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Armaments, Disarmament and International Security

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Stockholm International Peace Research Institute

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[WEU, Noordwijk Declaration, 14 Nov. 1994—NATO, Ministerial Meeting of the North Atlantic Council, 1 Dec. 1994—NACC, 2 Dec. 1994—Budapest Document 1994, Budapest Summit Declaration and Decisions (excerpt), 6 Dec. 1994—EU, Report from the Council to the Essen European Council on a Strategy to Prepare for the Accession of the Associated CCEE (excerpts), Essen, 11 Dec. 1994]

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Preface

The 26th edition of the *SIPRI Yearbook* is published in the year of the 50th anniversaries of the United Nations, the bombing of Hiroshima and Nagasaki, and the end of World War II. After the end of the cold war—when new opportunities were created to give practical meaning to the concept of the ‘world community’, as pointed out by Brian Urquhart in his introduction to Part I, or to the new term ‘global neighbourhood’, coined by the recently published Carlsson–Ramphal Report of the Commission on Global Governance—it became clear that only now is the UN starting to play the role that was laid down in its Charter. On the other hand, the world has become more unmanageable. As the world has changed, so have the contents of the *Yearbook*. In line with the guidelines for its research programme as laid down in the first years of the existence of the Stockholm International Peace Research Institute, SIPRI strives to monitor, assess and analyse the world arms trade, arms production and military expenditures, the development and control of weapons of mass destruction (nuclear, chemical and biological), technology proliferation and various aspects of arms control and disarmament. However, SIPRI’s research agenda has over the past few years been widened to cover new aspects of security as well. The *Yearbook* reflects an increasing emphasis in the Institute’s research projects on major armed conflicts and regional security issues, multilateral conflict prevention, peacekeeping, crisis management and the peaceful settlement of disputes. In this volume special chapters are devoted to the problems of regional security in South Africa, Central America and the Middle East, the lessons of war and diplomacy in the former Yugoslavia, conflict developments in and around Russia, and the multilateral security process in Europe. Unique data and analyses are also provided in the other chapters.

The *SIPRI Yearbook* does not offer simple recipes for solutions to the complex problems of today. Its task is much more modest: by publishing verified, transparent data and analyses, the authors seek to facilitate an understanding of the new realities by scholars, political decision makers and all others interested in contemporary developments. Fourteen of the chapters were written by SIPRI researchers; seven other chapters were prepared by prominent experts from outside SIPRI, whom I hereby would like to thank for their contributions.

The editorial work was carried out under the leadership of Connie Wall, whose work in coordinating and preparing this volume for publication was invaluable. Other competent and experienced editors—Billie Bielckus, Jetta Gilligan Borg and Eve Johansson—worked with enthusiasm and devotion. Very special thanks go this year to Shannon Kile and Ragnhild Ferm, for their attention to the entire volume in addition to their own contributions, and to Trevor Findlay, Eric Arnett, Ian Anthony and Zdzislaw Lachowski, for coordinating the chapters in Parts I–IV, respectively. I would also like to thank Gerd Hagemeyer-Gaverus, for programming and other computer support, and the secretaries—Cathy Söderquist, for her assistance to the editorial staff, and project secretaries Christina Barkstedt, Cynthia Loo, Marianne Lyons and Miyoko Suzuki. All the maps were prepared by Billie Bielckus and the index by Peter Rea, UK.

Dr Adam Daniel Rotfeld
Director
June 1995

Acronyms

Additional acronyms of UN observer, peacekeeping and electoral operations and weapon systems are given in appendix 2A and appendix 14B, respectively.

| | | | |
|-------|--|------------------|--|
| ABACC | Brazilian–Argentine Agency for Accounting and Control of Nuclear Materials | BMD | Ballistic missile defence |
| ABM | Anti-ballistic missile | BMDO | Ballistic Missile Defense Organization |
| ACDA | Arms Control and Disarmament Agency (US) | BTW | Biological and toxin weapon |
| ACM | Advanced cruise missile | BUR | Bottom–Up Review |
| ACRS | Arms control and regional security | BW | Biological weapon/warfare |
| ACV | Armoured combat vehicle | BWC | Biological Weapons Convention |
| AIFV | Armoured infantry fighting vehicle | CBM | Confidence-building measure |
| ALCM | Air-launched cruise missile | CBW | Chemical and biological weapon/warfare |
| ANC | African National Congress | CCW | Certain Conventional Weapons (Convention) |
| ANZUS | Australia–New Zealand–United States Security Pact | CD | Conference on Disarmament |
| APC | Armoured personnel carrier | CBE | Central and Eastern Europe |
| ARF | ASEAN Regional Forum | CEP | Circular error probable |
| ARV | Armoured recovery vehicle | CFE | Conventional Armed Forces in Europe |
| ASAT | Anti-satellite | CFSP | Common Foreign and Security Policy |
| ASEAN | Association of South-East Asian Nations | C ³ I | Command, control, communications and intelligence |
| ASLCM | Advanced sea-launched cruise missile | CIO | Chairman-in-Office |
| ASM | Air-to-surface missile | CIS | Commonwealth of Independent States |
| ASW | Anti-submarine warfare | COCOM | Coordinating Committee (on Multilateral Export Controls) |
| ATBM | Anti-tactical ballistic missile | CPC | Conflict Prevention Centre |
| ATC | Armoured troop carrier | CPI | Consumer price index |
| ATTU | Atlantic-to-the-Urals (zone) | CSBM | Confidence- and security-building measure |
| AWACS | Airborne warning and control system | CSCE | Conference on Security and Co-operation in Europe |
| BCC | Bilateral Consultative Commission | CSO | Committee of Senior Officials |
| BIC | Bilateral Implementation Commission | | |

| | | | |
|---------|--|-------|--|
| CTB(T) | Comprehensive test ban (treaty) | FYROM | Former Yugoslav Republic of Macedonia |
| CTOL | Conventional take-off and landing | G7 | Group of Seven (leading industrialized nations) |
| CTR | Cooperative Threat Reduction | G-21 | Group of 21 (formerly 21 non-aligned CD member states) |
| CW | Chemical weapon/warfare | GATT | General Agreement on Tariffs and Trade |
| CWC | Chemical Weapons Convention | GBR | Ground-based radar |
| DEW | Directed-energy weapon | GDP | Gross domestic product |
| DOD | Department of Defense (US) | GLCM | Ground-launched cruise missile |
| DOE | Department of Energy (US) | GNP | Gross national product |
| DOP | Declaration of Principles | GPALS | Global Protection Against Limited Strikes |
| ECOWAS | Economic Community of West African States | GPS | Global Positioning System |
| ECU | European Currency Unit | HACV | Heavy armoured combat vehicle |
| EFA | European Fighter Aircraft | HCNM | High Commissioner on National Minorities |
| EFTA | European Free Trade Area | HDE | Hydrodynamic experiment |
| ELINT | Electronic intelligence | HEU | Highly enriched uranium |
| EMP | Electromagnetic pulse | HLTF | High Level Task Force |
| EMU | Economic and Monetary Union | HLWG | High Level Working Group |
| Enmod | Environmental modification | HNE | Hydronuclear experiment |
| EPU | European Political Union | IAEA | International Atomic Energy Agency |
| ERINT | Extended Range Interceptor | IBRD | International Bank for Reconstruction and Development |
| ERW | Enhanced radiation (neutron) weapon | ICBM | Intercontinental ballistic missile |
| EU | European Union | ICFY | International Conference on Former Yugoslavia |
| EUCLID | European Cooperative Long-term Initiative on Defence | ICJ | International Court of Justice |
| EURATOM | European Atomic Energy Community | ICRC | International Committee of the Red Cross |
| FBR | Fast-breeder reactor | IEPG | Independent European Programme Group |
| FBS | Forward-based system | IFV | Infantry fighting vehicle |
| FOC | Full operational capability | | |
| FSC | Forum for Security Co-operation | | |
| FSU | Former Soviet Union | | |
| FY | Fiscal year | | |

| | | | |
|---------|--|-------|---|
| IGC | Intergovernmental Conference | MPLA | Popular Movement for the Liberation of Angola |
| IMF | International Monetary Fund | MSC | Military Staff Committee |
| INF | Intermediate-range nuclear forces | MTCR | Missile Technology Control Regime |
| INFCIRC | Information circular | MTM | Multinational technical means (of verification) |
| IOC | Initial operational capability | NAC | North Atlantic Council |
| IPM | International plutonium management | NACC | North Atlantic Cooperation Council |
| IPP | Individual Partnership Programme | NAM | Non-aligned movement |
| IPS | International plutonium storage | NATO | North Atlantic Treaty Organization |
| IRBM | Intermediate-range ballistic missile | NBC | Nuclear, biological and chemical (weapons) |
| JCC | Joint Consultative Commission | NGO | Non-governmental organization |
| JCG | Joint Consultative Group | NMP | Net material product |
| JCIC | Joint Compliance and Inspection Commission | NNA | Neutral and non-aligned (states) |
| JDA | Japan Defense Agency | NNWS | Non-nuclear weapon state |
| JNA | Yugoslav National Army | NPG | Nuclear Planning Group |
| JSG | Joint Strategy Group | NPR | Nuclear Posture Review |
| LDC | Less developed country | NPT | Non-Proliferation Treaty |
| LDDI | Less developed defence industry | NRRC | Nuclear Risk Reduction Centre |
| LEAP | Lightweight Exoatmospheric Projectile | NSG | Nuclear Suppliers Group |
| LEU | Low-enriched uranium | NTI | National trial inspection |
| MAD | Mutual assured destruction | NTM | National technical means (of verification) |
| MARV | Manœuvrable re-entry vehicle | NWFZ | Nuclear weapon-free zone |
| MBT | Main battle tank | NWS | Nuclear weapon state |
| MD | Military District | OAS | Organization of American States |
| MIC | Military-industrial complex | OAU | Organization of African Unity |
| MINATOM | Ministry for Atomic Energy | OBDA | Official budget defence allocation |
| MIRV | Multiple independently targetable re-entry vehicle | ODA | Official development assistance |
| MLRS | Multiple launch rocket system | ODIHR | Office for Democratic Institutions and Human Rights |
| MOU | Memorandum of Understanding | | |

| | | | |
|---------|--|--------|---|
| OECD | Organisation for Economic Co-operation and Development | SCC | Standing Consultative Commission |
| O&M | Operation and maintenance | SDI | Strategic Defense Initiative |
| OMB | Office of Management and Budget (US) | SICBM | Small ICBM |
| OMG | Operational Manoeuvre Group | SLBM | Submarine-launched ballistic missile |
| OOV | Object of verification | SLCM | Sea-launched cruise missile |
| OPANAL | Agency for the Prohibition of Nuclear Weapons in Latin America | SLV | Space launch vehicle |
| OPCW | Organisation for the Prohibition of Chemical Weapons | SMTS | Space and Missile Tracking System |
| OPV | Offshore patrol vessel | SNDV | Strategic nuclear delivery vehicle |
| OSCC | Open Skies Consultative Commission | SNF | Short-range nuclear forces |
| OSCE | Organization for Security and Co-operation in Europe | SRAM | Short-range attack missile |
| OSI | On-site inspection | SRBM | Short-range ballistic missile |
| OSIA | On-Site Inspection Agency | SSBN | Nuclear-powered, ballistic-missile submarine |
| PA | Parliamentary Assembly | SSD | Safe and Secure Dismantlement (Talks) |
| PFP | Partnership for Peace | SSGN | Nuclear-powered, guided-missile submarine |
| PLA | People's Liberation Army | SS(M) | Surface-to-surface (missile) |
| PLO | Palestine Liberation Organization | SSN | Nuclear-powered attack submarine |
| PNE(T) | Peaceful Nuclear Explosions (Treaty) | START | Strategic Arms Reduction Talks/Treaty |
| PTB(T) | Partial Test Ban (Treaty) | SVC | Special Verification Commission |
| PrepCom | Preparatory Commission | SWS | Strategic weapon system |
| R&D | Research and development | TASM | Tactical air-to-surface missile |
| RDT&E | Research, development, testing and evaluation | TEL | Transporter-erector-launcher |
| RMA | Restricted Military Area | THAAD | Theatre High Altitude Area Defence |
| RPV | Remotely piloted vehicle | TLE | Treaty-limited equipment |
| RV | Re-entry vehicle | TMD | Theatre missile defence |
| SACEUR | Supreme Allied Commander, Europe | TNF | Theatre nuclear forces |
| SALT | Strategic Arms Limitation Talks | TTB(T) | Threshold Test Ban (Treaty) |
| SAM | Surface-to-air missile | UNCLOS | United Nations Convention on the Law of the Sea |
| | | UNITA | National Union for the Total Independence of Angola |

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| UNPROFOR | United Nations Protection Force |
| UNSCOM | United Nations Special Commission on Iraq |
| UNTAG | United Nations Transition Assistance Group |
| UNTEA | United Nations Temporary Executive Authority |
| USAID | US Agency for International Development |
| V/STOL | Vertical/short take-off and landing |
| VCC | Verification Co-ordinating Committee |
| VEREX | Verification experiment |
| WEU | Western European Union |
| WMD | Weapon of mass destruction |
| WTO | Warsaw Treaty Organization (Warsaw Pact) |

Glossary

RAGNHILD FERM and CONNIE WALL

The major terms and organizations discussed in this Yearbook are defined and explained in the Glossary. For the major arms control and disarmament agreements, see annexe A.

- Agency for the Prohibition of Nuclear Weapons in Latin America (OPANAL) A forum established in the Treaty of Tlatelolco to resolve, together with the IAEA, questions of compliance with the Treaty.
- Anti-ballistic missile (ABM) system *See* Ballistic missile defence.
- Anti-tactical ballistic missile (ATBM) *See* Theatre missile defence.
- Arab League The principal objective of the League of Arab States, established in 1945 and with headquarters in Cairo, is to form closer union among Arab states and foster political and economic cooperation. An agreement for collective defence and economic cooperation was signed in 1950. *See* list of members below.
- Association of South-East Asian Nations (ASEAN) Established in the 1967 Bangkok Declaration to promote economic, social and cultural development as well as regional peace and security. The ASEAN Regional Forum (ARF) was established in 1993 by the ASEAN Post Ministerial Conference to address security issues in a multilateral forum. The first formal meeting of ARF took place in July 1994. *See* list of ASEAN and ARF members below.
- Atlantic-to-the-Urals (ATTU) zone The zone of the 1990 CFE Treaty and the 1992 CFE-1A Agreement, stretching from the Atlantic Ocean to the Ural Mountains, which comprises the entire land territory of the European NATO states, the CEE states and the CIS states.
- Australia Group A group of states, formed in 1985, which meets informally twice a year to monitor the proliferation of chemical and biological products and to discuss chemicals which should be subject to various national regulatory measures. *See* list of members below.
- Balkan states The states in south-eastern Europe bounded by the Adriatic, Aegean and Black seas: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Macedonia (Former Yugoslavia Republic of), Romania, Slovenia, Turkey and Yugoslavia (Serbia and Montenegro).
- Balladur Plan *See* Pact on Stability in Europe.

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| Ballistic missile | A missile which follows a ballistic trajectory (part of which may be outside the earth's atmosphere) when thrust is terminated. |
| Ballistic missile defence (BMD) | Weapon system designed to defend against a ballistic missile attack by intercepting and destroying ballistic missiles in flight. The now defunct US Strategic Defense Initiative (SDI) was a programme partly for space-based systems. In 1993 the Strategic Defense Initiative Organization (SDIO) was renamed the Ballistic Missile Defense Organization (BMDO), signifying a re-emphasis of US missile-defence programmes from strategic to theatre defences. <i>See also</i> Theatre missile defence. |
| Baltic states | The three former Soviet republics bordering on the Baltic Sea: Estonia, Latvia and Lithuania. |
| Bilateral Consultative Commission (BCC) | A forum established by the Threshold Test Ban Treaty to resolve questions of compliance with the Treaty. |
| Bilateral Implementation Commission (BIC) | A forum established by the START II Treaty to resolve questions of compliance with the Treaty. |
| Biological weapon (BW) | A weapon containing living organisms, whatever their nature, or infective material derived from them, which are intended for use to cause disease or death in man, animals or plants, and which for their effect depend on their ability to multiply in the person, animal or plant attacked, as well as the means of their delivery. |
| Central Asia | Of the former Soviet republics, this term refers to Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, as well as the Central Asian part of Russia. |
| Central and Eastern Europe (CEE) | Bulgaria, the Czech Republic, Hungary, Poland, Romania and Slovakia. The CEE region sometimes also includes the European former Soviet republics—Armenia, Azerbaijan, Belarus, Georgia, Moldova, the European part of Russia and Ukraine—and sometimes also the Baltic states. <i>See also</i> Central Europe, Eastern Europe. |
| Central Europe | Austria, the Czech Republic, Germany, Hungary, Poland and Slovakia. |
| Chemical weapon (CW) | Chemical substances—whether gaseous, liquid or solid—which might be employed as weapons because of their direct toxic effects on man, animals or plants, as well as the means of their delivery. |
| Common Foreign and Security Policy (CFSP) | <i>See</i> European Union, Pact on Stability in Europe, Western European Union. |
| Commonwealth of Independent States (CIS) | Organization of 12 former Soviet republics, established in 1991. <i>See</i> list of members below. |

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| Comprehensive test ban (CTB) | A ban on all nuclear explosions in all environments, under negotiation in the Conference on Disarmament (CD). |
| Conference on Disarmament (CD) | A multilateral arms control negotiating body, based in Geneva, composed of states representing all the regions of the world and including the permanent members of the UN Security Council. The CD reports to the UN General Assembly. <i>See</i> list of members below. |
| Conference on Security and Co-operation in Europe (CSCE) | <i>See</i> Organization for Security and Co-operation in Europe. |
| Confidence- and Security-Building Measure (CSBM) | A measure to promote confidence and security undertaken by a state. A CSBM is militarily significant, politically binding and verifiable. The CSBMs of the CSCE are embodied in the 1986 Stockholm Document and the Vienna Documents. |
| Confidence-Building Measure (CBM) | According to the Document on CBMs included in the 1975 Helsinki Final Act, a measure taken by a state to contribute to reducing the dangers of armed conflict and of misunderstanding or miscalculation of military activities which could give rise to apprehension. |
| Conventional weapon | Weapon not having mass destruction effects. <i>See also</i> Weapon of mass destruction. |
| Council of Europe | Established in 1949, with seat in Strasbourg, it is open to all European states which accept the principle of the rule of law and guarantee their citizens human rights and fundamental freedoms. Its main aims are defined in the European Convention on Human Rights (1950) and the Convention for the Protection of Human Rights and Fundamental Freedoms (1953). It deals with all European affairs except defence. Among its organs is the European Court of Human Rights. <i>See</i> list of members below. |
| Counter-proliferation | Measures or policies to prevent the proliferation or enforce the non-proliferation of weapons of mass destruction. |
| Cruise missile | A guided weapon-delivery vehicle which sustains flight at subsonic or supersonic speeds through aerodynamic lift, generally flying at very low altitudes to avoid radar detection, sometimes following the contours of the terrain. It can be air-, ground- or sea-launched and deliver a conventional, nuclear, chemical or biological warhead. |
| Eastern Europe | Albania, Armenia, Azerbaijan, Belarus, Bulgaria, the Czech Republic, Georgia, Hungary, Moldova, Poland, Romania, Slovakia and Ukraine, as well as the European part of Russia. |

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| European Union (EU) | Organization of 15 West European states. The Treaty on European Union (Maastricht Treaty) was signed in 1992 and entered into force in 1993. The highest decision-making body is the European Council. Other EU institutions are the Council of Ministers, the European Commission, the European Parliament and the European Court of Justice. An EU Common Foreign and Security Policy (CFSP) was established by the Maastricht Treaty, <i>inter alia</i> to preserve peace, strengthen international security, develop and consolidate democracy, the rule of law and respect for human rights and freedoms, and work as a cohesive force in international relations. An Intergovernmental Conference (IGC) is scheduled to be held in 1996 to review the Maastricht Treaty. <i>See also</i> Western European Union, and <i>see</i> list of members below. |
| Fissile material | Material composed of atoms which fission when irradiated by either fast or slow (thermal) neutrons. Uranium-235 and plutonium-239 are the most common examples of fissile material. |
| Forum for Security Co-operation (FSC) | <i>See</i> Organization for Security and Co-operation in Europe. |
| Group of Seven (G7) | The group of seven leading industrialized nations which have met informally, at the level of heads of state or government, since the late 1970s. <i>See</i> list of members below. |
| Group of 21 (G-21) | Originally 21 non-aligned CD member states. The group has acted together on proposals of common interest in this forum. <i>See</i> list of members below, under the Conference on Disarmament. |
| Hydronuclear experiment (HNE) | An explosion in which a small number of atoms fission and a small fission yield is released. |
| Intercontinental ballistic missile (ICBM) | Ground-launched ballistic missile with a range greater than 5500 km. |
| Intermediate-range nuclear forces (INF) | Theatre nuclear forces with a range of from 1000 km up to and including 5500 km. |
| International Atomic Energy Agency (IAEA) | A specialized agency of the UN with headquarters in Vienna, the IAEA is endowed by its Statute, which entered into force in 1957, with the twin purposes of promoting the peaceful uses of atomic energy and ensuring that nuclear activities are not used to further any military purpose. It plays a role in verification of the NPT, the Treaty of Tlatelolco and the Treaty of Rarotonga, and is involved in activities of the UN Special Commission on Iraq (UNSCOM). <i>See</i> list of members below. |
| Joint Consultative Commission (JCC) | A forum established by the Peaceful Nuclear Explosions Treaty to resolve questions of compliance with the Treaty. |
| Joint Consultative Group (JCG) | Established by the CFE Treaty to promote the objectives and implementation of the Treaty by reconciling ambiguities of interpretation and implementation. |

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| Joint Compliance and Inspection Commission (JCIC) | The Commission was established by the START I Treaty to resolve questions of compliance, clarify ambiguities and discuss ways to improve implementation of the Treaty. It convenes at the request of either party. |
| Kiloton (kt) | Measure of the explosive yield of a nuclear weapon equivalent to 1000 tonnes of trinitrotoluene (TNT) high explosive. (The bomb detonated at Hiroshima in World War II had a yield of about 12–15 kilotons.) |
| London Guidelines for Nuclear Transfers | <i>See</i> Nuclear Suppliers Group. |
| Maghreb states | The North African states Algeria, Libya, Mauritania, Morocco and Tunisia. |
| Megaton (Mt) | Measure of the explosive yield of a nuclear weapon equivalent to 1 million tonnes of trinitrotoluene (TNT) high explosive. |
| Minsk Group | Group of states acting together in the OSCE for political settlement of the conflict in the Armenian enclave of Nagorno-Karabakh in Azerbaijan. <i>See</i> list of members below. |
| Missile Technology Control Regime (MTCR) | An informal association of governments, established in 1987, which produced the Guidelines for Sensitive Missile-Relevant Transfers. The goal is to limit the spread of weapons of mass destruction by controlling delivery systems. The regime consists of the Guidelines, revised in 1992, and an Equipment and Technology Annex, revised in 1993. |
| Multiple independently targetable re-entry vehicles (MIRV) | Re-entry vehicles, carried by a single ballistic missile, which can be directed to separate targets along separate trajectories. A missile can carry two or more RVs. |
| National technical means of verification (NTM) | The technical intelligence means, under the national control of a state, which are used to monitor compliance with an arms control treaty to which the state is a party. |
| Non-strategic nuclear forces | <i>See</i> Theatre nuclear forces. |
| Nordic countries | The North European states of Denmark, Finland, Iceland, Norway and Sweden. |
| North Atlantic Council (NAC) | <i>See</i> North Atlantic Treaty Organization. |
| North Atlantic Cooperation Council (NACC) | Created in 1991 as a NATO institution for consultation and cooperation on political and security issues between NATO and the former WTO states and former Soviet republics. One of the first tasks was to preserve the CFE Treaty through the High-Level Working Group in the post-cold war security and political environment. <i>See also</i> Partnership for Peace, and <i>see</i> list of members below. |

- North Atlantic Treaty Organization (NATO)** A defensive political and military alliance established in 1949 by the North Atlantic Treaty, signed in Washington, DC, with headquarters in Brussels. The principal organs are the North Atlantic Council, a permanent body which meets in foreign ministerial session twice a year, the Defence Planning Committee, the Military Committee and the Nuclear Planning Group. The North Atlantic Assembly is the NATO inter-parliamentary organization. *See also* North Atlantic Cooperation Council, Partnership for Peace, and *see* list of members below.
- Nuclear Risk Reduction Centres (NRRC)** Established by the 1987 US–Soviet NRRC Agreement. The two centres, in Washington and Moscow, exchange information by direct satellite link in order to minimize misunderstandings which might carry a risk of nuclear war.
- Nuclear Suppliers Group (NSG)** Also known as the London Club. In 1977 the NSG agreed on the Guidelines for Nuclear Transfers (London Guidelines). In 1978 the NSG member states sent letters to the IAEA promising to abide by the Guidelines. The London Guidelines were revised in 1993. The Warsaw Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Material and Related Technology were agreed by the NSG in 1992. *See* list of members below.
- Open Skies Consultative Commission (OSCC)** A forum established by the Open Skies Treaty to resolve questions of compliance with the Treaty.
- Organisation for Economic Co-operation and Development (OECD)** Established in 1961 to replace the Organization for European Economic Co-operation (OEEC). With the accession of Canada and the USA, it ceased to be a purely European body. OECD objectives are to promote economic and social welfare by coordinating national policies. *See* list of members below.
- Organization for Security and Co-operation in Europe (OSCE)** From 1 Jan. 1995 the Conference on Security and Co-operation in Europe (CSCE) is called the OSCE. The OSCE institutions are: the Ministerial Council, the Senior Council, the Secretariat, the Conflict Prevention Centre (CPC), the Office for Democratic Institutions and Human Rights (ODIHR), the Parliamentary Assembly (PA), the Forum for Security Co-operation (FSC), the Chairman-in-Office (CIO), the High Commissioner on National Minorities (HCNM), the Court [on Conciliation and Arbitration] and the Permanent Council. *See* list of members below.
- Organisation for the Prohibition of Chemical Weapons (OPCW)** A forum established by the Chemical Weapons Convention to resolve questions of compliance with the Convention.
- Organization of African Unity (OAU)** Established in 1963, the OAU is a union of African states with the principal objective of promoting cooperation among the states in the region. In 1994 it adopted a resolution on an African Nuclear Weapon-Free Zone. *See* list of members below.

- Organization of American States (OAS)** Group of states in the Americas, established in 1890, with member states and permanent observers from other continents. Its principal objective is to strengthen peace and security in the western hemisphere. *See* list of members below.
- Pact on Stability in Europe** A proposal presented to the European Union in 1993 by French Prime Minister Edouard Balladur (also referred to as the Balladur Plan), for inclusion in the framework of the EU Common Foreign and Security Policy (CFSP). The objective is to contribute to stability by preventing tension and potential conflicts connected with borders and minorities. The Pact was adopted in Paris on 20 Mar. 1995 by over 50 states, and the instruments and procedures were handed over to the OSCE. The Pact consists of a declaration and a large number of agreements on and arrangements for good-neighbourliness and cooperation.
- Partnership for Peace (PFP)** The NATO programme launched in Jan. 1994 for cooperation with NACC and other CSCE states, in such areas as military planning, budgeting and training, under the authority of the North Atlantic Council. It provides for enhanced cooperation to prepare for and undertake multilateral crisis-management activities such as peacekeeping. States seeking partnership must provide Presentation Documents to NATO, identifying the steps they will take to achieve the PFP goals, and develop with NATO Individual Partnership Programmes. *See* list of partner states below.
- Peaceful nuclear explosion (PNE)** Application of a nuclear explosion for non-military purposes such as digging canals or harbours or creating underground cavities. The USA terminated its PNE programme in the 1970s. The USSR conducted its last PNE in 1988.
- Re-entry vehicle (RV)** That part of a ballistic missile which carries a nuclear warhead and penetration aids to the target, re-enters the earth's atmosphere and is destroyed in the terminal phase of the missile's trajectory. A missile can have one or several RVs; each RV contains a warhead.
- Safe and Secure Dismantlement (SSD) Talks** A forum established in 1992 to institutionalize cooperation between the USA and the former Soviet republics with nuclear weapons on their territories, in the safe and environmentally responsible storage, transportation, dismantlement and destruction of former Soviet nuclear weapons. Talks have resulted in bilateral agreements between the USA and Belarus, Kazakhstan, Russia and Ukraine for US funding.
- Safeguard agreements** According to the NPT, the Treaty of Tlatelolco and the Treaty of Rarotonga, non-nuclear weapon states must accept IAEA safeguards to demonstrate the fulfilment of their obligation not to manufacture nuclear weapons. The IAEA conducts *ad hoc* inspections to verify the information contained in reports on nuclear material subject to safeguards. Routine inspections are made to verify that reports are consistent with plants' records. *See also* International Atomic Energy Agency.

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|---|--|
| Short-range nuclear forces (SNF) | Nuclear weapons, including artillery, mines, missiles, etc., with ranges of up to 500 km. <i>See also</i> Tactical nuclear weapon, Theatre nuclear forces. |
| South Pacific Forum | A group of South Pacific states which hold high-level meetings: it proposed the South Pacific Nuclear Free Zone, embodied in the 1985 Treaty of Rarotonga. <i>See</i> list of members below. |
| Stability Pact | <i>See</i> Pact on Stability in Europe. |
| Standing Consultative Commission (SCC) | The consultative body established in the 1972 US–Soviet Memorandum of Understanding Regarding the Establishment of a Standing Consultative Commission. The USA and Russia refer issues regarding the implementation of the ABM Treaty to the SCC. |
| Strategic nuclear weapons | ICBMs and SLBMs with a range usually of over 5500 km, as well as bombs and missiles carried on aircraft of intercontinental range. |
| Submarine-launched ballistic missile (SLBM) | A ballistic missile launched from a submarine, usually with a range in excess of 5500 km. |
| Tactical nuclear weapon | A short-range nuclear weapon which is deployed with general-purpose forces along with conventional weapons. |
| Theatre missile defence (TMD) | Defensive systems against non-strategic nuclear missiles. |
| Theatre nuclear forces (TNF) | Nuclear weapons with ranges of up to and including 5500 km. In the 1987 INF Treaty, nuclear missiles are divided into intermediate-range (1000–5500 km) and shorter-range (500–1000 km), also called non-strategic nuclear forces. Nuclear weapons with ranges up to 500 km are called short-range nuclear forces. <i>See also</i> Short-range nuclear forces. |
| Throw-weight | The sum of the weight of a ballistic missile's re-entry vehicle(s), dispensing mechanisms, penetration aids, and targeting and separation devices. |
| Toxins | Poisonous substances which are products of organisms but are inanimate and incapable of reproducing themselves as well as chemically induced variants of such substances. Some toxins may also be produced by chemical synthesis. |
| Treaty-limited equipment (TLE) | The five categories of equipment on which numerical limits are established in the CFE Treaty: battle tanks, armoured combat vehicles, artillery, combat aircraft and attack helicopters. |
| Visegrad Group | The Czech Republic, Hungary, Poland and Slovakia. |
| Warhead | That part of a weapon which contains the explosive or other material intended to inflict damage. |
| Warsaw Treaty Organization (WTO) | The WTO, or Warsaw Pact, was established in 1955 by the Treaty of Friendship, Cooperation and Mutual Assistance. The WTO was dissolved in 1991. |
| Weapon of mass destruction | Nuclear weapon and any other weapon which may produce comparable effects, such as chemical and biological weapons. |

- Western European Union (WEU)** Established in the 1954 Protocols to the 1948 Brussels Treaty of Economic, Social and Cultural Collaboration and Collective Self-Defence among Western European States. Within the EU Common Foreign and Security Policy (CFSP) and at the request of the EU, the WEU is to elaborate and implement EU decisions and actions which have defence implications. The principal WEU organs are the WEU Council (comprised of the Ministerial Council and the Permanent Council) and the Parliamentary Assembly; the WEU Institute for Security Studies is a research institute. *See* list of members below.
- Yield** Released nuclear explosive energy expressed as the equivalent of the energy produced by a given number of tonnes of trinitrotoluene (TNT) high explosive. *See also* Kiloton, Megaton.
- Zangger Committee** The Nuclear Exporters Committee, called the Zangger Committee after its first chairman, is an intergovernmental group that has been active since 1971 in establishing the conditions and procedures for exports of nuclear equipment or material in accordance with obligations set out in the NPT as well as on the basis of fair commercial competition. *See* list of members below.

Membership of international organizations, as of 1 January 1995

United Nations (UN) and year of membership

| | | |
|--|--|--|
| Afghanistan, 1946 | El Salvador, 1945 | Macedonia, Former Yugoslav Republic of, 1993 |
| Albania, 1955 | Equatorial Guinea, 1968 | Madagascar, 1960 |
| Algeria, 1962 | Eritrea, 1993 | Malawi, 1964 |
| Andorra, 1993 | Estonia, 1991 | Malaysia, 1957 |
| Angola, 1976 | Ethiopia, 1945 | Maldives, 1965 |
| Antigua and Barbuda, 1981 | Fiji, 1970 | Mali, 1960 |
| Argentina, 1945 | Finland, 1955 | Malta, 1964 |
| Armenia, 1992 | France, 1945 | Marshall Islands, 1991 |
| Australia, 1945 | Gabon, 1960 | Mauritania, 1961 |
| Austria, 1955 | Gambia, 1965 | Mauritius, 1968 |
| Azerbaijan, 1992 | Georgia, 1992 | Mexico, 1945 |
| Bahamas, 1973 | Germany, 1973 | Micronesia, 1991 |
| Bahrain, 1971 | Ghana, 1957 | Moldova, 1992 |
| Bangladesh, 1974 | Greece, 1945 | Monaco, 1993 |
| Barbados, 1966 | Grenada, 1974 | Mongolia, 1961 |
| Belarus, 1945 | Guatemala, 1945 | Morocco, 1956 |
| Belgium, 1945 | Guinea, 1958 | Mozambique, 1975 |
| Belize, 1981 | Guinea-Bissau, 1974 | Myanmar (<i>formerly Burma</i>), 1948 |
| Benin, 1960 | Guyana, 1966 | Namibia, 1990 |
| Bhutan, 1971 | Haiti, 1945 | Nepal, 1955 |
| Bolivia, 1945 | Honduras, 1945 | Netherlands, 1945 |
| Bosnia and Herzegovina, 1992 | Hungary, 1955 | New Zealand, 1945 |
| Botswana, 1966 | Iceland, 1946 | Nicaragua, 1945 |
| Brazil, 1945 | India, 1945 | Niger, 1960 |
| Brunei Darussalam, 1984 | Indonesia, 1950 | Nigeria, 1960 |
| Bulgaria, 1955 | Iran, 1945 | Norway, 1945 |
| Burkina Faso (<i>formerly Upper Volta</i>), 1960 | Iraq, 1945 | Oman, 1971 |
| Burundi, 1962 | Ireland, 1955 | Pakistan, 1947 |
| Cambodia, 1955 | Israel, 1949 | Palau, 1994 |
| Cameroon, 1960 | Italy, 1955 | Panama, 1945 |
| Canada, 1945 | Jamaica, 1962 | Papua New Guinea, 1975 |
| Cape Verde, 1975 | Japan, 1956 | Paraguay, 1945 |
| Central African Republic, 1960 | Jordan, 1955 | Peru, 1945 |
| Chad, 1960 | Kazakhstan, 1992 | Philippines, 1945 |
| Chile, 1945 | Kenya, 1963 | Poland, 1945 |
| China, 1945 | Korea, Democratic People's Republic of (North Korea), 1991 | Portugal, 1955 |
| Colombia, 1945 | Korea, Republic of (South Korea), 1991 | Qatar, 1971 |
| Comoros, 1975 | Kuwait, 1963 | Romania, 1955 |
| Congo, 1960 | Kyrgyzstan, 1992 | Russia, 1945 ^a |
| Costa Rica, 1945 | Lao People's Democratic Republic, 1955 | Rwanda, 1962 |
| Côte d'Ivoire, 1960 | Latvia, 1991 | Saint Kitts (Christopher) and Nevis, 1983 |
| Croatia, 1992 | Lebanon, 1945 | Saint Lucia, 1979 |
| Cuba, 1945 | Lesotho, 1966 | Saint Vincent and the Grenadines, 1980 |
| Cyprus, 1960 | Liberia, 1945 | Samoa, Western, 1976 |
| Czech Republic, 1993 | Libya, 1955 | San Marino, 1992 |
| Denmark, 1945 | Liechtenstein, 1990 | Sao Tome and Principe, 1975 |
| Djibouti, 1977 | Lithuania, 1991 | Saudi Arabia, 1945 |
| Dominica, 1978 | Luxembourg, 1945 | Senegal, 1960 |
| Dominican Republic, 1945 | | |
| Ecuador, 1945 | | |
| Egypt, 1945 | | |

| | | |
|-----------------------|---------------------------|-------------------------------|
| Seychelles, 1976 | Sweden, 1946 | United Arab Emirates, 1971 |
| Sierra Leone, 1961 | Syria, 1945 | Uruguay, 1945 |
| Singapore, 1965 | Tajikistan, 1992 | USA, 1945 |
| Slovakia, 1993 | Tanzania, 1961 | Uzbekistan, 1992 |
| Slovenia, 1992 | Thailand, 1946 | Vanuatu, 1981 |
| Solomon Islands, 1978 | Togo, 1960 | Venezuela, 1945 |
| Somalia, 1960 | Trinidad and Tobago, 1962 | Viet Nam, 1977 |
| South Africa, 1945 | Tunisia, 1956 | Yemen, 1947 |
| Spain, 1955 | Turkey, 1945 | Yugoslavia, 1945 ^b |
| Sri Lanka, 1955 | Turkmenistan, 1992 | Zaire, 1960 |
| Sudan, 1956 | Uganda, 1962 | Zambia, 1964 |
| Suriname, 1975 | UK, 1945 | Zimbabwe, 1980 |
| Swaziland, 1968 | Ukraine, 1945 | |

^a In Dec. 1991 Russia informed the UN Secretary-General that it was continuing the membership of the USSR in the Security Council and all other UN bodies.

^b A claim by Yugoslavia (Serbia and Montenegro) in 1992 to continue automatically the membership of the former Yugoslavia was not accepted by the UN General Assembly. It was decided that Yugoslavia should apply for membership. Until an application is accepted, Yugoslavia is barred from participating in the work of UN bodies.

UN Security Council

Permanent members (the P5): China, France, Russia, UK, USA

Non-permanent members in 1995 (elected by the UN General Assembly for two-year terms. The year in brackets is the year at the end of which the term expires): Argentina (1995), Botswana (1996), Czech Republic (1995), Germany (1996), Honduras (1996), Indonesia (1996), Italy (1996), Nigeria (1995), Oman (1995), Rwanda (1995)

Note: Brazil, Djibouti, New Zealand and Spain were non-permanent members in 1993–94.

Conference on Disarmament (CD)

Members: Algeria, Argentina, Australia, Belgium, Brazil, Bulgaria, Canada, China, Cuba, Egypt, Ethiopia, France, Germany, Hungary, India, Indonesia, Iran, Italy, Japan, Kenya, Mexico, Mongolia, Morocco, Myanmar, Netherlands, Nigeria, Pakistan, Peru, Poland, Romania, Russia, Sri Lanka, Sweden, UK, USA, Venezuela, Yugoslavia*

* Yugoslavia has been suspended since July 1992.

Observers: Armenia, Austria, Bangladesh, Belarus, Brunei, Cameroon, Chile, Colombia, Croatia, Czech Republic, Denmark, Ecuador, Finland, Ghana, Greece, Holy See, Iraq, Ireland, Israel, Jordan, Korea (North), Korea (South), Kuwait, Libya, Madagascar, Macedonia, Malaysia, Malta, Norway, New Zealand, Oman, Philippines, Portugal, Qatar, Senegal, Singapore, Slovakia, Slovenia, Spain, South Africa, Switzerland, Syria, Tanzania, Thailand, Tunisia, Turkey, Ukraine, Viet Nam, Zambia, Zimbabwe

Members of the Group of 21: Algeria, Brazil, Cuba, Egypt, Ethiopia, India, Indonesia, Iran, Kenya, Morocco, Mexico, Mongolia, Myanmar, Nigeria, Pakistan, Peru, Sri Lanka, Venezuela, Zaire

Members of the Eastern Group: Bulgaria, Hungary, Poland, Romania, Russia

Members of the Western Group: Argentina, Australia, Belgium, Canada, France, Germany, Italy, Japan, Netherlands, UK, USA

International Atomic Energy Agency (IAEA)

Members: Afghanistan, Albania, Algeria, Argentina, Armenia, Australia, Austria, Bangladesh, Belarus, Belgium, Bolivia, Brazil, Bulgaria, Cambodia, Cameroon, Canada, Chile, China, Colombia, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Ethiopia, Finland, France, Gabon, Germany, Ghana, Greece, Guatemala, Haiti, Holy See, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Korea (South), Kuwait, Lebanon, Liberia, Libya, Liechtenstein, Lithuania, Luxembourg, Macedonia (former Yugoslav Republic of), Madagascar, Malaysia, Mali, Marshall Islands, Mauritius, Mexico, Monaco, Mongolia, Morocco, Myanmar (formerly Burma), Namibia, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Romania, Russia, Saudi Arabia, Senegal, Sierra Leone, Singapore, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sudan, Sweden, Switzerland, Syria, Tanzania, Thailand, Tunisia, Turkey, Uganda, UK, Ukraine, United Arab Emirates, Uruguay, USA, Uzbekistan, Venezuela, Viet Nam, Yemen, Yugoslavia, * Zaire, Zambia, Zimbabwe

* Yugoslavia has been suspended since July 1992.

Note: North Korea was a member of the IAEA until Sep. 1994.

Arab League

Members: Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, Yemen

Association of South-East Asian Nations (ASEAN)

Members: Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, Thailand

ASEAN Post Ministerial Conference (ASEAN-PMC)

Members: The ASEAN states plus Australia, Canada, European Union (EU), Japan, South Korea, New Zealand, USA

ASEAN Regional Forum (ARF)

Members: The ASEAN states plus Australia, Canada, China, European Union (EU), Japan, South Korea, Laos, New Zealand, Papua New Guinea, Russia, USA, Viet Nam

Australia Group

Members: Argentina, Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, UK, USA

Observer: EU Commission

Commonwealth of Independent States (CIS)

Members: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan

Council of Europe

Members: Andorra, Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, UK

Note: Latvia was admitted in Feb. 1995.

European Union (EU)

Members: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, UK

Group of Seven leading industrialized nations (G7)

Members: Canada, France, Germany, Italy, Japan, UK, USA

Minsk Group

Members: Armenia, Azerbaijan, Belarus, France, Germany, Hungary, Italy, Russia, Sweden, Switzerland, Turkey, USA

Note: Finland joined in Apr. 1995.

Missile Technology Control Regime (MTCR, Guidelines for Sensitive Missile-Relevant Transfers)

MTCR partners: Argentina, Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, UK, USA

Note: South Africa joined in early 1995.

North Atlantic Treaty Organization (NATO)

Members: Belgium, Canada, Denmark, France,* Germany, Greece, Iceland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain,* Turkey, UK, USA

* France and Spain are not in the integrated military structures of NATO.

NATO North Atlantic Cooperation Council (NACC)

Members: Albania, Armenia, Azerbaijan, Belarus, Belgium, Bulgaria, Canada, Czech Republic, Denmark, Estonia, France, Georgia, Germany, Greece, Hungary, Iceland, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Tajikistan, Turkey, Turkmenistan, UK, Ukraine, USA, Uzbekistan

Observer: Finland

Partnership for Peace (PFP)

Partner states with approved PFP Framework Documents: Albania, Armenia, Azerbaijan, Bulgaria, Czech Republic, Estonia, Finland, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Sweden, Turkmenistan, Ukraine, Uzbekistan

Note: Austria joined in Feb. 1995, Belarus in Jan. 1995, Malta in Apr. 1995 and Russia in May 1995.

Partner states with approved PFP Presentation Documents: Albania, Bulgaria, Czech Republic, Estonia, Finland, Hungary, Kazakhstan, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Sweden, Ukraine

Partner states with approved PFP Individual Partnership Programmes (IPP): Bulgaria, Czech Republic, Finland, Hungary, Lithuania, Poland, Romania, Slovakia, Sweden

Note: Albania's IPP was approved in Jan. 1995, Estonia's in Mar. 1995 and Latvia's in Feb. 1995.

Nuclear Suppliers Group (NSG, or London Club)

Members: Argentina, Australia, Austria, Belgium, Bulgaria, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden, Switzerland, UK, USA

Note: South Africa joined in Mar. 1995.

Organisation for Economic Co-operation and Development (OECD)

Members: Australia, Austria, Belgium, Canada, Denmark, Germany, Finland, France, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, UK, USA

Organization for Security and Co-operation in Europe (OSCE), formerly the Conference on Security and Co-operation in Europe (CSCE)

Members: Albania, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Holy See, Hungary, Iceland, Ireland, Italy, Kazakhstan, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Russia, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, UK, Ukraine, USA, Uzbekistan, Yugoslavia*

* Yugoslavia has been suspended since July 1992.

Observer: Macedonia (Former Yugoslav Republic of)

Organization of African Unity (OAU)

Members: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Djibouti, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Western Sahara (Saharawi Arab Democratic Republic), Sao Tome and Principe, Seychelles, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zaire, Zambia, Zimbabwe

Organization of American States (OAS)

Members: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba,* Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts (Christopher) and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, USA, Venezuela

* The current Cuban Government is excluded from participation.

Permanent observers: Algeria, Angola, Austria, Belgium, Cyprus, Egypt, Equatorial Guinea, European Union, Finland, France, Germany, Greece, Holy See, Hungary, India, Israel, Italy, Japan, Korea (South), Lebanon, Morocco, Netherlands, Pakistan, Poland, Portugal, Romania, Russia, Saudi Arabia, Spain, Switzerland, Tunisia, Ukraine

South Pacific Forum

Members: Australia, Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, New Zealand, Niue, Papua New Guinea, Samoa (Western), Solomon Islands, Tonga, Tuvalu, Vanuatu

Western European Union (WEU)

Members: Belgium, France, Germany, Italy, Luxembourg, Netherlands, Portugal, Spain, UK

Note: Greece became a member in Mar. 1995.

Associate Members: Iceland, Norway, Turkey

Observers: Austria, Denmark, Finland, Ireland, Sweden

Associate Partners: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia

Zanger Committee

Members: Australia, Austria, Belgium, Bulgaria, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, South Africa, Spain, Sweden, Switzerland, UK, USA

Observer: South Korea

Conventions in tables

| | |
|-----|--------------------------------------|
| .. | Data not available or not applicable |
| — | Nil or a negligible figure |
| () | Uncertain data |
| m. | million |
| b. | billion (thousand million) |
| \$ | US \$, unless otherwise indicated |

Introduction: the international system in transition

ADAM DANIEL ROTFELD

All too often current problems and conflicts so overwhelm and dominate the attention of politicians that they neglect the search for strategic and long-term solutions. Special anxiety and concern surround the wars in Afghanistan, Bosnia and Herzegovina, Chechnya, Kurdistan and Tajikistan, the genocide in Rwanda, and a host of long-drawn-out and new ethnic and religious conflicts elsewhere. Attempts by Iraq, North Korea and some other states to impair the regime for the non-proliferation of weapons of mass destruction, in blatant violation of their arms control obligations, are a challenge to the international security system. All these factors undermine, in the public view, the effectiveness and efficacy of the existing security structures and international procedures in preventing and peacefully solving crises.

In 1994, along with the failures, there were many positive developments and events. The Russian troops left Germany and the Baltic states, and the last British, French and US units evacuated Berlin. Germany regained full sovereignty. The trilateral agreement between the USA, Russia and Ukraine on the dismantlement of all Ukrainian nuclear weapons, achieved with difficulty, was a critical step in strengthening the nuclear non-proliferation regime. As a result, Ukraine acceded to the Non-Proliferation Treaty (NPT) as a non-nuclear weapon state (16 November 1994). The signing in Geneva (21 October 1994) of the agreement between North Korea and the USA on closing down one and delaying the construction of two other nuclear reactors was another important step. North Korea accepted to abide by full-scope International Atomic Energy Agency (IAEA) safeguards agreements. China committed itself to respect the Missile Technology Control Regime (MTCR) Guidelines. Efforts by and successes of the United Nations (UN) and the Conference on Security and Co-operation in Europe (CSCE—now the Organization for Security and Co-operation in Europe, OSCE), in hindering or warding off potential conflicts in various parts of the world, were less visible but none the less important. Many of these heartening developments are analysed in this volume.¹

In seeking a new international system, an evaluation of the past can provide an inspiration both in coping with problems of the present and in looking into the future. Such an endeavour is particularly prompted in 1995 by the 50th anniversaries of the end of World War II and of the establishment of the United Nations.

¹ For lists of members of organizations and summaries of and parties to treaties, see the Glossary and annexe A in this volume.

I. The United Nations: a new agenda

Seen in the light of current and future threats, the clear successes of the United Nations are often underestimated. Only now is the UN starting to play the role laid down in its Charter—that of an organizer and coordinator of actions aimed at strengthening peace and security on a global scale. UN activities in the field of peace and security are changing quantitatively and qualitatively,² but its spectacular actions, irrespective of their success, are overshadowing other major UN operations and efforts in economic, social and other fields. In a position paper on the occasion of the 50th anniversary of the UN, Secretary-General Boutros Boutros-Ghali rightly noted that we are still in a period of transition: ‘The end of the cold war was a major movement of tectonic plates and the after-shocks continue to be felt. But even if the ground beneath our feet has not yet settled, we still live in a new age that holds great promise for both peace and development’.³ While this is true, the volatility and new type of relations between the great powers, between the developed and developing countries, as well as between the great powers and their allies and former clients, make it difficult for all these states to determine their own political visions. Uncertainty and unpredictability are seen as the main threats. What does this mean in practice?

Pessimism has gradually started to replace the euphoria that accompanied the collapse of the bipolar system in the late 1980s and early 1990s. One prognosis on the future of the international order is based on the premise that the world is in the early stages of what promises to be, for the next 10 or 20 years, ‘one of its more tumultuous periods, even by the standards of the past couple of centuries’—because, after the relatively straightforward two-alliance confrontation of the cold war, ‘the world turned back to the riskier manoeuvrings of a multipower system’.⁴

II. The world system: the new strategic features

The end of the cold war, the breakup of the Soviet Union and the dissolution of the Warsaw Treaty Organization (WTO) in 1989–91 brought the end of the bipolar system. However, that system was not replaced by a new order but was followed by a transitional period that will probably continue in the years to come. The main reason for this seems to be that the collapse of the totalitarian regimes in the Soviet Union and its satellite countries in Central and Eastern Europe (CEE) stemmed from their inherent incapacity, and not—as was

² Boutros-Ghali gives the following data: 5 peacekeeping operations were deployed as of 31 Jan. 1988 and by 16 Dec. 1994 there were 17; the operations involved 9570 military personnel in 1988 and 73 393 in 1994; and the UN peacekeeping budget increased from \$230.4 million in 1988 to \$3610 million in 1994. Boutros-Ghali, B., *An Agenda for Peace 1995*, Second edition with the new supplement and related UN documents (United Nations: New York, 1995), p. 8.

³ Boutros-Ghali (note 2), p. 6.

⁴ The international order: situation, mission, execution’, *The Economist*, 24 Dec. 1994–6 Jan. 1995, p. 17.

often the case before—from external factors, such as a lost war and resulting imposition of a specific order by a group of victors. Fifty years ago, in the wake of unconditional surrender, Germany adopted a system of values and security rules imposed by the anti-Nazi coalition of victorious powers. Russia and its former WTO allies acknowledged and instituted the common system of values laid down in the Charter of Paris for a New Europe (1990), based on the fundamental principles guiding Western democracies: the rule of law, political pluralism, market economy and respect for the rights of the individual. However, political developments since the parliamentary election of December 1993 have shown that Russia is now facing the alternatives of authoritarian rule or a new type of dictatorship. The Russian political scene has clearly shifted towards nationalism, militarism and neo-imperialism, which has a bearing on its relations with the external world, particularly with its immediate neighbours.

There are also other reasons for the instability and volatility of the situation. The USA and the West European democratic states, organized in the frameworks of the North Atlantic Treaty Organization (NATO) and the European Union (EU), were not and still are not ready to assume world leadership and bear the responsibility of such a role. In effect, the dominant role of the USA and Western Europe in determining the basic parameters of international security on a world-wide scale is diminishing in relative terms.⁵ In the view of the authors of a report prepared under the auspices of the US National Defense University, the final shape of the emerging world order will depend on such factors as: (a) the degree of US involvement in world affairs; (b) the progress of European integration, both within the European Union and through the expansion of Western institutions to include all of Europe; (c) developments inside Russia and its relations with neighbouring states; (d) the extent to which Japan assumes new international obligations; (e) the ability of China to hold together and remain on a peaceful path to prosperity; and (f) the control of nuclear proliferation.⁶

This catalogue takes into account the new roles of China, Japan and Russia but ignores the relationships between development and security, the potential problems and risks springing up along the North–South axis, the growing importance of the Islamic world, the new role of the united Germany in Europe, and many other issues. However, the most serious reservation is that, according to the logic of the report, the essence of such threats has not changed and, consequently, the rules of the game remain unchanged in the emerging world order, although the roles of the actors, the correlation of forces and mutual relations between the participants have been altered.

This reasoning fails to take into account the new dimension of international affairs, a major aspect of which is that the main sources of threat in the world

⁵ Binnendijk, H. and Clawson, P. (eds), *Strategic Assessment 1995: U.S. Security Challenges in Transition* (National Defense University: Washington, DC, 1995), p. 1; the authors offer the view that we are now ushering in a period 'in which European concerns may not dominate the world as they have for past several decades'.

⁶ Binnendijk and Clawson (note 5), pp. 1–2.

today are not conflicts *between* states, but *within* them.⁷ In this context, attention should be drawn to the proposition submitted in the Report of the Commission on Global Governance (the Carlsson–Ramphal Commission) according to which: '[g]lobal security must be broadened from its traditional focus on the security of states to include the security of people and the planet'.⁸ A consequence of this thesis is that 'all people, no less than all states, have a right to a secure existence, and all states have an obligation to protect those rights'.⁹

III. The global neighbourhood: new security principles

The Carlsson–Ramphal Commission proposes to translate these concepts of security into principles for the post-cold war era that can be embedded in international agreements. The authors drew up a number of norms for security policies in the new era, among them:

- Military force is not a legitimate political instrument, except in self-defence or under UN auspices.
- The development of military capabilities beyond that required for national defence and support of UN action is a potential threat to the security of people.
- Weapons of mass destruction are not legitimate instruments of national defence.
- The production and trade in arms should be controlled by the international community.¹⁰

These proposals can be described as a long-term programme partially to demilitarize security policies. Although the deliberations of the Carlsson–Ramphal Commission reflect the idealism that is characteristic of visionary concepts, their significance lies not only in the attempt to respond to the main challenge of our times, but also in the formulation of concrete paths to action. It must be made clear how and within what limits the international community should act with regard to internal or domestic conflicts.¹¹ Action and intervention do not necessarily require the use of force.

⁷ In his position paper on the occasion of the 50th anniversary of the United Nations, Boutros-Ghali presented certain characteristics of new intra-state conflicts: '... the collapse of State institutions, especially the police and judiciary, with resulting paralysis of governance, a breakdown of law and order, and general banditry and chaos'; see Boutros-Ghali (note 2), p. 9.

⁸ The Report of the Commission on Global Governance, *Our Global Neighbourhood*, Co-Chairmen Ingvar Carlsson and Shridath Ramphal (Oxford University Press: New York, 1995), p. 78.

⁹ *Our Global Neighbourhood* (note 8), p. 84.

¹⁰ *Our Global Neighbourhood* (note 8), pp. 84–86.

¹¹ One legal basis in international law for action in this respect is the 1948 Convention on the Prevention and Punishment of the Crime of Genocide, which as of Sep. 1994 had 114 states parties. Article II states: 'In the present Convention, genocide means any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such: (a) Killing members of the group; (b) Causing serious bodily or mental harm to members of the group; (c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part; (d) Imposing measures intended to prevent births within the group; (e) Forcibly transferring children of the group to another group'. The international community should be aware that the UN is empowered to take action against acts of genocide in such extreme situations as the former Yugoslavia, Bosnia and Herzegovina, Rwanda and Somalia.

Before the end of the cold war all UN peacekeeping operations were military in character, deployed after a cease-fire but before a settlement of conflict had been negotiated. In fact, the intention was to create conditions for such negotiations. The new type of UN operations also addresses a wide range of civilian concerns. Their goal is to help the parties implement comprehensive negotiated settlements (such operations were successfully deployed in Angola, Cambodia, El Salvador, Mozambique and Namibia). In other words, the different tasks described in UN terminology as preventive diplomacy and peacemaking, peacekeeping and peacebuilding, and sanctions, peace enforcement and disarmament are closely related and should be implemented in parallel.

IV. SIPRI findings

The facts and analyses presented in this volume not only reflect these new realities but also offer an assessment of many new phenomena and issues. One of the most important new phenomena is that among the 31 major armed conflicts in 1994 no 'classic' interstate war was being waged, a fact that determined the nature of conflict prevention activities during the year.¹²

*Conflict prevention.*¹³ The United Nations, as it approached its 50th year, was little inclined to launch substantial operations, whether humanitarian or in the form of extended peacekeeping. The post-cold war heyday of peacekeeping appeared to be over, with the emphasis moving to conflict prevention. The mission in Somalia was ended, drawing to a close a very painful UN and US experience, while the United Nations Protection Force (UNPROFOR) in the former Yugoslavia continued to struggle with an impossible mandate. Yet in Mozambique, as in Cambodia, the UN proved that, given the proper resources and political support, it could see through to successful completion a complex, multi-component peace operation.

The peace settlements in Haiti, Mozambique, South Africa and the Middle East and the tentative beginnings of peace in Angola and Northern Ireland were heartening. None the less 1994 was marked by tragedies, the most deplorable being that in Rwanda where Hutu massacred millions of Tutsi while the UN, the Organization of African Unity and other organizations and states (except in the end France) stood by unwilling to intervene. The continuing wars in the former Yugoslavia also testified to the failure of the international community to devise a coherent strategy for dealing with them. Conflicts raged on in Afghanistan, Algeria, Chechnya, Sri Lanka, Sudan, Yemen and elsewhere without even a modicum of successful conflict prevention, management or resolution.

*Security in and for Europe.*¹⁴ In the search for a common and comprehensive security order for Europe, the shaping of democratic institutions and civil

¹² See chapter 1 in this volume.

¹³ See 'Introduction to Part I: towards a new United Nations' (written by Sir Brian Urquhart) and chapters 1-7 in this volume.

¹⁴ See chapter 8 in this volume.

societies is as important as the political, military, humanitarian and economic dimensions. NATO, the EU, the Western European Union (WEU) and the OSCE will continue to play a central and vital role in ensuring security. They could contribute to ending, limiting and preventing future outbreaks of armed conflicts in Europe provided that: (a) this multi-layered system is not tantamount to a division of Europe into different levels of security; (b) active US involvement is an integral part of Europe's security system, because an unstable Europe would threaten essential national security interests of the United States;¹⁵ (c) Russia, as the biggest military power on the European continent, enters into comprehensive cooperation and a security partnership with Europe;¹⁶ and (d) the common system of values and the code of conduct, as valid within the OSCE, plays a significant role in building this perceived cooperative security regime.

Decisions adopted at the CSCE Budapest Summit Meeting (December 1994) increased the role of the OSCE in solving security problems. The OSCE will be a major instrument for early warning, conflict prevention and crisis management in Europe, committed to the full implementation and indefinite and unconditional extension of the NPT. Discussion of a model of common and comprehensive security for Europe for the next century has been initiated.

*World military expenditure.*¹⁷ Aggregate world military spending continued to fall in 1994, driven largely by declining expenditure levels in the industrialized countries. Military spending also declined in the member nations of the Commonwealth of Independent States, notably in Russia, but without reliable data on defence budgets, exchange rates and inflation figures it is difficult to determine meaningful comparative statistics. Data on China are similarly inadequate. In addition, it has become more difficult to gain access to transparent data on defence budgets for the CEE countries in recent years. Because of these problems, SIPRI has not attempted to produce an aggregate figure for world defence spending. Instead, SIPRI would urge all countries to report their military spending in an open and transparent manner through the UN system. This would permit researchers to derive reliable and credible statistics on world military spending.

While total world military spending is clearly declining, the preponderance of cuts in the above-mentioned countries and regions conceals the fact that military expenditure is rising, or remains at very high levels, in regions such as the Middle East and South Asia, where there appears to be a trend towards increasing military outlays as economies grow in some developing countries. Case studies of South America, South Asia and South-East Asia are presented in this *Yearbook* in order to identify patterns of military expenditure in these important regions.

¹⁵ Holbrooke, R., 'America, a European power', *Foreign Affairs*, vol. 74, no. 2 (Mar./Apr. 1995), pp. 38–51.

¹⁶ Brzezinski, Z., 'The premature partnership', *Foreign Affairs*, vol. 73, no. 2 (Mar./Apr. 1994), p. 67; and Brzezinski, Z., 'A plan for Europe', *Foreign Affairs*, vol. 74, no. 1 (Jan./Feb. 1995), p. 26.

¹⁷ See chapter 12 in this volume.

*Arms transfers.*¹⁸ In 1994 a lack of purchasing power continued to restrict those countries which had plans to modernize and restructure their armed forces. The most effective curbs on the growth of arms sales were imposed—resource constraints, high levels of debt and a lack of hard currency reserves. The salience of these economic factors has been underlined by the fact that the major arms suppliers are no longer willing to offer the large-scale military assistance that was offered during the period of the superpower rivalry.

It is very rare for this process of arms transfers to be regarded by the major powers as a central problem for their own national security. Countries most often pointed to as offering a potential challenge to the security of the major powers either are already under a mandatory UN arms embargo (Iraq, Libya and the former Yugoslavia) or have very limited conventional military capabilities (Iran and Syria). Threats to the interests of the major powers will be related to whether or not these powers actively seek a role in distant conflicts.

Recent experience in other countries suggests that states are likely to continue to see their own defence preparedness as the best safeguard.¹⁹ As a result, while the USA and, to a lesser extent, countries of Western Europe debate how to implement the developments that have occurred under the heading of the 'Revolution in Military Affairs', other countries are also trying to increase their military capabilities through more modest programmes such as the modification of existing platforms through the addition of new engines, electronics and/or weapons.

Public statements and actions by the major powers in 1994 and early 1995 underlined that their approaches to arms transfers are firmly linked to advancement of their national interests on a unilateral basis. Arms-supply policies are driven by factors such as alliance politics and the need to support domestic industries in a time of reduced military spending. In the USA the new conventional arms transfer policy was unambiguous in stating that US policy goals were to sustain technological advantages over potential adversaries and enhance the US industrial base. Therefore, because there are major incompatibilities in the specific interests of the major suppliers, it was not possible to reach agreement on multilateral efforts to address problems associated with conventional arms transfers.

*Arms production.*²⁰ Stagnation continued in the sale and production of military equipment in the Organisation for Economic Co-operation and Development and developing countries. The 100 major arms-producing companies in 1993 had combined arms sales of about \$156 billion during the year—6 per cent less than the dollar value of their arms sales in 1992. If all companies worldwide were included, the decline would very likely be greater.

*The multilateral weapon-related export control regimes.*²¹ The possible spread of nuclear, biological and chemical weapons causes alarm among the

¹⁸ See chapter 14 in this volume.

¹⁹ Freedman, L., 'Great powers, vital interests and nuclear weapons', *Survival*, vol. 36, no. 4 (winter 1994–95), pp. 37–38.

²⁰ See chapter 13 in this volume.

²¹ See chapter 15 in this volume.

major powers, and there is a consensus among a group of 30–35 countries that they have a strong mutual interest in taking measures to prevent further proliferation. Accordingly, there has been a progressive harmonization in the membership of the multilateral regimes designed to address the proliferation of materials, equipment and technology for nuclear, biological and chemical weapons and missile delivery systems.

Within these regimes a new form of international cooperation appears to be emerging in the security field. Regimes created with the goal of technology denial are evolving into mechanisms which, through constant dialogue and information exchange, enhance confidence among the members that trade in potentially sensitive items can take place without negative effects. The evolution of these regimes is no longer based on technology denial but on rules for trade and technology transfer.

*Nuclear arms control.*²² With the Ukrainian accession to the NPT as a non-nuclear weapon state, the way was paved for entry into force of the START I Treaty, and the instruments of ratification were exchanged at the CSCE Summit Meeting on 5 December 1994. In September the USA and Russia had committed themselves to seek prompt ratification and implementation of the START II Treaty. The process of deactivation and withdrawal of strategic nuclear weapons from the states of the former USSR is proceeding in an orderly manner and is in general ahead of schedule.

While the point of origin has often been difficult to determine, the uncovering of a flurry of attempts to smuggle fissile material in the past year has focused attention on the inadequacies of the physical security of weapon-usable fissile material in the states of the former Soviet Union.

The resolution of the North Korean crisis avoided what would have been a serious crisis for the nuclear non-proliferation regime, especially in the run-up to the 1995 NPT Review and Extension Conference.

As the dismantlement of nuclear weapons proceeds, the problem of how to adequately dispose of the fissile material they contain, plutonium in particular, has been the subject of increasing concern. In addition, the substantial plutonium stockpiles from commercial nuclear reactors and the proliferation dangers they represent require immediate attention. While appropriate safeguarded storage must be assured in the short term, adequate long-term solutions to plutonium disposition must be implemented as soon as possible.

*Modernization of nuclear weapons.*²³ There were still more than 20 000 nuclear warheads in the world's arsenals at the beginning of 1995. There were some 1100 tonnes of plutonium and 1700 tonnes of highly enriched uranium (plus 100–200 tonnes in naval reactors) in world inventories at the end of 1993. The weapon modernization that could be carried out under a comprehensive test ban (CTB) is increasingly constrained by mutual agreement between Russia and the USA and the global norms against proliferation and favouring nuclear disarmament. SIPRI has therefore concluded that, while

²² See chapter 16 and appendix 16A in this volume.

²³ See chapter 9 in this volume.

summarizing known nuclear weapon holdings and inventories of fissile materials continues to be important, detailed discussion of nuclear weapon developments is now more appropriately discussed under the rubric of arms control and disarmament in Part IV of the *Yearbook*.

*Comprehensive test ban.*²⁴ The only major arms control treaty under negotiation in 1994 was the CTB treaty. The argument that the CTB was no longer important because it would not prevent the nuclear weapon states from modernizing their nuclear weapon arsenals was resurrected, but in fact, a CTB treaty will have an effect on nuclear weapon programmes.²⁵

*Chemical and biological weapons.*²⁶ There were fewer reports of the alleged use of chemical weapons (CW) in 1994, and more attention was focused on accusations of current or past possession and development of CW and biological weapons (BW). There are problems with the destruction of CW in both Russia and the USA: the costs of destruction are growing in both countries, and in Russia the final CW destruction programme has not yet been approved. The issue of CW dumped at sea was in 1994 of particular concern to the countries adjacent to the Baltic Sea.

In 1994 steady progress was made towards implementation of the Chemical Weapons Convention (CWC), but the pace was slower than originally expected. The optimistic forecasts of 1993 were not realized, and only 19 signatory states had ratified the CWC by 31 December 1994 (as of 6 March 1995, the number of ratifications had increased to 26), making it impossible for the Convention to enter into force at the earliest possible date of January 1995. The slow progress in 1994 in CW-related issues in the Preparatory Commission Expert Groups clearly reflected the impact of the pending implementation of the 1990 Russian-US Bilateral Destruction Agreement.

Although the BW information exchange, as agreed upon by the Second and Third Review Conferences of the Biological Weapons Convention (BWC) serves as a confidence-building measure and provides a degree of transparency on directly related activities and facilities, it does not strengthen the norm against biological and toxin warfare, not least because the undertaking is not mandatory.

*Conventional arms control.*²⁷ In 1994 there were both positive and negative developments in the enhancement of the conventional arms control regime in Europe. The implementation of existing disarmament and arms control agreements proceeded without major delays. The second phase in the elimination of major weapon holdings in the ATTU (the Atlantic-to-the-Urals) zone was successfully completed, and the parties to the Treaty on Conventional Armed Forces in Europe (CFE) are on the final stretch of the road to treaty implementation. Reductions in military personnel under the CFE-1A Agreement were

²⁴ See chapter 18 in this volume.

²⁵ These effects are discussed not only in chapter 18 but also in Arnett, E., SIPRI, *Nuclear Weapons after the Comprehensive Test Ban: Implications for Modernization and Proliferation* (Oxford University Press: Oxford, forthcoming 1995).

²⁶ See chapters 10 and 19 in this volume.

²⁷ See chapters 8 and 20 in this volume.

also carried out smoothly and the massive Russian troop pull-out from the Central European and Baltic states was successfully completed.

At the same time adverse tendencies and issues became more apparent.²⁸ Russia's world outlook and political approach to problems at home and abroad are undergoing an accelerating transformation. Russian political and military assertiveness in the former Soviet republics and even beyond is growing. Political decision making has been increasingly influenced if not taken over by the military. The armed conflict in Chechnya not only contravenes the spirit of the OSCE code of conduct but also infringes the confidence- and security-building measure provisions of the Vienna Document 1994 and threatens to undermine the CFE Treaty regime.

* * *

The facts, data and analyses of various aspects of international security and the process of arms control and disarmament presented in this *Yearbook* lead to the following conclusions.

1. National and international security are multi-dimensional. Both security and defence in the policies of the great powers and many other states are perceived in a much broader sense than was formerly the case. They are no longer confined to the military dimension, although it is an essential component, but increasingly embrace such issues as economy, ecology, demography, communications, and the development of civilization and technology.

2. Threats and tensions, formerly of an inter-bloc character and largely concentrated along the East–West divide, are now evident in many regions, while the chief vectors of potential antagonisms are along the North–South line. This is related neither exactly nor primarily to the type of confrontation envisaged in 1993 by Samuel P. Huntington in 'The clash of civilizations',²⁹ but rather to the direction of economic and demographic trends in the world.

3. The post-cold war conflicts are domestic or regional in character. The security structures and institutions called into being in the cold war period with the aim of staving off conflicts between the blocs are not fully equal to the task of preventing the new type of conflicts. The transformation of security institutions and structures is still far from the desirable new international security system. As Boutros-Ghali noted: '[t]he different world that emerged when the cold war ceased is still a world not fully understood'.³⁰ It is the moral duty of the scientific and intellectual communities to facilitate an understanding of the changed nature and the root causes of conflicts and to offer decision makers ways in which they may be peacefully solved. The considerations and data presented in this volume offer a modest contribution to this goal.

²⁸ See chapter 7 in this volume.

²⁹ Huntington, S. P., 'The clash of civilizations?', eds A. Clesse, R. Cooper and Y. Sakamoto, *The International System after the Collapse of the East–West Order* (Martinus Nijhoff: Dordrecht, 1994), pp. 7–27.

³⁰ Boutros-Ghali (note 2), p. 37.

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Introduction to Part I: towards a new United Nations*

BRIAN URQUHART

In 1945 the United Nations Charter gave the future world organization an ambitious and innovative role in maintaining international peace and security. It was primarily to deal with threats to the peace, acts of aggression, and disputes and conflicts between states. The Security Council, backed by the consensus and military power of its five permanent members,¹ the leaders of the victorious wartime alliance, was to preside over the peaceful settlement of disputes, to deter, face down or forcibly counter threats to the peace and acts of aggression, and to preside over a worldwide process of 'regulation of armaments'.² Its enforcement capacity was to be concerted by a Military Staff Committee (MSC) which would advise it on its military requirements for maintaining the peace, including the employment of the forces put at the Council's disposal by member states, as well as on the regulation of armaments and 'possible disarmament'.³ The general principles of international peace and security, including 'the principles governing disarmament and the regulation of armaments', were to be the subject of consideration by the General Assembly and recommendations addressed to member states or to the Security Council.⁴

Not surprisingly, this great and logical scheme of things soon ran aground on massive political obstacles. The Security Council, hopelessly divided by the cold war and impaled on the Soviet veto,⁵ found its ability to 'maintain international peace and security' severely compromised. The veto also meant that no action could be taken by the Security Council against the actions of any of its permanent members. The collective security action in defence of South Korea in 1950–51 was an exception to this paralysis, made possible only because the Soviet Union had absented itself from the Council in protest at the non-representation of the People's Republic of China in the United Nations.

The failure to make the Charter work as written led to the development of other, less spectacular methods of conflict control. Conciliation, good offices, mediation and fact-finding were exercised by groups of diplomats, specially appointed mediators, observers of various kinds, and increasingly by the Secretary-General and his senior colleagues. The securing of cease-fires, truces and armistices required the presence of UN military observers (as in Kashmir and Palestine), and this technique

¹ China, France, the UK, the USA and the USSR. China was initially represented by Nationalist China, based on Taiwan, but was replaced by the People's Republic of China in 1971. The Russian Federation succeeded to the seat of the Soviet Union in 1992.

² Charter of the United Nations, Article 26.

³ Charter of the United Nations, Article 47.

⁴ Charter of the United Nations, Article 11.

⁵ The five permanent members of the Security Council have a veto over all Council decisions.

* Contributed to the SIPRI Yearbook to mark the 50th anniversary of the foundation of the United Nations.

evolved, during the Suez Crisis in 1956, into the UN Emergency Force (UNEF I), the first true peacekeeping force.⁶

The decolonization process created power vacuums in various parts of the world (Palestine, Kashmir, the Congo, Cyprus and West Irian, to name only a few), and here the technique of peacekeeping and negotiation was progressively developed until by the end of the cold war it had become a main pillar of the authority and effectiveness of the Security Council. Peacekeeping served not only to contain conflict and create the necessary conditions for negotiations. It also provided a welcome and acceptable means of keeping regional conflicts out of the cold war orbit, thereby avoiding an involvement of East and West which could easily lead to a nuclear confrontation.

The UN after the cold war—a crisis of confidence

When the cold war ended, it was generally assumed that the Security Council would come into its own and begin to function as originally intended. The Council did indeed gain a new ability to agree on the issues before it, and at first this seemed an enormous step forward. The Council was able, for example, to condemn Iraq's invasion of Kuwait in August 1990 and agree on quick and forceful action to reverse it. Other actions—in Namibia, El Salvador and Cambodia,⁷ for example—were reasonably successful.

It soon became clear, however, that the post-cold war world was an unruly, violent and unpredictable place quite unlike the frozen immobility of the cold war, and that the forms of violence and disarray it presented were extremely difficult, if not impossible, to deal with by the old methods. During the cold war the motivation for supporting UN involvement in a conflict or potential conflict situation was the maintenance of international peace and security between states, a truly vital aim in a world of potential nuclear confrontation. The motivation for advocating UN intervention today—often driven by the visual media—is frequently little more than a belated feeling of moral responsibility for alleviating the suffering of large numbers of human beings in a situation which in no way impinges on national or international security. Since 1989 the bulk of the UN's field operations have been concerned with civil and ethnic violence within the borders of states or failed states, a challenge which—with the exception of the Congo in the early 1960s—the UN managed to avoid during the cold war period. The UN's discouraging experiences in Somalia, Bosnia and Herzegovina and Rwanda have precipitated a crisis of confidence which has quite overshadowed the organization's relative successes elsewhere.

While on the one hand the UN is increasingly perceived by the media and the public to be, or to have the potential of being, the world's police force and humanitarian rescue service—the embryonic public-service sector of a 'world community'—governments, on the other hand, have strong misgivings about giving the Security Council and the Secretary-General greater authority or more effective capacity to

⁶ Three previous missions are now considered to have been peacekeeping operations: the UN Special Committee on the Balkans (UNSCOB, 1947–51), the UN Truce Supervision Organization (UNTSO, 1948–), and the UN Military Observer Group in India and Pakistan (UNMOGIP, 1949–). See, for example, Durch, W. (ed.), *The Evolution of UN Peacekeeping: Case Studies and a Comparative Analysis* (The Henry L. Stimson Center: Washington, DC, 1993), p. 8.

⁷ For a comprehensive examination of the Cambodia operation, see Findlay, T., *Cambodia: The Legacy and Lessons of UNTAC*, SIPRI Research Report no. 9 (Oxford University Press: Oxford, 1995).

intervene. There is also growing reluctance on the part of many governments to have their troops involved under UN command in uncertain and disorderly situations which have no direct bearing on their own national security. In the developing world especially, the international interventionist spirit of the immediate post-cold war years has been regarded with scarcely concealed hostility and apprehension. There is much talk, especially in the United States, of over-commitment, incompetence, expense and lack of judgement, accompanied by uneasiness at even the small degree of independence enjoyed by the Secretary-General or his representatives and commanders in the field.

All this, in turn, has led to disastrous uncertainties and delays in following up Security Council decisions by rapid deployment in the field. The UN's emergency operations are still improvised from scratch and on a shoestring and are entirely dependent on the provision of national contingents. Such a situation is debilitating to the credibility of the world organization, often disastrous for the people it is supposed to help and usually necessitates a far larger operation later on, as, for example, in Somalia, Rwanda and Haiti.

Conflict prevention

The organization has shown itself to be extraordinarily poorly prepared for conflict prevention. There was, after all, a general awareness of the fact that post-Tito Yugoslavia was not a stable country and that the Hutu and Tutsi in Rwanda,⁸ after centuries of rivalry, were preparing for another round of killing. The same advance awareness existed in the cases of most of the current intra-state conflicts. Despite all the talk of the desirability of preventive action, however, no preventive efforts were made in Yugoslavia. Nor was any adequate attempt made to forestall the disaster precipitated by the shooting down of the aircraft carrying the presidents of Rwanda and Burundi. In fact most of the small UN force in Rwanda was actually withdrawn. The action taken in both cases, as in other recent situations, was reactive, motivated by media and public criticism, slow and largely inappropriate. Very little thought was given either to the necessity of evolving a new role and new rules of engagement for UN operations or to giving the UN the capacity to respond rapidly and effectively at a time when situations might be brought under control.

Is it possible to foresee disasters and, even more important, to take effective action to prevent them? Various efforts are now being made at the UN to put together the information systems necessary for early warning of disasters. Unfortunately this is the easiest part of the problem. To take preventive action in the territory of a sovereign state, or indeed a failed state, requires the cooperation of the local authorities and their willingness to be helped to save themselves from disaster. Past experience shows that more often than not they are not willing. Before disaster strikes, political and psychological factors often make future victims resistant to preventive intervention.

There is also the question of sovereignty and self-determination of peoples, more sensitive than ever when a minority is challenging a government, or when a government feels threatened from outside or by internal political and economic developments. If action, or at least authorization, is required from the Security Council, the governments of its members will also have to agree to be involved. In the past these

⁸ See appendix 2B in this volume.

governments have shown great reluctance to get involved in troublesome situations before they become disasters. There is also, in much of the world, an extreme sensitivity to outside intervention, especially by the Security Council, which is seen as the instrument of its permanent members and especially of the United States. The Secretary-General has traditionally engaged in preventive diplomacy and seems still to provide the most acceptable protagonist for it. The Secretary-General is perennially overburdened and will often have to delegate responsibility. There is, however, now one preventive peacekeeping operation—in Macedonia.⁹ This is a good sign.

Peacekeeping, peacemaking and peace enforcement

In the classical peacekeeping field of conflict control between sovereign states, where the use of force is excluded and cooperation is a basic condition, the well-tryed system of contingents made available from a growing roster of member countries seems more or less adequate for the demands that are likely to be made. Training schemes, standby arrangements, reserve funds, logistical infrastructure and contingency planning can certainly improve the quality of UN response. It is, however, in the large, murky area of civil and ethnic violence within the borders of states and failed states—the situations that now most preoccupy the Security Council—that the role and capacity of the United Nations demands urgent reassessment and strengthening. It is one thing to set up peacekeeping operations designed to achieve the suspension of hostilities between sovereign governments on which considerable pressure can be brought to bear by the members of the Security Council. It is quite another matter to inject peacekeeping forces into active civil or ethnic wars where there is no peace to keep and where the fighting factions have not asked for them, are unwilling to stop fighting or to cooperate with the UN forces, and cannot be easily subjected to political pressure.

Nor have experiments with 'peace enforcement', especially when combined with traditional, non-forceful peacekeeping and humanitarian relief operations, proved encouraging. Traditional peacekeeping operations are not suited to many of the situations they are now involved in, and efforts to supplement them by 'peace enforcement' mandates, as in Somalia, or by the use of force by other agencies, such as NATO in support of the UN Protection Force (UNPROFOR) in the former Yugoslavia,¹⁰ have proved self-defeating and confusing. The UN does not dispose of sufficient forces or authority to enforce its decisions in most cases, and inadequate enforcement efforts can easily prove worse than no enforcement at all, as has been the case in Somalia. In dealing with threats to the peace or acts of aggression, the Security Council is, and will continue to be, dependent on the USA and a few associated powers for mounting large-scale military operations.

It is obviously time to consider seriously a small, permanent, highly trained UN volunteer military force that could be immediately deployed as the spearhead for a later, larger, traditional UN operation, if that proved necessary.¹¹ Such a force, arriv-

⁹ See chapter 2 and appendix 2A in this volume for details of the UN Protection Force (UNPROFOR) deployment in the Former Yugoslav Republic of Macedonia (FYROM).

¹⁰ For details of the UN missions in Somalia and the former Yugoslavia, see Claesson, P. and Findlay, T., 'Case studies on peacekeeping: UNOSOM II, UNPROFOR and UNTAC', *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), appendix 1B, pp. 62–80; and chapter 6 in this volume.

¹¹ For more detail on this proposal, see Urquhart, B., 'For a UN volunteer military force', *New York Review of Books*, 10 June 1993, pp. 3–4; and Urquhart, B., 'Whose fight is it?', *New York Times*, 22 May 1994, p. 15.

ing immediately after a Security Council decision, would have a far better chance of getting the situation under control before too much blood has been shed and the combatants are out of control. It could also provide a professional assessment of the situation and what needed to be done, including, quite possibly, the recommendation that the situation was entirely unsuitable for UN intervention. The right mixture of military, police and civilian elements needs to be carefully considered.

There will be many objections to such an innovation: that it would give the Security Council and the Secretary-General too much power; that it would be the thin end of the wedge of supra-nationalism; that it would encourage interventionism; and that it would be expensive. The one overwhelming argument for such a force is that it would give the UN a desperately needed capacity for immediate action, which is not available from member governments with hesitations about deploying their troops in unpredictable international adventures. A public authority which cannot immediately send its officers to the scene of a disturbance will soon lose public respect and credibility. The same is true of the UN in international crises.

Reform measures

Many obstacles will have to be overcome before the UN becomes a consistent and effective instrument of peace and order. The most frequently mentioned problems are the management and administration of its field operations and its lack of infrastructure and financial reserves. In fact, current efforts to improve staffing, management and administration are making considerable headway.¹²

It is relatively easy to list further measures that could make the United Nations more effective and less incoherent in discharging its primary functions of maintaining international peace and security. These include: (a) an effective early-warning system based on economic and social as well as political information and an intensification of the present system of 'special representatives' of the Secretary-General in response to early warning of potential crises; (b) a forum in the United Nations (a restructured Trusteeship Council, for example) where the leaders of ethnic and other disaffected groups could state their cases, receive expert advice and even engage in negotiations; (c) a more proactive attitude to preventive action by the Security Council with a view to tackling problems *before* they deteriorate into conflict (this would also require a major development in the acceptance of UN assistance by governments); (d) a restructuring of the Security Council to make it more representative and to give it greater legitimacy; (e) the progressive evolution of a legal basis for UN operations, with a view to the eventual development of a universally accepted international legal and constitutional system, properly monitored and, if necessary, enforced; (f) a genuine effort by all governments, spurred on if necessary by public opinion and by non-governmental organizations, to tackle the manifold problems of arms control and eventually disarmament, from nuclear proliferation to the flow of small arms and light conventional weapons and a regime for controlling and ultimately eliminating land-mines; (g) far greater care in giving UN operations coherent mandates which do not confuse peacekeeping, peace enforcement, humanitarian relief and nation building (for example, it would be wise to consider the possibility of establishing a UN Humanitarian Police capacity to deal specifically with the many problems of protect-

¹² See Findlay, T., 'Multilateral conflict prevention, management and resolution', SIPRI, *SIPRI Yearbook 1994* (note 10), pp. 29–30; and chapter 2 in this volume.

ing humanitarian operations); (h) the evolution of a legal and accepted basis for UN action in failed states or in situations where there is no effective or legitimate government authority; (i) a clear agreement on the legal status and obligations both of a UN operation and of the parties it is dealing with, a practice which has lapsed in recent years; (j) a deliberate effort to move the UN from improvisation and *ad hoc* methods to a reliable system for taking quick action and a serious infrastructure for contingency planning, training, command and control, logistics and financial reserves—a system designed to respond quickly and effectively and to be more effective, and cost-effective, than the present cycle of reluctance, tardy decisions, unsuitable mandates, delay in implementation, weak performance and, ultimately, very large and belated operations to clear up the resulting mess; and (k) the creation of a standing, highly trained and motivated rapid reaction group which would not be completely dependent, as at present, on governments agreeing to provide troops. This spearhead group would be designed to fill the gap between Security Council decisions and effective action on the ground (at present sometimes as much as five or six months). Various efforts are now being made to work out the nature, composition, training and rules of engagement for such a group.

These measures should be supported by: (a) a major effort to study, focus and make effective all aspects of sanctions, including compensation, under Article 50 of the Charter,¹³ for other countries affected by them; (b) a survey of the resources of regional organizations and the methods by which they can best cooperate with the United Nations in the future; (c) continued progress in the concluding of standby arrangements with governments for the speedy provision of contingents for peace-keeping and, if possible, for peace enforcement; (d) a study of the future utility and use of the MSC; and (e) reserve financing and prompt payment of their assessments by all governments.

The report of the Commission on Global Governance, *Our Global Neighbourhood* (the Carlsson–Ramphal report), has made further recommendations for reform to be considered during the 50th anniversary year of the United Nations. While cognizant that the principle of non-interference in the domestic affairs of states should not be taken lightly, the Commission proposed that the UN Charter be amended to permit intervention which ‘in the judgement of a reformed Security Council constituted a violation of the security of people so gross and extreme that it required an international response on humanitarian grounds’.¹⁴ In order for non-state actors to bring situations ‘massively endangering the rights of peoples’ to the attention of the UN, the report recommended a further Charter amendment creating a new Right of Petition. This would authorize the Council to call on parties to intra-state disputes to settle them through the mechanisms listed in the Charter for the pacific settlement of disputes between states. The Council would be authorized to take enforcement action under Chapter VII of the United Nations Charter if such efforts failed, but only as a last resort. Among other measures suggested in the Carlsson–Ramphal report were a 10- to 15-year programme for the elimination of nuclear weapons, a Demilitarization

¹³ Article 50 of the UN Charter gives states which are adversely affected by preventive or enforcement actions taken against other states the ‘right to consult the Security Council with regard to a solution of those problems’.

¹⁴ Report of the Commission on Global Governance, *Our Global Neighbourhood*, Co-Chairmen Ingvor Carlsson and Sridath Ramphal (Oxford University Press: Oxford, 1995), p. 339.

Fund to help developing countries reduce their military commitments and the negotiation of a convention on curtailment of the arms trade.¹⁵

These are a few of the obvious measures that might be taken to strengthen the UN to meet the challenges of the future. They will not be effective, however, unless some basic issues are addressed.

Basic issues to be addressed

The fundamental, if unstated, political obstacles to improving the UN's effectiveness relate to fundamental questions of governmental attitude and intention. They are less easily dealt with than specific reform measures.

The first of these involves the attitude of member governments to the UN—their perception of what the organization is or ought to be. If in reality governments are only looking for a place where they may dump awkward problems and occasionally protect their own interests, or where they may join a coalition to fend off some undesirable development, nothing much will change. On the other hand, governments could come to see the UN as the place for developing the essential global institutions that the times, and our long-term problems, demand. Such institutions could provide advance warning of coming conflicts, intervene at an early stage to stop them from erupting into wars, and use preventive diplomacy and action. Most important of all in the long run, they would provide a centre for concerted efforts to deal with the great social and economic problems which are the root causes of instability and which will eventually determine, in one way or another, the entire future of the human race.

The best blueprints or organizational arrangements are useless without leadership, and nowhere is this truer than in an evolving international organization engaged in a changing and uncertain world. If governments believe that the UN is a vital institution for the future, a determined effort must be made to ensure that it, and other key international organizations, get the best possible leaders, both for the international civil service and in national delegations. The UN has done its best work and made its greatest progress when such leaders were present. Governments must also see to it that these leaders are fully supported while in office.

A second basic issue, related to the first, is the future indispensability of a first-rate, genuinely independent international civil service, and the full acceptance by governments of the principle involved, which is clearly stated in the UN Charter. Good modern national government is dependent on an objective, dedicated and highly competent civil service. So are international organizations. It is essential that the Charter principle be maintained and that the international civil service does not deteriorate into what former Secretary-General Dag Hammarskjöld called 'a lower level of government or party representation'.¹⁶ Such a development would destroy the very heart of the organization, its Charter and its effectiveness. A new era should begin now of respect by member states for the integrity and independence of a civil service upon which the future effectiveness of the organization in large part depends.¹⁷

¹⁵ *Our Global Neighbourhood* (note 14), p. 341.

¹⁶ From 'The international civil servant in law and fact', speech given by Dag Hammarskjöld at Oxford, July 1961.

¹⁷ Childers, E. with Urquhart, B., *Renewing the United Nations System* (Dag Hammarskjöld Foundation: Uppsala, 1994), p. 170.

Conclusion

If we aspire to make a success of the one world which our inventiveness and ingenuity have already substantially brought into existence, the term 'world community', so often mouthed by politicians, will have to take on a more practical meaning through the development of essential rules and institutions. For all its shortcomings and difficulties the UN, as the only available global institution, will be called on again and again because there is a limit to what even the strongest powers are willing to take on themselves and because inaction and apathy towards human misery, or about the future of the human race, are unacceptable. If the intention is to make a success of the future, the development and strengthening of the world organization are vital. For all the criticism, there is no alternative.

1. Major armed conflicts

MARGARETA SOLLENBERG and PETER WALLENSTEEN

I. Introduction

In 1994, 31 major armed conflicts were waged in 27 locations around the world, compared with 33 conflicts and 28 conflict locations in 1993.¹ The number of both the major armed conflicts and the locations has thus declined slightly since 1993. Both numbers for 1994 are also lower than in 1989, the last year of the cold war (36 conflicts in 32 locations). As was the case in 1993, no 'classic' interstate war was waged in 1994—that is, the basic incompatibility in each case was not a dispute over territory or government between two states but between parties within states, although there were interstate components in several conflicts. In at least five of the conflicts recorded for 1994, other states participated in the fighting with regular forces: Azerbaijan (Nagorno-Karabakh), which included Armenia; Bosnia and Herzegovina versus Bosnian Serbs, which included Yugoslavia (Serbia and Montenegro); Bosnia and Herzegovina versus Bosnian Croats, which included Croatia; Tajikistan, which included Russia and Uzbekistan; and Liberia, which included a peacekeeping/peace enforcement force—ECOMOG (the ECOWAS [Economic Organization of West African States] Monitoring Group)—comprising forces from several African states.²

A 'major armed conflict' is defined here as prolonged combat between the military forces of two or more governments, or of one government and at least one organized armed group, and incurring the battle-related deaths of at least 1000 people during the entire conflict.³ A conflict 'location' is the territory of a state. Since certain countries are the location of more than one conflict, the number of conflicts reported is greater than the number of conflict locations.⁴ The conflicts are defined in terms of two types of incompatibility: contested, incompatible positions regarding government (i.e., the type of political system or a change of the central government or its composition) and territory (i.e., control of territory, secession or autonomy). The casualty figures given refer to total battle-related deaths from the start of the conflict. Changes in the intensity of conflicts are measured in terms of an increase or a decrease in the

¹ In the *SIPRI Yearbook 1994*, 34 conflicts were recorded for 1993. Subsequent revision of these data shows that the conflict between the South African Government and the Freedom Alliance did not meet the criteria of a major armed conflict and is now classified as several minor conflicts.

² See also appendix 2A in this volume.

³ See appendix 1A in this volume for full definitions of the criteria. See also Heldt, B. (ed.), *States in Armed Conflict 1990–91* (Department of Peace and Conflict Research, Uppsala University: Uppsala, 1992), chapter 3, for the full definitions.

⁴ Some countries are also the location of minor armed conflicts. The table in appendix 1A includes only the major armed conflicts in those countries.

number of deaths in one calendar year as compared to the previous year. Conflicts are dropped from the listing if there is no use of armed force between the parties over the contested incompatibility during the year in question, if there were no deaths or if the incompatibility has been eliminated.

The most destructive conflict in terms of human lives during the year was the war in Rwanda since it was accompanied by genocidal massacres by Hutu extremists, targeting other Hutu as well as Tutsi. The situation resulted in a mass exodus into neighbouring countries, notably Zaire and Tanzania. Ultimately, the Rwanda Patriotic Front (RPF, or Front Patriotique Rwandais, FPR), the opposition coalition of Hutu and Tutsi, gained control over the country. The victims of the massacres are not recorded in appendix 1A, as these were not immediately related to the respective parties and the incompatibility. The killings were directed against an unarmed and defenceless population.⁵ Fighting was severe from April to July, when the government was defeated.

The most intensive conflicts of 1994 in terms of numbers of deaths, besides Rwanda, were those in Algeria, Angola, Turkey, Afghanistan and Yemen.

II. Changes in the table of conflicts for 1994

New conflict locations in 1994

Two new major armed conflicts were added to the listing in 1994: the war in Yemen, which broke out in May and ended in July when the self-declared Democratic Republic of Yemen was defeated by the forces of the Republic of Yemen; and the conflict between the Myanmar Government and the Mong Tai Army, over the status of the self-declared Shan State, which broke out in December 1993.

In December 1994 armed conflict broke out in Chechnya, between the unilaterally declared independent Republic of Chechnya, led by General Dzhokhar Dudayev, and the Russian Government. By the end of the year, however, the number of deaths had not risen above 1000, the threshold criterion for it to be registered as a major armed conflict in 1994.⁶

Conflicts recorded in 1993 that did not appear in 1994

Five major armed conflicts listed in 1993 were removed from the list in 1994—two conflicts in South Africa, the conflict in Croatia, one in Punjab in India and one in Kurdistan in Iraq. In South Africa the long-running conflict between the anti-apartheid opposition and the White minority government ended in late 1993, and the peace settlement was ratified by the elections in

⁵ The total number of deaths from the massacres is difficult to estimate. Common figures range between 500 000 and 1 000 000 casualties.

⁶ This also applies to the armed conflict in Sierra Leone between the Government and the Revolutionary United Front (RUF) which began in 1991. The use of armed force intensified in late 1994, but data in the available sources provided no evidence to indicate that it had become a major armed conflict in 1994.

May 1994. In the *SIPRI Yearbook 1994*, two major armed conflicts were recorded for South Africa in 1993. However, closer examination revealed that the groups constituting the Freedom Alliance should be treated as separate parties, owing to their different incompatibilities with the government. Hence the violence conducted by the parties is also treated separately, and none meets the criterion of 1000 battle-related deaths. The data for 1993 have been revised accordingly.

In the conflicts in Croatia as well as in Punjab, India, and in the Kurdish area of Iraq there were no reports of deaths during the year. However, they are not cases of a victory of one side over the other. In Croatia, an uneasy truce supervised by the UN prevails, but the danger of war remains. In the case of the Punjab in India, the Sikh organizations are believed to be regrouping. In Iraq, where the Kurdish area has been protected from Iraqi Government forces by a United Nations no-flight zone, the intra-Kurdish fighting might provide an opportunity for the Iraqi Government to re-establish control.

III. Regional patterns of major armed conflict, 1989–94

The regional distribution of conflict locations is shown in table 1.1. For 1994, there is a more even distribution of conflicts among the regions, none of which is significantly dominant as a location of armed conflicts. There is an element of declining numbers over time in some regions (e.g., Africa since 1991 and Asia since 1992). Europe is the only region with a trend towards increased conflict since 1990.

Table 1.1. Regional distribution of locations with at least one major armed conflict, 1989–94

| Region ^a | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Africa | 9 | 10 | 10 | 7 | 7 | 6 |
| Asia | 11 | 10 | 8 | 11 | 9 | 9 |
| Central and South America | 5 | 5 | 4 | 3 | 3 | 3 |
| Europe | 2 | 1 | 2 | 4 | 5 | 4 |
| Middle East | 5 | 5 | 5 | 4 | 4 | 5 |
| Total | 32 | 31 | 29 | 29 | 28 | 27 |

^a Only those regions of the world in which a conflict was recorded for the period 1989–94 are included here.

Source: Uppsala Conflict Data Project.

The most significant trend for the period 1989–94 is seen in Central and South America, where the number of conflicts started to decline in 1991, declined further in 1992 and has remained stable at that level. In addition, no new major armed conflicts were initiated in this region (see table 1.2), and the data in appendix 1A show that the use of armed force declined as well. No such clear trends are discernible for the other regions.

Table 1.2. Regional distribution, number and types of contested incompatibilities in major armed conflicts, 1989–94^a

| Region ^b | 1989 | | 1990 | | 1991 | | 1992 | | 1993 | | 1994 | |
|------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Gov | Terr | Gov | Terr | Gov | Terr | Gov | Terr | Gov | Terr | Gov | Terr |
| Africa | 7 | 3 | 8 | 3 | 8 | 3 | 6 | 1 | 6 | 1 | 5 | 1 |
| Asia | 6 | 8 | 5 | 10 | 3 | 8 | 5 | 9 | 4 | 7 | 4 | 7 |
| Central and South America | 5 | – | 5 | – | 4 | – | 3 | – | 3 | – | 3 | – |
| Europe | 1 | 1 | – | 1 | – | 2 | – | 4 | – | 6 | – | 5 |
| Middle East | 1 | 4 | 1 | 4 | 2 | 5 | 2 | 3 | 2 | 4 | 2 | 4 |
| <i>Total</i> | <i>20</i> | <i>16</i> | <i>19</i> | <i>18</i> | <i>17</i> | <i>18</i> | <i>16</i> | <i>17</i> | <i>15</i> | <i>18</i> | <i>14</i> | <i>17</i> |
| Total | 36 | | 37 | | 35 | | 33 | | 33 | | 31 | |

^a The total annual number of conflicts does not necessarily correspond to the number of conflict locations in table 1.1 and in table 1A, appendix 1A, since there may be more than one major armed conflict in each location.

^b Only those regions of the world in which a conflict was recorded for the period 1989–94 are included here.

Source: Uppsala Conflict Data Project.

In 1994 the contested incompatibilities in the major armed conflicts concerned internal affairs such as control over government or territory (i.e., secession or autonomy). There were nearly the same number of types of incompatibility: 14 concerned government and 17 concerned territory (see table 1.2). This was in line with a slight but continuous shift away from issues concerning government (from 55 per cent of the issues in 1989 to 45 per cent in 1994). As has been the case since 1990, all the major armed conflicts in Europe concerned territorial issues (questions of state formation), whereas all the conflicts in Central and South America throughout the period concerned control of government. In Africa, for the entire period most disputes concerned government control, while in Asia and the Middle East territorial issues were more frequent.

IV. Peace processes and conflicts with lower intensity in 1994

The one peace process during the year which ended a major armed conflict was that in South Africa. Peace accords were also agreed during the year between the Palestine Liberation Organization (PLO) and Israel, but the conflict concerning Palestine saw no dramatic decline in the number of deaths recorded. Instead, a shift occurred from a situation where most of the fighting was between the PLO and Israel to a situation where the fighting involved non-PLO groups opposed to the peace process, notably Hamas and Islamic Jihad, confronting both the PLO and Israel, and Hizbollah, operating from southern Lebanon. In addition, several PLO splinter groups took part in the violence. Another peace process with a significant effect on the level of

fighting moved ahead in Northern Ireland, with a cease-fire and a nearly total absence of battle-related deaths registered after August 1994.

Cease-fire agreements or other arrangements reduced the fighting in a number of cases: in the Nagorno-Karabakh conflict in Azerbaijan, in Bosnia and Herzegovina (between Government and Bosnian Croat forces), in the Abkhazia conflict in Georgia and in Bangladesh. As this listing makes clear, such arrangements were more successful in reducing the violence in conflicts in Europe. In the Philippines fighting declined during a period of negotiation between the government and the New People's Army (NPA) guerrillas, but negotiations broke down in October. However, decreasing armed conflict in the Philippines was mainly due to the NPA being weakened by internal power struggles.

In some situations, the presence of UN peacekeeping forces contributed to the implementation of a cease-fire and to a reduction in the number of deaths recorded, as in Croatia. Russian troops had a peacekeeping effect on the conflict in Abkhazia. Peacekeeping forces continued to be involved in armed conflict in Liberia and Tajikistan.

Appendix 1A. Major armed conflicts, 1994

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The following notes and sources apply to the locations listed in table 1A:¹

^a The stated general incompatible positions. 'Govt' and 'Territory' refer to contested incompatibilities concerning government (type of political system, a change of central government or in its composition) and territory (control of territory [interstate conflict], secession or autonomy), respectively.

^b 'Year formed' is the year in which the incompatibility was stated. 'Year joined' is the year in which use of armed force began or recommenced.

^c The non-governmental warring parties are listed by the name of the parties using armed force. Only those parties which were active during 1994 are listed in this column.

^d The figure for 'No. of troops in 1994' is for total armed forces (rather than for army forces, as in the *SIPRI Yearbooks 1988-1990*) of the government warring party (i.e., the government of the conflict location), and for non-government parties from the conflict location. For government and non-government parties from outside the location, the figure in this column is for total armed forces within the country that is the location of the armed conflict. Deviations from this method are indicated by a note (*) and explained.

^e The figures for deaths refer to total battle-related deaths during the conflict. 'Mil.' and 'civ.' refer, where figures are available, to *military* and *civilian* deaths, respectively; where there is no such indication, the figure refers to total military and civilian battle-related deaths in the period or year given. Information which covers a calendar year is necessarily more tentative for the last months of the year. Experience has also shown that the reliability of figures improves over time; they are therefore revised each year.

^f The 'change from 1993' is measured as the increase or decrease in the number of battle-related deaths in 1994 compared with the number of battle-related deaths in 1993. Although based on data that cannot be considered totally reliable, the symbols represent the following changes:

- ++ increase in battle deaths of > 50%
- + increase in battle deaths of > 10 to 50%
- 0 stable rate of battle deaths (\pm 10%)
- decrease in battle deaths of > 10 to 50%
- decrease in battle deaths of > 50%

n.a. not applicable, since the major armed conflict was not recorded for 1993.

Note: In the last three columns ('Total deaths', 'Deaths in 1994' and 'Change from 1993'), '.' indicates that no reliable figures, or no reliable disaggregated figures, were given in the sources consulted.

¹ Note that although some countries are also the location of minor armed conflicts, the table lists only the major armed conflicts in those countries. Reference to the tables of major armed conflicts in previous *SIPRI Yearbooks* is given in the list of sources.

* R. Amer was responsible for the data for the conflict location of Cambodia; C. J. Åsberg for India; B. Heldt for Liberia, Rwanda, Somalia and Sudan; A.-S. Jakobsson for Northern Ireland; T. Ohlson for Angola; K.-Å. Nordquist for Colombia, Guatemala and Peru; and A. Schnell for Algeria. M. Sollenberg was responsible for the remaining conflict locations. Ylva Nordlander, Cecilia Backman and Ulrika Gustin provided assistance in the data collection.

Sources: For additional information on these conflicts, see chapters in previous editions of the *SIPRI Yearbook*: Wallensteen, P. and Axell, K. 'Major armed conflicts', *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), chapter 2; Amer, R., Heldt, B., Landgren, S., Magnusson, K., Melander, E., Nordquist, K.-Å., Ohlson, T. and Wallensteen, P., 'Major armed conflicts', *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press: Oxford, 1993), chapter 3; Heldt, B., Wallensteen, P. and Nordquist, K.-Å., 'Major armed conflicts in 1991', *SIPRI Yearbook 1992* (Oxford University Press: Oxford, 1992), chapter 11; Lindgren, K., Heldt, B., Nordquist, K.-Å. and Wallensteen, P., 'Major armed conflicts in 1990', *SIPRI Yearbook 1991* (Oxford University Press: Oxford, 1991), chapter 10; Lindgren, K., Wilson, G. K., Wallensteen, P. and Nordquist, K.-Å., 'Major armed conflicts in 1989', *SIPRI Yearbook 1990* (Oxford University Press: Oxford, 1990), chapter 10; Lindgren, K., Wilson, G. K. and Wallensteen, P., 'Major armed conflicts in 1988', *SIPRI Yearbook 1989* (Oxford University Press: Oxford, 1989), chapter 9; Wilson, G. K. and Wallensteen, P., 'Major armed conflicts in 1987', *SIPRI Yearbook 1988* (Oxford University Press: Oxford, 1988), chapter 9; and Goose, S., 'Armed conflicts in 1986, and the Iraq-Iran War', *SIPRI Yearbook 1987* (Oxford University Press: Oxford, 1987), chapter 8.

The following journals, newspapers and news agencies were consulted: *Africa Confidential* (London); *Africa Events* (London); *Africa Reporter* (New York); *Africa Research Bulletin* (Oxford); *AIM Newsletter* (London); *Asian Defence Journal* (Kuala Lumpur); *Asian Recorder* (New Delhi); *Balkan War Report* (London); *Burma Focus* (Oslo); *Burma Issues* (Bangkok); *Conflict International* (Edgware); *Dagens Nyheter* (Stockholm); Dialog Information Services Inc. (Palo Alto); *The Economist* (London); *Facts and Reports* (Amsterdam); *Far Eastern Economic Review* (Hong Kong); *Financial Times* (Frankfurt); *Fortnight Magazine* (Belfast); *The Guardian* (London); *Horn of Africa Bulletin* (Uppsala); *Jane's Defence Weekly* (Coulsdon, Surrey); *Jane's Intelligence Review* (Coulsdon, Surrey); *The Independent* (London); *International Herald Tribune* (Paris); *Kayhan International* (Teheran); *Keesing's Contemporary Archives* (Harlow, Essex); *Latin America Weekly Report* (London); *Le Monde Diplomatique* (Paris); *Mexico and Central America Report* (London); *Middle East International* (London); *Moscow News* (Moscow); *Newsweek* (New York); *New Times* (Moscow); *New York Times* (New York); *Reuter Business Briefing* (London); *RFE/RL (Radio Free Europe/Radio Liberty) Research Report* (Munich); *Pacific Report* (Canberra); *Pacific Research* (Canberra); *S.A. Barometer* (Johannesburg); *Selections from Regional Press* (Institute of Regional Studies: Islamabad); *Southern African Economist* (Harare); *Southern Africa Political & Economic Monthly* (Harare); *SouthScan* (London); *Sri Lanka Monitor* (London); *The Statesman* (Calcutta); *Svenska Dagbladet* (Stockholm); *Teheran Times* (Teheran); *The Times* (London); *World Aerospace & Defense Intelligence* (Newtown, Conn.).

Table 1A. Table of conflict locations with at least one major armed conflict in 1994

| Location | Incompat- ibility ^a | Year formed/ year joined ^b | Warring parties ^c | No. of troops in 1994 ^d | Total deaths ^e (incl. 1994) | Deaths in 1994 | Change from 1993 ^f |
|----------------------------|-----------------------------------|--|--|---------------------------------------|---|-------------------|----------------------------------|
| Europe | | | | | | | |
| Azerbaijan | Territory | 1988/1990 | Govt of Azerbaijan | 56 000 | > 10 000 | .. | .. |
| | | | vs. Republic of Nagorno-Karabakh, Armenia | 10 000 | | | |
| | | | | .. | | | |
| Bosnia and Herzegovina* | Territory | 1992/1992 | Govt of Bosnia and Herzegovina | 110 000 | 20 000– 50 000 | > 1 500 | -- |
| | | | vs. Serbian Republic (of Bosnia and Herzegovina), Serbian irregulars, Yugoslavia (Serbia and Montenegro) | 50 000–80 000 | | | |
| | | | | .. | | | |
| | Territory | 1991/1993 | vs. Republic of Herzeg-Bosna, Croatia | 50 000 3 000–5 000 | | | |
| Georgia | Territory | 1992/1992 | Govt of Georgia | 20 000 | > 2 500 | < 200 | -- |
| | | | vs. Republic of Abkhazia | 4 000 | | | |

* Fighting between the Army of the Serbian Republic of Bosnia and Herzegovina and the Bosnian Croat Defence Council (or Bosnian HVO, the armed forces of the Croat Republic of Herzeg-Bosna) is not included as a conflict since neither of these parties is a national government.

| | | | | | | | |
|----------------|-----------|-----------|---------------------|---------|--------|------|----|
| United Kingdom | | | Govt of UK | 274 800 | 1 500* | 17** | .. |
| | Territory | 1969/1969 | vs. Provisional IRA | 200-400 | | | |

Provisional IRA: Provisional Irish Republican Army.

* The total number of deaths in political violence in Northern Ireland since 1969 is almost 3200. The figure given here is an estimate of the deaths incurred between the Government of the UK and the Provisional IRA; the remaining deaths were mainly caused by other paramilitary organizations such as the Ulster Volunteer Force (UVF) and the Ulster Freedom Fighters (UFF).

** The total number of deaths incurred in political violence in 1994 is 61.

Middle East

| | | | | | | | |
|------|-----------|-----------|------------------------|----------|----|----|----|
| Iran | | | Govt of Iran | 513 000* | .. | .. | .. |
| | Govt | 1970/1991 | vs. Mujahideen e-Khalq | .. | | | |
| | Territory | 1972/1979 | vs. KDPI | 8 000 | | | |

KDPI: Kurdish Democratic Party of Iran.

* Including the Revolutionary Guard.

| | | | | | | | |
|------|------|-----------|--------------|-----------------|----|----|----|
| Iraq | | | Govt of Iraq | 350 000-400 000 | .. | .. | .. |
| | Govt | 1980/1991 | vs. SAIRI* | 10 000** | | | |

SAIRI: Supreme Assembly for the Islamic Revolution in Iraq.

* Most of the Shia rebels belong to this group.

** Total strength of Shia rebels.

| Location | Incompatibility ^a | Year formed/ year joined ^b | Warring parties ^c | No. of troops in 1994 ^d | Total deaths ^e (incl. 1994) | Deaths in 1994 | Change from 1993 ^f |
|--|--|--|--|---------------------------------------|---|-------------------|----------------------------------|
| Israel | Territory | 1964/1964 | Govt of Israel vs. PLO* vs. Non-PLO groups** | 172 000 | 1948–: > 12 500 | 300–600 | .. |
| <p>* The Palestine Liberation Organization (PLO) is an umbrella organization; armed action is carried out by member organizations. The main groups represented on the Executive Committee are Al-Fatah, PFLP (Popular Front for the Liberation of Palestine; George Habash), DFLP (Democratic Front for the Liberation of Palestine; Branch of Nayef Hawatmeh), DFLP (Democratic Front for the Liberation of Palestine; Branch of Yassar Abed Rabbo), ALF (Arab Liberation Front), PPSF (Palestine Popular Struggle Front; Samir Ghosheh), PLP (Palestinian Liberation Front; Mahmoud Abul Abbas) and PPP (Palestinian People's Party, formerly PCP Palestinian Communist Party). Apart from these groups, 10 other members of the Executive Committee are not affiliated with any particular political party, ideology or organization.</p> <p>** Examples of these groups are Hamas, PFLP–GC (Popular Front for the Liberation of Palestine–General Command), Islamic Jihad and Hizbollah.</p> | | | | | | | |
| Turkey | Territory | 1974/1984 | Govt of Turkey vs. PKK | 600 000 10 000–12 000 | > 13 000 | > 3 000 | + |
| PKK: | Partiya Karkeren Kurdistan, Kurdish Worker's Party, or Apocus. | | | | | | |
| Yemen | Territory | 1994/1994 | Govt of Yemen vs. Democratic Republic of Yemen | 36 000–40 000 23 000–27 000 | 1 500– 7 000 | 1 500–7 000 | n.a. |
| Asia | | | | | | | |
| Afghanistan | Govt | 1978/1978 1990/1990 1992/1992 | Govt of Afghanistan vs. Hezb-i-Islami vs. Hezb-i-Wahdat vs. Jumbish-i Milli-ye Islami* | .. .. .. | > 14 000 | 4 000–10 000 | + |
| <p>* The National Islamic Movement (NIM), led by Dostum.</p> | | | | | | | |

| | | | | | | | |
|------------|-----------|-----------|--------------------|-------------|--------|-------------|---|
| Bangladesh | | | Govt of Bangladesh | 115 500 | 1975-: | < 25 | 0 |
| | Territory | 1971/1982 | vs. JSS/SB | 2 000-5 000 | | 3 000-3 500 | |

JSS/SB: Parbatya Chattagram Jana Sanghati Samiti (Chittagong Hill Tracts People's Co-ordination Association/Shanti Bahini [Peace Force]).

| | | | | | | | |
|----------|------|-----------|------------------|------------------|------------|----|----|
| Cambodia | | | Govt of Cambodia | 130 000-140 000* | > 25 500** | .. | .. |
| | Govt | 1979/1979 | vs. PDK | 6 000-15 000 | | | |

PDK: Party of Democratic Kampuchea (Khmer Rouge).

* Including all militias.

** For figures for battle-related deaths in this conflict prior to 1979, see *SIPRI Yearbook 1990*, p. 405, and note p, p. 418. Regarding battle-related deaths in 1979-89, that is, not only involving the Govt and PDK, the only figure available is from official Vietnamese sources, indicating that 25 300 Vietnamese soldiers died in Cambodia. An estimated figure for the period 1979-89, based on various sources, is >50 000, and for 1989 >1000. The figures for 1990, 1991 and 1992 were lower.

| | | | | | | | |
|-------|-----------|-----------|--------------------------|-----------|----------|--------|---|
| India | | | Govt of India | 1 265 000 | > 9 000* | > 800* | - |
| | Territory | .. / .. | vs. Kashmir insurgents** | .. | | | |
| | Territory | .. /1992 | vs BSF | .. | | | |
| | | 1982/1988 | vs. ULFA | .. | | | |

BSF: Bodo Security Force.

ULFA: United Liberation Front of Assam.

* Figures includes deaths only in the conflict over Kashmir.

** Several groups are active, some of the most important being the Jammu and Kashmir Liberation Front (JKLF), the Hizbul Mujahideen and the Harkat-ul-Ansar.

| | | | | | | | |
|-----------|-----------|-----------|-------------------|---------|---------------|------|---|
| Indonesia | | | Govt of Indonesia | 276 000 | 15 000- | < 50 | 0 |
| | Territory | 1975/1975 | vs. Fretilin | 200 | 16 000 (mil.) | | |

Fretilin: Frente Revolucionária Timorese de Libertação e Independência (Revolutionary Front for an Independent East Timor).

| Location | Incompat- ibility ^a | Year formed/ year joined ^b | Warring parties ^c | No. of troops in 1994 ^d | Total deaths ^e (incl. 1994) | Deaths in 1994 | Change from 1993 ^f |
|--|---|--|------------------------------------|---------------------------------------|---|-----------------------|----------------------------------|
| Myanmar | Territory | 1948/1948 | Govt of Myanmar vs. KNU | 286 000 4 000 | 1948-50: 8 000 | > 1 000 | .. |
| | Territory | ..*/1993 | vs. MTA | 10 000-20 000 | 1981-88: 5 000-8 500 | 1993-94: > 1 000** | |
| <p>KNU: Karen National Union. MTA: Mong Tai Army, commanded by Khun Sa, for the independence of the Shan State. * The Mong Tai Army was formed in 1987, but it is unclear when the demand for independence was stated. ** This figure includes deaths only in the conflict over Shan.</p> | | | | | | | |
| The Philippines | Govt | 1968/1986 | Govt of the Philippines vs. NPA | 106 500 7 750-10 000 | 21 000- 25 000* | < 200 | -- |
| | <p>NPA: New People's Army (it is possible that the NPA split into two factions in 1994). * Official military sources claim that 6500 civilians were killed during 1985-91.</p> | | | | | | |
| Sri Lanka | Territory | 1976/1983 | Govt of Sri Lanka vs. LTTE | 126 000 6 000-10 000 | > 27 000 | 500-1 500 | - |
| | <p>LTTE: Liberation Tigers of Tamil Eelam.</p> | | | | | | |

| | | | | | | | |
|------------|------|-----------|------------------------|---------------|---------|------|----|
| Tajikistan | | | Govt of Tajikistan, | 2 000–3 000 | 20 000– | ..** | -- |
| | | | Russia, | 20 000–25 000 | 50 000 | | |
| | | | Uzbekistan | .. | | | |
| | Govt | 1991/1992 | vs. Popular Democratic | .. | | | |
| | | | Army* | | | | |

* The major groups constituting the Popular Democratic Army are the Islamic Resistance Movement, the Democratic Party of Tajikistan and the Rastokhez People's Movement.

** Although no figure for deaths in 1994 is available, it is clear that the number decreased significantly compared to 1993.

Africa

| | | | | | | | |
|---------|------|-----------|-----------------|---------------|---------|---------|----|
| Algeria | | | Govt of Algeria | 150 000 | 10 000– | > 5 000 | ++ |
| | Govt | 1992/1992 | vs. FIS* | 10 000–15 000 | 25 000 | | |
| | | 1993/1993 | vs. GIA | .. | | | |

FIS: Front Islamique du Salut, *Jibhat al-Inqath* (Islamic Salvation Front).

GIA: Groupe Islamique Armé (Armed Islamic Group). It is unclear whether there are ties between GIA and FIS.

* The Islamic Salvation Army (Armée Islamique du Salut, AIS) is considered to be the armed wing of the FIS. There are also several other armed Islamic groups under the FIS military command. The number of troops refers to all armed FIS militants.

| | | | | | | | |
|--------|------|-----------|----------------|----------|-----------------|-----|----|
| Angola | | | Govt of Angola | > 90 000 | > 36 000 (mil.) | ..* | .. |
| | Govt | 1975/1975 | vs. UNITA | > 60 000 | > 86 000 (civ.) | ..* | |

UNITA: União Nacional para a Independência Total de Angola (National Union for the Total Independence of Angola).

* The open sources give no reliable figures for deaths in 1994. The figures for deaths in 1993 were conservatively estimated at 4000 (mil.) and 16 000 (civ.), and there is ample evidence that the number of deaths in 1994 was no lower than the figure for 1993.

| Location | Incompat- ibility ^a | Year formed/ year joined ^b | Warring parties ^c | No. of troops in 1994 ^d | Total deaths ^e (incl. 1994) | Deaths in 1994 | Change from 1993 ^f |
|---|-----------------------------------|--|--|---------------------------------------|---|-------------------|----------------------------------|
| Liberia | Govt | 1989/1989 | Govt of Liberia, ECOMOG vs. NPFL | 200-400 15 000-17 000 10 000 | 1989-92: 20 000* | < 500 | .. |
| ECOMOG: The ECOWAS (Economic Organization of West African States) Monitoring Group. | | | | | | | |
| NPFL: National Patriotic Forces of Liberia. | | | | | | | |
| * Note that this figure includes the fighting in 1990-91 (incurring 15 000 deaths) in which other than only the two parties participated. | | | | | | | |
| Rwanda | Govt | 1987/1990 | Govt of Rwanda vs. FPR | 30 000 15 000-20 000 | 1990-93: 5 500 | .. | ++ |
| FPR: Front Patriotique Rwandais (or Rwandan Patriotic Front, RPF). | | | | | | | |
| Somalia | Govt | 1991/1991 | Govt of Somalia* vs. USC faction (Aideed) | 10 000 10 000 | .. | .. | .. |
| USC: United Somali Congress. | | | | | | | |
| * Taken to be the USC faction (Mahdi). | | | | | | | |
| Sudan | Territory | 1980/1983 | Govt of Sudan vs. SPLA (Garang faction) | 81 000 30 000-50 000 | 37 000- 40 000 (mil.)* | .. | .. |
| SPLA: Sudanese People's Liberation Army. | | | | | | | |
| * Figure for 1991. | | | | | | | |

Central and South America

| | | | | | | | |
|----------|------|-----------|------------------|---------|-----|---------|---|
| Colombia | | | Govt of Colombia | 146 400 | ..* | < 1 000 | - |
| | Govt | 1949/1978 | vs. FARC | 5 700 | | | |
| | | 1965/1978 | vs. ELN | 2 500 | | | |

FARC: Fuerzas Armadas Revolucionarias Colombianas (Revolutionary Armed Forces of Colombia).

ELN: Ejército de Liberación Nacional (National Liberation Army).

* In the past three decades the civil wars of Colombia have claimed a total of some 30 000 lives.

| | | | | | | | |
|-----------|------|-----------|-------------------|-----------|----------------|-------|---|
| Guatemala | | | Govt of Guatemala | 44 200 | <2 800 (mil.) | < 200 | 0 |
| | Govt | 1967/1968 | vs. URNG | 800-1 100 | <43 500 (civ.) | | |

URNG: Unidad Revolucionaria Nacional Guatemalteca (Guatemalan National Revolutionary Unity).

| | | | | | | | |
|------|------|-----------|----------------------|---------|----------|-------|----|
| Peru | | | Govt of Peru | 115 000 | > 28 000 | < 200 | -- |
| | Govt | 1980/1981 | vs. Sendero Luminoso | 3 000 | | | |
| | | 1984/1986 | vs. MRTA | 500 | | | |

Sendero Luminoso: Shining Path.

MRTA: Movimiento Revolucionario Tupac Amaru (Tupac Amaru Revolutionary Movement).

* Of the reported deaths for 1994, fewer than 50 were incurred between the Government of Peru and the MRTA.

2. Armed conflict prevention, management and resolution

TREVOR FINDLAY*

I. Introduction

In 1994 patient and painstaking efforts, extending over several years, to resolve some of the world's most intractable armed conflicts came to fruition, most notably those in Angola, Northern Ireland, Mozambique and South Africa. Although not engaged in armed conflict for decades, Israel and Jordan sealed their *de facto* peace with a peace treaty, while Israelis and Palestinians took major steps in implementing their agreed peace process. A seemingly satisfactory solution in Haiti also ensued, although its situation was better described as a political stand-off than an armed conflict. Of the armed conflicts least amenable to negotiated settlement in 1994, the most widely publicized was that in Bosnia and Herzegovina. Others included civil wars in Algeria, Afghanistan, the Caucasus and Tajikistan. Of the major new armed conflicts that erupted in 1994, those in Rwanda and Yemen ran their course without a negotiated settlement, while that in the Russian republic of Chechnya continued unabated into 1995.

The most elaborate attempt at conflict management—keeping armed conflict at as low a level as possible—occurred in the former Yugoslavia, both in Croatia and in Bosnia and Herzegovina. Efforts of a similar kind but less intense, mostly carried out by UN and other multilateral peacekeeping missions, continued in various parts of the world, including Cyprus, Georgia (Abkhazia and South Ossetia), Lebanon and Liberia.

Conflict prevention, while intrinsically difficult to survey, appeared to work most spectacularly in the cases of North Korea and Haiti and, for the time being, in Burundi. The failure of efforts to avert armed conflict in Rwanda, Yemen and Chechnya was equally spectacular.

Continuing armed conflict in Bangladesh (in the Chittagong Hill Tracts), Cambodia, Chad, Chechnya, Colombia, Kashmir, Kenya, Myanmar, Peru, Sierra Leone, Sri Lanka and Turkey seemed not to be the focus of conflict resolution or management efforts by anyone.

The purpose of this chapter is to survey efforts undertaken in 1994 to prevent, manage or resolve armed conflict either between or within states. Section II describes and assesses the role of the various players in such efforts. Section III focuses on the role of the United Nations (UN), the key multilateral actor in conflict prevention, management and resolution, while

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section IV deals separately with peacekeeping, the UN's most prominent activity in this field. Section V surveys the UN role in peace enforcement, while section VI analyses the role of regional organizations.

II. The players in 1994

The key players in efforts to prevent, manage and resolve armed conflicts are the United Nations, other multilateral and/or regional organizations, individual states acting either alone or in *ad hoc* combinations, and individual states-persons. Best results are obtained when these players act synergistically, as occurred in 1994 in the case of Haiti, where the UN laid the groundwork for a settlement, the USA provided the military 'muscle' and former President Jimmy Carter and other diplomats added their personal diplomacy. Disaster can occur when peacemaking parties act at cross purposes, as happened in Bosnia and Herzegovina between the UN and NATO over the issue of air attacks on Bosnian Serb positions. In some instances a division of labour is the best solution. The UN retained the lead in peacemaking efforts in Tajikistan and in the Abkhazian conflict in Georgia, while the Organization for Security and Co-operation in Europe (OSCE), formerly the Conference on Security and Co-operation in Europe (CSCE), took the lead in Nagorno-Karabakh in Azerbaijan, in Moldova and in the South Ossetian conflict in Georgia.¹ In other instances joint operations will be most appropriate, as in the case of the joint United Nations–Organization of American States (OAS) human rights monitoring mission in Haiti.² The United Nations and regional organizations are attempting to improve their cooperative efforts through a series of formal agreements.³ However, regional organizations mostly lack the resources, organizational capabilities or political will to act collectively in preventing, managing or resolving armed conflicts. The UN is often the only possibility when massive resources are required.

Individual states can instigate and nourish peace processes and did so with varying success in 1994. The influence of the USA, either alone or supported by other permanent members of the Security Council, was a crucial factor in many instances, including in the Middle East peace negotiations.⁴ The Netherlands hosted unsuccessful peace talks between the Philippines Government and the National Democratic Front (NDF).⁵ The Central African Republic and

¹ UN, Press Release DH/1764, Geneva, 2 Nov. 1994, p. 4.

² The French acronym stands for Mission Civile Internationale en Haiti (MICIVIH) (International Civilian Mission in Haiti). OAS member states are listed in the Glossary at the front of this volume.

³ The then CSCE and the UN signed the Framework for Co-operation and Co-ordination Between the United Nations Secretariat and the Conference on Security and Co-operation in Europe in New York on 26 May 1993. The text is reproduced in SIPRI, *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 240–41.

⁴ For developments in the Middle East in 1994 see chapter 5 in this volume.

⁵ *Far Eastern Economic Review*, 27 Oct. 1994, p. 13. The NDF is the umbrella body for communist rebels who have in various guises been fighting the government almost uninterruptedly since the end of World War II. The talks broke down in Oct. but exploratory talks resumed in Nov. *International Herald Tribune*, 8 Nov. 1994.

Gabon attempted to mediate a settlement to the secessionist conflict in Chad.⁶ Among the most extensive national efforts were those of Norway, whose combination of official and non-governmental activism fostered peace settlements in situations as disparate as those in Burundi and Guatemala.⁷

Many of the year's developments were the result of direct negotiations between parties directly involved in conflict, albeit sometimes prompted, mediated and/or assisted by outsiders. A historic breakthrough in the long-running conflict in Northern Ireland occurred when first Sinn Fein, the political wing of the Irish Republican Army, and later its Loyalist opponents, agreed to a 'permanent' cease-fire and Britain and the Irish Republic united in their desire to forge a long-term solution. A cease-fire was agreed between the Papua New Guinea Government and the Bougainville Revolutionary Army (BRA) in September, although it collapsed shortly thereafter despite the presence of a South Pacific peacekeeping force. The Mexican Government began talks with the Zapatista fighters who had begun a surprise rebellion on New Year's Day. Following negotiations at Ouagadougou in Burkina Faso, Niger signed a peace agreement in October with the rebel Touareg Coordination de la Résistance Armée (CRA) of northern Niger which provided for a cease-fire and normalization of the situation in the region.⁸

Non-governmental organizations (NGOs) were also involved in initiating peace talks, including the Sant'Egidio Roman Catholic community in Rome, which attempted to broker peace between Algeria's factions in November as they had done previously in Mozambique.⁹

Meanwhile personal preventive diplomacy by former US President Jimmy Carter helped pave the way for a bilateral agreement between North Korea and the USA which ended heightened tension between the two countries over North Korea's attempts to acquire nuclear weapons.¹⁰ Besides helping avert an armed US invasion of Haiti during last-minute talks with the Haitian junta in September, Carter also helped create the negotiating framework for a cease-fire in Bosnia in December.¹¹

III. The UN role in conflict prevention, management and resolution in 1994

The United Nations, approaching its 50th anniversary in 1995, was noticeably less dramatically interventionist in 1994 and more conscious of its limitations

⁶ *International Security Digest*, vol. 1, no. 10 (Sep. 1994), p. 1.

⁷ The Norwegian Resource Bank for Democracy and Human Rights (NORDEM) enabled Norway to dispatch human rights advisers, peace mediators and observers at short notice. 'The United Nations and collective security in the next century', Address by Jan Egeland, State Secretary, Ministry of Foreign Affairs, Norway, to the Nordic Council Conference, Helsinki, 11–12 Jan. 1995, p. 2.

⁸ UN, Press Release DH/1749, Geneva, 12 Oct. 1994, p. 8 and DH/1750, Geneva, 13 Oct. 1994.

⁹ Zartman, W., 'Algiers has to give the moderates a chance, and a reason, to emerge', *International Herald Tribune*, 10 Feb. 1995, p. 8.

¹⁰ See chapters 15 and 16 in this volume.

¹¹ Kramer, M., 'The Carter connection', *Time*, 3 Oct. 1994, pp. 16–17; and *The Independent*, 20 Dec. 1994, p. 9.

Table 2.1. UN peace and security activities, 1988–94

| | As at 31 Jan. 1988 | As at 31 Jan. 1992 | As at 16 Dec. 1994 |
|--|-----------------------|-----------------------|-----------------------|
| Security Council resolutions adopted in the preceding 12 months | 15 | 53 | 78 |
| Disputes and conflicts in which the United Nations was actively involved in preventive diplomacy or peacemaking in the preceding 12 months | 11 | 13 | 28 |
| Peace-keeping operations deployed: | | | |
| Total | 5 | 11 | 17 |
| Classical | 5 | 7 | 9 |
| Multifunctional | — | 4 | 8 |
| Military personnel deployed | 9 570 | 11 495 | 73 393 |
| Civilian police deployed | 35 | 155 | 2 130 |
| International civilian personnel deployed | 1 516 | 2 206 | 2 260 |
| Countries contributing military and police personnel | 26 | 56 | 76 |
| United Nations budget for peacekeeping operations (annual, in US \$m.) | 230.4 | 1 689.6 | 3 610.0 ^a |
| Countries in which the United Nations had undertaken electoral activities in the preceding 12 months | — | 6 | 21 |
| Sanctions regimes imposed by the Security Council | 1 | 2 | 7 |

^a Projected.

Source: Supplement to *An Agenda for Peace: Position Paper of the Secretary-General on the Occasion of the Fiftieth Anniversary of the United Nations*, UN document A/50/60, S/1995/1, 3 Jan. 1995.

as the lessons of ambitious missions in Cambodia and Somalia were absorbed, its financial crisis worsened and the Security Council refused to commit the organization to a role in every crisis situation. The heyday of post-cold war peacekeeping appeared suddenly to be over. A new US peacekeeping policy, Presidential Decision Directive 25, had its intended dampening effect.¹²

For pro-interventionists, including UN Secretary-General Boutros Boutros-Ghali, the most troubling episode occurred when the Security Council—at the behest of the USA—refused to counter attempted genocide in Rwanda and actually reduced the UN peacekeeping force there after widespread massacres began.¹³ The much lauded virtues of early warning, preventive diplomacy and preventive deployment seemed hollow in the face of UN inaction. The UN Operation in Somalia (UNOSOM II) meanwhile ground towards ignominious withdrawal, the international community widely concluding that little beyond

¹² See the section on national contributions to peacekeeping below for details. Extracts from the Clinton Administration's Policy on Reforming Multilateral Peace Operations (Presidential Decision Directive 25) are reproduced in appendix 2B in this volume.

¹³ See appendix 2C for details.

humanitarian assistance could be provided for a people whose political leadership showed no inclination to seek peace and national reconciliation. In the former Yugoslavia the UN Protection Force (UNPROFOR), which in 1994 became the largest and most expensive peacekeeping operation ever, continued to struggle to deliver humanitarian supplies, guard safe areas, enforce no-fly zones and sanctions, and rehabilitate Sarajevo—rather than contributing to a long-term solution. Valiant UN efforts to broker lasting peace accords in Afghanistan, Cyprus and Georgia (Abkhazia) and to get the Western Sahara referendum back on track also came to nought.

The UN did, however, guide Salvadoreans and Mozambicans through free and fair elections and towards national reconciliation and reconstruction, writing new peace accords out of reluctant parties in Angola and Liberia, and lend its authority to ending the long-running dispute between Chad and Libya over the Aouzou Strip. The UN could also claim some credit for its long-standing and tenacious support for the establishment of majority rule in South Africa, which finally occurred in 1994.

Despite an unwillingness to launch major new peacekeeping or peace enforcement operations,¹⁴ the rapid overall expansion of the UN role in conflict prevention, management and resolution that has characterized the past few years continued in 1994. Expansion and reform of the Secretariat continued after the zero-growth restrictions of recent years were removed and some of the multitude of reform proposals implemented. One UN organ that might be regarded as a supremely successful conflict prevention and resolution device, having overseen the transition to independence of scores of colonial territories—the Trusteeship Council—suspended its operations indefinitely on 1 November after the last of the trusteeships under its aegis, the Pacific Trust Territory of Palau, achieved independence.¹⁵

Debate on the UN role

Debate continued during 1994 over the UN's new role and responsibilities, in particular over the use of force in 'peace operations'.¹⁶ The doctrinal debate was largely played out between the USA and the UK, with the former initially advocating a more robust approach, inspired in part by its Viet Nam, Grenada and Persian Gulf War experiences, while the UK, with its Northern Ireland and colonial background, adopted a more nuanced doctrine.¹⁷ Traditional exponents of peacekeeping and many military personnel argued for retaining the proven UN peacekeeping ethos of impartiality, consent of the parties and

¹⁴ For a discussion of the differences between these concepts, from UN and other perspectives, see Findlay, T., 'Multilateral conflict prevention, management and resolution', in SIPRI (note 3), pp. 14–19 and *passim*.

¹⁵ Trusteeship Council document TR/94/1, New York, 1 Nov. 1994. Palau became a UN member state in Dec. 1994.

¹⁶ This term is intended to comprise traditional and expanded peacekeeping operations, large multilateral humanitarian operations and peace enforcement operations.

¹⁷ These were reflected in US Army Field Manual FM100-23, *Peace Operations*, Washington, DC, 1995; and British Army Field Manual, *Wider Peacekeeping I* (Her Majesty's Stationery Office: London, 1995), respectively.

minimum use of force in self-defence only, or, at most, in defence of the mission. They argued that any attempt by a UN peacekeeping force to enforce its will on one or more recalcitrant parties would inevitably draw that force into full-scale fighting for which it was not equipped or prepared.¹⁸ They dismissed the notion that the use of force for enforcement purposes in a peacekeeping mission can wax and wane depending on the need for it, since once such force is used the UN is quickly perceived as having become a party to the conflict—a player rather than an umpire. General Sir Michael Rose, commander of UNPROFOR in Bosnia, insisted that ‘Patience, persistence and pressure is how you conduct a peacekeeping mission. Bombing is a last resort because then you cross the Mogadishu line . . . Hitting a tank is peacekeeping. Hitting infrastructure, command and control, logistics, that is war, and I’m not going to fight a war in white-painted tanks’.¹⁹

Proponents of more robust military activity in peace operations argued that, while it might be possible intellectually to draw a sharp distinction between peacekeeping and peace enforcement, there is in practice a continuum in which one merges into the other.²⁰ They argued that the difference between ‘defending the mandate’ and ‘enforcing the peace’ is not readily apparent in situations on the ground. They claimed that the UN cannot simply ignore violations of agreements, often painstakingly arrived at, by recalcitrant parties, often small in size and venal in nature.²¹ Nor, they argued, can the UN be impartial between parties which comply with agreements and those that brazenly violate them. To do so puts the credibility of the UN, the Security Council and the international community at risk and jeopardizes major investments of time, resources and personnel.

The debate was sharpened in mid-1994 by the release of the report of the UN Commission of Enquiry into the virtual war between UNOSOM II and one of the Somali factions in 1993 which had resulted in large numbers of Somali and UN casualties.²² The report recommended that the UN ‘refrain from undertaking further peace enforcement actions within the internal conflicts of states’.²³ Aware that this was unlikely to be possible, particularly

¹⁸ Sanderson, J. M. (Lt-Gen.), ‘Australia, the United Nations and the emerging world order’, the 28th Alfred Deakin Lecture, Melbourne, 5 Sep. 1994, p. 10; and Dobbie, C., ‘A concept for post-cold war peacekeeping’, *Survival*, vol. 36, no. 3 (autumn 1994), p. 134.

¹⁹ *International Herald Tribune*, 30 Sep. 1994, p. 2.

²⁰ Wurmser, D., et al., *The Professionalization of Peacekeeping* (US Institute of Peace: Washington, DC, Aug. 1993); and Daniel, D., ‘Issues and considerations in UN gray area and enforcement operations’, Occasional paper, Centre for Naval War Studies, Strategic Research Department Research Memorandum 4-94, US Naval War College, Newport, R.I., 1994.

²¹ Mackinlay, J., ‘Defining a role beyond peacekeeping’, ed. W. H. Lewis, National Defense University, Institute for National Strategic Studies, *Military Implications of United Nations Peacekeeping Operations* (INSS: Washington, DC, June 1993), p. 38.

²² For details see the case study on UNOSOM II in Claesson, P. and Findlay, T., ‘Case studies on peacekeeping: UNOSOM II, UNTAC and UNPROFOR’, in SIPRI (note 3), appendix 1B, pp. 62–66.

²³ UN, Report of the Commission of Inquiry established pursuant to Security Council Resolution 885 (1993) to investigate armed attacks on UNOSOM II personnel which led to casualties among them, New York, 24 Feb. 1994, appended to UN, Note by Secretary-General, UN document S/1994/653, 1 June 1994, p. 48. The report was prepared by the Chief Justice of Zambia, Matthew Ngulube, and two experienced former UN peacekeeping force commanders, Lt-Gen. Gustav Hägglund of Finland and Lt-Gen. (Ret.) Emmanuel A. Erskine of Nigeria.

given the UN's continuing involvement in peace enforcement in Bosnia, the Commission recommended that if peace enforcement was nevertheless undertaken, the mandate of the force 'should be limited to specific objectives and the use of force should be applied as the ultimate means after all peaceful remedies have been exhausted'. Increased use of preventive diplomacy, peace building and emergency assistance was recommended. At the operational level the Commissioners recommended for all future UN missions the inclusion of experienced peacekeepers, including observers (which was patently not the case in UNOSOM II), more and better protective equipment and a unified command under the Secretary-General.

The situation on the ground in the former Yugoslavia also strongly affected the debate. As the year drew to a close UNPROFOR found it increasingly difficult to allow NATO to use force on its behalf to punish or deter parties (principally the Bosnian Serbs) upon whom it relied for consent to carry out its primary mission of providing humanitarian relief and whose agreement was essential to the negotiation of a comprehensive peace agreement. Moreover, because of the nature of the war and UNPROFOR's scattered deployment, UN troops were extremely vulnerable to being taken hostage and/or attacked with superior force. Even providing for its own self-defence, much less defence of its mission (particularly defence of the safe areas declared around major provincial cities) was revealed as problematic. By the end of 1994 all attempts to use military means to enforce peace in the former Yugoslavia had been abandoned.

A consensus, hastened by these events, appeared to be emerging between the UN, national military headquarters (particularly the British and US) and among academic observers that peace enforcement and peacekeeping are essentially incompatible within a peacekeeping mission, mandated under Chapter 6 of the UN Charter. While it was conceded that force may be used at a local, tactical level, for instance against renegade groups which are beyond the control of their central commanders, it should only be in self-defence and defence of the peacekeeping mission (rather than attempting to bring such groups into complete conformity with a peace agreement) and be followed immediately by an attempt to establish the consent of the party concerned to the presence and activities of the UN force. Certainly this became conventional wisdom in the UN Secretariat itself. By the end of the year Boutros-Ghali was declaring that 'Peace-keeping and enforcement are *not* adjacent points on a continuum—they must be understood as alternative techniques'.²⁴ He also reverted to the UN's traditional definition of peacekeeping as requiring 'the consent of the parties',²⁵ abandoning the broader definition unveiled

²⁴ Boutros Boutros-Ghali, Address at the opening ceremony of the Nordic Council Conference on The Nordic countries in the United Nations—for Peace and Development, Helsinki, 11 Jan. 1995, pp. 8–9.

²⁵ UN, Improving the capacity of the United Nations for peace-keeping, Report of the Secretary-General, UN documents A/48/403/Add. 1 and S/26450/Add. 1, 14 Mar. 1994, p. 2.

in his 1992 *Agenda for Peace* which described it as being 'hitherto with the consent of all the parties concerned'.²⁶

The second view around which consensus appears to be developing was that an effective military presence should be a prerequisite for peacekeeping missions with expanded responsibilities in civil conflict situations. There should be a greater flexibility and range of options in using force, a clearer UN doctrine and more consistent rules of engagement. This does not mean lowering the threshold for the use of force or aggressively displaying military might; on the contrary, it may help avoid the use of force.²⁷ If peace enforcement is contemplated it should be mandated under Chapter 7 of the UN Charter and the force given the requisite military capability and resources and political commitment.

In response to allegations by some developing states that the UN was devoting too much attention and too many resources to peacekeeping, Boutros-Ghali tabled *An Agenda for Development* in the General Assembly in May.²⁸ A longer and more didactic work than *An Agenda for Peace*, the document set out a holistic UN philosophy on development.²⁹ It also refuted the argument that development was losing ground to peacekeeping by estimating that the UN and its central development-related programmes (excluding the specialized agencies) in 1992–93 spent \$13 223 million on development compared with just \$1700 million for peacekeeping.³⁰ *An Agenda for Development* is a valuable complement to *An Agenda for Peace* by clearly making the case that, while peace is an optimal condition for development, development efforts cannot wait for peace but must be adapted to the specific conditions prevailing in countries wracked by armed conflict. Developing countries were dissatisfied, however, justifiably claiming that the report lacked the specific reform proposals, commitment and creativity of *An Agenda for Peace*.³¹ The General Assembly, in response, established an open-ended *ad hoc* working group in December to 'further elaborate an action-oriented agenda for development'.³²

²⁶ Boutros-Ghali, B., *An Agenda for Peace: Preventive diplomacy, peacemaking and peacekeeping*, Report of the Secretary-General, UN document A/47/277, S/24111, 17 June 1992, reproduced in SIPRI, *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press, Oxford, 1993), appendix 2A, pp. 66–80.

²⁷ Mackinlay (note 21), pp. 38–39.

²⁸ UN, *An Agenda for Development*, Report of the Secretary-General, UN document A/48/935, 6 May 1994.

²⁹ For a critique of *An Agenda for Development*, see Craig, D., 'An Agenda for Development', *Pacific Research*, Aug. 1994, pp. 38–39.

³⁰ *An Agenda for Development* (note 28), pp. 46–47. See also Childers, E. with Urquhart, B., *Reviewing the United Nations System* (Dag Hammarskjöld Foundation: Uppsala, 1994), pp. 23–24.

³¹ Boutros-Ghali only increased suspicions about his own personal predilection for dealing with peace and security rather than development issues when he devoted several major statements exclusively to peacekeeping, claiming: 'Despite my hopes and actions to deal with the entire agenda of the United Nations, the Organization is forced to focus on peace-keeping. I will accentuate this distortion today. I will talk to you about peace-keeping. Peace-keeping is the subject of the day. It cannot be avoided'. Boutros-Ghali, Address at Harvard University, Cambridge, Massachusetts, on receiving the Harvard Medal, 14 Dec. 1994, UN, Press Release SG/SM/94/228, Geneva, 15 Dec. 1994, p. 2; and Boutros-Ghali (note 24), p. 4.

³² UN, Press Release DH/1797, 20 Dec. 1994, p. 2.

The General Assembly

As in most other areas of the UN agenda, the General Assembly's role in conflict prevention, management and resolution has been more hortatory than proactive. Its greatest power lies in its control over the financing of the UN, including its peacekeeping operations. Under Chapter IV of the UN Charter the Assembly is also able to make recommendations for the 'peaceful adjustment of any situation, regardless of origin, which it deems likely to impair the general welfare or friendly relations among nations'.³³ In the past the Assembly has also established fact-finding operations and in 1994 followed this precedent by establishing in August, at the recommendation of the Secretary-General, the UN Human Rights Verification Mission in Guatemala (MINUGUA) after the conclusion of the Comprehensive Agreement on Human Rights by the parties to the Guatemalan civil war.³⁴

The Assembly also produced a so-called 'Comprehensive Review of the Whole Question of Peace-Keeping Operations in All Their Aspects' through its Special Political and Decolonization Committee (Fourth Committee) which was, unfortunately, bereft of new ideas.³⁵ Scarcely more innovative was the Special Committee on Peace-keeping Operations, the so-called Committee of 34,³⁶ whose report for the year highlighted key differences between member states over peacekeeping issues rather than agreement on innovative ideas. One of the most troubling disagreements was over the extent to which peacekeeping should automatically incorporate peace-building elements such as promotion of human rights, the latter being particularly opposed by some developing states. Among the Committee's consensus proposals were further improved consultations by the Security Council with countries contributing troops, the reinforcement of audit and inspection mechanisms for peacekeeping missions and initiation of a trial programme for training peacekeeping trainers.³⁷

The Secretary-General and the Secretariat

The importance of conflict prevention and conflict resolution (in the parlance of the UN and other multilateral organizations 'preventive diplomacy' and 'peacemaking') was given even greater emphasis by the Secretary-General and the Secretariat in 1994, undoubtedly reflecting the realization that such

³³ UN Charter, Chapter IV, Article 14.

³⁴ UN, Establishment of a human rights verification mission in Guatemala, Report of the Secretary-General, UN document A/48/985, 18 Aug. 1994; and UN, Press Release, DH/1732, Geneva, 19 Sep. 1994, p. 2. See also chapter 4 in this volume.

³⁵ UN, Comprehensive review of the whole question of peace-keeping operations in all their aspects, Report of the Special Political and Decolonization Committee (Fourth Committee), UN document A/49/621, 28 Nov. 1994.

³⁶ Membership of the Committee comprises Afghanistan, Algeria, Argentina, Australia, Austria, Canada, China, Denmark, Egypt, El Salvador, Ethiopia, France, Germany, Guatemala, Hungary, India, Iraq, Italy, Japan, Mauritania, Mexico, the Netherlands, Nigeria, Pakistan, Poland, Romania, Sierra Leone, Spain, Thailand, Russia, the UK, the USA, Venezuela and Yugoslavia.

³⁷ UN, Report of the Special Committee on Peace-keeping Operations, UN document A/49/136, 2 May 1994.

methods were cheaper than substantial peacekeeping and/or humanitarian operations and that many UN member states were becoming increasingly reluctant to fund or become involved in such missions. In early 1994 Boutros-Ghali placed the Department of Political Affairs under a single Under Secretary-General, Marrack Goulding, in place of the previous two heads, to improve effectiveness.³⁸ The Department now includes six regional divisions (two for Africa, two for Asia and one each for the Americas and Europe) which have primary responsibility for preventive diplomacy and peacemaking, as well as an advisory role on other political matters. Proposals were made during the year for greater professionalism in UN preventive diplomacy efforts, including establishment of regionally focused preventive diplomacy units and a dispute resolution service within the Secretariat.³⁹ The Secretary-General repeatedly pointed to the lack of qualified and willing high-level negotiators and mediators as being a constraint on UN activity in this area.

Part of the early warning required for effective conflict prevention derives from attention to human rights situations in various countries. The Secretariat's ability to monitor and deal with gross human rights violations requiring international action was bolstered in 1994 by the appointment, after many years of debate, of a UN High Commissioner for Human Rights, José Ayala Lasso, and the establishment of a UN Centre for Human Rights.⁴⁰ A 24-hour facsimile 'Human Rights Hot Line' was immediately initiated so that emergency information relating to human rights situations could be received from victims of human rights violations, their relatives or NGOs.

The Secretary-General and the Secretariat, meanwhile, undertook several conflict prevention and peacemaking exercises in 1994, with mixed results. In a number of cases the Secretary-General himself intervened with his own good offices, while on other occasions he appointed distinguished outsiders or UN Secretariat officials to act on his behalf. Major activities are detailed below.

Afghanistan

A Special Mission dispatched to canvass a broad spectrum of the Afghan leadership on the future UN role in facilitating national *rapprochement* and reconstruction held discussions in Pakistan with Afghan refugees, with Iran, Russia, Saudi Arabia, Turkey and Uzbekistan and with the former King of Afghanistan in Rome.⁴¹ Options included re-establishment of a substantial UN presence in Afghanistan, implementation of a country-wide cease-fire and establishment of a transitional authority to permit the holding of free and fair elections. However, at the end of 1994 fighting continued between the various

³⁸ UN, Report of the Secretary-General on the work of the Organization, UN document A/49/1, 2 Sep. 1994, p. 54.

³⁹ Evans, G., 'Cooperative Security and Intra-State Conflict', *Foreign Policy*, no. 96 (fall 1994), p. 15; and Taylor, A., 'UN: after 50 years still true to founders' hopes?', *Insight*, Australian Department of Foreign Affairs and Trade, Canberra, 24 Oct. 1994, p. 12.

⁴⁰ UN (note 38), p. 49.

⁴¹ UN (note 38), pp. 58-60.

Afghan factions in Kabul and northern Afghanistan, precluding the implementation of any of these options.

Burundi

A fact-finding team of the Secretary-General's was in Burundi from 22 March until 20 April, the period in which the presidents of Rwanda and Burundi were killed in a plane crash in Kigali and ethnic violence erupted across both states.⁴² Although 25 000–100 000 people were killed in Burundi, the scale of violence did not approach that in neighbouring Rwanda and in May negotiations between 12 parties on the presidential succession took place under the guidance of the Secretary-General's representative. The Security Council in August also sent to Burundi a fact-finding mission of its own, comprising Council members from the Czech Republic, Nigeria, Russia and the USA.⁴³ The Council declined requests from the Burundi Government for a peace-keeping force to be dispatched. In September a power-sharing agreement, a Convention of Government, was reached by Burundi's political parties and a new President and government elected.⁴⁴ The situation remained extremely volatile at the end of 1994.

East Timor

The Secretary-General dispatched a mission to Australia, Indonesia, Portugal and East Timor in January for preparatory talks and to pursue contacts with East Timorese representing a range of opinions.⁴⁵ Talks between Indonesia and Portugal, the former colonial power, were held in Geneva in May and further talks were scheduled for January 1995. They were intended to focus on confidence-building measures, particularly in the human rights field, to foster an atmosphere propitious for addressing more substantive issues. The first direct talks between Indonesia and the resistance movement Fretilin⁴⁶ were held at the UN in New York in October but did not progress far.⁴⁷ Indonesia rejected Fretilin proposals for demilitarization of the territory, international verification of the withdrawal of Indonesian troops and a permanent UN presence.⁴⁸

Yemen

In February 1994 the Republic of Yemen, formed by a union between the former North and South Yemen in 1990, erupted into civil war, largely along

⁴² UN (note 38), pp. 63–64.

⁴³ UN (note 38), p. 64.

⁴⁴ UN, Press Release SG/SM/94/141, Geneva, 14 Sep. 1994, p. 1; and UN, Press Release DH/1793, Geneva, 14 Dec. 1994, p. 3. For background, see 'Burundi: a balancing act', *Africa Confidential*, vol. 35, no. 13 (1 July 1994), pp. 5–6.

⁴⁵ UN (note 38), p. 66.

⁴⁶ Frente Revolucionária Timorense de Libertação e Independência [Revolutionary Front for an Independent East Timor].

⁴⁷ *Canberra Times*, 8 Oct. 1994, p. 9.

⁴⁸ *The Australian*, 12 Oct. 1994, p. 12.

North/South lines.⁴⁹ The Arab League⁵⁰ in May charged its Secretary General with exerting all possible efforts to settle the conflict through diplomatic means and a League delegation was dispatched to talk to both sides. At the direction of the Security Council, the UN Secretary-General also dispatched a fact-finding mission and a Special Envoy, Lakhdar Brahimi, to seek a negotiated cease-fire and an acceptable monitoring mechanism.⁵¹ Events on the ground overtook these initiatives when troops of the government in Sana'a captured Aden and declared a cessation of hostilities. All that was left to the Secretary-General was to volunteer his good offices in helping bring about reconciliation in the country. This was another case, like Rwanda, in which, despite early warning of the outbreak of armed conflict and an attempt at preventive diplomacy and peacemaking, a peaceful solution proved impossible and military might prevailed.

Zaire

The Secretary-General and his representatives continued a conflict prevention exercise in Zaire aimed at preserving the unity of the country and at averting civil war and economic collapse and a humanitarian disaster that could rival those of Somalia and Rwanda. The aim was to achieve the political reconstitution of the country along pluralist, democratic lines. Such 'interference' in the domestic affairs of a sovereign UN member state would have been unthinkable several years ago, but it is an indication of how far the preventive diplomacy lesson has been absorbed that the UN has continued to persist with its efforts in 1994. During the year the two alternative Zairean 'governments' were merged, a new provisional constitution was promulgated and multi-party elections were scheduled for mid-1995.⁵² However, the tyrannical President Sésé Séko Mobutu remained determinedly in power, while the opposition challenged the legality of the new integrated government. The integrity of Zaire was further compromised by the presence of 2 million refugees from Rwanda along its eastern borders.⁵³

In addition to these activities, the UN Secretary-General and the Secretariat were involved in preventive diplomacy and/or peacemaking, with varying degrees of intensity and success in relation to Angola, Armenia and Azerbaijan, El Salvador, Georgia (Abkhazia), Guatemala, Haiti, Iraq, North and South Korea, Kuwait, some aspects of the Middle East conflicts, Moldova, Rwanda, Tajikistan and Western Sahara.⁵⁴

⁴⁹ For background to the conflict see Prados, A. B., 'Yemen, civil strife', *CRS Report for Congress*, no. 94-397 F, Congressional Research Service, Library of Congress, Washington DC, 27 May 1994.

⁵⁰ A list of members of the Arab League can be found in the glossary at the front of this volume.

⁵¹ UN (note 38), p. 79.

⁵² UN (note 38), p. 80.

⁵³ *International Herald Tribune*, 9 Nov. 1994.

⁵⁴ Details of some of these activities are included in sections below relating to specific UN peace-keeping missions or in other chapters of this volume.

Electoral operations: a new UN growth area

Democratic elections are one means of preventing, managing or resolving intra-state conflict, and, in general, democratically elected governments do not go to war against each other. This realization, as well as the end of the cold war, growing global democratization, particularly in Latin America, Eastern Europe and Southern Africa and the success of the UN in bringing several states through democratic elections, have prompted the UN Secretariat to vastly expand its role in electoral matters in recent years. This represents an ideological turnaround for the world organization. During the cold war the implicit assumption was that the method by which peoples chose their governments was none of the UN's business. With the collapse of the USSR and Eastern bloc and the democratization of the resulting new states, the UN is now free to promote democracy as a universal value. This sea change became most evident from the way in which democratic provisions were mandated by the UN Security Council for the Namibian and Cambodian constitutions and subsequently nurtured and supported by the UN Secretariat.

The number of requests from UN member states for electoral assistance has sky-rocketed in the 1990s. The Electoral Assistance Division of the UN Secretariat, located in the Department of Political Affairs, is responsible for handling and meeting such requests.⁵⁵ Assistance covers a wide variety of operations, from the organization and conduct of an election, as in Cambodia in 1993, to the supervision of an electoral process, as in Namibia in 1989, to the verification of the vote, as in Nicaragua, Eritrea and El Salvador, to the provision of support to national observers, as in the case of Mexico. Sometimes the UN provides coordination and support services to international observers from a range of governments and international organizations, as in the case of the Kenyan and Malawian elections. Finally, the UN undertakes technical assistance missions in areas such as electoral budgeting, electoral law, logistics, civic education, training, information and communication. A UN Electoral Assistance Fund is available to provide assistance to NGOs which meet such requirements as impartiality, pluralism, professionalism and transparency.⁵⁶

In 1994 the UN received 19 new requests for electoral assistance.⁵⁷ One of the most intriguing was from Mexico, which had long resisted foreign 'interference' in its corrupt electoral processes. After Mexico asked the UN to provide 'technical assistance' to national observers and to assess its new computerized electoral system,⁵⁸ the Secretariat established the UN Technical Team in Mexico (ETONU-MEX).⁵⁹ The Mexican presidential election in August was the 'cleanest' on record.

⁵⁵ UN (note 38), pp. 97–98.

⁵⁶ UN, Press Release, DH/1715, Geneva, 24 Aug. 1994, p. 3.

⁵⁷ Information from Electoral Assistance Division, UN Department of Peace-keeping Operations, New York.

⁵⁸ *International Herald Tribune*, 14–15 May 1994, p. 2.

⁵⁹ UN, Press Release DH/1715, Geneva, 24 Aug. 1994, p. 3.

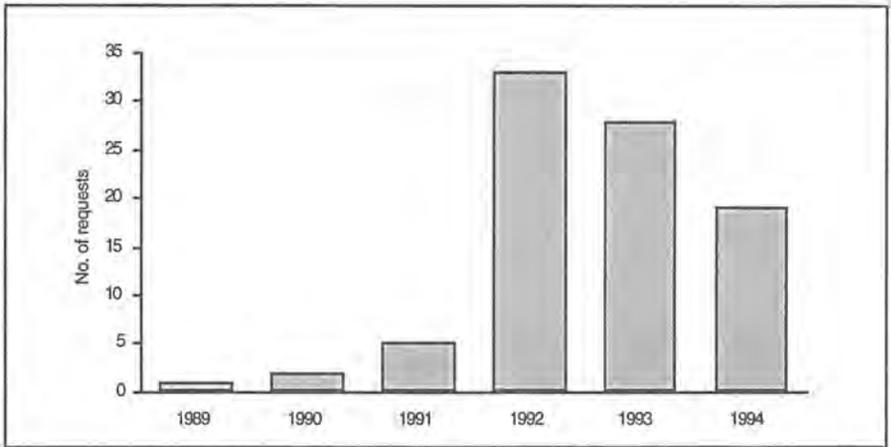


Figure 2.1. Requests by member states to the UN system for electoral assistance, 1989–94

Source: UN, Report of the Secretary-General on the Work of the Organization, UN document A/49/1, 2 Sep. 1994, p. 98; and additional information from the Electoral Assistance Division, Department of Peacekeeping Operations, United Nations, New York.

Another major activity of the UN electoral division in 1994 was the UN Observer Mission in South Africa (UNOMSA). In January the Security Council authorized the expansion of the mandate of UNOMSA,⁶⁰ which had been established in 1992 to monitor political violence and facilitate the transition to multi-party democracy, to include electoral observation.⁶¹ The UN's main role was to coordinate a core group of electoral observers from the Organization of African Unity, the Commonwealth, the European Union (EU) and other intergovernmental organizations and individual governments. At least 2120 observers took part in UNOMSA, one of the largest electoral missions ever mounted by the UN.

The greatest electoral success of the UN in 1994 was in Mozambique, where elections took place in October as part of a comprehensive peace plan. The UN monitored and verified all aspects of the election, coordinated and provided technical assistance to the electoral process, the latter through the United Nations Development Programme (UNDP), and helped shore up the process when it appeared to be in danger of collapse.⁶²

The Security Council

In 1994 the Council continued to enhance its role as the principle overseer of peace and security in the UN system.⁶³ As compared with the cold war years, when the Council's purview was limited by the sensitivities of one or more of

⁶⁰ UN, Security Council Resolution 894, UN document S/RES/894, 14 Jan. 1994.

⁶¹ UN (note 38), pp. 98–99.

⁶² See the section on ONUMOZ below for details.

⁶³ For commentary on the role of the Security Council see Findlay (note 14), p. 21.

the permanent members, almost every armed conflict, whether interstate or intra-state, became the subject of Council consideration, if not action.

However, the relative unanimity of the Council in recent years showed signs of strain, particularly over issues related to the former Yugoslavia. A veto was cast by Russia on 2 December on a draft resolution that proposed intensifying sanctions against the Bosnian Serbs because of their sustained attack on the UN Protected Area in Bihac.⁶⁴ This was Russia's second veto since 1990.⁶⁵ No other permanent members have cast vetoes in this period.

While the number of formal Council meetings decreased from 247 to 144 and 'consultations of the whole' declined from 359 to 242, these figures did not represent a diminution of the Council's activities but a new pattern of work.⁶⁶ The Council increasingly used 'working groups of the whole', meeting at expert level, to finalize draft resolutions and presidential statements. In effect the Council met on an almost continuous basis in order to respond to rapidly evolving situations and monitor UN field operations.

One particular area of expansion in Council activities in recent years has been the establishment of sanctions committees to oversee the effectiveness of mandatory sanctions imposed by the Council (the UN Secretariat monitors the sanctions day-to-day).⁶⁷ By the end of 1994 there were six such committees, concerned with Angola, Iraq, the former Yugoslavia, Libya, Rwanda and Somalia.⁶⁸

The Security Council continued, however, to be the target of criticism by UN member states and outside observers.⁶⁹ The refusal of the Council to act after the outbreak of mass killings in Rwanda in April revived accusations that it was beholden to the USA, in this case as a result of the newly cautious US peacekeeping policy (see below). Criticism was also directed at the Council's failure to match the mandate of UNPROFOR in the former Yugoslavia to the available means—the force had too few troops and resources to protect itself, its humanitarian supply deliveries and the designated UN protected and safe areas. Finally, the Council was criticized for the lack of transparency in its deliberations, particularly in regard to peacekeeping operations for which non-Council members provided the bulk of the forces. In response the Council announced in December that it would have greater recourse to open meetings.⁷⁰ In addition the Council's agenda would be released prior to each meeting.

⁶⁴ UN draft resolution S/1994/1358, 2 Dec. 1994.

⁶⁵ The first was on 11 May 1993 against a draft resolution which aimed to treat the costs of the UN Force in Cyprus as UN expenses funded through assessed contributions rather than as voluntary. See *UN Chronicle*, Sep. 1993, p. 47. Russia's opposition was later reversed.

⁶⁶ UN (note 38), pp. 4–5. Between 16 June 1993 and 15 June 1994 the Council adopted 87 resolutions, issued 68 presidential statements and considered over 120 reports by the Secretary-General and more than 1500 documents from states and intergovernmental organizations. UN, Press Release DH/1753, Geneva, 18 Oct. 1994, p. 2.

⁶⁷ UN (note 38), p. 5.

⁶⁸ UN, Press Release DH/1804, 6 Jan. 1995, p. 3. The Sanctions Committee on Haiti was abolished after sanctions were dropped in Oct.

⁶⁹ UN (note 35), pp. 5–6.

⁷⁰ UN, Press Release DH/1796, 19 Dec. 1995, p. 2.

Criticism of the Council added fuel to the continuing debate on its reform and expansion, both in official forums and outside.⁷¹ In response to a December 1993 General Assembly resolution, a report was tabled in the Assembly in September by the Open-ended Working Group on the Question of Equitable Representation on and Increase in the Membership of the Security Council.⁷² While the Committee reported a convergence of views that the Council's membership of 15 should be enlarged, there were differences over the scope and nature of enlargement. Tanzania, submitting the ambit claim of the African group, proposed that Africa receive two permanent seats and more non-permanent seats and that, failing efforts to eliminate the veto entirely, it should be granted to the new permanent members.⁷³ The USA favoured adding Germany and Japan as permanent members in addition to three new non-permanent seats.⁷⁴ Malaysia favoured abolishing the veto altogether, a view not shared by all developing countries.⁷⁵ Russia and the UK supported limited enlargement up to 20 members and preservation of the status of permanent members.⁷⁶ Two of the most widely touted candidates for permanent membership, Germany and Indonesia, were elected in September as non-permanent members of the Council for two-year terms, giving them an opportunity to demonstrate their suitability for permanent status.⁷⁷ Other favoured candidates are Brazil, India, Japan, Nigeria and Pakistan.

International legal mechanisms

International legal mechanisms for resolving international conflict remained underutilized in 1994. The International Court of Justice (ICJ) registered a rare success when in February it handed down its judgement on the territorial dispute between Chad and Libya over the Aouzou Strip.⁷⁸ The judgement, in favour of Chad, was accepted by Libya, and both parties requested UN assistance in monitoring the withdrawal of Libyan forces. While this was remarkable in view of Libya's previous flouting of international law, it was not surprising given that it had already reached agreement with Chad to withdraw and that it was hoping for a favourable judgement from the Court in the cases

⁷¹ See Wallenstein, P., 'Representing the world: a Security Council for the 21st century', *Security Dialogue*, vol. 25, no. 1 (1994), pp. 63–75. See also *Our Global Neighbourhood*, Report of the Commission on Global Governance [also known as the Carlsson–Ramphal report] (Oxford University Press: Oxford, 1995), pp. 233–41.

⁷² UN, Report of the open-ended Working Group on the Question of Equitable Representation on and Increase in the Membership of the Security Council, General Assembly Official Records, 48th Session Supplement no. 47, A/48/47, New York, 1994.

⁷³ UN, Question of equitable representation on and increase in the membership of the Security Council: Report of the Secretary-General, UN document A/48/264/Add.5, 30 Nov. 1993.

⁷⁴ Address of US Ambassador Madeleine Albright to UN General Assembly, 27 Oct. 1994, reproduced in *Wireless File* (US Information Service, US Embassy: Stockholm, 28 Oct. 1994), p. 15.

⁷⁵ *Unity*, UN Association of Australia, no. 56 (Nov. 1994), p. 8.

⁷⁶ UN, Press Release DH/1752, Geneva, 17 Oct. 1994, p. 6.

⁷⁷ *Time*, 31 Oct. 1994, p. 12. Permanent and non-permanent members of the Security Council are listed in the Glossary at the front of this volume.

⁷⁸ UN (note 38), p. 8.

Table 2.2. Cases before the International Court of Justice, 1994

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- Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Yugoslavia (Serbia and Montenegro))
 - Aerial Incident of 3 July 1988 (Iran v. USA)
 - East Timor (Portugal v. Australia)
 - Maritime Delimitation between Guinea-Bissau and Senegal
 - Maritime Delimitation and Territorial Questions between Qatar and Bahrain
 - Questions of Interpretation and Application of the 1971 Montreal Convention arising from the Aerial Incident at Lockerbie (Libya v. United Kingdom)
 - Questions of Interpretation and Application of the 1971 Montreal Convention arising from the Aerial Incident at Lockerbie (Libya v. USA)
 - Oil Platforms (Iran v. USA)
 - Gabcikovo–Ngyamaros Project (Hungary/Slovakia)^a
 - Bakassi Peninsula (Cameroon v. Nigeria)
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^a For details, see Englefield, G., International Boundary Research Unit, 'The international boundary between Hungary and Slovakia: the Nagymaros-Gabcikovo dispute', *IBRU Boundary and Security Bulletin*, July 1993, pp. 66–69.

Source: UN, Report on the Work of the Organization from the Forty-seventh to the Forty-eighth Session of the General Assembly, UN document A/49/1, 2 Sep. 1994, pp. 7–8. Cases listed as one party versus another are those in which one party (the first mentioned) has brought to the ICJ a case against another party; the others are cases where both parties jointly seek a Court ruling.

it had brought against the USA and the UK in relation to the bombing of a Pan American airliner over Lockerbie, Scotland in 1988. The Libyan withdrawal was carried out as ordered by the Court in May, supervised by the UN Aouzou Strip Observer Group (UNASOG).⁷⁹ The episode was a rare illustration of how several UN bodies—in this case the ICJ, the Security Council and a UN peacekeeping force—could work synergistically to help bring about a peaceful resolution of an international dispute.

One new case appeared on the Court's docket when in March Cameroon instituted proceedings against Nigeria in a dispute concerning sovereignty over the Bakassi peninsula. Cameroon requested the Court to determine the course of the maritime frontier between the two states.

The President of the ICJ, Mohammed Bedjaoui, appealed to member states during the year to review their criteria for use of the Court and to recognize that referral to it of a legal aspect of a political dispute might calm the situation.⁸⁰ He noted that certain innovations were being considered, such as giving the UN Secretary-General access to the Court to afford him greater flexibility in resolving conflicts.⁸¹ The Carlsson–Ramphal report, meanwhile, recommended several reforms, including the screening of potential judges for jurisprudential skills and objectivity, a single 10-year term for judges, modification of the Court's chamber procedure to enhance its appeal to states, greater use of

⁷⁹ See the sections on UNASOG below for details.

⁸⁰ UN, Press Release DH/1750, Geneva, 13 Oct. 1994, p. 2.

⁸¹ UN, Press Release DH/1758, Geneva, 25 Oct. 1994, p. 3.

the Court by the Security Council and Council enforcement of Court decisions.⁸²

Support increased in 1994 for the establishment of an International Criminal Court with jurisdiction over crimes under international law such as genocide, crimes against humanity and crimes referred to in certain treaties.⁸³ Such a court would obviate the need to establish special courts such as the International Tribunal for the Former Yugoslavia established in 1993⁸⁴ and the International Tribunal for Rwanda established in 1994.⁸⁵ The International Law Commission drafted a statute for such a court for states to consider.⁸⁶

IV. UN peacekeeping operations

The growth of UN peacekeeping operations⁸⁷ slowed in 1994 compared with immediately preceding years. The year began with 17 peacekeeping missions in the field and ended with 17, the lowest for almost two years (although it briefly rose to 18 with the short-lived deployment of UNASOG). The number of peacekeeping personnel remained roughly at 70 000 throughout the year,⁸⁸ nearly two-thirds of them in the former Yugoslavia.⁸⁹ More than half the missions consisted of fewer than 200 observers or peacekeepers. The number of troop-contributing countries rose from 70 to 76 in 1994.⁹⁰ Two new operations were established, the tiny UNASOG on the Libya–Chad border and the UN Mission of Observers in Tajikistan (UNMOT), while another, the UN Mission in Haiti (UNMIH), finally reached its destination. The UN Observer Mission in Uganda–Rwanda (UNOMUR) was phased out, while two large operations, UNOSOM II in Somalia and the UN Operation in Mozambique (ONUMOZ), had their mandates terminated and were to be wound down in early 1995. The UN Observer Mission in El Salvador (ONUSAL) had its mandate extended to April 1995 but its strength cut after the successful holding of elections in March and April 1994. It is also likely to be wound

⁸² *Our Global Neighbourhood* (note 71), p. 333.

⁸³ *Our Global Neighbourhood* (note 71), p. 323–24.

⁸⁴ UN, Security Council Resolution 827, UN document S/RES/827, 25 May 1993.

⁸⁵ Established by Security Council Resolution 955, UN document S/RES/955, 8 Nov. 1994. See 'UN Security Council establishes International Tribunal for Rwanda', *Dispatch*, US Department of State, vol. 5, no. 47 (21 Nov. 1994), pp. 780–81.

⁸⁶ UN, Press Release DH/1758, Geneva, 25 Oct. 1994, p. 3.

⁸⁷ A peacekeeping mission in UN parlance means one involving the deployment of military personnel, either alone or in combination with civilian elements. The designation of a UN mission with an acronym is somewhat arbitrary and does not necessarily qualify it as a peacekeeping mission. Missions with acronyms run the gamut from observation operations to full-scale comprehensive peacekeeping and peace-enforcement operations. Acquiring an acronym usually means the mission has been authorized by the Security Council and funded separately from the normal UN budget, but there are exceptions. Small observer missions like the UN Truce Supervision Organization (UNTSO) in the Middle East are funded out of the regular UN budget. The mission in Cyprus, UNFICYP, has been funded since 1993 by a combination of voluntary and assessed contributions (see note 38, p. 65).

⁸⁸ UN, Press Release DH/1805, 9 Jan. 1995, p. 3.

⁸⁹ Statement of Madelaine Albright, US Ambassador to the United Nations, 18 Jan. 1995, reproduced in *Wireless File* (US Information Service, US Embassy: Stockholm, 19 Jan 1995), p. 9.

⁹⁰ UN, Press Release DH/1805, 9 Jan. 1995, p. 3.

down in 1995.⁹¹ Another large mission, the UN Transitional Authority in Cambodia (UNTAC), was terminated at the end of 1993.⁹²

Most missions were essentially stable both in mandate and in personnel, including the UN Truce Supervision Organization (UNTSO), the UN Military Observer Group in India and Pakistan (UNMOGIP),⁹³ the UN Disengagement Observer Force (UNDOF), the UN Interim Force in Lebanon (UNIFIL) and the UN–Kuwait Observation Mission (UNIKOM). The UN Mission for the Referendum in Western Sahara (MINURSO) remained largely on hold pending favourable political developments.

Experiences in Somalia and Bosnia in 1993 had dampened enthusiasm for new large-scale peace operations entailing nation building and or peace enforcement to the extent that even dire situations like that in Rwanda failed to elicit an appropriate response. Such attitudes also left some missions already in the field, including those in Rwanda and the former Yugoslavia, undermanned and under-funded. A Security Council decision in June 1993 to add an extra 7650 troops to UNPROFOR was not fulfilled until mid-1994 because of the absence of contributors.⁹⁴ Sometimes the UN was forced to accept contingents which were not optimal in their training, experience or equipment. As Boutros-Ghali lamented, ‘You have to accept second-best and if not second-best you have to accept third-best’ in peacekeeping.⁹⁵ Claims of ‘peacekeeping fatigue’ among UN member states tended to be valid only for the missions perceived to be the most dangerous, such as those in Bosnia and Rwanda. More states were willing to volunteer troops for Angola and Haiti than could be accommodated.⁹⁶

Some of the most noteworthy UN peacekeeping operations in 1994 are detailed below.⁹⁷

UNASOG (Chad–Libya)

A traditional-style peacekeeping operation, the UN Aouzou Strip Observer Group had the shortest mandate in UN peacekeeping history. Established on 4 May for a period of up to 40 days, it was mandated to monitor the with-

⁹¹ UN, *UN Chronicle*, vol. 31, no. 3 (Sep. 1994), pp. 48–49; and UN, Press Release DH/1763, 1 Nov. 1994, p. 3.

⁹² After the withdrawal of UNTAC the UN retained a residual observer and liaison presence in Cambodia with a UN Military Liaison Team (UNMLT) from 15 Nov. to 15 May 1994. It was replaced in May by three officers seconded to the UN office in Phnom Penh. See UN, Mid-term Report of the Secretary-General on the United Nations Military Liaison Team in Cambodia, UN document S/1994/169, 14 Feb. 1994.

⁹³ In the case of UNMOGIP, however, Pakistan proposed that the force be substantially enlarged to allow it to patrol both sides of the Line of Control in Kashmir. India remained opposed to any such expansion. See UN, Press Release DH/1734, Geneva, 4 Oct. 1994, p. 3.

⁹⁴ UN, Press Release SG/SM/94/182, Geneva, 2 Nov. 1994, p. 3.

⁹⁵ Dowden, R., ‘Boutros-Ghali accepts UN’s limitations’, *The Independent*, 27 Oct. 1994, p. 13.

⁹⁶ Statement by Dr Emilio Cardenas, Argentine Ambassador to the United Nations, 25th Vienna Seminar, International Peace Academy, Vienna, 4 Mar. 1995.

⁹⁷ For details on UNOMIL in Liberia see Africa section below; for UNAMIR in Rwanda see appendix 2C; for ONUSAL in El Salvador see chapter 4; and for further details on UNPROFOR in the former Yugoslavia see chapter 6 in this volume.

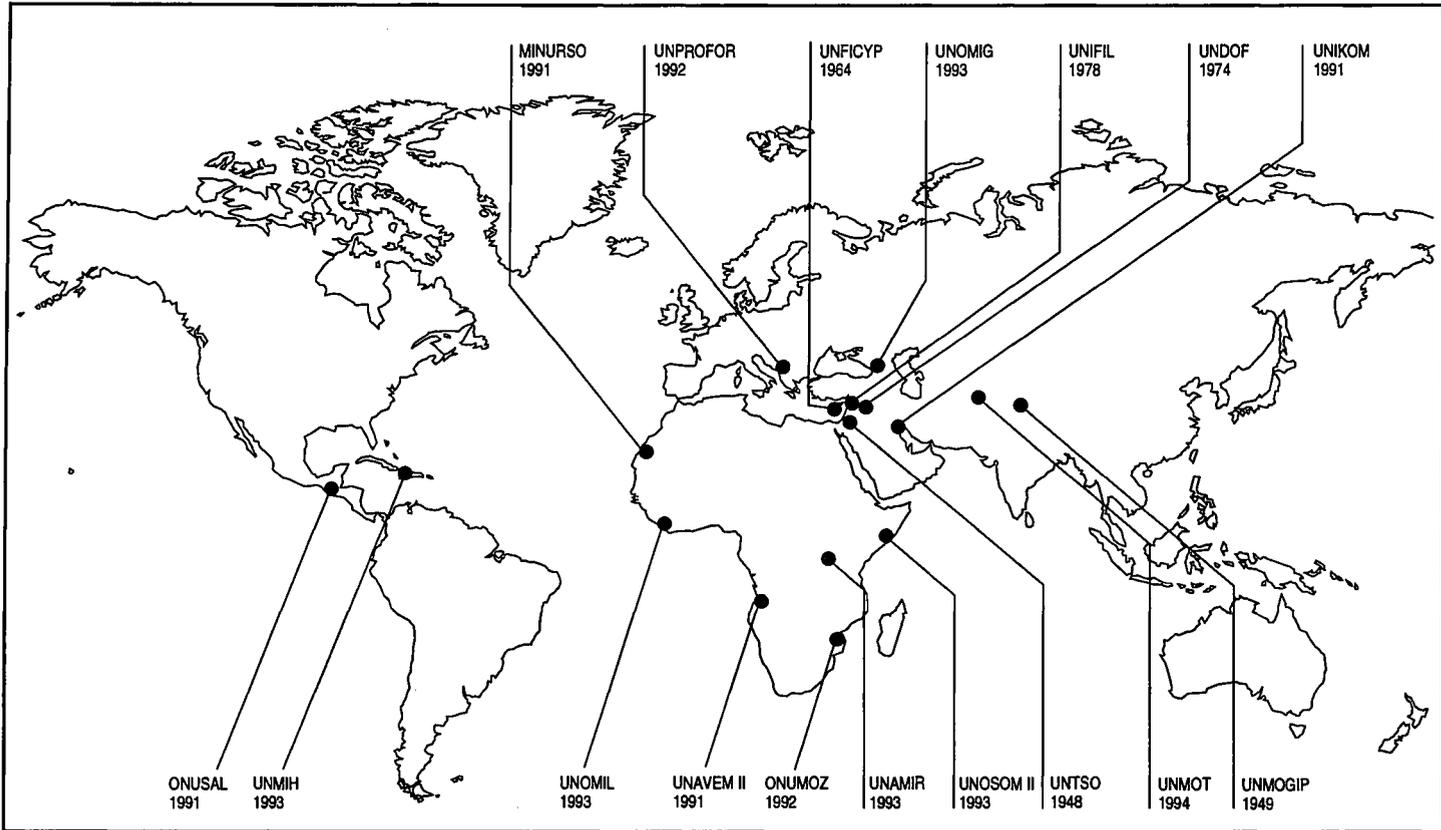


Figure 2.2. UN peacekeeping operations in the field as of 31 December 1994

Note: Dates refer to start of operations. ONUMOZ's mandate officially expired on 9 Dec. 1994 but residual operations continued until the end of Jan. 1995.

drawal of Libyan forces from a contested strip of land between Libya and Chad which the International Court of Justice had ruled belonged to Chad.⁹⁸ Comprising just nine military observers (drawn from existing peacekeeping operations) and six international civilian staff, UNASOG successfully completed its mission on schedule at a cost of \$400 000.⁹⁹

ONUMOZ (Mozambique)

The other UN peacekeeping operation to achieve major success in 1994 was the UN Operation in Mozambique (ONUMOZ), which succeeded, after more than 18 months of painstaking effort, in disarming and demobilizing most of the combatants in the long-running civil war and in supervising a free and fair election.¹⁰⁰ A last-minute hiccup occurred just prior to the 27–29 October elections when the opposition Mozambique National Resistance (Renamo) threatened to withdraw—only to be persuaded to change its mind by timely preventive diplomacy, including that of South African President Nelson Mandela. The elections were held peacefully, with a 87 per cent turnout. On 19 November the UN declared that voting in the election appeared to have been free and fair and that the government of the Mozambican Liberation Front (FRELIMO) had won. The new parliament convened in Maputo in early December and Joaquim Chissano was inaugurated president.

The mandate of ONUMOZ formally expired at that time and the mission began withdrawing. As in Cambodia the new government will face enormous challenges, including the inherent difficulty of uniting the remaining military forces of the two sides into a single national army (something even the better organized, led and funded South Africans had difficulty with in 1994); the prevalence of weapons throughout the country (including an estimated 700 000 AK-47 assault rifles);¹⁰¹ a difficult law-and-order situation; and the existence of extensive minefields. None the less the UN can justifiably add Mozambique to its list of successful post-cold war interventions. In particular the head of ONUMOZ, Special Representative Aldo Ajello, must be credited with handling the warring parties with considerable flexibility and finesse. Boutros-Ghali's own personal diplomacy, during a visit in October 1993, broke a negotiating log-jam over establishment of an Electoral Commission. Intense diplomatic activity by a number of countries, a tightly coordinated donor community and strong support from NGOs, including the Sant'Egidio Roman Catholics, also contributed to a successful outcome.¹⁰²

⁹⁸ Established by UN Security Council Resolution 915, UN document S/RES/915, 4 May 1994.

⁹⁹ UN, Information notes update: United Nations peace-keeping, May 1994, p. 168.

¹⁰⁰ For background to the Mozambique settlement see UN, 'UN effort ends terror, ushers in peace and democracy in Mozambique', Background Note, UN Press Release, OBS/94/1, Geneva, 8 Dec. 1994.

¹⁰¹ *The Independent*, 27 Oct. 1994, p. 16.

¹⁰² Note 89, p. 7.

UNAVEM II (Angola)

Angola's 1991 Peace Accords had collapsed after the opposition National Union for the Total Independence of Angola (UNITA) refused to accept the government's victory in the September 1992 UN-monitored elections.¹⁰³ Fighting that was more vicious than in the previous 16 years of civil war occurred in 1994 and UNITA's stronghold of Huambo fell to government forces. The UN peacekeeping operation, the UN Angola Verification Mission II (UNAVEM II), was scaled down, abandoning its presence in the countryside, retreating to the capital Luanda and provincial centres and moving from a peacekeeping role to one of supporting the Secretary-General's peacemaking efforts.¹⁰⁴ After painstaking negotiations a new peace treaty, the Lusaka Protocol, was initialled on 1 November (the deadline the UN had set) in Lusaka and formally signed on 20 November—but not by the top leaders of the warring parties.¹⁰⁵ The agreement provided for power-sharing, disarmament of UNITA forces and the establishment of a joint commission, with Portugal, Russia and the USA as observers, to oversee implementation.¹⁰⁶ The Security Council subsequently voted to restore UNAVEM II to its pre-March 1993 levels (from 80 to almost 500 personnel)¹⁰⁷ and to redeploy them throughout the countryside once a cease-fire was implemented and a Status of Forces agreement signed to guarantee the safety of UN personnel.¹⁰⁸ The UN at the end of the year was considering dramatically increasing the size of UNAVEM with 7000 peacekeeping troops and expanding its mandate to help Angola stabilize its fragile peace and avoid a return to civil war.¹⁰⁹

UNFICIYP (Cyprus)

Cyprus has been divided between Greek and Turkish communities since Turkey invaded the island in 1974. A UN peacekeeping operation, the UN Force in Cyprus (UNFICYP), has successfully kept the warring sides apart ever since, but peace talks have repeatedly failed. A Mission of Good Offices of the Secretary-General had been working with the Cypriot parties since April 1993 to achieve agreement on confidence-building measures relating to the no-man's-lands of the former tourist resort of Varosha and the old Nicosia International Airport.¹¹⁰ The idea was to place these areas under UN admini-

¹⁰³ For background information on the establishment and role of UNAVEM I and II see UN (note 99), pp. 22–33.

¹⁰⁴ *Wireless File* (US Information Service, US Embassy: Stockholm, 28 Oct. 1994), p. 3.

¹⁰⁵ *International Herald Tribune*, 8 Nov. 1994.

¹⁰⁶ *International Herald Tribune*, 21 Nov. 1994, p. 5 and 22 Nov. 1994, p. 2.

¹⁰⁷ There were 350 military observers and 126 police observers with appropriate support staff. See UN, Press Release DH/1760, Geneva, 27 Oct. 1994, p. 2.

¹⁰⁸ UN, Press Release, DH/1673, Geneva, 24 June 1994, p. 2; and *The Australian*, 2 Nov. 1994.

¹⁰⁹ *Financial Times*, 12 Dec. 1994, p. 6. UNAVEM III was established by the Security Council on 8 Feb. 1995. See *Wireless File* (US Information Service, US Embassy: Stockholm, 9 Feb. 1995), pp. 18–19.

¹¹⁰ UN, Report of the Secretary-General on his Mission of Good Offices in Cyprus, UN document S/1994/629, 30 May 1994.

tration and reopen them to access by both sides with a view to increasing confidence between the Greek and Turkish Cypriot communities. This approach had the support of the USA, the EU—including Greece—and, in principle, that of Turkish Prime Minister Tansu Ciller.¹¹¹ Despite the best efforts of the Secretary-General's Special Representative for Cyprus, former Canadian Foreign Minister Joe Clark, and US pressure, the negotiations collapsed. This was, the Secretary-General makes unusually clear, the result of the intransigence of the Turkish Cypriots. As one observer noted, 'the compendium of peacemaking devices has been nearly exhausted in Cyprus'.¹¹² Boutros-Ghali outlined several alternatives including the withdrawal of UNFICYP and, unprecedentedly for a UN Secretary-General, the use of coercive measures against the Turkish Cypriots. Turkey's membership of NATO is, however, likely to preclude the latter option.

Meanwhile the UN attempted to devolve more responsibility on the two sides for resolving their long-running conflict by reducing and restructuring UNFICYP, transferring some of the humanitarian functions it had acquired over the years to local agencies and urging the signing of local agreements with UNFICYP to prohibit the firing of weapons within sight or hearing of the buffer zone and ban deployment of live ammunition or non-hand-held weapons along the cease-fire lines.¹¹³ The UN was partly responding to the impatience of troop contributors to UNFICYP over the lack of progress towards a settlement and the suspicion that UNFICYP's presence had removed conflict resolution incentives for the parties.

MINURSO (Western Sahara)

MINURSO,¹¹⁴ in Western Sahara, established in September 1991, was also stymied, in this case by differences between the Moroccan Government and the Frente Polisario¹¹⁵ over eligibility criteria for voters in a referendum on the independence of this former Spanish colony.¹¹⁶ Voting was supposed to have taken place in January 1992. Having mediated almost continuously between the parties since then and postponed the referendum to mid-1994, the UN found it was still unable to fully implement MINURSO's mandate during the year. After patient diplomacy the so-called Identification Commission was able to complete the necessary groundwork for identifying and registering voters. However, registration was frustratingly slow and in November Boutros-Ghali visited the region in an attempt to remove the political obstacles to progress. Inauspiciously, Polisario's deputy leader, Bashir

¹¹¹ Brey, H., 'A solution to the Cyprus question; Options and obstacles', *Radio Free Europe/Radio Liberty, RFE/RL Research Report*, 15 July 1994, p. 23.

¹¹² Brey (note 111), p. 24.

¹¹³ UN (note 38), p. 66.

¹¹⁴ MINURSO is the Spanish acronym for *Mision de las Naciones Unidas para el Referendum del Sahara Occidental* (Mission of the UN for the Referendum of Western Sahara).

¹¹⁵ Frente para la Liberación de Sagúfa el-Hamra y de Río de Oro (Front for the Liberation of Sagúfa el-Hamra and of Río de Oro).

¹¹⁶ UN (note 99), p. 50.

Mustafa Sayed, called for MINURSO's withdrawal so that the 'armed struggle' against Morocco could be resumed.¹¹⁷ Some governments (Belgium and the UK) had already withdrawn their personnel or given notice of their intention to withdraw (Australia, Canada and Switzerland), in frustration at the lack of progress. South Korea and Uruguay provided some replacements. None the less in late 1994, in what might be seen as a last chance for a UN-assisted settlement, Boutros-Ghali recommended an expansion of MINURSO to help prepare for the referendum now rescheduled for October 1995.¹¹⁸

UNMIH (Haiti)

A relatively modest UN mission in Haiti had originally been scheduled for deployment in October 1993 to help monitor human rights and retrain the police and military in anticipation of the return of ousted President Jean-Bertrand Aristide. Such a sequence of events had been agreed in the Governors Island Agreement and the related Pact of New York signed in July 1993.¹¹⁹ However, in the face of opposition by armed thugs (so-called *attachés*) to the docking at Port-au-Prince in October 1993 of the *Harlan County*, which was transporting the military and police component of UNMIH, the force was not deployed. Following a threat of invasion by a US-led Multinational Force (MNF) authorized by the Security Council and last-minute negotiations by former US President Carter, along with former US Senator Sam Nunn and former Chief of Staff General Colin Powell, US forces supported by a small number of Caribbean troops occupied Haiti peacefully in October 1994.

The 21 000-strong MNF successfully pacified Haiti without serious opposition or fatalities and oversaw the reconvening of the Haitian Parliament, the departure of the military junta, including its head, Lieutenant General Raoul Cedras, and the return of President Aristide. The force was supported by 600 police monitors from 11 countries, including some from Israel in its first foray into peacekeeping.¹²⁰ By the of the year significant progress had been made in returning Haiti to constitutional, civilian rule. An Interim Public Security Force had been trained and deployed throughout the country to replace the former discredited military-led police force and a smaller Haitian armed force was being established and trained.

These developments permitted an advance team of the UN Mission in Haiti finally to be deployed, one year after its scheduled arrival. However, its eventual mandate and size would be vastly expanded from that originally envisaged. It would now assume all the functions of the MNF once that force was withdrawn in early 1995.¹²¹ With the unfortunate experience of Somalia

¹¹⁷ *Middle East International*, no. 491 (6 Jan. 1995), p. 15.

¹¹⁸ UN, Press Release DH/1795, Geneva, 16 Dec. 1995, p. 3.

¹¹⁹ UN documents S/26063, 3 July 1993 and S/26297, 16 July 1993.

¹²⁰ UN, Press Release, DH/1759, Geneva, 26 Oct. 1994, p. 2.

¹²¹ In Jan. 1995 the Security Council decided that the full transfer of responsibility from the MNF to UNMIH should take place by 31 Mar. 1995. UN Security Council Resolution 975, UN document S/RES/975, 30 Jan. 1995.

firmly in mind both the UN and the USA were determined to ensure that a hand-over would be 'seamless' and take place only when both parties and the situation on the ground permitted. To this end a US commander would be appointed to lead the UNMIH military component and approximately half of its authorized force of 6000 would be US troops with several months' experience in Haiti. The 900 police monitors in the MNF would also transfer to UNMIH.

A separate mission, the joint UN-OAS International Civilian Mission to Haiti (MICIVIH), mandated to monitor human rights, had been gradually fully redeployed after January 1994, having been withdrawn, except for a small administrative component in Port-au-Prince, in October 1993.¹²² It remained in place during the MNF's tenure and continued to support UNMIH.

The careful planning for the expanded UN take-over in Haiti (for instance through the establishment of a joint MNF/UNMIH working group) and the close cooperation between the UN and the USA in resolving the Haiti crisis indicated not only that lessons had been learned from Somalia but also that some of the reforms to the management of UN peacekeeping operations had started to pay dividends.

UNOSOM II (Somalia)

In March the United States and most of its Western allies completed their withdrawal from UNOSOM II after the disastrous events of 1993, leaving a slightly smaller force provided mostly by developing states, notably Egypt, India, Malaysia, Pakistan and Zimbabwe.¹²³ While not all Western states had withdrawn, their presence was mostly token.¹²⁴ The country had not reverted immediately to anarchy after the withdrawal of most Western contingents and the removal of peace enforcement from UNOSOM's mandate, as had been feared.¹²⁵ However, a political settlement to produce a national government or even a lasting cease-fire continued to elude the Somali factions, despite the UN's success in bringing them together for reconciliation talks in March in Nairobi and its sponsorship of local, district and regional reconciliation processes. The Secretary-General reported to the Security Council in August that the major obstacle to national reconciliation was conflict within the dominant Hawiye clan, to which both Ali Mahdi and General Mohammed Farah Aidid belong, and which was reflected in the division of Mogadishu.¹²⁶ UNOSOM II

¹²² Note 99, p. 155.

¹²³ For details see the case study on UNOSOM II in Claesson and Findlay (note 22), pp. 62–66.

¹²⁴ Australia had 66 military personnel, Ireland 99 and New Zealand 50. See *Jane's Intelligence Review*, Sep. 1994, pp. 410–11.

¹²⁵ On 4 Feb. 1994 the Security Council adopted a revised mandate for UNOSOM II which abandoned coercive means and reverted to reliance on the cooperation of the Somali parties. UNOSOM II retained the right to defend itself but would not become involved in inter-clan warfare. UNOSOM would also be mandated to protect the ports, airports and essential infrastructure of Somalia, keep the main supply routes between Mogadishu and outside areas open, and pursue the reorganization of the Somali police and judicial systems. See UN (note 38), p. 86.

¹²⁶ UN, Report of the Secretary-General to the Security Council on Somalia, UN document SS/1994/977, 17 Aug. 1994, p. 2.

continued to suffer unacceptable deaths, other casualties and material losses throughout the year. In August seven Indian peacekeepers were killed,¹²⁷ the highest loss in a single incident since the pitched battles of 1993.

A Security Council mission to Somalia led by New Zealand Ambassador Colin Keating reported in early November that 'nobody, but nobody, asked the UNOSOM military component to stay any longer'.¹²⁸ Aid agencies had come to the view that UN peacekeepers were no longer needed to escort convoys of food. UNOSOM had mostly retreated to its bases and was mostly occupied defending itself, having become a target for looters and terrorist attacks. In a perhaps unprecedented indication of the extent to which outsiders have lost patience with the Somali leadership, the mission told the factions that if they returned to civil war they could not count on the international community for reconstruction aid. Disputing accusations that UNOSOM II had failed, Keating noted that relief agencies had reported that famine had ended, harvests were good, food stocks were growing, exports had resumed and the economy had gone from 'non-existent to basic'.¹²⁹

On 4 November the Security Council finally took the long-overdue decision to withdraw UNOSOM II from Somalia, by March 1995.¹³⁰ The USA, the UK and others were asked for military assistance in ensuring the safe removal of UNOSOM personnel and property, raising the unprecedented prospect that a UN peacekeeping operation might have to fight its way out of its mission area.¹³¹ By the end of the year 131 UN peacekeepers had died in Somalia, the highest toll in a single UN mission in such a short period.¹³²

UNMOT (Tajikistan)

A temporary cease-fire agreement was signed by the Government of Tajikistan and its opposition on 17 September in Tehran as a result of a good offices mission by UN Special Envoy Ramiro Piriz-Ballon.¹³³ The agreement established a temporary cease-fire and cessation of other hostile actions along the border with Afghanistan and within Tajikistan until a referendum on a new constitution and presidential elections were held. Later in the month Boutros-

¹²⁷ UN, Press Release DH/1716, Geneva, 25 Aug. 1994, p. 2.

¹²⁸ *Wireless File* (US Information Service, US Embassy: Stockholm, 1 Nov. 1994), p. 4.

¹²⁹ *Wireless File* (note 128).

¹³⁰ UN Security Council Resolution 954, UN document S/RES/954, 4 Nov. 1994. For analysis of what went wrong in Somalia, see Conflict Resolution, Humanitarian Assistance and Development in Somalia: Lessons Learned, Overseas Development Council conference report, Washington, DC, 1994; Bolton, J. R., 'Wrong turn in Somalia', *Foreign Affairs*, vol. 73, no. 1 (Jan./Feb. 1994); *Restoring Hope: The Real Lessons of Somalia for the Future of Intervention*, Special Report (US Institute of Peace: Washington, DC, 1994); Makinda, S. M., *Seeking Peace from Chaos: Humanitarian Intervention in Somalia*, Occasional Paper Series (Lynne Rienner for International Peace Academy: Boulder, Colo. and London, 1993); and Sahnoun, M., *Somalia: The Missed Opportunities* (US Institute of Peace: Washington, DC, 1994).

¹³¹ *The Guardian*, 25 Sep. 1994, p. 17.

¹³² *International Herald Tribune*, 8 Dec. 1994, p. 2. As of May 1994 fatalities in UNIFIL, established in Lebanon in 1978, were 196: UN (note 99), p. 15. Fatalities in the Congo operation in the 1960s numbered 195: UN, *The Blue Helmets: A Review of United Nations Peace-keeping*, 2nd ed. (United Nations: New York, 1990), p. 435.

¹³³ UN, Press Release SG/SM/94/144, Geneva, 19 Sep. 1994, p. 1.

Ghali authorized the extension of the mandate of the Special Envoy and other UN officials in Tajikistan by four months and the deployment of 15 observers from existing UN peacekeeping operations pending a decision by the Security Council to establish a new UN observer mission in the country. In the meantime a technical mission would be sent to assess the modalities for establishment of such a mission.¹³⁴

A Commonwealth of Independent States (CIS) so-called peacekeeping force, the Tajikistan Buffer Force, comprising troops from Russia, Kazakhstan and Uzbekistan, present in the country since March 1993, remained in place. Since grave doubts remained as to its impartiality, the UN did not respond to calls by the Government of Tajikistan to give UN authorization to the force.¹³⁵ In November the parties agreed to extend their cease-fire to 6 February 1995 after talks in Islamabad. A joint commission was established to monitor the agreement and further confidence-building measures were agreed.¹³⁶ By December the Security Council was sufficiently assured of the stability of the situation officially to deploy the UN Mission of Observers in Tajikistan (UNMOT)¹³⁷ for a period of up to six months, with a mandate to investigate and report cease-fire violations, provide good offices between the parties and maintain close contacts with the CIS force and OSCE Mission in Tajikistan.¹³⁸

UNOMIG (Georgia)

Deployed in August 1993, the UN Observer Mission in Georgia (UNOMIG) is a small force, 55 strong, mandated to verify compliance with a cease-fire agreement of 27 July 1993 between the Georgian Government and the authorities in the breakaway Abkhazia region.¹³⁹ A tripartite Georgian–Russian–Abkhaz Joint Control Commission had been established to monitor the agreement on an interim basis and a CSCE Mission to Georgia was involved in seeking a negotiated solution to the conflict. In January 1994 the parties agreed to the presence of a full-scale peacekeeping force but resumed fighting, and continuing differences between the parties prevented its deployment. Negotiations continued involving the UN, the CSCE, the UN High Commissioner for Refugees (UNHCR) and the ‘Friends of Georgia’ (France, Germany, Russia, the UK and the USA). In an Agreement on a Cease-fire and Separation of Forces, signed in Moscow on 14 May 1994, the parties agreed in principle that a CIS peacekeeping force would be deployed and appealed to the Security Council to expand UNOMIG’s mandate to allow it to participate in the operation.¹⁴⁰ In accordance with the Sochi Agreement of 24 June 1994, a CIS force of 3000 troops, mostly Russian, was deployed in July along the

¹³⁴ UN, Press Release DH/1739, Geneva, 28 Sep. 1994, p. 7.

¹³⁵ Statement by Emomali Rakhmonov, Head of State and Chairman of the Supreme Council of Tajikistan to the UN General Assembly, UN, Press Release DH/1742, Geneva, 3 Oct. 1994, p. 5.

¹³⁶ UN, Press Release DH/1764, Geneva, 2 Nov. 1994, p. 3.

¹³⁷ UN, Security Council Resolution 968, UN document S/RES/968, 16 Dec. 1994.

¹³⁸ See also chapter 8 in this volume.

¹³⁹ UN (note 99), pp. 127–35.

¹⁴⁰ UN (note 38) p. 68.

Inguri River to separate the warring parties.¹⁴¹ On 21 July the Security Council mandated an expanded UNOMIG (up to 136 military observers) to monitor and verify implementation of the 14 May agreement and to observe the operation of the CIS peacekeepers. The most divisive issue preventing further progress between the parties was the return of approximately 200 000 refugees driven out of Abkhazia during the war. At the end of the year progress was further jeopardized by Abkhaz threats to unilaterally create a 'sovereign Abkhaz entity'.¹⁴²

Continuing peacekeeping reforms

Reform of the UN's capacity for handling peacekeeping operations continued apace in 1994, although progress was faster in some areas than others. Progress in establishing stand-by arrangements with UN member states for future contributions to UN peacekeeping operations was disappointing, calling into question the utility of the mechanism as a way-station between the current system of *ad hoc* national contributions as required and a future dedicated UN force.¹⁴³ The arrangement had an inauspicious beginning when in May not one of the 19 governments that had by then offered troops would allow them to be sent to Rwanda as part of an expanded UN Assistance Mission for Rwanda (UNAMIR).¹⁴⁴ This was an unfortunate first experiment given the extreme circumstances of the Rwanda case and the fact that the arrangements were not yet fully developed. By June, despite two years of contacts with member states, including by a military-led delegation of UN officials, only 21 member states had offered stand-by resources (including some 30 000 personnel), which could 'in principle, be called upon'.¹⁴⁵ The Secretary-General noted that these 'did not yet adequately cover the spectrum of resources required to mount and execute future peace-keeping operations'.¹⁴⁶ By the end of the year 34 member states had made pledges, but many were insubstantial and hedged with caveats.¹⁴⁷ Some states stayed out altogether, arguing, as Australia did, that earmarking forces would in fact reduce their capacity to respond in a prompt and flexible manner. The UK, despite supporting the idea, decided that because of its 'worldwide commitments' it could not earmark forces solely for UN service.¹⁴⁸ The USA was similarly unwilling.

¹⁴¹ *Financial Times*, 14 Sep. 1994, p. 2; and *Jane's Intelligence Review*, Aug. 1994, p. 365.

¹⁴² UN, Press Release DH/1786, Geneva, 5 Dec. 1994, p. 3; and CSCE, Budapest Summit Declaration, Towards a Genuine Partnership in a New Era, Budapest, 5-6 Dec. 1994, Part II, Regional Issues, pp. 15-16.

¹⁴³ UN, Stand-by arrangements for peace-keeping, Report of the Secretary-General, UN document S/1994/777, 30 June 1994.

¹⁴⁴ Supplement to An Agenda for Peace: position paper of the Secretary-General on the occasion of the 50th anniversary of the United Nations, UN document A/50/60, S/1995/1, 3 Jan. 1995, p. 11.

¹⁴⁵ UN (note 143), p. 1.

¹⁴⁶ UN (note 143), p. 2.

¹⁴⁷ The first Memorandum of Understanding between the UN and a member state relating to stand-by forces was signed with Jordan on 5 Jan. 1995. See UN, Press Release DH/1804, Geneva, 6 Jan. 1995, p. 2.

¹⁴⁸ UN (note 25), p. 27.

Other initiatives to improve UN peacekeeping operations in 1994 included the following:¹⁴⁹

1. Rosters of civilian experts, with over 5000 names, were prepared for multidimensional operations; recruiting rules were amended to permit more rapid short-term recruitment of staff; and procedures were established for secondment of nationals of member states to field operations.¹⁵⁰

2. A pilot project begun in UNPROFOR in November 1992 involving the contracting of civilian support staff on a commercial basis was evaluated.¹⁵¹

3. Peacekeeping training videos and manuals (including for the training of election monitors) were prepared and distributed to all member states by the UN Institute for Training and Research (UNITAR).¹⁵²

4. A feasibility study was carried out to assess current peacekeeping training and future needs for both military and civilian personnel.

5. A survey mission handbook was prepared as a comprehensive guide for the initial stages of organizing a peacekeeping operation.¹⁵³

6. A review of procurement procedures for United Nations headquarters, peacekeeping and other field missions was completed by a seven-person expert group.¹⁵⁴

The Situation Centre, established in April 1993, now operates 24 hours a day with a staff of approximately 24, meeting a long-standing criticism that the UN Secretariat was a '9 to 5' operation despite the fact that keeping the peace is a 24-hour a day business. No longer restricted to UNPROFOR and UNOSOM II, it has at least two officers on a 25-hour shift basis at all times to receive and send communications to and from all UN peacekeeping missions in the field.¹⁵⁵ It is also charged with communicating during non-business hours with relevant UN political and military officials when crises develop requiring immediate action. It produces daily written reports on all aspects of peacekeeping for the Secretary-General and Security Council. Briefings are also available as required.

Several initiatives were taken during the year to improve consultation between troop contributors, the Secretariat and the Security Council. Members of the Security Council began attending meetings of the contributors to UNPROFOR and UNOSOM II.¹⁵⁶ The President of the Security Council also

¹⁴⁹ For details of most of these initiatives, see UN (note 25).

¹⁵⁰ UN (note 25), pp. 11–12.

¹⁵¹ See UN, *The Use of Civilian Personnel in Peace-keeping Operations*, Report of the Secretary-General, UN document A/48/707, 14 Dec. 1993.

¹⁵² UNITAR, *Instructional Peace-keeping Training Video Series* (UNITAR: New York, 1994); and United Nations, *A Peacekeeping Training Manual*, 2nd draft (UN Department of Peace-keeping Operations: New York, 1994).

¹⁵³ UN, *Effective planning, budgeting and administration of peace-keeping operations*, Report of the Secretary-General, UN document A/48/945, 25 May 1994, p. 5.

¹⁵⁴ UN, Press Release SG/SM/94/230, 23 Dec. 1994.

¹⁵⁵ See UN, *Support account for peace-keeping operations*, Report of the Secretary-General, A/48/470/Add. 1, 27 May 1994, pp. 20–21; and Smith, H., 'Intelligence and UN peacekeeping', *Survival*, vol. 36, no. 6 (autumn 1994), p. 179.

¹⁵⁶ UN (note 25), p. 8.

began regularly briefing troop contributing countries on Council discussions and decisions.¹⁵⁷ The Secretariat began distributing a *Weekly Digest* on peacekeeping matters to all relevant UN missions, while the Council began publishing the detailed agendas of its daily meetings in the UN daily *Journal*.¹⁵⁸ In November the Security Council decided to hold meetings with peacekeeping troop-contributing countries as a matter of course before decisions are made to extend, terminate or significantly change the mandate of any particular peacekeeping operation and when unforeseen developments occur.¹⁵⁹ These measures helped reduce the concerns of non-Council member states about command and control of UN peacekeeping operations.

In November the Secretary-General released a report on command and control, based in part on an informal gathering of states in Canada in late April, which emphasized the need for integrated and strictly international UN operations, strengthened political and executive direction, and command and control by the Secretary-General.¹⁶⁰ It is increasingly widely recognized that, particularly in the complex operations conducted by the UN in civil war situations, unity of command is essential and that second-guessing by national capitals of decisions taken by UN military commanders is unacceptable and dangerous.

To improve coordination within the Secretariat and provide the Secretary-General with options and recommendations on policy, an inter-departmental Task Force on United Nations Operations was established in 1994.¹⁶¹ The Departments of Political Affairs, Peace-keeping Operations and Humanitarian Affairs were all further strengthened, including through the recruitment of functional experts in the various sub-components of peacekeeping operations, such as electoral matters and de-mining. According to Under Secretary-General for Peacekeeping Kofi Annan, the UN Department of Peace-keeping Operations (DPKO) has seen a 'drastic restructuring',¹⁶² including creation of a division to coordinate and plan civilian police (CivPol) involvement in peacekeeping operations, deemed especially urgent in light of their poor performance in Cambodia.¹⁶³ Significantly, in their only recommendation relating to peacekeeping, former UN civil servants Erskine Childers and Brian Urquhart urged in their 1994 report on *Reviewing the United Nations System*

¹⁵⁷ This may depend on which country has the presidency. Argentina, for instance, briefed delegations every day at 3 p.m.

¹⁵⁸ Information from Marion Rae, Defence Analyst, New Zealand Ministry of Defence, cited in *Pacific Research*, Aug. 1994, p. 40.

¹⁵⁹ UN Information Centre for the Nordic Countries, 'Security Council decides on increased consultations with troop contributors before changing mandate of peace-keeping forces', Press Release SC/5927, 4 Nov. 1994.

¹⁶⁰ UN, Command and control of United Nations peace-keeping operations, Report of the Secretary-General, UN document A/49/681, 21 Nov. 1994.

¹⁶¹ UN (note 25), p. 9.

¹⁶² UN Information Centre for the Nordic Countries, Press Release, GA/SPD/48, 14 Nov. 1994.

¹⁶³ UN, Press Release DH/1773, Geneva, 15 Nov. 1994, p. 4. For details of CivPol involvement in Cambodia, see Findlay, T., *Cambodia: The Legacy and Lessons of UNTAC*, SIPRI Research Report no. 9 (Oxford University Press: Oxford, 1995).

that 'the UN's staff resources for peacekeeping and logistical support must be significantly strengthened for all purposes including reducing instances of waste and possible abuse of funds'.¹⁶⁴

Significant progress was made in 1994 on providing legal protection for UN peacekeepers and related personnel when the General Assembly adopted without a vote and opened for signature a draft Convention on the Safety and Security of United Nations and Associated Personnel.¹⁶⁵ An initiative of New Zealand and Ukraine, the Convention obliges states to establish jurisdiction over crimes against UN personnel including murder, kidnapping or threat of attack. It defines the duties of states as being to ensure the safety and security of UN personnel and to release or return personnel captured or detained. It also requires host states and the UN to conclude agreements on the status of UN operations and personnel.

Financial situation

The financial situation of the UN in 1994 continued to cause deep concern largely as a result of peacekeeping operations, which required a minimum of \$200 million a month to finance. In an urgent letter to the Security Council on 27 July, Boutros-Ghali warned that the level of unpaid assessments for peacekeeping operations exceeded \$2003 million and that unless substantial contributions were received by early August there would be no cash available to finance any operations.¹⁶⁶ Both new and continuing peacekeeping operations were hampered during the year by cash shortages, the most precarious being UNOSOM II, ONUMOZ, ONUSAL, UNIFIL, UNIKOM and UNPROFOR. Unpaid assessments accumulated in all peacekeeping special accounts, leading to constraints on the timely payment of amounts due to troop-contributing countries for troop costs and contingent-owned equipment. All peacekeeping missions were instructed to reduce expenditures to the maximum extent, while the least urgent procurement and recruitment were to be postponed. The Secretary-General warned that the chasm between the tasks entrusted to the organization and the financial means provided to it which he had noted in 1993 was now even wider.¹⁶⁷ The situation, he said, 'erodes the Organization at its core, which is the compact among Member States to unite their strength and take effective collective measures to maintain international peace and security'.¹⁶⁸

¹⁶⁴ Childers and Urquhart (note 30), p. 209.

¹⁶⁵ UN, Press Release, DH/1791, Geneva, 12 Dec. 1994, pp. 1–2. For background, see Thwaites, M. J., 'Negotiating a convention on the safety of UN personnel', ed. H. Smith, *International Peacekeeping: Building on the Cambodian Experience* (Australian Defence Studies Centre: Canberra, 1994), pp. 169–73. For the text, see Report of the *Ad Hoc* Committee on the Elaboration of an International Convention Dealing with the Safety and Security of United Nations and Associated Personnel, Official Records of the General Assembly, Forty-ninth Session, Supplement no. 22 (A/49/22), 1994.

¹⁶⁶ UN, Letter dated 21 July 1994 from the Secretary-General addressed to the President of the General Assembly, UN document A/48/973, 27 July 1994.

¹⁶⁷ UN (note 25), 14 Mar. 1994, p. 16.

¹⁶⁸ UN (note 25), p. 16.

In October the USA finally fulfilled its pledge to end its long-running indebtedness to the UN by paying arrears of \$1.2 billion (although it immediately began accumulating new arrears).¹⁶⁹ While this helped the UN's cash flow, most of the money was used to reimburse 70 troop-contributing countries the \$1 billion owed them by the UN.¹⁷⁰ By 31 December member states still owed the UN \$1500 million for regular operations and peace-keeping. The USA was still the biggest debtor to the regular budget, owing \$248 million, followed by South Africa, Ukraine, Brazil and, ironically, Yugoslavia (Serbia and Montenegro). Russia was the largest peacekeeping debtor, owing \$507 million, followed by the USA, Ukraine, France and Japan.¹⁷¹ Only 75 of the 185 UN member states had paid their regular budget assessments in full and 39 had made no payment at all.

The lack of cash resulted in occasional temporary borrowing from one peacekeeping account to the other and the almost permanent loan of funds from the Peace-keeping Reserve Fund. Although the purposes of the fund were to help with start-up costs for new peacekeeping operations and to provide a buffer temporarily against the unpredictable receipt of peacekeeping assessments from member states, this has not been possible, since only \$64 million of the planned \$150 million has been contributed and because the Fund has been depleted to bail out indebted missions already in the field.¹⁷² A Trust Fund for purchasing a limited reserve stock of basic equipment and supplies for peacekeeping operations, established with a target of \$15 million, had received only \$40 000 by March 1994.¹⁷³

The Secretary-General made several new proposals and reiterated old ones for alleviating the financial situation, including raising the Reserve Fund to \$800 million and encouraging member states to establish their own reserve funds for unforeseen peacekeeping assessments. More fundamentally, he suggested de-linking the funding of peacekeeping operations from their mandate periods. Currently funding is renewed and contributions are assessed at the same time as mandates, usually on a six-monthly basis.¹⁷⁴ In a more immediate attempt to reduce recurrent costs the Secretariat undertook the comprehensive restructuring of UNDOF, UNIFIL and UNTSO, generating savings of approximately 15, 30 and 12 per cent respectively.¹⁷⁵ Other cost-saving initiatives proposed by the Secretary-General include a greater use of UN Volunteers, who proved so effective in Cambodia, greater use of contractual and local staff, the use of commercial aircraft rather than expensive reimbursable transport provided by member states and the provision of 'start-up' kits for missions (comprising, where possible, surplus equipment from liquidated mis-

¹⁶⁹ *Wireless File* (US Information Service, US Embassy: Stockholm, 28 Oct. 1994, p. 14.

¹⁷⁰ UN, Press Release DH/1738, Geneva, 27 Sep. 1994, p. 9.

¹⁷¹ *Wireless File* (US Information Service, US Embassy: Stockholm, 6 Jan. 1995), p. 12.

¹⁷² Note 151, p. 13. The fund was established with left-over amounts from UNTAG and UNIIMOG and through one national donation, from Switzerland: see UN, Establishment of a Peace-keeping Reserve Fund, Report of the Secretary-General, UN document, A/48/622, 19 Nov. 1993.

¹⁷³ UN (note 25), 14 Mar. 1994, p. 14.

¹⁷⁴ UN (note 153), p. 8.

¹⁷⁵ UN (note 153), p. 31.

sions). Boutros-Ghali rejected, on the grounds of 'efficiency and economy', proposals, notably by the UK,¹⁷⁶ for the establishment within the Secretariat of a large general staff with spare capacity to cope with future peak workloads in the peacekeeping field.¹⁷⁷

The Fifth Committee of the General Assembly in November agreed to the creation of a working group to study implementation of the principle of capacity to pay as the fundamental criterion for determining the scale of assessments for apportioning UN expenses.¹⁷⁸ The Committee's report to the Assembly, to be submitted by 15 May 1995, would help the Committee on Contributions to simplify the methods for determining the UN scale of contributions.

In July the General Assembly's *Ad Hoc* Committee on Administrative and Budgetary Questions (ACABQ) approved the establishment of an Office of Internal Oversight Services to be headed by an Under-Secretary-General to undertake monitoring, auditing, inspections and investigations within the UN system. This had been one of the demands made by the US Congress before it would authorize funding to end the US debt to the UN. German diplomat Karl Theodore Paschke was appointed to the position.¹⁷⁹ The Office absorbs the functions of the lower-ranked Assistant Secretary-General for Inspections and Investigations appointed in 1993. The ACABQ also released a report in November on the administrative and budgetary aspects of the financing of UN peacekeeping operations which concluded that 'the overwhelming impact of peace-keeping operations has seriously affected the Secretariat's capacity to manage and the General Assembly's capacity properly to oversee the work of the United Nations'.¹⁸⁰

The victory of Republicans in the November elections for the US Congress raises the prospect of further financial difficulties for the UN. Legislation introduced by Senator Robert Dole would require the USA to offset its contributions to the UN's regular and peacekeeping budgets by charging the UN for equipment and services currently provided free and for operations in which the USA has shown a particular interest in contributing unilaterally, such as enforcement operations against Iraq and the former Yugoslavia, and by subtracting an amount equivalent to all voluntary US payments to UN agencies and funds.¹⁸¹ This would decimate UN peacekeeping, which is already being faced with a reduction in US funding from 31 to 25 per cent in 1995.

¹⁷⁶ UN (note 25), pp. 22.

¹⁷⁷ UN (note 25), p. 17.

¹⁷⁸ UN, Press Release DH/1773, Geneva, 15 Nov. 1994, p. 4.

¹⁷⁹ UN (note 38), p. 4; and Bone, J., 'UN brings in watchdog to chase fraud and waste', *The Times*, 21 July 1994.

¹⁸⁰ UN, Administrative and budgetary aspects of the financing of the United Nations Peace-Keeping Operations, Report of the Advisory Committee on Administrative and Budgetary Questions, UN document A/49/664, 18 Nov. 1994, p. 5.

¹⁸¹ *Wireless File* (US Information Service, US Embassy: Stockholm, 6 Jan 1995), p. 11.

National contributions to peacekeeping operations

One of the most important developments in relation to national contributions to peacekeeping occurred in Germany when the Federal Constitutional Court ruled that German military participation in UN peacekeeping or peace enforcement operations was constitutional if approved by the German Parliament, the Bundestag. The German Constitution had been interpreted hitherto, most notably by Foreign Minister Hans-Dietrich Genscher in 1982, as banning German military activity except in collective security organizations and in defence of German territory.¹⁸² The court ruling cleared the way for Germany to shoulder greater international responsibilities as a major European power and Security Council aspirant. The Bundestag ratified the court ruling in a 424–48 vote on 22 July.¹⁸³ Foreign Minister Klaus Kinkel made clear, however, that Germany would not participate indiscriminately in all future peacekeeping missions: 'Cautiousness and reserve will certainly continue to do us good in future'.¹⁸⁴ The court ruling itself induced caution. German forces can participate in hostilities only with a Security Council mandate and the prior 'constructive agreement' of the Bundeswehr, the form and scope of the Bundeswehr's participation should be stipulated by a special law and German troops can be withdrawn by vote of the Bundestag.¹⁸⁵

A second development of import for the future of peacekeeping operations, particularly the frequency with which such operations are launched, was the Clinton Administration's promulgation in May of its new peacekeeping policy—Presidential Decision Directive 25 (PDD-25). The classified directive¹⁸⁶ affirmed US support for peacekeeping, describing it as a 'useful tool for advancing US national security interests in some circumstances', but added so many criteria as to make US involvement in peacekeeping operations apparently problematic. Moreover, in purveying criteria for supporting the establishment of new operations by the Security Council which are much more stringent than the Council's own criteria, the USA set itself up as a persistent naysayer or, worse, vetoer of peacekeeping operations, thereby doing nothing to assuage fears that it seeks to dominate the Council for its own national ends. In August 1993 during the USA's presidency of the Security Council its permanent representative had already attempted to impose a discipline on Council deliberations in line with the factors embodied in

¹⁸² Kinkel, K., 'Peacekeeping missions: Germany can play its part', *NATO Review*, Oct. 1994, pp. 3–7. The court ruled, however, that 3 instances of German participation in such operations to date—UNOSOM II and NATO/Western European Union (WEU) operations over the Balkans and the Adriatic in support of UNPROFOR, UN sanctions and no-fly zones—were unconstitutional because prior parliamentary approval had not been sought.

¹⁸³ *Financial Times*, 23–24 July 1994, p. 2.

¹⁸⁴ *International Herald Tribune*, 13 July 1994, p. 1.

¹⁸⁵ Shpakov, Y., 'Big boots for the German army', *Moscow News*, no. 32 (12–18 Aug. 1994), p. 5.

¹⁸⁶ The classified version apparently contains a couple of pages on US policy towards Russian peacekeeping operations. Appendix 2B in this volume provides summary extracts of PDD-25.

PDD-25.¹⁸⁷ Despite the fact that the criteria were described as 'factors' which would 'aid in decision-making' and not a 'prescriptive device', they had all the appearance of 'stringent conditionality'.¹⁸⁸ One observer described PDD-25 as an 'indecision directive'.¹⁸⁹

However, when it came to real-life situations PDD-25 did indeed turn out to be just a set of guidelines. The Security Council had its first real test of the new policy in action when the US studiously refused initially to respond to the pleas of Secretary-General Boutros-Ghali and Council members, including France, for the UN to intervene to halt genocide in Rwanda. Because Rwanda failed to fit the new criteria, US participation, responding to intensifying public and international clamour for action, was late, piecemeal and initiated *ad hoc*, but, none the less, it still happened. In the case of Haiti later in the year the Clinton Administration also failed to make a convincing case that the operation was consistent with PDD-25, especially that it was in the US national interest, that domestic and congressional support existed or could be marshalled and that an end-point for US participation could be identified. It might have been supposed that what was intended to be a UN peace-enforcement action but in which the USA was essentially acting alone would have been the Administration's worst nightmare and that the PDD-25 criteria would have been rigorously applied. Instead the Haiti operation was ultimately undertaken for political reasons, regardless of PDD-25.

As to multilateral cooperation in peacekeeping, this continued to expand and improve in 1994. Australia admitted defence personnel from Canada, the USA and countries in the Asia-Pacific region to training courses at the Australian Defence Force's Peacekeeping Centre, established in 1993, and trained troops for the South Pacific peacekeeping force sent to Bougainville in September.¹⁹⁰ Russia and the USA conducted their first joint peacekeeping training exercise ('Mirotvorets (Peacekeeper)-94') in September in the southern Urals near the Kazakh border.¹⁹¹ Involving only 300 US troops, the exercise, while historic, was described by NATO sources as at best 'shallow' and Russia was reportedly unenthusiastic about holding further exercises of this kind.¹⁹² A month later the first naval peacekeeping game session, 'RUKUS 94', involving Russian, US and British naval officers, was organized at the US Naval War College.¹⁹³ Meanwhile the Baltic states, the Nordic countries and the UK cooperated during the year in training a Baltic peacekeeping battalion: a

¹⁸⁷ Scheffer, D. J., 'Introductory note: United States: administration policy on reforming multilateral peace operations', *International Legal Materials*, US State Department, no. 33 (1994), p. 796. For a contrary view see Daalder, I. H., 'Knowing when to say no: the development of US peacekeeping policy in the 1990s', unpublished manuscript, School of Public Affairs, University of Maryland, Jan. 1995.

¹⁸⁸ Leitenberg, M., 'Rwanda, 1994: international incompetence produces genocide', *Peacekeeping and International Relations*, vol. 23, no. 6 (Nov/Dec. 1994), p. 8.

¹⁸⁹ Heininger, J. E., *Peacekeeping In Transition* (Twentieth Century Fund Press: New York, 1994), p. 141.

¹⁹⁰ *Insight*, Australian Department of Foreign Affairs and Trade, Canberra, 14 Mar. 1994, p. 18.

¹⁹¹ *International Herald Tribune*, 2 Aug. 1994, p. 2; and *Moscow News*, 16-22 Sep. 1994, p. 2.

¹⁹² *Defense News*, 12-18 Sep. 1994, p. 2.

¹⁹³ Sim, D. L. W. (Commander), 'The 1994 Russian-UK-US naval war game (RUKUS 94): important considerations for multinational naval operations', *RUSI Journal*, Oct. 1994, pp. 19-12 and 56.

Lithuanian platoon was already serving with the Danish UNPROFOR battalion in Croatia.¹⁹⁴

Purely national efforts at improving the performance of peacekeepers included the establishment of a training centre by Slovakia, which also has troops in UNPROFOR.¹⁹⁵ Denmark, Finland, Sweden and Norway all made plans to establish rapid reaction battalions for use on stand-by force missions for the United Nations.¹⁹⁶ Canada established the Lester B. Pearson Canadian International Peacekeeping Training Centre (named after the former Canadian Prime Minister credited with 'inventing' modern peacekeeping). The USA established a Peacekeeping Institute at its Army War College and is developing a joint peacekeeping training programme to better prepare joint task force commanders and staff for such operations.¹⁹⁷

V. UN peace-enforcement measures

The two principal means which the UN Charter envisages the UN using to 'enforce' peace are sanctions and the threat or use of military force. Both were used in 1994, sometimes in combination against a particular party.¹⁹⁸

Sanctions

Mandatory sanctions of varying types imposed by the Security Council in previous years remained in place throughout 1994 against certain states and non-state actors, including: Bosnia and Herzegovina, Croatia, Iraq, Liberia, Libya, Macedonia, Slovenia, Somalia,¹⁹⁹ UNITA (one of the parties to the conflict in Angola) and Yugoslavia (Serbia and Montenegro).²⁰⁰ With the exception of Iraq, Yugoslavia and Libya, which were subject to wider forms of sanctions, these were in the form of arms embargoes.

During the year, in May, an arms embargo was declared on parties to the conflict in Rwanda.²⁰¹ In the same month the long-standing mandatory arms embargo against South Africa was ended because of that country's successful transition from apartheid to multi-party democracy.²⁰² In September sanctions

¹⁹⁴ UN, Press Release DH/1742, Geneva, 3 Oct. 1994, p. 8.

¹⁹⁵ UN, Press Release DH/1740, Geneva, 29 Sep. 1994, p. 6.

¹⁹⁶ UN, Press Release DH/1749, Geneva, 12 Oct. 1994, p. 5.

¹⁹⁷ US Department of Defense Statement on Peacekeeping, 14 Apr. 1994, *International Legal Materials*, vol. 33, no. 3 (May 1994), p. 891.

¹⁹⁸ 'Enforce' is used here in the sense of coercing a party to do something it would otherwise not wish to do or to refrain from doing something it does wish to do. The difference between an enforcement activity and a non-enforcement activity turns on the question of consent. If the consent of the party is not forthcoming then the action taken is necessarily an enforcement activity.

¹⁹⁹ Security Council Resolution 954 of 4 Nov. 1994, which withdrew UNOSOM II from Somalia, reaffirmed the 'general and complete embargo on all deliveries of weapons and military equipment' to the Somali parties. See *Wireless File* (US Information Service, US Embassy: Stockholm, 4 Nov. 1994), p. 33.

²⁰⁰ In effect all the warring parties on the territory of the former Yugoslavia, whether recognized states or non-state parties, were subject to the arms embargo.

²⁰¹ UN, Security Council Resolution 918, UN document S/RES/918, 17 May 1994.

²⁰² UN, Security Council Resolution 919, UN document S/RES/919, 25 May 1994.

against Haiti were also lifted after the return of exiled President Jean-Bertrand Aristide.²⁰³

In September the Security Council imposed additional sanctions on the Bosnian Serbs because of their refusal to accept the international Contact Group's proposed territorial settlement of the conflict in Bosnia and Herzegovina.²⁰⁴ Russia vetoed the tightening of these in December after Serb attacks on Bihac.²⁰⁵ In October, under congressional pressure, the US Administration had made a half-hearted effort to have the Security Council lift the UN arms embargo against the Government of Bosnia and Herzegovina within six months. With France and the UK strongly opposed and only a handful of the 10 non-permanent non-aligned members of the Council supporting the measure, it was bound to fail. This did not stop the General Assembly voting 97–0, with 61 abstentions, to urge the Council to lift the ban (a decline in support compared with 1993).²⁰⁶ In any event the Bosnian Government itself had begun to reconsider the virtues of lifting the arms ban in view of its growing military strength and successes against the Serbs (even with the ban in place) and the likelihood that its lifting would prompt the withdrawal of at least the British and French components of UNPROFOR and trigger a major Serb assault.

Certain sanctions against Yugoslavia (Serbia and Montenegro) were suspended for an initial 100 days after it said it would close its border with Bosnia to stop arms and military equipment supplies going to the Bosnian Serbs. The International Conference on Yugoslavia dispatched 105 international inspectors to monitor the border to ensure compliance.²⁰⁷ By the end of the year Yugoslavia was reported to be largely complying, although many observers remained suspicious of the ultimate intentions of the Milosevic Government and there were conflicting reports about its compliance.²⁰⁸

Sanctions against Iraq were also controversial, with opinion in the Security Council (especially of Brazil, China, France and Russia)²⁰⁹ and more widely, moving towards lifting them, either wholly or in part. Iraq's ill-judged attempt to bully the Security Council into lifting the sanctions by moving an estimated 60 000 troops towards the Kuwaiti border in October 1994 backfired when the USA and its allies dispatched reinforcements to Kuwait and warned Iraq of grave consequences should the border be crossed.²¹⁰ Iraq's recognition of the UN-delimited border with Kuwait in early November, one of the pre-conditions for the lifting of sanctions, was insufficient to convince the Council of Iraq's *bona fides* and the sanctions remained in place.²¹¹

²⁰³ UN, Press Release DH/1740, Geneva, 29 Sep. 1994, p. 1.

²⁰⁴ UN, Security Council Resolution 942, UN document S/RES/942, 23 Sep. 1994.

²⁰⁵ UN (note 64).

²⁰⁶ *Wireless File* (US Information Service, US Embassy: Stockholm, 4 Nov. 1994), pp. 1, 4 and 5.

²⁰⁷ UN, Press Release DH/1743, Geneva, 4 Oct. 1994, p. 5.

²⁰⁸ Vasic, M., 'Greater Serbia: a dream too far', *Balkan War Report*, no. 31 (Feb. 1995), pp. 20–26.

²⁰⁹ *International Herald Tribune*, 18 Oct. 1994, p. 5; and *The Guardian* 11 Oct. 1994, p. 6.

²¹⁰ *International Herald Tribune*, 10 Oct. 1994, p. 1.

²¹¹ For a complete list of the conditions see UN, Security Council Resolution 687, 3 Apr. 1991, UN document S/RES/687, 8 Apr. 1991.

Use of military force

With the peace enforcement elements of UNOSOM II's mandate in Somalia hastily amended, the only United Nations operation in 1994 authorized to use military force other than to defend itself and its mission was UNPROFOR in Bosnia and Herzegovina. In support of UNPROFOR in late February 1994 NATO used military force for the first time in its 45-year history when US aircraft enforcing the no-fly zone over Bosnia and Herzegovina shot down four Serbian aircraft engaged in bombing raids on Muslim areas. It was also the first use of military force by a military alliance directly on behalf of the UN (as opposed to the use of force by a coalition of states with the authorization of the UN as in the 1991 Persian Gulf War). Several further uses of NATO air power on behalf of the UN occurred in the former Yugoslavia during 1994.

On the ground, in early October UNPROFOR used armoured vehicles, rockets and cannon fire to clear hundreds of Bosnian Government troops off the Mt Igman demilitarized zone south-west of Sarajevo, the greatest use of UN firepower against the Muslim-led government since the Bosnian war began.²¹²

However, a dispute simmered during the year between the UN and NATO over the alleged unwillingness of UNPROFOR to call in NATO air strikes to defend peacekeepers under attack, to punish violations of locally agreed accords (such as the cantonment of heavy weapons around Sarajevo) and to protect safe areas.²¹³

In November the Security Council authorized for the first time the use of air power in Croatia in response to the deteriorating situation around the UN-declared safe area of Bihac in Bosnia.²¹⁴ An air strike, the largest military operation ever conducted by NATO, was subsequently carried out on an airfield in Croatia being used in support of Bosnian Serb operations against Bihac.²¹⁵

A UN-authorized peace enforcement operation deriving from the Persian Gulf War was maintained in 1994, with US aircraft based in Turkey and Kuwait enforcing no-fly zones in northern and southern Iraq.²¹⁶ However, a dispute arose between France and the USA over whether the allies had UN authorization for imposing a military exclusion zone over southern Iraq as proposed by the USA in response to Iraq's movement of troops towards Kuwait in October.²¹⁷ No such zone was implemented.

The UN Security Council also authorized the USA to use all necessary means in the attempt to restore the elected government of Haiti. In the event a

²¹² *The Independent*, 20 Oct. 1994, p. 12.

²¹³ See chapter 6 in this volume.

²¹⁴ UN, Security Council Resolution 958, UN document S/RES/958, 19 Nov. 1994.

²¹⁵ *The Guardian*, 22 Nov. 1994, p. 1.

²¹⁶ *Wireless File* (US Information Service, US Embassy: Stockholm, 8 Nov. 1994), p. 3.

²¹⁷ *Financial Times*, 13 Oct. 1994, p. 1.

Table 2.3. Use of air power by NATO on behalf of UNPROFOR, 1994

| | |
|----------------|---|
| 28 Feb. | 4 Serbian fighter bombers shot down after launching a rocket attack in violation of the no-fly zone over Bosnia |
| 10 and 11 Apr. | Bosnian Serb artillery command post and military vehicles destroyed near Gorazde |
| 5 Aug. | Bosnian Serb M-18 76-mm self-propelled artillery piece destroyed near Sarajevo after weapons exclusion zone violated |
| 22 Sep. | Bosnian Serb anti-tank weapon near Sarajevo destroyed after weapons exclusion zone violated |
| 21 Nov. | Main runway and taxi-ways damaged and Bosnian Serb anti-aircraft guns and surface-to-surface missiles destroyed at Udbina airfield, Croatia |
| 23 Nov. | Surface-to-air missile sites attacked in the Bihac area |

Sources: *Wireless File* (US Information Service, US Embassy: Stockholm, 21 Nov. 1994), p. 14; *The Guardian*, 8 Oct. 1994, p. 4; and communications with SHAPE, Belgium.

peace enforcement operation was not necessary—the threat proved adequate. Similarly the Security Council authorized France as part of ‘Operation Turquoise’ in Rwanda to ‘use all necessary means’ in carrying out its mandate to provide sanctuary and humanitarian relief to Rwandans in need.²¹⁸

VI. The role of regional organizations

In contrast to the UN, regional organizations scored virtually no successes in 1994. The Economic Community of West African States (ECOWAS) peacekeepers were considering withdrawing in frustration from Liberia after its peace settlement collapsed. Neither the Arab League or the Organization of African Unity (OAU) appeared willing to intervene in Algeria’s murderous civil war, which was reported to have killed more than 10 000 people by October.²¹⁹ The League and the Organization of the Islamic Conference (OIC) both failed dismally to stop war in Yemen. The CSCE, while making progress in Nagorno-Karabakh (Azerbaijan) and South Ossetia (Georgia) and continuing its good works in less murderous conflicts, was unable to affect the continuing wars in the former Yugoslavia. The CIS, led by Russia, added another so-called peacekeeping mission, in Abkhazia, to its list but failed to produce negotiated settlements in other areas where it has taken upon itself the role of peacemaker.

Africa

With most of the world’s bloodiest conflicts occurring in Africa during the year and with 40 per cent of UN peacekeepers deployed on the continent, the

²¹⁸ UN, Security Council Resolution 929, UN document S/RES/929, 22 June 1994.

²¹⁹ *The Independent*, 1 Nov. 1994, p. 15.

Organization of African Unity and African states generally were under increasing pressure to assume greater responsibility for their own security.²²⁰ France, after the experience of Rwanda, where only 500 African soldiers, mostly Senegalese, assisted the French force, attempted to organize a standing African peacekeeping force. The proposal was for 1000–1500 African ‘white helmets’ to be trained, equipped and financed by France, Britain, other European states and the USA and used for missions under the aegis of the OAU or the UN.²²¹ A 34-nation African meeting at Biarritz in France in November agreed in principle to the idea but failed to make much progress, particularly on the question of when and how such a force would be deployed.²²² Among Black African states only South Africa is considered to have a modern, reliable army, but Defence Minister Joe Modise expressed reservations about his country becoming a leading player in peacekeeping at this stage.²²³

The 11 members of the Economic Community of Central African States (ECCAS), in contrast to the OAU, reportedly agreed during the year to establish a joint military staff for a regional intervention force, subject to ratification by national parliaments.²²⁴

Meanwhile efforts continued to make the OAU’s new conflict resolution machinery more effective.²²⁵ In May a meeting organized jointly by the Egyptian Government and the International Peace Academy (IPA) was held in Cairo to discuss the future of the mechanism.²²⁶ In September two conferences, one funded by the EU and organized by International Alert and the *Ad Hoc* Committee for Peace and Development (AHCPD) in Addis Ababa, the other organized by the US Institute for Peace in Washington, produced numerous recommendations.²²⁷ A Peace Fund established to fund OAU peacemaking activities attracted US and private donations.²²⁸ The OAU is chronically short of funds—in 1994 only 14 of its 52 members had paid their dues in full.²²⁹ A further obstacle to the OAU’s involvement in conflict prevention, management and resolution has been the absence of a permanent, decision-making body within the organization.²³⁰ Sierra Leone proposed the establishment of a ‘Political Security Council’ to play this role. South Africa’s acces-

²²⁰ UN, Press Release DH/1739, Geneva, 28 Sep. 1994, p. 2.

²²¹ *International Herald Tribune*, 25 Oct. 1994, p. 7 and 10 Nov. 1994, p. 2; and *Financial Times*, 10 Nov. 1994, p. 6.

²²² *Defense News*, 28 Nov.–4 Dec. 1994, p. 14.

²²³ *Defense News* (note 222).

²²⁴ *Defense News* (note 222).

²²⁵ For background see Findlay (note 14), pp. 45–46.

²²⁶ Information provided by the International Peace Academy, New York.

²²⁷ *International Alert Update*, no. 4 (Nov. 1994), pp. 1, 8 and 9; and ‘The US contribution to conflict prevention, management and resolution in Africa’, *Special Report*, US Institute of Peace, Washington, DC, Sep. 1994.

²²⁸ *Wireless File* (US Information Service, US Embassy: Stockholm, 28 Oct. 1994), p. 22.

²²⁹ UN, Letter dated 10 Aug. 1994 from the Permanent Representative of Ethiopia to the United Nations addressed to the Secretary-General, UN document A/49/313, 17 Oct. 1994, p. 5. For a list of OAU members see the glossary at the front of this volume.

²³⁰ Venter, D., ‘An evaluation of the OAU on the eve of South Africa’s accession’, *Africa Insight*, vol. 24, no. 1 (1994), p. 52. See also Jonah, J. O. C., ‘The OAU: peace keeping and conflict resolution’, ed. Yassin El-Ayouty, *The OAU After 30 Years* (Praeger: Westport, Conn. and London, 1994).

sion to the OAU may help breathe new life into the organization, not least through its ability to provide a sizeable financial contribution. The principal political obstacle to greater OAU activism, however, has traditionally been its unwillingness to tolerate interference in the internal affairs of its member states, a situation which appears to be slowly changing. The OAU did have one mission in the field in 1994, the International Observation Mission in Burundi (MIOB), comprising 47 observers.²³¹

The newly created Southern African Development Community (SADC), formerly the Southern African Development Coordinating Conference, successfully engaged in conflict prevention when it tasked the presidents of Botswana, South Africa and Zimbabwe peacefully to resolve an attempt to overthrow the democratically elected government of Lesotho.²³² Conflict between Namibia and South Africa was also averted when the latter voluntarily surrendered the enclave of Walvis Bay and the Offshore Islands to Namibian sovereignty.²³³ An unlikely conflict resolution intermediary, the Intergovernmental Authority on Drought and Development (IGADD), attempted to end the war in Sudan which has claimed more than 1.3 million lives since 1983.²³⁴

In 1994 ECOWAS remained the only example of a regional organization with a long-term, truly multilateral peacekeeping operation under way. The 12 000-strong so-called ECOWAS Monitoring Group (ECOMOG), deployed in Liberia since 1990 and which has oscillated between peacekeeping and peace enforcement, fared badly in 1994 after a promising start to the year. ECOMOG is accompanied by the UN Observer Mission in Liberia (UNOMIL), established in September 1993 to assist in the implementation of the July 1993 Cotonou Agreement between Liberia's three main warring factions and to monitor and verify the subsequent peace process.²³⁵ The Cotonou Agreement resulted in the establishment of a transitional government in March 1994. Elections were to have taken place immediately but were postponed until September (by the end of 1994 they had still not been held). When efforts to disarm the factions failed, fierce fighting resumed, including fighting between previously unknown factions. Several ECOMOG contributors, including Ghana, Uganda and Tanzania, warned they would withdraw if the situation continued. In September ECOMOG was forced to launch a military assault on coup leaders from Liberia's defunct national army who had ensconced themselves in the executive mansion in the capital Monrovia.²³⁶ After 43 UNOMIL observers were taken hostage in various parts of the country, UNOMIL withdrew its remaining personnel to Monrovia, from where it evacuated some of them. The UN dispatched a high-level mission to

²³¹ See appendix 2A.

²³² UN, Press Release DH/1746, Geneva, 7 Oct. 1994, p. 7 and DH/1749 12 Oct. 1994, p. 6.

²³³ UN, Press Release DH/1746, Geneva, 7 Oct. 1994, p. 7.

²³⁴ 'Sudan: Ending the war, moving talks forward', *Special Report*, US Institute of Peace, Washington, DC, 1994.

²³⁵ UN (note 38), p. 63.

²³⁶ *Guardian Weekly*, 25 Sep. 1994, p. 17.

Liberia and ECOWAS states in November to pursue a resolution of the crisis.²³⁷ In an effort to disarm the factions UNOMIL began a programme to 'buy out' rebel soldiers with resettlement grants.²³⁸ A new peace agreement between all the warring factions, mediated largely by Ghanaian President Jerry Rawlings, was signed in Accra on 21 December, calling for a cease-fire within a week, the seating of a new transitional government and the eventual holding of elections.²³⁹ However, the situation in Liberia remained fraught with danger as the year ended.

Europe²⁴⁰

NATO, NACC and the WEU

The North Atlantic Cooperation Council (NACC) and the Partnership for Peace (PFP), the NATO programme designed to enhance military cooperation with the former Soviet bloc and European neutral states, launched several cooperative ventures related to peacekeeping in 1994 in line with a programme prepared by NACC's *Ad Hoc* Group on Cooperation in Peacekeeping. In July the International Workshop on Cooperation in Peacekeeping was held in the UK in an attempt to move the participating states towards 'a common doctrinal approach for multi-national peacekeeping operations'.²⁴¹ Later in the year, when the PFP held its first joint military exercises, the emphasis was firmly on peacekeeping techniques and humanitarian assistance.²⁴² 'Cooperative Bridge 94', which took place in Poland in September, was the first time that NATO forces had held an exercise with their former Warsaw Pact adversaries.²⁴³ In September and early October the first maritime exercise was conducted, in the North Sea.²⁴⁴ Several bilateral and trilateral peacekeeping exercises among PFP members also took place.²⁴⁵ Other initiatives included open-ended expert groups and workshops and the exchange and collation of information on national peacekeeping training (led by Denmark).²⁴⁶ In addition, NATO's training school at Oberammergau in Germany conducted peacekeeping training courses for PFP participants in the Czech Republic and Poland. It remains to be seen, however, whether all this

²³⁷ UN, Press Release DH/1774, Geneva, 16 Nov. 1994, p. 3.

²³⁸ *International Herald Tribune*, 30 Dec. 1994, p. 2.

²³⁹ UN, Press Release DH/1799, Geneva, 22 Dec. 1994, p. 2; and DH/1800, Geneva, 23 Dec. 1994, p. 2.

²⁴⁰ For details of OSCE activities in conflict prevention, management and resolution see chapters 7 and 8 in this volume.

²⁴¹ *The Independent*, 7 July 1994, p. 14.

²⁴² *Dispatch*, US Department of State, vol. 5, no. 38 (19 Sep. 1994), p. 631.

²⁴³ A second field exercise, 'Cooperative Spirit 94', was held in the Netherlands in late Oct. For more details of the NACC/PFP exercises see table 8.1, chapter 8 in this volume.

²⁴⁴ *Military and Arms Transfers News*, 7 Oct. 1994, p. 9.

²⁴⁵ Including those between Poland and the UK in May, between France and the Czech Republic in June and between Denmark, Germany and Poland in Oct./Nov., with the Baltic states as observers.

²⁴⁶ Cooperation in Planning for Peacekeeping (chaired by NATO military authorities), Development of a Common Technical Base in Peacekeeping—Communications (chaired by the Netherlands) and Logistics of Peacekeeping, held in Norway and at NATO headquarters. NACC Press Release M-NACC-1 (94) 47, 10 June 1994.

activity actually leads to NACC/PPF involvement in peacekeeping operations or whether it simply represents a 'soft' way of initiating military cooperation between former cold war adversaries.

During 1994 NATO, in cooperation with the Western European Union (WEU) and the EU, continued to assist the UN in enforcing the no-fly zone over Bosnia and Herzegovina and sanctions against several of the former Yugoslav states.²⁴⁷ It also continued to provide protective air cover for UNPROFOR and to deter attacks against UN Protected Areas and Safe Areas. In contrast to 1993, in 1994 there were several actual uses of NATO air power in Bosnia.²⁴⁸

The Commonwealth of Independent States²⁴⁹

At the outset of 1994 there were three Russian-led military deployments in conflict zones in the CIS area—South Ossetia,²⁵⁰ eastern Moldova and Tajikistan—which described themselves as peacekeeping operations.²⁵¹ A fourth such deployment, in the Abkhazia region of Georgia, was initiated in July 1994.

Debate sharpened during the year as to whether they should be given UN imprimatur and even funding, as Russia has repeatedly demanded. Russian feelings were inflamed in 1994 when it saw the Security Council give endorsement to US actions in Haiti and French actions in Rwanda. However, Russian-led peacekeeping forces continued to operate on the basis of rules of engagement that were different from those of the UN, particularly in regard to impartiality, minimum use of force and its use only in self-defence, and retention of the consent of the parties. Russian peacekeeping practice appears to be a mixture of traditional UN techniques (for instance, Russian military negotiators in South Ossetia have reportedly performed well) with anti-guerrilla warfare techniques inherited from the war in Afghanistan. In Tajikistan, the least peacekeeping-like of all the current Russian missions led by the 201st Division has become openly supportive of the Tajik Government.²⁵² It guards the border against rival groups based in Afghanistan and carries out basic counter-insurgency tasks. As a result Russian troops have suffered a steady stream of casualties, with 33 killed in the first five months of 1994.

Russia has made it clear that while it wants international recognition and funding for its peacekeeping operations, it also wants to retain command and control, its own rules of engagement, its prominent role among troop contributors and to exclude non-CIS forces. Even if Russia had been offered sub-

²⁴⁷ See Findlay (note 14), pp. 48–49.

²⁴⁸ For detail on the relationship between NATO and the UN in Bosnia, see chapter 6 in this volume.

²⁴⁹ For further detail on CIS peacekeeping operations see chapter 7 in this volume.

²⁵⁰ See Bowers, S., 'The Ossetian conflict', *Jane's Intelligence Review*, Jan. 1994, pp. 3–5.

²⁵¹ Russian political parlance does not differentiate between peacekeeping, peace making and peace enforcement. The term used in Russia—'mirotvorchestvo'—means, if directly translated, 'peace creation'; this could cover a very broad range of activities, from political mediation to combat operations aimed at 'imposing peace'.

²⁵² Orr, M., 'Peacekeeping and overstretch in the Russian Army', *Jane's Intelligence Review*, Aug. 1994, p. 364.

stantial assistance in the way of forces, such as from NATO or the USA, it probably would have rejected them. Boutros-Ghali told the Russians bluntly during a visit to Moscow in April: 'We have no objection to, and welcome the participation of, Russian troops in multinational forces, but the whole operation will be under the direct control of the UN'.²⁵³ Attempts have been made to insert the UN and/or CSCE wherever possible to monitor CIS operations, such as in Georgia and Tajikistan. There are the makings of a compromise—trading international approval and funding of Russian operations in return for Russia surrendering them to UN control or strict oversight—but this appears unlikely given Russian imperiousness regarding its 'near abroad'.²⁵⁴

The South Pacific

In the South Pacific, a regional peacekeeping force was deployed—for the first time—to establish a neutral political environment on the secessionist island of Bougainville after a cease-fire agreement was reached between the Papua New Guinea Government and the Bougainville Revolutionary Army. The 200-person force comprised troops from Fiji (an experienced peacekeeping participant), Tonga and Vanuatu, with funding, training and support provided by Australia and some training from New Zealand.²⁵⁵ Australia was also asked to provide naval vessels to patrol the seas between Bougainville and the neighbouring Solomon Islands where some of the elements of the BRA had sought refuge.²⁵⁶ The peacekeepers were withdrawn a week ahead of schedule when a peace conference, scheduled to have begun by 10 October, was abandoned after the BRA failed to attend, allegedly because of concerns for its delegation's safety. Fighting resumed on Bougainville within 24 hours of the failure of the peace talks.²⁵⁷

Other organizations

The other multilateral organizations involved in conflict prevention, management and resolution in 1994 included the Commonwealth, which had observers in South Africa monitoring political violence and the April elections, along with those from the OAU, the UN and the EU.²⁵⁸ The Organization of American States continued to be involved in peace efforts in Central America, but its only formal role in a peace operation was its joint observer mission with the UN in Haiti, MICIVIH. An *ad hoc* multilateral mission, the

²⁵³ *The Guardian*, 5 Apr. 1994, p. 5.

²⁵⁴ See Allison, R., 'The military and security background to Russian peacekeeping operations', Paper presented to conference on Peacekeeping and the Role of Russia in Eurasia, Utrikespolitiska Institutet [Swedish Institute of International Affairs], Stockholm, 14 Oct. 1994.

²⁵⁵ Fraser, H., 'Peace hopes dashed on Bougainville', *Asia-Pacific Defence Reporter*, 1995 Annual Reference Edition, Dec. 1994/Jan. 1995, p. 52.

²⁵⁶ Kamiol, R., 'Green light given for PNG peacekeepers', *Jane's Defence Weekly*, 24 Sep. 1994, p. 6.

²⁵⁷ *Pacific Islands Monthly*, Nov. 1994, p. 6.

²⁵⁸ Commonwealth Secretariat, *International Election Observer's Manual* (Commonwealth Secretariat: London, Apr. 1994), p. 8.

Multinational Force and Observers (MFO), remained in the eastern Sinai under the 1979 Treaty of Peace between Egypt and Israel, despite being seemingly overtaken by the great progress towards an overall Middle East settlement. The Temporary International Presence in Hebron (TIPH), comprising 117 observers from Denmark, Italy and Norway, was deployed for three months in Hebron after the Ibrahim Mosque massacre in February. Working Group III of the multilateral Middle East negotiations²⁵⁹ produced an agreement to establish a Regional Security Center/Conflict Prevention Center (RSC/CPC) in the region to handle crisis prevention, management and resolution.²⁶⁰

While the Neutral Nations Supervisory Commission (NNSC) for Korea remained in place to supervise the 1953 Armistice Agreement and cease-fire line along the 38th parallel, North Korea made a serious attempt to undermine it by opposing Poland's continuing participation on the grounds that it was no longer a member of the Socialist bloc.²⁶¹ This left only Sweden and Switzerland manning the Commission.

VII. Conclusions

There were major achievements in the endless quest for peace and security in 1994. Peace settlements in Haiti, South Africa, Mozambique and the Middle East and tentative beginnings towards peace in Angola, Guatemala and Northern Ireland were heartening. The UN, as it approached its 50th year, was less inclined to launch substantial operations, whether humanitarian or in the form of extended peacekeeping. The lessons of the previous year regarding the use of force to enforce the peace and the need for better planning, organization, command and control, and financial and personnel management appear to have been well taken both by UN member states and the UN Secretary-General and Secretariat. Reforms at the UN appeared to be making a difference in performance. The OAU, the OSCE and NATO all made preparations for peacekeeping but failed to make it into the field. Interaction between the UN and regional organizations was mixed, with a troubled relationship with NATO in the former Yugoslavia being patched up by the end of the year. The civilian aspects of peacekeeping continued to expand in size and sophistication.

Tragedies none the less marked 1994, the most disturbing being that in Rwanda where Hutu massacred Tutsi by the millions while the UN, the OAU and others (except in the end France) stood by unwilling to intervene. The continuing wars in the former Yugoslavia were also testament to the failure of conflict prevention and resolution, although, and this was of small consolation.

²⁵⁹ See chapter 5 in this volume.

²⁶⁰ *The Middle East Peace Process: An Overview*, Information Division, Ministry of Foreign Affairs, Jerusalem, 1994, p. 28.

²⁶¹ Exchange of notes between the Ministries of Foreign Affairs of the Democratic Republic of Korea and Poland, 15 Dec. 1994 and 23 Jan. 1995. The North Koreans expelled the Poles in late Feb. 1995. See *International Herald Tribune*, 1 Mar. 1995, p. 4. North Korea had already refused to accept accreditation of either Czech or Slovak representatives following the breakup of Czechoslovakia.

tion, not of management. Other conflicts raged on in Algeria, Afghanistan, Chechnya, Sri Lanka, Sudan, Yemen and elsewhere without even a modicum of conflict management.

As 1995 approached hope lay in the possibility that the plethora of reform proposals for improving the machinery of the United Nations would, during its 50th anniversary year, lead to a revived capability for preventing, managing and resolving interstate and intra-state armed conflict.

Appendix 2A. Multilateral observer, peacekeeping and electoral operations, 1994

JAANA KARHILO

I. Multilateral observer and peacekeeping missions

Table 2A.1 lists multilateral observer and peacekeeping operations initiated, continuing or terminated in 1994, by international organization and by starting date. Three groups of operations are presented: 19 run by the United Nations, 4 by the Conference on Security and Co-operation in Europe (CSCE)¹ and 15 by other organizations. Purely civilian missions are not included, although in some of the missions listed, military observers may act in a civilian capacity.

Legal instruments underlying the establishment of an operation are given in the first column, which lists the resolution adopted by the UN Security Council or the date of the decision taken by the respective body or organization.

Countries ending their participation in the course of 1994 are listed in italics, and those participating for the first time in 1994 are listed in bold text. Numbers of civilian observers and international and local civilian staff are not included.

Mission fatalities are recorded from the beginning of the conflict until the last reported date for 1994 ('to date'), and as a total for the year ('in 1994'). Information on the approximate or estimated annual cost of the missions ('yearly') and the approximate cost of outstanding contributions ('unpaid') to the operation fund at the close of the 1994 budget period (the date of which varies from operation to operation) is given in current US \$. In the case of UN missions, unless otherwise noted, UN data on contributing countries and on numbers of troops, military observers and civilian police as well as on fatalities and costs are as of 31 December 1994. UN data on total mission fatalities ('to date') are for all UN missions since 1948.

While serving a peacekeeping role, and numbering some military observers, the CSCE missions listed are not military operations. Figures on the number of personnel involved are totals for each mission, and include both military and civilian staff in 1994. In addition to the four missions listed, in 1994 the CSCE maintained two long-term missions in Estonia and in Latvia and established a mission in Sarajevo in June and in Ukraine in November. The mission to Kosovo, Sandjak and Vojvodina, expelled on 28 June 1993, could not be reinstalled because of a lack of agreement on its extension. The CSCE also maintained Sanctions Assistance Missions (SAMs) in Albania, Bulgaria, Croatia, Hungary, the Former Yugoslav Republic of Macedonia, Romania and Ukraine. Their function is to assist the host countries in the implementation of the sanctions and embargoes imposed on the republics of the former Yugoslavia in accordance with relevant UN Security Council resolutions, in particular resolutions 713, 757, 787, 820 and 943. In 1994 they were staffed by 150 customs officers from various CSCE participating states.

¹ The CSCE was renamed the Organization for Security and Co-operation in Europe (OSCE) at the Budapest Summit Meeting, 5-6 Dec. 1994, effective as of 1 Jan. 1995.

II. Selected UN assisted electoral observer missions

Table 2A.2 lists major electoral observer missions coordinated or assisted by the UN for elections held in 1994, by country and by elections observed. Data on number of electoral observers pertains to the polling period. Only missions containing an international observer group are included. The elections were organized and run by national authorities. In the case of small missions, national authorities coordinated the activities of electoral observers with UN assistance. In the case of large missions, the UN coordinated observers through the Electoral Division of a UN observer mission or through a special UN assistance unit. In South Africa the UN had overall responsibility for coordinating the international electoral observer missions. The UN may provide assistance only on the basis of a formal request or pursuant to a Security Council resolution. The UN received 28 requests for electoral assistance in 1993 and 19 in 1994. Several countries made more than one request. Assistance was not always provided in the year it was requested and a few requests were turned down by the UN, usually because of a lack of lead time.

III. Note on acronyms

Acronyms for the names of the individual missions are explained in the tables. Other acronyms used throughout the tables are as follows: CARICOM = Caribbean Community; CIS = Commonwealth of Independent States; CSO = CSCE Council of Senior Officials; ECOWAS = Economic Community of West African States; EU = European Union; ESMC = ECOWAS Standing Mediation Committee; MOU = Memorandum of Understanding; OAU = Organization of African Unity; SCR = Security Council Resolution; UNGA = UN General Assembly; UNSC = UN Security Council; UNSG = Office of the UN Secretary-General.

IV. Sources

Tables 2A.1 and 2A.2 were compiled on the basis of the following main sources: SIPRI peacekeeping and regional security data base; UN material provided by the UN Department of Public Information and the UN Electoral Assistance Division of the Department of Peacekeeping Operations in New York and by the UN Information Centre for the Nordic countries in Copenhagen (special thanks to Rea Hoberg); CSCE material provided by the Secretariat of the Conflict Prevention Centre, Vienna; material pertaining to the Multilateral Force and Observers in the Sinai (MFO) provided by the MFO Office of Personnel and Publications, Rome; material on the Temporary International Presence in the City of Hebron provided by the Norwegian Ministry for Foreign Affairs; material on Operation Uphold Democracy provided by the US Information Service in Stockholm and by the National Defence University, Washington, DC (special thanks to Capt. W. Oscar Round); material on the International Conference on the Former Yugoslavia (ICFY) Mission provided by the ICFY, Geneva and by the Finnish Ministry for Foreign Affairs; material on the South Pacific Peacekeeping Force provided by Australian defence sources; and material relating to the Commonwealth provided by the Commonwealth Secretariat, London.

Table 2A.1. Multilateral observer and peacekeeping missions

| Acronym/ (Legal instrument) | Name/type of mission (O: observer) (PK: peacekeeping) | Location | Start date | Countries contributing troops, military observers (mil. obs) and/or civilian police (civ. pol.) in 1994 | Troops/ Mil. obs/ Civ. pol. | Deaths: To date In 1994 | Cost: Yearly Unpaid |
|---|---|---|---------------|---|---------------------------------------|-------------------------------|--|
| United Nations (UN) (UN Charter, Chapters VI and VII) | | (19 operations) | June 1948 | (77 countries; contingents on rotation) | 65 111 ¹ 2 263 1 982 | 1 203 143 | 3 500 ² 1 200 ³ |
| UNTSO (SCR 50) | UN Truce Supervision Organization (O) | Egypt/Israel/ Lebanon/Syria | June 1948 | Argentina, Australia, Austria, Belgium, Canada, Chile, China, Denmark, Finland, France, Ireland, Italy, Netherlands, New Zealand, Norway, Russia, Sweden, Switzerland, USA | - 218 - | 28 - | 29 - |
| UNMOGIP (SCR 91) | UN Military Observer Group in India and Pakistan (O) | India/Pakistan (Kashmir) | Jan. 1949 | Belgium, Chile, Denmark, Finland, Italy, <i>Norway</i> , South Korea , Sweden, Uruguay | - 39 - | 6 - | 7 - |
| UNFICYP (SCR 186) | UN Peace-keeping Force in Cyprus (PK) | Cyprus | Mar. 1964 | Argentina, Australia, Austria, Canada, <i>Denmark</i> , Finland, <i>Hungary</i> , Ireland, UK ⁴ | 1 149 - 34 | 163 - | 44 ⁵ 8 ⁶ |
| UNDOF (SCR 350) | UN Disengagement Observer Force (O) | Syria (Golan Heights) | June 1974 | Austria, Canada, <i>Finland</i> , Poland | 1 030 - ⁷ - | 37 2 | 32 ⁸ 25 |
| UNIFIL (SCR 425, 426) | UN Interim Force in Lebanon (PK) | Lebanon (Southern) | Mar. 1978 | Fiji, Finland, France, Ghana, Ireland, Italy, Nepal, Norway, Poland, <i>Sweden</i> | 5 146 - ⁹ - | 200 5 | 142 203 |
| UNIKOM (SCR 689) | UN Iraq-Kuwait Observation Mission (O) | Iraq/Kuwait (Khawr 'Abd Allah water- way and UN DMZ ¹⁰) | Apr. 1991 | Argentina, Austria, Bangladesh, Canada, China, Denmark, Fiji, Finland, France, Ghana, Greece, Hungary, India, Indonesia, Ireland, Italy, Kenya, Malaysia, Nigeria, <i>Norway</i> , Pakistan, Poland, Romania, Russia, Senegal, Singapore, Sweden, Thailand, Turkey, UK, USA, Uruguay, Venezuela ¹¹ | 898 ¹² 244 - | 3 3 | 69 30 |
| UNAVEM II (SCR 696) | UN Angola Verification Mission II (O) | Angola | June 1991 | Argentina, Brazil, Congo, Guinea-Bissau, Hungary, India, Jordan, Malaysia, Morocco, Netherlands, New Zealand, Nigeria, Norway, Slovakia, Sweden, Zimbabwe | 11 ¹³ 85 39 | 4 - | 26 13 ¹⁴ |

| Acronym/ (Legal instrument) | Name/type of mission (O: observer) (PK: peacekeeping) | Location | Start date | Countries contributing troops, military observers (mil. obs) and/or civilian police (civ. pol.) in 1994 | Troops/ Mil. obs/ Civ. pol. | Deaths: To date In 1994 | Cost: Yearly Unpaid |
|------------------------------------|---|--|----------------------------|---|------------------------------------|-------------------------------|----------------------------|
| ONUSAL (SCR 693, 729) | UN Observer Mission in El Salvador (O) | El Salvador | July 1991 | <i>Argentina, Austria, Brazil, Canada, Chile, Colombia, Ecuador, France, Guyana, India, Ireland, Italy, Mexico, Spain, Sweden, Venezuela</i> | – 3 ¹⁵ 31 | 3 1 | 29 24 ¹⁶ |
| MINURSO (SCR 690) | UN Mission for the Referendum in Western Sahara (O) | Western Sahara | Sep. 1991 | <i>Argentina, Australia, Austria, Bangladesh, Belgium, Canada, China, Egypt, France, Germany, Ghana, Greece, Guinea, Honduras, Ireland, Italy, Kenya, Malaysia, Nigeria, Norway, Pakistan, Poland, Russia, South Korea, Switzerland, Togo, Tunisia, USA, Uruguay, Venezuela</i> | 48 ¹⁷ 237 49 | 4 – | 41 20 |
| UNPROFOR (SCR 743, 776, 795) | UN Protection Force (PK) | Former Yugoslavia (Croatia; Bosnia and Herzegovina; Macedonia ¹⁸) | Mar. 1992 | <i>Argentina, Bangladesh, Belgium, Brazil, Canada, Colombia, Czech Rep., Denmark, Egypt, Finland, France, Ghana, Indonesia, Ireland, Jordan, Kenya, Lithuania, Malaysia, Nepal, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Poland, Portugal, Russia, Slovakia, Spain, Sweden, Switzerland, Tunisia, Turkey, Ukraine, UK, USA, Venezuela</i> | 38 332 ¹⁹ 693 764 | 138 67 | 1 600 ²⁰ 457 |
| ONUMOZ (SCR 797, 898) | UN Operation in Mozambique (PK) | Mozambique | Dec. 1992 | <i>Argentina, Australia, Austria, Bangladesh, Bolivia, Botswana, Brazil, Canada, Cape Verde, China, Czech Rep., Egypt, Finland, Ghana, Guinea-Bissau, Guyana, Hungary, India, Indonesia, Ireland, Italy, Japan, Jordan, Malaysia, Nepal, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Portugal, Russia, Spain, Sri Lanka, Sweden, Switzerland, Togo, USA, Uruguay, Zambia</i> | 3 941 ²¹ 204 918 | 19 10 | 295 72 |
| UNOSOM II (SCR 814) | UN Operation in Somalia II (PK) | Somalia | May 1993 ²² | <i>Australia, Bangladesh, Belgium, Botswana, Canada, Egypt, France, Germany, Ghana, Greece, India, Indonesia, Ireland, Italy, Kuwait, Malaysia, Morocco, Nepal, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Philippines, Romania, Saudi Arabia, South Korea, Tunisia, Turkey, UAE, USA, Zambia, Zimbabwe</i> | 9 385 ²³ – 27 | 134 39 | 862 191 ²⁴ |
| UNOMUR (SCR 846) | UN Observer Mission Uganda–Rwanda (O) | Uganda/ Rwanda (border area) | June 1993 ²⁵ | <i>Bangladesh, Botswana, Brazil, Hungary, Netherlands, Senegal, Slovakia, Zimbabwe</i> | – 80 ²⁶ – | – – | .. ²⁷ .. |

| | | | | | | | |
|--|--|---|----------------------------|--|--|-------------|-------------------------|
| UNOMIG (SCR 849, 858) | UN Observer Mission in Georgia (O) | Georgia (Abkhazia) | Aug. 1993 | Albania, Austria, Bangladesh, Cuba, Czech Rep., Denmark, ²⁸ Egypt, France, Germany, Greece, Hungary, Indonesia, Jordan, Pakistan, Poland, Russia, South Korea, Sweden, Switzerland, Turkey, UK, USA, Uruguay | - 134 ²⁹ - | - - - | 11 0.3 |
| UNOMIL (SCR 866) | UN Observer Mission in Liberia (O) | Liberia | Sep. 1993 | Austria, Bangladesh, China, Congo, Czech Rep., Egypt, Guinea-Bissau, Hungary, India, Jordan, Kenya, Malaysia, Pakistan, Poland, Slovakia, Uruguay | 8 ³⁰ 76 ³¹ - | - - - | 36 6 |
| UNMIH (SCR 867) ³² | UN Mission in Haiti (PK) | Haiti | Sep. 1993 ³³ | Austria, Bangladesh, Canada, Djibouti, France, Guatemala, Ireland, Netherlands, New Zealand, Tunisia, USA ³⁴ | 16 ³⁵ 18 40 | - - - | 5 0.3 |
| UNAMIR (SCR 872) | UN Assistance Mission for Rwanda (PK) | Rwanda | Oct. 1993 | Argentina, Australia, Austria, Bangladesh, Belgium, Canada, Chad, Congo, Djibouti, Egypt, Ethiopia, Fiji, Ghana, Guinea, Guinea-Bissau, Guyana, India, Jordan, Kenya, Malawi, Mali, Netherlands, Niger, Nigeria, Poland, Russia, Senegal, Slovakia, Togo, Tunisia, UK, Uruguay, Zambia, Zimbabwe | 5 147 ³⁶ 295 80 | 16 16 | 198 125 |
| UNASOG (SCR 915) | UN Aouzou Strip Observer Group (O) | Aouzou Strip Libya/Chad (border area) | May 1994 ³⁷ | Bangladesh, Ghana, Honduras, Kenya, Malaysia, Nigeria | - 9 - | - - - | 0.4 ³⁸ .. |
| UNMOT (SCR 968) | UN Mission of Observers in Tajikistan (O) | Tajikistan | Dec. 1994 | Austria, Bangladesh, Denmark, Jordan, Uruguay ³⁹ | - 17 ⁴⁰ - | - - - | 2 ⁴¹ |
| Conference on Security and Co-operation in Europe (CSCE) (4 operations) | | | | | | | |
| - (CSO 18 Sep. 1992 ⁴²) | CSCE Spillover Mission to Skopje (O) | Former Yugoslav Rep. of Macedonia | Sep. 1992 | Armenia, Austria, Denmark, Italy, Japan, Norway, Poland, Russia, Switzerland, USA | - 8 ⁴³ - | - - - | 0.7 ⁴⁴ .. |
| - (CSO 6 Nov. 1992 ⁴⁵) | CSCE Mission to Georgia (O) | Georgia (S. Ossetia; Abkhazia) | Dec. 1992 | Austria, Czech Rep., Finland, France, Germany, Hungary, Ireland, Lithuania, Netherlands, Poland, Ukraine, USA | - 17 ⁴⁶ - | - - - | 2 ⁴⁴ .. |

| Acronym/ (Legal instrument) | Name/type of mission (O: observer) (PK: peacekeeping) | Location | Start date | Countries contributing troops, military observers (mil. obs) and/or civilian police (civ. pol.) in 1994 | Troops/ Mil. obs/ Civ. pol. | Deaths: To date In 1994 | Cost: Yearly Unpaid |
|---|---|---------------------------------|---------------|---|---|-------------------------------|---------------------------|
| – (CSO 4 Feb. 1993 ⁴⁷) | CSCE Mission to Moldova (O) | Moldova | Apr. 1993 | Canada, Germany, Netherlands, Poland, Switzerland, <i>UK</i> , USA | – 7 – | – – | 0.4 ⁴⁴ .. |
| – (CSCE 1 Dec. 1993 ⁴⁸) | CSCE Mission to Tajikistan (O) | Tajikistan | Feb. 1994 | Bulgaria , <i>France</i> , Germany, Poland | – 3 – | – – | 0.5 ⁴⁹ .. |
| Other (15 operations) | | | | | | | |
| NNSC (Armistice agreement ⁵⁰) | Neutral Nations Supervisory Commission (O) | North Korea/ South Korea | July 1953 | Poland ⁵¹ , Sweden, Switzerland | – 4 ⁵² – | – – | .. .. |
| MFO (Protocol to treaty ⁵³) | Multinational Force and Observers in the Sinai (O) | Egypt (Sinai) | April 1982 | Australia, Canada, Colombia, Fiji, France, Italy, Netherlands, New Zealand, Norway, Uruguay, USA | 1 988 ⁵⁴ – – | .. .. | 53 ⁵⁵ .. |
| ECOMOG (ESMC 7 Aug. 1990 ⁵⁶) | ECOWAS ⁵⁷ Cease- Fire Monitoring Group (PK) | Liberia | Aug. 1990 | Gambia, Ghana, Guinea, Mali, Nigeria, Sierra Leone, Tanzania , Uganda ⁵⁸ | 8 430 ⁵⁹ – – | .. .. | 90 ⁶⁰ .. |
| ECMM (Brioni Agreement ⁶¹) | European Community Monitoring Mission ⁶² (O) | Former Yugoslavia | July 1991 | Belgium, <i>Canada</i> , Czech Rep., Denmark, France, Germany, Greece, Ireland, Italy, Netherlands, Poland, Portugal, Slovakia, Spain, Sweden, UK | – 173 ⁶³ – | 6 – | 19 ⁶⁴ .. |
| – (Bilateral agreement ⁶⁵) | 'South Ossetia Joint Force' (PK) | Georgia (S. Ossetia) | July 1992 | Georgia, Russia, North and South Ossetia | c. 1 600 ⁶⁶ – – | .. .. | .. .. |
| – (Bilateral agreement ⁶⁷) | 'Moldova Joint Force' (PK) | Moldova (Trans- Dniester) | July 1992 | Moldova, Russia, 'Trans-Dniester Republic' | (2 800– 3 400) ⁶⁸ – – | .. .. | .. .. |

| | | | | | | | |
|--|--|---|---------------------------|---|------------------------------------|----------------|--------------------------------|
| - (CIS 22 Jan. 1993 ⁶⁹) | CIS 'Tajikistan Buffer Force' (PK) | Tajikistan (Afghan border ⁷⁰) | Mar. 1993 | Kyrgyzstan, Russia, Uzbekistan ⁷¹ | c. 7 500 ⁷² - - | .. .. .. | ..⁷³ |
| UNMLT (SCR 880) | UN Military Liaison Team ⁷⁴ (O) | Cambodia | Nov. 1993 | Austria, Bangladesh, Belgium, China, France, India, Indonesia, Malaysia, New Zealand, Pakistan, Poland, Russia, Thailand, Uruguay | - 20 - | - - - | 0.9 0.12 ⁷⁵ - |
| MIOB ⁷⁶ (OAU 1993) | International Observation Mission in Burundi (O) | Burundi | Dec. 1993 | .. | 477 ⁷⁷ .. .. | .. .. .. | ..⁷⁸ |
| TIPH (Agreement Mar. 1994 ⁷⁹) | Temporary Inter- national Presence in the City of Hebron (O) | Hebron, West Bank | May 1994 ⁸⁰ | Denmark, Italy, Norway | - 117 - | - - - | 1.6 ⁸¹ |
| - (CIS 15 Apr. 1994) ⁸² | CIS 'Peacekeeping Forces in Georgia' (PK) | Georgian- Abkhazian border | June 1994 | Russia ⁸³ | c. 3 000 ⁸⁴ .. .. | .. .. .. | .. .. .. |
| - (SCR 929) | Operation <i>Turquoise</i> ⁸⁵ (PK) | Rwanda ⁸⁶ | June 1994 | Chad, Congo, Egypt, France, Guinea-Bissau, Mauritania, Niger, Senegal ⁸⁷ | 3 060 ⁸⁸ - - | .. .. .. | 212 ⁸⁹ |
| MNF (SCR 940) ⁹⁰ | Operation Uphold Democracy (PK) | Haiti | Sep. 1994 | Antigua & Barbuda, Argentina, Australia, Bahamas, Bangladesh, Barbados, Belgium, Belize, Benin, Bolivia, Costa Rica, Denmark, Dominica, Grenada, Guatemala, Guyana, Israel, Jamaica, Jordan, Netherlands, Philippines, Poland, St Kitts & Nevis, St. Lucia, St. Vincent & Grenadines, Trinidad & Tobago, UK, USA ⁹¹ | 7 412 ⁹² - 717 | - - - | 605 ⁹⁴ |
| - (Agreement Sep. 1994; SCR 943) | Mission of the International Conference on the Former Yugoslavia ⁹⁵ (O) | Serbia/ Bosnia and Herzegovina border area | Sep. 1994 | Belgium, Canada, Czech Rep., Denmark, Finland, France, Germany, Greece, Ireland, Netherlands, Norway, Portugal, Russia, Spain, Sweden, UK, USA | - 178 ⁹⁶ - | - - - | 1.3 ⁹⁷ |
| SPPKF (Agreement Sep. 1994 ⁹⁸) | South Pacific Peacekeeping Force ⁹⁹ (PK) | Bougainville, Papua New Guinea | Oct. 1994 | Fiji, Tonga, Vanuatu ¹⁰⁰ | c. 400 - - | - - - | 3.8 ¹⁰¹ |

Table 2A.2. Selected UN assisted electoral observer missions

| Acronym/ (Legal instrument) | Name of observer coordinating unit | Location | Start date | Elections conducted in 1994 with UN assistance to electoral observer team | Date of elections | Electoral observers |
|---|--|---------------|------------|---|---------------------------|------------------------------|
| – (Request Nov. 1993) | Supreme Electoral Council ¹⁰² | Nicaragua | Jan. 1994 | Elections for regional councils on the Atlantic coast | 27 Feb. | 29 ¹⁰³ |
| ONUSAL (SCR 693, 832) ¹⁰⁴ | UN Observer Mission in El Salvador, Electoral Division | El Salvador | Sep. 1993 | Elections for President, the National Assembly, municipal legislatures and the Central American Parliament Presidential elections, second round | 20 Mar. 24 Apr. | c. 850 ¹⁰⁵ 900 |
| – (Request July 1993) | Joint International Observer Group ¹⁰⁶ | Uganda | .. | Elections to Constituent Assembly | 28 Mar. | 110 ¹⁰⁷ |
| UNOMSA (SCR 772, 894) ¹⁰⁸ | UN Observer Mission in South Africa ¹⁰⁹ | South Africa | Sep. 1992 | Elections for the National Assembly and the 9 provincial parliaments | 26–29 Apr. ¹¹⁰ | 2 120 ¹¹¹ |
| EUNELSA ¹¹² | EU Election Unit in South Africa | South Africa | .. | Elections for the National Assembly and the 9 provincial parliaments | 26–29 Apr. | 322 |
| – ¹¹³ | OAU Observer Mission | South Africa | .. | Elections for the National Assembly and the 9 provincial parliaments | 26–29 Apr. | 102 |
| COGSA ¹¹⁴ | Commonwealth Observer Group in South Africa | South Africa | Feb. 1994 | Elections for the National Assembly and the 9 provincial parliaments | 26–29 Apr. | 118 |
| – (Request Oct. 1993) | UN Electoral Assistance Secretariat ¹¹⁵ | Malawi | Jan. 1994 | Presidential and parliamentary elections | 17 May | 250 ¹¹⁶ |
| – (Request Dec. 1992) | International observer group ¹¹⁷ | Guinea-Bissau | .. | Presidential and legislative elections Presidential elections, 2nd round | 3 July 7 Aug. | 100 100 |
| ETONU-MEX (Request May 1994) | UN Technical Assistance Team in Mexico ¹¹⁸ | Mexico | June 1994 | Presidential and congressional elections | 21 Aug. | c. 30 000 ¹¹⁹ |
| ONUMOZ (SCR 797) ¹²⁰ | UN Operation in Mozambique, Electoral Division | Mozambique | Mar. 1993 | Presidential and parliamentary elections | 27–29 Oct. | c. 2 300 ¹²¹ |
| – (Request July 1994) | Namibian Directorate of Elections ¹²² | Namibia | .. | Presidential and legislative elections | 7–8 Dec. | 150 ¹²³ |

Notes for tables 2A.1 and 2A.2.

¹ Operational strength varies from month to month because of rotation.

² 17 of the 19 UN peacekeeping operations conducted or ongoing in 1994 are financed from their own separate accounts on the basis of legally binding assessments on all member states in accordance with Article 17 of the UN Charter. UNTSO and UNMOGIP are funded from the UN regular budget. UNFICYP was until 15 June 1993 financed by voluntary contributions (see note 5). Since the mandates of most forces are renewed periodically on different dates, UN annual cost estimates for comparative purposes are approximate.

³ Outstanding contributions to UN peacekeeping operations as of 31 Dec. 1994.

⁴ Restructuring and reorganization of UNFICYP commenced on 16 Dec. 1992 following the withdrawal of the Danish battalion and reductions in Austrian, Canadian and British contingents, which cut the overall troop strength by approximately 28%. To offset the reductions in strength, the Force Commander has moved a greater portion of the battalions' strength into the buffer zone, reorganized the system of observation posts and handed over humanitarian tasks to the two sides.

⁵ Estimated 1994 cost. Prior to 15 June 1993, force costs were met by the governments providing the military contingents and by voluntary contributions received for this purpose by the UN; land-use costs were met by the Government of Cyprus; and administrative, logistic and other extraordinary costs by the UN. As the voluntary contributions from member states have consistently fallen short of costs accrued by the UN, reimbursement claims from the troop-contributing countries have been paid only up to Dec. 1981. UNGA Res. 47/236 (1993) established that for the period beginning 16 June 1993 costs not covered by voluntary contributions would be borne by the UN member states in accordance with Article 17 of the UN Charter. The Government of Cyprus has pledged to cover, on a continuing basis, one-third of the annual operation cost. The Government of Greece contributes \$6.5 million annually. Thus only c. \$23 million is assessed on the entire UN membership annually.

⁶ In addition, as of Dec. 1994 an accumulated shortfall of c. \$ 200 million remained unreimbursed to troop contributors for the period prior to 16 June 1993.

⁷ Supplemented by c. 80 seconded UNTSO military observers.

⁸ Initially financed from a special account established for UNEF II (Second UN Emergency Force, Oct. 1973–July 1979). At the termination of UNEF II, the account remained open for UNDOF.

⁹ Supplemented by 59 UNTSO military observers.

¹⁰ SCR 687 (1991) established a demilitarized zone (DMZ) stretching about 200 km along the Iraq–Kuwait border, extending 10 km into Iraq and 5 km into Kuwait.

¹¹ Additional logistic support from Switzerland.

¹² Initially supplemented by 5 infantry companies drawn from UNFICYP and UNIFIL (withdrawn by the end of June 1991). Authorized strength: 3345 troops and 300 military observers.

¹³ Authorized strength: 350 military observers and 126 civilian police. Following the outbreak of post-election fighting, the strength of UNAVEM was reduced to 50 military observers, 18 police observers and 11 military paramedics in Jan. 1993. SCR 952 (27 Oct. 1994) authorizes the restoration of the mission to its previous strength.

¹⁴ Total approximate value of outstanding contributions to UNAVEM I (Jan. 1989–June 1991) and UNAVEM II.

¹⁵ Authorized strength: approximately 1000 military and police personnel. At its peak strength in Feb. 1992, ONUSAL's military division comprised 368 military observers. The authorized strength of 631 civilian police was never realized. As the peace process progressed, the strength of both divisions was gradually reduced.

¹⁶ Total approximate value of outstanding contributions to ONUCA (UN Observer Group in Central America, Nov. 1989–Jan. 1992) and ONUSAL.

¹⁷ Authorized strength: 1700 troops and military observers and 300 civilian police.

¹⁸ Force divided into three separate operational commands: UNPROFOR I (Croatia); UNPROFOR II (Bosnia and Herzegovina); and UNPROFOR III (Former Yugoslav Republic of Macedonia, FYROM). SCRs 981, 982 and 983 (31 Mar. 1995) authorize the replacement of UNPROFOR by 3 separate but interlinked operations: UNCRO (UN Confidence Restoration Operation in Croatia); UNPROFOR (Bosnia and Herzegovina); and UNPREDEP (UN Preventive Deployment Force, operating in FYROM).

¹⁹ As of 20 Mar. 1995 UNPROFOR consisted of a total of 37 915 troops, 684 military observers and 803 civilian police (including 25 military observers and 3 civilian police awaiting deployment). Deployments were: UNPROFOR I—14 825 troops, 283 military observers and 731 civilian police; UNPROFOR II—21 994 troops, 352 military

observers (including 47 posted at airfields in Serbia and Montenegro to monitor compliance with the 'no-fly' zone) and 45 civilian police; and UNPROFOR III—1 096 troops, 24 military observers and 24 civilian police.

²⁰ Military personnel, equipment and logistic support for UNPROFOR protection of humanitarian convoys in Bosnia and Herzegovina are provided at no cost to the UN by the contributing countries.

²¹ Original authorized strength: 7 000–8 000 military and civilian personnel. SCR 898 (23 Feb. 1994) authorized the establishment of a 1 114-strong civilian police component. The initial reduction of the military component by 2 000 was undertaken in Apr.–July 1994. Following the election in Oct., the mission started the major withdrawal of its personnel. SCR 957 (15 Nov. 1994) authorized ONUMOZ to complete residual operations prior to its withdrawal on or before 31 Jan. 1995.

²² Took over military command from the Unified Task Force and incorporated UNOSOM I on 4 May 1993.

²³ Original authorized strength: 28 000. After the termination of UNITAF in 1993 there were still c. 17 700 troops in the US Joint Task Force in Somalia, which was not part of UNOSOM II. Belgium, France and Sweden withdrew their contingents from UNOSOM II in 1993. The USA completed its troop withdrawal in Mar. 1994, including the Quick Reaction Force deployed in support of UNOSOM II. Following further withdrawals of their contingents by many countries in 1994, the UNSC approved the gradual reduction of UNOSOM II to 22 000 troops (SCR 897, 4 Feb. 1994) and to 15 000 in Aug. SCR 954 (4 Nov. 1994) authorized the withdrawal of UNOSOM II by 31 Mar. 1995.

²⁴ Total approximate value of outstanding contributions to UNOSOM I and UNOSOM II.

²⁵ Integrated into UNAMIR in Jan. 1994.

²⁶ Authorized strength: 81. The phased reduction of the force commenced on 15 Aug. 1994. UNOMUR was officially closed down on 21 Sep. 1994.

²⁷ Operation costs included in the cost of UNAMIR.

²⁸ In 1993 the deployment of other contingents was suspended in Sep. following the breakdown of the cease-fire between the parties.

²⁹ Authorized strength: 136 military observers.

³⁰ Authorized strength: 65 troops (20 military medical staff and 45 military engineers) and 303 military observers.

³¹ SCR 950 (21 Oct. 1994) authorized the temporary reduction of the observer force to 90 because of deteriorated security.

³² SCR 940 (31 July 1994) authorized the formation of a multinational force to facilitate the restoration of legitimate government (see note 90) and approved the establishment of an UNMIH advance team to monitor the operations of the multinational force. SCR 975 (30 Jan. 1995) determined that 'a secure and stable environment' exists in Haiti and authorized the build-up of UNMIH to its permitted strength to take over from the Multinational Force by the end of Mar. 1995.

³³ Initial deployment was halted following an incident on 11 Oct. 1993 in which armed civilians, unimpeded by the security forces of the acting military government, prevented the landing of a ship carrying an UNMIH advance unit of 220 military personnel. Deployment of a 60-person UNMIH advance team commenced on 23 Sep. 1994.

³⁴ As of 30 Mar. 1995, military personnel for the full mission were provided by Argentina, Bangladesh, Canada, the Caribbean Community (CARICOM) countries, Djibouti, France, Guatemala, Honduras, India, Ireland, Nepal, Netherlands, Pakistan, Suriname and USA (2 400 troops of a total of 5 963). Civilian police personnel were provided by Algeria, Argentina, Austria, Bangladesh, Barbados, Benin, Canada, Djibouti, Dominica, France, Grenada, Guinea Bissau, Jordan, Mali, Nepal, Pakistan, Philippines, Russia, St. Kitts & Nevis, St. Lucia, Suriname and Togo. Members of the Caribbean Community are: Antigua & Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts & Nevis, St. Lucia, St. Vincent & the Grenadines and Trinidad & Tobago.

³⁵ Authorized strength pursuant to SCR 975 (30 Jan. 1995): 6000 military personnel and 900 civilian police. Authorized strength of the advance team was increased to 500 in SCR 964 (29 Nov. 1994).

³⁶ Authorized strength: c. 5400 military personnel, 50 military police and 90 civilian police personnel.

³⁷ Established on 4 May 1994 for a period of up to 40 days. Mandate terminated on 13 June 1994 (SCR 926).

³⁸ Estimated cost of operation from 15 Apr. to 30 May 1994.

³⁹ As of 29 Dec. 1994, the following countries had also expressed their willingness to provide military personnel: Bulgaria, Hungary, Poland, Switzerland and Ukraine.

⁴⁰ Authorized strength: 40 military observers.

⁴¹ Estimated cost from 1 Dec. 1994 to 6 Feb. 1995. Monthly cost thereafter estimated at \$442 300.

⁴² The decision to establish the mission was taken at the 16th CSO meeting, 18 Sep. 1992. The mission was authorized by the Government of the Former Yugoslav Republic of Macedonia through Articles of Understanding (corresponding to an MOU) agreed by an exchange of letters, 7 Nov. 1992.

⁴³ Supplemented by 2 monitors from the European Community Monitoring Mission under the operational command of the CSCE Head of Mission.

⁴⁴ Budget adopted for 1994.

⁴⁵ The decision to establish the mission was taken at the 17th CSO meeting, 6 Nov 1992. The mission was authorized by the Government of Georgia through an MOU of 23 Jan. 1993 and by the 'Leadership of the Republic of South Ossetia' by an exchange of letters on 1 Mar. 1993. The mandate of the mission was expanded in Mar. 1994 to include i.a. monitoring of the Joint Peacekeeping Forces in South Ossetia.

⁴⁶ The mission has 8 military and 9 civilian personnel.

⁴⁷ The decision to establish the mission was taken at the 19th CSO meeting, 4 Feb. 1992. The mission was authorized by the Government of Moldova through an MOU of 7 May. An 'Understanding of the Activity of the CSCE Mission in the Pridnestrovian [Trans-Dniester] Region of the Republic of Moldova' came into force on 25 Aug. 1993 by an exchange of letters between the Head of Mission and the 'President of the Pridnestrovian Moldovan Republic'.

⁴⁸ *Decisions of the Rome Council Meeting* (CSCE/4-C/Dec. 1), Decision I.4, 1 Dec. 1993. No MOU has been signed on this mission.

⁴⁹ Budget adopted for the period 18 Feb. to 31 Dec. 1994.

⁵⁰ Agreement concerning a military armistice in Korea, signed at Panmunjom on 27 July 1953 by the Commander-in-Chief, UN Command; the Supreme Commander of the Korean People's Army; and the Commander of the Chinese People's Volunteers. Entered into force on 27 July 1953.

⁵¹ The Democratic People's Republic of Korea announced the withdrawal of its consent to Polish participation in Nov. 1994. In diplomatic notes of 23 Jan. and 8 Feb. 1995 it demanded the withdrawal of the Polish delegation by 28 Feb. 1995.

⁵² As of 24 Feb. 1995, the Korean People's Army/Chinese People's Volunteers had not nominated a replacement for the former Czechoslovak member of the Commission, whose nomination they had withdrawn in Jan. 1993. Although it is composed of 4 senior officers, the Commission continued to function with only 3 delegations present.

⁵³ 1981 Protocol to Peace Treaty between Egypt and Israel of 26 Mar. 1979. The MFO was established following withdrawal of Israeli forces from Sinai. Deployment began 20 Mar. and the MFO took up its mission on 25 Apr. 1982.

⁵⁴ Strength as of Nov. 1994.

⁵⁵ Operating budget for FY 1994. Force funded by Egypt, Germany (since 1992), Israel, Japan (since 1989) and the USA.

⁵⁶ The decision to establish the force was taken by the ECOWAS Standing Mediation Committee (ESMC) at its first session on 7 Aug. 1990. The ESMC was composed of representatives of Gambia, Ghana, Guinea, Nigeria, Sierra Leone and Mali.

⁵⁷ ECOWAS membership: Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauretania, Niger, Nigeria, Senegal, Sierra Leone and Togo.

⁵⁸ Pursuant to the Cotonou Peace Agreement of 25 July 1993 signed by 3 Liberian parties, ECOMOG was expanded to include troops from outside the West African region.

⁵⁹ As of Feb. 1995 with bulk of force contributed by Nigeria (4900). Estimated troop strength required to implement Accra Agreement of 21 Dec. 1994: 12 000.

⁶⁰ The expanded ECOMOG was supported by voluntary contributions from UN member states through the Trust Fund for the Implementation of the Cotonou Agreement.

⁶¹ Mission established by the Brioni Agreement, signed at Brioni (Croatia) on 7 July 1991 by representatives of the European Community (EC) and the governments of Croatia, the Federal Republic of Yugoslavia (Serbia and Montenegro) and Slovenia. Its mandate was confirmed by the EC foreign ministers meeting in The Hague on 10 July 1991. The mission was authorized by the governments of Croatia, the Federal Republic of Yugoslavia (Serbia and Montenegro) and Slovenia through an MOU of 13 July 1991.

⁶² While established by the EC, the mission is maintained with the cooperation of the CSCE, and has included the participation of monitors from 5 non-EU CSCE participating states: Canada, the Czech Republic, Poland, Slovakia and Sweden.

⁶³ Including 120 field monitors and 53 staff monitors. Total size of the mission: 296.

⁶⁴ Not including national expenditures.

⁶⁵ Agreement on the Principles Governing the Peaceful Settlement of the Conflict in South Ossetia, signed 24 June 1992 by Georgia and Russia. Under the Agreement, a 4-party Joint Monitoring Commission was established with representatives from Russia, Georgia and North and South Ossetia. Also according to the terms of the Agreement, the Force Commander is Russian. NB: 'The Russian-dominated peacekeeping effort currently under way in South Ossetia [and] Moldova cannot be described accurately as CIS peacekeeping operations, owing to the fact that peacekeeping agreements for the operation were bilateral, were undertaken by CIS and non-CIS states, or came into being before general CIS peacekeeping agreements had been implemented.' Crow, S., 'Russia promotes CIS as an international organization', *RFE/RL Research Report*, vol. 3, no. 11 (18 Mar. 1994), p. 35, note 11.

⁶⁶ Including one Russian motor rifle battalion of 523 troops and three Georgian-Ossetian battalions totalling c. 1100 troops. Authorized strength: 2000 troops plus 1000 reserves. Allison, R., 'Russian peacekeeping—Capabilities and doctrine', *Jane's Intelligence Review*, Dec. 1994, p. 544; *Peacekeeping in the Soviet Successor States*, Chaillot Papers no. 18, Institute for Security Studies WEU, Paris, Nov. 1994, pp. 4–5.

⁶⁷ Agreement on the Principles Governing the Peaceful Settlement of the Armed Conflict in the Trans-Dniester Region, signed 21 July 1992 by representatives of the governments of Moldova and Russia. NB: not a CIS operation (see note 65).

⁶⁸ Projected range of troop strength including 1–2 Russian battalions, 3 Moldavian battalions and 3 battalions of the 'Trans-Dniester Republic'. In Nov., Russia announced its intention unilaterally to reduce its contingent (timetable unknown) from the then four motor rifle battalions. According to conflicting reports, either two battalions from the 27th Motor Rifle Division were to replace the previous contingent or one Russian battalion of 630 would remain. FBIS-SOV-94-224 (21 Nov. 1994), p. 54; *RFE/RL Daily Report* no. 226 (1 Dec. 1994); Selivanov, Yu., 'Rossiyskie mirotvortsy pokidayut Moldaviyu' [Russian peacemakers pull out from Moldova], *Segodnia*, 1 Dec. 1994, p. 4.

⁶⁹ CIS collective security agreement on Tajikistan's border with Afghanistan signed at CIS Heads of State Meeting at Minsk on 22 Jan. 1993 by representatives of the governments of Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan. Signed with reference to Part III, Articles 11 and 12, of the Charter of the Commonwealth of Independent States, also adopted at the same meeting. These provisions are based on the Agreement on Groups of Military Observers and Collective Peacekeeping Forces in the CIS, signed at Kiev on 20 Mar. 1992. The operation in Tajikistan is the first application of the procedures provided for in this Agreement.

⁷⁰ The mandate of the CIS operation is limited specifically to guarding the Afghan border. Russian and other CIS forces stationed or operating elsewhere in Tajikistan do not form part of the CIS peacekeeping operation.

⁷¹ The Russian contribution to the CIS force was mostly drawn from Russia's 201st Motor Rifle Division, reportedly numbering over 18 000 troops in Tajikistan in 1994. Allison, Dec. 1994 (note 66), p. 544. There are conflicting reports as to whether the force included units from Kazakhstan in 1994.

⁷² Allison, Dec. 1994 (note 66), p. 544. Initial deployment included a battalion each from Kyrgyzstan (286 troops), Russia (430 troops), Uzbekistan (350 troops) and Kazakhstan (unreported number of troops).

⁷³ According to a cost-sharing agreement signed by the participating countries on 24 Sep. 1993, operation costs are shared as follows: Kyrgyzstan 10%; Tajikistan 10%; Kazakhstan 15%; Uzbekistan 15%; and Russia 50%.

⁷⁴ Established on 4 Nov. 1993 for a single 6-month period following the withdrawal of UNTAC's military component by 15 Nov. 1993. Mandate expired on 15 May 1994.

⁷⁵ Status of contributions outstanding to the UN special account as at 31 Dec. 1994.

⁷⁶ French acronym for Mission internationale d'observation au Burundi. Initially entitled Mission pour le rétablissement de la confiance au Burundi (Miprobu).

⁷⁷ Initial demand for 5000 troops was scaled down to 180 in early 1994. Current authorized strength: 47 troops and 20 non-military observers.

⁷⁸ The mission is to be funded by Belgium, France, Germany, Switzerland and the USA.

⁷⁹ The mission was established through the Agreement on the Security Arrangement for Hebron, signed in Cairo 31 Mar. 1994. It was authorized in a tripartite MOU and exchange of letters between the three contributing countries, Israel and the PLO of 2 May 1994.

⁸⁰ The observer mission had a three-month mandate ending 8 Aug. to monitor and mediate following the 25 Feb. attack on a local mosque.

⁸¹ Total joint costs, shared by participating countries, excluding personnel costs.

⁸² The CIS Council of Heads of States on 15 Apr. expressed their readiness to send a peacemaking force composed of military contingents from interested states parties to the Treaty on Collective Security. The Georgian–Abkhazian Agreement on a Cease-fire and Separation of Forces of 14 May 1994 stipulated that Georgian and Abkhazian units move 12 km away from the Inguri river and a CIS peacekeeping contingent take up positions inside the 24-km buffer zone. In an unusual procedure not provided for in any CIS document, the Chairman of the Council, president Yeltsin, decided to deploy the force in June following a mission by the CIS Executive Secretary to other CIS states to obtain support for the force. The mandate of the force was approved by the Heads of States members of the CIS Council of Collective Security on 21 Oct. 1994.

⁸³ This mission is listed as multilateral following pledges in 1994 from other CIS countries for token participation in the Russian-led force. Tajikistan has offered to send a motor rifle company and Armenia, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan have promised observers. *Diplomaticheskii vestnik*, no. 21–22 (Nov. 1994), pp. 30–31. Ukraine also expressed interest in sending observers. *RFE/RL Daily Report*, no. 202 (24 Oct. 1994).

⁸⁴ Reportedly composed of 2 battalions from the Group of Russian Forces in the Caucasus and 2 battalions from the territory of Russia. Allison, Dec. 1994 (note 66), p. 544.

⁸⁵ The operation received a two-month mandate from the UNSC. It was launched on 22 June and concluded on 21 Aug. 1994.

⁸⁶ Initial deployment of the force and withdrawal of some units proceeded from Goma and Bukavu in Zaire. During the last phase of the operation, French units based in Goma provided logistical support for the French-speaking African contingents.

⁸⁷ Multi-state force established on the initiative of France and operated under French command with initial deployment by French and Senegalese units.

⁸⁸ Included 508 troops from African countries. Deployment proceeded in 4 phases with the force fully deployed effective 13 July. The first withdrawals began on 29 July.

⁸⁹ Incremental costs through 31 July 1994. Auberger, P., 'Rapport de l'Assemblée Nationale', no. 1560 (5 Oct. 1994), p. 51.

⁹⁰ SCR 940 (31 July 1994) authorized member states to form a 'multinational force under unified command and control', referred to as the Multinational Force (MNF). Following the establishment of 'a secure and stable environment', MNF was to terminate its mission and UNMIL was to assume the full range of its functions.

⁹¹ Multi-state force established on the initiative of the USA and operated under US command. Participating States as of 19 Jan. 1995.

⁹² As of 9 Jan. 1995. From an initial deployment of 2000 on 19 Sep., the troop strength peaked at c. 21 000 in early Oct. Thereafter contingents were steadily withdrawn. The maximum total strength of non-US contingents was expected to reach 1900 military and 900 police personnel.

⁹³ As of Jan. 1995. Fatality figures cover deaths in action of US troops only.

⁹⁴ Incremental costs incurred by the USA for the period from 1 Oct. 1993 to 28 Feb. 1995 for support for foreign monitors, police and military and for US troops in the MNF coalition. The White House, Office of the Press Secretary, *Report to Congress on the Situation in Haiti*, 1 Apr. 1995.

⁹⁵ Established pursuant to an exchange of letters 17 Sep. 1994 between the Co-Chairmen of the Steering Committee of the International Conference on the Former Yugoslavia (ICFY) and the Foreign Minister of the Federal Republic of Yugoslavia (Serbia and Montenegro) to monitor the border closure between FRY and Bosnia and Herzegovina to all traffic except deliveries of humanitarian assistance. In SCR 943 (23 Sep. 1994) the UNSC requested the UNSG to submit a monthly report as on certification by the Co-Chairmen of ICFY that the authorities of FRY were effectively implementing their Aug. 1994 decision to close the border.

⁹⁶ Status of the mission as of 3 Jan. 1995.

⁹⁷ Estimated total cost of the mission for the period from Sep. through Dec. 1994. Personnel costs borne and contributions in kind of equipment made by participating states. As of Nov. 1994, voluntary contributions totalling \$800 000 had been received from Canada, Denmark, Norway, Sweden and the USA to cover the start-up phase. Switzerland had provided 15 Geneva–Belgrade airlifts.

⁹⁸ Honiara Commitment to Peace Sep. 1994.

⁹⁹ The mandate of the force was to oversee the cease-fire between the Government of Papua New Guinea and the Bougainville Revolutionary Army and to guarantee the security of delegates to the Bougainville Peace Talks in Arawa, 10–14 Oct. 1994.

¹⁰⁰ Initial training by Australia and New Zealand. Australia provided command and control, communications and logistic support. The operation was run from two Australian supply ships by an Australian Force Commander.

¹⁰¹ Estimated cost of the operation. *The Australian*, 19 Oct. 1994.

¹⁰² Assisted by a UN officer and two consultants, who also observed the elections.

¹⁰³ Observers from ONUSAL, UNDP and the Government of Sweden joined the UN team during the polling period.

¹⁰⁴ In Jan. 1993, the Government of El Salvador requested UN observation before, during and following the general elections. Under SCR 832 (27 May 1993) the mandate of ONUSAL was enlarged to include observation of the electoral process.

¹⁰⁵ The Electoral Division initially functioned with 36 professional staff. From the setting up of the polling stations until the completion of the count, over 850 observers of 56 nationalities were deployed.

¹⁰⁶ 3 consultants assisted national electoral authorities under a UNDP project. 2 additional consultants coordinated the international observer group, joined by an officer from the Department for Development Support and Management Services.

¹⁰⁷ International observers from 17 countries and 6 international or non-governmental organizations.

¹⁰⁸ SCR 772 (17 Aug. 1992), mandating UNOMSA to promote peace, called upon other international organizations to assist the UN in implementing the resolution.

¹⁰⁹ First deployed Sep. 1992. South Africa's Transitional Executive Council (TEC) on 7 Dec. 1993 invited the EU, the UN, the Commonwealth, the OAU and foreign governments to observe the upcoming elections. The Independent Electoral Commission (IEC) appointed in Dec. 1993 was responsible for organizing and conducting the elections. The expanded mandate of UNOMSA (SCR 894, 14 Jan. 1994) was i.a. to observe the IEC actions and coordinate the activities of observers from international governmental organizations and foreign governments. The international missions of the Commonwealth, EU, OAU and UNOMSA set up a Coordinating Committee for this purpose.

¹¹⁰ The voting was due to end on 28 Apr. but following logistical difficulties, the TEC announced the extension of the voting period until 29 Apr. in Tkei, Ciseki, Venda, Lebowa, Gazankulu and KwaZulu.

¹¹¹ Observers of 103 nationalities deployed throughout the 9 provinces during the elections. In addition, 228 international personnel participated as observers at c. 120 foreign polling stations in 57 countries under UN coordination. UNOMSA cooperated with over 2000 observers fielded by 97 foreign non-governmental organizations (NGOs), including nearly 400 by the Association of Western European Parliamentarians, and with c. 25 000 observers deployed by 30 domestic NGOs accredited by the IEC.

¹¹² Mission approved by the General Affairs Council of the EU, 6–7 Dec. 1993.

¹¹³ The OAU deployed electoral observers within the auspices of a pre-existing observer mission, approved by the OAU following the Ninth Ordinary Session of the OAU *Ad Hoc* Committee of Heads of State and Government on Southern Africa, 15 Oct. 1992.

¹¹⁴ Established by the Secretary-General of the Commonwealth pursuant to a mandate from the Commonwealth Heads of Government meeting (CHOGM) in Cyprus, Oct. 1993. Joined personnel of the Commonwealth Observer Mission to South Africa (COMSA) approved at the CHOGM in Harare in Oct. 1991 and first deployed in Oct. 1992.

¹¹⁵ Several consultants assisted the Secretariat in coordinating the deployment of international observers and preparing a programme of post-electoral activities.

¹¹⁶ International observers provided by member states and non-governmental organizations.

¹¹⁷ The Department for Development Support and Management Services sent consultants to assist electoral authorities in organizing the electoral process. In addition, an expert was appointed to coordinate the activities of international observers during the elections.

¹¹⁸ ETONU-MEX was composed of a team of 11 specialists based in Mexico City and 32 consultants based in every Mexican state.

¹¹⁹ Observers mobilized by 14 national non-governmental organizations were joined by hundreds of foreign observers.

¹²⁰ The mandate of ONUMOZ contained an electoral component pursuant to the terms of the General Peace Agreement for Mozambique of 4 Oct. 1992, which invited the UN to monitor and verify the presidential and legislative elections organized by the National Elections Commission.

¹²¹ Authorized strength of Electoral Division: 148, fully constituted between Mar. and June 1994. During the polling period, c. 2100 UN observers included 570 provided by member states, 279 from various UN headquarters, 934 from ONUMOZ, 278 from the diplomatic community in Maputo and non-governmental organizations in Mozambique. In addition, the EU fielded 200 observers and an unspecified number were provided by the OAU and the Association of European Parliamentarians for Southern Africa.

¹²² UN consultants assisted the Namibian Directorate of Elections in coordinating the deployment of international observers.

¹²³ International and national observers, provided mostly by diplomatic missions and international organizations accredited to Namibia.

Appendix 2B. Extracts from the Clinton Administration's policy of reforming multilateral peace operations

EXECUTIVE SUMMARY

Last year, President Clinton ordered an inter-agency review of our nation's peacekeeping policies and programs in order to develop a comprehensive policy framework suited to the realities of the post-Cold War period. This policy review has resulted in a Presidential Decision Directive (PDD). The President signed this directive, following the completion of extensive consultations with Members of Congress. This paper summarizes the key elements of that directive.

As specified in the 'Bottom-Up Review,' the primary mission of the U.S. Armed Forces remains to be prepared to fight and win two simultaneous regional conflicts. In this contest, peacekeeping can be one useful tool to help prevent and resolve such conflicts before they pose direct threats to our national security. Peacekeeping can also serve U.S. interests by promoting democracy, regional security, and economic growth.

The policy directive (PDD) addresses six major issues of reform and improvement:

1. Making *disciplined and coherent choices about which peace operations to support*—both when we vote in the Security Council for UN peace operations and when we participate in such operations with U.S. troops.

—To achieve this goal, the policy directive sets forth three increasingly rigorous standards of review for U.S. support for or participation in peace operations, with the most stringent applying to U.S. participation in missions that may involve combat. The policy directive affirms that peacekeeping can be a useful tool for advancing U.S. national security interests in some circumstances, but both U.S. and UN involvement in peacekeeping must be *selective and more effective*.

2. *Reducing U.S. costs for UN peace operations*, both the percentage our nation pays for each operation and the cost of the operations themselves.

—To achieve this goal, the policy directive orders that we work to reduce our peacekeeping assessment percentage from the current 31.7% to 25% by January 1, 1996, and proposes a number of specific steps to reduce the cost of UN peace operations.

3. Defining clearly our policy regarding the *command and control of American military forces in UN peace operations*.

—The policy directive underscores the fact that **the President will never relinquish command of U.S. forces**. However, as Commander-in-Chief, the President has the authority to place U.S. forces under the operational control of a foreign commander when doing so serves American security interests, just as American leaders have done numerous times since the Revolutionary War, including in Operation Desert Storm.

—The greater the anticipated U.S. military role, the less like it will be that the U.S. will agree to have a UN commander exercise overall operational control over U.S. forces. Any large scale participation of U.S. forces in a major peace enforcement operation that is likely to involve combat should ordinarily be conducted under U.S. command and operational control or through competent regional organizations such as NATO or ad hoc coalitions.

4. *Reforming and improving the UN's capability to manage peace operations*.

—The policy recommends 11 steps to strengthen UN management of peace operations and directs U.S. support for strengthening the UN's planning, logistics, information and command and control capabilities.

5. *Improving the way the U.S. government manages and funds peace operations*.

—The policy directive creates a new 'shared responsibility' approach to managing and funding UN peace operations within the U.S. Government. Under this

approach, the Department of Defense will take lead management and funding responsibility for those UN operations that involve U.S. combat units and those that are likely to involve combat, whether or not U.S. troops are involved. This approach will ensure that military expertise is brought to bear on those operations that have a significant military component.

– The State Department will retain lead management and funding responsibility for traditional peacekeeping operations that do not involve U.S. combat units. In all cases, the State Department remains responsible for the conduct of diplomacy and instructions to embassies and our UN Mission in New York.

6. Creating better forms of cooperation between the Executive, the Congress and the American public on peace operations.

– The policy directive sets out seven proposals for increasing and regularizing the flow of information and consultation between the executive branch and Congress; the President believes U.S. support for and participation in UN peace operations can only succeed over the long term with the bipartisan support of Congress and the American people.

Key Elements of the Clinton Administration's Policy on Reforming Multilateral Peace Operations

Excerpts

(...)

I. Supporting the Right Peace Operations

i. Voting for Peace Operations

The U.S. will support well-defined peace operations, generally, as a tool to provide finite windows of opportunity to allow combatants to resolve their differences and failed societies to begin to reconstitute themselves. Peace operations should not be open-ended commitments but instead linked to concrete political solutions; otherwise, they normally should not be undertaken. To the greatest extent possible, each UN peace operation should have a specified timeframe tied to intermediate or final

objectives, an integrated political/military strategy well-coordinated with humanitarian assistance efforts, specified troop levels, and a firm budget estimate. The U.S. will continue to urge the UN Secretariat and Security Council members to engage in rigorous, standard evaluations of all proposed new peace operations.

The Administration will consider the factors below when deciding whether to vote for a proposed new UN peace operation (Chapter VI or Chapter VII) or to support a regionally-sponsored peace operation:

– UN involvement advances U.S. interests, and there is an international community of interest for dealing with the problem on a multilateral basis.

– There is a threat to or breach of international peace and security, often of a regional character, defined as one or a combination of the following:

– International aggression, or;

– Urgent humanitarian disaster coupled with violence;

– Sudden interruption of established democracy or gross violation of human rights coupled with violence, or threat of violence.

– There are clear objectives and an understanding of where the mission fits on the spectrum between traditional peacekeeping and peace enforcement.

– For traditional (Chapter VI) peacekeeping operations, a ceasefire should be in place and the consent of the parties obtained before the force is deployed.

– For peace enforcement (Chapter VII) operations, the threat to international peace and security is considered significant.

– The means to accomplish the mission are available, including the forces, financing and a mandate appropriate to the mission.

– The political, economic and humanitarian consequences of inaction by the international community have been weighed and are considered unacceptable.

– The operation's anticipated duration is tied to clear objectives and realistic criteria for ending the operation.

These factors are an aid in decision-making; they do not by themselves constitute a prescriptive device. Decisions have been and will be based on the cumulative weight of the factors, with no single factor necessarily being an absolute determinant.

In addition, using the factors above, the U.S. will continue to scrutinize closely all existing peace operations when they come up for regular renewal by the Security Council to assess the value of continuing them. In appropriate cases, the U.S. will seek voluntary contributions by beneficiary nations or enhanced host nation support to reduce or cover, at least partially, the costs of certain UN operations. The U.S. will also consider voting against renewal of certain long-standing peace operations that are failing to meet established objectives in order to free military and financial resources for more pressing UN missions.

will be based on the cumulative weight of the above factors, with no single factor necessarily being an absolute determinant.

(...)

Source: The Clinton Administration's Policy on Reforming Multilateral Peace Operations, 5 May 1994.

ii. Participating in UN and Other Peace Operations

The Administration will continue to apply even stricter standards when it assesses whether to recommend to the President that U.S. personnel participate in a given peace operation. In addition to the factors listed above, we will consider the following factors:

- Participation advances U.S. interests and both the unique and general risks to American personnel have been weighed and are considered acceptable.
- Personnel, funds and other resources are available;
- U.S. participation is necessary for operation's success;
- The role of U.S. forces is tied to clear objectives and an endpoint for U.S. participation can be identified;
- Domestic and Congressional support exists or can be marshalled;
- Command and control arrangements are acceptable.

Additional, even more rigorous factors will be applied when there is the possibility of significant U.S. participation in Chapter VII operations that are likely to involve combat:

- There exists a determination to commit sufficient forces to achieve clearly defined objectives;
- There exists a plan to achieve those objectives decisively;
- There exists a commitment to reassess and adjust, as necessary, the size, composition, and disposition of our forces to achieve our objectives.

Any recommendation to the President

Appendix 2C. Case study on peacekeeping: Rwanda

JAANA KARHILO

I. Introduction

The modern roots of the politically motivated ethnic violence which engulfed Rwanda in 1994 can be traced back to the country's political history as an independent nation. The Hutu Revolution of 1959–61 overthrew the monarchy and ended domination by the Tutsi minority of political and economic life, leading to Rwanda's independence in 1962 from its most recent colonial master, Belgium.¹ During the following decades, Rwanda repeatedly witnessed pogroms and mass exoduses of Tutsi to neighbouring Burundi, Tanzania, Uganda and Zaire. The one-party regime of President Juvénal Habyarimana, established after a military coup in 1973, did not allow for the return of the refugees. In the 1980s a group of them joined the rebel forces that brought Yoweri Museveni to power in Uganda. In 1990 the militant refugees, calling themselves the Rwandan Patriotic Front (RPF), attacked northern Rwanda, meeting with resistance from government troops aided by Belgium, France and Zaire. As the war turned into a protracted guerrilla conflict, Belgium, prohibited by its legislation from assisting countries at war, cut off its military aid, but France persisted.² A cease-fire was concluded in 1992, and a fragile transitional government, drawn from the five most prominent parties to emerge from the President's move to political pluralism in 1990,³ was charged with negotiating peace with the RPF.

The Arusha Peace Agreement of 4 August 1993 was intended to end the civil war. Sponsored by the Organization of African Unity (OAU) and the government of Tanzania, the Peace Agreement called on the United Nations to play a major support role during a 22-month transitional period, beginning with the institution of a transitional government and multi-party national assembly and ending with national elections to be held by the end of 1995.⁴ To oversee the agreement, the UN Security Council

¹ The Rwandan population is composed of three ethnic groups, Hutu (85%), Tutsi (14%) and Twa (1%). Originally, classification for the census was established primarily through the paternal line and ownership of cattle. Social anthropologists do not consider Hutu and Tutsi 'tribes' but rather different segments within one nationality. For a short background to the current crisis, see Waller, D., *Rwanda. Which Way Now?*, An Oxfam Country Profile, Oxford, 1993. For a comprehensive analysis of the Rwandan political system, see Reyntjens, F., *L'Afrique des grands lacs en crise. Rwanda, Burundi: 1988–1994* [Great Lakes Africa in crisis. Rwanda, Burundi: 1988–1994] (Karthala: Paris, 1994).

² The Rwandan Army was modernizing its weaponry with French assistance in 1992–93. Rwanda had also concluded a secret arms deal with Egypt worth US\$ 6 million and with South Africa worth US\$ 5.6 million. Human Rights Watch Arms Project (Washington, DC/New York), *Arming Rwanda: The Arms Trade and Human Rights Abuses in the Rwandan War*, vol. 6, no. 1 (Jan. 1994); and Goose, S. and Smyth, F., 'Arming genocide in Rwanda', *Foreign Affairs*, vol. 73, no. 5 (1994), pp. 86–96.

³ The French acronyms for the main Rwandan political parties are the president's party Mouvement républicain national pour la démocratie et le développement (MRND); Mouvement démocratique républicain (MDR); Parti démocratique chrétien (PDC); Parti social-démocrate (PSD); Parti libéral (PL); Coalition pour la défense de la république (CDR). CDR was not included in the government.

⁴ For the text of the Arusha Agreements, see UN, Letter dated 23 Dec. 1993 from the Permanent Representative of the United Republic of Tanzania to the UN addressed to the Secretary-General, UN document A/48/824-S/26915, 23 Dec. 1993.

established the UN Assistance Mission for Rwanda (UNAMIR) in October 1993. It was given command over the UN Observer Mission Uganda–Rwanda (UNOMUR), set up in June to ensure that no military assistance reached Rwanda through Uganda.⁵

A traditional peacekeeping operation, UNAMIR was authorized to monitor observance of the cease-fire agreement, including cantonment, demobilization and integration of the armed forces of the parties; to establish a weapons-secure area in the capital Kigali and to monitor the security situation until the elections; to assist in mine clearance, the repatriation of Rwandan refugees and the coordination of humanitarian assistance; and to investigate incidents regarding the gendarmerie and police as well as alleged non-compliance with the provisions of the peace agreement. The UN operation was to proceed in four phases, beginning with the departure of foreign forces and the establishment of a secure area in Kigali. Preparations for the disengagement, demobilization and integration of the armed forces and gendarmerie were to be completed during the second phase, due to begin with the instalment of the broad-based transitional government.⁶ At this time, UNAMIR was to reach its peak strength of 2548 military personnel, which was to be gradually reduced before the elections. By December 1993 UNAMIR had completed the tasks set out for the first phase, including safe passage to Kigali for 600 RPF troops.

In 1994 the UN mission was unable to proceed with the implementation of its mandate owing to a deadlock in the political process. Militants within President Habyarimana's MRND party and the Hutu-supremacist CDR were overtly opposed to the proposed power-sharing arrangements. Each party had established a militia—the Interahamwe and Impuzamugambi—which were being trained and armed by the army in camps set up in 1992 and 1993. The most active propagandist of their sentiments, the CDR-controlled illegal radio station, Radio-TV libre des mille collines (RTL), opposed the Arusha Agreement and fomented ethnic hatred, accusing UNAMIR of acting in concert with the RPF to reinstate Tutsi feudalism.⁷ Factionalism within two of the other major parties, the MDR and the Liberal Party, was both encouraged and exploited by the MRND and resulted in disputes over the lists of nominees for the transitional government and national assembly. With no legitimate government in place and the president accused of interfering with the transitional process, political violence culminated in the assassination of two prominent politicians, Félicien Gatabazi and Martin Bucyana, in February.

The increasing insecurity within Rwanda was underscored by evidence of importation of arms and ammunition in contravention of the Arusha Agreement. In January and February UNAMIR prevented the delivery of four planeloads of arms for the army, placing them under joint UN–Rwandan Government supervision.⁸ The UN also expressed concern over reports of weapons distribution to civilians and protested against the existence of training camps. A further sign of bad faith was the continued mining of the major route from Kigali to Mulindi by government forces despite repeated protests by UNAMIR. By the end of March high-level diplomatic pressure

⁵ UN, Security Council Resolution 846, UN document S/RES/846, 22 June 1993.

⁶ See UN, Security Council Resolution 872, UN document S/1994/RES 872, 5 Oct. 1993; Report of the Secretary-General on Rwanda, UN document S/26488, 24 Sep. 1993.

⁷ Economist Intelligence Unit (EIU, London), *Country Report Uganda Rwanda Burundi*, 1st quarter 1994, p. 19.

⁸ Human Rights Watch/Africa, *Human Rights in Africa and U.S. Policy. A Special Report by Human Rights Watch/Africa for the White House Conference on Africa* (26–27 June 1994), p. 30.



Figure 2C. UNAMIR sectors of operation in August 1994

Note: The shaded area indicates the safe area established by the French-led Operation Turquoise during the second phase of its deployment, 7–31 July 1994. UNAMIR began deploying troops in the zone on 10 August and assumed responsibility from Operation Turquoise on 21 August. As UNAMIR troop strength reached its authorized level of 5500 in early November, a sixth sector of operation was established in Kigali City.

had resulted in the removal of the mines, and a mine clearance coordination centre had been established in the UNAMIR Force headquarters in Kigali.⁹

The success of the UN mission, as UN Secretary-General Boutros Boutros-Ghali has emphasized repeatedly since its inception, was predicated on the assumption that there would be continued cooperation between the parties and with the UN in carrying out their commitments under the Arusha Agreement. Deep-rooted mistrust, delaying tactics and ever-shifting political alignments, however, undermined implementation of the transitional arrangements. In January only one of the intended institutions, the presidency, was in place. Despite international pressure, efforts at mediation by the Special Representative of the Secretary-General in Rwanda, Jacques Roger Booh-Booh, produced no tangible results. In February he warned the parties of a possible UN withdrawal in face of the impasse,¹⁰ a threat repeated by the Security Council in early April when it prolonged the mandate of UNAMIR conditionally for four months: further delay would risk provoking the UN into abandoning its role in the peace process.¹¹

⁹ UN, Second Progress Report of the Secretary-General on UNAMIR, UN document S/1994/360, 30 Mar. 1994, p. 8.

¹⁰ Hilsum, L., 'Rwanda tribal rampage feared after two politicians are killed', *The Guardian*, 23 Feb. 1994.

¹¹ UN, Security Council Resolution 909, UN document S/RES/909, 4 Apr. 1994.

II. Failure of the UN to confront genocide

In an effort to break the stalemate, President Ali Hassan Mwinyi of Tanzania, the facilitator of the Rwandan peace process, called a one-day summit meeting in Dar es Salaam to find a regional approach to preventing what he called 'a Bosnia on our doorstep'.¹² All promise of progress was abruptly reversed when the aircraft carrying the presidents of Rwanda and Burundi back to Kigali was shot down on its approach to the airport.

Different theories have been advanced about who was responsible for the plane crash, but a conclusive, impartial investigation into the incident has yet to be conducted. The most widely held view attributes the attack to Hutu extremists within the Presidential Guard (GP), intent on pre-empting any move towards power sharing with the Tutsi. An élite unit of the armed forces drawn almost exclusively from the president's home region, the GP was trained by the French Army and supplied with French weaponry, including rockets of the type, SA-7, that downed the presidential plane. According to UN spokespersons, the GP prevented UN troops from investigating the wreckage.¹³ The government, the security forces and initially France accused the RPF, which categorically denied involvement. The Hutu élite also accused Belgium of complicity in an alleged RPF plot.¹⁴ The unresolved mystery of the plane crash, with France and Belgium associated with opposite sides of the story, could be used by all groups to their own advantage in the ensuing mayhem.

The death of President Habyarimana on 6 April unleashed two parallel processes of violence which continued unabated for the next three months—massacres of the civilian population and a resumption of the civil war. Within hours of the plane crash, government troops, the GP and armed militias attacked and killed opposition politicians and ethnic Tutsi. Among the first victims were Prime Minister Agathe Uwilingiyamana and President of the Supreme Court Joseph Kavaruganda. Kigali quickly descended into chaos as soldiers and gangs of youths wielding machetes, knives and firearms rampaged through the streets attacking civilians. On 8 April an 'interim government' was set up, headed by former Speaker of Parliament Theodor Sindikubwabo as president, and composed mostly of Hutu extremists who had held positions of power during the Habyarimana presidency.

Although the interim government claimed that the killings were the result of a spontaneous expression of the people's animosity towards the RPF, allegedly held responsible for the plane crash, there is strong evidence that the massacres proceeded according to a preconceived plan.¹⁵ The first roadblocks went up in Kigali even before news of the plane crash had been announced. Attackers then pursued victims

¹² Bone, J., 'Presidents' deaths raise UN fears of tribal violence', *The Times*, 7 Apr. 1994.

¹³ *Africa Confidential*, vol. 35, no. 8 (15 Apr. 1994), p. 8. Another theory blames southern Hutu opposed to the president's northern entourage, but loses credibility from the fact that most élite and airport troops were composed of northern Hutu.

¹⁴ President Habyarimana's widow, i.a., believed Belgian individuals—although not the government—had participated in the planning and execution of the attack. *Jeune Afrique*, vol. 34, no. 1738/39 (Apr.–May, 1994), p. 18. Stories of Belgian UNAMIR involvement also circulated in the capital at the time. Hilsum, L., 'Settling scores', *Africa Report*, vol. 39, no. 3 (May–June 1994), p. 17.

¹⁵ The unfolding of the genocide has been documented by numerous human rights organizations and later by UN missions. For details see African Rights, 'Rwanda. Who is killing; who is dying; what is to be done: a discussion paper', London, May 1994; Human Rights Watch/Africa, 'Genocide in Rwanda April–May 1994', May 1994; Amnesty International, 'Rwanda: Mass murder by Government supporters and troops in April and May 1994', London, May 1994; Human Rights Watch/Africa (note 8); Vassall-Adams, G., *Rwanda. An Agenda for International Action*, Oxford, Oxford, 1994; and African Rights, 'Rwanda: Death, despair and defiance', London, Sep. 1994.

listed by name while the radio station RTLM incited the population to 'hunt out the Tutsi'.¹⁶ The first to be killed were the leaders of the political parties, mostly Hutu, opposed to the extremists within the MRND and CDR. The next targets were other opposition politicians, lawyers, intellectuals, human rights activists, businessmen, southern Hutu and Tutsi. For the first time in Rwandan history the church came under sustained attack. There were also deliberate attacks on hospitals and patients. Within a week, an estimated 20 000 people in Kigali and its immediate environs had been killed. By the end of the month the death toll had reached 200 000.¹⁷

By all accounts the worst perpetrators of the attacks were the Interahamwe and Impuzamugambi militias. The GP bore main responsibility for the murders of opposition politicians in early April while the gendarmerie, often mobilized by local government officials, took part in the killings in the countryside. The process became all the more insidious when the killings spread outside the capital as the militia coerced and frightened ordinary civilians into joining the death squads, a task they had been prepared for by inflammatory radio propaganda. The massacres were for the most part carried out with traditional weaponry—machetes, knives and clubs—but automatic rifles and grenades were also used to kill large groups sheltering in churches, schools or stadiums. The army was involved in the genocide, especially in the beginning and in certain areas of the country, but it became engaged in combat primarily with the RPF.¹⁸

The civil war resumed shortly after the massacres began, ending a cease-fire in effect since August 1993. The RPF battalion stationed in Kigali under UN protection broke out of its quarters and engaged government troops, including elements of the GP, while RPF units from the demilitarized zone in the north advanced rapidly towards the capital, controlling the north-eastern part of the country by the end of the month. As the fighting intensified, the interim government left the capital on 12 April and fled to Gitarama. The massacres and the fighting sometimes occurred in the same area, as in Kigali, but often raged in widely separate regions. The south and west, where some of the worst massacres took place, were remote from the actual war zones.¹⁹ The declared aims of the rebel leadership were to set up a new government, re-establish law and order, and bring those responsible for the massacres to justice.²⁰ The RPF held the interim government responsible for the continuation of the massacres and refused to negotiate with it. The RPF was also accused of perpetrating atrocities in turn, but these appear to have been isolated incidents, not systematic abuses.²¹ Special Representative Booh-Booh, who in his initial reporting apportioned blame for the massacres equally between the warring sides, quickly lost the confidence of the RPF.²²

¹⁶ Radio Rwanda, the national broadcasting station controlled by the President, was also involved. The relatively inoffensive broadcasts in French of both stations differed significantly from those in the local language Kinyarwanda, which were highly aggressive. The generally illiterate Rwandese rural population listens attentively to broadcasts in Kinyarwanda. UN, Situation of human rights in Rwanda, UN document S/1994/1157, 13 Oct. 1994, para. 59.

¹⁷ Human Rights Watch/Africa (note 8), p. 26.

¹⁸ African Rights submits that the major role played by the regular army was to engage the RPF and slow its advance, enabling the militias to carry out the genocide away from the battle lines. The upgrading of its weaponry during 1992–93 had given opposition politicians the confidence that they could seek a military solution to the problem of the opposition. African Rights, May 1994 (note 15) p. 35.

¹⁹ Human Rights Watch/Africa, May 1994 (note 15), p. 4

²⁰ *International Herald Tribune*, 12 Apr. 1994.

²¹ Human Rights Watch/Africa, June 1994 (note 8), p. 28. This finding was confirmed in the June report of the UN Special Rapporteur for Rwanda.

²² Human Rights Watch/Africa, May 1994 (note 15), pp. 9–10.

Within a week of the plane crash, the French, Belgian and US troops sent in to evacuate expatriates from Rwanda had completed their mission; meanwhile the pre-conditions for sustaining a traditional peacekeeping operation had dissipated. Consent of the parties, ambivalent at best, was no longer forthcoming for the political process that UNAMIR was to support. Nor was the UN force perceived as being impartial. Hostility towards the former colonial power placed Belgian nationals in particular danger when civil authority collapsed; 10 Belgian peacekeepers were the first victims.²³ Attempting to protect the prime minister, they were disarmed and killed by the Presidential Guard on 7 April. The UN headquarters in Kigali was shelled two weeks later and UN vehicles were shot at. The roadblocks and fighting in Kigali limited UN troop movements, further restricted by gendarmes who prevented the forces from entering areas suspected of having sustained the most casualties.²⁴ Soon after the massacres began, UNAMIR's Force Commander, General Roméo Dallaire, requested the Office of the UN Secretary-General to provide him with new Rules of Engagement allowing for the protection of civilians. The request was rejected.²⁵ The troops on the ground at the time were providing protection for a modest number of civilians who took shelter in hotels, hospitals and the Amahoro stadium under UN supervision. However, following the Belgian decision to withdraw its contingent of 420 troops because of the inadequate protection provided for them, the Security Council was left to contemplate the continued viability of the force, soon to be further reduced by the departure of Bangladeshi and Ghanaian troops.²⁶

Given its new non-permissive operational environment, it is clear that UNAMIR would have been unable to intervene in the massacres without a revised mandate and a substantial increase in its size and military capability—one of three options the Secretary-General presented for consideration by the Security Council.²⁷ The other alternatives were to reduce the force and restrict its mandate or to withdraw completely, the latter a move not favoured by Boutros-Ghali. The Security Council considered it self-evident that if the old mandate were to be upheld, UNAMIR could not do without its best-equipped contingent, the Belgians. The majority of its members had already declared themselves opposed to both a UN attempt to impose peace and total withdrawal a week before the vote.²⁸ Thus, in a fateful decision, taken unanimously, the Security Council decided to reduce the force from 2500 to 270 and adjust its mandate to empower it to act as intermediary in securing a cease-fire, assist in the resumption of humanitarian assistance, and monitor and report on developments.²⁹

²³ Six Belgian civilians were killed during the first week of violence with French citizens reported to have saved themselves only by showing their passports.

²⁴ Hilsum, L., 'Armed forces wreak carnage in Rwanda', *The Guardian*, 8 Apr. 1994. Furthermore, of the 8 armoured personnel carriers (APCs) at UNAMIR's disposal, 7 were not functioning.

²⁵ Leitenberg, M., 'Rwanda, 1994: International incompetence produces genocide', *Peacekeeping and International Relations*, vol. 23, no. 6 (Nov./Dec. 1994), p. 6.

²⁶ On 14 Apr. the Secretary-General presented two options for retaining a reduced force with the existing mandate, which were predicated on the establishment of a cease-fire, subsequently considered unlikely. On the other hand, Boutros-Ghali feared that UNAMIR would be unable to fulfil its mandate with the withdrawal of the key Belgian contingent and asked the Force Commander to prepare withdrawal plans. *Wireless File* (United States Information Service, US Embassy: Stockholm, 14 Apr. 1994), p. 5.

²⁷ It envisioned 'the immediate and massive reinforcement of UNAMIR and a change in its mandate so that it would be equipped and authorized to coerce the opposing forces into a cease-fire, and to attempt to restore law and order and put an end to the killings.' UN, Special Report of the Secretary-General on UNAMIR, UN document S/1994/470, 20 Apr. 1994, p. 3.

²⁸ Pour, A. B., 'L'ONU tente d'obtenir un cessez-le-feu' [The UN tries to obtain a cease-fire], *Le Monde*, 15 Apr. 1994, p. 3.

²⁹ UN, Security Council Resolution 912, UN document S/RES/912, 21 Apr. 1994.

The African members of the Council had circulated a draft resolution calling for a reinforcement of UNAMIR, also supported by Ugandan President Museweni, but ended up 'reluctantly' voting for Resolution 912.³⁰

III. The expansion of UNAMIR

The initial scaling down of the force constitutes the crucial turning-point in the life cycle of UNAMIR, as time was of the essence in any effort to protect the civilian population. In the face of the mounting death toll, the Secretary-General called upon the Security Council to reverse its decision on UNAMIR within a week of its having adopted the new mandate. In a letter to the Council on 29 April he noted that 'it has become clear that that mandate does not give UNAMIR the power to take effective action to halt the continuing massacres'. He reported that UNAMIR had lost credibility, with both government forces and the RPF questioning its impartiality and refusing to cooperate with it, and called for forceful action to restore law and order. He recognized, however, that 'such action would require a commitment of human and material resources on a scale which member states have so far proved reluctant to contemplate'.³¹ The same day the UN High Commissioner for Refugees (UNHCR) reported the outpouring of 250 000 Rwandan refugees into Tanzania within a period of 24 hours, the largest and fastest such exodus hitherto witnessed by the world body.

The Western countries had indicated at the outset that they would be unwilling to commit troops to end the killing in Rwanda. The Secretary-General was therefore instructed to consult with the OAU 'on ways to restore law and order'.³² Planning proceeded on the assumption of a strengthened force composed of African contingents with Western financial and logistic support.³³ The proposal to send 5500 troops into Kigali, whence they would fan out to create protected areas, was countered by a US plan to establish protected zones in neighbouring countries along Rwanda's borders. Under the Clinton Administration's cautious new guidelines for peace operations,³⁴ the USA argued that its approach was safer and more realistic. After lengthy debate, the Security Council approved the upgrading of UNAMIR to 5500 troops with an expanded mandate, although not under Chapter VII of the UN Charter, to protect civilians and provide security to humanitarian relief operations as well as an expanded right of self-defence against threats to protected sites and

³⁰ The Rwandan envoy, who remained on the Council throughout the crisis, accused the UN of not 'acting appropriately', especially in not trying hard enough to persuade the RPF to accept a cease-fire. He nevertheless voted for the resolution since it expressed support for the Arusha Agreement and called for a cease-fire. *Wireless File* (United States Information Service, US Embassy: Stockholm, 22 Apr. 1994), p. 37.

³¹ UN, Letter of the Secretary-General to the Security Council, UN document S/1994/518, 29 Apr. 1994.

³² UN, Statement by the President of the Security Council, UN document S/PRST/1994/21, 30 Apr. 1994.

³³ The OAU was very critical of UN policy and initially responded that 'since the UN is already engaged in Rwanda, the accent should be put on strengthening and expanding that engagement instead of transferring responsibility elsewhere. Besides, the magnitude of the tragedy in that country requires the kind of coordination and resources which can effectively be sustained only through a global network.' *Africa Research Bulletin*, vol. 31, no. 5 (Apr. 1994), p. 11424 C.

³⁴ For details see under 'National contributions to peacekeeping operations' in chapter 2 in this volume; and for the criteria to be considered when the USA was to vote on or participate in peace operations, see appendix 2B in this volume.

populations.³⁵ The Council also imposed an arms embargo on Rwanda under Chapter VII. However, at US insistence, it was agreed to send initially only 150 unarmed observers to assess the military situation and an 800-strong Ghanaian battalion to secure Kigali airport. Authorization for the deployment of the bulk of the force would depend on a further report regarding the cooperation of the parties, the duration of the mandate and the availability of troops.³⁶ US prudence was shared neither by Boutros-Ghali nor Commander Dallaire, who promptly criticized the phased arrival of troops, arguing it would allow the RPF to drive home its military advantage.³⁷

The delay built into the mandate of the expanded UNAMIR was compounded by a myriad of practical problems. The first contingent of the force was prevented from arriving because Kigali airport was not considered safe after having been captured by the RPF on 22 May. Meanwhile African countries, many of which had criticized the UN decision to reduce UNAMIR, were slow to pledge troops for an enlarged force. Frustrated at not having been properly consulted about their military capacity or arrangements for logistical support, they presented the UN with long lists of demands. Within a month nine African countries had volunteered troops,³⁸ but all except Ethiopia had stipulated conditions, including the supply of arms and equipment. Western military logistics units were not forthcoming, nor were these countries making bilateral arrangements with the troop contributors, called for by the Secretary-General, to supply them with the necessary equipment. The ensuing negotiations conducted by the UN Secretariat for leasing and procurement proved to be prolonged and complex.³⁹

As of 18 June, UNAMIR thus consisted of only 354 troops and 124 military observers. The mission pursued its efforts to broker a cease-fire, but they proved futile, as did diplomatic initiatives by African leaders; a cease-fire agreement signed at the OAU's Tunis summit meeting in mid-June had no impact on the ground. The RPF continued to make steady advances, capturing Gitarama, the hide-out of the interim government, on 13 June. While they had agreed to the expansion of UNAMIR, the rebels did not want the mission to interfere with their war aims, which grew more ambitious with the advance of their forces. They captured Kigali on 4 July and Gisenyi, the last government stronghold, two weeks later. A new government was installed the following day.

³⁵ UNAMIR was mandated 'a) to contribute to the security and protection of displaced persons, refugees and civilians at risk in Rwanda, including through the establishment and maintenance, where feasible, of secure humanitarian areas; b) to provide security and support for the distribution of relief supplies and humanitarian relief operations.' UN, Security Council Resolution 918, UN document, S/RES/918, 17 May 1994, p. 3.

³⁶ US policy was being finalized during the Security Council meeting as Ambassador Madeleine Albright consulted Washington on a cellular telephone, initially demanding a second resolution after troop commitments had been obtained. She later told Congress that US insistence on more detailed plans for the Rwanda mission represented the first test of PDD-25. Pringle, P., 'America hampers dispatch of extra UN troops for Rwanda', *The Independent*, 18 May 1994; and Jehl, D., 'Rwanda stand reflects new US caution', *International Herald Tribune*, 19 May 1994. Authorization for continued deployment was given in UN, Security Council Resolution 925, UN document S/RES/925, 8 June 1994.

³⁷ EIU, *Country Report Uganda Rwanda Burundi*, 2nd quarter, 1994, p. 26.

³⁸ Congo, Ethiopia, Ghana, Malawi, Mali, Nigeria, Senegal, Zambia, Zimbabwe. UN, Letter Dated 19 June 1994 from the Secretary-General Addressed to the President of the Security Council, UN document S/1994/728, 20 June 1994.

³⁹ For example, the delivery of 50 armoured personnel carriers from the USA was delayed for weeks by a dispute over repayment; when they did arrive in mid-July, they were unpainted and without radios or machine guns, further delaying their use. Metz, S., *Disaster and Intervention in Sub-Saharan Africa: Learning from Rwanda*, Strategic Studies Institute, US Army War College, Pa., 1994, p. 7.

IV. The international humanitarian effort

As the deployment of UN troops dragged on, France launched a controversial unilateral initiative in mid-June. Domestic pressure in favour of French action, demanded by humanitarian organizations and influential former Minister of Cooperation Bernard Kouchner, mounted as media reports focused on individual tales of tragedy and implicit French culpability because of its long-term military support for the Habyarimana regime.⁴⁰ On President Mitterrand's initiative, the government announced its determination to mount a strictly humanitarian operation of limited duration under UN authorization. Critics charged that France had ulterior motives,⁴¹ seeking to bolster its political ambitions and maintain influence in the region. The proposed force received a mixed response from France's West European allies, while the USA welcomed the bold French initiative. The UN Secretary-General also supported the French force, pointing out that it was likely to take another three months before the expanded UNAMIR was fully operational.

After a week of intensive diplomacy, the Security Council authorized the French intervention by 10 votes to none with five abstentions. Resolution 929, which did not mention France by name, approved the establishment of a temporary multinational operation 'under national command and control'. The mission was to be strictly humanitarian and conducted 'in an impartial and neutral fashion' and would not constitute 'an inter-position force' between the warring Rwandan parties. Its duration was limited to two months until the expanded UNAMIR could take over. With Chapter VII authorization, the force could use 'all necessary means' to achieve its humanitarian objectives.⁴²

From the outset the RPF announced its complete opposition to the French plan, warning that the intervention would be viewed as a provocation. Despite French assurances of its non-partisan character, the RPF insisted that previous French military support for the government demonstrated its support for the Hutu cause.⁴³ The interim government in turn called on France to expand its operations beyond the battlefield into RPF-controlled areas.⁴⁴

Operation Turquoise was launched on 23 June. The first detachments of a French-led force of over 3000⁴⁵ fanned out into Rwanda from bases in Zaire. Their first mission was to protect some 8000 Tutsi surrounded by militia forces near Cyanguu. The French gradually undertook patrols in western Rwanda, and on 5 July the force received orders to establish a safe area in the south-western part of the country where Hutu were fleeing the imminent RPF victory in the civil war. The zone was soon inundated with internally displaced civilians, engaging the force in the delivery and distribution of humanitarian aid in addition to its previous task of evacuating

⁴⁰ For an account of the domestic context for the French intervention, see Soudan, F., 'Pourquoi la France s'en mêle' [Why France is getting involved], *Jeune Afrique*, vol. 34, no. 1747 (June-July, 1994), pp. 12-17.

⁴¹ The French were, for example, reported to be keen to recover experimental equipment tested in Rwanda, including light mountain tanks and helicopters, and to keep it from falling into the hands of the RPF. *Daily Telegraph*, 22 June 1994.

⁴² UN, Security Council Resolution 929, UN document S/RES/929, 22 June 1994. Brazil, China, New Zealand, Nigeria and Pakistan abstained in the voting.

⁴³ European intelligence sources claimed that weapons paid for by the French had been delivered to Goma as late as May for use by the Rwandan Army and militia in breach of the UN arms embargo. *Africa Research Bulletin*, vol. 31, no. 6 (June 1994), p. 11483C; and *The Guardian*, 23 June 1994.

⁴⁴ *The Guardian*, 30 June 1994.

⁴⁵ The multinational force included 508 troops from seven African countries. See appendix 2A.

refugees.⁴⁶ Members of the rump government, army and Hutu militias also entered the safe area despite French pledges not to allow them in. The French then forbade military or political activity inside the zone, set up control posts to disarm soldiers and collected information on human rights violations to be submitted to the UN.⁴⁷

Prevailing doubts over the impartiality of the French mission had numerous implications on the ground. The RPF promptly withdrew its consent to the presence in UNAMIR of troops from French allies or former colonies, precipitating the repatriation of 37 Senegalese, Togolese and Congolese peacekeepers from the already emaciated force. UNAMIR, which only received 23 hours notice of the arrival of the French force, even took casualties at the time. The RPF itself threatened to come into conflict with the French several times over the establishment of the safe zone and the treatment of the criminals seeking its protection. Despite threats from both sides, clashes were averted apparently as a result of top-level communication between the two armies.⁴⁸ The French also had trouble enlisting the cooperation of aid agencies, which disagreed with them over the tactics of aid distribution, the insufficient protection afforded to civilians in the north and the treatment of the former killers.⁴⁹

The attention of aid agencies was diverted outside Rwanda's borders in mid-July when the final victory of the RPF precipitated the worst refugee crisis the UN has ever faced. The sheer volume and unprecedented speed of the 'exodus of a nation' as well as the attendant logistical problems overwhelmed the UN and aid agencies.⁵⁰ Terrified by continuing extremist radio broadcasts threatening them with Tutsi retaliation, a million Hutu crossed over into the Zairean border town of Goma within three days, at the rate of up to 500 a minute; hundreds of thousands also poured into camps in Bukavu and Uvira. The situation deteriorated drastically when epidemics of cholera and dysentery spread in the unsanitary conditions prevailing in the overcrowded makeshift camps set up on inhospitable volcanic rock. Unable to cope, the UNHCR appealed for governments to intervene directly: only a rapid and massive military operation was deemed capable of rushing in the food, medicine, water, trucks, planes and helicopters needed in Goma to bring relief to the thousands dying of exhaustion, hunger and disease.

The US Government was the first to offer military support for the delivery of the 600 tonnes of food and 500 tonnes of medical equipment the UN had estimated was required daily for sustaining the displaced population. The USA launched a 24-hour airlift first from Uganda, then Kigali, to deliver the international relief supplies that started to flow in as governments and private organizations responded to the appeal of the UN Secretary-General for over \$400 million in emergency aid. The US task force also undertook engineering tasks and operated water purification plants.

⁴⁶ For details, see Lanxade, J., 'L'opération Turquoise', *Défense nationale*, vol. 51, no. 2 (1995), pp. 8–15.

⁴⁷ UN, Letters from the French representative to the UN addressed to the Secretary-General, UN documents S/1994/795, 5 July 1994; S/1994/933, 4 Aug. 1994; and S/1994/1100, 27 Sep. 1994.

⁴⁸ EIU, *Country Report Uganda Rwanda Burundi*, 3rd quarter, 1994, p. 27. The UNAMIR Force Commander acted as intermediary between the RPF and France regarding the perimeter of the humanitarian protection zone and French policy towards government troops and militia within it. Interview with Maj. Gen. Roméo Dallaire, 16 Dec. 1994.

⁴⁹ *The Guardian*, 12 July 1994. The Ethiopian peacekeepers who took over control of the zone from the French claimed that French troops collaborated with and protected known murderers and released prisoners suspected of crimes against humanity before France withdrew. Col. Tadele Slassie also accused the Zairian Government of protecting the killers. *The Guardian*, 27 Aug. 1994; and *Africa Research Bulletin*, vol. 31, no. 8 (Aug. 1994), p. 11560B.

⁵⁰ At the end of July aid agencies estimated that up to 5 million people were displaced inside and outside Rwanda.

Numbering over 2000 troops at its peak, Operation Support Hope was billed as a mission strictly for disaster relief, not peacekeeping.⁵¹

The UK followed the US lead by sending a force of 600 engineers, medics and logistics staff for a three-month mission, Operation Gabriel, to set up a network of 'way stations' providing food and medical help to entice refugees to return home. They were followed by a 300-strong Australian contingent and over 300 Canadians. The arrival of foreign logistics support created an urgent need for coordination and liaison with UNAMIR, which was also providing security and support for humanitarian operations. Not notified of the arrival of other foreign troops in Goma, Commander Dallaire did obtain information on US capabilities by visiting the Commander of the US Task Force in Kampala to develop a concept of operations for humanitarian relief.⁵² The Secretary-General expressed his concern in early August, urging all foreign forces to become part of UNAMIR.⁵³ Other countries placed their troops under UN command, but the US mission remained separate until it was withdrawn in September. The 470 Japanese troops who arrived in September to support the aid mission also remained under national command.

The UN was also concerned about increasing UNAMIR troop strength in time for the French withdrawal. In early August UNAMIR still numbered fewer than 1000 troops, prompting an exasperated appeal from the Secretary-General that was finally answered by a number of governments. Despite appeals from the UNHCR for the French force to stay longer to forestall another feared massive outflow of refugees from the safe zone, France affirmed its commitment to pull out by 22 August as set out in its mandate. UNAMIR in turn negotiated with the new government to postpone the latter's take-over of the zone. Although thousands of refugees fled, the major crisis anticipated by the aid agencies was averted as France left control of the zone to UNAMIR battalions from Ethiopia, Ghana and francophone African countries. The new government started posting civilian officials in the zone in the end of August without incident.

V. Enforcing individual accountability

The new broad-based Government of National Unity (BBGNU) set up on 19 July quickly identified the punishment of those guilty of genocide as being critical to the future rehabilitation of the country. The RPF sought to allay the fears of the majority by promoting multi-party government and appointing Hutu in 12 of 21 government posts, including those of prime minister and president. The political parties involved in the previous government were included, with the notable exception of the MRND and the CDR, which the RPF held responsible for planning and fomenting the massacres. The RPF retained nine positions for itself (of these, three were held by Hutu and six by Tutsi), appointing its victorious General Paul Kagame both Vice-President and Minister of Defence.⁵⁴ The new government invited the refugees to return, assuring them that the innocent had nothing to fear. Although it declared its

⁵¹ Vogel, S., "'Successful' Rwandan mission phasing out', *Army Times*, 12 Sep. 1994, p. 19.

⁵² Dallaire interview (note 48).

⁵³ UN, Report of the Secretary-General on the Situation in Rwanda, UN document S/1994/924, 3 Aug. 1994, p. 9.

⁵⁴ The RPF took the presidency, 3 of the MRND's 5 allocated posts and created the Vice-Presidency for Kagame. In deviating from the power-sharing arrangement agreed under the Arusha Agreement, it also became over-represented in proportion to the Tutsi share of the population, for which it was later to be criticized by opposition politicians. *Africa Confidential*, vol. 35, no. 17 (26 Aug. 1994), pp. 2-4.

intention of bringing criminal elements to justice, it admitted that conducting such trials was beyond Rwanda's capabilities after the recent convulsions as there were few magistrates and a non-existent judiciary.⁵⁵

The international community, slow publicly to acknowledge the Rwandan massacres as genocide or to act to prevent them, launched a number of initiatives and investigations aiming to punish the perpetrators of the atrocities. When deliberating the possibility of more forceful action in April, the Security Council still specifically avoided referring to the massacres as genocide,⁵⁶ but described them in the terminology of the 1948 Genocide Convention which all but three of its members—including Rwanda itself—have ratified.⁵⁷ After his trip to the area in mid-May, the newly appointed UN High Commissioner for Human Rights noted the continuation of 'extremely serious' human rights violations and called for the appointment of a special rapporteur to investigate their root causes and those responsible.⁵⁸ Meeting in emergency session, the UN Commission on Human Rights appointed René Degni Ségui as its Special Rapporteur.⁵⁹ His investigations revealed a pre-planned and systematically coordinated campaign of genocide. In his report in June, he recommended that war crime charges be brought against those responsible; the venue was to be either a temporary international jurisdiction or an extended jurisdiction of the Tribunal for the former Yugoslavia. He also recommended the deployment of human rights observers throughout the country.⁶⁰

Pursuant to a Security Council mandate,⁶¹ the Secretary-General appointed a Commission of Experts in late July to investigate the grave humanitarian violations in Rwanda, including acts of genocide. The Commission, composed of three African jurists, was given four months to report on the evidence establishing individual responsibility and to present its views on the most appropriate jurisdiction for subsequent trials.⁶² In its preliminary report, the Commission found overwhelming evidence of genocide having been committed.⁶³ Even before the Commission submitted its final report, the Security Council voted to establish an International Tribunal for Rwanda. Although Rwanda had asked for the establishment of the Tribunal, it cast the only negative vote.⁶⁴ The new government objected to the absence of the death penalty, to the temporal jurisdiction of the Tribunal and to the

⁵⁵ *Financial Times*, 25 July 1994.

⁵⁶ Pour, A. B., 'M. Boutros-Ghali propose à l'ONU une action militaire au Rwanda' [Boutros-Ghali proposes a military action in Rwanda at the UN], *Le Monde*, 2 May 1994, p. 5.

⁵⁷ The signatories confirm that 'genocide whether committed in time of peace or war, is a crime under international law' which they undertake to 'prevent and punish'. *Convention on the Prevention and Punishment of the Crime of Genocide*, entered into force 12 Jan. 1951, UN Treaty Series, vol. 78, no. 277, art. I.

⁵⁸ UN, Report of the United Nations High Commissioner for Human Rights, Mr José Ayala Lasso, on his mission to Rwanda 11–12 May 1994, UN document E/CN.4/S-3/3, 19 May 1994.

⁵⁹ UN, Report of the Commission on Human Rights on its Third Special Session, UN document E/CN.4/S-3/1, 30 May 1994, pp. 4–8.

⁶⁰ UN, Report on the situation of human rights in Rwanda submitted by Mr R. Degni-Ségui, Special Rapporteur of the Commission on Human Rights, UN document E/CN.4/1995/7, 28 June 1994.

⁶¹ UN, Security Council Resolution 935, UN document S/RES/935, 1 July 1994.

⁶² The Commission's terms of reference were elaborated in UN, Report of the Secretary-General on the Establishment of the Commission of Experts Pursuant to Paragraph 1 of Security Council Resolution 935 (1994) of 1 July 1994, UN document S/1994/879, 26 July 1994.

⁶³ UN, Letter dated 1 October 1994 from the Secretary-General addressed to the President of the Security Council, UN document S/1994/1125, 4 Oct. 1994.

⁶⁴ UN, Security Council Resolution 965, UN document S/RES/965, 8 Nov. 1994. China abstained in the voting. The Commission of Experts submitted its final report a month later, UN document S/1994/1405, 9 Dec. 1994.

possibility of trials being held outside Rwanda, since the venue for the proceedings, subsequently Arusha in Tanzania, remained to be decided later. Nevertheless, it later announced its intention to co-operate with the new Tribunal's investigators.

While the international community has recognized the importance for Rwanda's rehabilitation of the speedy investigation of humanitarian abuses, the pursuit of this goal has been difficult in practice. Its full implementation would require a functioning division of labour between international and national proceedings, with most of the perpetrators being tried by Rwandan courts. However, by the end of the year the Rwandan judiciary as well as its public administration continued to be hobbled by the country's abject bankruptcy, perpetuated by donor fatigue and mistrust towards the new regime. Similarly the work of the UN investigative team was hampered by insufficient human or material resources, leading to the resignation of several of its members in September and October.⁶⁵ In the absence of other investigators, even the Force Commander of UNAMIR occasionally dispatched teams to investigate sites of alleged massacres. In late November the peacekeeping force was explicitly given a new, expanded mandate that included providing security for the personnel of the Tribunal and for human rights officers.⁶⁶

VI. The threat of renewed violence

As the UNAMIR troop level was gradually raised towards its authorized strength, reaching 4270 in early October, the force was able to assume its tasks of promoting internal security and assisting the repatriation programme.⁶⁷ A UNAMIR-coordinated deployment of units of the Rwandese Patriotic Army (RPA) gradually established the government's authority in the former French-protected zone, the most unstable region of the country. UNAMIR also collected arms surrendered by the gendarmerie. As there was no real police force in place after the civil war, UNAMIR's civilian police component initiated a training programme to assist the government in the creation of a new force for which it received a formal mandate from the Security Council in November. Police monitors were also gradually being deployed in all prefectures.

In order to create conditions conducive to the return of refugees, the UN force continued deploying in October throughout six sectors covering the entire country. Installation in Kigali of a UN FM broadcasting capability, a medium used successfully in Cambodia, was under way for eventual use by the UN in encouraging repatriation. A further confidence-building measure, the deployment of human rights monitors, was carried out with UNAMIR's assistance, although only 60 of a projected 147 were in place in mid-November.⁶⁸

As the year drew to a close, however, the security situation both inside the country and especially on its borders remained volatile. In September and October the repatriation efforts were temporarily suspended when UNHCR and Amnesty International reported findings of systematic abuses perpetrated by the RPA on returning refugees. The reports were called into question by other agencies and were referred to

⁶⁵ *International Herald Tribune*, 12 Sep. 1994; and *Africa Confidential*, vol. 35, no. 22 (4 Nov. 1994), p. 5.

⁶⁶ UN, Security Council Resolution, UN document S/RES/965, 30 Nov. 1994.

⁶⁷ The military observer component had reached its authorized strength of 320 and was deployed in all sectors. UN, Progress Report of the Secretary-General on UNAMIR, UN document, S/1994/1133, 6 Oct. 1994, p. 10.

⁶⁸ UN, Progress Report of the Secretary-General on UNAMIR, UN document S/1994/1344, 25 Nov. 1994, p. 5.

the UN human rights organs for investigation.⁶⁹ From October the RPA engaged in mass arrests and became increasingly impatient to close down the camps for internally displaced persons, especially after mounting evidence that they were being used as venues for recruitment by the former government forces.⁷⁰ As incidents of camp violence became more frequent, the UN forces launched raids on several camps to disarm and detain Hutu extremists in December.⁷¹

The main threat to rehabilitation, however, remained outside the country's borders. Some 20 000 former government soldiers and Hutu militia had escaped with their arsenals intact to refugee camps in Zaire, where they proceeded to regroup, retrain and take control of the camps, terrorizing refugees who attempted to return.⁷² Former government members openly announced their intention to reinvade Rwanda at an opportune time. Zaire did not appear able or willing to honour its pledges to disarm and canton members of the RGF; quite the contrary, Zairian forces were even reported to be training Hutu soldiers in November.⁷³

As early as September, the Secretary-General's new Special Representative for Rwanda, Ambassador Shaharyar Khan, observed signs of guerrilla warfare. Following a visit to the region he concluded that the only effective way of ensuring the safety of the refugees and securing their option to return was to separate the armed elements ensconced in the camps from ordinary refugees. A joint Zairian-UN working group was set up to study the financial, logistics and security requirements of such an undertaking which, it was agreed, would require a strong security mechanism to protect both the refugees and those carrying out the operation.⁷⁴ The operative recommendation was to form 'a force of significant strength' that could 'forcibly disarm, collect and escort' the Rwandan ex-government forces 'to cantonment sites'.

In a detailed report to the Security Council, the Secretary-General outlined three options for action to improve camp security. Separating the armed elements from other refugees would require action under Chapter VII, either by a UN or multinational force of two brigade groups (10 000-12 000 men) in what would amount to a 'risky, complex and very expensive endeavour'.⁷⁵ A more realistic option in his view was to deploy a peacekeeping force of 3000-5000 in the camps to provide security for relief workers, some of whom had by then already pulled out of the camps in Goma because of deteriorating security. The latter alternative was favoured by the Council, which instructed the Secretary-General to consult troop contributors with a view to setting up such a force and meanwhile to plan assistance to the Zairian security forces in protecting humanitarian operations.⁷⁶ However, subsequent UN appeals to 60 governments for troops and equipment only elicited one positive response. A more limited plan for deployment of 2000 Zairian troops under a few

⁶⁹ Amnesty International, *Rwanda: Reports of killings and abductions by the Rwandese Patriotic Army, April-August 1994*, 14 Oct. 1994. The UNHCR report, written by a consultant, was not made public. The Secretary-General subsequently ordered a UN investigation into its findings.

⁷⁰ DHA-Geneva *Daily Information Report* No. 64, 23 Nov. 1994; and Human Rights Watch/Africa (Washington, DC/New York), *Rwanda: A New Catastrophe?*, Dec. 1994, pp. 5-6.

⁷¹ *The Independent*, 15 Dec. 1994; and DHA-Geneva *Daily Information Report*, no. 68, 20 Dec. 1994.

⁷² *Africa Confidential* (note 54), p. 4.

⁷³ Austin, K., 'Secure in UN camps, Hutu prepare a bloody return', *International Herald Tribune*, 21 Nov. 1994.

⁷⁴ UN document S/1994/1133 (note 67), pp. 5-6.

⁷⁵ UN, Report of the Secretary-General on Security in the Rwandese Refugee Camps, UN document S/1994/1308, 18 Nov. 1994, p. 7.

⁷⁶ UN, Statement by the President of the Security Council, UN document S/PRST/1994/75, 30 Nov. 1994.

dozen UN officers was no more successful.⁷⁷ At the beginning of the new year, the UNHCR was mandated to negotiate giving even more limited civilian assistance to Zairian troops as the Hutu staged their first big cross-border attack from Zaire in what UNAMIR Force Commander Guy Tousignant feared could be the start of a consolidated insurgency campaign.⁷⁸

VII. Conclusions

The failure of the UN member states to act early to prevent or halt one of the swiftest and most massive incidents of genocide in this century raises the most fundamental questions about its *raison d'être* that an international organization could be called upon to contemplate. In an unusually strong outburst, the UN Secretary-General observed in May that

we have failed in our response to the agony in Rwanda, and thus have acquiesced in the continued loss of human lives. Our readiness and capacity for action has been demonstrated to be inadequate at best and deplorable at worst, owing to the absence of the collective political will. While attempting now to redeem these failings in the Rwandese crisis, the entire system requires review to strengthen its reactive capacity. It is my intention that such a review be conducted.⁷⁹

While political will remains the crucial determinant of whether states will or will not act collectively in a particular case, reactive capacity may lend itself to institutional improvement. In Rwanda, the collection of information proved difficult and early-warning signals that were observed do not appear to have led to political action within the UN. In January, the Secretary-General's Special Representative reported that all the ingredients were present for a resumption of the conflict.⁸⁰ The UNAMIR Force Commander had informally been told of the existence of 'hit lists' but was unable to confirm this from reliable sources.⁸¹ The political component of the mission was to be strengthened to 8–9 persons but remained understaffed at 3–4. After the outbreak of violence, it is unclear to what extent the Security Council received accurate information from the Special Representative, whose reports in April apparently depicted mutual and chaotic killings, not the systematic and organized nature of the genocide.⁸² Finally, UNAMIR, in at least the formal tradition of peacekeeping missions, did not have an independent intelligence-gathering capability, which was severely to constrain its action during the peak of the crisis.

There were two critical junctures, in April and August, when early and effective intervention might have altered the course of events. The massacres began in and around the capital city and took weeks to spread to southern Rwanda. Although the staggering figure of 200 000 dead was reached at the end of April, the killing in the south did not get fully under way until May. The window of opportunity for containing the genocide was limited: by the time the French-led *Operation Turquoise* started

⁷⁷ UN, Second Report of the Secretary-General on Security in the Rwandese Refugee Camps, UN document S/1995/65, 25 Jan. 1995.

⁷⁸ *International Herald Tribune*, 12 and 25 Jan. 1995.

⁷⁹ UN, Report of the Secretary-General on the Situation in Rwanda, UN document S/1994/640, 31 May 1994, p. 12.

⁸⁰ Willame, J.-C., 'Diplomatie internationale et génocide au Rwanda' [International diplomacy and genocide in Rwanda], *Politique africaine*, no. 55 (Oct. 1994), p. 121.

⁸¹ Reuters, Toronto, 29 Nov. 1994.

⁸² Human Rights Watch/Africa, May 1994 (note 15), pp. 9–10.

establishing a humanitarian protection zone, the UN Special Rapporteur had reported the deaths of at least half a million people.⁸³ When the RPF declared victory a month later, the flight of armed troops and Hutu militia to neighbouring countries resulted in a prolonged refugee crisis. Their control over ordinary civilians in the camps contributed to delays in repatriation and their raids on Rwandan territory served to destabilize the regime and the region.

The scale and speed of the massacres raises the interrelated problems of how appropriate timing, configuration of forces and mandate for a military response could have been combined to possibly stem the tide. In the estimation of the Force Commander, a fully equipped brigade or even the original authorized level of 2600 troops with sustainment capability would have been able to contain the killings in April if mandated to intervene for humanitarian protection.⁸⁴ With each passing week, another new battalion would have been needed as the violence spread out over a larger area. In his concept of operations in early August, Commander Dallaire reported a need for several battalions above the authorized 5500 troops to follow the militia to the borders in order to disarm and separate them from the rest of the refugee population before they became entrenched in the camps—a suggestion that went unheeded.⁸⁵

Within its existing mandate, UNAMIR could not halt the massacres, but in May it was empowered to provide security to protected sites. Although it is impossible to prove, it is evident that the larger the international military presence, the greater the number of protected civilians: even the reduced UNAMIR force of 450 was able to protect over 25 000 people and to move tens of thousands to safety.⁸⁶ The French-led force of 3000 succeeded in stabilizing a displaced population of 1.4 million in the safe area. Thus it is unfortunate that the early deployment of UNAMIR was not supported by troops pledged for the UN stand-by arrangements, a system designed to expedite the start-up phase of peacekeeping operations. The 19 governments involved refused to make their troops available when the system was invoked for the first time in May 1994. The African troops promised to UNAMIR were slow to deploy for lack of appropriate equipment, highlighting the issue of whether the UN should have substantial prepositioned supplies of its own for such circumstances.

The outbreak of violence challenged, once again, the parameters of peacekeeping. Intervention in the genocide would have brought UNAMIR face to face with armed resistance in the context of a civil war; the low level of political support for such a mandate was in evidence throughout the Rwandan crisis. Although during 1994, the Security Council took decisions under Chapter VII of the UN Charter as early as May and twice thereafter, the rules of engagement for UNAMIR were not changed to encompass the wider powers for so-called 'deterrent actions' sought by the Force Commander.⁸⁷ UNAMIR was not given the means to disarm the militia in August, a

⁸³ Some observers had placed the figure at close to 1 million, representing *c.* 7–14% of Rwanda's population of *c.* 7 million. UN document E/CN.4/1995/7 (note 60) para. 24; and Hunter, B. (ed.), *The Statesman's Year-Book 1994–95*, 131st edn (Macmillan: London, 1994).

⁸⁴ In a CBC interview, the UN Secretary-General said that in the early stages of the crisis, the quick involvement of 400 excellent paratroopers may have saved the situation. Reuters (note 81).

⁸⁵ Dallaire interview, 16 Dec. 1994 (note 48).

⁸⁶ Speech by Maj. Gen. Roméo Dallaire, Peacekeeping Conference, Washington, DC, 14 Nov. 1994.

⁸⁷ In his view, the UN should have the authority to carry out offensive actions. When there is sufficient evidence (weapons, training) of imminent hostile action, UN troops should be deployed in a manner that would deter perpetrators, rounding up weapons and people. Pro-active measures would also include following the militia into refugee camps immediately. When the violence broke out in Rwanda, he had requested capabilities to launch such 'deterrent operations' which would have required getting the

task undertaken quite successfully by the French-led force in the area that it controlled. By the end of the year, the prospect of segregating the militia had become even more demanding and dangerous. The reluctance of troop contributors to undertake such an unprecedented task underscores the perception that 'peacekeeping is essentially an instrument for conflict management and resolution . . . it is not designed and has not generally been used to ensure security in refugee camps.'⁸⁸

In the latter part of 1994 the tasks of UNAMIR were adapted to the exigencies of the situation. Top priority was given to the repatriation and resettlement of the 2 million refugees resident in neighbouring countries. An inter-agency initiative, *Operation Retour*, was launched on 29 December to facilitate resettlement of the 350 000 internally displaced persons. The importance of UNAMIR's civilian police component was evident as the internal security situation was still precarious with continuing reports of reprisal killings and other incidents of violence. The peacekeepers were also providing security to other international agencies whose work was directed at promoting reconciliation and supporting the reconstruction of civil society, such as the UN Human Rights Field Operation and the International Tribunal for Rwanda.

At the end of the year, the aftermath of the genocide in Rwanda continued to present very complex problems for the country, the region and a multitude of international actors. The government was faced with the task of broadening its constituency and establishing its legitimacy both with the majority population and international donors in order to garner the human and material resources necessary for rebuilding the country.⁸⁹ Neighbouring countries, destabilized by the presence of large refugee populations on their territories, addressed Rwanda's problems in a summit meeting in Nairobi in early January 1995. A subregional OAU/UNHCR conference on refugees was to be held in Burundi. While international agencies were fully occupied with humanitarian problems, plans were underway to tackle political issues in a broader international conference aimed at identifying long-term solutions to peace, security and sustainable development in the subregion. After the horrific trauma experienced by this small African nation, a concerted and sustained effort on all three levels will be necessary to search for ways to rebuild the country and promote political coexistence. For the UN, the Rwandan tragedy should give pause, prompting it both to pursue the promised review of its reactive capacity overall and specifically to investigate whether the peacekeeping instrument can be endowed with a rapid reaction capability to better enable it to respond to such dire humanitarian emergencies.

necessary troops, equipment and mandate, although not necessarily under Chapter VII. Approval by the troop contributing countries would have been critical, however. Speech 14 Nov. 1994 (note 86); interview 16 Dec. 1994 (note 48); and *Jane's Defence Weekly* (15 Apr. 1995), p. 32.

⁸⁸ UN (note 77), para. 40.

⁸⁹ Until late in the year, most foreign aid was directed to relief operations. In Nov. the European Union approved 67 million ECUs of aid for Rwanda which was reportedly initially blocked by France. After a Round Table Conference of international donors in Geneva, 18–19 Jan. 1995, Rwanda received pledges towards funding of its \$764 million reconstruction programme. Human Rights Watch/Africa (note 70), pp. 14–15; DHA-Geneva, *Daily Information Report*, no. 1 (31 Jan. 1995).

3. South Africa: from apartheid to multi-party democracy

THOMAS OHLSON

I. Introduction

The elimination through negotiation of institutionalized apartheid from the world political map was confirmed through South Africa's first free elections in April 1994. The *Washington Post* wrote that in 'Bosnia, Serbs have blown up bridges that joined Serb and Muslim areas. In Rwanda, people are hacking their brothers and sisters to pieces. In Italy, a new prime minister is giving Cabinet jobs to neo-Fascists. And South Africa is giving lessons in democracy and joy'.¹ However, this watershed left a range of legacies and divisions that stand in the way of building a new South Africa. Apartheid as a juridical system is gone but it lives on as a socio-economic structure, a security system, a lifestyle and a mental legacy. White power remains entrenched in economic and state structures. The ending of legislated apartheid is a necessary but not sufficient condition for the ending of apartheid as a system of racial domination. The contradictions, although less incompatible, remain. The difference now is that a fragile political culture advocating non-violent solutions to societal conflicts has found root and taken a preliminary constitutional form.

After the National Party (NP) came to power in 1948 South Africa was dominated by a conflict between actors with incompatible goals. The apartheid concept was introduced in South Africa following the NP victory in the 1948 elections.² From 1948 to 1990 apartheid governments unilaterally and through force superimposed their own solutions onto society, breeding a culture of violence among their adversaries. Since February 1990 the two central political actors, the former NP Government and the main liberation movement, the African National Congress (ANC), have instead opted for talks, debate, exchange and a search for common ground as tools of conflict resolution. The actors, struggling for ascendancy, have actively sought outcomes that would maximize their own advantage. Now, after the April 1994 elections and with the ANC-dominated Government of National Unity (GNU) in place, one phase in a long conflict-resolution process has been brought to an at least partially successful end.

¹ *Washington Post*, 12 May 1994, quoted in Sisk, T., 'The US looks on', ed. A. Reynolds, *Election '94 South Africa: The Campaigns, Results and Future Prospects* (David Philip: Cape Town, 1994), p. 156.

² Dunbar Moodie and Bill Freund have pointed out that when it was first used, the Afrikaans word 'apartheid' (separateness) referred to a separation between Afrikaners and English speakers; it had nothing to do with black Africans. See Freund, B., *The Making of Contemporary Africa* (Macmillan: London, 1984), p. 263.

The approach of this chapter is twofold: to describe and explain the dynamics of South Africa's transition to democracy,³ and to identify and explain post-election conflict issues that may lead to renewed large-scale political violence or otherwise endanger the path to a stable and legitimate democracy.⁴ Section II sketches the background to the process of the early 1990s. The main challenges the post-apartheid polity faces, the legacies of apartheid, are outlined in section III. While these legacies were either intended results or necessary costs of upholding minority rule, they are now problems that the GNU and any subsequent government must attend to if it is to gain or maintain legitimacy and electoral support. Section IV suggests an analytical framework for understanding the transition process up to the elections, while the negotiation process, the elections and the period under the GNU in 1994 are described in section V. Section VI analyses post-election conflict issues and actor strategies in order to assess the impact of change on the continuing democratization process.

II. The apartheid era

The phenomenon of Afrikaner ethno-nationalism represented a response to a number of threats perceived by the Afrikaners in South Africa after World War II. Apartheid was a set of laws and policies that sought to regulate totally relations between the races in South Africa. While economic and political domination by whites over blacks had a long history in South Africa, the critical difference in the policies that came to be known as apartheid was 'in the completeness with which racial separation was sought, and in the locus within the state of racial control'.⁵ It prevented the breakdown of Afrikanerdom through class divisions or social stratification.⁶ Robert Price argues that in pursuing apartheid the National Party had three aims:

(1) to create a completely segregated society, in keeping with the precepts of Afrikaner politico-religious doctrine, and in so doing preserve Afrikaner identity; (2) to secure white political supremacy and its resulting economic privileges from potential internal and external threats (the former represented primarily by the black majority and the latter by an international community increasingly inhospitable to notions of

³ The term 'transition' in the current South African context is used by many commentators to denote the period from early 1990 to the elections in Apr. 1994. However, it is also used by some in a more extensive manner, meaning 'transition to majority rule' (thus implying the period 1990-99). In this chapter the term refers to the period Feb. 1990-Apr. 1994.

⁴ This chapter draws on the author's previous writings on South Africa. In particular, see Ohlson, T. and Stedman, S., *The New Is Not Yet Born: Conflict and Conflict Resolution in Southern Africa* (Brookings Institution: Washington, DC, 1994), chapter 5; and Ohlson, T. and Odén, B., 'South Africa: a conflict study', B. Odén et al., *The South African Tripod* (Scandinavian Institute of African Studies: Uppsala, 1994).

⁵ Price, R., *The Apartheid State in Crisis: Political Transformation in South Africa, 1975-1990* (Oxford University Press: New York, 1991), p. 19.

⁶ Vincent Maphai has stressed that: 'The essence of Afrikaner nationalism is that *every person is, first and foremost, a member of a group, and that everything else follows from that major premise*', Maphai, V., 'Liberal democracy and ethnic conflict in South Africa', Paper presented to the conference on Dimensions of Economic and Political Reform in Contemporary Africa, Kampala, Uganda, 8-12 Apr. 1994, p. 27 (emphasis in original).

racial rule); and (3) to move the Afrikaner community into a position of social and economic parity with the English-speaking community which had dominated the modern economic and urban sector since the dawn of capitalist economic development in South Africa.⁷

The first serious challenges to apartheid emerged in the late 1950s and early 1960s. Black opposition manifested itself in the so-called 'defiance campaign' against the pass-law system for non-whites. The 1960 Sharpeville massacre focused international attention on South Africa's racial policies and came to symbolize the impossibility of eradicating apartheid by peaceful means alone. The ANC launched its armed struggle in 1961, after 50 years of peaceful but fruitless efforts to convince the government to democratize. In the second half of the 1970s, military and financial circles in South Africa began to criticize the political leaders for their inability to handle the crisis. As a result, the Government of B. J. Vorster was replaced by a security-oriented government under former Defence Minister P. W. Botha in 1978.

Botha's Total Strategy policy called for the mobilization of all the available economic, political, diplomatic, cultural, ideological, socio-psychological and military resources to defend and advance the interests of the apartheid state. It was claimed that the state was threatened by a total onslaught, a Soviet-orchestrated strategy to overthrow the white minority regime and take over both South and Southern Africa. Total Strategy emanated from the military, signified the ascendancy to power of the military and created an independent, unaccountable military organization. As Swilling and Phillips have pointed out, 'what emerged was a dual state that rested on a hybrid of party government based on the parliamentary process, and a militarised state rooted in the security establishment. . . . In short, what has taken place is a militarisation of the state and politicisation of the military'.⁸

In terms of domestic policy, Total Strategy sought to combine intensified repression with various social, economic and political reform measures aimed at drawing what state strategists dubbed 'useful blacks' into a new supportive alliance. Constitutional wizardry by the NP Government was frequent in the 1980s: the '1980s were not only a decade of conflict but also of constitutional tinkering in which ever more elaborate and exotic plans were unveiled, all of which had a common theme: whites . . . would have the final say in decisions or, at the very least, a veto over anything which blacks decided'.⁹ This was a theme that the de Klerk Government would also bring to the negotiating table in the 1990s.

⁷ Price (note 5), p. 23.

⁸ Swilling, M. and Phillips, M., 'State power in the 1980s: from "total strategy" to counter revolution-ary warfare' eds J. Cock and L. Nathan, *War and Society: The Militarisation of South Africa* (David Philip: Cape Town, 1989), p. 137.

⁹ Bulger P. and Friedman, S., 'The reluctant reconcilers', ed. S. Friedman, *The Long Journey: South Africa's Quest For a Negotiated Settlement* (Ravan Press: Johannesburg, 1993), p. 7. Note that the term 'black' is here used to mean all non-whites. The prevailing practice in academic discourse on South Africa is to classify the population in four racial groups: 'Whites', 'Blacks', 'Coloureds' and 'Asians' (Indians), while 'ethnicity' refers to cultural groupings within racial groups.

In 1984 a new tricameral Constitution came into effect as the result of a November 1983 whites-only referendum. However, the chambers of Parliament were racially separated as 'Whites', 'Coloureds' and 'Asians' and a weighted voting system ensured a permanent white majority for votes on 'general affairs'. South Africans classified as 'Blacks' continued to be excluded from any form of representation in Parliament. The tricameral system was rejected by the majority of 'Coloureds' and 'Asians', who boycotted parliamentary elections. The new system did, however, provide an important spur to mass campaigns under the aegis of the United Democratic Front (UDF), which coalesced various anti-apartheid organizations. In September 1984 an uprising in the Vaal triangle area triggered a wave of escalating popular-action guerrilla attacks, township insurrections, school, rent and consumer boycotts, strikes and stay-aways aimed at making the country ungovernable.

State repression intensified under the cover of a nationwide state of emergency which was imposed in June 1986. The Total Strategy doctrine fell from favour, as the 'securocrats' turned instead to a strategy of Winning Hearts and Minds (WHAM). WHAM was predicated on the assumption that most black people were interested in material well-being rather than political issues and that they could therefore be 'bought off' or neutralized by material concessions. According to a popular formula among state strategists at the time, 30 per cent of blacks were moderates, 20 per cent supported revolutionary organizations and 50 per cent were undecided. The task of WHAM was to eliminate the revolutionaries through violence and repression, enhance and consolidate an alternative moderate leadership through welfare reforms and through both processes win over the undecided majority.

The capstone of WHAM was a series of elections for black local authorities in October 1988. However, these failed to attract credible candidates or sufficient voters. Instead of black township administrations tied to the state, the people turned to mushrooming civic associations that combined the provision of local services with active opposition to apartheid. A situation of dual power developed at the local level: official government structures vs. autonomous community-based organizations.¹⁰

As when Total Strategy failed, violence intensified and increased external pressure on Pretoria. The regime was obliged to acknowledge that it could no longer act alone in implementing political reforms. New dispensations would have to be the product of genuine negotiations if they were to have any chance of gaining legitimacy.

Meetings between the ANC and representatives of the white community in South Africa had meanwhile become frequent. About 30 such meetings were held in the period September 1985–August 1989.¹¹ When the dogmatic and military-aligned P.W. Botha was replaced as State President in 1989 by the

¹⁰ For a description of the local organizations and the emerging situation as one of 'dual power', see Mufson, S., *Fighting Years: Black Resistance in South Africa, 1983–1990* (Beacon Press: Boston, 1990).

¹¹ Compilation of publicly recorded meetings made by Robert Davies, now an ANC MP, then a senior researcher at the Centre for African Studies at the Eduardo Mondlane University in Maputo, Mozambique; unpublished working paper, 1989.

pragmatic and party-aligned F. W. de Klerk, the NP could finally address the inevitable. In February 1990 de Klerk removed the ban on the ANC and other anti-apartheid organizations, allowed the exiled leaderships of these organizations to return, committed his government to a negotiated end to white minority rule and ordered the immediate release of Nelson Mandela and other political prisoners. Mandela and de Klerk, in many senses a world apart, had two things in common: pragmatism and the courage to act constructively on the realization that their lifetime goals and visions were unattainable. With reluctance and hesitation, and with widely differing agendas, they set out to find a middle ground from which apartheid's wrongs could begin to be corrected.¹²

III. The legacies of apartheid

Like many other nations, South Africa was born out of conflict, but like few other nations it continued on a path of internal conflict and violence. The National Party established and continuously reinforced a repressive police state to control the majority and enable white South Africans to live comfortably and safely. The architects of apartheid believed that the security of white South Africans depended on the insecurity of black South Africans. The resulting toll was enormous. Four sets of legacies bequeathed by apartheid can be discerned.¹³

The first is the political legacy of constitutionally enshrined political exclusion, which gave rise to the struggle for political participation. This is the legacy that the negotiation process could only address with great difficulty. The NP captured the South African state and moulded a bureaucracy, judiciary, police force and military to serve the goals and interests of the small minority. It used the state as an employment agency for poor Afrikaners. The South African state and many former homeland governments became bureaucracies full of individuals with a vested interest in preventing change. The Afrikaner capture of the state also created in the mind of Afrikaners an identification of their ethnicity with power. As Giliomee observes, 'by the mid-1980s the Afrikaners had come to consider the state as an Afrikaner state or "Boereplaas". Furthermore they have come to value power not for purely instrumental reasons but as an end in itself and as confirmation of ethnic status'.¹⁴

The second legacy is that of economic crisis. The NP established a welfare economy for Afrikaners. Apartheid as an economic system created a massive distribution conflict with great disparities between whites and blacks in wealth, income, health, education, housing and land. Addressing those disparities grew increasingly more difficult owing to the perverse effects of apartheid's economic policy. While it contributed to rapid economic growth in the

¹² Mandela, N., *Long Walk to Freedom: The Autobiography of Nelson Mandela* (Little Brown: London, 1994).

¹³ For a more detailed account of these four legacies, see Ohlson and Odén (note 4), pp. 235–50.

¹⁴ Giliomee, H., 'The last trek? Afrikaners in the transition to democracy', *South Africa International*, vol. 22, no. 3 (Jan. 1992), p. 118.

1950s and 1960s, it became increasingly counter-productive by the early 1970s owing *inter alia* to the rigidity of the labour market, massive state subsidies to white consumers, protection of the manufacturing sector and commercial agriculture, and international sanctions.

The economic legacy of apartheid is particularly explosive because of two mutually reinforcing crises: a productivity crisis and a distribution crisis. These legacies have created a set of economic realities with which a new government will have to deal:¹⁵ declining levels of gross domestic product (GDP) and fixed capital formation; massive unemployment, approaching 60 per cent of the economically active black population; an extremely wide gap between rich and poor; and a legacy of economic waste and capital flight.

The third legacy can be termed a mental legacy and has to do with group identity and the way in which groups and individuals perceive themselves in relation to others. Apartheid was predicated on the development of ethnic group consciousness. With the Verwoerdian creation of the Bantustan (homeland) system and its promotion of tribal tradition, the South African state pursued a policy of actively creating group identities so that Afrikaners could ultimately become a minority in a nation of minorities.¹⁶ Owing to the state's historical insistence on categorizing peoples in South Africa and the psychological fixation of the Afrikaner people on group identity, conflicts over who people are and who they should be are both pervasive and explosive. The identities of the 'old order' have staying power, and the violence used to maintain or oppose the old order has contributed to a two-sided culture of violence that appears to be incompatible with building a democratic, non-racial nation.

Finally, there is the legacy of violence. Violence can be categorized as one of the mental legacies described above. Apartheid's central core was violence against individuals based on skin colour. Analysts of the white right wing make explicit links between the militarization of South African society in the past 20 years and a fascination with violence which is seen as central to Afrikaner identity.¹⁷ Just as apartheid created a culture of violence among right-wing Afrikaners, the struggle against apartheid created a generation of black youths who see violence as an integral part of their identity. The combination of a self-justifying security rationale for violence and the notion of the

¹⁵ See, for example, Wilson, F. and Ramphela, M., *Uprooting Poverty: The South African Challenge*, Report for the Second Carnegie Inquiry into Poverty and Development in Southern Africa (Norton: New York, 1989); Gelb, S. (ed.), *South Africa's Economic Crisis* (David Philip: Cape Town, 1991); Schrire, R. (ed.), *Critical Choices for South Africa: An Agenda for the 1990s* (Oxford University Press: Cape Town, 1990); and Moll, P., Nattrass, N. and Loots, L. (eds), *Redistribution: How Can It Work in South Africa?* (David Philip: Cape Town, 1991).

¹⁶ The Bantustans included four 'independent homelands'—Bophuthatswana, Ciskei, Transkei and Venda—and six 'self-governing territories'—Gazankulu, KaNgwane, KwaNdebele, KwaZulu, Lebowa and QwaQwa.

¹⁷ For the most authoritative account of the origins and growth of Afrikaner nationalism and the history of South Africa's myriad white right-wing organizations, see Van Rooyen, J., *Hard Right: The New White Power in South Africa* (I. B. Taurus: New York, 1994).

victims of violence as less than human is a devastating and destabilizing legacy of apartheid.¹⁸

However, violence must first and foremost be understood as an ideological and political phenomenon resulting from long-term racial oppression strategies and from tactics used in the acute situation of political crisis, turmoil and change of recent years. In part, it is also the result of the virtual absence of legitimate administrative government structures on the local level and the non-viability of alternative popular structures. This absence of legitimate structures capable of maintaining law and order and supporting peaceful values and norms, combined with overall socio-economic distress, fuels the development of a culture of violence. Increasingly, violence becomes perceived not only as a legitimate means of resolving conflicts and securing material advantages, but also as the only viable means of achieving these objectives. Violence also causes and is caused by the high levels of fear, mistrust, misperceptions and the considerable politico-ideological intolerance that so characterize apartheid South Africa.

The challenge for the GNU and subsequent governments is thus monumental. The peoples, parties and leaders of South Africa must consolidate new democratic institutions so that these institutions are accorded broad popular legitimacy. The institutions must also allow for recognition of the needs of ethnic minorities without undermining the ability of the state to create a unified national identity. In order at least partially to respond to high popular expectations, economic policies must be pursued that address the needs of the majority for housing, jobs and education. Such policies must also not undermine domestic and foreign investment and prospects for economic growth. The society must eliminate the violence at its core and provide the means to incorporate marginalized groups for whom violence has become a part of their identity.

IV. The causes of change

The current South African Government must address the problems consciously created by past governments. The dramatic process of change in South Africa in the 1990s prompts two fundamental questions: What happened and why? This section suggests an explanatory framework; section V describes the sequence of events from 1990 to the end of 1994.

Why did the two central actors, the ANC and the NP Government, decide to negotiate? The fundamental values underpinning actor behaviour in the South African conflict between the forces of apartheid and those of liberation had seemed indivisible, implying a struggle that could only end in victory for one party and total defeat for the other. However, domestic and international

¹⁸ A killer can conceive of his victim and the act of killing in two ways. First, he can see it as taking the life of another human being, something which for many rational reasons seems necessary for him to do. The other way is to conceive of it as exterminating vermin. This conjures up images of Hitler's concentration camps, Kampuchea under Pol Pot or Latin American death squads. The apartheid system fuelled both these conceptions among many South Africans.

developments brought about new circumstances that prompted the key actors instead to opt for the path of negotiation and compromise. More specifically, there emerged a mutually perceived, 'hurting stalemate'.¹⁹

Domestically, it was clear to F. W. de Klerk that co-optation politics, the mix of cautious reform and intensified repression pursued by his predecessor, would not result in a Constitution and a political system that satisfied the demands of the majority. Both Total Strategy and WHAM failed to create a new supportive political alliance capable of resolving apartheid's legitimacy crisis. In addition, under crisis-imposed strain there was a gradual weakening of white political cohesion regarding the path South Africa ought to take. For the NP this domestic factor was coupled with three external ones: (a) the growing pressure of international isolation, particularly the effects of exclusion from the normal facilities of international financial markets on the South African economy; (b) the changing international environment, leading to growing cooperation between the former Soviet Union and the West in seeking political solutions to the conflicts in Southern Africa and elsewhere in the Third World; and (c) the military setbacks and political defeat of South African armed forces in Angola, which resulted in Namibia's independence and highlighted the limitations of military aggression as a means of guaranteeing long-term security for apartheid.

The ANC, too, had run out of alternatives. The possibility of overthrowing the apartheid state through guerrilla warfare was never a credible option and became less so as the cold war rapidly became history. Sanctions were equally inefficient as a revolutionary tool. Bargaining with the adversary, not unconditional surrender, is usually both the logical and the preferred result of successful sanctions. A strategy of negotiation to achieve majority rule was also historically the preferred option of the ANC. Finally, negotiations aiming for multi-party democracy did not suggest a great degree of uncertainty for the ANC. The available evidence indicated that it would be the largest party in the country by a large margin.

A classical stalemate resulting from a balance of power had developed. Neither side could defeat the other, while each had the capacity to make untenable the option of the other ruling alone. For both adversaries the costs of pursuing unilateral strategies were rising while the real and potential rewards of cooperation and compromise were becoming increasingly obvious. Vincent Maphai has noted that the choice was no longer between victory or capitulation, but between negotiation or disaster.²⁰

The notion of stalemate has another important implication for understanding the process. Shrinking manoeuvring space and a lack of alternative—not, for example, fundamental political or moral reassessments of earlier positions or deeply felt urges for reconciliation—both caused and subsequently guided the negotiating behaviour of the two main adversaries. A balance of forces,

¹⁹ The concept 'mutually hurting stalemate' is taken from Zartmann, I. W., *Ripe for Resolution*, 2nd edn (Oxford University Press: New York, 1989).

²⁰ Maphai, V., 'The politics of transition to 1990', ed. V. Maphai, *South Africa: The Challenge of Change* (SAPES Books: Harare, 1994), p. 64.

although not static, was a constant which set invisible limitations on the behaviour of both the ANC and the government.

This leads to another question: What was at stake and how did the actors perceive the stakes? The social contract that carried the apartheid state was exclusionist with three principal actors: (a) the NP and the civil service, (b) big business, and (c) the security apparatus (i.e., the armed forces, the police and the myriad intelligence and covert operations organizations). They manifested, respectively: (a) the political, ideological and cultural, (b) the economic, and (c) the security foundations of white minority rule and Afrikaner hegemony.²¹

The stalemate and balance of power situation suggest that to achieve sufficient popular legitimacy a new social contract had to include the mainstream ANC élite and constituencies together with big business and reform-minded elements of the former apartheid regime and to exclude the security apparatus as an independent political actor. (The latter would instead assume its traditional, more subordinate role in democracies: to defend citizens, society and the state.) The entire South African transition process is thus one of realignment: substituting one social contract for another.

Outlining the main challenges and roadblocks facing those seeking such realignment provides a better grasp of the pre-election process. A general problem was the irreconcilable demands on the ANC and government negotiators, whose task was to negotiate in good faith while simultaneously electioneering, two objectives requiring profoundly different behaviour towards an adversary. This caused frequent clashes within the élites of both the NP and the ANC. In addition, each step in the process had to be explained to the electorate so that new constituencies were won without losing old ones.

Another set of problems concerned threats to the transition process, some from within the process itself. First, as Susan Booysen has argued, the ANC and the NP 'entered into negotiations to achieve original, as opposed to compromised, objectives'.²² At the negotiations the parties initially sought to attain what they had been unable to achieve unilaterally. The consensus on which the process was based was narrow, and almost everything was contested. Most importantly, the perceived goals were very different. First, the stalemate placed limitations on the behaviour of the government and the ANC both in and outside the negotiations. However, it did not prevent them from seeking the strategic initiative in order to control the process and thus achieve the result closest to their preferred outcomes. Second, as trade-offs became more frequent ANC and NP constituencies, who saw compromise as betrayal, became increasingly alienated. Large parts of these constituencies had not accepted the existence of a stalemate. Negotiators on both sides had to take

²¹ While big business was part of apartheid's social contract, this does not deny that there were contradictions between corporate South Africa and the government. The monopolies were vacillating: moving closer to the government position when they felt the government was capable of guaranteeing workable conditions for economic activity and a relatively stable economic environment, distancing themselves when they felt it was not.

²² Booysen, S., 'Changing relations of political power in South Africa's transition: the politics of conquering in conditions of stalemate', *Politikon*, vol. 19 (Dec. 1992), p. 64.

into account the futility of reaching élite-level agreements with an adversary which had lost the support of its constituency. Third, there were a multitude of lesser although not insignificant actors, who feared being left behind whenever the two key actors bilaterally advanced the process. Their goals and constituencies had to be accommodated in a context of rapid and unpredictable change.

A more tangible threat came from those actors, such as Inkatha and white right-wingers, who most often stood outside the negotiation process. They represented frustrated elements in or linked to the security apparatus, in combination with other parties or influential actors, who saw themselves as losers in any non-racial and democratic outcome of the transition process. Their concerns could not be ignored since they demonstrated a preparedness to use violence to prevent or influence the transition.

The NP dominated the first half of the pre-election process. The essence of its strategy was an 'attempt to seize the strategic initiative by appropriating the form of the adversary's demands and giving it its own substance'.²³ The NP Government initially pursued a conscious double agenda. On the one hand, it portrayed itself as a responsible political actor trying to find solutions to problems through dialogue and negotiation and preparing for democratic and transparent political competition with the ANC over the future of the country. On the other hand, elements within the government, in collusion with other forces, sought to undermine the ANC as a credible and responsible political force through various forms of covert action.

The inherent dynamics of the process were compelling. Periods of talks and negotiations were replaced by deadlock and crisis as the actors sought to maximize their advantages. This, however, went beyond the invisible limitations imposed by the stalemate, and the ANC and the NP were forced to compromise and make new concessions that reduced the gap between them. Each new crisis resulted in confirmation of the stalemate, which brought the central actors closer but increased the gap between them and those opposed to the process or those who disagreed with its direction. Towards the end of the process, the primary goal of the ANC and the NP was to achieve quick agreement and as inclusive an election as possible. Both saw their support eroding, and this threatened to undermine their future influence and endanger the entire process.

V. The transition

The South African transition process and the April 1994 elections are among the best documented political phenomena the world has seen. Many studies have described and explained the multilateral negotiation process.²⁴ This sec-

²³ Giliomee, H., *Cape Times*, Feb. 1991, quoted in H. Adam and K. Moodley, *The Negotiated Revolution: Society and Politics in Post-Apartheid South Africa* (Jonathan Ball: Johannesburg, 1993), p. 33.

²⁴ Such seminal studies include Adam and Moodley (note 23); Friedman (note 9); Maphai (note 20); Price (note 5); Reynolds (note 1); Strand, P. and Davidson, A., 'The path to democracy', *Odén et al.*

tion synthesizes them: it begins by outlining the positions of key actors prior to constitutional negotiations,²⁵ followed by accounts of the pre-election transition process, the 1994 elections and subsequent developments.

Positions of key political actors prior to negotiations

In 1989 the ruling National Party published a Plan of Action containing the basic principles it thought should guide the elaboration of South Africa's post-apartheid Constitution. The document was based on the assumption that, since South Africa consists of different population groups with differing interests, these interests must be constitutionally entrenched. Two broad principles emerged: first, self-determination for groups in regard to all matters that pertain to that group, so-called 'own affairs'; and second, the principle of power-sharing with regard to all issues of concern to all groups, so-called 'general affairs'. The principles suggested a federal system with devolution of power, minority vetoes, prescribed majorities and consensual decision making.²⁶

The NP also presented preconditions for talks and negotiations, most importantly, that it would not negotiate with any party that did not abandon the armed liberation struggle. The basic contention of the NP, logically flowing from the goals of self-determination and power sharing, was that leaders from all groups should be parties to the negotiations and that all groups must agree to the new Constitution.

The point of departure of the African National Congress and its allies in the Tripartite Alliance was very different.²⁷ In 1988 the ANC had published a set of constitutional guidelines, founded on the principles of non-racialism and a unitary state, both contradicting the NP principles of group (race and ethnicity)-based sovereignty and power sharing. The guidelines also stated the ANC's commitment to a mixed economy, a bill of rights and a democratic system.²⁸ In the Harare Declaration of 1989 the ANC committed itself to a peaceful transition, stated its preconditions for talks with the government and suggested guidelines for the negotiation process.²⁹ These included the repeal of all apartheid legislation, the ending of state-of-emergency legislation, the release of political prisoners, the repeal of security laws and the general with-

(note 4); and Friedman, S. and Atkinson, D. (eds), *The Small Miracle: South Africa's Negotiated Settlement*, South African Review no. 7 (Ravan Press: Randburg, 1994).

²⁵ For reasons of space, only the central actors are presented. For more comprehensive and in-depth accounts of the histories and positions of these and other political actors in South Africa, see Strand and Davidson (note 24) and Reynolds (note 1).

²⁶ The NP Plan of Action is reprinted in 'No domination: group protection', ed. M. Phillips, *Negotiations Package* (Centre for Policy Studies: Johannesburg, 1989), pp. 6-8.

²⁷ The alliance between the ANC, the South African Communist Party (SACP) and the Congress of South African Trade Unions (COSATU) was never formally constituted; it emerged from the context of struggle against the apartheid regime in the second half of the 1980s.

²⁸ The constitutional guidelines are reprinted in Liebenberg, I., *Responses to the ANC Constitutional Guidelines*, Institute for a Democratic Alternative for South Africa (IDASA) Occasional Paper, no. 25 (IDASA: Cape Town, 1990), pp. 11-12.

²⁹ The Harare Declaration was adopted by the OAU *ad hoc* committee on 21 Aug. 1989 and was subsequently endorsed by major sections of the international community; it is reprinted in Liebenberg (note 28), pp. 14-16.

drawal of all impediments to free political activity. The bottom line for the ANC was that the new Constitution should be written by an elected constituent assembly.

The Democratic Party (DP) and the Zulu-based Inkatha movement under Mangosuthu Buthelezi, at the time not yet a political party, were in favour of negotiations and indicated strong preferences for a federal solution to the participation conflict in the country. They also demanded the abolishment of anti-apartheid organizations and the repeal of repressive legislation as pre-conditions.

On the white right, the Conservative Party (CP) argued that negotiations were possible only if all participants accepted as a non-negotiable point of departure the traditional apartheid policy of partition according to race and ethnicity, particularly with reference to a white homeland, a volkstaat. Furthermore, in practice the CP seemed to opt out of the negotiations by refusing to talk to the ANC. On the non-white left the Pan African Congress (PAC) and the Azanian People's Organization (AZAPO) argued that more could be gained from continuing the struggle, while negotiations would mean an unnecessary surrender at a time when the liberation movements had the upper hand.

Negotiating change

The formal negotiation process, ending in late April 1994, dealt with the modalities of the transition and the new Constitution. Parallel to this, two related problem-solving processes were under way: one concerning violence and security, the other economic issues.

After the initial euphoria following Mandela's release the key actors, the NP and the ANC, spent almost two years in a largely bilateral search for a middle ground on which substantive discussion of the participation issue could begin on the central question of how and by whom the new Constitution should be written.

In May and August 1990 two protocols were signed, the Groote Schuur Minute and the Pretoria Minute. They concerned the release of political prisoners and the return of exiles and contained one particularly important concession by the ANC, namely, suspension of the armed struggle. In addition, Mandela mentioned in a January 1991 policy speech that an all-party congress should negotiate the route to a constituent assembly.³⁰ This was a major move in that it went a long way in bridging the gap on the Constitution-making issue. The ANC thus made two major unilateral concessions. This caused discontent within the Tripartite Alliance—first, because the good faith of the government was increasingly being questioned by ANC negotiators, and second, because the Natal-based Inkatha movement had transformed itself into a political party, the Inkatha Freedom Party (IFP), that had begun to project itself onto the national scene through the instigation of unprecedented

³⁰ Friedman (note 9), p. 15.

violence in the townships surrounding Johannesburg.³¹ Despite ANC concessions, no progress was made on the issues of granting indemnity to exiles and releasing political prisoners; the violence continued unabated. In May 1991 the ANC completely suspended its participation in the talks as the government had not shown any intention to stop the violence or investigate alleged collaboration between the IFP and the South African Police (SAP).

In July 1991 the so-called 'Inkathagate' scandal gave substance to the ANC's suspicions. It emerged that the government had funded IFP rallies, financially supported IFP-affiliated trade unions and trained police officers of the KwaZulu/Natal police force. These and subsequent revelations implicated both government members and elements of the security forces in efforts that were designed to assist the IFP in damaging the ANC. The NP Government and President de Klerk personally were weakened by these developments. Two hard-line ministers, Magnus Malan and Adriaan Vlok, were removed from their posts. The ANC returned to the negotiation table with a strengthened hand.

Concern over violence was now widespread in South Africa and the activities of churches, non-governmental organizations (NGOs) and others mobilized a movement to end violence, which also brought the ANC and the NP to the first multi-party structure of the transition. The National Peace Accord (NPA), an agreement in which some of the protagonists agreed to control their followers and set up mechanisms to monitor the violence, was signed in September 1991.³² Peace did not follow, but sufficient trust had been built up to carry the multi-party approach over to constitutional negotiations.

The Convention for a Democratic South Africa (CODESA) assembled in December 1991 with a total of 19 participating delegations.³³ The basis for the convention was that the path to and principles of a new South Africa were the subject of negotiations. Both the ANC and the NP floated new constitutional proposals at CODESA. The ANC wanted an interim government and an elected Constitution-making body (CMB) in place as soon as possible. This required the CODESA exercise to be short-lived so as not to produce a lot of constitutional detail, thereby tying the hands of the CMB. The NP, on the other hand, wanted CODESA to bind the CMB as much as possible in both principle and detail to safeguard minority rights. The NP also envisaged a transitional arrangement for up to 15 years. CODESA set up five working

³¹ For a concise account of Inkatha, its origins, support base and relations to other political actors, see Cawthra, G. and Navias, M., 'Inkatha: past, present and future', *Jane's Intelligence Review*, vol. 5, no. 10 (Oct. 1993), pp. 476-79. A more penetrating assessment of Inkatha is offered in Maré, G. and Hamilton, G., *An Appetite for Power: Buthezi's Inkatha and the Politics of 'Loyal Resistance'* (Ravan Press: Johannesburg, 1987).

³² Thirty-one organizations—including the government, the ANC, Inkatha and all the parties represented in Parliament except the CP—signed the National Peace Accord. The Accord sought to end violence and establish a background for the all-party constitutional talks (CODESA) that followed; see *National Peace Accord* (V&R Drukkery: Pretoria, 1991).

³³ The 19 delegations to CODESA were the South African Government, 4 national political parties (DP, IFP, NP, SACP), 4 national movements (most importantly, the ANC), 4 delegations from the independent homelands (Bophuthatswana, Ciskei, Transkei and Venda) and 6 predominantly ethnic parties from the self-governing territories. Important political actors who were absent from CODESA were the Conservative Party, white right-wing extremist organizations and the PAC.

groups, the two most important dealing with constitutional principles and how the CMB should be set up (WG2) and the terms for an interim government (WG3). The working groups were supposed to present their reports at a second plenary, CODESA II, no later than 15 May 1992.

Meanwhile, the Conservative Party, not a delegation at CODESA, had won several by-elections since the transition process began, and there was a general feeling that the sympathies of the white electorate were moving from the NP to the CP. This led to a whites-only referendum on whether the reforms 'aimed at a new constitution through negotiation' should continue. After an intense three-week campaign, marked by nearly 300 deaths, the bombing of NP headquarters and physical attacks on de Klerk, the whites of South Africa turned out in massive numbers (86 per cent) and voted 68.7 per cent in favour of the reforms.

The referendum posed a strategic dilemma for the ANC. On the one hand, the ANC had a vested interest in seeing the referendum pass. On the other hand, it feared that de Klerk would use a positive result to strengthen his hand in the negotiations. During the run-up to the referendum there was speculation in South Africa that the ANC had made numerous concessions concerning the make-up of the interim government and that the ANC and NP had reached agreement in principle on transitional arrangements. Shortly after the landslide victory of the pro-reform forces in the white community, the NP aborted the tacit agreement on the interim government and took a no-concession stance on the percentage of votes that would be necessary to pass legislation in the interim government and other issues central to Working Groups 2 and 3. These details reflected underlying principles, and on those, compromise could now not be reached.

President de Klerk chose to use his reaffirmed strength with his constituency to gain more benefits in the talks with the ANC. In so doing he attempted to win back the support of the white voters opposed to a settlement. In the short term the NP hard line alienated the ANC, weakened those in favour of concessions within the ANC and destroyed the momentum of trust between the parties. Deadlock followed and CODESA failed to produce a final agreement. However, CODESA was not unimportant. It achieved some breakthroughs and suggested various fundamental compromises that would, some 18 months later, be part of the final agreement leading to the 1994 elections. In May 1992, however, the parties still had more to learn about the adversary's demands and needs and the costs of not reaching agreement.

Following the CODESA failure, bilateral ANC-NP talks also broke down after Inkatha supporters killed 49 ANC followers in the June 1992 Boipatong massacre. The massacre seriously discredited the NP and de Klerk and led the 19 CODESA delegations including the NP, which had previously vehemently opposed any 'international interference', to put the matter of the deadlocked process before the United Nations Security Council.³⁴ The massacre also

³⁴ In July 1992 the UN Security Council unanimously adopted Resolution 765 condemning the escalation of violence in South Africa, demanding measures from the government to bring the violence to an end and agreeing to send a special envoy, Cyrus Vance, on a fact-finding mission to South Africa.

caught the attention of US Under Secretary of State for African Affairs Herman Cohen, who presented the US Government view on minority vetoes, stating that no side could insist on 'overly complex arrangements intended to guarantee a share of power to particular groups which will frustrate effective governance. Minorities have the right to safeguards; they cannot expect a veto'.³⁵

The ANC issued 14 demands to be met before it would resume negotiations and turned to a mass action campaign. ANC Secretary-General Cyril Ramaphosa argued that mass action had a dual purpose: to regain the support the ANC élite had lost from its constituents during CODESA, and to put pressure on the government to agree to a time-frame for the transition to majority rule by a show of strength.³⁶ Success at the negotiation table could only be obtained by showing strength away from it. Some ANC militants argued that the 'Leipzig option', named after events in the former East Germany when street protests toppled the Honecker Government, could work in South Africa, too. The mass protests were successful in that they severely crippled the country. Strikes and stay-aways exacted a heavy toll on the economy, but in September 1992 an event occurred which 'both put pressure on the government, and exposed the mistaken assumptions of the militants within the ANC alliance'.³⁷ Twenty-eight ANC marchers were killed and 200 were wounded as homeland troops in Ciskei fired indiscriminately into the ranks of demonstrators who had departed from the agreed march route in an ill-considered attempt by some ANC march leaders to apply the Leipzig option on the Ciskei Government.

Both the NP Government and the ANC had thus been confronted with the strength of the other—fire-power and popular legitimacy, respectively—and both were reminded that there was no real alternative to negotiation and substantial compromise. In September 1992 the ANC and the NP signed a Record of Understanding (RoU), which was, on balance, a victory for the ANC. The government accepted that an elected CMB would sit for a fixed period of time and be bound only by general principles.³⁸

At this point the pace of the process quickened. Two parallel developments, in addition to the pressure of world opinion and a bleeding national economy, prompted this. First, South African Communist Party (SACP) chairman and leading ANC negotiator Joe Slovo published an article arguing that the ANC-NP balance of force was such that the ANC needed to reconsider some of its non-negotiable principles in order to advance the process. Otherwise, he argued, the entrenchment of white power in the state apparatus and the

Following his visit, Vance proposed a modest presence in South Africa of UN monitors. Security Council Resolution 772 established the UN Observer Mission in South Africa (UNOMSA) and, by November 1992, there were some 50 UN monitors in South Africa, alongside some from the Commonwealth, the EC and various independent observer missions.

³⁵ Cohen, H., 'The current situation', Statement before the Subcommittee on Africa of the House Foreign Affairs Committee, Washington, DC, 23 July 1992, *US Department of State Dispatch*, vol. 3, no. 30 (27 July 1992), quoted in Friedman (note 9), p. 157.

³⁶ *Business Day*, 1 July 1992, cited by Friedman (note 9), pp. 140–41.

³⁷ Strand and Davidson (note 24), p. 124.

³⁸ Record of Understanding, *CODESA Media Release*, 27 Sep. 1992.

security forces could undermine the entire transition. In order to take the fears and interests of whites more into account he suggested three concessions on matters of principle: (a) a 'sunset clause' in the Constitution guaranteeing power sharing between parties for a fixed term after adopting the Constitution; (b) bilateral talks with the NP on regional boundaries, powers and functions prior to deliberations in the CMB; and (c) a general amnesty for political crimes and an acknowledgement of the interests of public servants with regard to job security, terms of retirement, retrenchment packages, and so on.³⁹ After fierce debate in the Tripartite Alliance, in November 1992 the ANC adopted its Strategic Perspective document, which contained all of Slovo's proposals.⁴⁰

The second development was the growing rapport between Buthelezi's Inkatha and white right-wingers. In October 1992 the CP, the IFP and the homeland governments of Bophuthatswana and Ciskei founded the Concerned South African Groups (Cosag). The aim was twofold: to oppose the September RoU and other exclusionary bilateral agreements between the ANC and the NP, and to offer a platform for those in favour of strong federalism and self-determination for ethnic groups. Cosag members insisted that the new Constitution should not be written by an elected assembly.

The Cosag views on the Constitution mirrored those held by the NP at the outset of the process, and many 'old guard' ministers were still hoping that an election alliance with the IFP and the friendly homeland parties could win the elections. However, at the end of 1992 there was a visible shift within the NP towards cooperation with the ANC rather than with the IFP. Some members of government moved towards the ANC while many of those opposed were moved to the background or left politics owing to fatigue and attrition.

The outlines of a bilateral agreement on how to restart the transition process and include other actors emerged in early 1993. It was hoped that the common front presented by the ANC and the NP would ultimately result in an inclusive agreement. The CODESA successor, the Multi-Party Negotiating Forum (MNF), met for the first time on 1 April 1993. In addition to the 19 CODESA delegations another 7 delegations were added, including the CP and the PAC. They withdrew when the MNF agreed to set the election for 27 April 1994. The IFP and the Cosag group combined with the Afrikaner Volksfront (AVF) to form the Freedom Alliance (FA), under the leadership of former Chief of the South African Defence Force (SADF) Constand Viljoen, to fight for a federal/confederal Constitution and regional self-determination.⁴¹

³⁹ Slovo, J., 'Negotiations: what room for compromise?', *African Communist*, 3rd quarter (1992), pp. 36-40. Long before his untimely death in Jan. 1995, politicians and analysts from across South Africa's wide political spectrum agreed on Joe Slovo's monumental contribution, throughout the negotiation process and later as the GNU Minister of Housing, to a political culture of tolerance and peaceful conflict resolution in South Africa.

⁴⁰ ANC, 'Negotiations: a strategic perspective', as adopted by the ANC National Working Committee, Johannesburg, 18 Nov. 1992.

⁴¹ The AVF was formed in May 1993 under the auspices of a committee of former security apparatus generals. The AVF became an umbrella organization for 21 different right-wing groups. The objective was to unite and mobilize whites around the goal of Afrikaner self-determination and a white 'volkstaat'.

The ANC and NP proceeded with urgency in hope that, fearing marginalization, the recalcitrant parties would re-enter the process. Constitutional experts drafted and redrafted the interim Constitution and the transitional arrangements. In November 1993 the MNF agreed on a comprehensive solution that was ratified by the existing Parliament in late December. The interim Constitution stipulated that a Constituent Assembly (CA), consisting of a National Assembly and a Senate, would elaborate the new Constitution.⁴² The interim Constitution included 34 binding principles to steer the drafting work of the CA, principles that suggested that a federal Constitution should emerge. The interim Constitution confirmed the principle of regional government, listed certain regional powers and established a mechanism for determining the details of power distribution between the regional and national levels. Other elements in the final agreement stipulated that: (a) a Transitional Executive Council should guide the country up to elections on 27 April 1994; (b) a National Assembly with 400 delegates should be elected by proportional representation and sit for an interim period of five years; (c) an interim GNU with ministerial posts to all parties obtaining more than 5 per cent on the national ticket in proportion to their election showing should be formed; and (d) a deputy presidency would be given to the second-largest party.⁴³

The agreement weakened those who had opted out of the elections. The dictatorship of Lucas Mangope in Bophuthatswana fell in early March 1994 as civil servants and local security forces joined a popular uprising in favour of reintegration of the self-governing homeland with South Africa. Afrikaner militants from the neo-Nazi Afrikaner Weerstandsbeweging (AWB), a member organization of the Freedom Alliance, rushed to Mangope's assistance only to be chased out by local police and the SADF, ordered in to restore order by Mandela and de Klerk. This event split the right wing: Constand Viljoen resigned from the leadership of the AVF and the FA to form a new party, the Freedom Front (FF), to contest the elections on a ticket to achieve the Afrikaner goal of a white volkstaat through constitutional and non-violent means. Similarly, the Ciskei Government was overthrown by a civil servant strike. Only the IFP held out. However, Buthelezi's strategy failed as support dwindled owing to internal contradictions over election participation.

The FF and the IFP were brought into the process through further compromises by the ANC and the NP. The ANC, the FF and the NP signed a draft accord in April 1994 making provisions for 'the formation after the election of a statutory council, the volkstaatraad, consisting of 20 members, and an advisory body of 25 members, elected by local (presumably volkstaat-supporting) communities in the nine existing provinces. These two bodies would investigate the possibility of creating a volkstaat and report back to the Constitutional Assembly, and in general would prepare the ground for Afrikaner self-

⁴² The Senate has 90 members: 10 senators from each of the 9 provinces. The distribution of senatorial seats for each province mirrors the proportional representation of the parties in the provincial legislature.

⁴³ More specifically, the rule stipulated that every party with more than 20% of the vote should have the right to nominate a vice-president. If only one party received more than 20%, the second-largest party would have the right to nominate a deputy president.

determination in a volkstaat'.⁴⁴ Similarly, after the failed mediation attempt involving Henry Kissinger and Lord Carrington, and facing the risk of a State of Emergency in KwaZulu/Natal, Buthelezi's IFP joined the election process in the last week of the election campaign for a guarantee, enshrined in an amendment to the interim Constitution, of constitutional status in KwaZulu/Natal for the Zulu king.⁴⁵

The centripetal forces in South African politics triumphed over the centrifugal ones. Both the ANC and the NP had made several concessions on major principles; for example, the ANC compromised with respect to regional powers as did the NP on group rights and minority vetoes. Both made multiple minor but crucial concessions on the details of the transition and the Constitution-drafting process.

Two influential processes wholly or partly progressed outside the constitutional engineering framework. First, the issue of violence and security accompanied the negotiations throughout.⁴⁶ In the period February 1990–April 1994 14 000 South Africans were killed in political violence.⁴⁷ The degree of this violence correlated with the constitutional process: whenever the talks achieved positive results, death tolls rose.⁴⁸ It was generally seen as impossible to hold free and fair elections unless the level of political violence was brought down, particularly in Natal and the Pretoria–Witwatersrand (PWV) area (a triangular area encompassing Johannesburg and Pretoria). Furthermore, the instigators and perpetrators had to be identified, not least in order to address the high level of popular suspicion of the security apparatus. Concrete suspicions emerged that a so-called Third Force based in the security apparatus was behind many of the massacres and assassinations that accompanied the negotiation process.⁴⁹ More generally, the legitimacy problem of the secur-

⁴⁴ Van Rooyen, J., 'The white right', ed. Reynolds (note 1), p. 97.

⁴⁵ Act to amend the Constitution of the Republic of South Africa, so as to provide for the institution, role, authority, and status of constitutional monarchs in provincial constitutions; and to provide for matters in connection therewith'. Constitution of the Republic of South Africa, Second Amendment Act, 1994, *Government Gazette*, Cape Town, no. 15681 (26 Apr. 1994), p. 3.

⁴⁶ For a detailed account of this subject, including a comprehensive set of references, see Ohlson and Stedman (note 4), pp. 165–75.

⁴⁷ Human Rights Commission (HRC), *Monthly Repression Report* (HRC: Johannesburg), various issues.

⁴⁸ For statistics and analyses of pre-election political violence, see HRC (note 47); Taylor, R., 'The myth of ethnic division: township conflict on the Reef', *Race and Class*, vol. 33, no. 2 (1991); Charney, C., 'Vigilantes, clientelism and the South African state', *Transformation*, no. 16 (1991); Morris, M. and Hindson, D., 'South Africa: political violence, reform and reconstruction', *Review of African Political Economy*, no. 53 (1992); Everatt, D. and Sadek, S., *The Reef Violence: Tribal War or Total Strategy* (CASE/HRC: Johannesburg, 1992); Howe, G., 'The Trojan horse: Natal's civil war 1989–93', *Indicator South Africa*, vol. 10, no. 2 (1993); Minnaar, A., 'The impact of political violence since 1990 on the transition to democracy in South Africa', Report from the Human Sciences Research Council (HSRC), Pretoria, Aug. 1994; and Minnaar, A., 'An analysis of the scope and extent of political conflict in South Africa with specific reference to the identification of high-conflict areas', Report for the Independent Electoral Commission, HSRC, Pretoria, Mar. 1994.

⁴⁹ The notion of a Third Force is ambiguous. It is generally agreed, however, that the origin of Third Force-related violence is to be found in the military (the Department of Military Intelligence, special forces and the reconnaissance regiments), the police (the security police, special branch, riot squads and former Koevoet officers) and in various 'hit squads' linked to the elements of the security apparatus. For writings on the Third Force, see 'Roots of the Reef War', *New Nation*, 24–30 Aug. 1990; 'Inkatha's secret training base', *Weekly Mail*, 21–27 Aug. 1990; Pauw, J., *In the Heart of the Whore: The Story of Apartheid's Death Squads* (Southern Book: Halfway House, 1991); Minnaar, A. (ed.), *Patterns of Vio-*

ity apparatus, and of the South African Police in particular, owed to the fact that the police force was trained to defend the apartheid system against the liberation movements, leading to a racist and violence-prone organizational culture within the SAP.

Yet some progress was made. The independent Goldstone Commission was set up by President de Klerk in September 1991 within the framework of the NPA, mainly to establish the culpability of state actors in past cases of violence. Some of its 1992 reports led de Klerk to dismiss 23 senior SADF officers for involvement in political assassinations.⁵⁰ The most dramatic findings of the Goldstone Commission were made public in March 1994: 'the report revealed that a network inside the South African Police had colluded with Inkatha in assassination, massacres of civilians and illegal gunrunning'.⁵¹

Other institutions were set up under the NPA. The task of these bodies was to monitor continuing violence, mediate in conflicts and prevent future violence. For that purpose 11 Regional Dispute Resolution Committees (RDRC) and numerous Local Dispute Resolution Committees (LDRC) were set up. Many of these achieved substantial success, even if problems beset some of their activities.⁵² In addition to these multi-party bodies the Tripartite Alliance set up Joint Working Committees (JWCs) in 14 regions to monitor and analyse the forces behind the violence, assist victims, and the like. Many academic and civil society institutions and networks were also involved in independent monitoring of political violence and in efforts at local, community-based management and reduction of conflict.

It is positive that revelations about SAP and SADF complicity in political violence were made in the first place, and that the ANC and independent investigators found elements in the SAP and the SADF willing to cooperate in their search for the truth. It was important that a rapport be struck between some of those who had the ability to control the violence and the principal victims of the violence (i.e., the ANC and its constituency), not least since it was widely believed that President de Klerk was not in full control of the security apparatus. The negative aspect is that there was a hard-core group in the security apparatus prepared to go far in preventing majority rule. This forebodes problems in the process of reforming the police and the armed forces.

lence: Case Studies of Conflict in Natal (HSRC: Pretoria, 1992); Zulu, P., 'Behind the mask: South Africa's Third Force', *Indicator South Africa*, vol. 10 (summer 1992), pp. 8-14; and Ellis, G., 'Third Force: what is the evidence', South African Institute of Race Relations, *Regional Topic Paper*, vol. 93, no. 1 (May 1993).

⁵⁰ For a description of this, see Mkhondo, R., *Reporting South Africa* (Heinemann: New York, 1993), pp. 85-88.

⁵¹ Ohlson and Stedman (note 4), p. 171, referring to Goldstone Commission, *Interim Report on Criminal Political Violence by Elements within the South African Police, the KwaZulu Police and the Inkatha Freedom Party* (made public 18 Mar. 1994).

⁵² Dan Mofokeng, then Director General of the Civic Association of Southern Transvaal, noted that by late 1991 the civic associations had withdrawn from all LDRCs in Southern Transvaal and also from some LDRCs elsewhere in South Africa. The reason was that 'it is untenable to sit and discuss security issues with SAP generals and Inkatha members in the day-time, if these people use the occasion to target you as a victim for night-time assassinations'. Interview by the author, Johannesburg, 17 Nov. 1992.

The second influential process at work outside the constitutional engineering framework was the issue of economic problem-solving. Since February 1990 there had been a convergence of opinion concerning economic policy direction among analysts from business, labour, government and the ANC. The elements of the consensus included acknowledgement that: (a) the government will continue to play an economic role in South Africa; (b) large-scale nationalization is not a viable economic tool; (c) redistribution cannot take place at the expense of economic growth; and (d) emphasis must be placed on regaining South Africa's international economic competitiveness.

This convergence was, and is, relative. Substantial gaps must still be overcome. However, from the point of view of making a positive contribution to the constitutional negotiations, the way this convergence was arrived at set an important example. The economic debate proceeded, with great ease under the circumstances, through two stages: first, representatives of key actors participated in joint studies, book projects or scenario-making exercises to promote common understanding of the various problems, to sensitize participants to the arguments of others and to lower the expectations of South Africans by explaining that certain 'rapid change' strategies with great popular appeal were economically unviable. Second, various forums, specifically the National Economic Forum (NEF), were created to elaborate economic policy formulation among business, labour and state officials.⁵³ In general, progress in the areas of violence reduction and economic problem solving positively influenced the constitutional negotiations, particularly in periods of deadlock.

The elections

The historic elections were held on 26–29 April 1994 and were remarkably free of political violence, in contrast to the preceding months and years. Some right-wing bombing attacks occurred in the Johannesburg area in the days before the elections, killing 21 people and injuring hundreds. However, the police swiftly apprehended 31 Afrikaner nationalists, most of them AWB members, and the attacks stopped. More than 100 000 policemen were on duty at the 12 343 polling stations. In addition, there were 10 000 Independent Electoral Commission (IEC) observers at the polling stations, complemented by 15 000 monitors trained by the National Peace Secretariat (a part of the organizational structure built up after the NPA was signed), some 5000 international observers and several thousand journalists.⁵⁴

The election results were announced on 6 May 1994. Many observers have referred to them as a 'designer result', noting that the outcome was optimal from the point of view of political stability for the next five years (see

⁵³ For details, see Ohlson and Stedman (note 4), pp. 175–85; Lundahl, M. and Moritz, L., 'The quest for equity in South Africa: redistribution and growth', Ohlson and Odén (note 4); and Tucker, B. and Scott B. (eds), *South Africa: Prospects for a Successful Transition* (Juta Books: Cape Town, 1992).

⁵⁴ Poggrund, B., 'South Africa votes', ed. Reynolds (note 1), pp. 172–73.

Table 3.1. Results of the April 1994 South African National Assembly elections

| Party | National share | Assembly seats |
|------------------------------------|----------------|----------------|
| African National Congress | 62.65 | 252 |
| National Party | 20.39 | 82 |
| Inkatha Freedom Party | 10.54 | 43 |
| Freedom Front | 2.17 | 9 |
| Democratic Party | 1.73 | 7 |
| Pan African Congress | 1.25 | 5 |
| African Christian Democratic Party | 0.45 | 2 |
| Others (12 parties) | 0.82 | 0 |
| <i>Total</i> | <i>100</i> | <i>400</i> |
| Total votes: 19 533 498 | | |

Source: Derived from Reynolds, A. (ed.), *Election '94 South Africa: The Campaigns, Results and Future Prospects* (David Philip: Cape Town, 1994), table 1, p. 183.

table 3.1).⁵⁵ The ANC won the election with a clear 62.6 per cent majority, yet insufficient for it to write the new Constitution without the assistance of others, notably the IFP and the NP. The NP received the second largest number of votes; its 20.4 per cent gave it several Cabinet posts as well as a deputy presidency. The NP also secured one strong regional base of support by winning the Western Cape province. The IFP was the third and only other party to be granted Cabinet posts with its 10.4 per cent. It also won the KwaZulu/Natal province, thus providing Buthelezi with both a regional and a national platform within the political system. Constand Viljoen's Freedom Front secured a voice in Parliament for the over 400 000 advocates of a white volkstaat. The Democratic Party failed to break out of its white 'suburban-liberal' strongholds, and the PAC did worse than expected, largely owing to an incompetent election campaign. The African Christian Democratic Party (ACDP) was the only successful party of the new parties that participated in the election.

Voter turnout averaged 86 per cent, impressively high by any standards, although it varied from province to province, with 80 per cent as the lowest voter turnout rate (KwaZulu/Natal) and 92 per cent as the highest (Northern and Eastern Cape). Table 3.2 presents a preliminary calculation of how the ANC and NP votes were distributed according to racial groups (of the total of 19.5 million votes, the ANC received 12.2 million votes, while the NP received 3.9 million votes). Two facts stand out: the almost total dominance of blacks in the ANC vote, despite the movement's strong non-racial platform, and the great inroads made by the NP among non-whites indicating that the NP is far from a spent force in South African politics.⁵⁶

⁵⁵ Schrire, R., 'Bumbling along', *Indicator South Africa*, vol. 11, no. 4 (spring 1994), pp. 7-12.

⁵⁶ For an alternative set of statistics and an interesting analysis, see Schlemmer, L., 'Birth of democracy', *Indicator South Africa*, vol. 11, no. 3 (winter 1994), pp. 17-22.

Table 3.2. Racial breakdown of the April 1994 ANC and NP vote

| Community | Share of national vote | Share of ANC total vote | Share of NP total vote |
|--------------|------------------------|-------------------------|------------------------|
| Black | 73 | 94.0 | 14 |
| White | 15 | 0.5 | 49 |
| Coloured | 9 | 4.0 | 30 |
| Indian | 3 | 1.5 | 7 |
| Total | 100 | 100 | 100 |

Source: Derived from Reynolds, A. (ed.), *Election '94 South Africa: The Campaigns, Results and Future Prospects* (David Philip: Cape Town, 1994), tables 4, 6 and 7, pp. 190–92. Numbers are estimates, based on turnout, regional support and opinion poll indications.

The composition of the Government of National Unity mirrors the proportions obtained by the parties in the assembly elections. Along with the Presidency and the first Deputy Presidency (Thabo Mbeki), the ANC were allotted 18 of 27 ministerial posts and 8 of 12 deputy ministerial posts. The NP got 6 ministries and 3 deputy minister posts in addition to the second Deputy Presidency (F. W. de Klerk), while the IFP received 3 ministerial posts with Buthelezi as Minister of Home Affairs and 1 deputy minister. In Parliament, blacks are under-represented compared to the composition of the electorate, while whites, coloureds and Indians are over-represented. Twenty-two per cent of the parliamentarians are women.

A uniquely placed participant in the election process, Steven Friedman, has referred to the elections as a 'messy miracle'.⁵⁷ In his authoritative account of the elections, he argues that 'the election's administration exceeded the fears of many, the behaviour of voters exceeded the hopes of most'.⁵⁸ On the one hand, in a number of respects the elections were an organizational disaster from the campaign through to the proclamation of the results. This was due to two odd features of the South African elections: the absence of state resources and experience in the administration of truly national elections and the late entry of the IFP, a week before polling day, thus forcing an extraordinarily tight time-schedule and huge practical problems. Friedman presents a horrendous list of problems and irregularities—myriad administrative shortcomings, denial of access, ballot fraud, computer hackers boosting the results of the right-wing parties, improprieties and complaints of intimidation and violence at polling stations—that ought to have rendered it impossible to proclaim the election 'free and fair'.

Nevertheless, it was so proclaimed and this, argues Friedman, reflects the peculiarly successful aspect of the elections. First, voters confounded the pessimists by displaying calm, patience and dignity in the face of administrative

⁵⁷ Friedman is probably the foremost expert on the South African transition process. The paragraphs analysing the election are based on his account; see Friedman, S. and Stack, L., 'The magic moment', eds Friedman and Atkinson (note 24).

⁵⁸ See Friedman, S. and Stack, L., 'The magic moment', eds Friedman and Atkinson (note 24), p. 317.

havoc and, above all, a deep desire to vote as free citizens. Second, the political parties opted for a 'second-best' election result rather than invalidation of the election. No objections were raised when IEC Chairman Richard Kriegler announced the results on 6 May 1994 and proclaimed them free and fair. Following four years of hard-won bargaining experience the parties settled the election issue as they had settled all the other issues—by negotiating a compromise. Friedman suggests that a deal was struck in the sense that complaints about irregularities, which could have caused invalidation of the election results, were withdrawn by all parties. This was relatively easy since the results of the election met the minimum requirements of all major parties.⁵⁹

An uneasy coalition

In terms of visible change, the period from the elections to the end of 1994 resulted in much talk and little action. This is not surprising given the new and unfamiliar working environment for the members of the National Assembly and the Government of National Unity. The performance of the ANC since the elections has been criticized. Commonly voiced criticisms are that, owing in part to ministerial incompetence, some important ministries have seen too little change, other leaders are only too eager to 'ride the gravy train', and the ANC has done far too little to curb crime and re-establish administrative control over townships, hostels and squatter settlements.⁶⁰

The drafting of the new Constitution had made little if any public progress by the end of 1994. Parliamentarians, including those who are members of the constitutional committee set up to streamline the process, complained that there was little time to work on the Constitution: their days were spent in endless debate over both major principles and the details of the day-to-day decision-making and legislative tasks of the National Assembly.⁶¹

The key development related to the economy was the adoption of the Reconstruction and Development Programme (RDP), which was published as a Government White Paper in late September 1994 and passed by the Parliament in November. The RDP has five programmatic goals: (a) to meet basic popular needs, (b) to develop human resources, (c) to reconstruct the economy, (d) to democratize and restructure the state apparatus and society, and (e) to carry out 22 specific lead projects.⁶² The procedure elaborated for the identification, planning, implementation and control of specific projects is a complex mix of approaches that run across and between levels of the state apparatus. This complexity creates problems and divisions. Particularly prob-

⁵⁹ See Friedman, S. and Stack, L., 'The magic moment', eds Friedman and Atkinson (note 24), pp. 323–25.

⁶⁰ Tom Lodge, a prominent analyst of South African politics, now professor of political science at the University of the Witwatersrand, interviewed in the Swedish daily *Dagens Nyheter*, 4 Dec. 1994, p. C3.

⁶¹ ANC parliamentarians interviewed by the author, Harare, 28 Sep. 1994.

⁶² GNU, *White Paper on Reconstruction and Development: Government's Strategy for Fundamental Transformation*, Sep. 1994. A description and a critical assessment of the RDP can be found in Odén, B., ['RDP and Development Assistance'], Report for the Swedish Ministry for Foreign Affairs, Oct. 1994 (in Swedish).

lematic is the local level, where projects such as housing, electrification, sanitation, schooling and health care are to be implemented. Reorganization into new provincial and local administrations is incomplete, human resources are lacking and bureaucratic inertia is frequent. Many communities lack legitimate political leadership until local elections are held (at the earliest in October 1995). In addition, elements of the inherited apartheid bureaucracy are working to make RDP implementation difficult. A commonly held ANC view is that 'we are in command, but not in control'. Intra-ANC divisions have appeared between the national concerns of GNU ministers and the goals and aspirations of provincial government ministers. In other cases, some GNU ministers have been unable to come to grips with the challenges.⁶³ The RDP is, however, the most crucial instrument for economic, political and social change. As such it has taken on a symbolic value, the entire reform process appearing to hinge on an at least partial success of the RDP.

The decline of political violence is notable. A total of 4398 persons were killed in political violence in 1993; for 1994 the figure was 2683, of which 1631 were killed in January–April 1994, with 1052 killed in the latter part of 1994 (i.e., the average monthly death toll was 408 before and 131 after the election).⁶⁴ Several issues emerged related to the restructuring of the security apparatus. First, ANC ministers clashed over the size of the defence budget and the advisability of freeing funds for the RDP by cutting the defence budget, reducing force levels, and decreasing armaments and arms production.⁶⁵ The Defence Minister, former Umkhonto weSizwe commander Joe Modise, sided with the now renamed South African National Defence Force (SANDF) commanders and Armscor executives in opposing such cuts and met with fierce opposition from the RDP Minister Jay Naidoo, Housing Minister Joe Slovo and ANC Secretary-General Cyril Ramaphosa. Even the former Chief of the SADF, FF leader Viljoen, suggested that another 2.5 billion Rand, of a four-year budget of 7 billion Rand, could have been used to boost the RDP. Eventually, however, Modise's budget was passed.⁶⁶ A second issue concerned delays in the integration and renewal of the security and intelligence services. A third problem area was the difficulties former ANC soldiers had with integration into the SANDF. They complained of unfulfilled

⁶³ The Minister of Housing, Joe Slovo, clashed repeatedly with the premier of the PWV (Gauteng) region, Tokyo Sexwale, and with the PWV Minister of Housing, Dan Mofokeng, in the autumn of 1994. The clashes concerned promises made by the provincial leaders to hand out state-owned houses to occupants free and, in other cases, to forget overdue rent and rates charges. Slovo referred to these promises as populist policies that would undercut the national housing strategy. This reflects the difference between provincial leaders primarily sensitive to grassroots demands and national leaders sensitive mainly to fiscal realities. See *SouthScan*, vol. 9, no. 36 (30 Sep. 1994) and no. 37 (7 Oct. 1994). On ministerial inaction, the ministries of health and education, two of the most important ministries in terms of the need for rapid change, are frequently singled out for criticism. See interview with Tom Lodge (note 60).

⁶⁴ See Human Rights Commission (note 47).

⁶⁵ See appendix 14E in this volume.

⁶⁶ *SouthScan*, vol. 9, no. 30 (19 Aug. 1994), p. 11. For an argument in favour of retaining South Africa's arms production and arms export capacity, see Cilliers, J., 'To sell or die: the future of the South African defence industry', *ISSUP* [Institute for Strategic Studies, University of Pretoria] *Bulletin*, no. 1 (1994).

promises made by Modise regarding their conditions of integration, miserable material conditions and patronizing behaviour from white soldiers and officers. Fourth, Modise was heavily criticized for his handling of an Armscor arms smuggling scandal.⁶⁷ Finally, disagreements arose concerning the so-called Truth Commission, a planned inquiry to establish individual culpability for crimes committed under the apartheid system.⁶⁸ South Africa is also experiencing major cross-border problems such as conflict-induced refugee flows, illegal immigration, and arms and drug trafficking.⁶⁹ This has created widespread hostility to 'illegal aliens', a new term for non-South African Africans. There are plans to extend to the borders with Zimbabwe and Botswana the electric fence that currently stands on the border of Mozambique.⁷⁰

VI. The new conflict map: continuity and change

The risk of destabilizing conflicts and large-scale violence was considerably less in December 1994 than at the beginning of the year owing to five generally positive factors.

1. The new democratic political system passed its first test. South Africans proved that the country could conduct peaceful elections. The majority of parties took part in the negotiation process and the elections, and the results were accepted. The universal franchise gave most South Africans a sense of profound dignity, empowerment and self-assertion.

2. A human rights regime was established through a Bill of Rights in the Constitution and the creation of a powerful Constitutional Court.

3. The NP and the ANC committed themselves to solve their conflicts through a policy of national reconciliation. At least nominally, the entire GNU is also committed to the Reconstruction and Development Programme.

4. The level of political violence was considerably reduced following the elections.

⁶⁷ Armscor was delivering 10 000 AK-47 automatic rifles with ammunition; according to alleged forged end-use certificates they were supposedly intended for Lebanon. The weapons were originally bought from Eastern Europe in the 1980s for delivery to the National Union for the Total Independence of Angola (UNITA). One rumour now suggests that the rifles were in fact intended for Angola. Another suggestion is that Armscor was framed into effecting this sale by US arms companies which do not want Armscor off the US embargo list for fear of competition in connection with a large helicopter order for the UK. See *SouthScan*, vol. 9, nos 36-39 (1994).

⁶⁸ The proposal to set up a Commission on Truth and Reconciliation was launched by Justice Minister Dullah Omar in July 1994. The overall purpose is to expose and redress the crimes committed against individuals under apartheid. The Commission will seek to identify the perpetrators of abductions, disappearances, killings and other human rights abuses (amnesty may be offered to those perpetrators who 'come clean'). It will provide a forum for victims to tell their stories and will look at ways of compensating victims. The basic argument for such a commission is that the wounds in the minds of South Africans cannot be healed without transparency and establishment of culpability. The main argument against this is the risk of severe splits in the GNU and among individuals that might emerge in the wake of such revelations.

⁶⁹ On cross-border arms trafficking, see Minnaar, A., 'Guns galore', *Indicator South Africa: Conflict Supplement*, no. 2 (June 1994), pp. 2-7.

⁷⁰ Illegal immigrants make up a growing proportion of the population. Estimates suggest 2-3 million, or more than 5% of the total population, see *SouthScan*, vol. 9, no. 33 (9 Sep. 1994), and no. 39 (21 Oct. 1994).

5. South Africa's international isolation was broken, with all that entails in terms of new possibilities, rights and responsibilities.

This suggests that no concrete and immediate threat to a continued peaceful democratization of South Africa can be readily identified. However, three generally negative factors are at work as well:

1. Most of the fundamental causes of violence and conflict are deeply rooted and structural in nature. Their gradual elimination requires time, resources and a conducive external environment.⁷¹

2. There is a huge discrepancy between what is desirable and what is possible with regard to two central tasks: socio-economic reconstruction, and the reform and legitimization process of the state apparatus at various levels. Resistance to change is particularly strong in the security apparatus and in former Bantustan administrations. Restructuring the security apparatus is crucial.

3. Several constitutional issues with conflict potential remain unresolved, such as issues regarding autonomy and the relationship between and respective powers of national, regional and local government.

The potential for conflict is thus still significant. If these conflicts can be handled under the Constitution and within the framework prescribed by new institutions and the emerging norms of a new political culture, this will support stability. If this is possible, conflicts and their management will not be a threat but rather evidence that the system works. More needs to be known therefore about the current actor configurations and strategies and concrete conflict issues.

Actor strategies

The conflict arena has fundamentally changed, which has influenced the behaviour of the actors. Old enemies participate in the same government and have committed themselves to common goals. However, this is not unproblematic. Many parliamentarians, particularly in the ANC, talk about 'the almost schizophrenic feeling of sitting in a coalition government with the enemy'. On the other hand, old enemies have also become friends. Experience from elsewhere shows that the dynamics of compromise and cooperative problem solving in previously strongly polarized conflict situations produce new ways of thinking. This is clearly true of South Africa's transition thus far. It is no longer possible to talk about purely NP or ANC strategies. On the contrary, individuals in the same party frequently arrive at different conclusions, even on matters of principle. The lack of internal coherence and mounting strain within both the ANC and the NP were obvious by the end of 1994. Instead,

⁷¹ On the continuing problem of political violence, see Mattes, R., 'The wild west', *Indicator South Africa: Conflict Supplement*, no. 2 (June 1994), pp. 7-9; and Louw, A., 'Post election conflict in KwaZulu/Natal', *Indicator South Africa: Conflict Supplement*, no. 3 (Sep. 1994), pp. 14-17.

there appear to be two basic and party-transcending strategies for meeting current and future challenges.

The first strategy is compromise. Its advocates support democracy and a thorough but gradual change of South African society. They want to cooperate in good faith, favour national reconciliation and support the goals of the RDP. They recognize that the balance-of-power-induced stalemate remains a stabilizing factor and are convinced that 'old enemies' will continue to need each other until the democratic culture has been reinforced and tangible redistributive results have been achieved. Those who favour compromise are found in all the parties and at all levels, although the meaning of compromise is different for President Mandela, an SACP member of Parliament or a Freedom Front Afrikaner. They do, however, share the view that pragmatism is better than blind ideology and that debate, exchange and knowledge of one's political opponents are preferable to intolerance and bloodshed.

The second strategy is confrontation. Its proponents fall into three categories.

1. The *radical populists* are those linked mainly to segments within the ANC as well as the PAC, AZAPO and certain groups in the trade union movement which advocate a more rapid and drastic political and socio-economic transformation of society. Their potential base constituency (young, black and unemployed) largely took a watchful attitude, although several instances of strikes and labour unrest occurred.

2. The strategy of *passive resistance* is chiefly represented by officials of the old regime in the bureaucracy and the security forces. Through inaction, threat of strike and the like, this group evidences its fear of loss of privilege and scepticism towards bureaucratic reform and socio-economic reconstruction. This is a key group. Formally, the ANC has power in Parliament and government, but it lacks control of the security forces, the economy, the state apparatus and the government organs at the regional and local level. However, the future legitimacy of the ANC hinges on the establishment of such control and on at least modestly successful implementation of the RDP. Those among the ANC's National Party partners in the GNU and Parliament who put party interests above the national interest would prefer that the ANC not succeed in establishing such control. This would give the NP several advantages: (a) the ANC would experience a legitimacy crisis, pushing it towards the political middle; (b) the NP would do better in the 1999 elections; and (c) the NP would be in a more favourable position to secure for the white minority the privileges enjoyed by it under apartheid.

3. Those who favour *destabilization* are mainly whites on the extreme right and some within the IFP who actively work against South Africa's transformation into a functioning, coherent and democratic state.

Conflict issues

Post-election conflict issues can be structured under the four legacies of apartheid identified in section III. The central political and constitutional issue has been resolved: legally, all South Africans now enjoy equal citizenship. Two main roadblocks, 'resolved' by postponement in the run-up to the elections, remain for the Constituent Assembly to address. The first is the problem of centralization versus decentralization. There is debate on which issues should be regulated by regional or national constitutions and legislation. Generally speaking, the ANC is more centralist than the NP and the IFP, but discussion of the degree of decentralization most likely to strengthen democracy, local and regional autonomy, grass roots participation, transparency, accountability and popular control increasingly transcends party lines. For example, a strong federalist lobby within the ANC has consolidated around some regional prime ministers and has led to serious clashes with ANC ministers in the GNU.⁷²

The second issue concerns ethnic self-determination. In the elections, both the Freedom Front and the IFP were promised 'self determination for cultural communities' and that the relationship between traditional Zulu law and the democratic Constitution would be further negotiated. This will take place in part outside the Constituent Assembly and thus limit transparency and debate. The results of local elections, scheduled for October 1995, will more clearly indicate how these constitutional questions can be resolved.

The issues related to socio-economic conflict remain unresolved. The RDP has come to epitomize the transition process, both symbolically and concretely. Even without bureaucratic inertia and passive resistance, transforming four province and 10 Bantustan administrations into nine new regional administrations (and establishing new structures for economic reconstruction at all levels) would be a complex and monumental challenge. The RDP confronts the ANC leadership with the expectations of its constituency. Compromise actors from the various parties disagree, and those who favour passive resistance and destabilization can do great harm. In a longer perspective the greatest threat to South Africa's stability would come from failure of the RDP. If it is moderately successful all other conflict issues will be defused.

Conflicts related to identity are currently less pronounced. Most South Africans appear prepared to want to break down intolerance, distrust and fear. Adam and Moodley suggest that 'The fundamental cleavages in South African society . . . do not concern issues of culture or race and identity, but social equity and increasing intra-class divisions, particularly in black society. . . . Rather than ethnicity, it is 'class' . . . that matters to most to blacks and whites'.⁷³ However, since socialism is no longer on the agenda in South Africa, neither is much of the class-based analysis of socio-economic inequality. Those problems will probably instead be addressed in terms of race and ethnicity. Ethnicity and ethno-nationalism will continue to influence polit-

⁷² See, for example, the clash between Joe Slovo and Tokyo Sexwale, which also took on a constitutional dimension (note 63).

⁷³ Adam and Moodley (note 23), p. 220.

ics and economics by politicizing and polarizing the need for a sub-national cultural identity, and their effect will be strongest if the RDP fails to offer 'a better life'.

Political violence and general security are difficult issues. The extreme right, the security apparatus, the Third Force and sabotage strategies all operate partly with hidden agendas. White right-wing extremist organizations and the Zulu secessionists within the IFP may be marginalizing themselves,⁷⁴ as demonstrated by the contempt with which people of all races met the right-wing terror bombings of April 1994. The strained relationship between Buthelezi and the Zulu monarchy is also evidence of the weakening of these groups,⁷⁵ as is the resigned 'Rhodesian' attitude ('My farm is my Boerestaat') increasingly assumed by white farmers. The development of the threat of political violence strongly correlates to the restructuring and integration processes in the SANDF, the police and the intelligence organizations.

This owes, in part, to the fact that relatively diffuse right-wing threats emanate from the SANDF and also to other more complex reasons. The GNU must meet the challenge of penetrating, regulating and controlling society, thereby gaining legitimacy. Crime is a major problem in South Africa which has been kept in check by civic associations, self-defence (ANC) and self-protection (IFP) units, vigilante groups and warlords in the absence of adequate local government structures. The leaders of these alternative structures may find it difficult to adjust to the fact that what was patriotic a year ago, such as refusing to pay rent or taxes, is now a crime. Some leaders do not want to relinquish power, which was often acquired or maintained through Mafia-like activities camouflaged by political rhetoric.

Crime must be brought under control, new norms must be introduced and local structures that respect central authority must be reincorporated into the system. If this fails to occur, the legitimacy of the GNU will not be consolidated in the local communities where the foundation of the new, democratic South Africa must be laid and where the RDP is to be implemented. The security apparatus, primarily the police, must help to make these structures function, but it currently lacks popular support. The legitimacy of the ANC and of the GNU at the local level will depend largely on the success with which the security apparatus is able to play its role.

South Africa's new leaders must tap the creativity, resolve and patience that its people have shown thus far in the struggle for a better, more dignified life. In the final analysis, the political leadership must provide a better life for the majority of South Africans.

⁷⁴ For this argument, see Lodge, T., 'The final transition', *Indicator South Africa*, vol. 11, no. 3 (winter 1994), p. 11. Schrire argues that the FF and the PAC are likely to remain permanently off South Africa's political map, while he suggests that the future of the IFP is more unpredictable; Schrire (note 55), pp. 8–10.

⁷⁵ There is a split, which may divide the Zulu nation in yet another area (Zulus are already divided between the ANC and the IFP), between IFP leader Buthelezi and Zulu King Goodwill Zwelithini (Buthelezi's nephew), on three closely related areas: the constitutional question (regional vs. national powers, and the standing of the Zulu Royal House); the political arena (the King moved closer to the positions taken by Mandela and the ANC after the elections); and personal issues (who should represent Zulu national interests). See *SouthScan*, vol. 9, nos 33–38 (1994).

4. Central America: a firm and lasting peace?

STEPHEN BARANYI

I. Introduction

Looking at Central America¹ in early 1995 from the viewpoint of peace and security, the divergencies are striking. On the one hand, since the late 1980s tremendous advances have undoubtedly occurred in respect of war termination, the reduction of foreign military involvement, democratization and economic stabilization. The shooting war in El Salvador is over, and even in Nicaragua the war has largely been brought to an end. By now most of the 200 000 people who were granted refugee status in neighbouring countries during those two conflicts have returned home to rebuild their communities.² Civilian governments are in office across Central America. Military involvement of external powers has greatly declined. Only in Guatemala do war and massive human rights violations continue, but even there a UN-mediated peace process progressed in 1994 with the signing of several accords and the deployment of a UN Human Rights Verification Mission in the field. Most interstate disputes with a potential to lead to war have ended. It is this trend which underpins the portrayal of Central America as a success story compared to Africa, Asia and the former Yugoslavia.

On the other hand, these advances have not been matched by changes in the conditions which gave rise to armed conflict (such as extreme economic inequalities and impunity for political crimes) in the 1960s and 1970s. This threatens to undermine the progress achieved in recent years and could lead to the elimination of Central America from the short list of conflict management successes thus far in the post-cold war era.³ The region is still a long way from the 'firm and lasting peace' envisaged by the Central American presidents

¹ Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua. The 5 countries were part of the United Provinces of Central America after independence from 1823 until 1838; they retained a sense of common identity after the collapse of the federation and have attempted various regional integration schemes since then. Although they are geographically part of the Central American isthmus, Belize and Panama are not considered part of the region because they did not belong to the United Provinces, they remained outside regional integration efforts in the 1960s and they have stayed on the margins of new regional integration processes since 1987. For a discussion of the concept of 'region' and its relevance to Central America, see MacFarlane, S. N. and Weiss, T. G., *The United Nations, Regional Organizations, and Human Security: Building Theory in Central America*, Reports and Papers no. 1994-2 (Academic Council on the United Nations System: Providence, R.I., 1994). For a concise history of the region, see Woodward, R. L., *Central America: A Nation Divided* (Oxford University Press: New York, 1976).

² United Nations High Commissioner for Refugees, Number of Refugees as of 31 March 1987 (UNHCR: Geneva, 1987, unpublished); and International Conference on Central American Refugees, 'Declaration of commitments in favour of the populations affected both by uprootedness and by conflicts and extreme poverty, within the framework of consolidating peace in Central America', UN document CIREFCA/CS/94/4 (29 June 1994).

³ For a recent similar assessment see Millett, R. L., 'Central America's enduring conflicts, *Current History*, vol. 93, no. 581 (Mar. 1994), pp. 124-28.

when they signed the Esquipulas II Accord in 1987:⁴ there are concerns that there could be a new descent into armed conflict in the future; political killings continue even in El Salvador and Nicaragua: over 40 000 Guatemalan refugees remain in Mexico,⁵ awaiting a significant improvement in the human rights situation before returning to their country. While the truth about past violations is now widely known, impunity for such crimes persists across Central America. Most of the region's economies have experienced modest recoveries, yet the fruits of growth continue to be distributed very unequally. Underemployment and rural landlessness continue to threaten social peace.⁶

The movement towards peace has been uneven essentially because the factors which facilitated the ending of armed conflict have not been enough to consolidate these advances into long-term, region-wide conflict resolution. War termination was facilitated by the convergence of five sets of factors: (a) the collapse of the USSR and related shifts in US foreign policy with the end of the cold war; (b) creative peacemaking by Latin American medium-sized powers such as Costa Rica and Mexico; (c) an integrated approach to peace promotion on the part of the UN, to a lesser extent the Organization of American States (OAS) and non-governmental organizations (NGOs); (d) the exhaustion of the belligerents; and (e) the emergence or re-emergence of credible national conciliators. The details and relative prominence of these factors have varied from country to country, but in the three cases considered in this chapter they converged to bring the warring parties to the table and help them agree on a framework for peace negotiations. In El Salvador and Nicaragua this led to agreements on cease-fires, the voluntary demobilization of combatants and broader institutional reforms. Yet these factors have not sufficed to generate agreements for war termination in Guatemala and it has proved difficult to extend their positive impact to the post-war resolution of conflicts. This chapter explains how and why this has occurred.

Many of these patterns are common to Central America as a whole. This chapter focuses on El Salvador, Guatemala and Nicaragua because it is these countries which have experienced the most long-drawn out wars and complex peace processes in the period since World War II.

⁴ The Procedure for the Establishment of a Firm and Lasting Peace in Central America, 7 Aug. 1987, also at the time called the Arias Plan, was signed in Esquipulas, Guatemala, by the presidents of Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua on 7 Aug. 1987. For the text see *New York Times*, 12 Aug. 1987; and *Inforpress Centroamericana*, no. 751 (13 Aug. 1987). See also SIPRI, *SIPRI Yearbook 1988: World Armaments and Disarmament* (Oxford University Press: Oxford, 1988), p. 297; *SIPRI Yearbook 1989: World Armaments and Disarmament* (Oxford University Press: Oxford, 1989), p. 354; *SIPRI Yearbook 1990: World Armaments and Disarmament* (Oxford University Press: Oxford, 1990), p. 415; and *SIPRI Yearbook 1991: World Armaments and Disarmament* (Oxford University Press: Oxford, 1991), pp. 377–78.

⁵ See International Conference on Central American Refugees (note 2).

⁶ During the 1980s, El Salvador experienced negative annual GDP growth averaging -0.4%; since then, it has had positive growth of 3.4% (1990), 3.5% (1991) and 4.6% (1992). Guatemala had negative growth during the early 1980s; its recovery began in 1987 and since then it has experienced growth rates of 3.1% (1990), 3.3% (1991) and 4.6% (1992). In Nicaragua negative growth began in 1984 and lasted until 1991; 1992 was the first year of net growth (0.4%). GDP growth per capita, however, is much less impressive. See Inter-American Development Bank, *Economic and Social Progress in Latin America: 1993 Report* (Johns Hopkins University Press for the IADB: Washington, DC, Oct. 1993).



Figure 4.1. Map of Central America

II. Historical background

Despite the highly politicized debate over the causes of war in Central America during the 1980s, it is now widely agreed that external intervention aggravated conflicts which were rooted in two basically local conditions.⁷ First, there was an enormous gap between sustained macroeconomic growth from the mid-1950s to the late 1970s and an extremely unequal distribution of its material benefits.⁸ Second, politics became polarized between two sectors: business and military élites who resorted to judicial manipulation, electoral fraud and outright repression to protect their narrow interests; and coalitions of opposition parties, grass-roots organizations and increasingly strong guerrilla armies.

These tendencies manifested themselves differently in each country, but by the early 1980s the region was host to armed conflicts between revolutionary movements—in Nicaragua the Sandinista National Liberation Front (Frente

⁷ *Report of the President's Bipartisan Commission on Central America* (Washington, DC, 1984); Child, J. (ed.), *Conflict in Central America: Approaches to Peace and Security* (St. Martin's Press: New York, 1986); and Dunkerley, J., *Power in the Isthmus: A Political History of Modern Central America* (Verso: London, 1988).

⁸ For details on growth and distribution during this period, see Bulmer-Thomas, V., *The Political Economy of Central America Since 1920* (Cambridge University Press: Cambridge, 1987); and North, L. (ed.), *Between War and Peace: Choices for Canada* (Between the Lines: Toronto, 1990), pp. 29–36.

Sandinista para la Liberación Nacional, FSLN), which had overthrown the Somoza regime and formed a new government in 1979, in El Salvador the Farabundo Marti National Liberation Front (Frente Farabundo Marti para la Liberación Nacional, FMLN) and in Guatemala the National Revolutionary Unity (Unidad Revolucionaria Nacional Guatemalteca, URNG)—and military-dominated regimes in El Salvador, Guatemala and Honduras as well as the remnants of the Somoza regime, revived as the Nicaraguan Resistance (Resistencia Nicaragüense, RN, also known as the Contras).⁹

The escalation of US and Soviet-bloc military involvement fuelled these endogenous conflicts. Historically, the USA had armed, trained and in some cases created military forces throughout the region, but its involvement grew steadily under the Reagan Administration, particularly through the provision of intelligence, planning, training and arms supplies to the armed forces of El Salvador and Honduras as well as to the RN. Meanwhile the USSR, Cuba and other Soviet-bloc countries established major programmes of military assistance to Nicaragua and covertly provided military assistance to the FMLN. External military involvement encouraged a dramatic expansion of military, paramilitary and guerrilla forces across the region.¹⁰

It is striking that international organizations remained largely on the sidelines of conflict resolution efforts at this stage. In January 1983 four Latin American medium-sized powers (Colombia, Mexico, Panama and Venezuela) institutionalized earlier *ad hoc* peacemaking efforts by creating the Contadora Group. As the wars and superpower involvement escalated steadily, Contadora worked to forge comprehensive peace agreements to be signed by the five governments of Central America.¹¹ In early 1986, it was joined by Argentina, Brazil, Peru and Uruguay in the Rio Group, formed to promote peace in Central America and coordinate broader foreign policy initiatives; behind the scenes the European Community and medium-sized powers such as Canada supported the Contadora process. On the margins of this coalition of states, transnational policy networks of NGOs were also working to prevent a US invasion of Nicaragua and promote dialogue in Central America. Even so no definitive agreement was achieved, and by late 1986 Contadora was widely viewed as having exhausted its peacemaking role.

⁹ On these forces and the roots of war in each country, see Goldblat, J. and Millán, V., 'The Central American crisis and the Contadora search for regional security', SIPRI, *SIPRI Yearbook 1986: World Armaments and Disarmament* (Oxford University Press: Oxford, 1986), pp. 523–42.

¹⁰ For longitudinal data on the expansion of armed forces in the 1980s, see Klepak, H. P., *Security Considerations and Verification of A Central American Arms Control Regime*, Arms Control Verification Occasional Papers no. 5 (External Affairs and International Trade Canada: Ottawa, Aug. 1990), appendix C.

¹¹ The draft treaties tabled from 1984 to 1986 were impressive in scope: they included provisions for confidence-building measures, democratization, refugee repatriation, cease-fires, demobilization of combatants, regional demilitarization including the withdrawal of all foreign military bases and forces, regional economic integration and international verification. For details, see Bagley, B., Alvarez, R. and Hagedorn, K. J. (eds), *Contadora and the Central American Peace Process: Selected Documents* (Westview Press: Boulder, Colo., 1985); and Goldblat and Millán (note 9).

It was not until November 1986 that the UN and the OAS became directly involved in the peace process, initially with an offer of conflict management services to the Central Americans and to the wider circle of Latin American medium-sized powers. These services included fact-finding and peacekeeping, but mediation was initially left in the hands of the Contadora Group.¹² When this produced no breakthroughs, President Oscar Arias Sánchez of Costa Rica launched his own peace initiative, originally aimed at ending the Nicaraguan war on terms which could attract bipartisan support in the USA, but recast to deal with the conflicts across the region. The result was the Esquipulas II Accord which, although less ambitious than the Contadora drafts, included provision for national dialogue and democratization in each country, the cessation of assistance to insurrectionist forces and regional economic integration. It also established an International Commission for Verification and Follow-up (Comisión Internacional de Verificación y Seguimiento, CIVS) composed of the signatories, members of the Rio Group, and one representative each from the UN and the OAS.¹³

The CIVS visited the region to monitor compliance with the Accord, but when it tabled a report critical of the signatories' records (and that of the USA) in January 1988 it was promptly dissolved by the Central American governments. For the next year, the signatories kept the Esquipulas process going but the forum gradually lost its centrality since it lacked mechanisms for impartial monitoring and was somewhat overshadowed by the increasingly compartmentalized national peace talks that it had spawned. It is these processes of national dialogue which became the main contexts for negotiating war termination and international verification.

The movement towards peace in Nicaragua and El Salvador had a salutary effect on interstate disputes.¹⁴ Military tensions between Honduras and Nicaragua decreased after 1990, and no significant border clashes have occurred since. The territorial dispute between El Salvador and Honduras was referred to the International Court of Justice (ICJ) and its ruling was accepted, leaving the Belize–Guatemala dispute as the only major territorial flashpoint in

¹² Press briefing by Executive Assistant to the UN Secretary-General, 18 Nov. 1986. That day the UN General Assembly passed Resolution 41/37, reiterating the international community's support for Contadora but not mandating the Secretary-General to play a greater role in the peace process. In making his offer, the Secretary-General was therefore acting on his own initiative, although he probably had support from key Latin American and European states. See United Nations, *Official Records: Forty-First Session*, suppl. no. 53, UN document A/41/53 (1987).

¹³ Procedure for the Establishment of a Firm and Lasting Peace in Central America (see note 4). For a comprehensive analysis of the factors which led to the agreement as well as of its implementation until 1990, see Opazo Bernales, A. and Fernandez, V. R., *Esquipulas II: una tarea pendiente* [Esquipulas II: unfinished business] (Confederation of Central American Universities: San José, Costa Rica, 1990) (in Spanish).

¹⁴ Although this chapter focuses on the conflicts in El Salvador, Guatemala and Nicaragua, interstate disputes have given rise to armed conflicts in the past. On contemporary interstate conflicts see International Institute for Strategic Studies, *Strategic Survey 1992–93* (Brassey's for IISS: London, 1993). On the revival of the Belize–Guatemala territorial dispute in 1993, see International Institute for Strategic Studies, *The Military Balance 1993–94* (Brassey's: London, 1993), p.173; and *Inforpress Centroamericana*, nos 1037 (1 July 1993) and 1038 (8 July 1993).

Central America at present.¹⁵ Under the Esquipulas process (with technical and political support from the UN) a Central America Security Commission was established in 1990 as a forum for regional arms control and disarmament talks. Its greatest achievements were the narrowing of disagreements on a scheme for a regional arms balance and the compilation of a regional arms register.¹⁶ However, by 1994 the Commission had lapsed into inactivity as it became clear that reductions in military forces responded primarily to national rather than to regional discussions. It is these negotiations and broader national peace processes which remained the primary contexts for conflict management in Central America.

III. Nicaragua

Progress towards the resolution of the internal conflicts began when, soon after the signing of the Esquipulas II Accord, the government established a National Reconciliation Commission (Comisión Nacional de Reconciliación, CNR) for dialogue with the internal political opposition and initiated cease-fire talks with the RN through the Commission. The parties signed the Sapoa Accord on 23 March 1988,¹⁷ under which they committed themselves to a 60-day cease-fire, continued talks and the concentration of RN forces inside designated security zones. Faced with an impasse in talks with the RN and the refusal of the UN to help to compel the RN to make concessions, in February 1989 the FSLN government gave in to a major demand of the *political* opposition by advancing the date of national elections and promising that these would be monitored by the UN and the OAS. Agreement was reached on the conditions for free elections scheduled for February 1990. In August 1989, after some debate over which organization should take the lead, the UN despatched the UN Verification Mission for the Nicaraguan Elections (Observadores de las Naciones Unidas para la Verificación de las Elecciones en Nicaragua, ONUVEN) and the OAS deployed its own electoral team to Nicaragua.

Progress in the talks with the political opposition opened the door to further breakthroughs in August 1989. First, the Central American presidents signed an agreement setting out the terms for the voluntary repatriation of Nicaraguan refugees and agreed to request the deployment of a joint UN–OAS International Verification and Support Commission (Comisión Internacional de Apoyo y Verificación, CIAV) to assist the implementation of the repatriation agreement. Second, Nicaragua dropped a suit which it had filed against Honduras in the ICJ for Honduran support to the RN, and Honduras dropped

¹⁵ On the ICJ ruling, see International Institute for Strategic Studies, *Strategic Survey* (note 14), p. 223.

¹⁶ Rojas Aravena, F., 'Esquipulas: un proceso de construcción de confianza' [Esquipulas: a confidence-building process], *Estudios Internacionales*, vol. 4, no. 8 (July–Dec. 1993) (in Spanish). For a dated but comprehensive analysis of the prospects for a regional arms control regime, see Klepak (note 10).

¹⁷ See *Inforpress Centroamericana*, no. 782 (7 Apr. 1988).

its objection to the activation of a request for the UN to deploy a mission to verify the security provisions of Esquipulas II.

In November 1989, the UN Security Council authorized the establishment of the UN Observer Mission in Central America (Observadores de las Naciones Unidas en Centroamérica, ONUCA): its initial mandate was strictly limited to verifying the security provisions of the Esquipulas II Accord.¹⁸ Together with continuing mediation by the CNR and by UN officials, ONUVEN, CIAV and ONUCA offered a multi-faceted approach to peace promotion in Nicaragua.

This coordinated approach produced impressive initial results. International verification facilitated the holding of free and fair elections while continuing mediation facilitated a peaceful transfer of power to the opposition party, President Violeta de Chamorro's Nicaraguan Opposition Union (Unión Nacional Opositora, UNO). Between March and May the FSLN signed a series of transition accords with the UNO and the RN defining the parameters for the demobilization of the RN, the peaceful transfer of power and the reduction of the army (the Ejército Popular Sandinista, EPS).¹⁹ Once steps had been taken to implement these accords, the USA allowed the Security Council to expand the mandate of ONUCA to allow it to oversee the demobilization of the RN. On the basis of its expanded mandate, ONUCA carried out what became known as Operation Home Run, verifying the voluntary demobilization of over 20 000 RN combatants between April and July 1990, while the OAS assumed responsibility for the reintegration of these combatants and their families into Nicaraguan society through CIAV.²⁰ As a result of this progress, ONUCA quickly reduced its presence in Nicaragua to a small contingent of military observers, redeploying the rest across the region to fulfil its initial mandate of patrolling borders to ensure that no government was aiding insurgent forces.

In retrospect, it seems that the UN pulled out of Nicaragua prematurely, leaving Nicaraguans and the OAS to face challenges which exceeded their limited conflict management experience. Only a fraction of the arms used by the RN were actually collected by ONUCA.²¹ By 1992, several thousand former combatants from the RN and the EPS had rearmed themselves to claim the land, credit and other goods promised to them under the peace accords or to exercise 'frontier justice' in the perceived absence of the rule of law. These tensions were aggravated by continued pressure from the USA for the dis-

¹⁸ ONUCA was authorized to 'monitor on a regular basis areas reported to harbour bases and camps of irregular forces . . . monitor on a regular basis land, sea and air borders across which military operations might be carried out or assistance of the kind excluded . . . might be provided . . . [and] investigate immediately any complaint received from one of the five Governments . . .'. See United Nations, Report of the Secretary-General, UN document S/20895 (11 Oct. 1989), para. 11.

¹⁹ Reported in *Infopress Centroamerica*, no. 886 (17 May 1990).

²⁰ United Nations, Report of the Secretary-General. United Nations Observer Group in Central America, UN document S/21909 (26 Oct. 1990), annexes I and II; and Organization of American States, *Annual Report of the Secretary General 1991-92* (OAS: Washington, DC, 1992).

²¹ Baranyi, S. and North, L., *Stretching the Limits of the Possible: United Nations Peacekeeping in Central America*, Aurora Papers no. 15 (Canadian Centre for Global Security: Ottawa, 1992), p. 15.

missal of senior FSLN officers from the security forces and settlement of compensation claims for properties allegedly confiscated from US citizens.²²

In July 1993 it seemed once again that the country was on the verge of fully fledged internal war when the United Peasants' and Workers' Front (Frente Revolucionario de Obreros y Campesinos, FROC) took the northern city of Estelí; on the government's orders, the army responded with a counter-assault in which 40 persons were killed and 160 seriously injured. Weeks later rearmed RN members kidnapped a delegation of government and FSLN officials; ex-EPS combatants responded by kidnapping leaders of the UNO. Cardinal Obando y Bravo and OAS Secretary General João Baena Soares stepped in to help defuse the crisis.

The human rights situation was also a source of concern. CIAV was supposed to provide verification services in this area, but its focus on former RN members apparently caused it to take sides and lose its credibility as an impartial monitor. In October 1992, therefore, the government appointed a Tripartite Commission which included CIAV to investigate the broader human rights situation. In December 1993 the Tripartite Commission tabled its third report, which concluded that, of the 50 killings which it had investigated, 42 of the victims were ex-RN members and eight had been FSLN sympathizers. According to the Commission, the EPS and the National Police were responsible for 43 per cent of these killings, most of them the result of excessive use of force. The rest had been committed by civilians, including ex-RN members and FSLN sympathizers. Over three-quarters of these cases had not been followed up with adequate investigations or prosecutions.²³

The return to violence was the result partly of the incapacity of the country's political and judicial institutions to channel social conflict peacefully, partly of the inability of either the market or the state, under the constraints of extreme indebtedness, to satisfy the basic needs of demobilized combatants and other Nicaraguans, yet CIAV's tendency to abandon the norm of impartiality, meddling by the USA and the harshness of the policy reforms sponsored by the International Monetary Fund (IMF) and World Bank since 1991 appear to have aggravated these problems.

²² Under pressure from Republicans in Congress, the Bush and Clinton administrations each tied aid disbursements to Nicaragua to changes in the security forces and the settlement of property disputes in favour of US citizens. In 1993 Congress passed the Helms-Gonzalez Amendment, under which the US Government is required to suspend aid to any government which does not respect the property rights of US citizens. Although the Chamorro Government has taken steps to resolve most cases, one difficulty is that many of the US claimants were born in Nicaragua and were allegedly supporters of the Somoza dictatorship. See Washington Office on Latin America, *Nicaragua: Reconciliation Awaiting Recovery* (WOLA: Washington, DC, 1991); Americas Watch, *Fitful Peace: Human Rights and Reconciliation in Nicaragua under the Chamorro Government* (Americas Watch: Washington, DC, 1991); and Millett (note 3), p. 128.

²³ Comisión Tripartita, *Memoria de trabajo 1992-93* [Annual report 1992-93] (Impresiones COPROSA: Managua, 1993) (in Spanish); Human Rights Watch/Americas, 'Separating facts from fiction: the work of the Tripartite Commission in Nicaragua', [no serial title], vol. 6, no. 13 (Oct. 1994); and Centro Nicaragüense de los Derechos Humanos (CENIDH), *Derechos humanos en Nicaragua, abril 1993-abril 1994* [Human rights in Nicaragua, April 1993-April 1994] (CENIDH: Managua, 1994) (in Spanish).

After a series of aggressive counter-insurgency operations by the EPS and as a result of the good offices of Cardinal Obando y Bravo, the last major organization of rearmed combatants remaining in Nicaragua, the Northern Front (Frente Norte, FN 3-80), suspended its military actions on 9 February 1994. The government responded by immediately suspending its military operations and on 24 February the government and FN 3-80 signed a peace agreement.²⁴ In return for the demobilization of approximately 500 FN 3-80 combatants by 15 April, the government promised gradually to withdraw its troops from most towns in the Nueva Segovia region. FN 3-80 combatants were appointed as chiefs and sub-chiefs of the National Police in the region and it was agreed that half of the police staff in the area would be drawn from FN 3-80 ranks, after they had received basic training. The parties agreed to coordinate the implementation of several agricultural and social services projects in the area, backed by financing from the United States Agency for International Development (USAID) and the European Union (EU). Finally, they agreed that implementation of the 24 February agreement would be monitored by an *ad hoc* group including Cardinal Obando y Bravo, CIAV, two human rights organizations and representatives of the parties themselves.²⁵ Even so, about 300 FN 3-80 combatants defected from the agreement, the government responded with an offensive in April and another counter-insurgency operation was conducted in June.

By 1994 the EPS had been reduced to 15 200 personnel (from 77 000 in 1989) and many weapons had been sold off, but tensions persisted over the autonomy of the army from civilian control. These frictions centred on the Chief of the EPS, General Humberto Ortega, a former FSLN 'comandante'. Backed by the USA, President Chamorro announced in September 1993 that General Ortega would be retired in 1994; the General retorted that this would only take place after a new EPS law (proposed by the EPS itself) had been publicly debated, passed by the National Assembly and signed by the president. The General also faced charges of covering up a murder in 1990.

The issues of civilian control over the army and the position of General Ortega were separated on 18 May 1994, when the General's retirement in February 1995 was announced jointly by the President and the General. The following day the Executive and the EPS Military Council presented their Code of Military Organization, Jurisdiction and Pensions to the National Assembly. The Assembly passed an amended version of the bill on 23 August and the president signed the law in September. It fell short of demands by certain sectors that the EPS be disbanded; it also fell short of the more moderate call for EPS subordination to a civilian Minister of Defence. Yet the new Code enshrined the principle of civilian supremacy and the norm of an apolitical, professional force; it also codified the mechanisms for the orderly trans-

²⁴ *Inforpress Centroamericana*, no. 1070 (10 Mar. 1994).

²⁵ *Inforpress Centroamericana*, no. 1067 (17 Feb. 1994); and no. 1076 (28 Apr. 1994).

fer of command and provided a face-saving political solution to the conflict which had pitted the government against both the EPS and the FSLN.²⁶

This political breakthrough was complemented by important developments in the economic realm. In April 1994 the government reached an agreement with the IMF on an Expanded Structural Adjustment Facility (ESAF), under which Nicaragua was to receive \$750 million in fresh concessional loans over the period 1994–97 in exchange for implementing further market-oriented reforms. The ESAF agreement was applauded by the World Bank Consultative Group on Nicaragua and the government predicted 3 per cent growth for 1994. Yet serious doubts remain about whether the recipe of the IMF and the World Bank will work in Nicaragua unless there is a significant reduction of the country's extremely high external debt in 1995, and unless social compensation measures are applied quickly and coherently.²⁷ By laying off more public sector workers as required by the ESAF, the government will increase unemployment (which stood at 20 per cent and underemployment at 60 per cent in 1994), at least in the short run. Lay-offs and the removal of price subsidies provoked violent disputes throughout 1994. Ex-combatants from both sides occupied various embassies to draw attention to unfulfilled promises for security, land and social services. Violent land conflicts, rooted in attempts to reverse land reforms passed by FSLN governments, continued on a weekly basis. The September 1994 decision by the Clinton Administration to exempt Nicaragua from the Helms–Gonzalez Amendment, under which the USA must withhold aid to governments which have not resolved land disputes with US citizens, gave the Chamorro Government some time to negotiate legal solutions to land disputes. However, some observers fear that the credit squeeze and other steps mandated by the ESAF could aggravate these disputes and lead to renewed armed conflict in the countryside and in the cities.²⁸

The narrow victory of a far-right party, the Liberal Constitutionalist Party (Partido Liberal Constitucionalista, PLC), and the poor showing by both the FSLN and the UNO in the Atlantic Coast regional elections in February 1994 suggest that there will be no deviation from market-oriented reforms either before or after the national elections in 1996. Regardless of whether this macroeconomic strategy brings the promised results, the PLC's success suggests that the *de facto* Chamorro–FSLN alliance which permitted the minimum consensus required for peace may not endure.²⁹ Under these conditions,

²⁶ *Inforpress Centroamericana*, no. 1094 (1 Sep. 1994).

²⁷ World Bank, 'Consultative Group praises Nicaragua's economic reform efforts; calls for intensified efforts to alleviate poverty and reduce debt overhang', Press Release (17 June 1994); and *Inforpress Centroamericana*, no. 1085 (30 June 1994). In 1994, Nicaragua's external debt stood at \$11 billion, the highest per capita debt and the second highest debt in relation to GDP in the world. Nicaragua is on the Paris Club's list for a major debt reduction in 1995. See Debt Crisis Network, *Nicaragua's Debt to Western Governments* (DCN: London, 1994).

²⁸ *Inforpress Centroamericana*, no. 1091 (11 Aug. 1994), no. 1102 (27 Oct. 1994) and no. 1104 (10 Nov. 1994). See also *Inforpress Centroamericana*, no. 1107 (1 Dec. 1994) for a statement by the UN Secretary-General that in Nicaragua 'the principal threat to the democratic system is not political conflict, but the deterioration of living conditions and the consequent loss of faith in democracy and its institutions'.

²⁹ See Rillaerts, S., 'Menaces d'extrême droite sur le Nicaragua' [Threats from the extreme right to Nicaragua], *Le Monde Diplomatique*, vol. 41, no. 486 (Sep. 1994), p. 3 (in French).

it is fair to predict that there will be sustained demand for impartial human rights verification by the Tripartite Commission and by CIAV in that context. International involvement which facilitates an equitable and sustainable economic recovery will also be required.

IV. El Salvador

Talks between the government and the FMLN had taken place several times since the beginning of the war but were seen as an attempt by successive governments to maintain international support while waging war on the leftist guerrillas. Within the Esquipulas framework, a National Reconciliation Commission (Comisión Nacional de Reconciliación, CNR) was set up in El Salvador and attempted to revive these talks without success. An FMLN offensive in November 1989 was followed by low-profile talks initiated by the UN. In April 1990 the UN brokered the Geneva Agreement which defined the normative framework for future talks and for UN mediation.³⁰ In May it helped to forge an agreement which set the agenda and calendar for the negotiations while also affirming the central role of the UN in the verification of all future accords. Finally, in July 1990 it brokered the Accord on Human Rights, the first substantive agreement in the peace process. The Accord specified the parties' obligations under international human rights law and mandated the establishment of a UN mission to conduct investigations and promote an end to human rights violations from the date of its establishment onwards. These initial successes were aided by the military stalemate on the ground and by continuing pressure on both sides by Colombia, Mexico, Spain and Venezuela, which had formed a group of 'Friends of the Secretary-General' to assist UN efforts. A shift of policy in Washington under the Bush Administration, brought about by congressional pressure, the weakening and eventual collapse of the USSR and the resultant winding down of the cold war were crucial factors which facilitated these peacemaking breakthroughs.³¹

Shortly after signing the Accord on Human Rights, the parties asked the UN to deploy a mission to assist its implementation. The FMLN insisted that this be separate from ONUCA and be directed by a civilian. After another FMLN offensive and pressure from other parties, a second substantive agreement was signed in April 1991 and Security Council Resolution 693 of 20 May was passed, mandating the deployment of ONUSAL, the UN Observer Mission in

³⁰ All the accords signed between Apr. 1990 and Jan. 1992 are compiled in United Nations, *El Salvador Agreements: The Path to Peace* (UN: New York, 1992).

³¹ The Accord on Human Rights contained provisions that the Government and the Army had opposed for years, but it was signed one month after the US House of Representatives passed a bill recommending a 50 per cent reduction in military aid to El Salvador, and just when the Senate was preparing to force the President's hand by supporting that bill. See Baranyi and North (note 21), p. 24. For other analyses of the processes leading to the peace accords, see LeoGrande, W. M., 'After the battle of San Salvador', *World Policy Journal*, vol. 7, no. 2 (spring 1990); Acevedo, C., 'Balance global del proceso de negociación entre el gobierno y el FMLN' [Analysis of the negotiations between the government and the FMLN], *Estudios Centroamericanos*, vol. 57, nos 519–520 (Jan.–Feb. 1992) (in Spanish); and Karl, T. L., 'El Salvador's negotiated revolution', *Foreign Affairs*, vol. 71, no. 2 (spring 1992).

El Salvador (Observadores de las Naciones Unidas en El Salvador) to verify the Accord on Human Rights.

Cease-fire negotiations began shortly after the Security Council mandated ONUSAL. ONUCA played a logistical role in shuttling FMLN field commanders to the talks, which helped build the guerrillas' confidence in the organization's capacity, while the initial human rights monitoring activities of ONUSAL helped build the confidence of both the FMLN and the government in the UN's impartiality. These activities facilitated the signing of further substantive accords in September and December 1991, when agreements covering the cease-fire, demobilization, reforms to security forces, land transfers and other assistance programmes for former combatants were concluded. The Chapultepec Accords, signed on 16 January 1992, clarified details and ratified these two agreements.

ONUCA played no role in monitoring the cease-fire and demobilization in El Salvador, although consideration had been given during the 1989 and 1990 offensives to the idea of concentrating it in El Salvador to oversee the demobilization of the FMLN. It was dissolved without fanfare in February 1992 and its assets, including many senior personnel, were transferred to El Salvador to fulfil a quite different function within ONUSAL under a civilian Chief of Mission.

As the 375-person Military Division of ONUSAL, UN Military Observers performed fairly well in El Salvador: the Division played the key role in overseeing the cease-fire, which suffered no major breaches, as well as the concentration and demobilization of 9000 FMLN combatants and over 50 per cent of the 63 000-strong armed forces of El Salvador (Fuerzas Armadas de El Salvador, FAES). The 350-person Police Division monitored the activities of the National Police pending its replacement by the National Civil Police (Policía Nacional Civil, PNC), and a Human Rights Division of 135 persons received complaints of violations, carried out investigations of key cases, scrutinized security agencies and the judicial system and formulated proposals for reforms which could end impunity and strengthen the rule of law. Units within the Chief of Mission's Office surveyed other areas such as the electoral system and the land situation to prepare for the implementation of the accords pertaining to those domains.

Demobilization was not a smooth process. By mid-1992, the FMLN had slowed down the concentration and demobilization of its troops on the grounds that the government was not disbanding the National Guard and Treasury Police, establishing the foundations for the new PNC or moving ahead with the Land Transfer Programme as it was required to do under the Chapultepec Accords.³² Senior officials from the UN Secretariat rushed in to

³² This assessment of contributions by ONUSAL and the UN more broadly to the implementation of the accords up to the end of 1993 draws on Hemisphere Initiatives, *Endgame: A Progress Report on the Implementation of the Salvadoran Peace Accords* (Hemisphere Initiatives: Cambridge, Mass., 1992); Holiday, D. and Stanley, W., 'Building the peace: preliminary lessons from El Salvador', *Journal of International Studies*, vol. 46, no. 2 (winter 1993); and Spence, J. et al., *A Negotiated Revolution? A Two-Year Progress Report on the Salvadoran Peace Accords* (Hemisphere Initiatives: Cambridge, Mass., 1994). See also the periodic Reports by the UN Secretary-General, especially UN document

defuse this and other crises, ONUSAL worked to widen its monitoring remit and resolve daily conflicts over the implementation of the Accords, and the ONUSAL Police Division played a crucial role here. Human rights violations attracted continuing attention. A UN-supported *Ad Hoc* Commission invested in May 1992³³ tabled a report in September 1992 recommending that 100 senior FAES officers be transferred or discharged for their records of human rights and other abuses; all these officers were eventually removed from their posts. In December 1992 the FMLN was legalized as a political party and accepted the demobilization of its remaining forces.

In March 1993 the UN-supported Commission on the Truth, which had begun work in August 1992,³⁴ released a carefully documented report identifying numerous government officials and FMLN members who (by commission or omission) were responsible for grave human rights violations during the war. The report also presented proposals for eliminating impunity through institutional reforms, the removal and prosecution of senior officials responsible for these crimes and their exclusion from political office for 10 years. Despite vocal opposition from the UN Secretary-General and certain human rights NGOs, the Legislative Assembly immediately passed an amnesty law which ensured that no prosecutions would occur and that impunity, at least for past abuses, would become entrenched.

In addition, several secret FMLN arms caches were discovered in El Salvador and Nicaragua in 1992 and 1993 while the armed forces had apparently left numerous light arms in the hands of the Civil Defence Units officially disbanded under the Chapultepec Accords. Death-squad killings reappeared in mid-1993. In March the FMLN and the Commission on the Truth demanded that a special international body be formed to investigate these killings, and the UN backed this. A National Human Rights Counsel's Office had been established with assistance from ONUSAL and the international community but was not perceived as being capable of carrying out the thorough and impartial investigations required on such a complex and delicate matter.

Progress in other areas was also quite uneven. The Supreme Court of Justice successfully resisted all attempts to remove from their posts members and other judicial officials named by the Commission on the Truth; it also managed to circumscribe proposals for reforms of the judiciary. The Land Transfer Programme suffered major delays: by November 1993, ONUSAL estimated that only 10 per cent of potential recipients had received land titles under this programme. During 1993, delays in this and other reintegration programmes prompted several violent protests by ex-combatants.³⁵

S/23402 (10 Jan. 1992) and S/24833 (25 Nov. 1992); and the quarterly reports of the Director of the Human Rights Division of ONUSAL, all published as UN documents.

³³ Hemisphere Initiatives, *Justice Impugned: The Salvadorean Peace Accords and the Problem of Impunity* (Hemisphere Initiatives: Cambridge, Mass., June 1993).

³⁴ Hemisphere Initiatives (note 33).

³⁵ United Nations, Further report of the Secretary-General on the United Nations Observer Mission in El Salvador, UN document S/26561 (14 Oct. 1993); and Further report of the Secretary-General on the United Nations Observer Mission in El Salvador, UN document S/26790 (23 Nov. 1993). Reintegration

Finally, through the newly established Forum for Social and Economic Consensus, representatives of business, labour and government agreed to take steps to bring the country's labour laws and practices into line with international standards. By the end of the year, however, few measures had been implemented and business representatives had withdrawn from the Forum. Despite talk by UN officials and others about the 'irreversibility' of the peace process, some Salvadoreans probably wondered, as they prepared for the 'elections of the century' in 1994, whether their country would join the list of UN failures, notwithstanding recent advances.

From the beginning of the year, the attention of many Salvadoreans, of ONUSAL and of others in the international community who were involved in the peace process was focused on preparing for the 'historic elections' on 20 March 1994. The significance of the elections stemmed from the fact that they included elections for the Presidency and the Legislative Assembly as well as for 262 mayoralties across the country. Moreover, these were the first elections in which the FMLN was participating openly and in which, thanks to reforms and monitoring by the international community, large-scale fraud would be difficult.

Even though the government had implemented reforms of the Supreme Electoral Tribunal and other electoral bodies to prevent such fraud, a number of serious concerns did arise prior to the elections. It became evident that there were major gaps in the voter registration process, and the resurgence of politically motivated killings and death threats from mid-1993 onwards undermined the confidence which ONUSAL was trying to foster. These factors and disorder in the voting process on 20 March threatened the legitimacy of the outcome. There was particular concern over the results of municipal elections. On 21 March, however, the UN Special Representative in El Salvador reported that 'ONUSAL believes that in general the elections on 20 March took place under appropriate conditions in terms of freedom, competitiveness and security' and concluded that 'despite the serious flaws regarding organization and transparency already referred to, the elections can be considered acceptable'.³⁶

Some participants and non-governmental observers were disappointed with this response. The UN's position seems to have reflected an agreement between the National Republican Alliance (Alianza Republicana Nacional, ARENA) and the FMLN that despite obvious irregularities the process as a whole and the outcome in the Legislative Assembly were acceptable and that the priority was to improve voting procedures for the forthcoming second round of the presidential election and to keep the peace process on track. On 24 March ONUSAL sent a letter to the Supreme Electoral Tribunal presenting practical recommendations for measures which could help avoid 'the anoma-

programmes for ex-combatants include training and business development projects, credits and technical assistance in starting small farms, medical care for the war-wounded and rehabilitation programmes for the war-disabled.

³⁶ United Nations, Report of the Secretary-General on the United Nations Observer Mission in El Salvador, UN document S/1994/375 (31 Mar. 1994), para. 27.

lies recorded in the first round'.³⁷ On 28 March the UN Secretary-General issued a report detailing the many areas in which compliance with the Accords was still lacking; the Security Council backed the report in a strong statement on 7 April and called for the full implementation of the peace accords. Some improvements to voter registration and voting procedures were implemented in time for the second round of the presidential election on 24 April; as expected, Armando Calderón Sol of ARENA won a 68 per cent majority. Even so, the UN Secretary-General noted that procedural changes were still required if future elections were to be more efficient and more widely accepted.³⁸

In the meantime the main challenge was to press ahead with other aspects of the Accords. An area which deserved particular attention was judicial reform. The judiciary had been identified by the Commission on the Truth as part of the system which perpetuated impunity and it had resisted all attempts at reform since 1993. The UN focused its pressure on the outgoing Legislative Assembly to approve a series of constitutional amendments which would open the door to institutional reforms in the judiciary. In the end, despite intense lobbying through the Peace Commission (Comisión para la Paz, COPAZ) and ONUSAL, the outgoing Assembly passed a bill which, according to the Secretary-General, 'falls short of both the Commission's recommendations and the COPAZ proposals'.³⁹ Still, the Supreme Court of Justice finally selected by the incoming Legislative Assembly is composed of new appointees and has signalled its intention to move ahead with the reforms proposed by the Commission on the Truth.

Another area in which compliance has been uneven is the reintegration of ex-combatants into the economy and society. In August 1994 the UN reported that only 25 per cent of eligible recipients had received land titles under the Land Transfer Programme, although agreements had been reached with another 66 per cent of potential recipients.⁴⁰ Ex-FAES combatants seized hostages in the Legislative Assembly in July and September to protest at these delays. Reductions in credit to recipients of land and the termination of other reintegration programmes in late 1994 (officially because of fiscal constraints) are still problematic. As the FMLN noted publicly in August 1994, failure to assign sufficient resources to these programmes 'could become a source for greater frustration and social instability, as occurred in Nicaragua'.⁴¹

³⁷ United Nations, Report of the Secretary-General (note 36), para. 16.

³⁸ United Nations, Transcript of the 3360th meeting of the Security Council, 49th year, UN document S/PV.3360 (7 Apr. 1994); United Nations, Letter dated 28 March 1994 from the Secretary-General addressed to the President of the Security Council, UN document S/1994/361 (28 Mar. 1994); and United Nations, Report of the Secretary-General, UN document S/1994/561 (11 May 1994).

³⁹ United Nations, Report of the Secretary-General (note 38), para. 9.

⁴⁰ These percentages were calculated on the basis of the figures presented in United Nations, Report of the Secretary-General on the United Nations Observer Mission in El Salvador, UN document S/1994/1000 (26 Aug. 1994), para. 28. According to various reports by the Secretary-General, the obstacles to the timely implementation of the PTT include technical and administrative difficulties, the logic of the market, a lack of political will on the part of successive ARENA governments and the Frente Farabundo Martí para la Liberación Nacional (FMLN) and inadequate financing by the international community.

⁴¹ Frente Farabundo Martí para la Liberación Nacional, 'Evaluation of the process of implementation of the peace accords', Press Release, 12 Aug. 1994.

Another worrying development was the conclusion, in a 28 July 1994 report tabled by the Joint Group for the Investigation of Politically-Motivated Illegal Armed Groups (Grupo Conjunto, GC) that, although death squads were no longer organized as a matter of government policy, politically motivated killings nevertheless persisted and agents of the state continued to be involved in such crimes. The GC also observed that complex links between these agents, 'new' death squads and organized crime had emerged over the past few years. Finally it concluded that further strengthening of the National Civil Police and reforms to the judiciary were required to deter such crimes and bring those responsible to justice.⁴² This report complemented those of ONUSAL's Human Rights Division, which showed that despite the improvement in the human rights situation since the war serious violations persisted: indeed, on 31 October 1994 the Division stated that it had accepted 21 reports of arbitrary executions, five reports of attempted arbitrary executions and 20 reports of death threats during the period from 1 July to 30 September.⁴³

In that context, the government and the FMLN asked the UN to extend the mandate of ONUSAL once again, while international NGO networks, particularly in North America and Europe, lobbied their governments to support another extension. Security Council Resolution 961 of 23 November backed this request,⁴⁴ although it indicated that this was the 'final' phase of ONUSAL's work, and noted priority areas for full compliance before ONUSAL pulled out of El Salvador by May 1995:

delays in implementing several important elements of the Peace Accords, particularly those regarding the National Civil Police and the completion of demobilization of the National Police, as well as those related to the transfer of lands, the implementation of programmes to facilitate the reintegration of combatants into civilian society of ex-combatants and war disabled, the problem of human settlements, the reform of the judicial and electoral systems, and several recommendations of the Commission on the Truth.⁴⁵

If these problems are remedied by 30 April 1995 there is a chance that ONUSAL will leave the country with a genuine conflict management success to its (and El Salvador's) credit. If implementation delays continue and grave human rights violations persist, it will be difficult for the UN to abandon the country even after having been there for almost four years. In the long term,

⁴² The GC was established and financed under UN auspices. Its report is reproduced in two parts in *Inforpress Centroamericana*, no. 1091 (11 Aug. 1994) and no. 1092 (18 Aug. 1994).

⁴³ United Nations, Twelfth report of the Director of the Human Rights Division of ONUSAL, UN document S/1994/1220 (31 Oct. 1994), table V.1. The figures in this table are higher than those reported in para. III.A.1 of the text, but the table appears to be more up-to-date. Note the contrast between these figures and the way the human rights situation is described in United Nations, Report of the UN Secretary-General on the UN Observer Mission in El Salvador, UN document S/1994/1212 (31 Oct. 1994), paras. 8–11, released on the same day.

⁴⁴ UN Security Council Resolution 961 (23 Nov. 1994).

⁴⁵ UN Security Council Resolution 961 (note 44). The record of compliance in these areas is detailed and analysed in United Nations, Report of the Secretary-General on the United Nations Observer Mission in El Salvador, UN document S/1994/1000 (note 40) and in United Nations, Report of the UN Secretary-General on the UN Observer Mission in El Salvador, UN document S/1994/1212 (note 43).

Salvadoreans and the international community will have to work to ensure that the peace which they have built in El Salvador, at such great human cost, is not threatened by political backsliding at home or by a loss of international interest, as has happened in Nicaragua.⁴⁶

V. Guatemala

It is widely acknowledged that, particularly from the mid-1970s to the mid-1980s, Guatemala had one of the worst human rights records in the world. The armed forces combined scorched earth campaigns with the militarization of rural communities through so-called Self-Defence Patrols and the widespread use of death squads to neutralize leftist guerrillas and terrorize the civilian political opposition. During that dark decade, it is estimated that 100 000 civilians were killed for political reasons and 150 000 fled to other countries while 250 000 stayed in Guatemala as internally displaced persons.⁴⁷

Having largely defeated the Unidad Revolucionaria Nacional Guatemalteca (URNG) guerrillas in military terms, yet concerned about the costs of its international isolation, the army initiated a return to civilian rule in 1984, leading to the election of President Vinicio Cerezo in 1985. However, the army remained firmly in control of urban areas and had recruited over 500 000 persons into the Self-Defence Patrols to control rural communities, although the URNG managed to carry out harassment and sabotage activities in various regions.⁴⁸ Although there were divisions of opinion, senior officers were united by their common interest in preventing trials for human rights violations, preserving military autonomy, maintaining major investments in key sectors of the economy (such as banking and telecommunications) and supervising the civilian government in 'strategic' policy domains.⁴⁹

It was against this backdrop that peace talks were initiated within the Esquipulas framework. A National Reconciliation Commission (Comisión Nacional de Reconciliación, CNR) was established in late 1987 and received considerable support from certain governments and international NGOs, but was only able to arrange a series of talks between the URNG and representatives of different sectors of Guatemalan society. Still, these talks established

⁴⁶ This is the message which a joint Government-FMLN delegation brought to New York in the new year. See *New York Times* (5 Jan. 1995), p. A7. For a rigorous analysis of these long-term development challenges, see Murray, K. *et al.*, *Rescuing Reconstruction: The Debate on Post-War Economic Recovery in El Salvador* (Hemisphere Initiatives: Cambridge, Mass., May, 1994).

⁴⁷ Tomuschat, C., Informe a la Comisión de Derechos Humanos de las Naciones Unidas, del Experto Asesor en Derechos Humanos de las Naciones Unidas [Report to the United Nations Commission on Human Rights by the Independent Expert of the United Nations on Human Rights in Guatemala], UN document E/CN.4/1991/5 and Add. 1 (11 Jan. 1991); Amnesty International, *Guatemala: Human Rights Violations Under the Civilian Government* (Amnesty International: London, 1989); and Americas Watch, *Getting Away With Murder* (Americas Watch: Washington, DC, 1991).

⁴⁸ Jay, A., *Persecution by Proxy: The Civil Patrols of Guatemala* (Kennedy Center for Human Rights: Washington, DC, 1993); and Black, G., *Garrison Guatemala* (Zed Press: London, 1984).

⁴⁹ Aguilera Peralta, G., *El fusil y el olivo: la cuestión militar en Centroamérica* [Rifle and khaki: military issues in Central America] (Departamento Ecueménico de Investigaciones: San José, Costa Rica, 1989); and Barry, T., *Inside Guatemala* (Inter-Hemispheric Education Resource Center: Albuquerque, N. Mex., 1992).

normative guidelines and created a space for UN involvement as an official observer in the talks.⁵⁰ The election and inauguration of President Serrano Elías in January 1991 opened the door to the first direct talks between the URNG and the government in April 1991. Under the auspices of Bishop Quezada Toruño, these negotiations led to the signing of the Mexico Accord on 26 April 1991:⁵¹ the agreement included an 11-point agenda for future talks covering democratization and human rights, resettlement of refugees and the internally displaced, the rights and identity of indigenous peoples, social and economic aspects, the agrarian situation, the incorporation of the URNG into political life, the role of the armed forces in a democratic society, a cease-fire, demobilization and verification.⁵² In June 1991 the parties reached the Queretaro Accord on political democratization.⁵³ More meetings took place but the talks reached an impasse over human rights, especially over the URNG's demand for a Truth Commission to investigate past human rights violations.

The peace process was completely stalled by May 1993 when President Serrano launched a 'self-coup' in order, as he said, to reverse the slide towards corruption and anarchy. Although hard-line sectors of the armed forces initially supported his move, they were soon overruled by the pragmatic sector: seeing that a broad coalition had come together in opposition to the coup, and that this alliance included the business élite and the international community, the army dropped Serrano and agreed to his replacement by the Human Rights Ombudsman, Ramiro de León Carpio. By 5 June, de León had been named president of Guatemala, and by the autumn he had established a Peace Commission and mandated it to renew talks with the URNG. Still, the Commission's initial proposals represented a step back from the April 1991 Accord and no talks were held in late 1993; moreover, grave human rights violations such as extra-judicial executions remained prevalent.⁵⁴

Although the new government of President de León Carpio had proposed to revive talks with the URNG in the autumn of 1993, it took the eruption of armed conflict in Mexico (the declaration of war by the Zapatista National Liberation Army on 1 January 1994) to bring the parties to the table under the aegis of the UN. This had the unexpected result of intensifying international and especially Mexican pressure for a negotiated settlement in neighbouring

⁵⁰ Ortega Pinto, H. D., 'Análisis de los actores políticos y de las incompatibilidades básicas' [Analysis of political actors and of their basic incompatibilities], *Estudios Internacionales*, vol. 5, no. 9 (Jan.–June 1994); and Instituto de Relaciones Internacionales y Investigaciones para la Paz, *Cronologías de los procesos de paz: Guatemala y El Salvador* [Chronologies of the peace processes: Guatemala and El Salvador] (IRIPAZ: Guatemala City, 1991).

⁵¹ Reprinted in Aguilera Peralta, G., *Los temas substantivos en las propuestas para la paz* [Substantive themes in the peace proposals], (Facultad Latinoamericana de Ciencias Sociales and the Friedrich Ebert Foundation: Guatemala City, 1994) (in Spanish).

⁵² *Infopress Centroamericana*, no. 932 (2 May 1991).

⁵³ Aguilera Peralta (note 51).

⁵⁴ For analyses of the situation in 1993, see Millett (note 3); Dunkerley, J., Institute of Latin American Studies, University of London, *The Pacification of Central America*, Research Paper no. 34 (ILAS: London, 1994); and United Nations, Informe de la experta independiente, Sra. Mónica Pinto, sobre la situación de los derechos humanos en Guatemala [Report of the Independent Expert, Mrs Mónica Pinto, on the human rights situation in Guatemala], UN document E/CN.4/1994/10 (20 Jan. 1994).

Guatemala which galvanized support for upgrading the UN's role from that of observer to that of a moderator (or mediator) in the talks.⁵⁵

The first breakthrough occurred on 10 January 1994, when the parties signed a Framework Agreement which reaffirmed the April 1991 Accords, with some modifications, and codified the role of the UN as moderator and primary verifier of all future accords to come out of the negotiations. The Framework Agreement also mandated the establishment of an Assembly of Civil Society (*Asamblea de la Sociedad Civil*, ASC) to channel the opinions of different sectors of Guatemalan society into the peace talks.⁵⁶ On 29 March, the government and the URNG signed their first substantive agreement: under the Global Accord on Human Rights,⁵⁷ the parties committed themselves to work to end impunity for crimes and take a series of steps to guarantee respect for internationally recognized human rights, particularly civil and political rights. They also agreed to solicit the deployment of a UN mission to verify compliance with the agreement on site and strengthen existing human rights agencies such as the Ombudsman's office and NGOs. In addition they set an ambitious calendar for future talks, under which they envisaged that a final Accord for a Firm and Lasting Peace would be signed by the end of 1994. The March talks had almost collapsed over the issue of establishing a Truth Commission along Salvadorean lines, but the parties finally accepted the UN's suggestion that the issue of past violations be discussed separately from the Global Accord on Human Rights—which deals with the present and future.

On 17 June in Oslo, the two parties signed the Accord for the Resettlement of Populations Uprooted by the Armed Conflict, which sets out a framework for the resettlement and reintegration into society of those who fled the country or were internally displaced as a result of the war.⁵⁸ The agreement which sparked the most controversy, however, was the Accord on the Establishment of the Commission to Clarify Human Rights Violations and Acts of Violence that have Caused the Guatemalan Population to Suffer, signed on 23 June. It provided for the establishment of a three-person body under the aegis of the UN, after the signing of the intended Final Accord, to investigate past violations which have occurred in the 34-year armed conflict. It reaffirmed the 'right of the Guatemalan people to know the full truth' as set out in the Global Accord on Human Rights but only provided for the identification of institutions responsible for violations and is thus only a tenuous basis for the prosecution of individuals. The Resettlement Accord of June 1994 will not come into force before a Final Accord is signed.⁵⁹

The Clarification Commission Accord was seen as weak in comparison to the proposal submitted by the ASC before the talks and to the agreement for

⁵⁵ See Ortega Pinto (note 50).

⁵⁶ 'Acuerdo marco para la reanudación del proceso de negociación entre el Gobierno de Guatemala y la Unidad Revolucionaria Nacional Guatemalteca', in *Inforpress Centroamericana*, no. 1062 (13 Jan. 1994).

⁵⁷ 'Acuerdo Global sobre los Derechos Humanos' [Global Accord on Human Rights], reprinted in *Inforpress Centroamericana*, no. 1073 (7 Apr. 1994) (in Spanish).

⁵⁸ *Inforpress Centroamericana*, no. 1084 (23 June 1994).

⁵⁹ *Inforpress Centroamericana*, no. 1085 (30 June 1994).

the Commission on the Truth in El Salvador. These deficiencies and delays in the deployment of the UN mission provoked an outcry from human rights organizations and other sectors of society. Although the Global Accord on Human Rights was meant to go into effect immediately after it was signed, in July the Human Rights Counsel of the Archbishop of Guatemala reported 787 violations of the rights to life, liberty and physical integrity of the person in the first six months of 1994. In September, the Human Rights Counsel reported 325 violations of civil rights since the signing of the Global Accord on Human Rights.⁶⁰ As a result, 10 000 people marched in Guatemala City during the first week of July to demand the immediate deployment of the UN Verification Mission in Guatemala (Misión de Verificación de las Naciones Unidas en Guatemala, MINUGUA). Meanwhile Bishop Quezada Toruño, former conciliator of the peace talks and now president of the ASC, criticized the international community for being more interested in keeping the talks going than in promoting meaningful agreements.⁶¹

In this context, the URNG stepped up its military activities and declared, on 6 August 1994, that it would not return to the table or sign further agreements until the UN took concrete steps to verify compliance with the Global Accord on Human Rights. On 19 September, after lengthy negotiations between the UN Security Council and the General Assembly over which body should mandate the mission (and after parallel international NGO-sponsored discussions between the parties, UN officials and other key sectors of society in Oslo), the General Assembly passed Resolution A/48/267. This resolution confirmed the recommendation by the UN Secretary-General that the primary task of MINUGUA should be to verify and facilitate compliance with the Global Accord on Human Rights.⁶² As set out in the January 1994 Framework Agreement, MINUGUA's mandate and structure would be broadened to include the verification of additional accords once a final peace agreement was signed.

When fully staffed, MINUGUA will have almost 300 international personnel in its initial (human rights verification) phase: 220 civilian personnel in charge of human rights verification, technical assistance, public information

⁶⁰ The URNG is responsible for some of these violations, yet these other sources concur that the state is responsible for the majority of human rights abuses. See 'Informe del primer semestre de 1994 de la Oficina de Derechos Humanos del Arzobispado', in *Inforpress Centroamericana*, no. 1089 (28 July 1994), the summary of the Ombudsman's mid-1994 report in *Inforpress Centroamericana*, no. 1095 (8 Sep. 1994) and Ortega Pinto (note 50).

⁶¹ The Bishop stated that the international community was 'only interested in a ceasefire, not in seeing a resolution of the substantive issues which are considered to have originated and fuelled the armed conflict'. See Orlebar, E., 'Guatemala rights agreement fails to take root', *Financial Times* (29 July 1994).

⁶² The Mission's mandate is not retroactive: its role is limited to verifying that the Human Rights Agreement is respected from the time of MINUGUA's deployment onwards. MINUGUA is also mandated to strengthen national institutions which are already working (or should be working) to promote respect for human rights. The targets of this function are governmental agencies including the National Police, the judiciary, the Public Prosecutor's Office, the semi-autonomous Human Rights Counsel (Procuraduría para los Derechos Humanos en Guatemala, PDHG) and NGOs. See United Nations, General Assembly Resolution 267, 19 Sep. 1994, UN document A/48/267; and United Nations, Report of the Secretary-General: Establishment of a Human Rights Verification Mission in Guatemala, UN document A/48/985 (18 Aug. 1994).

and administration; 60 civil police observers; and 10 military liaison officers. The Director, Leonardo Franco, is backed by a Deputy Director and by principal advisers on human rights, legal, military and police affairs and indigenous peoples issues. Eight regional and five subregional offices are being established. A Special Office on Guatemala has been established in the UN Secretariat Department of Political Affairs to provide backup to MINUGUA and other UN agencies.⁶³

Almost immediately after the General Assembly passed Resolution 48/267, UN Moderator Jean Arnault announced that talks would soon resume. That turned out to be more difficult than anticipated, but by mid-October the parties had returned to the table to discuss the rights and identity of indigenous peoples. Although the advance team deployed to Guatemala in September laid the groundwork for the initiation of MINUGUA's verification activities on 21 November, the peace talks remained in an impasse. One obstacle was the complexity of the issues involved; another was the demand for participation by indigenous peoples' organizations. The broader situation also undermined both parties' confidence in the peace process: the government saw the URNG's stepped-up military activities as a sign of ill will, while the guerrillas viewed continuing abuses (particularly the responsibility of state security agencies for repression against students, farm workers and others during that period) as evidence of the government's inability or unwillingness to abide by its commitments. Thus it is not surprising that no further accords were signed by the end of the year, even though 1994 was intended to be the year when a firm and lasting peace was forged in Guatemala.⁶⁴

VI. Conclusions

Although the processes leading to these changes are complex, factors which facilitated progress can be identified. The broadest cause was the collapse of the USSR and related shifts in US foreign policy. The salience of this factor varied with the degree of internationalization of each conflict: it was in Nicaragua, the most internationalized conflict, that the end of the cold war first forced the parties to soften their negotiating positions and settle for peace; this was followed by El Salvador; the war in Guatemala has been most resistant to this logic because the belligerents depend much less on external support.

The second major factor was the exhaustion of the warring parties on the ground. This also varied by country. In Nicaragua the war had become unus-

⁶³ As with ONUSAL in El Salvador, it is expected that the signing of further accords on matters such as police and military reform, the demobilization of combatant forces, land transfers, the rights of indigenous peoples and particularly the signing of a Final Accord for a Firm and Lasting Peace will lead to the addition of new units to oversee compliance with those agreements.

⁶⁴ *Inforpress Centroamericana*, no. 1107 (1 Dec. 1994), including the report on the UN Expert's visit in Nov. 1994. Unwilling to let these dates slip by without notice, the Secretary-General wrote to the Government and the URNG on 22 Dec. to express his concern about the loss of momentum in the talks; he called on the parties to agree on a new calendar for compressed negotiations and to reach a final settlement as early as possible in the new year. See *Inforpress Centroamericana*, no. 1109 (12 Jan. 1995).

tainable for both the FSLN government and the RN by about 1988, and it reached the same point in El Salvador after the November 1989 FMLN offensive. This point has perhaps not yet been reached in Guatemala: given that the conflict is of a much lower intensity, both belligerents could sustain the war militarily and politically for some time.

The end of the cold war and the exhaustion of the belligerents were necessary but not sufficient factors underpinning key breakthroughs. Active peacemaking was the third factor, required to build confidence, craft detailed agreements and hold the parties to the commitments necessary for lasting peace. The activities of Latin American medium-sized powers through the Contadora Group and of Costa Rica through the Esquipulas process were crucial catalysts. The OAS also played an important role, particularly in the case of Nicaragua. NGOs in each country, in the USA and in Europe, linked together in transnational networks, have also provided crucial technical, verification and political input into these peacemaking processes. The organization which played a key role by consolidating these dispersed actions into a coherent peace effort, especially in El Salvador, was the UN.

The UN was able to play this positive role because it took an integrated approach to peace from the outset. UN involvement was premised on the integration of three things: peacemaking, on-site verification and peacekeeping, and peace building through the promotion of institutional and societal reforms. This worked more effectively in El Salvador, where the UN was the lead organization, than in Nicaragua, where it shared responsibilities with the OAS. Within the context of this three-pronged approach to peace promotion, the UN's strict adherence to the norms of classical peacekeeping (impartiality, consent and non-use of force except in self-defence) greatly facilitated the UN's capacity to fulfil its mandates, keep the peace processes on track and lay some foundations for longer-term conflict resolution.

This integrated approach provided the framework required to orient the actions of the large range of actors involved in each case: the warring parties and their supporters in society, the medium-sized Latin American powers and other states involved in diplomatic support groups, international organizations and NGOs. This approach also increased the political space for the emergence or re-emergence of national conciliators like Cardinal Obando y Bravo in Nicaragua and Bishop Quezada Toruño in Guatemala.

This virtuous convergence of factors has been insufficient to forge the 'firm and lasting peace' envisioned by many Central Americans. The war continues in Guatemala, where the UN-sponsored peace process remains tenuous. Even in El Salvador and Nicaragua, the wars have ended but the conflicts have not been resolved. The fragility of peace is to some extent the result of the typical legacy of wars in the developing world, namely, physical destruction, and of social polarization and pervasive poverty, but there are specific political factors which make the peace which has been forged in Central America uneven and unstable.

1. Although the victory of the developed market societies in the cold war has had many positive benefits, it has also greatly reduced counterbalances to power projection by these societies, and by the USA in particular, especially in the Americas. More subtly, the inability of Central American governments and others to propose alternatives to structural adjustment programmes, even when these programmes visibly undermine necessary peace-building measures in the region, also reflects the effective unipolarity of the new world order. The resurgence of radical Republicanism in the USA could exacerbate the negative effects of this global power imbalance on Central America.

2. Despite the historic contributions of the Contadora and Esquipulas processes, these were state-sponsored forums and produced agreements between governments which would be ineffective if not supplemented by national accords. The initial mandate of ONUCA reflected the state-centric bias of the Esquipulas process—it was authorized only to verify that no arms were being provided to the insurgents, while the states were free to continue receiving arms—and almost prevented the UN from gaining credibility as an impartial verifier. The enforcement provisions of the Esquipulas Accord were diluted into insignificance by the dissolution of the International Verification and Follow-up Commission in 1988. It is important not to romanticize the character of the Esquipulas process and to recall that its replacement by national peace negotiations was necessary and constructive in each instance.

3. Domestic power balances have shaped each national peace process and its results. The enduring power of traditional élites partly explains why it has been so difficult to bring those responsible for past human rights abuses to justice, reform institutions such as the judiciary, and contemplate progressive taxation or land reform in El Salvador, all of which could significantly enhance the prospects for conflict resolution in that country. The same factors will make it very difficult to move towards lasting peace in Guatemala, given the enormous power of the army and the business élite *vis-à-vis* other sectors of society. In Nicaragua the situation is almost the reverse: there, traditional élites (backed by elements within the US Government) are trying to recover power lost at the hands of the FSLN and their supporters during the 1980s. This and the FSLN's fear of a return to the *status quo ante* greatly impede conflict resolution. Popular organizations and their foreign supporters provide only modest counterweights to these skewed patterns of domestic power.

4. The involvement of the UN and other international organizations has tended to reflect these power imbalances at the global, regional and national levels. The OAS fell prey to this tendency in Nicaragua when, under pressure from the USA, it sided with ex-RN combatants and compromised its impartiality. Some Salvadoreans have accused the UN of trying to do the opposite in their country by taking sides with the FMLN. This tendency to tilt towards the most powerful national and international forces is most visible in the realm of fiscal and broader economic policy: indeed, ONUSAL's peace-building mandate has been circumscribed by the government's market-oriented reconstruction programme which was formulated primarily to attract loans from

international financial institutions and to stimulate business activity rather than to redress the socio-economic inequities which sparked the civil war.

Within the complex matrix of transnational power relations affecting Central America, it is important for those with a stake in conflict resolution to work together to sustain and extend recent advances. They will have to press for continued movement towards meaningful agreements in Guatemala, timely compliance with the Salvadorean peace accords and deeper national reconciliation in Nicaragua. They will have to find ways to harmonize short-term peace-building programmes with broader fiscal and macroeconomic policies. Finally, they will have to guard and enhance other domestic foundations of conflict resolution (such as professional security agencies, effective judiciaries and transparent electoral mechanisms) which are central to lasting peace. Indeed, it is only by strengthening domestic conflict resolution capacities that Central Americans will be able to sustain recent advances given the likely diminution of international assistance in the near future. Otherwise a firm and lasting peace will not be built, recent advances might be reversed, and Central America could join the long list of conflict resolution failures in the post-cold war era.

5. The Middle East: continuation of the peace process

GEOFFREY KEMP and JEREMY PRESSMAN

I. Introduction

By the end of 1994 the Middle East peace process was at a critical threshold. There were some momentous breakthroughs during the year, including a peace treaty between Israel and Jordan,¹ but violence by Arab and Israeli extremists threatened to undermine the 1993 Declaration of Principles on Interim Self-Government Arrangements (DOP)² and the political survival of both Palestine Liberation Organization (PLO) Chairman Yasser Arafat and Israeli Prime Minister Yitzhak Rabin.

Each time political progress was made, militants somewhere reminded the supporters of compromise that the war against extremism is far from over. Significant issues, including Israeli–Syrian relations, remained unchanged and left open the possibility that obstacles could eventually derail the Arab–Israeli peace process.

The so-called Madrid Framework (see figure 5.1), a two-track structure for the Middle East peace talks, was set up at a 30 October–1 November 1991 international conference in Madrid which began the process.³

In addition to the much publicized bilateral track, 1994 also witnessed the continued development of the multilateral track which broadened the political process and set the stage for future relations. Many participants are hopeful that declarations of economic cooperation will replace declarations of war and that countries in the region will focus more attention on the economic and social future of the region.

This chapter reviews key bilateral relations, beginning with Israeli–Palestinian negotiations and actions in 1994, followed by coverage of Israeli–Jordanian ties and Israeli–Syrian talks and disputes. Following the discussion of bilateral developments, section V considers the growing importance of multilateral negotiations and initiatives, and section VI concludes the chapter with a brief assessment of possible future problems.

¹ For the text of the Treaty of Peace Between the State of Israel and the Hashemite Kingdom of Jordan, 26 Oct. 1994, see appendix 5A in this volume.

² The text is reproduced in SIPRI, *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), appendix 3A, pp. 117–22.

³ See *SIPRI Yearbook 1994* (note 2), p. 101.

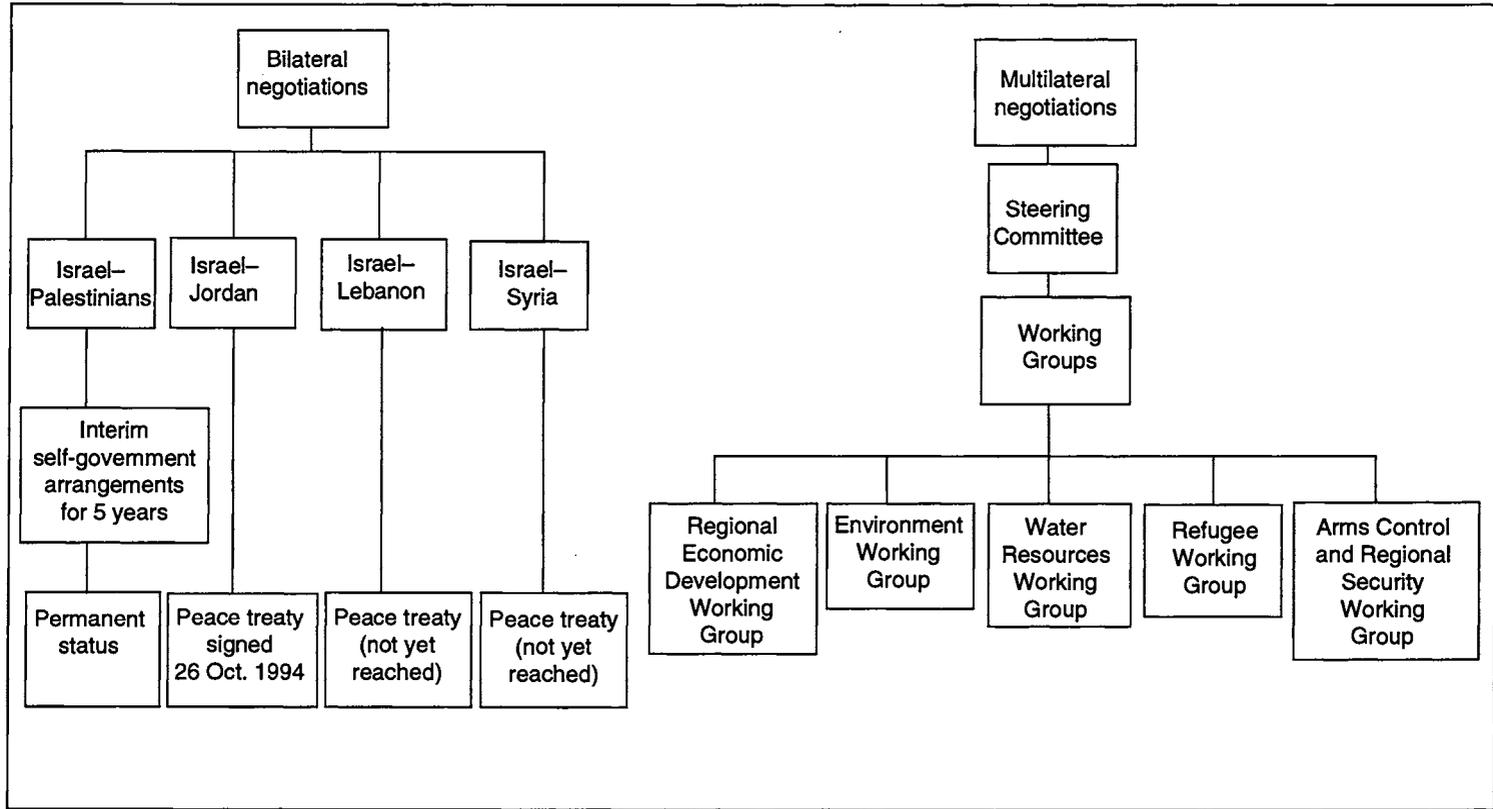


Figure 5.1. The Madrid Framework, inaugurated at the 30 October–1 November 1991 Madrid Conference

Source: Based on State of Israel, *The Middle East Peace Process: An Overview* (Information Division, Ministry of Foreign Affairs: Jerusalem, 1994).



Figure 5.2. Map of the Middle East region

Note: The Palestinian Authority is comprised of the Gaza Strip and Jericho.

Table 5.1. Timetable for the implementation of the Declaration of Principles (DOP) of 13 September 1993

| Action called for in the DOP implementation | Original 1994 deadline | Actual date of event |
|--|------------------------|----------------------------|
| Israeli troop withdrawal from Gaza/Jericho | 13 April | 18 May 1994 |
| Palestinian elections in West Bank/Gaza | 13 July | Did not take place in 1994 |
| Redeployment of Israeli troops from West Bank population centres | 13 July | Did not take place in 1994 |

II. Israel and the Palestinians

After the signing of the DOP many observers expected rapid progress towards Israeli–Palestinian peace. The agreement included an ambitious timetable for implementation. However, it proved too rapid for Israeli and Palestinian negotiators and leaders. In late 1993 and the early months of 1994 several deadlines passed without significant progress in implementing the DOP (see table 5.1).

Throughout 1994 for every political advance a price was paid in Israeli and Palestinian blood. In the West Bank outside Jericho, Israeli troops continued to clash with Palestinian demonstrators. House demolitions, riot control with gunfire and curfews did not disappear with the signing of the DOP.

Within the autonomous areas Israeli soldiers proved an inviting target for Palestinian militants. On 11 November 1994 three Israeli soldiers were killed in a suicide attack at the Israeli army post at Netzarim, an isolated Israeli settlement in Gaza. This was one of many incidents that took place after the Israeli withdrawal. It also served as a reminder of the cycle of violence in the conflict. Islamic Jihad, a militant Islamic organization often allied with Hamas (a political and military Islamic movement based in the West Bank and Gaza Strip), claimed that the suicide attack was retaliation for Israel's alleged murder of Jihad leader Hani Abed on 2 November. Israelis inside the Green Line⁴ also experienced deadly attacks with heavy casualties in Afula, Hadera and Jerusalem. The most fearsome attack occurred in Tel Aviv on 19 October, when a suicide bomber from Hamas detonated a bomb on a crowded bus on Dizengoff Street, one of Israel's busiest thoroughfares; 23 people, including the bomber, were killed.

Within the Palestinian community, tension between the PLO-led authorities and Islamic movements (Hamas and Islamic Jihad) was high from the moment the first stage of autonomy began. Frequent negotiations, high-level contacts, apparent back-room deals and conflicting political interests within each group kept the lid on Palestinian-on-Palestinian violence for most of 1994. However,

⁴ The Green Line was Israel's pre-1967 boundary with the West Bank and Gaza Strip. It divided Jerusalem into two sections.

on 18 November 1994, Palestine National Authority (PNA) police opened fire on a pro-Hamas crowd; 16 Palestinians were killed, including at least one police officer. Outrage spread throughout the Gaza Strip and some Palestinians talked of civil war.⁵

The November flare-up was contained with techniques similar to those used in earlier disagreements. PLO–Hamas contacts succeeded in lowering the temperature on both sides, but there are no guarantees that the leadership of either side will be able to restrain its most aggressive supporters in the future. The prospect of further Palestinian violence does not bode well for the stability of the autonomous areas or for the viability of Arafat's fledgling government. Even within his own movement, many younger activists have little patience for the political route.⁶ US Secretary of State Warren Christopher was pleased that, in their 7 December 1994 meeting, Arafat acknowledged Israeli security concerns and pledged to combat Palestinian terrorism.⁷

Terrorism and other violence took place alongside already difficult political negotiations. The DOP entered into force on 13 October 1993, one month after the signing ceremony. According to the timetable laid out in the agreement the Israeli troop withdrawal from Gaza and Jericho was to be completed by 13 April 1994, with Palestinian elections to be held in the West Bank and Gaza Strip by 13 July 1994. However, deep differences between the two sides soon emerged. In early January 1994, several weeks after the DOP date for beginning the Israeli withdrawal, both sides issued angry statements accusing the other of back-peddalling and delay. Rabin told reporters that 'there are no sacred dates'.⁸ On 6 January 1994, the two sides announced the resumption of negotiations but conceded that additional agreements and actual implementation were still several weeks away.⁹

On 9 February 1994, Israel and the Palestinians took a significant step towards implementation when Arafat and Foreign Minister Shimon Peres initialled a draft agreement in Cairo. While the agreement left some key economic and security issues unresolved, Israeli and Palestinian negotiators resolved the most difficult issues relating to border crossings, patrols and the approximate size of the Jericho enclave.¹⁰ Intricate procedures were created for crossing the border at Rafah and the Allenby Bridge. Negotiators predicted that an accord resolving the remaining disagreements would be signed in the next few weeks.

⁵ Haberman, C., '12 die as P.L.O. police fire on Palestinian militants', *New York Times*, 19 Nov. 1994, p. 1; and *Qol Yisra'el*, 22 Nov. 1994, in Foreign Broadcast Information Service, *Daily Report—Near East and South Asia (FBIS-NES)*, FBIS-NES-94-225, 22 Nov. 1994, p. 27.

⁶ Dockser, M. A., 'Generation gap: young Palestinians vow to derail accord, level attacks on Israel', *Wall Street Journal*, 13 Dec. 1994, p. A1.

⁷ Sciolino, E., 'Arafat tells Christopher he'll act against terrorism', *New York Times*, 8 Dec. 1994, p. A3.

⁸ Haberman, C., 'Israel–PLO agreement provides shared duties at border crossings', *New York Times*, 11 Feb. 1994, p. A1.

⁹ Hoffman, D., 'PLO, Israel agree to resume talks', *Washington Post*, 7 Jan. 1994, p. A12; and Gradstein, L., 'Israel balks at renewed PLO talks', *Washington Post*, 3 Jan. 1994, p. A1.

¹⁰ Hedges, C., 'Israel–PLO deal solves key issues in self-rule plan', *New York Times*, 10 Feb. 1994, p. A1; and 'Fine print: spelling out details to forge a Mideast accord', *New York Times*, 11 Feb. 1994, p. A12.

However, as the initial stage of the talks appeared to be nearing completion, on 25 February 1994 an Israeli settler, Baruch Goldstein, launched a suicide attack on Islamic worshippers at the Cave of the Patriarchs in Hebron, one of the West Bank's major mosques. At least 29 Palestinians were killed and scores more wounded. The Palestinians claimed that there were actually many more casualties. Although Israeli leaders and the majority of the Jewish population vehemently condemned this terrorist act, Palestinian leaders temporarily broke off talks with Israeli officials. On 18 March, the United Nations Security Council passed a resolution condemning the Hebron massacre.¹¹ A report on the incident released on 26 June by the Israeli commission of inquiry blamed Goldstein for the premeditated attack.¹²

As part of the informal agreement to restart the talks, Israel agreed on 31 March 1994 to the introduction of foreign observers in Hebron, the Temporary International Presence in Hebron (TIPH); both sides also pledged to speed up the pace of the negotiations and the Israeli withdrawal schedule.¹³ While the force, composed of Danes, Italians and Norwegians, did not actually arrive in Hebron until 8 May, it was the first international observer force¹⁴ introduced into the Arab-Israeli conflict region since Israel and Egypt signed agreements in 1979 that led to the Multinational Force and Observers in Sinai. With little fanfare, the TIPH left Hebron on 8 August 1994 when its initial mandate expired. In any case, the five-week delay following Goldstein's attack further put off implementation of the DOP.

As talks continued, so did the violence. In Israel bombs exploded in Afula on 6 April 1994 and in Hadera on 13 April, killing 12 Israelis. Hamas claimed responsibility for the attacks as acts of retaliation for the February Hebron attack. By late April Israelis and Palestinians had endured months of foot-dragging and violence with little tangible progress.

While the more significant agreement was still to come, the tide began to turn on 29 April 1994 with the signing in Paris of an Economic Agreement.¹⁵ After a final all-night session, Israeli Finance Minister Avraham Shohat and PLO economic negotiator Ahmed Qurie set the stage for Israeli-Palestinian economic relations. The agreement included provisions for a Palestinian monetary authority, tax administration and tourist administration. The agreement also envisioned coordinated tariffs in most areas, the free movement of goods and people and jointly operated customs authorities at key border crossings. Separate sections dealt with low-cost Arab fuel for the Palestinians and the export of produce to Israel.¹⁶

¹¹ Lewis, P., 'Security Council condemns massacre in Hebron', *New York Times*, 19 Mar. 1994, p. 6.

¹² Hoffman, D., 'Israeli panel says killer acted alone', *Washington Post*, 27 June 1994, p. A1.

¹³ Satloff, R., 'Establishing an international presence in Hebron: an analysis', *Peacewatch*, no. 14 (31 Mar. 1994). The text of the agreement to resume talks is included here.

¹⁴ See appendix 2A in this volume.

¹⁵ The text of the Economic Agreement was incorporated into the Agreement on the Gaza Strip and the Jericho Area, 4 May 1994 (Cairo Agreement of 4 May). See appendix 5A in this volume.

¹⁶ Simons, M., 'Gaza-Jericho economic accord signed by Israel and Palestinians', *New York Times*, 30 Apr. 1994, pp. 1, 7.

This agreement was quickly followed by the Agreement on the Gaza Strip and the Jericho Area on 4 May 1994, the so-called Cairo Agreement, in which Israeli and Palestinian leaders tackled many of the difficult issues and broad outlines of the DOP. The initial stages of Palestinian autonomy and Israeli pull-backs were about to commence. In his speech at the signing of the accord, Arafat claimed that 'withdrawal from Gaza and Jericho is the prelude that opens the door to ending the occupation and establishing new relations between' Israelis and Palestinians.¹⁷

The agreement signified the beginning of the first actual withdrawal of Israeli troops from any part of the West Bank or Gaza Strip. Israel agreed to partial withdrawal within three weeks, and specific routes were designated for Palestinian travel between Gaza and Jericho. A new 24-member Palestinian Authority with both executive and legislative powers was created and a 9000-member Palestinian police force was authorized. The agreement called for further discussions on a host of issues, including the final size of the Jericho enclave, the status of Palestinian refugees from the 1967 War, control of border crossings, and the release of Palestinian prisoners above and beyond the 5000 called for in the agreement. It also initiated the five-year interim period mentioned in the DOP.¹⁸ According to Articles I and V of the DOP, the permanent status negotiations must begin after two years (May 1996), with the final disposition of the territories settled by the end of the five-year period (May 1999).

Regarding important security issues, the agreement left most matters in Israeli hands. Israel retained responsibility for external and internal security of the Israeli settlements. The latter provision left Israeli forces in control of several Gaza roads utilized by Israeli settlers but did stipulate that some roads would be jointly patrolled. Palestinians took over responsibility for the internal security of their own autonomous areas.¹⁹

Within a week of the signing, the first contingents of Palestinian police entered the autonomous areas. The last Israeli soldier left Jericho on 13 May 1994, and the pull-back in Gaza was completed on 18 May. Arafat's triumphant return to the Gaza Strip came on 1 July; on 5 July he visited Jericho and led a swearing-in ceremony for members of the Palestinian Authority. During this period the Palestinian leadership struggled to build a basic institutional framework for the fledgling entity. Israeli and Palestinian negotiators resumed talks on 11 July in order to deal with unresolved issues from the Cairo Agreement and discuss early empowerment and expansion of self-rule.²⁰

In late August, the Palestinian Authority received a boost when Israel began handing over responsibility for educational matters. On 24 August 1994 the Palestinians took control of the Ramallah school district. By the start of the

¹⁷ 'As leaders speak, caution is dominant', *New York Times*, 5 May 1994, p. A16.

¹⁸ See Articles I and V of the DOP, *SIPRI Yearbook 1994* (note 2).

¹⁹ For a text of the agreement, see 'Framework for peace: agreement between Israel and the P.L.O.', *New York Times*, 5 May 1994, p. A18; and appendix 5A in this volume.

²⁰ 'Israeli-Palestinian talks start', *New York Times*, 12 July 1994, p. A2.

school year, the entire school system of the West Bank and Gaza Strip was in Palestinian hands.

As the educational system changed hands, the so-called Early Empowerment Agreement that provided for Palestinian control of education, culture, health, social welfare, tourism, direct taxation and value added tax on local production was signed on 29 August 1994. At the same time, negotiators wrestled with Israeli–Palestinian differences over Palestinian elections and the redeployment of Israeli forces from Arab population centres throughout the West Bank. In a meeting at the Erez crossing on the border between Israel and Gaza, Rabin and Arafat agreed on 8 November to speed up the pace of talks with simultaneous negotiations on Palestinian elections and Israeli troop withdrawal.²¹

A number of steps towards fuller implementation have taken place. On 2 November 1994 Palestinian inspectors took up positions at the Allenby Bridge and Rafah border crossing for the first time, as called for in Annex II.4 of the DOP and Article X of the Agreement on the Gaza Strip and the Jericho Area.²² On 15 November the Palestinian Authority took responsibility for tourism and social welfare; the tax department and government health system followed on 1 December.²³

Since May 1994, when the Palestinian leadership assumed more control of daily life in the Gaza Strip and Jericho, the financial state of the Palestinian Authority has been an abiding concern. While many countries and international financial institutions made large-scale pledges to the Palestinians, only a small amount of aid actually reached the Palestinian leaders. At an October 1993 meeting initial pledges of grants and loans included \$100 million from Saudi Arabia, \$500 million from the USA over five years, \$600 million from the European Community (EC) over five years, \$75 million from Israel, \$200 million from Japan over two years and \$150 million from the Nordic countries.²⁴ Israel transferred \$15 million in taxes during the first six months of self-rule; another \$8.5 million was handed over on 23 November 1994.²⁵

Each side blames the delay on other parties. For much of 1994 the Palestinians were accused of failing to set up the necessary accounting and budgetary procedures to satisfy the concerns of donors that the money be spent as intended. Varied expectations also contributed to the disappointment. While many donors agreed to finance larger projects and infrastructure improvements, Arafat and other Palestinian officials needed cash for the daily opera-

²¹ Haberman, C., 'Israel will speed up talks for Palestinian self-rule', *New York Times*, 9 Nov. 1994, p. A1.

²² Haberman, C., 'Arabs now take charge (sort of) at Allenby border post', *New York Times*, 3 Nov. 1994, p. A12.

²³ Greenberg, J., 'Israel turns over more responsibility to Palestinian authority', *New York Times*, 16 Nov. 1994, p. A8; and Greenberg, J., 'Israelis yield west bank taxation and health to Palestinians', *New York Times*, 2 Dec. 1994, p. A9.

²⁴ Greenhouse, S., '43 nations promise Palestinians \$2 billion in aid', *New York Times*, 2 Oct. 1993, p. 2.

²⁵ Bronner, E., 'Israel weighs speeding of aid to Palestinians', *Boston Globe*, 21 Nov. 1994, pp. 1, 10; and AFP, 23 Nov. 1994, in FBIS-NES-94-229, 29 Nov. 1994, p. 9.

tion of the Palestinian Authority. In the short term Palestinian officials have sought funding for salaries, especially for security personnel and government bureaucrats, and for basic supplies and equipment.

In September 1994 Israeli and Palestinian disagreements over Jerusalem spilled over into the financial arena. When Israel rejected Palestinian proposals that included projects in East Jerusalem—proposals that Israel claims are excluded by the DOP timetable for talks on Jerusalem—an important meeting with international donors collapsed. The World Bank, which had organized the meeting, was disappointed, and the Palestinians lost an opportunity to receive aid pledged earlier. Within a few days the differences were resolved to allow financial meetings to progress. During meetings on 29–30 November 1994 the Palestinian Authority finally received a large cash infusion. In addition to \$58 million in grants from the World Bank, individual donor nations pledged \$125 million in grants through March 1995 and promised to sign on for another \$23 million by the end of 1994.²⁶ The large grants were an acknowledgement both that acceptable procedures had been set up in Gaza and that international donors were concerned in the aftermath of the November PLO– Hamas clash.

During the second half of 1994, some steps taken by Arafat raised concern among some members of the Palestinian community, including Hanan Ashrawi, former Palestinian negotiator and currently head of a Palestinian human rights watch-dog organization. In July Arafat ordered the closing of *Al-Nahar*, an East Jerusalem-based newspaper with a generally pro-Jordanian line. Arafat supporters claimed that the closing of *Al-Nahar* was an administrative issue and note that *Al-Nahar* is again being published. Critics contended that the paper only reopened after it agreed to support the Arafat Administration. In late November 1994 copies of *Al-Nahar* and *Al-Quds* were temporarily confiscated for several days in a row.²⁷

A second area of concern was the growth of Palestinian security forces in Gaza and Jericho. While the Israeli Government seemed to have welcomed these forces as a means of combating Hamas and other rejectionists, some Palestinians were worried that Arafat was laying the groundwork for an autocratic police state. Some Palestinians also questioned the staffing of various national police forces with partisan, pro-Fatah members; they suggested that few attempts had been made to compose a truly representative or broad-based force.²⁸ Like the response to criticism over their handling of the media, Arafat and his supporters also denied the allegations in the security arena.²⁹ The questionable support for and/or outright opposition of several Palestinian organizations to the peace process also makes hiring a balanced police force difficult.

By the end of 1994, a distinct air of pessimism clouded Israeli–Palestinian relations. Rabin and other Israeli officials raised the possibility of not

²⁶ Nash, N. 'Donors grant Arafat \$200 million to tide him over in Gaza', *New York Times*, 1 Dec. 1994, p. A9.

²⁷ Greenberg, J., 'Palestinian authority holds up delivery of newspapers in Gaza', *New York Times*, 1 Dec. 1994, p. A8.

²⁸ 'Proliferating police forces', *Middle East International*, 23 Sep. 1994, pp. 4–6.

²⁹ Kanafani, M., 'Arafat's new antagonists', *Washington Post*, 30 Oct. 1994, pp. C1, C4.

redeploying troops outside populated areas in the West Bank before Palestinian elections as previously agreed. In the first week of December 1994 the Israeli Cabinet met on three occasions to consider modifications to the DOP and subsequent agreements on redeployment.

On 10 December 1994 the Nobel Peace Prize was presented to Rabin, Peres and Arafat as a tribute to the progress made in resolving the Arab–Israeli conflict. Rabin's public mention a few days after the Nobel Peace Prize ceremony of possible modifications drew an angry response from Arafat, who said, 'I am astonished because no one can accept to carry on an election in the presence of the occupying power'.³⁰ A survey by the Center for Palestine Research and Studies revealed that 40 per cent of Palestinians aged 18–22 supported Islamic organizations that opposed Arafat and the peace process, twice the rate of Palestinians over 50 years of age.³¹ A poll taken in early December revealed that a hypothetical election between Rabin and Likud leader Binyamin Netanyahu would result in a dead heat.³² Based on polling and anecdotal evidence, by the end of the year both Rabin and Arafat were deeply concerned about their political futures.

III. Israel and Jordan

In contrast to the difficult relations between Israelis and Palestinians, Israeli and Jordanian leaders demonstrated what can happen when mutual trust and the expectation of shared benefits prevail. Israel and Jordan built rapidly on the constructive developments in the peace process of late 1993. For many years, King Hussein's meetings with Israeli leaders had been an open secret. By mid-1994 Israeli–Jordanian relations were 'on the fast track' and they quickly bypassed progress on all other fronts. Even the Egyptians, 17 years after President Anwar Sadat's pathbreaking trip to Jerusalem, must have taken note of the degree to which Israeli and Jordanian leaders seemed to glide smoothly into a new era of ties.

The prognosis seemed hopeful in early 1994. Building on the common agenda signed on 14 September 1993, Israel and Jordan both benefited from active US diplomacy. The US–Jordanian–Israeli Trilateral Economic Committee, set up during an October 1993 meeting between President Bill Clinton, Crown Prince Hassan and Foreign Minister Peres, provided an effective framework for continuing negotiations. The Committee's third and fourth sessions, held in Washington on 16–17 February and 6–7 June 1994, paved the way for the major breakthroughs of July.

In Jordan, King Hussein could operate from a stronger position after the 8 November 1993 parliamentary elections. While radical legislators suffered an electoral setback, the voices of moderation in Jordan received a solid boost.

³⁰ Haberman, C., 'Israelis reaffirm pact with P.L.O.', *New York Times*, 9 Dec. 1994, p. A6; and Reuters, 'Rabin idea on army irks Arafat', *Boston Globe*, 13 Dec. 1994, p. 27.

³¹ See Dockser (note 6), p. A1.

³² Netanyahu led in the poll, 44% to 42%, but the margin of error was 3%. Honig, S., *Jerusalem Post*, 6 Dec. 1994, in FBIS-NES-94-235, 7 Dec. 1994, p. 21.

Those hostile towards political and economic relations with Israel were mostly marginalized by the end of 1993. Jordan's leaders did not have free rein, but they were able to move faster towards peace with Israel as negotiations advanced. For many years Jordan and Israel had had few fundamental policy differences, although the timing never seemed right for public or formal links. Even when the peace process started in 1991, it still appeared that Jordan and Israel were keeping the potential for full relations on hold while assessing the prospects on other Arab-Israeli fronts. In a literal sense, this proved true with the September 1993 Common Agenda.³³ In October 1992 the *Jordan Times* had published the Agenda, but it took the Oslo DOP Agreement to bring it out in the open; the official agenda was virtually identical to the one contained in the *Jordan Times* article.³⁴

On 7 June 1994 Israel, Jordan and the USA announced significant structural progress in both the political and economic arenas. Dennis Ross, US Special Middle East Coordinator, explained that the meeting 'was a trilateral set of discussions that also provided an occasion for bilateral discussions and for progress on both a trilateral and bilateral basis'.³⁵ Israel and Jordan had not held formal bilateral meetings since before the February Hebron massacre. They announced a series of economic measures including an agreement to begin working on a draft framework for future economic relations, continued consultations on banking and a proposal for a trilateral forum with the Palestinians on trade, banking and financial issues. Several cooperative projects were proposed, including the development of the Jordan Rift Valley, tourism promotion, a cultural heritage park, civil aviation, and a road linking Egypt, Israel and Jordan near Aqaba and Eilat.

Perhaps more important were the political steps agreed to in early June 1994. In addition to the economic measures mentioned above, Israeli negotiator Elyakim Rubenstein and Jordanian negotiator Fayiz al-Tarawinah signed 'common sub-agendas' on water, energy and the environment, security, and borders and territorial matters.³⁶ The sub-agendas were a continuing effort to elaborate on the 1993 Common Agenda. The 7 June 1994 statement also noted that the results of the negotiations would be incorporated into the peace treaty draft. Israel and Jordan decided to set up a Commission on Boundaries, Security, Water and the Environment and Related Issues and relevant sub-commissions.³⁷

At about the same time, the Jordanian Government changed the composition of the Cabinet. While the Prime Minister and several other key officials retained their posts, 16 new Cabinet appointees were named. A number of political parties were represented in the new appointments, and many assumed

³³ See *SIPRI Yearbook 1994* (note 2), appendix 3A, pp. 122–23.

³⁴ 'Inching toward "peace treaty" with Jordan', *Middle East Today*, no. 379 (30 Oct. 1992), p. 2; and 'Israel-Jordan track common agenda, September 14, 1993', *Foreign Policy Bulletin*, vol. 4, no. 3 (Nov./Dec. 1993), p. 13.

³⁵ 'Special State Department briefing', *Federal News Service*, 7 June 1994.

³⁶ AFP, 9 June 1994, in FBIS-NES-94-112, 10 June 1994, pp. 1–3.

³⁷ 'Fourth meeting of U.S.-Jordanian-Israeli Trilateral Economic Committee', *US Department of State Dispatch*, vol. 5, no. 24 (13 June 1994), pp. 389–90.

that the move was an attempt to broaden support and strengthen the government for the peace effort with Israel.

In hindsight it appears that a secret meeting between Rabin and Hussein on 19 May 1994 was the real impetus behind the flurry of activity that began in June. At that meeting, held in London, Rabin agreed to discuss water and border issues before a formal peace treaty was signed while Hussein agreed to take a number of steps towards normalization. More importantly, both agreed to embark on the road towards peace. The 6–7 June 1994 meeting was a ‘cover’ to bring the USA in on the results of the 19 May meeting and to generate further advances.³⁸

In what turned out to be the standard pace for Israeli–Jordanian events in 1994, the two parties moved rapidly towards the next stage of negotiations. King Hussein came to Washington and stated at a 20 June news conference that he would have no problem meeting with Rabin.³⁹ When the King met with President Clinton on 22 June, Clinton pressed Hussein to take a large and dramatic step towards peace with Israel. Forgiveness of Jordan’s \$700 million debt and other financial and military incentives for Jordan were apparently a major element of their discussions. In addition to promising to work to reduce the debt owed to the USA, Clinton allegedly agreed to approach Jordan’s other international creditors and support favourable debt rescheduling.⁴⁰

On 9 July 1994 King Hussein told the lower house of the Jordanian Parliament that he would meet with Rabin if it served Jordanian interests. Secretly, on 12 July, Hussein sent Clinton a letter indicating that he would meet with Rabin. Three days later Clinton announced that King Hussein and Prime Minister Rabin would meet at the White House on 25 July; initially it was unclear what exactly Israel and Jordan would sign at the ceremony.

Jordan continued to drop hints that peace was approaching. On 18 July 1994, in a tent on the Israeli–Jordanian border, the two countries began direct negotiations. On the second day of the talks, al-Tarawinah revealed that Jordan was willing to begin cooperative ventures with Israel before a treaty was signed: ‘As we feel, both of us, that there are things that will be beneficial to both sides, I think that we can do that’.⁴¹ After two days of talks, the two sides issued a joint statement and agreed to begin continuous negotiations on 8 August.

On 20 July, at a news conference held by Warren Christopher and King Hussein in Amman, the King suggested that he would sign a separate treaty with Israel without an Israeli–Syrian deal. That same day Peres became the first Israeli minister to publicly visit Jordan when he met with Christopher and Abd al-Salam al-Majali at a site near the Dead Sea. The three officials issued a joint communiqué that spelled out areas of cooperation. In addition to the

³⁸ Sciolino, E., with Friedman, T., ‘Crossing the river: the Israel–Jordan pact’, *New York Times*, 31 July 1994, p. 1.

³⁹ Jordan Television Network, 20 June 1994, in FBIS-NES-94-119, 21 June 1994, p. 41.

⁴⁰ Lippman, T., ‘Clinton promises to seek forgiveness of Jordan’s debt’, *Washington Post*, 23 June 1994, p. A22.

⁴¹ Haberman, C., ‘Jordan hints it may cooperate with Israel before signing pact’, *New York Times*, 20 July 1994, p. 2.

economic, trade and commercial clauses, the statement included a pledge to hold regular ministerial meetings.

By the time Hussein and Rabin arrived in Washington for the 25 July White House ceremony, several weeks of positive rhetoric and fruitful diplomacy had led to a surprisingly comprehensive document, the so-called Washington Declaration.⁴² The Declaration ended the state of belligerency between the two countries, and some observers called it a virtual peace treaty. The two sides pledged to develop good relations, refrain from activities that adversely affect the security of the other and move forward on economic projects and border and water negotiations. While significant issues remained to be resolved, both sides took pride in the warmth, cooperative spirit and substance of both the ceremony and the document.

The US Congress responded quickly to the breakthrough. On 29 July 1994 a House–Senate conference committee appropriated \$99 million to write off \$220 million of Jordan's debt to the USA, close to one-third of the amount owed. It also gave the US Administration the authority to send Jordan some excess US military equipment. Jordan appears interested in greater US aid.⁴³ In the Middle East, a largely symbolic event took place on 3 August when King Hussein spoke by telephone with Rabin as the King's aeroplane flew over Israel on his return trip to Jordan. President Clinton made good on an earlier pledge⁴⁴ to Hussein when, on 5 August, he sent a letter to the Paris Club⁴⁵ asking for relief of Jordan's financial burden. This was followed closely by the opening of a new southern border crossing near Aqaba and Eilat on 8 August 1994 at which Crown Prince Hassan, Foreign Minister Peres and Secretary of State Christopher spoke.

Over the next months Israeli and Jordanian negotiators worked on resolving remaining differences, including the central issues of water distribution and border demarcation. Jordan argued that Israel took more than its fair share of water from the Yarmuk and Jordan rivers while Jordan faced a water shortage. It also contended that between 1948 and 1969, Israel intermittently seized about 322 km².⁴⁶ On 3 October 1994, as negotiations continued, Clinton met with Hassan and Peres on the first anniversary of their initial meeting. They announced a number of new economic measures and joint projects and pledged to open a new border crossing in the north.⁴⁷ They did not, as some

⁴² For a text of the agreement, see 'The Washington Declaration: Israel, Jordan, the United States, July 25, 1994', *Foreign Policy Bulletin*, vol. 5, no. 2 (Sep./Oct. 1994), pp. 80–81.

⁴³ Doherty, C., 'For Jordan, peace is its own reward', *Congressional Quarterly*, 30 July 1994, p. 2156; and *Jordan Times*, 1–2 Dec. 1994, pp. 1, 12, in FBIS–NES–94–231, 1 Dec. 1994, pp. 36–37.

⁴⁴ See Lippman (note 40).

⁴⁵ In 1962 Belgium, Canada, France, Italy, Japan, the Netherlands, Sweden, the UK, the USA and West Germany (the Group of Ten or Paris Club) signed the General Agreement to Borrow under which a specified amount of credit was made available to the International Monetary Fund (IMF).

⁴⁶ Sources provide different estimates of the area of disputed land. An undated document from the Jordan Information Bureau in Washington notes two main areas totalling about 322 square km. An Israeli news summary claimed that 'Jordan is demanding the return of 368 square kilometers'. Israeli Consulate, 'Gaps remain as Israeli–Jordanian talks resume in Eilat', 11 Oct. 1994 (via Internet).

⁴⁷ 'Remarks by President Bill Clinton, Crown Prince Hassan of Jordan and Israeli Foreign Minister Shimon Peres', *Federal News Service*, 3 Oct. 1994.

had hoped, set a specific date for the completion of the peace treaty, although both sides renewed their pledges to seek a full peace.

Public scepticism that a treaty could be concluded in 1994 proved unwarranted, although a draft treaty was initialled on 17 October in Amman by Rabin and al-Majali. The official signing was set for 26 October, and President Clinton accepted an invitation to participate in the ceremony. The Arab–Israeli peace treaty, the first in the region, was signed at a site on the Israeli–Jordanian border a few kilometres north of Eilat and Aqaba. Representatives were present from eight Arab or Muslim countries, including Algeria, Egypt, Malaysia, Mauritania, Morocco, Oman, Qatar and Tunisia.⁴⁸ Syria and the PLO, however, quickly condemned the treaty, with Syrian President Hafez al-Assad specifically denigrating the Israeli–Jordanian land arrangements in it. While Assad was generally upset to have been bypassed by Israel and Jordan, Syrian criticism of the land arrangement is significant given the possibility that Israel and Syria may need some type of creative arrangement to break their negotiating impasse.

The treaty contained a number of far-reaching measures that went well beyond simply ending the Israeli–Jordanian conflict. The years of secret, informal relations between King Hussein and Israeli leaders were an important element in this new cooperative relationship between the two countries. In addition to establishing full diplomatic relations, Jordan agreed to end participation in the Arab boycott of Israel and companies doing business with Israel.⁴⁹ Tourism and trade were also a high priority, although negotiations continued for up to six months on trade, banking and other financial arrangements.

Both sides pledged that they would not let their territory be used as a staging ground for an attack by a third party. This was important to Israel which, although not fearful of the Jordanian armed forces, was concerned that another country might launch an attack against Israel from Jordanian territory. Article 4 of the treaty dealt with these security issues and contained most of the traditional peace treaty clauses on ending belligerency, hostility and military threats. It also contained a joint commitment to combat terrorism.

Israel and Jordan found a novel approach to end a long-standing dispute over approximately 350 km² of land along the Israeli–Jordanian border. The land will be returned to Jordan, and Israel will acknowledge Jordanian sovereignty, but Israel will lease back about one-third of the land, mostly to protect the fields of Israeli farmers.⁵⁰ The procedures for the two main areas where Israel is leasing land, the al-Baqurah/Naharayim area in the north and the Zofar area in the south, call for a 25-year lease that is automatically renewed unless 'one year prior notice of termination is given by either party' which

⁴⁸ Haberman, C., 'Israel and Jordan sign a peace accord', *New York Times*, 27 Oct. 1994, pp. A1, A12; see also appendix 5A in this volume.

⁴⁹ In theory, the Arab boycott included the boycott of Israeli companies (the primary boycott), non-Israeli companies that did business with Israel (the secondary boycott) and non-Israeli companies doing business with companies falling under the secondary boycott (the tertiary boycott).

⁵⁰ Greenberger, R., 'Jordan and Israel sign peace accord, but other Mideast pacts may be elusive', *Wall Street Journal*, 27 Oct. 1994, p. A22.

may then lead to consultations.⁵¹ This arrangement was both a result of the trusting relationship of the leaders and negotiators and a confidence-building force in its own right.

The proposals on water-sharing in the body of the treaty and in Annex II will help alleviate Jordan's chronic water shortage. Jordan's chief water negotiator, Munthir Haddadin, explained that Jordan will receive 215 million cubic metres (m³) of water, of which 175 million m³ will be suitable for drinking water and the rest only for irrigation. Israel will immediately provide 55 million m³, with the rest dependent on building dams, finding storage sites, identifying new sources and rehabilitating low-quality water.⁵²

Like the Jerusalem clause in the July Washington Declaration, the reference to Jerusalem in the Israeli–Jordanian treaty was one of the most controversial aspects of the agreement. Article 9 states that 'Israel respects the present special role of . . . Jordan in Muslim Holy Shrines in Jerusalem. When negotiations on the permanent status will take place, Israel will give high priority to the Jordanian historic role in these shrines'.⁵³ Palestinian leaders were once again outraged and protests against the treaty, partly as a result of the Jerusalem claim, erupted in several parts of the Gaza Strip and West Bank. The Muslim competition over Jerusalem is extensive, with Jordan, Morocco, the Palestinians and Saudi Arabia articulating the major claims. In an effort to reduce disagreements, Crown Prince Hassan announced on 1 November 1994 that Jordan will turn over control of Jerusalem's Islamic holy sites to the Palestinians when the final status of the city is determined.⁵⁴

The Israeli Knesset approved the treaty by a vote of 105 to 3, with 6 abstentions, on 25 October 1994.⁵⁵ The Lower House of the Jordanian Parliament approved the treaty by a vote of 55 to 23 on 6 November. The Jordanian Senate gave unanimous approval on 9 November. On 10 November, King Hussein became the second Arab leader to visit Israel when he and Rabin exchanged copies of ratified peace treaties in Zemach on the shores of the Sea of Galilee. Earlier in the day the nearby Sheik Hussein Bridge was reopened on the Israeli–Jordanian border. The first trade shipment, several tonnes of tomatoes, was sent on 20 November 1994, and temporary embassies were opened in Tel Aviv and Amman on 11 December.⁵⁶

⁵¹ *Al-Aswaq*, 24 Oct. 1994, p. 18, in FBIS-NES-94-206, 25 Oct. 1994, pp. 1–7 (Annex I, III, IV and V of the Israeli–Jordanian Treaty).

⁵² *Jordan Times*, 20–21 Oct. 1994, p. 7, in FBIS-NES-94-203, 20 Oct. 1994, pp. 1–3 (Annex II of the Israeli–Jordanian Treaty); *Jordan Times*, 19 Oct. 1994, pp. 1, 7, in FBIS-NES-94-203, 20 Oct. 1994, p. 3; and *Jordan Times*, 20–21 Oct. 1994, pp. 1, 2, in FBIS-NES-94-204, 21 Oct. 1994, pp. 6–7.

⁵³ *Jordan Times*, 20–21 Oct. 1994, pp. 6–7, in FBIS-NES-94-204, 21 Oct. 1994, pp. 1–6 (text of the Israeli–Jordanian Draft Treaty).

⁵⁴ *Qol Yisra'el*, 1 Nov. 1994, in FBIS-NES-94-212, 2 Nov. 1994, p. 4.

⁵⁵ Gordon, E., *Jerusalem Post*, 26 Oct. 1994, p. 2, in FBIS-NES-94-207, 26 Oct. 1994, pp. 28–29.

⁵⁶ Bronner, E., 'Hussein seals pact with Rabin in Israel', *Boston Globe*, 11 Nov. 1994, p. 2; and *Radio Jordan*, 20 Nov. 1994, in FBIS-NES-94-224, 21 Nov. 1994, p. 50.

IV. Israel and Syria

The all-important Israeli–Syrian breakthrough remained elusive. Both countries made some progress—most of it semantic—but no major public advance occurred. Although 1994 started on a hopeful note, no significant advances were made.

On 16 January, President Clinton met with Syrian President Assad in Geneva and although no agreement was reached, the general tone of the meeting was positive. It seemed possible that Assad's comments, coupled with the right actions, might lead to an Israeli–Syrian agreement or declaration in the first few months of 1994. At a joint news conference, Assad stated, 'If the leaders of Israel have sufficient courage to respond to this kind of peace, a new era of security and stability with normal peaceful relations shall dawn'.⁵⁷ As expected, US officials hailed the statement as a step forward on the long road to peace, the first Syrian reference to 'normal relations'. Israeli leaders had hoped for a more revealing definition of 'normal relations', but some were pleased that Assad mentioned the subject of normalization. After several months passed with little progress, however, Assad was successful in putting pressure on Israel to respond.

Rabin did not waste much time in responding. On 18 January 1994 Rabin told reporters, 'If and when we come to a draft of a peace agreement between Syria and us and it demands a painful price, perhaps higher than the residents of Israel expect, then in my opinion we will need to bring it to a referendum'.⁵⁸ The day before Israeli officials had raised the issue of a national referendum on any Golan Heights agreement, a move that might help both as leverage in negotiations with Syria and as a means of quelling domestic dissent. Rabin's 'painful price' was widely interpreted as a reference to Israeli withdrawal from the Golan, although the extent of the withdrawal he had in mind remained ambiguous. Behind the scenes, US officials also apparently told Israeli leaders that in his private meeting with Clinton, Assad had dropped Syria's demand for equal geographic demilitarization as a security arrangement in any deal.⁵⁹

That same week Syria was stunned by the accidental death of Assad's eldest son, Basil al-Assad, in a car crash on 21 January 1994. Many observers had expected that Basil would succeed his father, an issue of rising importance in view of President Assad's history of heart problems.

As a result of the Assad and Rabin statements and of US diplomacy, Israel and Syria resumed bilateral talks in Washington on 24 January. Talks continued on and off over the next month with little tangible progress. After the attack against Islamic worshippers in Hebron on 25 February, Syria, along

⁵⁷ Jehl, D., 'Assad holds out prospect of normal ties with Israel after talks with Clinton', *New York Times*, 17 Jan. 1994, pp. A1, A6.

⁵⁸ Haberman, C., 'Rabin says peace with Syria may require a "painful price"', *New York Times*, 19 Jan. 1994, pp. A1, A6.

⁵⁹ See Haberman (note 58).

with Jordan and Lebanon, broke off the bilateral talks on 27 February.⁶⁰ Direct Israeli–Syrian and Israeli–Lebanese talks in the same format did not resume after this breakdown. In a 16 March joint news conference in Washington, both Rabin and Clinton tried to entice Syria back to the table. In wording similar to previous statements, Rabin said, ‘We will not compromise on our security, but we will stand ready to do what is required of us if the Syrians are ready to do what is required of them’.⁶¹

In April 1994, as government plans and drafts on the Golan issue appeared in the Israeli and Palestinian press, Rabin re-emphasized that Israeli settlements were secondary to peace with Syria.⁶² When he addressed the United Kibbutz Movement convention, Rabin said, ‘If we reach the point where we need to remove settlements for the sake of peace, I have been and will remain in favor of it. . . . For me, peace is a higher value for Israel’s future and security than this or that group of settlements’.⁶³ Rabin also noted that Israel is militarily strong enough to safely make a deal with Syria.

In the absence of bilateral talks, other forms of Israeli–Syrian negotiations took centre stage. In Washington, Israeli Ambassador Itamar Rabinovich and Syrian Ambassador Walid Muallem are said to have met on many occasions to exchange ideas and pass along the positions of their respective governments.⁶⁴ However, neither was apparently given much negotiating flexibility; this diplomatic avenue seemed more helpful for the exchange of information than the reduction of actual differences through compromise.

Throughout 1994 US Secretary of State Christopher shuttled back and forth between Jerusalem and Damascus, often carrying new ideas and counter-proposals. His travels became particularly intense in April and May after reports that Israel and Syria had exchanged comprehensive peace plans.⁶⁵ In the end, however, the two sides remained far enough apart on key issues that an agreement was not reached. While Israel wanted to resume face-to-face negotiations, Syria seemed content to have Christopher continue his shuttle missions. When Rabin warned that without an Israeli–Syrian peace treaty Israel should ‘prepare for war 3, 5 years or 7 years from now, or 10 years from now’, he was probably trying to pressure Syria to move faster at the bargain-

⁶⁰ Greenhouse, S., ‘3 Arab nations are said to break off Israel talks’, *New York Times*, 28 Feb. 1994, p. A9.

⁶¹ Greenhouse, S., ‘U.S. and Israel hope to persuade Syria to return to the peace talks’, *New York Times*, 17 Mar. 1994, p. A1.

⁶² Ben, A., *Ha’aretz*, 5 Apr. 1994, p. A1, in FBIS-NES-94-065, 5 Apr. 1994, p. 28; and *Al-Manar*, 18 Apr. 1994, p. 1, in FBIS-NES-94-076, p. 3.

⁶³ *Qol Yisra’el*, 21 Apr. 1994, in FBIS-NES-94-078, p. 27; and Haberman, C., ‘Rabin hints peace could cost Golan’, *New York Times*, 22 Apr. 1994, p. A1.

⁶⁴ Ben, A., *Ha’aretz*, 20 Apr. 1994, pp. A1, A10, in FBIS-NES-94-077, p. 8; and Dowek, N., *Yedi’ot Aharonot*, 23 Sep. 1994, p. 2, in FBIS-NES-94-176, p. 7.

⁶⁵ Greenhouse, S., ‘Israelis urge Syria to show it seeks peace’, *New York Times*, 30 Apr. 1994, p. 7; Goshko, J., ‘Syria rebuffs Israel’s ideas, offers its own’, *Washington Post*, 3 May 1994, p. A15; Greenhouse, S., ‘Israelis offering to leave Golan, negotiators say’, *New York Times*, 18 May 1994, p. A1; and Greenhouse, S., ‘Israeli–Syrian round ends without breakthrough’, *New York Times*, 19 May 1994, p. A6.

ing table. Even some Israelis were not pleased that their leader had raised the spectre of another war.⁶⁶

The next major positive rhetoric and semantic advances occurred in September. On an 8 September 1994 visit to London, Syrian Foreign Minister Faruq al-Sharaa called for a 'warm peace' with Israel and took questions from Israeli journalists.⁶⁷ On the same day, Rabin described a two-stage withdrawal plan to his Cabinet and the Israeli public. While Rabin did not specify the extent of the final Israeli withdrawal, he did explain that the first stage would involve a token Israeli withdrawal, an exchange of ambassadors and a three-year trial period in which 'the normalization in its entirety will be put to a test'. In the second stage, Israel would withdraw from more of the Golan and implement security arrangements.⁶⁸

Assad responded indirectly on 10 September 1994 in a speech before the Syrian Parliament in which he reiterated that Syria is working to bring peace to the region. In addition, he stated that 'Syria shall meet the objective requirements of peace that are agreed upon'.⁶⁹ This was widely seen as a reference to security arrangements and normalization and thus a deeper Syrian acceptance of the rest of the package associated with Israeli withdrawal from the Golan. Foreign Minister Peres called Assad's speech a 'declaration of peace', and Israeli leaders were pleased that Assad addressed his parliament on the topic.⁷⁰ Assad's speech and other statements by leaders in both countries were also attempts to reorient public opinion in countries that have seen the other as the hated enemy for many years. On 12 September, a Labour Party spokesman claimed that Rabin had told a private meeting of Labour Party legislators that 'whoever thinks there will be peace with Syria while we keep the Golan is lying'.⁷¹

At this juncture, the Israeli and Syrian positions are widely known. Syria advocates full peace for full withdrawal, with withdrawal coming first and normalization second. Syria sees no reason to open up to Israel, arrange a meeting of top officials or begin to implement tangible confidence-building measures (CBMs) until Israel has withdrawn from the Golan. Syria probably would support such measures after Israel has explicitly accepted full withdrawal in a reasonable, that is, short, time period. It is concerned that, should a Likud Government come to power, it would not continue the withdrawal, and Syria would therefore like to see such a withdrawal completed in one year or less, or at the latest before the 1996 Israeli parliamentary elections. To a large degree Syria would like to see mutual security arrangements, although there may be some flexibility on degree or extent for each side on any given

⁶⁶ Haberman, C., 'Peace pact with Syria needed to prevent war, Rabin says', *New York Times*, 25 June 1994, p. 4; and Samet, G., 'Will there be war?', *Ha'aretz*, 1 July 1994, p. B1, in FBIS-NES-94-128, 5 July 1994, p. 61.

⁶⁷ al-Husayni, H., Radio Monte Carlo, 8 Sep. 1994, in FBIS-NES-94-174, 8 Sep. 1994, p. 47.

⁶⁸ Horovitz, D., 'Rabin proposes 2-step withdrawal from Golan Heights', *Boston Globe*, 9 Sep. 1994, pp. 1, 15.

⁶⁹ Syrian Arab Television Network, 10 Sep. 1994, in FBIS-NES-94-176, 12 Sep. 1994, pp. 41-48.

⁷⁰ Haberman, C., 'Israeli officials enthusiastic about the latest word from Syria', *New York Times*, 12 Sept. 1994, p. A5; and *Qol Yisra'el*, 12 Sep. 1994, in FBIS-NES-94-177, 13 Sep. 1994, pp. 47-48.

⁷¹ 'Rabin might accept complete withdrawal from Golan', *Miami Herald*, 13 Sep. 1994, p. 7A.

measure. By the end of 1994 Syria had rejected most of the far-reaching Israeli security proposals, such as the call for Syria to restructure its armed forces with fewer standing personnel.

Seeking recognition and contact after years of regional isolation, Israel has proposed a gradual approach that combines elements of withdrawal, normalization and security. Overall, withdrawal and normalization should move together. Syria should open its borders and increase trade before Israeli withdrawal is near completion. The withdrawal itself should take place in two or three phases; Rabin has not committed Israel to a full withdrawal, although many Israelis claim that he supports it. Throughout 1994 the Israeli media debated whether or not Rabin had committed himself in private to a full withdrawal from the Golan. He has said that 'it would be extremely stupid' for him to explicitly draw the final withdrawal line at this time.⁷² Rabin raised the possibility that peace with Syria could require a 'significant and painful withdrawal'.⁷³ While Israel is willing to accept some security restrictions, Israeli officials argue that since Syria will receive military and strategic advantages from control of the Golan Heights, Syria should also accept more restrictions and military changes. Past Rabin statements that the depth of the withdrawal will match the depth of the peace clearly leave the door open for a full Israeli withdrawal.

Given these differences, Clinton felt that including a stop in Damascus during his visit to attend the Israeli-Jordanian treaty ceremony might help accelerate the process. On 27 October 1994 he met with Assad, and they held a press conference in Damascus; Syria allowed an Israeli reporter to attend and ask a question. Clinton said that their private meeting led to 'significant progress', and US officials pointed to Assad's comment that Syria 'commits itself to the objective requirements of peace through the establishment of peaceful, normal relations with Israel in return for Israel's full withdrawal from the Golan . . . and the south of Lebanon'.⁷⁴ In the aftermath of the 19 October bus bombing in Tel Aviv, the news conference revealed a clear disagreement on terrorism. Assad stated 'We did not discuss terrorism as a separate title' while Clinton said that he had told the Syrian leader that peace is inconsistent with terrorism. Clinton added that Assad had said repeatedly during their meeting that killing of innocent civilians, in Hebron or Tel Aviv, is wrong.

Syria's involvement with terrorist groups has been an abiding concern of US and Israeli officials, and Syria remains on the US State Department's list of sponsors of international terrorism. Several of the major rejectionist Palestinian groups are based in Damascus, and Hizbollah has operated from Lebanon with a virtual free hand. Non-Syrians suggest that Syria's decisive influence in the Lebanese Government means that Damascus could rein in Hizbollah at any time.

⁷² *Ha'aretz*, 6 July 1994, p. B2, in FBIS-NES-94-130, 7 July 1994, p. 52.

⁷³ *Qol Yisra'el*, 11 Nov. 1994, in FBIS-NES-94-220, 15 Nov. 1994, p. 31.

⁷⁴ Devroy, A., 'Peace process advanced in Syria talks, U.S. says', *Washington Post*, 28 Oct. 1994, p. A32.

Hizbollah and Israel battled on numerous occasions in 1994. Fire-fights in southern Lebanon were a regular occurrence, as were bombing runs by Israeli aircraft and Hizbollah-launched rockets landing in northern Israel. In July 1994 many blamed Hizbollah for devastating terrorist attacks against Jewish organizations in Buenos Aires and London. The attacks coincided with the Israeli–Jordanian opening and followed Israeli kidnappings of Shiite leaders in Lebanon and a particularly effective air strike against a Hizbollah training camp on 2 June 1994. On 8 August Israeli leaders did praise Syria for pressing Hizbollah to end a particular round of rocket attacks.⁷⁵

The Lebanese Government has remained on the sidelines during the Israeli–Hizbollah confrontation. It rejects the Israeli military presence in the so-called security zone but is unable to exhibit much freedom with 30 000 Syrian troops in Lebanon. Lebanon has followed Syria's lead in the Arab–Israeli peace process, boycotting the multilateral talks and breaking off bilateral talks after the February Hebron attack. In October, Lebanese President Elias H'rawi offered to discuss security arrangements on the Israeli border in exchange for a complete Israeli troop withdrawal. With Christopher acting as an intermediary in late October and early November, Rabin offered a more comprehensive counterproposal that went far beyond the military issue raised by H'rawi.⁷⁶ The exchange marked the first public reports of an Israeli–Lebanese dialogue at such a high level after months of apparent silence.

One interesting throwback to another era was the signing of a Russian–Syrian arms deal on 27 April 1994 in Damascus.⁷⁷ The Syrian military saw other changes in 1994 as some observers claimed that Assad was purging his leadership of officers who did not support the peace process. Unofficial sources claimed that Assad dismissed at least 16 'senior military commanders' including Major-General Ali Haidar, head of the Special Forces, and General Shafiq Fayyadh, head of the Third Armoured Division deployed around Damascus.⁷⁸ The secretive nature of the Assad regime has prevented the emergence of a definitive account of these alleged changes.

On 9 December 1994 wire services reported that Syria had agreed to resume talks with Israel in Washington. According to Foreign Minister al-Sharaa, negotiations would be resumed to help break the Israeli–Syrian stalemate.⁷⁹ The brief talks began in Washington on 22 December and included Muallem,

⁷⁵ Kemp, G. and Pressman, J., 'A promising move toward peace, but obstacles remain', *San Diego Union-Tribune*, 31 July 1994, p. G-1; and Greenhouse, S., 'Israel praises Syria for help in stopping militia attacks', *New York Times*, 9 Aug. 1994, p. A2.

⁷⁶ Alon, G., *Ha'aretz*, 2 Nov. 1994, p. A3, in FBIS-NES-94-212, 2 Nov. 1994, p. 33; and Israeli Consulate, 'Lebanon offers Israel to begin negotiations on withdrawal', 1 Nov. 1994 (via Internet).

⁷⁷ 'Russia and Syria sign military agreement', *New York Times*, 29 Apr. 1994, p. A7; Ben, A., *Ha'aretz*, 13 Apr. 1994, pp. A1, A10, in FBIS-NES-94-073, 15 Apr. 1994, p. 26; Sychev, A., 'Moscow considering writing off Syrian debt', *Izvestia*, 29 Apr. 1994, p. 3, in FBIS, *Daily Report-Soviet Union (FBIS-SOV)*, FBIS-SOV-94-083, 29 Apr. 1994, p. 12; and Bruce, J., 'Russia/Syria sign to smooth arms trade', *Jane's Defence Weekly*, vol. 21, no. 19 (14 May 1994), p. 3. See also chapter 14 in this volume.

⁷⁸ Bruce, J., 'Purge may ease path to Middle East peace', *Jane's Defence Weekly*, vol. 22, no. 9 (3 Sep. 1994), p. 1; Bruce, J., 'Syria's inner circle reshuffle', *Jane's Defence Weekly*, vol. 22, no. 11 (17 Sep. 1994), p. 27; and *al-Muharrir* (Paris), 26 Sep 1994, p. B1, in FBIS-NES-94-186, 26 Sep. 1994, p. 47.

⁷⁹ 'Syria says it would reopen talks', *New York Times*, 10 Dec. 1994, p. 4.

Rabinovich, Syrian Major-General Hikmat Shihabi and Israeli Lieutenant-General Ehud Barak. Further meetings are expected to take place in 1995.

The burning issue for Israel will remain the security implications of withdrawal from the Golan Heights. For Hafez al-Assad, peace with Israel is a much more complicated problem. Can Assad and his regime survive if relations with Israel are 'normalized' and Lebanon itself becomes independent once more, possibly with close ties to Israel? The answer is not yet apparent.

V. Multilateral negotiations

While the bilateral Arab-Israeli negotiations have rightfully commanded the headlines since the October 1991 Madrid conference,⁸⁰ various multilateral efforts to build a brighter future in the Middle East have been successful in bringing long-time enemies together and tackling key challenges facing the region in the years ahead. The five multilateral working groups launched in Moscow on 28–29 January 1992 have formed the core of the multilateral negotiations, but other steps and meetings have also contributed to the process. The five official working groups cover Arms Control and Regional Security, Water Resources, the Environment, Economic Development and Refugees.

This is the forward-looking track of the Arab-Israeli peace process. Rather than narrowly focusing on ways to untangle bitter border disputes or military confrontations, the multilateral talks have looked for common ground on important economic and military issues. Of course, they cannot be divorced from the bilateral talks, but negotiators have tried to find goals, activities and projects that will build a better future for the Middle East.

In that sense many steps related to the multilateral talks have served, and will continue to serve, as CBMs. Arab and Israeli delegates have now participated in tens of joint meetings where they network, socialize and exchange ideas. They have begun to propose and develop a structural framework for enhancing trust and cooperation in the region. The work of these representatives may very well lay the groundwork for new institutions and tangible gains for the participating countries. A multilateral steering group guides and monitors the five individual groups, which in 1994 entered rounds six and seven.

On 3–5 May 1994 the Arms Control and Regional Security (ACRS) working group met in Doha, Qatar, and continued work on a variety of security issues. It approved the establishment of an ACRS communications network and decided to hold a search and rescue demonstration in the Mediterranean area. Discussions continued on verification issues, establishing a conflict prevention centre and drafting a document on security relations.⁸¹ In July a joint naval activity took place off the coast of Italy with the participation of

⁸⁰ See *SIPRI Yearbook 1994* (note 2), chapter 3, p. 101.

⁸¹ Information on the round six meetings (Apr.–July) of the multilateral talks may be found in Pelletreau, R., 'The multilateral peace negotiations', *US Department of State Dispatch Supplement*, vol. 5, no. 7 (Aug. 1994), p. 40.

Canada, Egypt, Israel, Italy, Qatar, Tunisia and the USA.⁸² In early October talks were held in Paris on security threats in the Middle East. Meetings continued in Jordan on 8–10 November. In addition to the above-mentioned issues, negotiators in Jordan discussed providing advance notice of military exercises and agreed to a regional joint military exercise sometime in the future.⁸³ The arms control talks have been divided into two sub-committees, or 'baskets', the operational one that met in Jordan on 8–10 November, and a conceptual basket.

A successful plenary session opened in Tunis on 13 December. According to US officials, the participants agreed to provide advance notification of exercises involving more than 4000 troops or 110 tanks and to exchange 'military information'. In addition to a Palestinian delegation, 13 countries agreed to these measures: Algeria, Bahrain, Egypt, Israel, Jordan, Kuwait, Morocco, Oman, Qatar, Saudi Arabia, Tunisia, the United Arab Emirates and Yemen.⁸⁴

Several proposals were approved on 17–19 April 1994 at the water resources working group meeting in Oman, including an Omani plan for a regional desalination research centre based in Muscat. Proposals on the rehabilitation of municipal water supply systems and on wastewater treatment were also approved. Further talks on water desalination were held in Oman on 17–18 October, and a full session took place in Athens on 7–9 November.⁸⁵

Like the other groups, the environmental working group meetings addressed both general issues and specific projects. At the 6–7 April meeting in The Hague, issues covered included an environmental code of conduct, oil spill contingencies in the Gulf of Aqaba, desertification and wastewater treatment in smaller communities. The seventh round of talks opened in Bahrain on 25 October.

The fourth working group, dealing with refugees, met in Cairo on 10–12 May 1994 and spent much of its time discussing the issue of Palestinian refugees. The group has focused on social services and projects that will foster self-sufficiency.

Although no one knew it at the time, the 15–16 June 1994 gathering in Rabat served as a warm-up for the major economic development meeting in Morocco in October. At the June meeting, the working group drafted economic guidelines for regional cooperation and followed up on previous proposals. In early December an economic development follow-up committee agreed to set up regional councils for finance, trade and tourism.⁸⁶

The most important multilateral event of 1994 was the Middle East/North Africa Economic Summit that began on 30 October, three years to the day after the Madrid Conference. The large meeting, organized by the Swiss-based World Economic Forum and the New York-based Council on Foreign Rela-

⁸² New Channel 2 Television Network, 21 July 1994, in FBIS-NES-94-141, 22 July 1994, p. 34.

⁸³ Israeli Consulate, 'Multilateral arms control talks adjourn in Jordan', 11 Nov. 1994 (via Internet); Vivekanand, P. V., *Jordan Times*, 9 Nov. 1994, in FBIS-NES-94-217, 9 Nov. 1994, pp. 2–4; and Jordan Television Network, 10 Nov. 1994, in FBIS-NES-94-219, 14 Nov. 1994, p. 1.

⁸⁴ 'Israel, Arab nations reach tension-easing pacts', *Washington Post*, 21 Dec. 1994, p. A21.

⁸⁵ *Qol Yisra'el*, 18 Oct. 1994, in FBIS-NES-94-203, 20 Oct. 1994, p. 5.

⁸⁶ MENA, 7 Dec. 1994, in FBIS-NES-94-236, 8 Dec. 1994, p. 2.

tions, brought together 10 heads of state, 60 ministers, over 300 other officials and chief executives of over 1100 companies from 60 countries. While delegates to the meeting at the Casablanca royal palace heard many familiar rhetorical speeches, the more important discussions took place on an informal level as members of the political and business arenas mingled, negotiated, networked and shared specific ideas for economic cooperation.⁸⁷ Officials were unable to agree on establishing a regional development bank, but they supported an economic community involving 'the free flow of goods, capital, and labor throughout the region'. They agreed to establish a regional tourist board and called for a second economic summit to be held in Amman in early 1995.⁸⁸ The Israeli delegation distributed suggestions for regional cooperation projects totalling \$18–27 billion.⁸⁹ Far more important than any political agreement, however, was the powerful symbolism of a new era represented by Arabs and Israelis jointly discussing the region's economic future.

For Israel the conference was one more symbol of its growing acceptance in the Arab and Muslim world and the international community. The Israelis brought a delegation of over 200 officials and businessmen, by far the largest at the conference. The conference came on the heels of a number of breakthroughs in Israeli political and economic relations. As part of the sixth round of the multilateral talks, Israeli representatives were allowed into several Arab countries, including Tunisia and Morocco. On 1 September 1994 Israel and Morocco announced that they would soon establish liaison offices in Rabat and Tel Aviv. On 30 September the six members of the Gulf Co-operation Council (GCC)⁹⁰ formally ended their blacklisting of foreign companies that trade with Israel. After Israel and Tunisia announced on 1 October that economic liaison officers would work out of the Belgian embassies in Tunis and Tel Aviv, Foreign Minister Peres and Tunisian Foreign Minister Habib Ben Yahya met publicly at the State Department on 4 October. Peres also met with the Omani Foreign Minister, Yusuf Bin Alawi. Israel has also realized tangible economic benefits from the diplomatic openings of the 1990s; the largest economic gain was with Asia, where trade was up 21 per cent in the first half of 1994. As countries perceive that the Arab–Israeli conflict is winding down, Israel is able to reap significant economic advantages. On 5 December the foreign ministers of Algeria, Egypt, Israel, Morocco and Tunisia met in Budapest and promised to hold biannual meetings to develop a Middle Eastern version of the Conference on Security and Co-operation in Europe (CSCE), as of January 1995, the Organization for Security and Co-operation in Europe (OSCE).⁹¹ Rabin himself travelled to Oman in late December.

⁸⁷ Bronner, E., 'These Mideast talks forsake politics in favor of economics', *Boston Globe*, 31 Oct. 1994, p. 16; and Bronner, E., 'Mideast Summit spurred trade-in business cards', *Boston Globe*, 2 Nov. 1994, p. 17.

⁸⁸ RTM Television Network (Rabat), 1 Nov. 1994, in FBIS-NES-94-212-S, 2 Nov. 1994, pp. 8–10 (text of the conference declaration).

⁸⁹ Israeli Ministry of Foreign Affairs and Ministry of Finance, *Development Options for Regional Co-operation* (Government of Israel Advertising Department, Oct. 1994), p. II–3.

⁹⁰ Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

⁹¹ Horowitz, N., *Ha'aretz*, 6 Dec. 1994, p. A3, in FBIS-NES-94-235, 7 Dec. 1994, p. 2.

While Israel has benefited greatly from the multilateral process, Syria and Lebanon have sat on the sidelines. Syria claims that it will not participate until bilateral issues are resolved. Other countries, such as Iran and Iraq, have also stayed out of the talks; this has left the regional vision for the future less than complete. Organizers of the next economic summit meeting purposely left the date ambiguous in the hope that Syria and Lebanon could be convinced to attend.

VI. Continuing threats and impediments to the Arab–Israeli peace process

Like 1993, 1994 brought momentous events in the Middle East. On many levels the gains of the peace process build on each other, creating a clear momentum. Yet all is far from solved. Several significant challenges remain, not to mention the broader regional problems ready to take the spotlight.

Electoral timing will be a key factor in both Israel and the United States. With US presidential elections in November 1996 and Israeli parliamentary elections also expected in 1996, time is running out before several central figures, most notably Israeli leaders, are distracted by domestic concerns. With the 1994 US elections resulting in Republican control of the House and Senate for the first time in 40 years, Democrats acknowledged that President Clinton will need to follow a demanding road to re-election.

The US election campaign could have effects that push the peace process in either direction. Warren Christopher, and by extension the entire Clinton Administration, is always looking for a triumph to counter criticism of Clinton's record in foreign affairs; the peaceful introduction of forces into Haiti, the rapid US show of force to counter Iraq's troop movements and the Israeli–Jordanian peace process provided a welcome boost to a much-maligned foreign policy team. However, with Republican candidates already looking towards the 1996 presidential elections, Clinton officials could easily become distracted by domestic concerns. They may be unable to devote the necessary resources to facilitating the peace process.

Timing is even more crucial in Israel. While Rabin could call early elections, he is likely to wait until 1996. Syria has made it clear that it would like the Israeli withdrawal from the Golan completed before the next Israeli elections; Syria fears that a Likud-led government would not uphold previous peace agreements. This leaves a very small window of opportunity in which Israel and Syria can still come to an agreement with enough time for implementation. Many observers have also assumed that Rabin will be caught up in Israeli electoral politics, although it is important to note that the typical Israeli election campaign is not as much the drawn-out US affair as it is similar to the rapid-fire British approach. This should leave most, if not all, of 1995 free for further progress at the peace talks.

Many of the organizations and countries that oppose the Arab–Israeli peace process have little concern for deadlines. Extremists on many fronts are

actively seeking to undermine the process and bring back the days of Arab–Israeli confrontation. Militants on both sides see the peace process as a dangerous threat to the achievement of their objectives as evidenced by the Hizbollah rockets, Hamas bombings and the actions of the right-wing Israeli underground. Ironically, the moves of one extremist benefit the other. Terrorism inevitably leads to calls from many quarters to roll back the agreements, slow the negotiations or cancel upcoming aspects of implementation. Although unlikely to succeed, a concerted and violent campaign against the peace process could bring progress to a halt or even undo some of the changes witnessed in 1994. The exact threshold is unknown, but the Israeli and the Palestinian peoples have limited tolerance for terrorist acts. Bus bombings and shooting massacres will eventually pose a threat to the political process. There is some hope that the extremist groups will eventually accept the peace process; an Israeli commentator noted that ‘the leadership of . . . Hamas and Hizbollah are quoted, both in the press and particularly in internal documents, as saying that peace with Israel is inevitable, and that there is nothing they can do to prevent it’.⁹²

The rejectionist issue also involves key regional players like Iran and Iraq. Iran issues an unending series of anti-Israel, anti-peace process statements and supports organizations like Hamas and Hizbollah. Although there were reports of secret Israeli–Iraqi contacts in 1994, outwardly President Saddam Hussein’s regime remains an enemy of Israel. As Baghdad demonstrated during the 1991 Persian Gulf War, Iraq is willing to attack Israel, whether it is with Scud missiles or some other form of weaponry. While it is unlikely that Iraq and Iran would cooperate to undermine the peace process, even their independent words and actions are threatening. Beyond the rhetoric, the absence of Iran and Iraq limits the degree of arms control possible. Israel, and even some of the Arab countries, will not accept new restrictions and prohibitions that do not apply to Iran and Iraq. The need for arms control progress in the Middle East increases the need to bring Iran and Iraq into the political negotiations in some fashion. This will not be an easy task.

At the heart of the Arab–Israeli conflict, Arafat’s precarious position is a concern for all sides. He obviously lacks the funds and the institutional base to quickly provide social services or economic benefits to the Palestinian people. With the security-minded Israelis on one side and the Islamist forces led by Hamas on the other, he has little room for manoeuvre or margin for error. There are already many obstacles, and the final negotiations for the status of the West Bank and Gaza Strip are not due to start until 1996. If Arafat were toppled, chaos could result or a group that rejects the peace process could take power. In either case the peace process that began in Oslo might quickly come crashing down. Such thinking explains the Israeli decision in November 1994 to speed up the implementation of previous agreements and negotiations on

⁹² Ya’ari, E., ‘From Casablanca to Bahrain: a perspective on the peace process’, *Peacewatch*, no. 40 (30 Nov. 1994).

other topics. Israel apparently recognizes that Arafat needs more substance with which to work.

By the close of 1994 Israel and Syria had not concluded a peace agreement. A stalemate in Israeli–Syrian negotiations does not bode well for efforts to move past the Arab–Israeli conflict and break the rejectionist front. If Syria supports the process and reaches an agreement, Lebanon will follow. Palestinian rejectionist groups in Damascus, Hizbollah and the Iranian regime are just a few of the anti-peace process players who would be forced to alter course if Syria makes peace with Israel. However, the opposite is also true. As long as Israel and Syria remain at odds, these regional militants will continue to attack Israel and the peace process, either by word or by force. Only an Israeli–Syrian agreement can bring peace of mind to the parties to the conflict.

In 1994 the peace process moved forward in ways unthinkable just two or three years ago. All the participants should take pride in the advances and moves towards peace. However, many significant problems remain unsettled. Israeli–Palestinian and Israeli–Syrian progress hold the key to a complete break with the Arab–Israeli history of hatred and warfare. A final resolution of the conflict will have to wait until 1995 and beyond.

Appendix 5A. Documents on the Middle East peace process

TREATY OF PEACE BETWEEN THE STATE OF ISRAEL AND THE HASHEMITE KINGDOM OF JORDAN

Arava/Araba Crossing Point, 26 October 1994

Preamble

The Government of the State of Israel and the Government of the Hashemite Kingdom of Jordan:

Bearing in mind the Washington Declaration, signed by them on 25th July, 1994, and which they are both committed to honour;

Aiming at the achievement of a just, lasting and comprehensive peace in the Middle East based on Security Council resolutions 242 and 338 in all their aspects;

Bearing in mind the importance of maintaining and strengthening peace based on freedom, equality, justice and respect for fundamental human rights, thereby overcoming psychological barriers and promoting human dignity;

Reaffirming their faith in the purposes and principles of the Charter of the United Nations and recognising their right and obligation to live in peace with each other as well as with all states, within secure and recognised boundaries;

Desiring to develop friendly relations and co-operation between them in accordance with the principles of international law governing international relations in time of peace;

Desiring as well to ensure lasting security for both their States and in particular to avoid threats and the use of force between them;

Bearing in mind that in their Washington Declaration of 25th July, 1994, they declared the termination of the state of belligerency between them;

Deciding to establish peace between them in accordance with this Treaty of Peace;

Have agreed as follows:

Article 1. Establishment of peace

Peace is hereby established between the State of Israel and the Hashemite Kingdom of Jordan (the 'Parties') effective from the exchange of the instruments of ratification of this Treaty.

Article 2. General principles

The Parties will apply between them the provisions of the Charter of the United Nations and the principles of international law governing relations among states in times of peace. In particular:

1. They recognise and will respect each other's sovereignty, territorial integrity and political independence;

2. They recognise and will respect each other's right to live in peace within secure and recognised boundaries;

3. They will develop good neighbourly relations of co-operation between them to ensure lasting security, will refrain from the threat or use of force against each other and will settle all disputes between them by peaceful means;

4. They respect and recognise the sovereignty, territorial integrity and political independence of every state in the region;

5. They respect and recognise the pivotal role of human development and dignity in regional and bilateral relationships;

6. They further believe that within their control, involuntary movements of persons in such a way as to adversely prejudice the security of either Party should not be permitted.

Article 3. International boundary

1. The international boundary between Israel and Jordan is delimited with reference to the boundary definition under the Mandate as is shown in Annex I (a), on the mapping materials attached thereto and co-ordinates specified therein.

2. The boundary, as set out in Annex I (a), is the permanent, secure and recognised international boundary between Israel and Jordan, without prejudice to the status of any territories that came under Israeli military government control in 1967.

3. The parties recognise the international boundary, as well as each other's territory, territorial waters and airspace, as inviolable, and will respect and comply with them.

4. The demarcation of the boundary will take place as set forth in Appendix (I) to Annex I and will be concluded not later than nine months after the signing of the Treaty.

5. It is agreed that where the boundary follows a river, in the event of natural changes in the course of the flow of the river as described in Annex I (a), the boundary shall follow the new course of the flow. In the event of any other changes the boundary shall not be affected unless otherwise agreed.

6. Immediately upon the exchange of the instruments of ratification of this Treaty, each Party will deploy on its side of the international boundary as defined in Annex I (a).

7. The Parties shall, upon the signature of the Treaty, enter into negotiations to conclude, within 9 months, an agreement on the delimitation of their maritime boundary in the Gulf of Aqaba.

8. Taking into account the special circumstances of the Naharayim/Baqura area, which is under Jordanian sovereignty, with Israeli private ownership rights, the Parties agreed to apply the provisions set out in Annex I (b).

9. With respect to the Zofar/Al-Ghamr area, the provisions set out in Annex I (c) will apply.

Article 4. Security

1. a. Both Parties, acknowledging that mutual understanding and co-operation in security-related matters will form a significant part of their relations and will further enhance the security of the region, take upon themselves to base their security relations on mutual trust, advancement of joint interests and co-operation, and to aim towards a regional framework of partnership in peace.

b. Towards that goal the Parties recognise the achievements of the European Community and European Union in the development of the Conference on Security and Co-operation in Europe (CSCE) and commit themselves to the creation, in the Middle East, of a CSCME (Conference on Security and Co-operation in the Middle East).

This commitment entails the adoption of regional models of security successfully implemented in the post World War era (along the lines of the Helsinki process) culminating in a regional zone of security and stability.

2. The obligations referred to in this Article are without prejudice to the inherent right of self-defence in accordance with the United Nations Charter.

3. The Parties undertake, in accordance with the provisions of this Article, the following:

a. to refrain from the threat or use of force or weapons, conventional, non-conventional or of any other kind, against each other, or of other actions or activities that adversely affect the security of the other Party;

b. to refrain from organising, instigating, inciting, assisting or participating in acts or threats of belligerency, hostility, subversion or violence against the other Party;

c. to take necessary and effective measures to ensure that acts or threats of belligerency, hostility, subversion or violence against the other Party do not originate from, and are not committed within, through or over their territory (hereinafter the term 'territory' includes the airspace and territorial waters).

4. Consistent with the era of peace and with the efforts to build regional security and to avoid and prevent aggression and violence, the Parties further agree to refrain from the following:

a. joining or in any way assisting, promoting or co-operating with any coalition, organisation or alliance with a military or security character with a third party, the objectives or activities of which include launching aggression or other acts of military hostility against the other Party, in contravention of the provisions of the present Treaty.

b. allowing the entry, stationing and operating on their territory, or through it, of military forces, personnel or materiel of a third party, in circumstances which may adversely prejudice the security of the other Party.

5. Both Parties will take necessary and effective measures, and will co-operate in combating terrorism of all kinds. The Parties undertake:

a. to take necessary and effective measures to prevent acts of terrorism, subversion or violence from being carried out from their territory or through it and to take necessary and effective measures to combat such activities and all their perpetrators.

b. without prejudice to the basic rights of freedom of expression and association, to take necessary and effective measures to prevent the entry, presence and co-operation in their territory of any group or organisation, and their infrastructure, which threatens the security of the other Party by the use of or incitement to the use of, violent means.

c. to co-operate in preventing and combating cross-boundary infiltrations.

6. Any question as to the implementation of this Article will be dealt with through a mechanism of consultations which will

include a liaison system, verification, supervision, and where necessary, other mechanisms, and higher level consultation. The details of the mechanism of consultations will be contained in an agreement to be concluded by the Parties within 3 months of the exchange of the instruments of ratification of this Treaty.

7. The Parties undertake to work as a matter of priority, and as soon as possible in the context of the Multilateral Working Group on Arms Control and Regional Security, and jointly, towards the following:

a. the creation in the Middle East of a region free from hostile alliances and coalitions;

b. the creation of a Middle East free from weapons of mass destruction, both conventional and non-conventional, in the context of a comprehensive, lasting and stable peace, characterised by the renunciation of the use of force, reconciliation and goodwill.

Article 5. Diplomatic and other bilateral relations

1. The Parties agree to establish full diplomatic and consular relations and to exchange resident ambassadors within one month of the exchange of the instruments of ratification of this Treaty.

2. The Parties agree that the normal relationship between them will further include economic and cultural relations.

Article 6. Water

With the view to achieving a comprehensive and lasting settlement of all the water problems between them:

1. The Parties agree mutually to recognise the rightful allocations of both of them in Jordan River and Yarmouk River waters and Araba/Arava ground water in accordance with the agreed acceptable principles, quantities and quality as set out in Annex II, which shall be fully respected and complied with.

2. The Parties, recognising the necessity to find a practical, just and agreed solution to their water problems and with the view that the subject of water can form the basis for the advancement of co-operation between them, jointly undertake to ensure that the management and development of their water resources do not, in any way, harm the water resources of the other Party.

3. The Parties recognise that their water resources are not sufficient to meet their needs. More water should be supplied for

their use through various methods, including projects of regional and international co-operation.

4. In light of paragraph 3 of this Article, with the understanding that co-operation in water-related subjects would be to the benefit of both Parties, and will help alleviate their water shortages, and that water issues along their entire boundary must be dealt with in their totality, including the possibility of trans-boundary water transfers, the Parties agree to search for ways to alleviate water shortage and to co-operate in the following fields:

a. development of existing and new water resources, increasing the water availability including co-operation on a regional basis as appropriate, and minimising wastage of water resources through the chain of their uses;

b. prevention of contamination of water resources;

c. mutual assistance in the alleviation of water shortages;

d. transfer of information and joint research and development in water-related subjects, and review of the potentials for enhancement of water resources development and use.

5. The implementation of both Parties' undertakings under this Article is detailed in Annex II.

Article 7. Economic relations

1. Viewing economic development and prosperity as pillars of peace, security and harmonious relations between states, peoples and individual human beings, the Parties, taking note of understandings reached between them, affirm their mutual desire to promote economic co-operation between them, as well as within the framework of wider regional economic co-operation.

2. In order to accomplish this goal, the Parties agree to the following:

a. to remove all discriminatory barriers to normal economic relations, to terminate economic boycotts directed at each other, and to co-operate in terminating boycotts against either Party by third parties;

b. recognising that the principle of free and unimpeded flow of goods and services should guide their relations, the Parties will enter into negotiations with a view to concluding agreements on economic co-operation, including trade and the establishment of a free trade area, investment, banking, industrial co-operation and labour, for the purpose of promoting beneficial economic relations,

based on principles to be agreed upon, as well as on human development considerations on a regional basis. These negotiations will be concluded no later than 6 months from the exchange the instruments of ratification of this Treaty.

c. to co-operate bilaterally, as well as in multilateral forums, towards the promotion of their respective economies and of their neighbourly economic relations with other regional parties.

Article 8. Refugees and displaced persons

1. Recognising the massive human problems caused to both Parties by the conflict in the Middle East, as well as the contribution made by them towards the alleviation of human suffering, the Parties will seek to further alleviate those problems arising on a bilateral level.

2. Recognising that the above human problems caused by the conflict in the Middle East cannot be fully resolved on the bilateral level, the Parties will seek to resolve them in appropriate forums, in accordance with international law, including the following:

(a) in the case of displaced persons, in a quadripartite committee together with Egypt and the Palestinians:

(b) in the case of refugees,

(i) in the framework of the Multilateral Working Group on Refugees;

(ii) in negotiations, in a framework to be agreed, bilateral or otherwise, in conjunction with and at the same time as the permanent status negotiations pertaining to the territories referred to in Article 3 of this Treaty;

3. through the implementation of agreed United Nations programmes and other agreed international economic programmes concerning refugees and displaced persons, including assistance to their settlement.

Article 9. Places of historical and religious significance

1. Each party will provide freedom of access to places of religious and historical significance.

2. In this regard, in accordance with the Washington Declaration, Israel respects the present special role of the Hashemite Kingdom of Jordan in Muslim Holy shrines in Jerusalem. When negotiations on the permanent status will take place, Israel will give high priority to the Jordanian historic role in these shrines.

3. The Parties will act together to promote interfaith relations among the three monotheistic religions, with the aim of working towards religious understanding, moral commitment, freedom of religious worship, and tolerance and peace.

Article 10. Cultural and scientific exchanges

The Parties, wishing to remove biases developed through periods of conflict, recognise the desirability of cultural and scientific exchanges in all fields, and agree to establish normal cultural relations between them. Thus, they shall, as soon as possible and not later than 9 months from the exchange of the instruments of ratification of this Treaty, conclude the negotiations on cultural and scientific agreements.

Article 11. Mutual understanding and good neighbourly relations

1. The Parties will seek to foster mutual understanding and tolerance based on shared historic values, and accordingly undertake:

a. to abstain from hostile or discriminatory propaganda against each other, and to take all possible legal and administrative measures to prevent the dissemination of such propaganda by any organisation or individual present in the territory of either Party;

b. as soon as possible, and not later than 3 months from the exchange of the instruments of ratification of this Treaty, to repeal all adverse or discriminatory references and expressions of hostility in their respective legislation;

c. to refrain in all government publications from any such references or expressions;

d. to ensure mutual enjoyment by each other's citizens of due process of law within their respective legal systems and before their courts.

2. Paragraph 1 (a) of this Article is without prejudice to the right to freedom of expression as contained in the International Covenant on Civil and Political Rights.

3. A joint committee shall be formed to examine incidents where one Party claims there has been a violation of this Article.

Article 12. Combating crime and drugs

The Parties will co-operate in combating crime, with an emphasis on smuggling, and will take all necessary measures to combat and prevent such activities as the production of, as well as the trafficking in illicit drugs, and will bring to trial perpetrators of such

acts. In this regard, they take note of the understandings reached between them in the above spheres, in accordance with Annex III and undertake to conclude all relevant agreements not later than 9 months from the date of the exchange of the instruments of ratification of this Treaty.

Article 13. Transportation and roads

Taking note of the progress already made in the area of transportation, the Parties recognise the mutuality of interest in good neighbourly relations in the area of transportation and agree to the following means to promote relations between them in this sphere:

1. Each party will permit the free movement of nationals and vehicles of the other into and within its territory according to the general rules applicable to nationals and vehicles of other states. Neither party will impose discriminatory taxes or restrictions on the free movement of persons and vehicles from its territory to the territory of the other.

2. The Parties will open and maintain roads and border-crossings between their countries and will consider further road and rail links between them.

3. The Parties will continue their negotiations concerning mutual transportation agreements in the above and other areas, such as joint projects, traffic safety, transport standards and norms, licensing of vehicles, land passages, shipment of goods and cargo, and meteorology, to be concluded not later than 6 months from the exchange of the instruments of ratification of this Treaty.

4. The Parties agree to continue their negotiations for a highway to be constructed and maintained between Egypt, Israel and Jordan near Eilat.

Article 14. Freedom of navigation and access to ports

1. Without prejudice to the provisions of paragraph 3, each Party recognises the right of the vessels of the other Party to innocent passage through its territorial waters in accordance with the rules of international law.

2. Each Party will grant normal access to its ports for vessels and cargoes of the other, as well as vessels and cargoes destined for or coming from the other Party. Such access will be granted on the same conditions as generally applicable to vessels and cargoes of other nations.

3. The Parties consider the Strait of Tiran and the Gulf of Aqaba to be international waterways open to all nations for unimpeded and non-suspendable freedom of navigation and overflight. The Parties will respect each other's right to navigation and overflight for access to either Party through the Strait of Tiran and the Gulf of Aqaba.

Article 15. Civil aviation

1. The Parties recognise as applicable to each other the rights, privileges and obligations provided for by the multilateral aviation agreements to which they are both party, particularly by the 1944 Convention on International Civil Aviation (The Chicago Convention) and the 1944 International Air Services Transit Agreement.

2. Any declaration of national emergency by a Party under Article 89 of the Chicago Convention will not be applied to the other Party on a discriminatory basis.

3. The Parties take note of the negotiations on the international air corridor to be opened between them in accordance with the Washington Declaration. In addition, the Parties shall, upon ratification of this Treaty, enter into negotiations for the purpose of concluding a Civil Aviation Agreement. All the above negotiations are to be concluded not later than 6 months from the exchange of the instruments of ratification of this Treaty.

Article 16. Posts and telecommunications

The Parties take note of the opening between them, in accordance with the Washington Declaration, of direct telephone and facsimile lines. Postal links, the negotiations on which having been concluded, will be activated upon the signature of this Treaty. The Parties further agree that normal wireless and cable communications and television relay services by cable, radio and satellite, will be established between them, in accordance with all relevant international conventions and regulations. The negotiations on these subjects will be concluded not later than 9 months from the exchange of the instruments of ratification of this Treaty.

Article 17. Tourism

The Parties affirm their mutual desire to promote co-operation between them in the field of tourism. In order to accomplish this goal, the Parties—taking note of the understandings reached between them concerning tourism—agree to negotiate, as soon as possible, and to conclude not later than three

months from the exchange of the instruments of ratification of this Treaty, an agreement to facilitate and encourage mutual tourism and tourism from third countries.

Article 18. Environment

The Parties will co-operate in matters relating to the environment, a sphere to which they attach great importance, including conservation of nature and prevention of pollution, as set forth in Annex IV. They will negotiate an agreement on the above, to be concluded not later than 6 months from the exchange of the instruments of ratification of this Treaty.

Article 19. Energy

1. The Parties will co-operate in the development of energy resources, including the development of energy-related projects such as the utilisation of solar energy.

2. The Parties, having concluded their negotiations on the interconnecting of their electric grids in the Eilat-Aqaba area, will implement the interconnecting upon the signature of this Treaty. The Parties view this step as a part of a wider binational and regional concept. They agree to continue their negotiations as soon as possible to widen the scope of their interconnected grids.

3. The Parties will conclude the relevant agreements in the field of energy within 6 months from the date of exchange of the instruments of ratification of this Treaty.

Article 20. Rift Valley development

The Parties attach great importance to the integrated development of the Jordan Rift Valley area, including joint projects in the economic, environmental, energy-related and tourism fields. Taking note of the Terms of Reference developed in the framework of the Trilateral Israel-Jordan-US Economic Committee towards the Jordan Rift Valley Development Master Plan, they will vigorously continue their efforts towards the completion of planning and towards implementation.

Article 21. Health

The Parties will co-operate in the area of health and shall negotiate with a view to the conclusion of an agreement within 9 months of the exchange of instruments of ratification of this Treaty.

Article 22. Agriculture

The Parties will co-operate in the areas of agriculture, including veterinary services, plant protection, biotechnology and market-

ing, and shall negotiate with a view to the conclusion of an agreement within 6 months from the date of the exchange of instruments of ratification of this Treaty.

Article 23. Aqaba and Eilat

The Parties agree to enter into negotiations, as soon as possible, and not later than one month from the exchange of the instruments of ratification of this Treaty, on arrangements that would enable the joint development of the towns of Aqaba and Eilat with regard to such matters, *inter alia*, as joint tourism development, joint customs, free trade zone, co-operation in aviation, prevention of pollution, maritime matters, police, customs and health co-operation. The Parties will conclude all relevant agreements within 9 months from the exchange of instruments of ratification of the Treaty.

Article 24. Claims

The Parties agree to establish a claims commission for the mutual settlement of all financial claims.

Article 25. Rights and obligations

1. This Treaty does not affect and shall not be interpreted as affecting, in any way, the rights and obligations of the Parties under the Charter of the United Nations.

2. The Parties undertake to fulfil in good faith their obligations under this Treaty, without regard to action or inaction of any other party and independently of any instrument inconsistent with this Treaty. For the purposes of this paragraph each Party represents to the other that in its opinion and interpretation there is no inconsistency between their existing treaty obligations and this Treaty.

3. They further undertake to take all the necessary measures for the application in their relations of the provisions of the multilateral conventions to which they are parties, including the submission of appropriate notification to the Secretary-General of the United Nations and other depositories of such conventions.

4. Both Parties will also take all the necessary steps to abolish all pejorative references to the other Party, in multilateral conventions to which they are parties, to the extent that such references exist.

5. The Parties undertake not to enter into any obligation in conflict with this Treaty.

6. Subject to Article 103 of the United Nations Charter, in the event of a conflict between the obligations of the Parties under

the present Treaty and any of their other obligations, the obligations under this Treaty will be binding and implemented.

Article 26. Legislation

Within 3 months of the exchange of ratifications of this Treaty the Parties undertake to enact any legislation necessary in order to implement the Treaty, and to terminate any international commitments and to repeal any legislation that is inconsistent with the Treaty.

Article 27. Ratification

1. This Treaty shall be ratified by both Parties in conformity with their respective national procedures. It shall enter into force on the exchange of instruments of ratification.

2. The Annexes, Appendices, and other attachments to this Treaty shall be considered integral parts thereof.

Article 28. Interim measures

The Parties will apply, in certain spheres, to be agreed upon, interim measures pending the conclusion of the relevant agreements in accordance with this Treaty, as stipulated in Annex V.

Article 29. Settlement of disputes

1. Disputes arising out of the application or interpretation of this Treaty shall be resolved by negotiations.

2. Any such disputes which cannot be settled by negotiations shall be resolved by conciliation or submitted to arbitration.

Article 30. Registration

This Treaty shall be transmitted to the Secretary-General of the United Nations for registration in accordance with the provisions of Article 102 of the Charter of the United Nations.

Done at the Arava/Araba Crossing Point this day Heshvan 21st, 5775, Jumada Al-Ula 21st, 1415 which corresponds to 26th October, 1994 in the Hebrew, English and Arabic languages, all texts being equally authentic. In case of divergence of interpretation the English text shall prevail.

....

For the State of Israel: (Yitzhak Rabin, Prime Minister)

For the Hashemite Kingdom of Jordan:
(Abdul Salam Majali, Prime Minister)

Witnessed by: (William J. Clinton, President of the United States of America)

....

List of annexes, appendices and other attachments

ANNEX I

- (a) International Boundary
- (b) Naharayim/Baqura Area
- (c) Zofar Area

Appendices

ANNEX II. Water

ANNEX III. Crime and drugs

ANNEX IV. Environment

ANNEX V. Interim measures

Source: Israel Information Service Gopher, Information Division, Israel Foreign Ministry, Jerusalem, 27 Jan. 1995.

AGREEMENT ON THE GAZA STRIP AND THE JERICHO AREA

Cairo, 4 May 1994

The Government of the State of Israel and the Palestine Liberation Organization (hereinafter 'the PLO'), the representative of the Palestinian people;

Preamble

Within the framework of the Middle East peace process initiated at Madrid in October 1991;

Reaffirming their determination to live in peaceful coexistence, mutual dignity and security, while recognizing their mutual legitimate and political rights;

Reaffirming their desire to achieve a just, lasting and comprehensive peace settlement through the agreed political process;

Reaffirming their adherence to the mutual recognition and commitments expressed in the letters dated September 9, 1993, signed by and exchanged between the Prime Minister of Israel and the Chairman of the PLO;

Reaffirming their understanding that the interim self-government arrangements,

including the arrangements to apply in the Gaza Strip and the Jericho Area contained in this Agreement, are an integral part of the whole peace process and that the negotiations on the permanent status will lead to the implementation of Security Council Resolutions 242 and 338;

Desirous of putting into effect the Declaration of Principles on Interim Self-Government Arrangements signed at Washington, DC on September 13, 1993, and the Agreed Minutes thereto (hereinafter 'the Declaration of Principles'), and in particular the Protocol on withdrawal of Israeli forces from the Gaza Strip and the Jericho Area;

Hereby agree to the following arrangements regarding the Gaza Strip and the Jericho Area:

Article I

Definitions

For the purpose of this Agreement:

a. the Gaza Strip and the Jericho Area are delineated on map Nos. 1 and 2 attached to this Agreement;

b. 'the Settlements' means the Gush Katif and Erez settlement areas, as well as the other settlements in the Gaza Strip, as shown on attached map No. 1;

c. 'the Military Installation Area' means the Israeli military installation area along the Egyptian border in the Gaza Strip, as shown on map No. 1; and

d. the term 'Israelis' shall also include Israeli statutory agencies and corporations registered in Israel.

Article II

Scheduled withdrawal of Israeli military forces

1. Israel shall implement an accelerated and scheduled withdrawal of Israeli military forces from the Gaza Strip and from the Jericho Area to begin immediately with the signing of this Agreement. Israel shall complete such withdrawal within three weeks from this date.

2. Subject to the arrangements included in the Protocol Concerning Withdrawal of Israeli Military Forces and Security Arrangements attached as Annex I, the Israeli withdrawal shall include evacuating all military bases and other fixed installations to be handed over to the Palestinian Police, to be established pursuant to Article IX below (hereinafter 'the Palestinian Police').

3. In order to carry out Israel's responsibility for external security and for internal

security and public order of Settlements and Israelis, Israel shall, concurrently with the withdrawal, redeploy its remaining military forces to the Settlements and the Military Installation Area, in accordance with the provisions of this Agreement. Subject to the provisions of this Agreement, this redeployment shall constitute full implementation of Article XIII of the Declaration of Principles with regard to the Gaza Strip and the Jericho Area only.

4. For the purposes of this Agreement, 'Israeli military forces' may include Israel police and other Israeli security forces.

5. Israelis, including Israeli military forces, may continue to use roads freely within the Gaza Strip and the Jericho Area. Palestinians may use public roads crossing the Settlements freely, as provided for in Annex I.

6. The Palestinian Police shall be deployed and shall assume responsibility for public order and internal security of Palestinians in accordance with this Agreement and Annex I.

Article III

Transfer of authority

1. Israel shall transfer authority as specified in this Agreement from the Israeli military government and its Civil Administration to the Palestinian Authority, hereby established, in accordance with Article V of this Agreement, except for the authority that Israel shall continue to exercise as specified in this Agreement.

2. As regards the transfer and assumption of authority in civil spheres, powers and responsibilities shall be transferred and assumed as set out in the Protocol Concerning Civil Affairs attached as Annex II.

3. Arrangements for a smooth and peaceful transfer of the agreed powers and responsibilities are set out in Annex II.

4. Upon the completion of the Israeli withdrawal and the transfer of powers and responsibilities as detailed in paragraphs 1 and 2 above and in Annex II, the Civil Administration in the Gaza Strip and the Jericho Area will be dissolved and the Israeli military government will be withdrawn. The withdrawal of the military government shall not prevent it from continuing to exercise the powers and responsibilities specified in this Agreement.

5. A Joint Civil Affairs Coordination and Cooperation Committee (hereinafter 'the CAC') and two Joint Regional Civil Affairs Subcommittees for the Gaza Strip and the Jericho Area respectively shall be established

in order to provide for coordination and cooperation in civil affairs between the Palestinian Authority and Israel, as detailed in Annex II.

6. The offices of the Palestinian Authority shall be located in the Gaza Strip and the Jericho Area pending the inauguration of the Council to be elected pursuant to the Declaration of Principles.

Article IV

Structure and composition of the Palestinian Authority

1. The Palestinian Authority will consist of one body of 24 members which shall carry out and be responsible for all the legislative and executive powers and responsibilities transferred to it under this Agreement, in accordance with this Article, and shall be responsible for the exercise of judicial functions in accordance with Article VI, subparagraph 1.b. of this Agreement.

2. The Palestinian Authority shall administer the departments transferred to it and may establish, within its jurisdiction, other departments and subordinate administrative units as necessary for the fulfillment of its responsibilities. It shall determine its own internal procedures.

3. The PLO shall inform the Government of Israel of the names of the members of the Palestinian Authority and any change of members. Changes in the membership of the Palestinian Authority will take effect upon an exchange of letters between the PLO and the Government of Israel.

4. Each member of the Palestinian Authority shall enter into office upon undertaking to act in accordance with this Agreement.

Article V

Jurisdiction

1. The authority of the Palestinian Authority encompasses all matters that fall within its territorial, functional and personal jurisdiction, as follows:

a. The territorial jurisdiction covers the Gaza Strip and the Jericho Area territory, as defined in Article I, except for Settlements and the Military Installation Area.

Territorial jurisdiction shall include land, subsoil and territorial waters, in accordance with the provisions of this Agreement.

b. The functional jurisdiction encompasses all powers and responsibilities as specified in this Agreement. This jurisdiction does not include foreign relations, internal security and public order of Settlements and the Military

Installation Area and Israelis, and external security.

c. The personal jurisdiction extends to all persons within the territorial jurisdiction referred to above, except for Israelis, unless otherwise provided in this Agreement.

2. The Palestinian Authority has, within its authority, legislative, executive and judicial powers and responsibilities, as provided for in this Agreement.

3. a. Israel has authority over the Settlements, the Military Installation Area, Israelis, external security, internal security and public order of Settlements, the Military Installation Area and Israelis, and those agreed powers and responsibilities specified in this Agreement.

b. Israel shall exercise its authority through its military government, which, for that end, shall continue to have the necessary legislative, judicial and executive powers and responsibilities, in accordance with international law. This provision shall not derogate from Israel's applicable legislation over Israelis in personam.

4. The exercise of authority with regard to the electromagnetic sphere and airspace shall be in accordance with the provisions of this Agreement.

5. The provisions of this Article are subject to the specific legal arrangements detailed in the Protocol Concerning Legal Matters attached as Annex III. Israel and the Palestinian Authority may negotiate further legal arrangements.

6. Israel and the Palestinian Authority shall cooperate on matters of legal assistance in criminal and civil matters through the legal subcommittee of the CAC.

Article VI

Powers and responsibilities of the Palestinian Authority

1. Subject to the provisions of this Agreement, the Palestinian Authority, within its jurisdiction:

a. has legislative powers as set out in Article VII of this Agreement, as well as executive powers;

b. will administer justice through an independent judiciary;

c. will have, inter alia, power to formulate policies, supervise their implementation, employ staff, establish departments, authorities and institutions, sue and be sued and conclude contracts; and

d. will have, inter alia, the power to keep and administer registers and records of the

population, and issue certificates, licenses and documents.

2. a. In accordance with the Declaration of Principles, the Palestinian Authority will not have powers and responsibilities in the sphere of foreign relations, which sphere includes the establishment abroad of embassies, consulates or other types of foreign missions and posts or permitting their establishment in the Gaza Strip or the Jericho Area, the appointment of or admission of diplomatic and consular staff, and the exercise of diplomatic functions.

b. Notwithstanding the provisions of this paragraph, the PLO may conduct negotiations and sign agreements with states or international organizations for the benefit of the Palestinian Authority in the following cases only:

(1) economic agreements, as specifically provided in Annex IV of this Agreement;

(2) agreements with donor countries for the purpose of implementing arrangements for the provision of assistance to the Palestinian Authority;

(3) agreements for the purpose of implementing the regional development plans detailed in Annex IV of the Declaration of Principles or in agreements entered into in the framework of the multilateral negotiations; and

(4) cultural, scientific and educational agreements.

c. Dealings between the Palestinian Authority and representatives of foreign states and international organizations, as well as the establishment in the Gaza Strip and the Jericho Area of representative offices other than those described in subparagraph 2.a. above, for the purpose of implementing the agreements referred to in subparagraph 2. b. above, shall not be considered foreign relations.

Article VII

Legislative powers of the Palestinian Authority

1. The Palestinian Authority will have the power, within its jurisdiction, to promulgate legislation, including basic laws, laws, regulations and other legislative acts.

2. Legislation promulgated by the Palestinian Authority shall be consistent with the provisions of this Agreement.

3. Legislation promulgated by the Palestinian Authority shall be communicated to a legislation subcommittee to be established by

the CAC (hereinafter 'the Legislation Subcommittee'). During a period of 30 days from the communication of the legislation, Israel may request that the Legislation Subcommittee decide whether such legislation exceeds the jurisdiction of the Palestinian Authority or is otherwise inconsistent with the provisions of this Agreement.

4. Upon receipt of the Israeli request, the Legislation Subcommittee shall decide, as an initial matter, on the entry into force of the legislation pending its decision on the merits of the matter.

5. If the Legislation Subcommittee is unable to reach a decision with regard to the entry into force of the legislation within 15 days, this issue will be referred to a board of review. This board of review shall be comprised of two judges, retired judges or senior jurists (hereinafter 'Judges'), one from each side, to be appointed from a compiled list of three Judges proposed by each.

In order to expedite the proceedings before this board of review, the two most senior Judges, one from each side, shall develop written informal rules of procedure.

6. Legislation referred to the board of review shall enter into force only if the board of review decides that it does not deal with a security issue which falls under Israel's responsibility, that it does not seriously threaten other significant Israeli interests protected by this Agreement and that the entry into force of the legislation could not cause irreparable damage or harm.

7. The Legislation Subcommittee shall attempt to reach a decision on the merits of the matter within 30 days from the date of the Israeli request. If this Subcommittee is unable to reach such a decision within this period of 30 days, the matter shall be referred to the Joint Israeli-Palestinian Liaison Committee referred to in Article XV below (hereinafter 'the Liaison Committee'). This Liaison Committee will deal with the matter immediately and will attempt to settle it within 30 days.

8. Where the legislation has not entered into force pursuant to paragraphs 5 or 7 above, this situation shall be maintained pending the decision of the Liaison Committee on the merits of the matter, unless it has decided otherwise.

9. Laws and military orders in effect in the Gaza Strip or the Jericho Area prior to the signing of this Agreement shall remain in force, unless amended or abrogated in accordance with this Agreement.

Article VIII**Arrangements for security and public order**

1. In order to guarantee public order and internal security for the Palestinians of the Gaza Strip and the Jericho Area, the Palestinian Authority shall establish a strong police force, as set out in Article IX below. Israel shall continue to carry the responsibility for defense against external threats, including the responsibility for protecting the Egyptian border and the Jordanian line, and for defense against external threats from the sea and from the air, as well as the responsibility for overall security of Israelis and Settlements, for the purpose of safeguarding their internal security and public order, and will have all the powers to take the steps necessary to meet this responsibility.

2. Agreed security arrangements and coordination mechanisms are specified in Annex I.

3. A joint Coordination and Cooperation Committee for mutual security purposes (hereinafter 'the JSC'), as well as three joint District Coordination and Cooperation Offices for the Gaza district, the Khan Yunis district and the Jericho district respectively (hereinafter 'the DCOs') are hereby established as provided for in Annex I.

4. The security arrangements provided for in this Agreement and in Annex I may be reviewed at the request of either Party and may be amended by mutual agreement of the Parties. Specific review arrangements are included in Annex I.

Article IX**The Palestinian Directorate of Police Force**

1. The Palestinian Authority shall establish a strong police force, the Palestinian Directorate of Police Force (hereinafter 'the Palestinian Police'). The duties, functions, structure, deployment and composition of the Palestinian Police, together with provisions regarding its equipment and operation, are set out in Annex I, Article III. Rules of conduct governing the activities of the Palestinian Police are set out in Annex I, Article VIII.

2. Except for the Palestinian Police referred to in this Article and the Israeli military forces, no other armed forces shall be established or operate in the Gaza Strip or the Jericho Area.

3. Except for the arms, ammunition and equipment of the Palestinian Police described in Annex I, Article III, and those of the Israeli military forces, no organization or individual

in the Gaza Strip and the Jericho Area shall manufacture, sell, acquire, possess, import or otherwise introduce into the Gaza Strip or the Jericho Area any firearms, ammunition, weapons, explosives, gunpowder or any related equipment, unless otherwise provided for in Annex I.

Article X**Passages**

Arrangements for coordination between Israel and the Palestinian Authority regarding the Gaza-Egypt and Jericho-Jordan passages, as well as any other agreed international crossings, are set out in Annex I, Article X.

Article XI**Safe passage between the Gaza Strip and the Jericho Area**

Arrangements for safe passage of persons and transportation between the Gaza Strip and the Jericho Area are set out in Annex I, Article IX.

Article XII**Relations between Israel and the Palestinian Authority**

1. Israel and the Palestinian Authority shall seek to foster mutual understanding and tolerance and shall accordingly abstain from incitement, including hostile propaganda, against each other and, without derogating from the principle of freedom of expression, shall take legal measures to prevent such incitement by any organizations, groups or individuals within their jurisdiction.

2. Without derogating from the other provisions of this Agreement, Israel and the Palestinian Authority shall cooperate in combating criminal activity which may affect both sides, including offenses related to trafficking in illegal drugs and psychotropic substances, smuggling, and offenses against property, including offenses related to vehicles.

Article XIII**Economic relations**

The economic relations between the two sides are set out in the Protocol on Economic Relations signed in Paris on April 29, 1994 and the Appendices thereto, certified copies of which are attached as Annex IV, and will be governed by the relevant provisions of this Agreement and its Annexes.

Article XIV

Human rights and the rule of law

Israel and the Palestinian Authority shall exercise their powers and responsibilities pursuant to this Agreement with due regard to internationally-accepted norms and principles of human rights and the rule of law.

Article XV

The Joint Israeli-Palestinian Liaison Committee

1. The Liaison Committee established pursuant to Article X of the Declaration of Principles shall ensure the smooth implementation of this Agreement. It shall deal with issues requiring coordination, other issues of common interest and disputes.

2. The Liaison Committee shall be composed of an equal number of members from each Party. It may add other technicians and experts as necessary.

3. The Liaison Committee shall adopt its rules of procedure, including the frequency and place or places of its meetings.

4. The Liaison Committee shall reach its decisions by Agreement.

Article XVI

Liaison and cooperation with Jordan and Egypt

1. Pursuant to Article XII of the Declaration of Principles, the two Parties shall invite the Governments of Jordan and Egypt to participate in establishing further liaison and cooperation arrangements between the Government of Israel and the Palestinian representatives on the one hand, and the Governments of Jordan and Egypt on the other hand, to promote cooperation between them. These arrangements shall include the constitution of a Continuing Committee.

2. The Continuing Committee shall decide by agreement on the modalities of admission of persons displaced from the West Bank and the Gaza Strip in 1967, together with necessary measures to prevent disruption and disorder.

3. The Continuing Committee shall deal with other matters of common concern.

Article XVII

Settlement of differences and disputes

Any difference relating to the application of this Agreement shall be referred to the appropriate coordination and cooperation mechanism established under this Agreement. The provisions of Article XV of the Declaration of Principles shall apply to

any such difference which is not settled through the appropriate coordination and cooperation mechanism, namely:

1. Disputes arising out of the application or interpretation of this Agreement or any subsequent agreements pertaining to the interim period shall be settled by negotiations through the Liaison Committee.

2. Disputes which cannot be settled by negotiations may be settled by a mechanism of conciliation to be agreed between the Parties.

3. The Parties may agree to submit to arbitration disputes relating to the interim period, which cannot be settled through conciliation. To this end, upon the agreement of both Parties, the Parties will establish an Arbitration Committee.

Article XVIII

Prevention of hostile acts

Both sides shall take all measures necessary in order to prevent acts of terrorism, crime and hostilities directed against each other, against individuals falling under the other's authority and against their property, and shall take legal measures against offenders. In addition, the Palestinian side shall take all measures necessary to prevent such hostile acts directed against the Settlements, the infrastructure serving them and the Military Installation Area, and the Israeli side shall take all measures necessary to prevent such hostile acts emanating from the Settlements and directed against Palestinians.

Article XIX

Missing persons

The Palestinian Authority shall cooperate with Israel by providing all necessary assistance in the conduct of searches by Israel within the Gaza Strip and the Jericho Area for missing Israelis, as well as by providing information about missing Israelis. Israel shall cooperate with the Palestinian Authority in searching for, and providing necessary information about, missing Palestinians.

Article XX

Confidence building measures

With a view to creating a positive and supportive public atmosphere to accompany the implementation of this Agreement, and to establish a solid basis of mutual trust and good faith, both Parties agree to carry out confidence building measures as detailed herewith:

1. Upon the signing of this Agreement, Israel will release, or turn over, to the Palestinian Authority within a period of 5 weeks, about 5,000 Palestinian detainees and prisoners, residents of the West Bank and the Gaza Strip. Those released will be free to return to their homes anywhere in the West Bank or the Gaza Strip. Prisoners turned over to the Palestinian Authority shall be obliged to remain in the Gaza Strip or the Jericho Area for the remainder of their sentence.

2. After the signing of this Agreement, the two Parties shall continue to negotiate the release of additional Palestinian prisoners and detainees, building on agreed principles.

3. The implementation of the above measures will be subject to the fulfillment of the procedures determined by Israeli law for the release and transfer of detainees and prisoners.

4. With the assumption of Palestinian authority, the Palestinian side commits itself to solving the problem of those Palestinians who were in contact with the Israeli authorities. Until an agreed solution is found, the Palestinian side undertakes not to prosecute these Palestinians or to harm them in any way.

5. Palestinians from abroad whose entry into the Gaza Strip and the Jericho Area is approved pursuant to this Agreement, and to whom the provisions of this Article are applicable, will not be prosecuted for offenses committed prior to September 13, 1993.

Article XXI

Temporary international presence

1. The Parties agree to a temporary international or foreign presence in the Gaza Strip and the Jericho Area (hereinafter 'the TIP'), in accordance with the provisions of this Article.

2. The TIP shall consist of 400 qualified personnel, including observers, instructors and other experts, from 5 or 6 of the donor countries.

3. The two Parties shall request the donor countries to establish a special fund to provide finance for the TIP.

4. The TIP will function for a period of 6 months. The TIP may extend this period, or change the scope of its operation, with the agreement of the two Parties.

5. The TIP shall be stationed and operate within the following cities and villages: Gaza, Khan Yunis, Rafah, Deir El Ballah, Jabaliya, Absan, Beit Hanun and Jericho.

6. Israel and the Palestinian Authority shall agree on a special Protocol to implement this Article, with the goal of concluding negotiations with the donor countries contributing personnel within two months.

Article XXII

Rights, liabilities and obligations

1. a. The transfer of all powers and responsibilities to the Palestinian Authority, as detailed in Annex II, includes all related rights, liabilities and obligations arising with regard to acts or omissions which occurred prior to the transfer. Israel will cease to bear any financial responsibility regarding such acts or omissions and the Palestinian Authority will bear all financial responsibility for these and for its own functioning.

b. Any financial claim made in this regard against Israel will be referred to the Palestinian Authority.

c. Israel shall provide the Palestinian Authority with the information it has regarding pending and anticipated claims brought before any court or tribunal against Israel in this regard.

d. Where legal proceedings are brought in respect of such a claim, Israel will notify the Palestinian Authority and enable it to participate in defending the claim and raise any arguments on its behalf.

e. In the event that an award is made against Israel by any court or tribunal in respect of such a claim, the Palestinian Authority shall reimburse Israel the full amount of the award.

f. Without prejudice to the above, where a court or tribunal hearing such a claim finds that liability rests solely with an employee or agent who acted beyond the scope of the powers assigned to him or her, unlawfully or with willful malfeasance, the Palestinian Authority shall not bear financial responsibility.

2. The transfer of authority in itself shall not affect rights, liabilities and obligations of any person or legal entity, in existence at the date of signing of this Agreement.

Article XXIII

Final clauses

1. This Agreement shall enter into force on the date of its signing.

2. The arrangements established by this Agreement shall remain in force until and to the extent superseded by the Interim Agreement referred to in the Declaration of Prin-

ciples or any other agreement between the Parties.

3. The five-year interim period referred to in the Declaration of Principles commences on the date of the signing of this Agreement.

4. The Parties agree that, as long as this Agreement is in force, the security fence erected by Israel around the Gaza Strip shall remain in place and that the line demarcated by the fence, as shown on attached map No. 1, shall be authoritative only for the purpose of this Agreement.

5. Nothing in this Agreement shall prejudice or preempt the outcome of the negotiations on the interim agreement or on the permanent status to be conducted pursuant to the Declaration of Principles. Neither Party shall be deemed, by virtue of having entered into this Agreement, to have renounced or waived any of its existing rights, claims or positions.

6. The two Parties view the West Bank and the Gaza Strip as a single territorial unit, the integrity of which will be preserved during the interim period.

7. The Gaza Strip and the Jericho Area shall continue to be an integral part of the West Bank and the Gaza Strip, and their status shall not be changed for the period of this Agreement. Nothing in this Agreement shall be considered to change this status.

8. The Preamble to this Agreement, and all Annexes, Appendices and maps attached hereto, shall constitute an integral part hereof.

Done in Cairo this fourth day of May, 1994.

....

For the Government of the State of Israel

For the PLO

Witnessed by:

The United States of America

The Russian Federation

The Arab Republic of Egypt

....

Source: Israel Information Service Gopher, Information Division, Israel Foreign Ministry, Jerusalem, 27 Jan. 1995.

6. The former Yugoslavia: lessons of war and diplomacy

MARIO ZUCCONI

I. Introduction

Having already qualified as the longest and most destructive European armed conflict since World War II, the war in the former Yugoslavia entered its fourth year in 1994 and moved on with no clear prospect of a solution. As the year ended there were contradictory signs, on the one hand of increasing fatigue and exhaustion among the warring parties in Bosnia, and on the other of a possible rekindling of the conflict on Croatian territory.

As the year opened, the attention given by the January 1994 NATO summit meeting to developments in Bosnia and Herzegovina and the ultimatum establishing a weapons exclusion zone around Sarajevo one month later seemed to indicate a heightened involvement and resolve above all on the part of the Western countries to find a way out of the political and diplomatic impasse there. However, the second part of the year witnessed an increasingly bitter dispute between the UN and NATO and among the NATO members themselves about when and how to apply force, which for a while seemed to make withdrawal of the UN peacekeeping forces from Bosnia inevitable. The repeated failure of diplomatic initiatives added bitterness and cynicism to the division among the main outside actors about the way to approach the conflict.

Weeks of shelling in Bihac in north-western Bosnia at the end of 1994 once again raised the tally of casualties: overall figures for casualties from June 1991 up to this point vary, but between 150 000 and 300 000 people had been killed and there were at least 2.7 million refugees.¹ The UN had mounted what was to become the most costly and complex field operation in its history—the United Nations Protection Force, UNPROFOR—in March 1992.² In the closing months of 1994 it deployed 13 500 peacekeeping troops in Croatia and over 22 000 peacekeepers in about 20 locations in Bosnia and Herzegovina—a peak in the expansion of the UN Bosnian contingent to date.

¹ Information about casualties is very uncertain. In June 1994, the UN High Commissioner for Refugees stated that there were 3.9 million refugees and displaced persons within the former Yugoslavia, 2.7 million of them in Bosnia and Herzegovina alone. See United Nations High Commissioner for Refugees, *Information Notes*, no. 6 (1994).

² On 27 Nov. 1991 the UN Security Council passed Resolution 721, supporting the establishment of a UN peacekeeping force on condition that the cease-fire held. After a cease-fire (the 13th, according to some accounts) negotiated by the representative of the UN Secretary-General, Cyrus Vance, came into effect on 3 Jan. 1992, the UN deployment began with the dispatching of observers. UNPROFOR was established by UN Security Council Resolution 743 of 21 Feb. 1992. See Claesson, P. and Findlay, T., 'Case studies on peacekeeping: UNOSOM II, UNTAC and UNPROFOR', SIPRI, *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 71–80.



Figure 6.1. Map of the former Yugoslavia

Despite this impressive effort, in 1994 the war had an increasingly negative impact on the functioning and legitimacy of the multilateral organizations that were channelling the international response to the conflict in the former Yugoslavia, caught as they were between public pressure to resolve the issue and the completely inadequate means provided by UN member states.

This chapter analyses developments in the former Yugoslavia in 1994 and in particular the lessons that can be derived from the difficult experience of UN–NATO cooperation. Section II summarizes the situation of the conflicting parties and the peacekeepers at the start of 1994 and outlines the main developments of the year. It pays particular attention to the evolution of the international response to the conflict, describes the conflicts between the major powers engaged in efforts for a political settlement and demonstrates the impact of their domestic politics on their policies in the former Yugoslavia. Section III analyses the difficulties in cooperation between the UN and NATO, the contradictions inherent in the use of force in a peacekeeping operation and the changes which the very availability of NATO's military might introduced into the operation. The final section draws conclusions.

II. From peacekeeping to peace enforcement

In 1994 the situation on the ground was still largely the same as that created by the original Serb push to gain control of as much territory as possible once the Yugoslav Federation began to break apart. Before Serbia and Croatia accepted the UN-negotiated cease-fire and the deployment of peacekeeping troops in early 1992, the Serbs had seized almost 30 per cent of Croatian territory, although those identifying themselves as Serbs made up less than 12 per cent of the population of the Republic of Croatia.³ In Bosnia and Herzegovina within a few months of fighting breaking out in April 1992 the Serbs had seized and mostly 'cleansed' of other groups about 70 per cent of the land and confined the Muslims in particular to a few enclaves in and around a number of cities. Serbs here made up 31.5 per cent of the population at the outset of the war.⁴

Both because of its early policy of support for a unified Yugoslavia and because it was increasingly controlled by the Serbs (large-scale desertions had rapidly homogenized its ethnic composition), the Yugoslav National Army (YNA) from the outset had weighed decisively on the side of the Serbs both in Croatia and in Bosnia.⁵

Among outside actors, in December 1991 the European Community (EC) had abandoned the search for a solution to all aspects of the Yugoslav problem and opted for simply recognizing the existing component republics of the former Yugoslavia. This only widened the divisions between the parties in conflict and inflated their claims and counter-claims. Bosnia's leaders felt compelled to ask for independence once Croatia was recognized as an independent state,⁶ although they were perfectly aware that independence would bring about war among the different components of the population of the republic. In both the Croatian and the Bosnian cases, the EC in recognizing their independence effectively internationalized the conflict but in fact left its resolution to the balance of forces on the ground.⁷

Western Europe and the UN having failed to find a political solution, much of the international response to the conflict was now directed to the increasingly pressing humanitarian issues, in particular in Bosnia and Herzegovina. On the diplomatic side, starting in late August 1992 at the London Conference (the opening meeting of the International Conference on Former Yugoslavia, the ICFY), the UN and the EC co-sponsored an initiative, led by Cyrus Vance

³ Census of Apr. 1991. *Statesman's Yearbook 1993-1994* (Macmillan: London, 1993), p. 463.

⁴ See note 3.

⁵ Wynaendts, H., 'L'engrenage: Chroniques yougoslaves, juillet 1991-août 1992 [The cog-wheel: Yugoslav chronicle, July 1991-August 1992] (Éditions Denoel: Paris, 1993), chap. 8 (in French).

⁶ Croatia was recognized by the European Community in Jan. 1992 and by the UN in May 1992. Bosnia and Herzegovina was recognized by the EC in Apr. 1992 and the UN in May 1992.

⁷ Eyal, J., *Europe and Yugoslavia: Lessons from a Failure* (Royal United Services Institute: London, 1993); Weller, M., 'The international response to the dissolution of the Socialist Federal Republic of Yugoslavia', *American Journal of International Law*, July 1992, pp. 569-607; and Zucconi, M., 'The European Community in the former Yugoslavia: a case study', eds A. Chayes and A. H. Chayes, *Preventing Conflict in the Post-Communist World: Mobilizing International and Regional Organizations* (Brookings Institution: Washington, DC, forthcoming).

and Lord David Owen as their respective representatives, which was to remain the main channel of international effort at mediation until April 1994. At that date the Contact Group of five countries took over.⁸ Symbolizing the ruthless character of the conflict and the impotence of the outside world, shells and mortar bombs continued to fall on the Bosnian capital, Sarajevo, throughout the London Conference.⁹

The first Vance–Owen Plan¹⁰ would have divided the country into nine provinces, besides Sarajevo, with Croats, Muslims and Serbs prevailing in three provinces each. It was rejected in May 1993 by the Bosnian Serbs, and a new proposal to partition the territory into three autonomous states loosely bound together was put forward in late August 1993 by the two negotiators, Thorvald Stoltenberg (the successor to Cyrus Vance as representative of the UN) and Lord Owen. After a few weeks this plan was also dead.¹¹ Meanwhile the relentless pressure of the Serbian forces on the Muslim enclaves continued, in the face of much disagreement among the main international actors as to how to enforce observance of the safe areas—Srebrenica, Sarajevo, Tuzla, Bihac, Gorazde and Zepa—established by the UN in April and May 1993.¹²

As 1994 opened, the Bosnian Government found itself fighting on three fronts, as Croatia and Serbia dusted off old plans for the partition of Bosnia and Herzegovina rather than have their Bosnian associates there continue fighting.¹³ In addition the Bosnian Government lost control of the Bihac Muslim enclave in the north-western part of the country after the leader of the Muslim community there, Fikret Abdic, decided to reach an accommodation with the Serbs. Formalized on 7 November 1993, that agreement afforded Abdic's forces an ample supply of weapons from the Bosnian Serbs.

A new factor which influenced developments in the former Yugoslavia after mid-1993 was the increasingly active role played by the US Administration. After initial reservations about the diplomatic process (the new Administration of President Bill Clinton in early 1993 had first opposed, then supported the Vance–Owen Plan) the USA became more and more vocal in pressing for more decisive use of military force in both the UN and NATO. Responding also to strong British and French pressure to commit US forces on the ground, in July 1993 the Administration dispatched a small contingent of troops to the UNPROFOR preventive deployment force in the Former Yugoslav Republic of Macedonia.¹⁴

⁸ The Contact Group consisted of Russia and the USA plus France, Germany and the UK, the latter 3 representing the European Union.

⁹ 'Barrage of words', *The Economist*, 29 Aug. 1992, p. 18.

¹⁰ See Claesson and Findlay (note 2), p. 75.

¹¹ On this and the Vance–Owen Plan, see Claesson and Findlay (note 2), pp. 75–76.

¹² UN Security Council Resolutions 819 of 16 Apr. 1993 and 824 of 6 May 1993.

¹³ See Hayden, R., 'The partition of Bosnia and Herzegovina', *Radio Free Europe/Radio Liberty, RFE/RL Research Report*, vol. 2, no. 22 (28 May 1993).

¹⁴ Also indicative of this growing interest in Balkan politics was the USA's signature, in Oct. 1993, of a military assistance agreement with Albania providing among other things for high-level exchanges and training of military officers.

The growing interest of the USA in playing an active role was specifically reflected in the decisive part that NATO played in support of the UN operation. At the outset of the Balkan crisis in June 1991, Washington had looked at the crisis as 'a European problem', the North Atlantic Council (NAC) had kept its distance, and NATO Secretary General Manfred Wörner had stressed the role taken up by the EC and the importance of not interfering with it.¹⁵ This approach began to change as early as June 1992 when, at the Oslo NAC ministerial meeting, the Western allies for the first time accepted the possibility of acting in out-of-area crises. NATO's actual role began in July 1992 with the monitoring and then enforcement of the arms embargo of September 1991 against the republics of the former Yugoslavia. On 15 January 1993 the NAC confirmed in a letter to the UN Secretary-General that it was prepared for the first time to undertake operations outside its own area, in the no-fly zone over Bosnia and Herzegovina, should the UN consider this necessary. Operation Deny Flight started on 12 April 1993.¹⁶

The UN Security Council had expanded UNPROFOR's mandate following continued Serb pressure on the safe areas with Resolution 836 of 4 June 1993. UNPROFOR was now authorized to reply to bombardment and to respond to obstruction of the freedom of movement of its personnel or of protected humanitarian convoys. In that context, the Security Council also decided that 'Member States . . . may take, under the authority of the Security Council and subject to close co-ordination with the Secretary-General and UNPROFOR, all necessary measures, through the use of air power . . . to support UNPROFOR in the performance of its mandate'.¹⁷ On that basis, 'close air support' or protective air cover for UNPROFOR was decided on at the Athens NAC meeting of 10 June 1993 at the request of the UN Secretariat and launched by NATO in late July. During 1994 NATO was to have a significant impact on the evolution of the conflict itself.

Russia's interest in the Balkan conflict had been growing too, despite its troubled domestic agenda. A March 1993 article in *The Times* reported revelations by British defence analysts about a recent agreement under which Russia promised the Bosnian Serbs anti-aircraft missiles and tanks.¹⁸ These revelations were later to receive partial confirmation from Russian sources.¹⁹ From early 1994, Russia was also to play a major role in the diplomatic efforts to bring the conflict under control.

The willingness of the Western countries to use force increased in 1993 and early 1994 in proportion to the mounting frustration among the public at

¹⁵ 'Die Deutsche wollen keine Verbände aus der NATO lösen', *Die Welt*, 2 Nov. 1991.

¹⁶ UN Security Council Resolutions 781 of 9 Oct. 1992 and 786 of 10 Nov. 1992 had established a ban on military flights in the airspace of Bosnia and Herzegovina and charged UNPROFOR with the task of monitoring compliance with the ban. Started on 13 Apr. 1993, Operation Deny Flight followed authorization by UN Security Council Resolution 816 of 31 Mar. 1993 to member states to 'take all necessary measures' in the event of violation of the no-fly zone over Bosnia.

¹⁷ UN Security Council Resolution 836 of 4 June 1993.

¹⁸ Prentice, E.-A., 'Moscow makes secret deal to send Serb tanks and missiles', *The Times*, 2 Mar. 1993. The article refers to a weapons transfer agreement of 22 Jan. 1993.

¹⁹ Ramet, S. P., 'The Bosnian war and the diplomacy of accommodation', *Current History*, Nov. 1994, p. 384.

increasing Serb pressure and especially at the indiscriminate shelling of Sarajevo. In late 1992 and 1993 shells fell, besides other places, on a football match and on bread and water queues, killing dozens of innocent people. Therefore, when in August 1993 it looked as though the Bosnian Serbs were ready to overrun Sarajevo, the USA made known its intention to 'take strong measures' and asked for the convening of the NAC to take collective action. At its meetings of 2 and 9 August 1993 the NAC decided that the alliance should 'prepare itself immediately, should the strangulation of Sarajevo and other zones continue . . . to take more rigorous measures, including the use of air strikes' and then moved to consider the operational options.²⁰ While the allies singled out the Serbs in this case as the possible target, they also framed their action as being consistent with implementation of Security Council Resolution 836. Finally the NATO Brussels summit meeting of 10–11 January 1994 expressed NATO's commitment to support the UN operations, including the willingness to use air strikes.²¹

According to NATO sources, the collective allied commitment helped to keep the threatened unilateral US action within the framework of multilateral action. However, it also triggered a dispute over which organization, the UN or NATO, had the right to decide on air strikes—an issue which was to sour relations between them throughout 1994.²² Most sensitive, at this stage, was France. In October 1993 the French Minister of Foreign Affairs, Alain Juppé, warned against giving NATO a 'blank cheque'.²³ In January 1994, however, increasingly worried that its commitment in Bosnia was at a dead end, France changed its position and asked for US intervention.²⁴ This change in the French position was a precondition of a strong commitment to support the UN operations, including the willingness to use air strikes, expressed by the NATO summit meeting of 10–11 January 1994.

Reflecting increasing political pressure on the UN, in late 1993 Secretary-General Boutros Boutros-Ghali appointed as his representative to the former Yugoslavia Yasushi Akashi, a UN Under Secretary-General who had had experience as head of the complex and largely successful UN operation in Cambodia in 1991–93. Moreover, the arrival of the British Lieutenant-General Sir Michael Rose, who had experience in the Falklands/Malvinas conflict and the British special forces, to head UNPROFOR in Bosnia and Herzegovina raised expectations that the UN operation might become more vigorous. Rose's early declarations and actions in Bosnia seemed to meet those expectations.

²⁰ *Nouvelles Atlantiques*, vol. 27, no. 2547 (4 Aug. 1993), p. 2; and vol. 27, no. 2548 (26 Aug. 1993), p. 2.

²¹ Declaration of the Heads of State and Government participating in the meeting of the North Atlantic Council, 11 January 1994, NATO Press Communiqué M-1(94)3, Brussels, 11 Jan. 1994. For the text see *SIPRI Yearbook 1994* (note 2), pp. 268–72.

²² See also section III in this chapter.

²³ *Nouvelles Atlantiques*, vol. 27, no. 2558 (1 Oct. 1993), p. 2.

²⁴ *Nouvelles Atlantiques*, vol. 28, no. 2584 (6 Jan. 1994), p. 3.

The massacre at the Sarajevo market-place

Although Western resolve had possibly persuaded the Bosnian Serbs not to attempt to take Sarajevo in August 1993, pressure on the city, including the killing of innocent civilians, continued. The real turning-point for international intervention in the Bosnia conflict came after 5 February 1994, when a mortar shell lobbed on to a Sarajevo market-place left 68 people dead and almost 200 injured.

While responsibility for the shelling remains to this day undetermined,²⁵ the market-place massacre spurred NATO into action. The ultimatum it issued on 10 February demanded that the siege of Sarajevo be lifted and all heavy weapons be eliminated from an exclusion zone of 20-km radius around the city within 10 days. The day after the massacre, the UN Secretary-General wrote to his NATO counterpart asking that the alliance prepare to launch air strikes against the Serb artillery positions around the city.²⁶ At the end of the 10-day period both UN and NATO officials considered that the specific conditions of the ultimatum had been met.²⁷

At this stage Russia pooled its influence with that of the Western countries, making an important contribution to the achievement of joint objectives. It sent a special envoy, Deputy Minister of Foreign Affairs Vitaliy Churkin, to pressure the Serbs to comply with the ultimatum. Shortly afterwards further Russian pressure was probably decisive in making possible the reopening of Tuzla airport to humanitarian operations. Russian observers were to guarantee that no weapons were shipped in. In April, negotiations between the Croatian Government and the Serbs of the self-proclaimed Republic of Serbian Krajina, part of Croatia, were conducted at the Russian embassy in Zagreb.

Then, on 28 February, two US fighter planes, acting in the framework of Operation Deny Flight,²⁸ shot down four Serbian aircraft returning from a bombing raid in Bosnia. NATO officials maintained that this was the first violation by fixed-wing aircraft since the allies had begun enforcing the ban.

The Sarajevo ultimatum and the downing of the Serbian aircraft for a while gave the impression that the international community had finally drawn the line with regard to Serb aggression. It looked as if this was 'the end of the West's long vacillation and the beginning of action designed, with luck, to achieve results'.²⁹ However, that impression was soon to dissipate as the Bosnian Serbs began the long and ruthless bombardment of Gorazde only weeks afterwards.

In April, after weeks of siege and intense shelling of that Muslim enclave, the UN Secretary-General wrote to Wörner asking the NAC to authorize the

²⁵ Binder, D., 'Anatomy of a massacre', *Foreign Policy*, winter 1994/95, pp. 70–78.

²⁶ *Nouvelles Atlantiques*, vol. 28, no. 2595 (9 Feb. 1994), p. 1.

²⁷ Threats of NATO air strikes produced the desired effect when a few pieces of artillery and 3 tanks were found within the exclusion zone in Mar. 1994. Actual strikes were carried out in Aug. 1994 after the Bosnian Serbs took a number of heavy weapons and a tank out of one depot in the Sarajevo exclusion zone.

²⁸ See note 16.

²⁹ 'A glimmer in Bosnia', *The Economist*, 5 Mar. 1994, p. 34.

launching of air strikes to defend the six safe areas. In contrast to the 'close air support' for UNPROFOR established in June 1993, the air strikes needed to be authorized for each single area by the Atlantic Council. The only such authorization so far decided upon was that of August 1993 concerning Sarajevo. The UN had only four observers in Gorazde and no possibility of sending in more troops. Shortly before the start of the Serb push, the USA had vetoed a request for more cash to increase the number of peacekeepers on the ground (it agreed to pay at the end of April). After overcoming strong US hesitations, in late April 1994 the NAC acted to meet Boutros-Ghali's request and issued another ultimatum to stop the siege of Gorazde. It specifically ordered the withdrawal of the attackers to three km from the centre of the city and unimpeded access for UNPROFOR and medical personnel to the city. As in the Sarajevo case, it demanded that all heavy weapons be moved outside an exclusion zone of 20-km radius. It further made clear its readiness to strike in defence of the other safe areas whenever an attack with heavy weapons was carried out.

The Bosnian–Croatian agreement and the Contact Group plan

Increasing US involvement in the diplomatic dimension during February and March 1994 contributed to further progress for a while. Under UN auspices, a cease-fire agreement was signed on 23 February 1994 by Bosnian Muslims and Croats.³⁰ Then, building on the cease-fire, two more agreements were negotiated and signed in Washington on 18 March in the presence of President Clinton. The first, signed by Bosnian Prime Minister Haris Silajdzic and the representative of the Bosnian Croats, Kresimir Zubak, established a Bosnian federation between the Bosnian state and the Bosnian Croats. As part of the agreement, the Bosnian Government and Bosnian Croat armies were to be put under unified command. The second agreement, signed by the presidents of Croatia and Bosnia and Herzegovina, Franjo Tudjman and Alija Izetbegovic respectively, was a statement of principles linking the new federation to Croatia.

The cease-fire and the two agreements considerably changed the military and political balances in the Bosnian conflict. Later in the year the new Muslim–Croat military cooperation was to intensify and show its potential most clearly in the recapturing of the town of Kupres.³¹ On 24 March the Bosnian Serb assembly in Pale explicitly rejected the possibility of the Bosnian Serbs joining the Muslim–Croat federation.

After April much of the diplomatic activity came to be managed by the newly organized Contact Group,³² intended to bring together the different sources of initiative and bypass the stalemated EU–UN negotiating process. The plan which the Contact Group presented on 5 July built on the new feder-

³⁰ 'US is cool to Yeltsin's summit call for Bosnia', *International Herald Tribune*, 24 Feb. 1994, p. 1.

³¹ Cohen, R., 'Bosnian Serbs: in retreat, or just regrouping?', *International Herald Tribune*, 7 Nov. 1994, p. 1.

³² See note 8.

ation agreement between Bosnian Muslims and Croats, allocating 51 per cent of the territory of Bosnia and Herzegovina to the new federation and 49 per cent to the Bosnian Serbs. Ruling out all possibility of subsequent amendment, the Contact Group offered its plan with a 15-day deadline for acceptance by the contending parties. Punishment was threatened for those rejecting it. To put pressure on the Bosnian Serbs, Serbia itself was threatened with a further tightening of sanctions, especially on the border with the Former Yugoslav Republic of Macedonia. Rewards were also promised—a phased lifting of those same sanctions—if the plan was accepted. Moreover, the Group asked the UN and NATO to work out ways of responding quickly and resolutely to Bosnian Serb violation of Security Council decisions. Another instrument of pressure used was the threat to lift the arms embargo against the Bosnian Government.

As in the case of the Vance–Owen Plan over a year earlier, the Bosnian Serb leaders referred the new plan to the assembly in Pale, which in early August first rejected it and then set a referendum for the end of the month to support its decision. However, this time the rejection produced an ostentatiously negative response from the Serbian authorities in Belgrade, including an unprecedented media campaign of abuse against Radovan Karadzic, the Bosnian Serb leader. Except for food, medicine and humanitarian aid, Serbia's border with Bosnia was declared closed on 4 August. Building on this apparent rift, on 9 September the Contact Group offered Serbia an easing of the trade sanctions in exchange for the deployment of 100 international monitors along the border.³³ After Serbia accepted the deal, the deployment of observers on the Serbian border with Bosnia began in mid-September. Meanwhile the Security Council suspended sanctions on sports and cultural ties and re-established international flight links with Serbia.³⁴

Domestic politics and strategy in the international response

The Contact Group itself had been held together by the expectation that its plan would succeed. The failure of the 5 July plan released the different pressures and motivations behind the national policies of the Group's members. The Russian Government now pressed the Western governments for more substantial rewards for Serbia for its cooperation in promoting the peace plan—a move which the Government hoped would allow it to reoccupy the pro-Serb position in its contest with the Russian right wing.

In Washington, the Clinton Administration tried to dispel general frustration by yielding to congressional demands that it commit itself to seek the lifting of the arms embargo against the Bosnian Government by October if the Bosnian Serbs still rejected the plan. This possibility in turn enraged France and the UK which had always considered that such a move would only lead to escala-

³³ Known as the ICFY mission.

³⁴ The suspension became effective on 5 Oct. after the first full report by the international monitors.

tion of the conflict. They now warned that their contingents might be withdrawn, which would effectively terminate the UNPROFOR mission.

In late September the clouds of a serious rift among the allies seemed to disperse when the Bosnian Government proposed a six-month postponement on implementation of the lifting of the embargo if the Security Council did decide to lift it. There were signs at this point of enhanced Muslim capabilities: weapon re-supply was now easier, thanks to the new alliance with the Croats, while Serbia's closure of its border seemed, at least for a few weeks and especially in the north-western part of Bosnia and Herzegovina, to be having an effect on the Bosnian Serbs' ability to counter growing military pressure on them. Press reports hinted at possible interest on the part of the Serbian President, Slobodan Milosevic, in finding a successor to Radovan Karadzic.³⁵

Once again, in October the Clinton Administration began to press the Security Council for a resolution that would lift the arms embargo on the Bosnian Government. On 3 November the UN General Assembly adopted a Resolution³⁶ (by 97 votes to 0 but with 61 abstentions, including all EU members) urging the Security Council to take action to lift the embargo. It asked UN member states to help Bosnia to exercise its 'inherent right of individual and collective self-defence'. On 11 November President Clinton announced, to NATO's alarm, that Washington was unilaterally withdrawing from the policing of the arms embargo. The Administration had no choice: the action was required by legislation drafted by Democratic leaders with the purpose of heading off a tougher Republican proposal.³⁷ To offset the damage, the US State Department went to great lengths to clarify that the decision did not imply challenging the enforcement of the embargo by other countries. Against a background of growing pressure from Congress for the USA to flout the embargo, the Administration spent the next few months responding to allegations that it was clandestinely helping the Muslim side with arms, training or intelligence.³⁸ Growing differences now emerged among senior US officials as the Clinton presidency concerned itself more with saving NATO than with saving Bosnia.³⁹ Press reports indicated that the US Administration complied promptly with a congressional request that options for arming and training Bosnian Muslims be drafted, while President Clinton was still warning of the associated risks and possible political fallout. An indication of the limited reach of the emerging US policy can be found in the very negative position expressed by the incoming Speaker of the House of Representatives, Newt

³⁵ 'Fear and loathing beyond the Pale', *The Economist*, 12 Nov. 1994, pp. 34–35.

³⁶ UN General Assembly Resolution 49/10 of 3 Nov. 1994.

³⁷ Fitchett, J., 'Allies are worried after US calls off policing the ban on arms in Bosnia', *International Herald Tribune*, 12–13 Nov. 1994, p. 1.

³⁸ 'The pot bubbles', *The Economist*, 19 Nov. 1994, p. 34. On the denials of the US Administration, see Pomfret, J., 'US denies European claims it is aiding Bosnian Muslims', *International Herald Tribune*, 21 Nov. 1994, p. 2. In early Jan. 1995 the new Senate majority leader, Bob Dole, again offered a bill to lift the arms embargo against the Bosnian Government by 1 May. President Clinton immediately stated that he would veto it if it were passed but it was possible that Congress would have the two-thirds majority to override the veto.

³⁹ 'A sly game of "liar's poker"', *Newsweek*, 19 Dec. 1994.

Gingrich, with regard to a possible multi-million dollar aid package for the Bosnian Government: 'Bosnia', declared Gingrich in early November, 'is largely a European problem. The Germans and the French and the British and the Italians are more than wealthy enough to provide the overwhelming bulk of the aid'.⁴⁰

The NAC formally re-stated on 15 November its intention to implement the UN-mandated arms embargo in full. After the November 1994 elections the USA decided not to share intelligence for purposes of the arms embargo, renegeing on an earlier promise. This was to remain the most damaging aspect of Washington's position to many of the allies.

The battle for Bihac

By mid-November the Bosnian Government's push, which had been going on since September, to enlarge the territory it controlled around Bihac, one of the UN safe areas, had largely been turned back. The Bosnian Serbs moved heavy artillery pieces around the enclave while the Krajina Serbs were helping troops of the Muslim leader in Bihac, Fikret Abdic, in an apparent attempt to reconquer the city itself from the Bosnian Army.

Worried that the situation would slip even further from their hands and concerned about the new Republican majority in the US Congress, the Western members of the Contact Group now hinted at the possibility of changing specific elements of the 5 July plan and allowing the Serb-allocated territory in Bosnia to confederate with Serbia proper. The angry response of the Bosnian Government made it difficult thereafter even to think of opening a new round of all-party negotiations.⁴¹ A seminar of NATO defence ministers in Seville, Spain, on 29–30 September had already expressed the need for 'more robust' action in Bosnia.⁴² When the Serb side used aircraft in combat over Bihac on 19 November the Security Council authorized strikes against targets in the Krajina region, from which the aircraft had come. Permission to enter what is internationally recognized as Croatian airspace had come the day before from Zagreb. On 21 November a force of 39 NATO aircraft attacked the Udbina airport runway in Krajina, 35 km south-west of Bihac. At the UN's request, to minimize the risk of casualties they deliberately avoided hitting the Serbian aircraft on the ground.⁴³ Two days later 24 NATO aircraft attacked missile batteries again in Krajina and north-western Bosnia.⁴⁴

⁴⁰ 'Gingrich opposes aid to Bosnia, "Europe's problem"', *International Herald Tribune*, 19–20 Nov. 1994, p. 1. On other occasions Gingrich took a hawkish position with regard to Bosnia, but this seemed mostly an opportunistic political position. 'A sly game of "liar's poker"' (note 39), p. 14.

⁴¹ 'Would they reward genocide and hand half of Bosnia over to a Greater Serbia?', said the Bosnian Prime Minister, Haris Silajdzic, at the end of Nov. 'The consequences of Bosnia', *The Economist*, 3 Dec. 1994, p. 32.

⁴² *Nouvelles Atlantiques*, vol. 28, no. 2658 (1 Oct. 1994), pp. 2–3.

⁴³ 'Raid underscores limits on West's military power', *International Herald Tribune*, 22 Nov. 1994, p. 1.

⁴⁴ See chapter 2, table 2.3 in this volume for details of the use of air power in Bosnia during 1994.

The promised Western resolve to use force quickly melted away as the situation became rougher for the UNPROFOR personnel on the ground. Indecision about whether and how to use force grew. Bosnian Serb troops detained 50 Canadian peacekeepers, made UN military observers lie bound on an airfield and held other UN troops hostage by blockading them in the weapon collection centres around Sarajevo. About 1000 lightly armed Bangladeshi peacekeepers were trapped near Bihac with all supply lines cut. UN personnel were no longer permitted to move through Serb-held territory and the delivery of fuel to the UN mission was impeded.⁴⁵ This intensified the difficulties between the UN and NATO, and especially among the allies themselves. 'I think we have a complete breakdown of NATO', protested Senator Bob Dole, the new Republican leader of the Senate.⁴⁶ Worried that its detained peacekeepers might be used by the Bosnian Serbs as a shield against further air strikes, in early December the UN Bosnian command even asked NATO to stop patrolling the no-fly zone over Bosnia to avoid possible incidents.⁴⁷

While the Republican position in the US Congress, opposed to the 'subordination' of NATO to the UN and favouring a complete withdrawal of UNPROFOR and the unleashing of NATO air power, attracted growing attention in the press, the Clinton Administration quickly reverted to worrying about the cohesion of the alliance above all.⁴⁸ That implied focusing again on the diplomatic process, and this path became even more difficult when Moscow reacted with resentment to the NAC decision on 1 December to set a one-year deadline for a study of the conditions for and implications of the enlargement of the alliance to selected Central and East European countries. The prospect of inclusion in NATO of some of Russia's former allies in the Warsaw Treaty Organization created in Moscow a perception of isolation from the West. The predictable reaction was obstruction on a number of issues over which Russia had long been cooperating with the West. On 1 December the Russian Foreign Minister, Andrey Kozyrev, refused to sign the Partnership for Peace Individual Partnership Programme and an accompanying document concerning cooperation between Russia and NATO.⁴⁹ On the same day, President Boris Yeltsin vetoed an extension of the sanctions on the Bosnian Serbs at the Security Council. At the summit meeting of the Conference on Security and Co-operation in Europe (CSCE)⁵⁰ in Budapest on 5-6 December, Yeltsin warned that 'Europe [was] in the danger of plunging into a cold

⁴⁵ Pomfret, J., 'UN wants to withdraw from Bihac', *Washington Post*, 7 Dec. 1994, p. A27.

⁴⁶ Horvitz, P. F., 'Serbs cannot be stopped, US and UN concede: diplomatic effort called a failure', *International Herald Tribune*, 28 Nov. 1994, p. 1.

⁴⁷ 'Fresh split develops over Bosnia no-fly zone', *International Herald Tribune*, 3-4 Dec. 1994, p. 1. The patrols were stopped until 25 Mar. 1995.

⁴⁸ For the Republican position see Horvitz (note 46); see also Drozdiak, W., 'At NATO, Dole adds fuel to arms embargo feud', *International Herald Tribune*, 30 Nov. 1994, p. 1. On the changed position of the Administration, see Horvitz (note 46); and Fitchett, J., 'Allies breathe sigh of relief as US drops past policies', *International Herald Tribune*, 30 Nov. 1994, p. 1.

⁴⁹ See chapter 8, section III in this volume. For the text of the Invitation and the Framework Document, see *SIPRI Yearbook 1994* (note 2), pp. 272-74.

⁵⁰ After the Budapest summit meeting, as of 1 Jan. 1995 the CSCE became the Organization for Security and Co-operation in Europe (OSCE).

peace', and he and Kozyrev blocked agreement on a series of statements on Bosnia because they all assigned a measure of guilt to the Serbian side.⁵¹

The withdrawal of UNPROFOR began to seem likely. NATO, which after a few high-profile military operations against the Bosnian Serbs was now sharing the blame for the impasse, for a few weeks concentrated its efforts on making contingency plans for UNPROFOR's withdrawal. Accusing the USA of having contributed to creating 'a total dead end in Bosnia', France now asked that the UN and NATO prepare for the pull-out, hoping at the same time that the warring parties would soften their negotiating positions.⁵² However, for several reasons (including the likelihood that the fighting would escalate further) on 9 December both France and the UK declared their intention to maintain their contingents in and continue to support the UNPROFOR mission in Bosnia. Meeting in Washington a few days later, the French Defence Minister, François Léotard, and his US counterpart, William J. Perry, focused on making the UN peacekeepers more effective by increasing their number and weapons, by introducing better rules of engagement and by establishing a protected humanitarian aid corridor from the Adriatic Sea to Sarajevo.⁵³ This was followed by a meeting of the eight NATO countries which had troops in Bosnia, plus the USA and Italy, to discuss the strengthening of UNPROFOR. A meeting of military commanders from nations participating in UNPROFOR on 20 December accepted the request for special equipment (engineering equipment, night vision glasses and so on), but set aside the French proposal for the Adriatic-to-Sarajevo corridor.⁵⁴

The end-of-year cease-fire

In the last days of December 1994 and early weeks of the new year, two cease-fire agreements signed on 23 and 31 December seemed to take hold in Bosnia. Mediated in outline by former US President Jimmy Carter, who had come to Bosnia at the invitation of Bosnian Serb leader Karadzic and against the advice of the new NATO Secretary General, Willy Claes, and then developed in detail by the UN authorities in Bosnia, they included a four-month truce, the opening of new negotiations on the cessation of hostilities⁵⁵ and Serb commitments: (a) to end all restrictions on humanitarian convoys; and (b) to the reopening of Sarajevo airport to aid flights and of the territory held by the Bosnian Serbs to international human rights monitors.

The cease-fire agreements were further strengthened by another deal of 11 January 1995 between the local parties committing the Bosnian Serbs to open roads leading into Sarajevo and the Muslim side to stay out of the demilitarized zone around the city. Both sides seemed to find it convenient to

⁵¹ 'Security talks end in disarray over Bosnia war', *International Herald Tribune*, 7 Dec. 1994, p. 1.

⁵² Cohen, R., 'Bosnia dead end: fury and blame', *International Herald Tribune*, 8 Dec. 1994, p. 1.

⁵³ *Nouvelles Atlantiques*, vol. 28, no. 2680 (16 Dec. 1992), pp. 1-2; and 'US and France close ranks on reinforcing UN in Bosnia', *International Herald Tribune*, 13 Dec. 1994, p. 2.

⁵⁴ *Nouvelles Atlantiques*, vol. 28, no. 2681 (22 Dec. 1991), pp. 1-2.

⁵⁵ *Financial Times*, 22 Dec. 1994, p. 3.

comply with the agreements. After the political pressure they had been subjected to, the Serbs could use them to consolidate their gains, as they called for UNPROFOR to be deployed along the front lines. To the Bosnian Government the cease-fire could mean a useful respite from military pressure now that the Western countries were again reluctant to use their military might against the Serbs.

In early January 1995 external pressures were once again growing on the Bosnian Government to accept a substantial revision of the Contact Group plan of July 1994. The Contact Group countries and the Clinton Administration were beginning to consider it unrealistic to hold out for the Muslims the retention of the safe areas of Srebrenica, Zepa and Gorazde. Moreover, they now considered it unavoidable that the Bosnian Serb-controlled territories would be allowed into a confederation with Serbia and Montenegro mirroring the arrangement of March 1994 between Bosnian Muslims, Bosnian Croats and Croatia.

A worrying sign of what might lie ahead came in a request by the Croatian Government that the 13 500 UN troops in Serbian Krajina be withdrawn. The UN mandate in Croatia was due to expire on 31 March 1995, but the Croatian Government gave three more months to complete the withdrawal. Born of frustration and resentment with the international community for failing to carry out its decisions, Zagreb's move might have been primarily intended as a means of putting pressure on the most influential international actors. None the less it carried the risk of a further broadening of the conflict.

A year that had opened with escalating intervention by the international community and the most influential Western countries in particular later witnessed, particularly in its second half, increasing difficulty on the part of those outside actors to agree on a common line of action. These difficulties also marred the cooperation between the two international organizations most directly involved in attempting to manage the conflict, the UN and NATO.

III. UN–NATO cooperation

While expanding greatly in 1994, UN–NATO cooperation was increasingly fraught with problems. As these surfaced, especially in the second part of 1994, bitterness and mutual accusations increasingly characterized relations between the two organizations.

NATO participation in the international response to the conflict necessarily changed the character of that response and of the UN operations in particular. UNPROFOR in Bosnia and Herzegovina had achieved its primary objective—humanitarian assistance.⁵⁶ However, even that limited objective at times required measures that went well beyond the traditional mode of operation of UN peacekeeping missions. The environment for these operations remained very uncertain. Despite the commitments undertaken by all parties at the London Conference of August 1992 (including respect for human rights, the

⁵⁶ UN Security Council Resolution 770, 13 Aug. 1992.

ending of ethnic cleansing and the closing of detention camps),⁵⁷ Serb pressure on Sarajevo and on the Muslim enclaves remained especially steady and deadly.

The very availability of NATO military power inevitably tended to lower the threshold of the conditions considered necessary for successful implementation of peacekeeping and humanitarian missions. Thus, for instance, on 20 March 1994, after the show of international resolve that followed the Sarajevo market-place massacre, UN officers promised a more 'muscular' approach and the decision was taken to send a relief convoy to the Muslim enclave of Maglaj in central Bosnia, with the assistance of NATO aircraft circling overhead.⁵⁸ The town had been under Serb siege and shelling for some months and was subsisting on supplies dropped by US aircraft. Only one convoy had reached the town since the previous June.

The availability of NATO airpower had afforded the international intervention the possibility of pursuing broader objectives. The UN, however, was obliged to keep the use of force subordinated to the operation and needs on the ground.

The Security Council's decisions produced a tangle of initiatives poorly coordinated and relying on different, at times contradictory, means of implementation. NATO took over operations that the UN could not carry out. The enforcement of the no-fly zone⁵⁹ and the defence of the safe areas were again instances of this. NATO took over enforcement of the ban after repeated violations: a statement by the President of the UN Security Council reported 465 violations including bombings of Bosnian villages.⁶⁰ When the safe areas were established by the Security Council in April and May 1993,⁶¹ the UN commander of the time requested some 900 peacekeepers for each of five safe areas and a larger number for Sarajevo. This force, which might have been capable of a preventive function, was never deployed: in Gorazde at the beginning of the April 1994 Serb attack the UN had only four observers. Continued Serb pressure on those areas put the few UN troops there in danger.

The major source of tension between NATO and the UN concerned the right to decide on air strikes. The problems here were: (a) who should give the order to attack; (b) how and how expeditiously the order reached those who were to carry it out; and (c) consistency and credibility in responding to violations.

Air strikes were called by the UN authorities in Bosnia on a number of occasions.⁶² When the Bosnian Serbs took a number of heavy weapons out of

⁵⁷ 'Texts of statements approved 27-27 Aug. 1992, at the London Conference on Yugoslavia, London, United Kingdom', *US Department of State Dispatch*, vol. 3, supplement no. 7 (Sep. 1992), pp. 3-6.

⁵⁸ 'UN aid convoy breaks Serbian siege of enclave', *International Herald Tribune*, 21 Mar. 1994, p. 1.

⁵⁹ See note 16.

⁶⁰ Letter of 16 March 1993 from the Secretary-General addressed to the President of the Security Council, UN document S/25444, 19 Mar. 1993; and Note by the President of the Security Council, UN document S/25426, 17 Mar. 1993.

⁶¹ See note 12.

⁶² See chapter 2, table 2.3 in this volume.

one of the depots in the Sarajevo exclusion zone in early August 1994, the NATO air strikes called by the UN commander quickly made them surrender those weapons. Similarly, during the siege of Gorazde in April 1994 other air strikes were called by the UN command to defend UNPROFOR personnel considered to be under attack.

However, in many cases the UN command was reluctant to make use of NATO power, even though it would have been well within the parameters authorized. In one such instance, in March 1994, after Bosnian Serb shells fell on a contingent of French 'blue helmets' near Bihac, air support was first requested and then called off. This incident and another in March in which NATO planes circled for three hours above a designated target waiting for the order to strike (the target in the meantime departed and the operation was cancelled) brought French and NATO complaints to the UN and led to an exchange of letters between the Secretaries General of the UN and NATO. A 20 April 1994 meeting of the NAC insisted that the alliance must be allowed to act 'effectively' and through 'improved and very rapid procedures'.⁶³ NATO complained again to the UN authorities on 23 April after it had prepared to strike in response to attacks in the Gorazde area but found it impossible to establish contact with the UN commander. In mid-May the commander of an UNPROFOR unit at Tuzla airport asked that air strikes be called, the source of the shelling against the airport having been clearly identified, and Akashi refused authorization.⁶⁴

After the August 1993 NATO threat to silence the guns around Sarajevo, Wörner and Boutros-Ghali had met on 1 September to clarify the issue and agreed that the decision to strike belonged to the UN. The UN Secretary-General was concerned at the time that 'the United Nations flag should not become a flag of convenience'.⁶⁵ Then, in early 1994, the new UN commander for the whole of the former Yugoslavia, the French General Jean Cot, in an interview accused the Secretary-General of having repeatedly rejected his requests for air support. The same General Cot later praised Boutros-Ghali's decision to delegate authority for ordering air strikes to Akashi.⁶⁶

Afterwards, in an attempt to clear the air and defuse the growing tension, Akashi defined in three points the command procedures for the use of air power.⁶⁷ Close air support was to be requested by the UN command, while air strikes could be requested either by the UN or by NATO. However, both parties had to agree before such actions could be carried out: this was called the 'double key' system. In the event of disagreement on the assessment of a violation, the final decision could be taken by the secretaries general of the two organizations.⁶⁸

⁶³ *Nouvelles Atlantiques*, vol. 28, no. 2616 (22 Apr. 1994), p. 1.

⁶⁴ *Nouvelles Atlantiques*, vol. 28, no. 2624 (20 May 1994), p. 1.

⁶⁵ *Nouvelles Atlantiques*, vol. 27, no. 2550 (3 Sep. 1993), p. 2.

⁶⁶ *Nouvelles Atlantiques*, vol. 28, no. 2597 (16 Feb. 1994), p. 3.

⁶⁷ *Nouvelles Atlantiques*, vol. 28, no. 2597 (note 66).

⁶⁸ *Nouvelles Atlantiques*, vol. 28, no. 2622 (14 May 1994), p. 1.

That did not stop disagreements and mutual recriminations. Thus, when a meeting between Akashi and US Defense Secretary Perry brought no result, in October 1994 the NAC decided to spell out its conditions and proposals in a letter to the UN Secretary-General. Formal negotiation between the two organizations ensued. The main points of disagreement concerned NATO's requests: (a) that its pilots be allowed to choose among four different targets (because of possible difficulties of identification, the risk of collateral casualties, weather conditions, and for other reasons); (b) that violations be responded to promptly; and (c) that the principle of warning the party under attack, which the UN had hitherto maintained, be abandoned.⁶⁹

A last meeting on 28 October 1994 produced a detailed agreement between the representatives of the two sides and was approved that same day by the NAC.⁷⁰ The document signed stated, among other things, that 'NATO will carry out the air strikes with the appropriate speed' and that 'while the party responsible for the violation can be given a generic warning, in principle there should not be tactical warning of the imminent air strike'. The number of targets envisioned for each single attack was extended to three or four. The agreement established that the principle of the 'double key' was still operational and guaranteed that 'the decisions concerning the target and the execution of the mission will be taken jointly by the military commanders of the UN and NATO'.

Despite the October agreement, in a matter of days Bihac brought the two organizations back to acrimonious quarrelling. In an interview published in *Le Monde* in late October, the UNPROFOR commander, General Bertrand de Lapresle, included NATO among the threats he said he had to confront in the former Yugoslavia. NATO headquarters asked (unsuccessfully) in December that future missions, such as the UNPROFOR withdrawal operation, be left entirely under NATO command. NATO Secretary General Claes in a statement in early December excluded any future allied participation in UN operations which carried the same stringent conditions as those imposed in Bosnia.⁷¹ Areas of cooperation and complementarity were not re-established until mid-December.

The UN and NATO had different views of the use of force. To the UN authorities in charge of the operation on the ground, air strikes were only one of the instruments they had at their disposal in the course of difficult, unceasing negotiations, mostly with the Bosnian Serbs, aimed at gaining their assent, case by case, to specific humanitarian initiatives. The UN authorities stressed the different approach of the two organizations to the use of force. 'Air power', declared Boutros-Ghali, 'is there to protect peacekeeping forces on

⁶⁹ *Nouvelles Atlantiques*, vol. 28, no. 2665 (26 Oct. 1994), p. 1.

⁷⁰ *Nouvelles Atlantiques*, vol. 28, no. 2667 (3 Nov. 1994), pp. 1-2.

⁷¹ 'Il y a une différence de culture entre l'ONU et l'OTAN, selon le chef des "casques bleus", le général de Lapresle' [There is a difference of culture between the UN and NATO, says the head of the 'blue helmets', General de Lapresle], *Le Monde*, 25 Oct. 1994, p. 8; Drozdziak, W., 'Europeans back off on Bosnian pullout', *International Herald Tribune*, 10-11 Dec. 1994, p. 1; and *Nouvelles Atlantiques*, vol. 28, no. 2682 (29 Dec. 1994), pp. 1-2.

the ground, not to punish'.⁷² To those applying force, that is, the NATO authorities, the basic conditions for their involvement were consistency and credibility. On a number of occasions NATO Secretary General Wörner stressed that credibility needed to be maintained if the alliance's participation in the Bosnian operations was to be effective.⁷³ Force was used in many cases to influence the evolution of the conflict itself or to control the violence on the ground. The positions of the UN and NATO were built on different premises and were bound to clash.

The UN authorities in Bosnia were abundantly criticized for their reluctance to make use of NATO's strength. It is difficult, however, not to be sensitive to their plight: 'Bombing is a last resort because then you cross the Mogadishu line . . . If somebody wants to fight a war here on moral or political grounds, fine, great, but count us out. Hitting one tank is peacekeeping. Hitting infrastructure, command and control, logistics, that is war, and I am not going to fight a war in white painted tanks'.⁷⁴

The international response to the conflict in Bosnia and Herzegovina became more problematic when NATO was the instigator of specific operations. This was case with the threats of air strikes in August 1993, with the ultimata of February 1994 and the establishment of exclusion zones around Sarajevo and Gorazde in February and April 1994 respectively, and with the air strikes conducted in response to the attack against Bihac in late 1994. Such initiatives, of course, required the formal request of the UN Secretary-General or authorization by the Security Council. It was even more clear that when NATO played a supporting role to UN operations it was not neutral: allied intervention was directed against one of the parties in the conflict and weighed in the balance of forces among them. There were fewer problems in those operations in which implementation and the decision when to act were left entirely in the hands of NATO. Both Operation Deny Flight and the Adriatic Sea operations could be considered as cases of the UN 'subcontracting' to the Atlantic allies.

It was an argument neither organization could win, and the October UN-NATO negotiation and agreement on streamlining the command procedures were more a symptom of the problem than a remedy to it.

IV. Conclusions

More than in other recent cases, the response to the Yugoslav conflict has brought to the fore the incompatibility between UN-managed operations on the ground and the concurrent broader initiatives of the Security Council, which concerned peace enforcement. Despite attempts to classify specific conditions for and different types of post-cold war UN interventions, the

⁷² *Nouvelles Atlantiques*, vol. 28, no. 2666 (28 Oct. 1994), p. 1.

⁷³ *Nouvelles Atlantiques*, vol. 28, no. 2602 (2 Mar. 1994), pp. 1-2.

⁷⁴ UNPROFOR commander General Sir Michael Rose in an interview. Cohen, R., 'UN General opposes more Bosnia force', *New York Times*, 29 Sep. 1994

important lesson of the former Yugoslavia may be the recognition that there are inherent contradictions in complex peacekeeping operations carried out under the UN banner which involve the application of limited levels of force.⁷⁵

A humanitarian operation needs the consent of the warring parties to be carried out, and that consent is invariably withdrawn by those who become the target of other initiatives of the Security Council or of NATO. Indeed the operation on the ground may become hostage to those trying to defend themselves from attacks. One recent analysis concludes that 'peacekeeping and peace enforcement are . . . separate and mutually exclusive activities that cannot be mixed'.⁷⁶

Since the European Community's failure to find a solution to the different and interconnected aspects of the Yugoslav conflict in late 1991, the international community has had no overall strategy for dealing with the issue—no strategy that would go beyond the humanitarian operation and stopgap responses to particular developments. In this situation the use of force has tended to become a substitute for policy.

NATO can only be used as what it is—an instrument for a policy determined by others. The UN cannot pacify Bosnia. It cannot even adequately perform its limited missions if other capabilities, especially political and economic, are not used on a large scale to deal with this extremely complex crisis.

⁷⁵ Two recent studies have clarified the factors of that contradiction, although they look at the issues from different angles. See Dobbie, C., 'A concept for post-cold war peacekeeping', *Survival*, vol. 36, no. 3 (autumn 1994); and Picco, G., 'The UN and the use of force: leave the Secretary-General out of it', *Foreign Affairs*, vol. 73, no. 5 (Sep.–Oct. 1994), which focuses on the contrast that the increasing reliance on the use of force has recently brought out between the workings of the UN Secretariat and of the Security Council.

⁷⁶ Dobbie (note 75), p. 121.

7. Russia and its neighbourhood: conflict developments and settlement efforts

VLADIMIR BARANOVSKY

I. Introduction

In 1994, alongside the continuing conflict-generating trends in the newly independent states of the former Soviet Union (FSU), there were modest signs of stabilization and successful conflict management. The hostilities in some conflict areas stopped; negotiations brought certain positive (if modest) results; and the relations between the new states were less troubled than in the first years of their independence.

However, there remains the risk of serious domestic crises within and tensions between the former Soviet republics, the situation in and the policies of Russia being the most important factors at play. The war in Chechnya was the most dramatic culmination of the crises in 1994, significantly spoiling the overall record of the year.

This chapter focuses on the domestic trends in Russia and their impact on Russian foreign and security policy. Section II describes these developments and section III the course of the war in Chechnya. Sections IV and V analyse the centripetal and centrifugal developments in the 'post-Soviet space': the record of 1994 in the seven other conflicts in the FSU and the search for integration by the members of the Commonwealth of Independent States (CIS).

II. Domestic developments in Russia

The year 1994 was the first full year of operation of the new Constitution of the Russian Federation and the new legislative body, the Federal Assembly. Both resulted from the election held on 12 December 1993, which followed the serious crises in Moscow in September–October 1993. However controversial the background to and the outcome of those developments might be, Russia was at least provided with a certain legal and political framework, a minimal condition for domestic stability.

A certain political stabilization did take place in 1994, with the main political actors apparently ready to accept new rules and to refrain from open confrontation, presumably trying to avoid a repetition of the scenario of 1993, when the political process was blocked and a constitutional coup was regarded as the only way out. The threat of overall chaos or large-scale civil war, imminent at the end of 1993, receded in 1994.

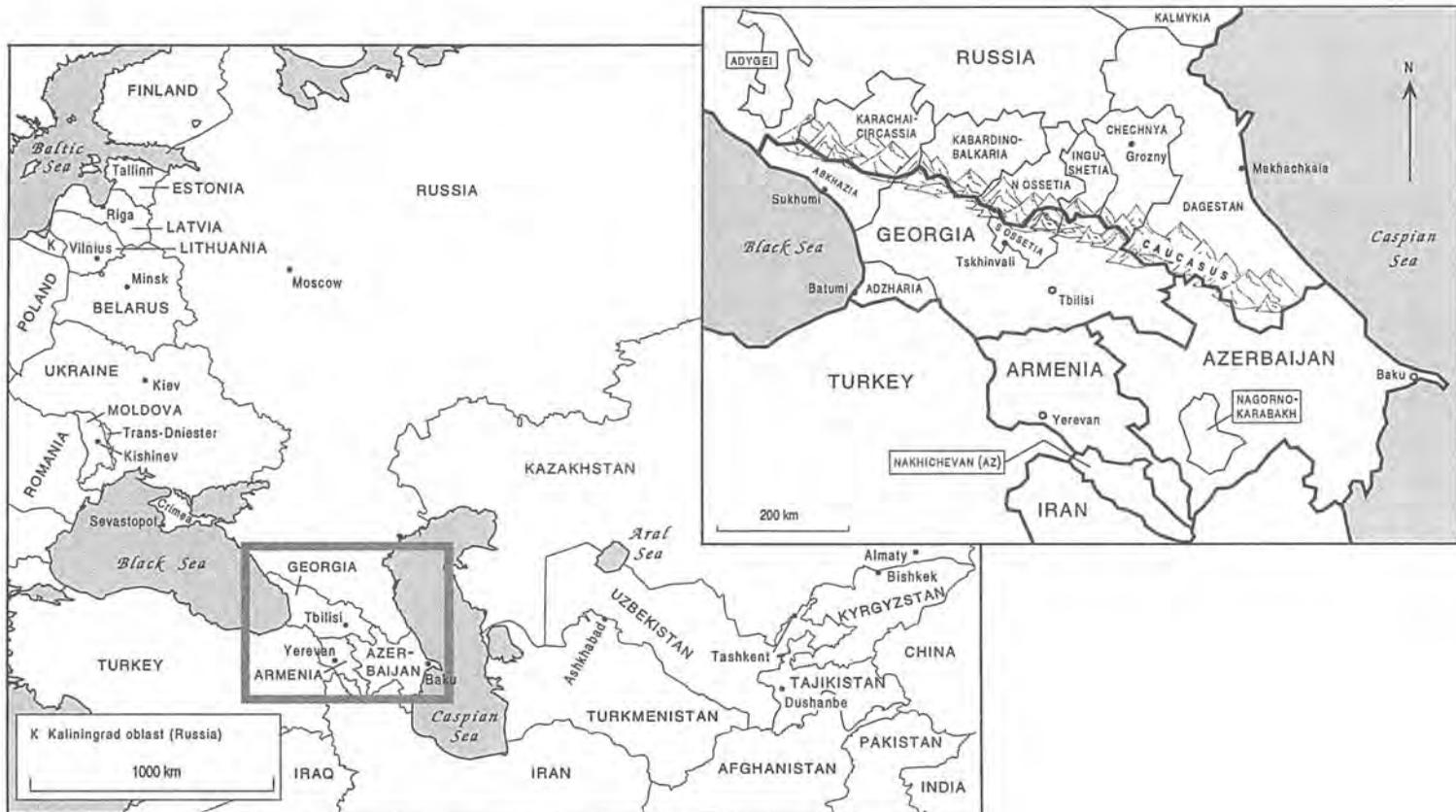


Figure 7.1. Map of the new states on the territory of the former Soviet Union. *Inset*: The Caucasus region

Patterns of power

One cost of the apparent political stabilization in 1994 was the increasing authoritarianism of the central administration, with the presidency and the government becoming increasingly powerful and moving further outside democratic control.

The unprecedented pace of political developments, together with undemocratic methods of power formation and policy making, have put in doubt the political future of many prominent figures in Moscow. For numerous individuals, losing power may make them not only politically but also legally accountable for their past actions. The possibility of postponing the next parliamentary election has been raised in political circles in Russia¹—purportedly in order not to damage the ongoing legislative process. Delaying the presidential election has also been suggested as a means of preventing political destabilization.² Although President Boris Yeltsin has not expressed support for delaying the election, such a decision might seem extremely tempting to a number of actors seeking to preserve political control in Russia.

Meanwhile, the 1993 Constitution is becoming increasingly irrelevant as far as the actual political process is concerned. Personal and 'shadow' assistants to the president are far more influential than are any actors operating within the 'constitutional space'.³ The Russian Security Council⁴ is often referred to as a successor to the Politburo of the Soviet times. There are also numerous reports on the growing role of the Main Protection Directorate⁵ and the president's security service,⁶ which not only remain uncontrolled by any official institutions, including the FSK (Federalnaya Sluzhba Kontrrazvedki, the Federal Counter-intelligence Service, successor to the KGB) but also aspire to influence the most important aspects of state policy.⁷ The demonstrative use of force in illegal raids against the largest private company, Most, in December

¹ According to the Russian Constitution, the first State Duma must be re-elected within 2 years of starting to function, i.e., not later than Dec. 1995.

² President Yeltsin was elected on 12 June 1991 for a 5-year term. When the confrontation with the previous Russian Parliament culminated in the autumn of 1993, he suggested parliamentary and presidential elections as a means of solving the conflict. However, the anticipated presidential election was 'forgotten' soon after the dissolution by force of the parliament.

³ Byzhutovich, V., 'Teneviye sovetniki Kremlya usilivayut svoyo vliyaniye' [Shadow advisers in the Kremlin increase their influence], *Izvestia*, 24 Jan. 1994, pp. 1–2; and Golovkov, A. and Mamaladze, T., 'Podbor kadrov na fone neubrannykh trupov' [Staff selection against the background of a litter of corpses], *Izvestia*, 14 Jan. 1994, p. 7.

⁴ The Russian Security Council is composed of the top officials of the country: the president; the prime minister; the chairmen of the two houses of the parliament; the ministers of foreign affairs, finance, justice, defence and the interior; and the heads of the security service, border control troops and external intelligence. Kostjukov, A., 'Vtoroye izdanie GKChP' [Second edition of the GKChP (State Emergency Committee)], *Obshchaya Gazeta*, no. 3 (19–25 Jan. 1995), p. 8.

⁵ The Main Protection Directorate, headed by Gen. Mikhail Barsukov, has 44 000 personnel. *Izvestia*, 26 Apr. 1995, p. 5.

⁶ The president's security service is headed by Gen. Aleksander Korzhakov and has a force of 4000 guards. *Obshchaya Gazeta*, no. 7 (16–22 Feb. 1995), p. 7.

⁷ Savvateeva, I., 'Kto upravliayet stranoy—Yeltsin, Chernomyrdin ili general Korzhakov?' [Who governs the country—Yeltsin, Chernomyrdin or General Korzhakov?], *Izvestia*, 22 Dec. 1994, p. 1. In 1995 the FSK was renamed the Federalnaya Sluzhba Bezopasnosti, FSB, the Federal Security Service.

1994 was regarded as an indication that the president's personal security guard might emerge as the decisive element in a power struggle.⁸

However, Yeltsin's name is no longer associated with overwhelming public support, as it was in 1991. Moreover, he has become hostage to the 'presidential' constitution that gives him exclusive responsibility for nominations to the highest state positions and for the main strategic decisions. The growing public disappointment over domestic developments is focused primarily on Yeltsin. According to reliable opinion polls, the erosion of his support has become critical: by the end of 1994, support for the president was as low as 11.8 per cent.⁹

For a significant part of the power groups oriented towards a 'post-Yeltsin era', he may have become a burden rather than an asset. Yet the authoritarian trends in society may become more entrenched whether or not Yeltsin remains in power. However, numerous domestic failures might be conveniently attributed to the personal record of President Yeltsin if he is removed from the political arena,¹⁰ although such a scenario would inevitably involve a severe power struggle and significant political realignments.

If this struggle results in the predominance of non-democratic trends in domestic developments, the foreign policy implications are predictable. Not only might Russia's relations with the outside world become more erratic and incoherent, but the traditional Soviet-style paranoia about a hostile external environment (which might eventually result in external adventurism) would probably be an element of such a development.

The changing foundation of political power is noteworthy. Since the quasi-official pro-presidential forces,¹¹ associated mainly with the democratic end of the political spectrum, were defeated in the 1993 elections, they cannot provide solid political support for Yeltsin in the parliament. The government proposed an 'agreement on civic accord'—inspired by the Moncloa Pact of post-Franco Spain and aimed at ensuring cooperation among the main political actors in Russia. However, this highly publicized agreement, concluded on 28 April 1994, turned out to be a dead letter. Moreover, the parliament—although limited in its ability to influence government (i.e., presidential) policy—became increasingly critical of the government. The latter, in an attempt to broaden its political base, gradually moved towards 'de-ideologization'—

⁸ 'Okhrana prezidenta stanovitsa samostoyatel'noy politicheskoy siloy' [President's guard becomes an independent political force], *Segodnya*, 6 Dec. 1994, p. 3.

⁹ Vil'chek, V., 'Reiting Yeltsina kriticheskii nizok' [Yeltsin's rating is critically low], *Obshchaya Gazeta*, no. 47 (25 Nov.–1 Dec. 1994), p. 8.

¹⁰ Gavriil Popov, a prominent democratic leader and a former mayor of Moscow, argues that Yeltsin will probably become a victim of the authoritarian regime he is trying to install. 'Boris Yeltsin i avtoritarnoye gosudarstvo' [Boris Yeltsin and the authoritarian state], *Izvestia*, 29 Dec. 1994, p. 5.

¹¹ This refers in the first instance to the newly established political party 'Vybor Rossii' ('Russia's Choice', later renamed 'Democratic Russia's Choice'). Its leader is former Russian Prime Minister Yegor Gaidar, who began the programme of price liberalization in 1992.

by dismissing 'the first-generation democrats' from the top posts and by becoming increasingly receptive to the slogans and recommendations of their opponents. The idea of a 'coalition government' was put on the political agenda,¹² while the president's adherence to democratic values was increasingly questioned.¹³

The political evolution was aggravated by the situation in many provincial areas. Although in some regions (e.g., Nizhniy Novgorod) the reformist ideology is predominant in the political spectrum, the regions in which the former *nomenklatura* seeks both to preserve its position and to control the local economic and political life even more tightly than did the communist leadership are more numerous (e.g., Adygei, Altay, Buryatia, Kabardino-Balkaria, Komi, North Ossetia, Orlov and Ulyanovsk). The dilemma with which the central authorities are confronted—that of either preserving or undermining the 'bulwarks of conservatism'—is being resolved in favour of preservation.¹⁴ Such an approach, although rationalized as being necessary to prevent destabilization, is increasingly conducive to further shifts in power, as was clearly demonstrated in a number of local elections in 1994.¹⁵

The indulgence (if not sympathy) of the authorities towards the 'national-patriotic' end of the political spectrum is also noteworthy. In 1994 about 90 radical right-wing organizations operated in Russia with no political or legal control.¹⁶ Even more scandalous was the nomination to a ministerial post of a politician who did not even attempt to conceal his chauvinist ideology and was dismissed only after numerous revelations in the press.¹⁷

The changing political basis of the government could not help but affect Russian foreign and security policy. The Yeltsin Government gradually began to endorse the arguments developed by the 'patriotic' forces, adopting elements of assertiveness, emphasizing that Russia is a 'great power' and demonstrating uncooperativeness with the West. This does not necessarily mean that the old Soviet ideology will return—but the new élites interpret the old dogma in such a way that it could become more acceptable to them in reaching their pragmatic goals.

¹² Significantly, in a number of important votes in the State Duma, the government was mainly supported not by the 'democrats' but by representatives of the 'irreconcilable opposition'.

¹³ By the end of 1994, some prominent democratic politicians had openly withdrawn support for President Yeltsin. Noteworthy in this respect is Grigoriy Yavlinskiy, the head of the 'Yabloko' faction in the State Duma and the most serious possible challenger to Yeltsin in the next presidential election.

¹⁴ 'Ulyanovskiy zapovednik' [The Ulyanovsk reserve], *Izvestia*, 3 Dec. 1994, p. 5.

¹⁵ E.g., in Nov. 1994 the local elections in the Krasnodar krai (a politically important area neighbouring the North Caucasus) resulted in a clear defeat of all the parties claiming a democratic orientation. Fomin, V., 'Broсок na yug sostoyalsia' [The breakthrough to the south has taken place], *Literaturnaya Gazeta*, 30 Nov. 1994, p. 2.

¹⁶ Latsis, O., 'Fashistam v Rossii boyatsa nechego' [Fascists in Russia have nothing to fear], *Izvestia*, 2 Dec. 1994, p. 5.

¹⁷ Boris Mironov, who chaired the State Press Committee, had openly identified himself as a 'Russian fascist'. It is therefore not surprising that racist and fascist printed materials have been produced and distributed in Russia without any restrictions.

Economic policy

Government economic policy is increasingly criticized both for its ineffectiveness¹⁸ and because it has not been able to prevent large-scale criminalization of the market.¹⁹ The proclaimed adherence to economic reforms notwithstanding, the Russian Government has failed to create incentives for structural changes²⁰ and to influence the flows of capital.²¹ Moreover, there are serious suspicions that the continuation of non-market elements of the economy is deliberately aimed at preserving and increasing the power of the bureaucracy, which is steadily becoming even more influential than in Soviet times.²²

Meanwhile, the reforms (or what are presented as reforms) dangerously discredit the general market orientation because of the prohibitively high social price to be paid by the population.²³ Although Russians have shown remarkable tolerance and adaptability, the inevitable wave of future mass bankruptcies²⁴ and resulting growth of unemployment²⁵ could seriously increase the risk of a social explosion.²⁶ As in the case of any politically

¹⁸ In 1994 the Russian GDP decreased to 88% of the 1993 level. Rybak, S., 'Gosudarstvenny sektor proizvel bol'shuyu chast' VVP' [The state sector has produced most of the GDP], *Nezavisimaya Gazeta*, 18 Jan. 1995, p. 2.

¹⁹ Over 60 investment-type companies ceased operation in 1994 without returning money to individual investors. It is estimated that over 3 million people were affected, which may become a significant political factor—in so far as they not only blame the government for their losses but are also trying to be elected to political positions. Rudakov, A. and Shimov, Ya., 'Mnogolikiy Golubkov' [Many-faced Golubkov], *Izvestia*, 2 Dec. 1994, p. 4. This was clearly demonstrated by the absurd vote (in the supplementary Oct. 1994 election to the Duma in Mytishchi, a suburb of Moscow) which resulted in the victory of Sergey Mavrodi, the swindler—hero of the spectacular 'MMM Ltd' scandal in 1994.

²⁰ An estimated 20% of Russian GDP is produced by enterprises which do not pay taxes and thus is not reported in official statistics. *Nezavisimaya Gazeta*, 8 Dec. 1994, p. 4.

²¹ Since 1990, \$50–100 billion have been illegally withdrawn from Russia. According to the Ministry of the Interior, another \$2 billion is added to this figure each month. Guiblov, M., 'Vzyatka—norma nashey zhizni' [Bribery is a norm of our life], *Argumenty i Fakty*, no. 48 (Nov. 1994), p. 5.

²² In 1994 there were 1.5 times as many civil servants in Russia as there were in the entire FSU. Sivkova, V., 'Pochemu chinovnikam ne khvataet stulyev' [Why the bureaucrats do not have enough positions], *Argumenty i Fakty*, no. 46 (Nov. 1994), p. 5. Compared to 1990, expenditure for administrative management as a share of the budget increased from 1.38% to 3.8% (from 0.37% to 1.06% of GDP). Zhaguel', I., 'Tak vo chto zhe obkhodyatsya nam vlasti' [What do the authorities cost us?], *Izvestia*, 20 Dec. 1994, p. 4.

²³ It is estimated that in 1994 up to 40% of the population lived below the poverty level. Sivkova, V., 'Skol'ko v Rossii bednykh i skol'ko bogatykh' [How many poor and rich are there in Russia?], *Argumenty i Fakty*, no. 50 (Dec. 1994), p. 6. With retail prices approaching (and in some cases exceeding) the average world level, the minimum monthly wage by the end of 1994 was equivalent to \$5 (20 500 roubles)—which, according to the Labour Ministry, represented only 12% of the subsistence minimum. Open Media Research Institute (OMRI), *OMRI Daily Digest*, no. 43, part 1 (1 Mar. 1995). Meanwhile, the government and the parliament hotly debated an increase of the minimum monthly wage to the equivalent value of either \$9 or \$14.

²⁴ Approximately 4500 state-owned enterprises (11% of the total) are candidates for bankruptcy; about 800 will become subjects of *sanatsia* (imposed restructuring) in the near future. *Nezavisimaya Gazeta*, 8 Dec. 1994, p. 4.

²⁵ By early 1995, 1 549 600 individuals were officially registered as unemployed. This represents c. 1.9% of the workforce. *Nezavisimaya Gazeta*, 31 Dec. 1994, p. 1. If the Law on Bankruptcy enters into force, unemployment would probably rise to over 3–4 million. *Doklad o soblyudeniі prav cheloveka i grazhdanina v Rossiyskoy Federatsii za 1993 god* [Report on human and civil rights observance in the Russian Federation in 1993], Unpublished report approved on 14 June 1994 by the Human Rights Commission of the President of the Russian Federation, pp. 61, 66. The figure for hidden unemployment is officially estimated to be 5.3 million. Rybak (note 18), p. 2.

²⁶ According to the Association of Russian Banks, in 1994 the ratio between the income of the poorest 10% and the richest 10% of the population increased to 1:15 (unofficial estimates of this indicator are

unstable government, poor economic performance creates additional incentives to demonstrate toughness and arrogance towards the outside world.

The political and intellectual weakness of the central administration makes it highly receptive to pressures emanating from powerful domestic interest groups. Some of these groups have already consolidated to an extent which allows them to influence the most important foreign policy decisions, while the government is often unable to counterbalance such pressures by a coherent, long-term strategy. In 1994 this was demonstrated by the open struggle within the government over the position to be taken on the significant contract for extraction of oil from the Caspian Sea continental shelf, concluded by Azerbaijan and affecting the long-term political interests of Russia in the area. Significantly, the Foreign Ministry's opposition to this project was easily defeated by the oil and gas lobby in the government, which was interested in immediate economic gains.²⁷

The competing interests of economic groups may generate differently oriented, sometimes incompatible impulses for foreign policy. However, most of the new business élites have been recruited from the old *nomenklatura*, and the fact that they are often professionally uncompetitive in terms of world market requirements strongly pushes them to lobby for highly protectionist policies. Indeed, the 'patriotic' schizophrenia about the alleged deliberate intention of the West to keep Russia in the position of a second-rate state is thus supported by the short-sighted egoism of the business élites.

At the same time economic constraints will inevitably create serious obstacles for a would-be expansionist policy. The military remain underpaid, their vital needs (e.g., housing) are unfulfilled, their morale is low, and their combat-readiness is highly doubtful. The overall economic crisis has not spared the defence industries and their research and development (R&D) bases, which will probably have a long-term negative effect on the technological performance of the armed forces.²⁸

However, the military-industrial complex (Voyenno-promyshlenny kompleks, or VPK) remains among the most powerful lobbies, and the continuing—although reduced—state support of the defence industries might well have an effect on Russia's international behaviour. The nationalist-oriented party of Vladimir Zhirinovskiy, the unexpected victor in the December 1993 parliamentary election, is reportedly backed by significant VPK forces.²⁹ It is

even higher; in 1991, it was 1:4.5). Experts consider that a ratio of 1:10 is socially explosive. *Finansovye Izvestia*, no. 12 (21 Feb. 1995), p. 1. In the first quarter of 1994, strikes occurred at 288 enterprises. This represented more than a tenfold increase over 1993. *Doklad o soblyudenii prav* . . . (note 25), p. 66.

²⁷ Guseinov, E., 'Skhvatka vokrug Kaspiyskogo shel'fa' [Fighting around the Caspian shelf], *Izvestia*, 12 Sep. 1994, p. 4; Blagovestov, A., 'Vokrug azerbaydjanskogo kontrakta veka' [Around 'the contract of the century' in Azerbaijan], *Segodnya*, 15 Oct. 1994, p. 4; Gurbanov, I., 'Chtoby imet' stabil'nuyu ekonomiku, neobkhodimo sotrudnichat' s Rossiei' [In order to have a stable economy, it is necessary to cooperate with Russia], *Vek*, no. 41 (28 Oct.–3 Nov. 1994), p. 4; and Blagovestov, A., 'Rossiyskiy MID predlagal Chernomyrdinu vvesti sanktsii protiv Baku' [Russian Foreign Ministry suggested to Chernomyrdin sanctions against Baku], *Segodnya*, 21 Oct. 1994, p. 3.

²⁸ See the report of the 'round table' discussion on the problems of the Russian military-industrial complex in *Nezavisimaya Gazeta*, 24 Nov. 1994, pp. 4–5.

²⁹ *Literaturnaya Gazeta*, 23 May 1994, p. 3.

no coincidence that the government has since then become more receptive to their demands—both domestically and in terms of relations with the external world. An aggressive (although not very successful) arms sales policy is only one manifestation of this linkage.

Criminalization as a political phenomenon

There has been an unprecedented increase in criminal activity in the transitional period. Creating a legal infrastructure in Russia, where the rule of law was non-existent for several decades, will inevitably require time and consistent political efforts. This process lags considerably behind the large-scale redistribution of property which has become the main priority for most of those in the state apparatus since it affords formidable opportunities for bureaucrats to amass private wealth from the process. Bribe-taking affects all relationships in civilian society and, in a sense, has become the most important element in forming its structures.³⁰ Over 70 per cent of all civil servants are estimated to be involved in corruption.³¹

Thus there is no paradox in the fact that, alongside increasing authoritarianism, the state apparatus has demonstrated a remarkable inability to combat crime. According to the Ministry of the Interior, over 200 000 criminal groups operate in Russia, and 35 000 enterprises, including 400 banks and 47 stock and commodity exchanges, are under criminal control.³²

The criminal community has become a parallel power, challenging the authority of the state and increasingly affecting the everyday life of ordinary people.³³ Citizens' alienation from the political structures is becoming increasingly pronounced and is evident in their deepening scepticism about democratic values and in the increasing attraction to slogans proclaiming the necessity for 'a strong man' to re-establish order. Indeed, a scenario of some popular general coming to power and revitalizing the ability of the state to fight crime is no longer discussed in only theoretical terms.³⁴

At the same time the government is becoming increasingly inclined to take 'extraordinary measures' which might be supported by a frustrated and disoriented public opinion. This development may well make democracy the victim

³⁰ 'The all-encompassing corruption has in fact become the only mechanism of rational decision-making'. Kagarlitskiy, B., 'Sushchestvuyut ekonomicheskie predposylki dlya smeny elit' [The economic prerequisites exist for a change of élite], *Nezavisimaya Gazeta*, 22 Feb. 1995, p. 4.

³¹ Guiblov (note 21), p. 5.

³² *Argumenty i Fakty*, no. 48 (Nov. 1994), pp. 5, 8.

³³ The number of armed bandit organizations is estimated at 5500, with over 30 000 participants. Nikulina, N., 'Pobeg iz russtrel'noy' [Escape from the prison cell for a death sentence], *Vek*, no. 43 (18–24 Nov. 1994), p. 12. The number of assassinations by criminals in 1994 approached 30 000. See Guiblov, M., 'Kaznit' nel'zia, pomilovat'' [To execute is impossible, pardon them], *Argumenty i Fakty*, no. 7 (Feb. 1995), p. 6.

³⁴ The names of the popular Russian generals Alexander Lebed and Boris Gromov are often mentioned in this respect.

of what would be presented as the requirements for preserving stability. This is clearly demonstrated by numerous reports of the abuse of power by the police, Interior Ministry troops and 'special forces'³⁵—especially in the areas where emergency was proclaimed (notably, in Moscow during the events in September–October 1993,³⁶ in the zone of the Ingushi–Ossetian conflict³⁷ and in some provincial areas³⁸).

Even more frustrating, however, is the direct 'politicization' of the criminal community, its increasing penetration into the political system and its merging with the state apparatus. It is widely recognized that some notorious political parties and organizations are at least partially financed by 'dirty money'.³⁹ Direct representation in the legislative and executive bodies, up to the highest echelons of power, may be either a goal or even a practical current policy of the criminal community.

Some observers believe that top officials have already become hostages of the criminal community—pointing to their inability to dismiss corrupted generals from the highest positions in the armed forces⁴⁰ or to initiate investigations on the numerous reports of corruption and lawless activities of high-level bureaucrats.⁴¹ Discussions on how to prevent an overall criminalization of the country are irrelevant, writes one analyst, since 'we already live in a Mafia-type state'.⁴² Even if this statement is an exaggeration, it does reflect the public mood in the country.

³⁵ The flagrant abuses in the penal system (with regular severe beatings and torture of convicts by 'special forces' detachments for 'professional training') are only one manifestation of the lawlessness practised by law-enforcement bodies. See Sharov, L., 'Chelovek v maske' [The man in the mask], *Obshchaya Gazeta*, no. 7 (16–22 Feb. 1995), p. 7.

³⁶ In this respect, impressive data were provided in *Doklad o soblyudenii prav . . .* (note 25).

³⁷ The most flagrant violations committed by the security forces operating under the emergency law in the area were reportedly covered up (if not supported) by the central authorities, including Minister of the Interior Viktor Yerin. See Dementyeva, I., 'Beliy Lebed na prudu kachayet pavshuyu zvezdy' [The white swan in the lake is shaking the fallen star], *Izvestia*, 9 Dec. 1994, p. 5.

³⁸ See the reports on illegal persecutions and tortures in Mordovia, in the Volga region, where the interior forces established an uncontrolled terrorist regime. Boyarkina, N. and Zhavoronkov, G., 'Chuma 347' [Plague 347], *Kriminal'naya Khronika*, no. 1 (1995), pp. 8–9; and Zhavoronkov, G., 'Strastimordasti' [Violent passions], *Obshchaya Gazeta*, no. 7 (16–22 Feb. 1995), p. 7.

³⁹ *Argumenty i Fakty*, no. 48 (Nov. 1994), p. 8

⁴⁰ Although there have been numerous allegations about large-scale corruption in the Western Group of Forces (which was deployed in Germany), the commander, Gen. Matvey Burlakov, was appointed to the position of Deputy Minister of Defence. The subsequent assassination of investigative journalist Dmitri Kholodov, who had been actively investigating the case, produced an outburst of public indignation accompanied by open accusations against the top Russian military establishment, including Defence Minister Pavel Grachev. One might presume, however, that appointments to and dismissals from the top military positions are strongly affected by political struggles involving competing personal and group interests; corruption is only one of the aspects of that struggle.

⁴¹ For example, in spite of shocking revelations in the central press about economic crimes and political terror perpetrated against opponents and journalists by Yevgeniy Nazdratenko, head of administration in the Maritime Territory (Primorskiy kray), he was personally awarded a high official decoration by President Yeltsin.

⁴² Moroz, O., 'Vsyo kuplyu . . .' [I'll buy all . . .], *Literaturnaya Gazeta*, 30 Nov. 1994, p. 10.

III. The war in Chechnya⁴³

All these political trends in Russia have been dramatically accelerated by the war in Chechnya,⁴⁴ which has greatly shaken the domestic situation in the country and may have significant implications for Russian foreign policy.

According to the Russian Constitution, Chechnya⁴⁵ is one of Russia's 21 constituent republics.⁴⁶ However, this status has never been recognized by the local leadership, which has been in effective control of Chechnya's territory since 1991.⁴⁷ Chechnya's proclaimed sovereignty and independence, however, led to an authoritarian regime that criminalized and militarized the entire society. Chechnya became a *de facto* 'free economic zone' for illegal transactions to and from Russia, a safe haven for criminals, out of reach of the federal police and judicial system, and a mechanism for the unrestrained accumulation of wealth by Mafia-type bureaucratic clans.⁴⁸

Russia's central authorities have not at any time recognized the secession of Chechnya but have not been able to develop a coherent strategy towards the breakaway republic—because of the permanent power struggle in the centre, hesitations about the means to be used, uncertainties and instabilities in overall developments in the areas around Chechnya (in Georgia under the Gam-

⁴³ For background information, see Ware, R., *Russia and the Chechens*, Research Paper 95/4 (International Affairs and Defence Section, House of Commons Library: London, 10 Jan. 1995).

⁴⁴ The origins of the conflict can be traced back to the turbulent history of Tsarist Russian and Soviet policy in the area. 'The conquest of the Caucasus' was one of the most protracted and painful of Russia's endeavours in the 19th century; noteworthy is the enduring resistance of the majority of the native population in North Caucasus, where the war (1817–64) continued long after most of the Transcaucasus was joined to Russia. In Stalinist times, several ethnic groups in the North Caucasus (including Chechens) became victims of ruthless repression and deportation in which up to 50% of Chechens perished.

⁴⁵ The population is estimated at approximately 1 million. The 1989 census provides aggregate figures for Checheno-Ingushetia (i.e., before the official separation into 2 republics in 1992). The total population of 1.27 million included 57.8% Chechens, 12.9% Ingush and 23.1% Russians. Approximately one-half of the Russians had emigrated by the end of 1994. See Pimenov, A., 'S Kavkazskogo khrebtana Kol'skiy poluostrov?' [From the Caucasian range—to the Kola peninsula?], *Segodnya*, 7 Dec. 1994, p. 9.

⁴⁶ Altogether there are 7 republics in Russia's North Caucasus: Adygei, Chechnya, Dagestan, Ingushetia, Kabardino-Balkaria, Karachai-Circassia and North Ossetia.

⁴⁷ In the aftermath of the failed coup in Moscow in the autumn of 1991, the local power system in Chechnya collapsed. The Supreme Soviet of the republic, which had supported the coup leaders in Moscow, was forcefully dispersed on 6 Sep. 1991 by the 'national guard' of the recently established United Congress of the Chechen People headed by Dzhokhar Dudayev, who had been an air force general in the Soviet armed forces and became a popular local leader. On 1 Nov., newly elected President Dudayev issued a decree proclaiming the sovereignty of the Chechen Republic. The election, with an estimated voter turnout of 10–12%, was proclaimed illegal by the then highest legislative organ of Russia, the Congress of People's Deputies, by a resolution on 2 Nov. 1991. On 7 Nov. Yeltsin issued a decree establishing emergency law in Chechnya, but the Supreme Soviet of the Russian Federation refused to approve it, and the whole situation remained unsettled. Chechnya did not sign the Federal Treaty (defining the status of Russia's constituent territories) in 1992 and refused to participate in Russia's parliamentary elections and the referendum on the new Russian Constitution in Dec. 1993. For an account of the developments in and around Chechnya during 1991–94, see Payin, E. and Popov, A., 'Chechenskaya politika Rossii: spusk v propast' [Russia's policy with respect to Chechnya: down to the abyss] (Report prepared by the Expert Analytical Council; its main provisions were published in *Izvestia*, 7–10 Feb. 1995).

⁴⁸ While these phenomena are not unfamiliar in Russia (see section II in this chapter), the situation in the Chechen regime was manifestly much more serious.

sakhurdia regime and in the conflict areas of Abkhazia and Ingushi–Ossetia), and, presumably, the financial connections of interest groups operating in Russia with ‘the Chechen business’.⁴⁹ In any case, attempts to find a solution to the problem were fruitless and finally gave way to a vague hope that the situation would gradually change—either by itself or after the peaceful or forceful removal of Chechen leader General Dzhokhar Dudayev by his opponents.⁵⁰

A more flexible and imaginative Russian policy might have resolved the situation peacefully, but there were indications that Dudayev’s resolve to secede from Russia made it impossible to apply the ‘Tatarstan pattern’.⁵¹ In Moscow, Chechnya’s separation from Russia was regarded as something which might dramatically accelerate a disintegration of the country. The domestic failures of the Russian leadership, alongside its increasing political assertiveness and the growing role of enforcement institutions, substantially contributed to more decisive action with respect to Chechnya.⁵²

The initial strategy consisted in organizing and promoting opposition to Dudayev, who was expected to be overthrown easily by the Provisional People’s Council, hastily established in August 1994 and operating with considerable financial, organizational and military support from Russia.⁵³ However, although the opposition claimed to control 7 of the 11 administrative districts of the republic,⁵⁴ the very fact that it was overwhelmingly (and often clumsily) backed by Russian authorities resulted in massive consolidation of Chechen popular support around Dudayev, more than he had ever enjoyed before.⁵⁵

Nevertheless, beginning in September 1994, the logic of direct military action against Dudayev gained the upper hand in the Kremlin. The spectacular failure of the Chechen opposition’s military ‘march to Grozny’, the capital of Chechnya—organized on 26 November 1994 with striking professional ineptness and resulting in an estimated 400 casualties and the capture of several dozen Russian military servicemen engaged by the special services as merce-

⁴⁹ Such operations as illegal international flights to Jordan, Turkey and the United Arab Emirates (up to 150 per month), illegal arms transfers to and from Abkhazia and Ossetia (with the involvement of Russian armed forces), illegal oil supplies from Chechnya (via pipelines over Russia’s territory) and so on ‘were carried out with the tacit support of Moscow and not without the hidden participation of high-level actors in the Kremlin’. Yakov, V., ‘Svidetelya luchshe ubrat’ [It is better to eliminate the witness], *Izvestia*, 14 Jan. 1994, p. 7.

⁵⁰ Some local leaders—rivals and challengers to Dudayev—have managed to establish control over a number of towns and villages in Chechnya.

⁵¹ On 15 Feb. 1994, Russia and Tatarstan concluded a treaty which broke the constitutional and political deadlock resulting from Tatarstan’s proclamation of sovereignty.

⁵² Arbatov, A., ‘Samonadeyannost’ sily’ [Self-confidence of force], *Nezavisimaya Gazeta*, 28 Dec. 1994, p. 2. Furthermore, significant economic interests might also be involved because of the beginning of the second phase of privatization in Russia and the attractiveness of Chechnya’s oil resources. Svetitskiy, K., ‘Politiki boryutsa za neftedollary’ [Politicians are struggling for petro-dollars], *Vek*, no. 47 (16–22 Dec. 1994), p. 3.

⁵³ Dmitrieva, L., ‘Vlasti vyalo, no sorevnuyutsa’ [The authorities are languidly competing with each other], *Vek*, no. 40 (21–27 Oct. 1994), p. 3; and Gorodetskaya, N., ‘Grozny gotov obyavit’ voynu Rossii’ [Grozny is ready to declare war on Russia], *Segodnya*, 1 Oct. 1994, p. 1.

⁵⁴ *Literaturnaya Gazeta*, 30 Nov. 1994, p. 1.

⁵⁵ The subsequent military actions of the Russian armed forces against Dudayev turned him, according to General Lebed, into ‘a symbol of national resistance’. *Argumenty i Fakty*, no. 14 (Apr. 1995), p. 3.

naries⁵⁶—brought a wave of indignation in Russia, both in the parliament and in public opinion, against the irresponsible actions of the central authorities.⁵⁷ The scandal was aggravated by the clumsy denials of Russia's military involvement by the highest officials, contrary to all the evidence of the use of tanks, armoured vehicles and air bombing against the forces of Dudayev.⁵⁸

The choice was made by Moscow to eliminate Dudayev's regime by armed force. On 29 November 1994 Russia issued an ultimatum demanding the disarming of 'illegal armed formations' in Chechnya, at the same time accelerating the concentration of armed forces in adjacent areas.⁵⁹ On 1 December a decree of Yeltsin fixed the deadline for disarming these formations for 15 December (it was later delayed by 48 hours). Another decree, issued on 9 December (i.e., before the ultimatum expired), ordered the government 'to use all means available' to disarm illegal groups in Chechnya. On 10 December, Russian armed forces entered Chechnya from the west, north and east and started to move towards Grozny.⁶⁰ The negotiations between Russia and Chechen representatives on 12–14 December, which Russia probably entered into solely to avoid being blamed for renouncing political means, were in fact only a formality—because Russia defined the subject of the negotiations as 'voluntarily laying down arms and stopping resistance to federal forces', equivalent to the unconditional surrender of Dudayev.⁶¹

What had been probably conceived as a quick and low-cost police operation⁶² turned into large-scale hostilities which continued for months. The obvious preponderance of Russian armed forces notwithstanding,⁶³ the

⁵⁶ Leontyeva, L., 'Lidery oppozitsii eshche ne pobedili Dudayeva' [The opposition leaders have not yet defeated Dudayev], *Literaturnaya Gazeta*, 30 Nov. 1994, p. 1; and Eismont, M., 'Grozny gotovitsa k otrazheniyu shturma' [Grozny is getting ready to oppose the assault], *Segodnya*, 2 Dec. 1994, p. 1.

⁵⁷ Zhuravlev, P., 'Bol'shinstvo dumtsev odobryayut ideyu vmeshatel'stva v Chechne' [Most of the Duma members support the idea of intervention in Chechnya], *Segodnya*, 30 Nov. 1994, p. 2; Pechegina, N., 'Voyska v Chechniu poka ne vvedeny' [Troops have not yet entered Chechnya], *Nezavisimaya Gazeta*, 2 Dec. 1994, p. 1; and Chugayev, S., 'Deputaty Gosdumy nastaiavayut na mirnom razreshenii krizisa' [Duma deputies insist on peaceful resolution of the crisis], *Izvestia*, 3 Dec. 1994, pp. 1, 2.

⁵⁸ *Segodnya*, 30 Nov. 1994, p. 2; *Izvestia*, 2 Dec. 1994, pp. 1, 2; and *Izvestia*, 3 Dec. 1994, pp. 1, 2.

⁵⁹ Pelts, A., 'Zona konflikta: voyska gotovy' [The conflict zone: the troops are ready], *Krasnaya Zvezda*, 7 Dec. 1994, p. 1.

⁶⁰ 'Moskva rubit chechenskiy uzel' [Moscow cuts the Chechen knot], *Izvestia*, 12 Dec. 1994, p. 1; and 'Poprobuyem snizit' nakal strastey' [Let us try to reduce the level of passion], *Izvestia*, 12 Dec. 1994, p. 3.

⁶¹ *Krasnaya Zvezda*, 14 Dec. 1994, p. 1.

⁶² Russian Minister of Defence Grachev reportedly claimed that 72 hours would be sufficient for establishing control over Chechnya; on 28 Nov. 1994 he stated that 'the question of Grozny' would be 'settled' by one airborne infantry regiment within 2 hours. *Nezavisimaya Gazeta*, 1 Dec. 1994, p. 1; and *Izvestia*, 10 Mar. 1995, p. 4.

⁶³ Russia committed nearly 40 000 troops. At the beginning of hostilities Russian analysts estimated Dudayev's forces at 12 000–13 000, of whom 'some 3000 can fight intensively'. Erlanger, S., 'Russian troops advance to seal off rebel capital', *International Herald Tribune*, 14 Dec. 1994, pp. 1, 3; and *Krasnaya Zvezda*, 10 Jan. 1995, p. 1. It must be noted, however, that other estimates of the personnel available in case of total mobilization in Chechnya were as high as 100 000 (Dudayev proclaimed general mobilization on 14 Aug. 1994). *International Observer*, vol. 13, no. 293/137 (Nov. 1994), p. 137; Konovalov, V., 'Chem voyuet chechenskaya storona?' [What is the Chechen side fighting with?], *Argumenty i Fakty*, no. 51 (Dec. 1994), p. 2. The assessments made by the Russian MOD in Feb. 1995 were as follows: the Chechen side had c. 15 000 regular forces, mobilized c. 30 000 irregulars and committed c. 7000 foreign mercenaries. *Nezavisimaya Gazeta*, 22 Feb. 1995, p. 2. It is noteworthy that later assessments made by the MOD obviously intended to provide explanations for its initial failures; Grachev stated on 28 Feb. that Dudayev's forces consisted of 30 000, plus 6000 volunteers from other

weapons at Dudayev's disposal⁶⁴ did allow him to organize an efficient defence and to inflict significant losses on the attacking units, preventing them from achieving an easy victory.⁶⁵ Furthermore, the Russian units were confronted not so much with 'illegal armed formations' which could be identified and neutralized as with the broad resistance of the population, which was strongly motivated and possessed a significant number of arms.

Numerous reports⁶⁶ testify to the fact that the troops were extremely poorly organized by the highest military command—which resulted in 'probably the most unskilful operation in the history of the Russian Army'.⁶⁷ The lack of preparedness and disorganized interaction of combat units were aggravated by the disproportionately high number of generals in the area of the conflict.⁶⁸ At the same time the operations of Russian armed forces in Chechnya should not be assessed only in terms of military efficiency. At the initial stage of the war, the actions of unarmed civilians, such as road-blocks by women and elderly people, often prevented the Russian military from conducting combat activities. Seizing Grozny turned out to be impossible without artillery shelling, rocket strikes and bombing, but they resulted in such significant collateral damage and civilian casualties that the army's morale was dramatically affected. The assault on Grozny on New Year's Eve resulted in military defeat, not least because Russia's armed forces faced obvious constraints in its large-scale combat operations against the civilian population.

countries, whereas the MOD had initially committed 24 000 troops. Russian TV news programme 'Vesti', 28 Feb. 1995.

⁶⁴ The bulk (up to 80%, according to the Russian MOD) of Chechnya's military potential consisted of what remained from the Soviet armed forces' weapons, equipment and infrastructure deployed in the area and seized by Dudayev upon coming to power. *Krasnaya Zvezda*, 18 Jan. 1995, p. 1. According to different estimates, these included over 100 tanks and armoured vehicles, several air-defence missile systems, up to 600 anti-tank weapons, over 150 artillery and mortar pieces, up to 50 000 guns and sub-machine-guns. Dudayev's aircraft (over 250) had been destroyed on land by the air strikes before the offensive of the Russian armed forces started. *Argumenty i Fakty*, no. 51 (Dec. 1994), p. 2; *Nezavisimaya Gazeta*, 1 Dec. 1994, p. 1; *Izvestia*, 3 Dec. 1994, p. 2; *Krasnaya Zvezda*, 16 Dec. 1994, p. 2; and *Segodnya*, 10 Feb. 1995, p. 1.

⁶⁵ According to Deputy Prime Minister Nikolai Yegorov, 1436 federal troops were killed and over 4500 wounded by early Apr. 1995. *OMRI Daily Digest*, no. 66, Part 1 (3 Apr. 1995). Unofficial estimates, after 3 months of hostilities, were 2000–5000 deaths. Golovkov, A. and Shaveshov, T., 'Pervy kvartal chechenskoy pyatiletki' [The first quarter of Chechnya's five-year plan], *Izvestia*, 10 Mar. 1995, p. 4. The estimates of Russia's losses provided by Dudayev's side after 3 months of hostilities were 18 000 killed and about 70 000 wounded. *Nezavisimaya Gazeta*, 7 Mar. 1995, p. 1.

⁶⁶ Litovkin, V., 'Rasstrel 131-y maykopskoy brigady' [The shooting down of the 131st Maykop brigade]; and Frolov, A., 'Soldaty na peredovoy i polkovodtsy v Mozdok' [Soldiers at the front line and commanders in Mozdok], *Izvestia*, 11 Jan. 1994, p. 4.

⁶⁷ Lukin, A., 'Posledniy shans' [The last chance], *Nezavisimaya Gazeta*, 24 Jan. 1995, p. 3. It is noteworthy that Defence Minister Grachev publicly admitted that there was poor cooperation between the military, interior troops, border troops and Federal Intelligence Service personnel, and even between different branches of the army and that officers were poorly trained in the command and control of lower units, noting also the poor combat-effectiveness of rocket artillery and reconnaissance equipment and poor troop education and motivation. *Krasnaya Zvezda*, 2 Mar. 1995; and *OMRI Daily Digest*, no. 45, Part I (3 Mar. 1995).

⁶⁸ In the initial stage, about 100 generals from Moscow arrived in Mozdok, North Ossetia, the field headquarters of forces operating against Chechnya. Korotchenko, I., 'Operatsiya v Chechne: uspekhi ili porazhenie rossiyskoy armii?' [The operation in Chechnya: success or defeat of the Russian Army?], *Nezavisimoye Voennoye Obozrenie*, no. 1 (Feb. 1995), pp. 1–2.

Even the establishment of military control of Grozny (at the price of the destruction of the city)⁶⁹ and Chechnya as a whole⁷⁰ would not have solved the problem. Russia would undoubtedly have been able to 'install order' in Chechnya, drive Dudayev's supporters out and organize a loyal administration in the suppressed republic.⁷¹ However, any order established with bayonets and severe repression⁷² would risk turning Chechnya into an area of protracted low-intensity hostilities with guerrilla irregulars and even destabilizing the entire North Caucasus.⁷³

The political repercussions of developments in Chechnya were dramatic. Most of the mass media and public opinion in Russia strongly condemned the methods used by the central authorities to 'pacify' the secessionist republic. In the State Duma (the lower house of parliament), this condemnation unexpectedly brought together democrats and communists. The Council of the Federation (the upper house of parliament), with representatives of the republics and administrative territories, could not even be counted on in discussions of an official introduction of a state of emergency in Chechnya as required by the constitution.⁷⁴ Numerous prominent politicians desperately appealed to President Yeltsin to stop the large-scale violence; his endorsement of the armed operations made him the main object of the severe criticism which ensued. This criticism reached the level of a broad public outcry by the end of the year, accompanying the flow of television broadcast information on the numerous civilian victims of the indiscriminate bombings, reports on the increasing casualties among the Russian military, and the dramatic evidence presented by the well-known human rights activist Sergey Kovalev,⁷⁵ who,

⁶⁹ The population of Grozny, estimated at 300 000 by the beginning of hostilities, diminished to 60 000 within 2 months. Russian TV news programme 'Vesti', 16 Feb. 1995; and *Segodnya*, 17 Feb. 1995, p. 2. The number of civilian casualties in the city was estimated by Sergei Kovalev at about 25 000 (Russian TV news programme 'Vesti', 22 Feb. 1995).

⁷⁰ By the end of Apr. 1995 the Russian military command claimed to have seized all the major towns and villages in Chechnya and to have pushed Dudayev's troops to the remote mountainous southern part of the republic.

⁷¹ Alongside military operations, Moscow attempted to establish new local governance involving some prominent anti-Dudayev Chechen politicians (such as Salambek Khadzhev).

⁷² The Russian press abounds in reports of the atrocities committed in Chechnya by the military and especially by the interior troops. Fadin, A., 'Eta vojna pereydet po nasledstvu' [This war will be inherited], *Obshchaya Gazeta*, no. 7 (16–22 Feb. 1995), p. 8.

⁷³ Hundreds or thousands of volunteers from the other North Caucasian republics were reported to have participated on Dudayev's side in the hostilities. *Nezavisimaya Gazeta*, 2 Dec. 1994, p. 1; and 16 Dec. 1994, p. 1. In Dagestan and Ingushetia, the Russian military were sporadically blocked by the local population on their way to Chechnya. President Ruslan Aushev of Ingushetia did not conceal his open opposition to Moscow's actions; official leaders of the other North Caucasian republics, most of whom were loyal to the centre, had to be very cautious in expressing their attitude towards developments in Chechnya in order to avoid discrediting themselves in the eyes of the local population. *Izvestia*, 15 Dec. 1994, p. 1.

⁷⁴ In fact, armed action officially aimed at re-establishing the constitutional order in Chechnya was illegal in terms of the current Russian Constitution. In Apr. 1995 the Council of the Federation decided to ask the Constitutional Court to rule on the president's and government's decrees initiating military action in Chechnya.

⁷⁵ A former dissident who had spent 15 years in prison and in exile during the Soviet times, Sergey Kovalev was appointed as chairman of the president's Human Rights Commission and is supposed to operate as ombudsman. His great personal prestige and unique position as an official of Yeltsin strongly protesting against Yeltsin's policy enabled him to present his case in the most convincing way and put his evidence and arguments at the centre of public attention.

together with a group of Russian parliamentarians, was in Grozny during the heaviest air strikes and assaults on the city.⁷⁶

The war in Chechnya shook the political regime in Russia to such an extent that dramatic changes were expected both in the composition of the ruling élite and in its political orientation.⁷⁷

Domestically, there were serious concerns that democracy in Russia would be the first victim of the developments in Chechnya.⁷⁸ In economic terms, the costs of the war, taking into account the restoration of destroyed dwellings, enterprises and infrastructure,⁷⁹ would not only endanger reform in Russia but also inflict heavy damage on its financial system and significantly reduce the chances of overcoming the crisis.⁸⁰ As far as the integrity of the country is concerned (which was presumably the most serious issue at stake for Russia's Chechnya policy), it is far from clear whether the 'Chechen example' will deter other would-be separatists in Russia or whether it will increase the alienation of the constituent republics and administrative territories, thus leading to a fragmentation of the country.⁸¹

Internationally, Moscow had reason to be satisfied with the initially predominant interpretation of the conflict in Chechnya as being Russia's 'internal affair'. However, the protracted character of the military campaign, as well as the horrifying use of tanks, missiles and aircraft against civilians on Russia's own territory, changed foreign and international attitudes soon after the beginning of hostilities. Russia may have to pay a high price along the whole spectrum of its foreign policy for the ill-managed conflict in Chechnya.

Moscow's 'big stick' policy has also created additional incentives and provided arguments for the East-Central European countries to seek membership

⁷⁶ By the end of the year, casualties among the Chechen population were estimated by Dudayev's side at approximately 2000. *Nezavisimaya Gazeta*, 30 Dec. 1994, p. 2. By 10 Jan. 1995 the estimates were over 8000 (*Nezavisimaya Gazeta*, 10 Jan. 1995, p. 1) and by the beginning of Mar. 1995, 27 000 (*Nezavisimaya Gazeta*, 7 Mar. 1995, p. 1). The total number of refugees who had fled the fighting was estimated at approximately 300 000–350 000, i.e., almost one-third of the total population. *International Herald Tribune*, 10 Jan. 1995, p. 4; and *Obshchaya Gazeta*, 19–25 Jan. 1995, p. 2.

⁷⁷ In early Jan. 1995 the appointment of Valentin Kovalev (from the Communist Party faction in the State Duma) to the post of Minister of Justice seemed to mark a new opening in the political composition of Yeltsin's Administration.

⁷⁸ Tretyakov, V., 'Voyna s Chechney—ugroza demokratii Rossii' [The war in Chechnya is the threat to democracy in Russia], *Nezavisimaya Gazeta*, 29 Nov. 1994, p. 1; and Latsis, O., 'Voyna v Chechne sposobna pogubit' rossiyskuyu demokratiyu' [The war in Chechnya could kill Russian democracy], *Izvestia*, 6 Dec. 1994, pp. 1, 2. Attempts to introduce *de facto* censorship on information from Chechnya were the first significant manifestations of this trend. Yakov, V., 'Chinovniki ne mogut oboytis' bez tsenzury' [Bureaucrats cannot do without censorship], *Izvestia*, 17 Dec. 1994, p. 1.

⁷⁹ Eighty per cent of the buildings in Grozny were reduced to rubble. *Izvestia*, 26 Apr. 1995, p. 2.

⁸⁰ The costs of the war are estimated to have reached \$2–5 billion. Hockstader, L., 'Cost of war severe blow to reforms', *International Herald Tribune*, 10 Jan. 1995, p. 1; *Izvestia*, 17 Feb. 1995, p. 2; and *Izvestia*, 3 Mar. 1995, p. 3. The most pessimistic overall estimates were as high as \$40 billion (Russian TV news programme 'Vesti', 14 Feb. 1995), whereas Dudayev's side assessed the damage inflicted on Chechnya as \$46–52 billion (*Nezavisimaya Gazeta*, 7 Mar. 1995, p. 1).

⁸¹ A number of constituent republics expressed their disagreement with Moscow's use of force to address the 'Chechen problem'. See Petrov, N., 'Regiony ne bezmolstvuyut' [The regions do not keep silence], *Nezavisimaya Gazeta*, 20 Jan. 1995, p. 3. The leaders of 7 republics met in early Jan. 1995 in Cheboksary to discuss the problem of Chechnya and issued an appeal to convene a Congress of Russia's Peoples—thus challenging the existing constitution of the country. For the text, see *Nezavisimaya Gazeta*, 10 Jan. 1995, pp. 1–2.

in Western organizations.⁸² Russia's alleged 'non-aggressiveness', presented as one of the strongest arguments against their joining NATO, could well become less convincing. Russia's relations with the Muslim world will be affected as well.

All the previous efforts of Russian diplomacy to create a solid basis for relations with the West may be significantly compromised. Certain developments were thrown into doubt immediately, such as the entry into force of Russia's trade and partnership agreement with the European Union (EU), Russia's application to join the Council of Europe and the credits granted to Russia by the US Congress. The massive violation of human rights in Chechnya is a serious case for the Organization for Security and Co-operation in Europe (OSCE), which has to make a difficult choice between again demonstrating its inefficacy and risking antagonizing Russia.

Fearing the chaos which might result from the disintegration of Russia and the collapse of its political élites, foreign governments (in contrast to public opinion) seemed reluctant to over-dramatize the events in Chechnya. The option of 'punishing' Moscow was rejected as unacceptable and fraught with the risk of re-establishing international confrontation.

IV. Conflict developments in the other post-Soviet states

Apart from Chechnya, in three other areas on the territory of the former Soviet Union armed conflicts continued in 1994 with varying intensity: Nagorno-Karabakh (Azerbaijan), Tajikistan and Abkhazia (Georgia). Two conflicts where force had been intensively used in the recent past remained 'frozen' in 1994: in South Ossetia (Georgia) and in the Trans-Dniester region (Moldova). All these conflicts have resulted from separatist movements with the exception of Tajikistan, where a civil war pattern prevails.

Two more sets of conflict-generating problems continued, although significantly below the level of open violence—in relations between Russia and the Baltic states and between Russia and Ukraine (over the Crimea and the Black Sea Fleet).⁸³ Both cases could be included in a list of the conflicts in the post-Soviet 'geopolitical space' but with strong qualifications, since political means seem to be the prevailing method of conflict settlement.

The Baltic states

The withdrawal of former Soviet troops to Russia, which was the long-standing central conflict in the area, was successfully completed in 1994.

⁸² Kondrashov, S., 'Vnutrennee delo s mezhdunarodnym rezonansom' [An internal affair with an international echo], *Izvestia*, 17 Dec. 1994, p. 4.

⁸³ The basic parameters of the conflicts in the FSU were presented in Baranovsky, V., 'Conflict developments on the territory of the former Soviet Union', SIPRI, *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 169–203. Substantial background information is available from the volume prepared by the Conflict Studies Research Centre of the Royal Military Academy, Sandhurst: *Instabilities in Post-Communist Europe 1994* (Carmichael and Sweet: Portsmouth, 1994).

Agreements on withdrawal were reached on 30 April 1994 with Latvia and on 26 July 1994 with Estonia; both envisaged the completion of Russia's troop pull-out by 31 August 1994.⁸⁴ The last Russian combat ships left Estonia and Latvia from bases in Tallinn, Riga, Ventspils and Liepaja in the summer of 1994.⁸⁵

Political tension continued over what Moscow regarded as discrimination against the former Soviet military as well as against the civil rights of the Russian-speaking populations in general.⁸⁶ The problem has by no means been removed from the political agenda,⁸⁷ but in 1994 it was less dramatized by the parties involved.

Neither were there any dramatic developments with respect to the territorial claims which might be addressed to Russia by Estonia and Latvia⁸⁸ on the basis of the 1920 peace treaties, which Moscow considers to have been invalid since 1940. In Latvia, the issue remains a low-profile one; in Estonia, there is increasing support for renouncing any territorial claims in exchange for Russia's acceptance of the 1920 Tartu Peace Treaty.⁸⁹ However, Russian efforts to equip border installations (in their existing configuration) were vigorously denounced by its Baltic neighbours as unilateral and illegal.

The Kaliningrad region, on the other hand, became the focus of political debate several times in 1994. In November the Baltic Assembly (comprising parliamentarians from the three Baltic states) adopted a resolution 'On demilitarization of the Kaliningrad region and its further developments' which was strongly condemned in Russia as flagrant interference in its domestic affairs.⁹⁰ It is indicative that the conciliatory statements of Lithuanian President Algirdas Brazauskas, who stressed that the Kaliningrad region should be recognized as part of Russia and that Russia alone is entitled to define the number of military personnel in the area,⁹¹ did not help to reduce the tension in Moscow—where some analysts assessed the situation as 'the next phase in

⁸⁴ Hockstader, L., 'Russia and Estonia sign troop accord', *International Herald Tribune*, 27 July 1994, p. 6. For the text of the Russian–Estonian treaty, see *Diplomatscheskiy Vestnik*, no. 15–16 (Aug. 1994), pp. 15–20.

⁸⁵ Nesvizhskiy, V., 'Podlodki iz Liepai rzhaveyut v Kronshtade' [The submarines from Liepaja are getting rusty in Kronshtadt], *Segodnya*, 2 Dec. 1994, p. 2.

⁸⁶ For instance, Russia strongly reacted to the law on citizenship adopted by Latvia on 22 July 1994. *Diplomatscheskiy Vestnik*, no. 17–18 (Sep. 1994), pp. 5–6.

⁸⁷ Moscow, pointing to the violations of human rights in Latvia, tried to prevent Latvia from joining the Council of Europe, arguing that Latvian membership would provoke negative attitudes in Russia towards international institutions in general and, moreover, be perceived as support of Latvian territorial claims against Russia. Abdulatipov, R., 'Nado li toropitsa s priemom Latvii v Sovet Evropy?' [Should Latvia be hastily admitted into the Council of Europe?], *Nezavisimaya Gazeta*, 14 Oct. 1994, p. 2.

⁸⁸ Estonia might claim the eastern coast of the Narva River (the Kingisepp district of the Leningrad oblast), with an area of c. 800 km² and population of over 22 000, and the Pechorskiy district of the Pskov oblast, with an area of c. 1500 km² and population of over 25 000. Latvia might claim the Pytalovskiy and Palkinskiy districts of the Pskov oblast, with an area of c. 1600 km² and population of about 30 000. *Krasnaya Zvezda*, 9 Aug. 1994, p. 3.

⁸⁹ Maloverian, Yu., 'Yubiley Tartuskogo mirmogo dogovora' [The anniversary of the Tartu Peace Treaty], *Segodnya*, 3 Feb. 1995, p. 5.

⁹⁰ *Izvestia*, 19 Nov. 1994, p. 1

⁹¹ Gromak, V., 'Prezident Litvy voprosov k Rossii ne imeet' [The President of Lithuania has no questions for Russia], *Krasnaya Zvezda*, 2 Dec. 1994, p. 3. Radicals insist that there are no international legal documents defining the status of Kaliningrad as belonging to Russia.

some grandiose [anti-Russian] plan to reshape the European borders and spheres of influence'.⁹²

The Trans-Dniester region (Moldova)

In 1994 the political process in this conflict area focused on the future of the Russian 14th Army. Moldova demanded the prompt withdrawal of Russian armed forces that had been deployed in the Trans-Dniester region since the Soviet times, whereas Russia considered it necessary to synchronize the process with a definition of 'special political status' for the self-proclaimed Trans-Dniester republic.⁹³ After long negotiations, an agreement was signed on 21 October 1994; it was to enter into force 'after fulfilment of necessary intra-state procedures' and envisaged the withdrawal of former Soviet troops over a period of three years.⁹⁴

However, some aspects of the situation in this region remain a matter of concern. The Trans-Dniestrian authorities (in contrast to the other cases of separatism in the FSU) are ready to proceed from acceptance of the territorial integrity of Moldova. However, the conflicting parties differ in their practical interpretation of this formula: Moldova insists on having a unified foreign policy and unified defence, security, crime-fighting, and financial and economic system, whereas Trans-Dniestria demands a loose 'association relationship'.⁹⁵

Russia's direct and indirect support of the Trans-Dniestrian authorities diminished significantly during 1994. Moscow seems to have opted for distancing itself from the separatist region and endorsing a much more loyal attitude towards Moldova—not least because the February 1994 elections resulted in an overwhelming victory for the political forces advocating a more cooperative relationship with Russia.

The positive political prospects have been significantly increased by the successful settlement of another case of separatism, in the southern part of the country—that of the self-proclaimed Gagauz republic.⁹⁶ In December 1994 Gagauz was granted special autonomous status by the Moldovan Parliament, and (most importantly) the right to self-determination in the event Moldova should merge with Romania.⁹⁷

In Trans-Dniestria it is still not clear to what extent the meetings of bilateral expert working groups, with intermediary efforts by the representative of the

⁹² Nikolayev, D., 'Spory vokrug Kaliningradskoy oblasti obostryayutsa' [Disputes around the Kaliningrad region become more acute], *Nezavisimaya Gazeta*, 9 Dec. 1994, p. 3.

⁹³ Kniaz'kov, S., 'Tri goda na sbory' [Three years to make all ready], *Krasnaya Zvezda*, 19 Oct. 1994, p. 3.

⁹⁴ Kniaz'kov, S., 'Soglashenie o vyvode 14-y armii podpisano' [The agreement on the withdrawal of the 14th Army is signed], *Krasnaya Zvezda*, 26 Oct. 1994, p. 3. For the text of the agreement, see *Diplomaticheskiy Vestnik*, no. 21-22 (Nov. 1994), pp. 47-51.

⁹⁵ Prikhod'ko, N., 'Pridnestrovye i Gagauzia otvergli obvinenie v separatizme' [Trans-Dniestria and Gagauzia reject accusations of separatism], *Nezavisimaya Gazeta*, 17 Nov. 1994, p. 3.

⁹⁶ Five districts, predominantly populated by Gagauzi (an ethnic Turkic group of Christian religious orientation), proclaimed independence from Moldova in 1989.

⁹⁷ Gamova, S., 'Gagauzy v Moldavii poluchili avtonomiyu' [The Gagauzi in Moldova have got autonomy], *Izvestia*, 29 Dec. 1994, p. 4.

President of Russia and the head of the Conference on Security and Co-operation in Europe (CSCE) mission in Moldova, were instrumental in paving the way for compromise.⁹⁸ Moreover, some aspects of domestic developments in the separatist region could revitalize the conflict—such as the official policy of not teaching the Latin alphabet (used in Moldova) in schools, which provoked serious tension in the Trans-Dniestrian region, or a blockade of railway communications.⁹⁹

There are also disagreements on the future of the weapons and military equipment of the 14th Army. In Tiraspol, the Trans-Dniestrian authorities implicitly threaten not to allow them to leave, pointing out that the military potential of the self-proclaimed republic is one-quarter that of Moldova.¹⁰⁰ The suggested formula of 'reciprocal disarmament', however, is by no means acceptable to Kishinev; moreover, Moldova is concerned that the beginning of a withdrawal will push the separatists to seize arms.¹⁰¹ Paradoxically, this makes Moldova appreciate the potential stabilizing role of Russia's military presence—its insistence on withdrawal notwithstanding.¹⁰²

In 1994 Russia decided to reduce the number of its peacekeeping¹⁰³ personnel deployed in the area of conflict since 1992. Of six battalions, only one (with 630 personnel) will remain.¹⁰⁴ It is indicative that both parties seemed unenthusiastic about such a prospect. On the one hand, the Trans-Dniestrian authorities suspect that the reduction of peacekeeping personnel will be used to conceal the withdrawal of the 14th Army military equipment. Moldova, on the other hand, has claimed that the separatists have been creating their own military forces under cover of the peacekeeping mission and that the mission should be put under international control; otherwise it would be logical to reinforce the peacekeeping forces with an international contingent rather than withdrawing them.¹⁰⁵

The Crimea (Ukraine) and the Black Sea Fleet

In 1994 developments in the Crimea, which is an internationally recognized part of Ukraine, were less explosive than in previous years—although the 'war

⁹⁸ Kniiaz'kov (note 94), p. 3. On the CSCE mission, see also chapter 8 in this volume.

⁹⁹ Gamova, S., 'Poezda cherez Pridnestrovye ne idut' [The trains do not go through Trans-Dniestria], *Izvestia*, 1 Nov. 1994, p. 4.

¹⁰⁰ *Krasnaya Zvezda*, 26 Oct. 1994, p. 3.

¹⁰¹ Selivanov, Yu., 'Komu meshaet 14-ya armiya?' [Whom does the 14th Army hinder?], *Segodnya*, 15 Oct. 1994, p. 3.

¹⁰² Significantly, when Moscow initiated a reorganization of the 14th Army and removal of its commander, Alexander Lebed, he was supported by Moldovan President Mircea Snegur. *Segodnya*, 15 Oct. 1994, p. 3.

¹⁰³ The Russian term *mirotvorchestvo* (literally, 'peacemaking' or 'peace-creation') denotes activities which could range from political mediation to large-scale armed actions aimed at 'imposing peace'. In this chapter the term 'peacekeeping' will be used for Russian and CIS operations.

¹⁰⁴ Selivanov, Yu., 'Rossiyskie mirotvortsy pokidayut Moldaviyu' [Russian peacekeepers pull out from Moldova], *Segodnya*, 1 Dec. 1994, p. 4.

¹⁰⁵ Prikhod'ko, N., 'V Strasburge ponimayut problemy Kishineva' [In Strasbourg they understand the problems of Kishinev], *Nezavisimaya Gazeta*, 15 Oct. 1994, p. 3.

of laws' continued, with the decisions of the Crimean Parliament, President and Government repeatedly contradicting the laws adopted in Kiev.¹⁰⁶

The Ukrainian Parliament (Verkhovna Rada) addressed an ultimatum to the Crimean authorities, demanding nullification of all provisions and decrees which did not correspond to the Ukrainian Constitution, threatening that otherwise the autonomy of the Crimea would be liquidated, its Supreme Soviet dissolved and the local constitution eliminated. After the deadline expired on 1 November 1994, Kiev rescinded about 40 documents which had been approved by the Crimean Parliament (including the Declaration on State Sovereignty, the Act on Independence, and so on).¹⁰⁷

The Ukrainian Government and the National Bank threatened to stop financing those enterprises and institutions in the peninsula which continued to operate according to the abolished laws. Taking into account the Crimea's overwhelming economic dependence on Ukraine,¹⁰⁸ this threat was convincing. A kind of political *modus vivendi* seemed to emerge, with the local authorities avoiding open provocation of Kiev.

Two factors helped to prevent an extremist separatist scenario in the peninsula. First, the deepening conflict between two branches of local power—the parliament and the presidency—deprived them of operational ability and focused them on the struggle against each other.¹⁰⁹ Second, in 1994 Moscow seemed seriously concerned by the prospect of a collapse of Ukraine and avoided destabilizing it—although perhaps without definitely abandoning playing 'the Crimean card'. By all appearances, it was Moscow's involvement in Chechnya which was considered in Kiev as providing a favourable environment for decisive action: on 17 March 1995, the presidency of the Crimea and its constitution were abolished, opening a new round of tension between Russia and Ukraine.

The problem of the Crimea is linked with (and complicated by) the problem of the Black Sea Fleet. Negotiations between Russia and Ukraine on the Fleet were aimed at finalizing the earlier decision; according to an agreement reached on 15 April 1994, Ukraine will receive 15–20 per cent of the Fleet.¹¹⁰ Under discussion were the drafts of a general declaration and nine agreements specifying the principles for sharing ships, bases and coastal infrastructure and the pattern of cooperation in naval activities (zones of responsibility in air and

¹⁰⁶ This was, e.g., the case of the decision on strengthening the local Soviets, whereas Leonid Kuchma gave the instruction to eliminate them throughout Ukraine. Yadukha, V., 'Novy zakonodatel'ny akt krymskogo parlamenta' [A new legislative act of the Crimean Parliament], *Segodnya*, 10 Dec. 1994, p. 5.

¹⁰⁷ Sokolovskaya, Ya., 'Krymu poka sokhranena avtonomiya' [The Crimea still retains its autonomy], *Izvestia*, 19 Nov. 1994, p. 2.

¹⁰⁸ For Kiev, the annual 'cost of running' of the Crimea is estimated at \$1 billion. *Izvestia*, 19 Nov. 1994, p. 2.

¹⁰⁹ Pilat, A., 'Deputaty VS nastavayut na ostavke svoego Prezidiuma' [The deputies of the Supreme Soviet insist on dismissal of their Presidium], *Nezavisimaya Gazeta*, 3 Dec. 1994, p. 3; and 'Na poluostrove parlamentskiy krizis' [Parliamentary crisis in the peninsula], *Nezavisimaya Gazeta*, 16 Dec. 1994, p. 2.

¹¹⁰ Another important aspect of this agreement was the principle of separate basing of the 2 fleets. For the text of the Agreement on a stage-by-stage settlement of the Black Sea Fleet problem, see *Diplomatscheskiy Vestnik*, no. 9-10 (May 1994), p. 48.

sea spaces; joint use of the equipment of the Black Sea Fleet; rules of navigation; hydrographic and meteorological maintenance; joint use of training grounds, and so on).¹¹¹

The status of Sevastopol remained one of the most difficult issues to solve. Moscow insisted that it continue as the main base for the Black Sea Fleet and that it be rented to Russia. Kiev seemed to prefer the idea of joint use. However, Ukraine was reported to be ready to accept Russia's use of part of its territory 'under certain conditions'.¹¹² Specific terms of the accord remained far from settled at the end of the year,¹¹³ the outcome was further complicated by numerous reports that the Russian military was selling the material assets of the Fleet.¹¹⁴

Although the agreement on the Black Sea Fleet is considered to be a necessary precondition for signing a 'big treaty' between the two countries,¹¹⁵ the basic parameters of a forthcoming deal may still change fundamentally. By the end of 1994, alongside information on the progress of negotiations, the appeals in Russia to avoid the division of the Fleet got a second wind. In December the Russian Council of the Federation suggested changing the approach towards settling the problem and preserving the unity of the Black Sea Fleet.¹¹⁶ This may mean that Moscow's policy on the issue has come full circle and returned to its initial position.

Abkhazia (Georgia)

The signing of a memorandum of understanding by the conflicting parties on 1 December 1993 opened an opportunity to re-orient the conflict towards a political settlement.¹¹⁷ Indeed, some infrastructure for a dialogue was created, providing for negotiations in Geneva, New York and Moscow under the auspices of the United Nations¹¹⁸ and with Russia's mediation.

¹¹¹ *Krasnaya Zvezda*, 15 Dec. 1994, p. 3.

¹¹² Skachko, V., 'Chernomorskiy flot: peregovory prodolzhayutsa' [The Black Sea Fleet: negotiations continue], *Nezavisimaya Gazeta*, 15 Dec. 1994, p. 2.

¹¹³ Ukraine was ready to rent only those coastal infrastructures which are necessary to maintain the agreed number of Russian warships. The time-frame for paying the rent was another issue of disagreement. In addition, Russia demanded that the headquarters of the Ukrainian Navy should not be located in Sevastopol, which was rejected by Kiev as affecting its sovereign right to decide upon the issue. Furthermore, Russia insisted on sharing all the ground forces of the Fleet, including those which had sworn allegiance to Ukraine, whereas Ukraine preferred the withdrawal of those which had not sworn allegiance. Finally, Kiev seemed worried about the long-term if not permanent military presence of Russia throughout the peninsula. Portnikov, V., 'Rossiysko-ukrainskaya konfidentsial'nost'' [Russian-Ukrainian confidentiality], *Nezavisimaya Gazeta*, 20 Dec. 1994, p. 1.

¹¹⁴ Sokolovskaya, Ya., 'Poka v Moskve i Kieve dogovari vayutsa, v Sevastopole rasprodoyut Chernomorskiy flot' [While Moscow and Kiev negotiate, the Black Sea Fleet is being sold off in Sevastopol], *Izvestia*, 24 Feb. 1995, p. 2.

¹¹⁵ The Treaty on Friendship, Cooperation and Partnership was signed in Kiev on 8 Feb. 1995. Parishkura, K., 'Rossiysko-ukrainskiy dogovor parafirovan' [The Russian-Ukrainian treaty is signed], *Segodnya*, 9 Feb. 1995, p. 1.

¹¹⁶ *Krasnaya Zvezda*, 17 Dec. 1994, p. 1.

¹¹⁷ Baranovsky (note 83), p. 194.

¹¹⁸ For UN activities in Abkhazia, see chapter 1 in this volume; for the CSCE mission, see chapter 8 in this volume.

On 14 May 1994 the Agreement on Cease-fire and Force Separation was signed in Moscow. The deployment of peacekeeping troops was envisaged in order to monitor the cease-fire. Although Georgia insisted on supervising the entire territory of Abkhazia and on conferring police functions on the UN forces, the parties finally agreed that the peacekeeping mission would be fulfilled by Russia in the area along the Inguri River separating Abkhazia from Georgia. In June 1994, 2500 Russian troops were deployed there (later reinforced by additional contingents).¹¹⁹ The presence of UN observers was envisaged. In October the peacekeeping activities of Russia were mandated by the signatories of the Tashkent Treaty on Collective Security as a collective operation, for the period from 15 November 1994 to 15 May 1995.¹²⁰

Two main problems are the focus of conflict settlement efforts in Abkhazia: the return of refugees and the definition of Abkhazia's political status. Neither was resolved in 1994. On 4 April 1994 the warring sides concluded the Agreement on the Voluntary Repatriation of Refugees and Displaced Persons.¹²¹ However, it was never implemented. Confronted with the selective approach of the Abkhazian authorities¹²² and lacking reliable security guarantees,¹²³ the refugees returning to their homes remained very few until late 1994.¹²⁴ In Georgia, this has strengthened the positions of radical groups appealing to a forcible re-establishment of the *status quo ante*.

The attempts to compromise on the issue of the future political status of Abkhazia have also remained fruitless. As Georgian President Eduard Shevardnadze defined the position of Georgia, 'We are ready to provide Abkhazia with the broadest competences existing in international practice . . . But the formula "two independent states" on which the authorities of Abkhazia insist is unacceptable'.¹²⁵ More specifically, the Abkhaz side insisted on confederate relations within a 'union state', but this formula was resolutely rejected by Georgia. A proposal put forward by the UN, Russia and the CSCE suggested a federal framework, and at the same time the use of a 'union state' formula, but it was rejected by both sides. Meanwhile, the radically altered ethno-demographic situation and lack of progress in the return of

¹¹⁹ *Georgian Chronicle*, no. 6 (June 1994), p. 5; and no. 8 (Aug. 1994), p. 5.

¹²⁰ *Diplomaticheskii Vestnik*, no. 21-22 (Nov. 1994), p. 30.

¹²¹ Their total number is estimated at 260 000 in Georgia, plus 60 000 in the adjacent areas of the Russian Federation. *Georgian Chronicle*, no. 6 (June 1994), p. 5. The agreement was also signed by Russia and the UN High Commissioner for Refugees; for the text, see *Diplomaticheskii Vestnik*, no. 9-10 (May 1994), pp. 55-57.

¹²² For instance, in Oct. permissions to return were granted to only 350 persons. At such a pace, the process would take 60-80 years. Aydinov, M., 'Skol'ko stoit vozvrashchenie v Abkhaziyu' [What is the cost of returning to Abkhazia?], *Vek*, no. 39 (21-27 Oct. 94), p. 4.

¹²³ Violence against Georgians in Abkhazia and their deportations were reported even after the cease-fire agreement was signed.

¹²⁴ *Vek*, no. 43 (18-24 Nov. 1994), p. 4. According to the UN High Commissioner for Refugees, by the end of Nov. 1994 only 147 persons had returned to the Gali region of Abkhazia (designated as the area where the first stage of the return of refugees was to take place). Aydinov, M., 'Kto izlechit gruzinskie bolyachki?' [Who will heal the Georgian sores?], *Vek*, no. 43 (18-24 Nov. 1994), p. 4. However, the figures from different sources on returnees vary significantly; according to the Abkhaz side, 20 000 refugees had returned of their own accord by the end of Nov. *Georgian Chronicle*, no. 11 (Nov. 1994), p. 4.

¹²⁵ Broladze, N., 'Pri nalichii dobroyo voli vsiyo vozmozhno' [With good will, everything is possible], *Nezavisimaya Gazeta*, 17 Nov. 1994, pp. 1, 3.

refugees make it unrealistic to organize a referendum to decide upon the possible options (autonomy within Georgia, a federative or confederative pattern, or independence).¹²⁶

The search for a political settlement was undermined by the persistent attempts of the leadership of Abkhazia to consolidate its self-proclaimed sovereignty—as when it signed the Treaty on Friendship and Co-operation with Tatarstan on 17 August 1994.¹²⁷ Adopting a new constitution which proclaimed Abkhazia an independent state and introducing a presidency in November 1994 were further steps in this direction, leading the political dialogue with Tbilisi into a deadlock.¹²⁸

The position of Russia with respect to the conflict in Abkhazia (which is by far the most important external factor in developments in the area) might be substantially affected by the events in Chechnya. While using the conflict as a means of pressure against Georgia had rewarded Russia in the previous stage, this turned out to be extremely counterproductive in the light of Russia's own problems with separatism, especially taking into account the ethnic and political links between Abkhazia and Chechnya.¹²⁹ Moscow might be tempted to 'exchange' its less ambivalent backing of Georgia's territorial integrity for Tbilisi's support of Russia's actions in Chechnya—which would be needed not only for political reasons but even more so in view of Georgia's territorial proximity to the North Caucasus.¹³⁰

South Ossetia (Georgia)

Against the background of the dramatic developments in Abkhazia, Chechnya, Nagorno-Karabakh and Tajikistan, and the situation in South Ossetia could be described as a 'forgotten conflict'. The presence of Russian peacekeeping forces seems to have been instrumental in limiting the conflict. In 1994 there were no significant armed clashes. However, no substantial progress towards a political settlement was registered.¹³¹ At the most, it was possible to reach some limited functional agreements on organizing everyday life in the region (such as joint road control, health care, and so on)¹³² and to agree to re-establish the quadripartite Joint Monitoring Commission as a standing body.¹³³

¹²⁶ Labakhua, Z., 'Nado deystvovat' energichneye i chestneye' [There is a need to operate in a more energetic and fair way], *Nezavisimaya Gazeta*, 14 Oct. 1994, p. 3.

¹²⁷ It was invalidated by Moscow as violating the Constitution of the Russian Federation.

¹²⁸ *Georgian Chronicle*, no. 11 (Nov. 1994), p. 5.

¹²⁹ In 1992–93 Dudayev's Chechnya was extremely active in organizing military support for Abkhazia—apparently with the tacit benevolence of Moscow.

¹³⁰ *Nezavisimaya Gazeta*, 1 Dec. 1994, p. 1. See also section V in this chapter.

¹³¹ Antipov, A., 'Rossiyskie mirotvortsy v tupike' [Russian peacekeepers in the deadlock], *Obshchaya Gazeta*, no. 43 (28 Oct.–3 Nov. 1994), p. 5.

¹³² *Georgian Chronicle*, no. 6 (June 1994), p. 4.

¹³³ *Diplomaticeskii Vestnik*, no. 21–22 (Nov. 1994), p. 52.

Nagorno-Karabakh (Azerbaijan)

The major change in the situation in this area of conflict in 1994 consisted in the cessation of large-scale fighting and activation of the political efforts of the parties, with the participation of the CSCE and Russia as mediators.

The cease-fire regime has held since 16 May 1994.¹³⁴ Meanwhile, both Moscow and the CSCE Minsk Group have devoted significant efforts to preparing an agreement on further settlement—although competing with each other and expressing mutual suspicions in their attempts to dominate or even monopolize the process of conflict management.¹³⁵ Tensions were defused at the December 1994 CSCE Summit Meeting in Budapest, where Russia had to give up its earlier explicit aspiration to be the only peacekeeper operating on FSU territory or for mandating the CIS without being obliged to abide by CSCE norms and procedures.¹³⁶ At the same time it was agreed to appoint two co-chairmen of the future conference, with the understanding that one of them would be a representative of Russia—thus recognizing Russia's prominent role in the process of conflict management.

Even more important (and unprecedented in the history of this multilateral structure) was the CSCE decision at the Budapest Summit Meeting to endorse a future peacekeeping operation in Nagorno-Karabakh. According to preliminary assessments, this may involve deploying 3000 peacekeepers in the conflict area, with the United Nations allocating \$40 million for the first six months of operations.¹³⁷

The Budapest agreement is a breakthrough towards a settlement in Nagorno-Karabakh, but only the first one. The parties still have to sign a political agreement on a cessation of the conflict; the 'blue helmets' will arrive only afterwards. Meanwhile, the obstacles for such developments remain formidable and concern practically all the stages of the forthcoming settlement: troop withdrawal from the occupied territories, the return of refugees, reliable security guarantees and definition of the status of Nagorno-Karabakh. Azerbaijan is not ready to recognize the breakaway region as a party to the settlement, and the authorities of Nagorno-Karabakh object to the participation of peacekeepers from Turkey.¹³⁸ Turkey's increasingly important geopolitical role will probably provoke additional concerns in Moscow.¹³⁹

¹³⁴ 'Ceasefire agreed in Karabakh war', *The Guardian*, 17 May 1994, p. 4.

¹³⁵ Kazimirov, V., 'Rossiya i Minskaya gruppa SBSE' [Russia and the CSCE Minsk Group], *Segodnya*, 14 Oct. 1994, p. 3.

¹³⁶ Gurbanov, I., 'V Karabakh budut vvedeny mirotvorcheskiye voiska SBSE' [CSCE peacekeeping forces will be introduced in Karabakh], *Vek*, no. 43 (18–24 Nov. 1994), p. 2. See also chapter 8 in this volume.

¹³⁷ Vinogradov, B., '3000 mirotvortsev dolzhny sozdat' usloviya dlya uregulirovaniya v Karabakhe' [3000 peacekeepers have to create conditions for settlement in Karabakh], *Izvestia*, 9 Dec. 1994, p. 3.

¹³⁸ According to different sources, Ankara has assigned 480–1100 troops for the peacekeeping mission. *Segodnya*, 30 Nov. 1994, p. 4; and *Izvestia*, 9 Dec. 1994, p. 3.

¹³⁹ See the article 'Nuzhny mirotvortsy iz Rossii' [Peacekeepers from Russia are needed], *Literaturnaya Gazeta*, 28 Dec. 1994, p. 11, warning Russia against 'Turkey's challenge'.

Tajikistan

In 1994 sporadic armed clashes continued between the government and opposition forces, both inside the country (especially in the mountainous area of Gorny Badakhshan) and at the frontier with Afghanistan (with the active involvement of Russian border control troops).¹⁴⁰ The CIS Collective Peace-keeping Forces (CPF, with Russia's 201st motor-rifle division being by far their most important element) seem to have been relatively efficient in preventing large-scale violence but not in establishing stability throughout the country. At the same time, their impartiality has been contested in several reports from Tajikistan.¹⁴¹

Under strong pressure from Moscow, the Dushanbe regime agreed to negotiations with the opposition. The 'inter-Tajik dialogue' opened in Moscow on 5 April 1994.¹⁴² The most successful round was the third, held in Islamabad, Pakistan (20 October–1 November). Negotiations (organized with UN sponsorship and Russia's active involvement) were preceded by a temporary cease-fire agreement, signed in Tehran on 17 September,¹⁴³ and resulted in its prolongation until 6 February 1995. More importantly, the parties agreed to establish a joint commission that would be provided with information on developments in Tajikistan and have access to all the officials operating in the country.¹⁴⁴

However, this has not introduced elements of cooperation in the political process in Tajikistan. By the end of 1994 the Russian border control troops (in contrast to the peacekeeping forces) were reported to have become increasingly active against the opposition—in violation of the provisions of the cease-fire agreement.¹⁴⁵ The opposition fighters (most probably representing its extremist factions) were also accused of violations by the UN military observers.¹⁴⁶

¹⁴⁰ In 1994 Russian border control troops reported that they had prevented 306 illegal frontier transfers by the opposition irregulars; *Nezavisimaya Gazeta*, 11 Jan. 1995, p. 2. At the same time Russian military sources estimated the total number of irregulars fighting against the border control troops at only 1500–2000. *Krasnaya Zvezda*, 2 Feb. 1995, p. 3.

¹⁴¹ Reports pointed, e.g., to the participation in arrests of opposition activists (*Nezavisimaya Gazeta*, 6 Dec. 1994, p. 3) and to attempts to prevent the UN observers from monitoring the violations (*Nezavisimaya Gazeta*, 14 Dec. 1994, p. 2).

¹⁴² Pelts, A., 'Pryamoy dorogi k miru net' [There is no straight path to peace], *Krasnaya Zvezda*, 4 Nov. 1994, p. 3. See also *Diplomaticheskii Vestnik*, no. 9–10 (May 1994), p. 58.

¹⁴³ For the text of the Agreement on Temporary Cease-fire and Cessation of Other Hostile Activities, see *Diplomaticheskii Vestnik*, no. 19–20 (Oct. 1994), p. 37.

¹⁴⁴ Panfilov, O., 'Tretiy raund peregovorov nachnetsa 20 oktyabrya' [Third round of negotiations starts on 30 October], *Nezavisimaya Gazeta*, 14 Oct. 1994, p. 3; 'V Islamabade zavershilis' mezhtadzhikskiy peregovory' [The inter-Tajik negotiations are over in Islamabad], *Nezavisimaya Gazeta*, 2 Nov. 1994, p. 3; and 'Badakhshanskiye oppozitsionery atakuyut' [The Badakhshan opposition's attack], *Nezavisimaya Gazeta*, 14 Dec. 1994, p. 2.

¹⁴⁵ Panfilov, O., 'Obmen udarami i obvineniyami' [Exchange in strikes and accusations], *Nezavisimaya Gazeta*, 10 Jan. 1995, p. 1. The Russian side was reported to reject the applicability of the cease-fire agreement for the border control troops—contrary to the 'principle of neutrality' explicitly stated in that agreement. Panfilov, O., 'Oppozitsiya ne doveryayet Moskve' [The opposition does not trust Moscow], *Nezavisimaya Gazeta*, 18 Jan. 1995, p. 2.

¹⁴⁶ Kniazev, A., 'Soglashenie o prekrashchenii ognya narusheno boevikami oppozitsii' [The cease-fire agreement has been violated by opposition fighters], *Nezavisimaya Gazeta*, 11 Jan. 1995, p. 2. By the

The opposition refused to participate in the Tajik presidential elections, claiming that they discriminated against opponents of the regime in Dushanbe. Pointing to the non-democratic character of the elections (nomination was only possible by administrative organs, under full control of the regime, and by political parties, which were banned), the CSCE mission in the country did not recommend sending observers.¹⁴⁷ Apart from the enormous bureaucratic privileges of Imamali Rakhmonov (head of the parliament and the effective head of state) over another candidate, Abdumalik Abdullodzhanov (the Tajik ambassador to Russia), there were numerous reports of flagrant violations of the voting rules, unfair procedures and cheating during the elections, held on 6 November 1994. Not surprisingly, the expected victory of Rakhmonov failed to increase his political legitimacy, and the results were contested by his official opponent.¹⁴⁸ The parliamentary elections of 26 February 1995 were conducted in a similar way.

The dramatic economic situation in Tajikistan and the political weakness of the regime make Dushanbe overwhelmingly dependent on support from Russia and from neighbouring Uzbekistan.¹⁴⁹ The rationalization for this support is first of all the necessity 'to close the southern border of the CIS'. The prospects for political stabilization in the country improved somewhat in 1994 but remain extremely uncertain. Some influential factions of the opposition intend to increase combat activities; furthermore, in addition to the civil war, separatist trends have become more pronounced in Gorno-Badakhshan (comprising one-third of the Tajik territory).¹⁵⁰ In the spring of 1995, serious armed clashes took place along the Tajik-Afghan border.

V. The CIS: searching for integration?

After Azerbaijan, Georgia and Moldova had joined the CIS,¹⁵¹ it included all the former Soviet republics with the exception of the Baltic states. This composition enables the CIS to address the numerous problems of common concern which the member states inherited from the FSU. Moreover, the public mood in most of these countries has significantly shifted; emphasis on the virtues of independence has given way to a more sober assessment of the

end of the year, Russian border control troops registered over 50 violations of the cease-fire agreement, after it entered into force, by the opposition irregulars. *Nezavisimaya Gazeta*, 28 Dec. 1994, pp. 1-2.

¹⁴⁷ *Nezavisimaya Gazeta*, 13 Oct. 1994, p. 3. See also chapter 8 in this volume on the CSCE mission.

¹⁴⁸ Pelts, A., 'Tajikistan posle vyborov' [Tajikistan after the elections], *Krasnaya Zvezda*, 7 Dec. 1994, p. 2; and Panfilov, O., 'Rakhmonov speshno nazvan prezidentom' [Rakhmonov has been hastily proclaimed president], *Nezavisimaya Gazeta*, 9 Nov. 1994, pp. 1, 3.

¹⁴⁹ The former Vice Prime Minister of Tajikistan has pointed out the competition between Russia and Uzbekistan over controlling the country. Karimov, B., 'Tadzhikskiy krizis ne razreshit' mirotvorcheskim davleniem' [The Tajik crisis will not be solved by peacekeeping pressure], *Nezavisimaya Gazeta*, 12 Oct. 1994, p. 3.

¹⁵⁰ *Krasnaya Zvezda*, 7 Dec. 1994, p. 2.

¹⁵¹ In Sep. 1993, Mar. 1994 and Apr. 1994, respectively. Foreign Broadcast Information Service, *Daily Report-Central Eurasia (FBIS-SOV)*, FBIS-SOV-93-188, 30 Sep. 1993, p. 44; *Nezavisimaya Gazeta*, 3 Mar. 1994, pp. 1, 3; *Nezavisimaya Gazeta*, 15 Apr. 1994, p. 3; and *Krasnaya Zvezda*, 16 Apr. 1994, p. 1.

existing interdependence and even to some nostalgia about the stability and relative well-being of the Soviet time.

On the political level, however, the cooperative spirit of CIS participants does not seem to extend to accepting a re-establishment of the dissolved unitary state, whatever the incentives for such a scenario might be. Even the idea of a loose confederation is regarded with suspicion. In this respect, it is noteworthy that the member states were reluctant even to discuss at the CIS summit meetings the highly publicized appeal of Nursultan Nazarbayev, President of Kazakhstan, to create a kind of 'Euro-Asian Union'.

Economic aspects

All the CIS participants are interested in minimizing the negative consequences of the collapse of the former single 'economic space'. However, the preponderance of Russia makes them extremely cautious, so as not to lose the possibility to take independent economic decisions, and this might eventually severely limit their political sovereignty. Russia, on its part, is reluctant to assume the burden of financial stabilization of and economic reform in the other CIS countries because it suspects these countries of aiming only at gaining access to cheap natural resources in Russia. Significantly, Russia, as the last CIS state to do so, did not ratify the 1993 CIS Treaty on Economic Union until 25 October 1994.

In October 1994, the Interstate Economic Committee of the Economic Union was created—presented as a great success in the evolution of the CIS.¹⁵² Indeed, this structure might be empowered with some supranational competence, which was strongly advocated by Moscow and rationalized by the necessity to make economic decisions more efficient. However, each participant will decide individually what competence it is willing to delegate to this 'supranational' institution—which, with such a design, has every chance of remaining just another bureaucratic superstructure, without significantly improving intra-CIS economic cooperation. In any case, by the end of the year none of the participants had delegated any competence to this ill-conceived 'analogue' of the EU Commission.¹⁵³ Consequently, the prospects for establishing a common customs union by 1998, as decided at the October 1994 CIS summit meeting in Moscow, remain obscure.

Not surprisingly, the CIS states attach more importance to bilateral agreements, such as those between Russia and Belarus or Ukraine and Turkmenistan. Conflicts of interest created serious obstacles to realization of some of the 'big projects' broadly discussed and steadily prepared in 1994. The most ambitious project concerned Russia and Belarus. On 12 April 1994 the two countries signed a financial agreement envisaging the establishment of a

¹⁵² Portnikov, V., 'Sozdan mezhgosudarstvenny ekonomicheskii komitet' [The interstate economic committee has been established], *Nezavisimaya Gazeta*, 22 Oct. 1994, p. 1. For the text of the Agreement on Establishing the Interstate Economic Committee, see *Diplomaticheskii Vestnik*, no. 21-22 (Nov. 1994), pp. 35-39.

¹⁵³ *Obshchaya Gazeta*, no. 47 (25 Nov.-1 Dec. 1994), p. 5.

single currency (in fact, the reintroduction of the Russian rouble in Belarus).¹⁵⁴ In Moscow, the prospect of 'reintegration' provoked some criticism (notably, for in fact writing off Belarus's debt to Russia, estimated at over 1 trillion roubles).¹⁵⁵ It is revealing, however, that the opposition in Minsk, pointing to the inevitable loss of sovereignty,¹⁵⁶ was even more significant.

Military and security-related aspects

Interaction between the CIS states has developed on several levels.

1. The military dimension of the CIS has 'materialized' mainly in the numerous *multilateral documents* adopted by the defence ministers of the member states. For instance, on 14 April 1994 they signed a Declaration on Collective Security and defined the aim of their joint efforts: to create a new structure which would operate as a defensive alliance in the Euro-Asian region. A Collective Security Council was envisaged, with a Secretariat in Moscow.¹⁵⁷ Four sessions of the CIS Council of Defence Ministers were held in 1994; they made over 20 decisions on specific aspects of military cooperation and discussed 24 other draft documents.¹⁵⁸

Most of those agreements, however, focus primarily on maintaining the disorganized and chaotic military infrastructure inherited from the Soviet Union. This includes numerous practical matters (defining the status of the military personnel from some CIS countries serving in other CIS countries, coordinating the operation of military schools, supplying spare parts for military equipment, settling the financial problems of joint military-related activities, and so on). However, it would be an exaggeration to conclude that a kind of military alliance is in the making.

In fact, the foundations of a would-be alliance remain unclear. It is significant that the notions of 'collective security' and 'defensive alliance' are used synonymously in these documents. Furthermore, in some post-Soviet states the armed forces are almost non-existent or have an embryonic character, and the creation of national armies will depend mainly on Russia's assistance. The situation of Armenia and Azerbaijan, still in military confrontation over Nagorno-Karabakh but simultaneously participating in the 'alliance', does not contribute to its viability. Belarus's proclaimed neutrality adds to the overall confusion about the status of the 1992 Tashkent Treaty on Collective Security. In adopting a concept of collective security at the CIS summit meeting in

¹⁵⁴ *Krasnaya Zvezda*, 14 Apr. 1994, p. 3.

¹⁵⁵ Karmanov, Yu., 'Lukashenko pozhinayet plody sobstvennogo populizma' [Lukashenko reaps the fruits of his own populism], *Nezavisimaya Gazeta*, 25 Nov. 1994, p. 3.

¹⁵⁶ A forthcoming bilateral treaty on customs union, e.g., envisaged the establishment of a supra-national control body, with 9 votes at the disposal of Russia and only 1 vote given to Belarus. *Vek*, no. 46 (9–15 Dec. 1994), p. 10.

¹⁵⁷ Pelts, A., 'Sammit pod flagom integratsii' [The summit under the banner of integration], *Krasnaya Zvezda*, 16 Apr. 1994, p. 1.

¹⁵⁸ Prokopenko, S., 'Armii stran Sodruzhestva ukreplyayut sotrudnichestvo' [The CIS countries' armies reinforce cooperation], *Krasnaya Zvezda*, 3 Dec. 1994, p. 1.

Almaty, Kazakhstan, in February 1995, the participants were probably aiming to overcome that confusion.

It is to be noted, however, that the Almaty summit meeting was significantly less successful in implementing the steps which might lead to military integration in the CIS. For instance, the participants failed to sign a protocol on joint border defence which was strongly advocated by Russia but supported only by Kazakhstan, Kyrgyzstan and Tajikistan and resolutely rejected by Azerbaijan and Ukraine.¹⁵⁹ In contrast, the agreement on establishing a joint air-defence system was supported by the majority of CIS participants (with the exception of Azerbaijan, Moldova and Turkmenistan).¹⁶⁰

2. The *Collective Peacekeeping Forces* represent the most visible result of multilateral cooperation with respect to the military aspects of security in the CIS area.¹⁶¹ Formally created in September 1993 and mandated for peacekeeping operations in Tajikistan, the CPF was an issue of discussion at several CIS meetings in 1994. In October its mandate was extended for another six months;¹⁶² in December the commander-in-chief of the CPF in Tajikistan was empowered to decide independently on the use of force, provided that he inform the CIS heads of state.¹⁶³

However, the 'collective' character of the CPF remains mainly symbolic. In Tajikistan, by the end of 1994 the shares of countries other than Russia in the CPF personnel were only 3.2 per cent for Uzbekistan and 0.6 per cent for Kyrgyzstan. Kazakhstan, its official participation in the CPF notwithstanding, refrained from sending troops.¹⁶⁴ Moreover, although initially it was planned to deploy 25 000 peacekeepers within the CPF framework, this number was subsequently reduced to 16 000, but even this could not be achieved; by October 1994 the CPF in Tajikistan comprised only 7171 troops.¹⁶⁵

The extension of CPF activities to other post-Soviet conflict areas has met even more serious obstacles. When patterns of peacekeeping in Abkhazia were discussed at the CIS Council of Defence Ministers session in October 1994 in Moscow, only Tajikistan expressed readiness to join Russia with a motor-rifle company, whereas Armenia, Kazakhstan and Kyrgyzstan wanted to limit their presence to observers. Belarus, while supporting the mission

¹⁵⁹ Parkhomenko, S. and Gorodetskaya, N., 'Boris Yeltsin ostavljen na vtoroy srok' [Boris Yeltsin is kept for the second term], *Segodnya*, 11 Feb. 1995, p. 1; and Portnikov, V., 'Zachem rukovoditeli stran SNG priezhal v Moskvu?' [Why did the CIS countries' leaders come to Moscow?], *Nezavisimaya Gazeta*, 11 Feb. 1995, pp. 1, 2.

¹⁶⁰ Plotnikov, N., 'Sozdanie obyedinennoy sistemy PVO SNG—proyekt dorogostoyashchiy' [Creating a CIS joint air defence is a costly project], *Nezavisimaya Gazeta*, 21 Feb. 1995, p. 2.

¹⁶¹ For a good analysis of the problem, see Allison, R., *Peacekeeping in the Soviet Successor States*, Chailot Papers 18 (Institute for Security Studies, Western European Union: Paris, Nov. 1994).

¹⁶² Golotiuk, Yu., 'Istekaet mandat mirotvortsev' [The peacekeepers' mandate is approaching its end], *Segodnya*, 15 Oct. 1994, p. 2. According to later information, the CPF mandate in Tajikistan was prolonged until 30 June 1995. Pelts (note 148), p. 3.

¹⁶³ Prokopenko (note 158), p. 1.

¹⁶⁴ Golotiuk (note 162), p. 2.

¹⁶⁵ Plotnikov, N., 'Ministry oborony sodruzhestva sobralis' v Moskvu' [The CIS ministers of defence have got together in Moscow], *Nezavisimaya Gazeta*, 21 Oct. 1994, pp. 1, 3.

politically, could not send troops outside the country according to its constitution.¹⁶⁶

3. The *bilateral agreements* between Russia and other CIS states address numerous specific aspects of military-related cooperation; they create a sort of network of specific hierarchic links within the FSU rather than the foundations of a multilateral military alliance. It is noteworthy that Russia's proclaimed intention to establish 30 military bases on the territory of the former Soviet Union¹⁶⁷ is also to be negotiated bilaterally with each CIS country.

A number of military-related agreements supplement the bilateral Russian–Georgian Treaty of Friendship, Neighbourly Relations and Cooperation that was signed on 3 February 1994.¹⁶⁸ They legalize the Russian military presence in the area, allowing Moscow to maintain three military bases in Georgia; an agreement on the terms of their maintenance was reached on 22 March 1995.¹⁶⁹ Discussions on air-defence cooperation between Moscow and Yerevan were reportedly aimed at deploying MiG-23 aircraft in Armenia,¹⁷⁰ thus establishing a strategically important Russian presence in the area. A treaty on military cooperation between Russia and Kazakhstan, ratified by Kazakhstan in October 1994, envisages *inter alia* the conclusion of a bilateral agreement on the eventual joint use of force for preserving stability in the area of the Caspian Sea.¹⁷¹ The two countries also signed agreements on a space launch site located in Baykonur, Kazakhstan,¹⁷² and on cooperation in protecting the CIS external borders.¹⁷³ At the January 1995 bilateral summit meeting in Moscow, the parties declared their intention 'to start establishing joint armed forces, with joint planning of training and use of forces, their support by weapons and military equipment'.¹⁷⁴ Finally, on 6 January 1995 a number of military-related agreements were concluded between Russia and Belarus.¹⁷⁵

At the CIS summit meeting in Moscow in October 1994, several documents on bilateral military cooperation were reportedly agreed: three between Russia and Armenia, one between Russia and Kyrgyzstan, and two between Russia and Moldova.¹⁷⁶ It seems that developments in the field of military cooperation, even if in some respects erratic and chaotic, were extensive in 1994¹⁷⁷

¹⁶⁶ Plotnikov (note 165), pp. 1, 3.

¹⁶⁷ Announced in the decree of President Yeltsin on 5 Apr. 1994.

¹⁶⁸ *Nezavisimaya Gazeta*, 2 Feb. 1994, p. 1; and *Segodnya*, 10 Feb. 1994, p. 1. See also Hiatt, F., 'Georgia signs military accord and re-enters Russian sphere', *International Herald Tribune*, 4 Feb. 1994, pp. 1, 4.

¹⁶⁹ *Krasnaya Zvezda*, 7 Apr. 1995, p. 3; see also *OMRI Daily Digest*, vol. 1, no. 58 (22 Mar. 1995).

¹⁷⁰ Andriushkov, A., 'Istrebiteli-perekhvatchiki Rossii prikryvayut nebo Armenii' [Russia's fighter-interceptors protect the air space of Armenia], *Krasnaya Zvezda*, 15 Oct. 1994, p. 1.

¹⁷¹ Pelts, A. and Ladin, A., 'Kakogo tsвета stanet kaspiskaya volna?' [What will be the colour of the Caspian wave?], *Krasnaya Zvezda*, 14 Oct. 1994, p. 3.

¹⁷² *Krasnaya Zvezda*, 22 Oct. 1994, pp. 2, 4.

¹⁷³ *Izvestia*, 10 Dec. 1994, p. 1.

¹⁷⁴ Sherman, B., 'Rossiya i Kazakhstan sozdayut Obyedinenniye vooruzhenniye sily' [Russia and Kazakhstan will create joint armed forces], *Segodnya*, 21 Jan. 1995, p. 2.

¹⁷⁵ Ostapchuk, A., 'Boris Yeltsin otdayot Belorussii prioritet' [Boris Yeltsin gives priority to Belarus], *Nezavisimaya Gazeta*, 23 Feb. 1995, p. 1.

¹⁷⁶ *Krasnaya Zvezda*, 22 Oct. 1994, pp. 2, 4.

¹⁷⁷ As an indicative example, one could mention bilateral agreements between Russia and 10 other CIS states on cooperation in the field of intelligence. *Nezavisimaya Gazeta*, 24 Dec. 1994, p. 2.

and were undoubtedly marked by the steadily expanding role of Russia, not only acting as if it were *primus inter pares* but also being recognized by the other participants as such.

Russia's 'zone of vital interests'

In 1994 there was further consolidation in Russia of the thesis that the 'near abroad' (i.e., the CIS area or even the entire FSU) should be a Russian zone of vital interests. In addition to the economic factors contributing to interdependence, a number of political considerations are regarded as justifying this thesis.

1. Moscow is very sensitive about the issue of the Russians who live in the 'near abroad'. Reports of violations of their rights have continued to be a matter of domestic political debate in Russia; they have also affected Russia's interaction with its FSU partners. However, whereas in previous years Russian pressure was focused on two of the Baltic states, in 1994 the focus seems gradually to have turned to Central Asia.

The situation in Kazakhstan, where a significant proportion of the population is Russian, is perceived as a particular concern. Not only does the Kazakh Constitution proclaim it 'the country of the Kazakh nation' but the Russian-speaking population are reportedly being gradually forced out of all the important areas of activity and are increasingly subjected to daily incidents of Kazakh nationalism.¹⁷⁸ This creates serious incentives to activate the Cossack movements in the Russophone-dominated areas of Kazakhstan (the northern and north-eastern regions); their radicalization and the public meetings at which they demand autonomy or that they join Russia¹⁷⁹ provoke strong reactions on the part of the authorities¹⁸⁰ and further exacerbate ethnic tensions in Kazakhstan.¹⁸¹ This situation could explode; according to some estimates, it might become a more grave and dramatic conflict than those in many of the other post-Soviet areas.¹⁸²

For Moscow, a serious aspect of the problem is the anticipated migration to Russia from the 'near abroad'. The total number of migrants in Russia is offi-

¹⁷⁸ Since 1989 the number of Russians in Kazakhstan has diminished by 200 000, Ukrainians by 40 000 and Germans by 344 000. Orekozev, K., 'Kazakhstan stanovitsa kazakhskim' [Kazakhstan becomes Kazakh], *Argumenty i Fakty*, no. 45 (Nov. 1994), p. 5. Over a period of 8 months in 1994, 266 200 left the country (half of them Russians, one-quarter Germans). Ladin, A., 'Nemtsy v Germaniyu, ostal'nye v Rossiyu' [Germans to Germany, the rest to Russia], *Krasnaya Zvezda*, 2 Dec. 1994, p. 3.

¹⁷⁹ Baranov, V., 'V Kazakhstane volnuyutsa kazaki' [In Kazakhstan, Cossacks are agitating], *Obshchaya Gazeta*, no. 47 (25 Nov.–1 Dec. 1994), p. 3.

¹⁸⁰ Some Cossack organizations were suspended for paramilitary preparations, non-recognition of the existing administrative structure of Kazakhstan, and renaming the towns and villages. Abakirov, B., 'Kazakhye obshchestvo pod vremennym zapretom' [Cossack society is under temporary ban], *Segodnya*, 10 Dec. 1994, p. 5.

¹⁸¹ The Kazakh civil movement 'Azat' reportedly appealed for capital punishment for Alexander Solzhenitsin, for arguing that the northern and north-eastern regions of Kazakhstan should be considered as historically and ethnically belonging to Russia. Kozlov, S., 'Kazakov zapretili na polgodu' [Cossacks have been banned for half a year], *Nezavisimaya Gazeta*, 3 Dec. 1994, p. 3.

¹⁸² Orekozev (note 178), p. 5.

cially estimated at over 2 million.¹⁸³ The Federal Migration Programme aims to be prepared to receive 400 000 refugees per year, but, according to some alarmist estimates, in 1994–96 the flow of refugees may reach 4–6 million.¹⁸⁴

2. Moscow is interested in having friendly regimes in its immediate surroundings—or at least regimes which are not headed by leaders with anti-Russian political sentiments. In this respect, 1994 has brought some important positive changes for Russia, with the election of Leonid Kuchma as President of Ukraine and Alexander Lukashenko as President of Belarus. Both of them, with all the differences in terms of their constituency, career background, professional abilities and personal prestige, have focused their political programmes on the need for closer and more cooperative relations with Russia. In Moldova, the February 1994 parliamentary election brought to power political forces with a significant pro-Russian orientation.

In the Transcaucasus, former presidents Zviad Gamsakhurdia of Georgia and Ebulfez Elcibey of Azerbaijan, both with a strong anti-Russian orientation, were replaced even earlier, whereas in Armenia the geopolitical imperatives would make any leadership of the country seek cooperation with and support from Moscow. As for Central Asia, it seems that so far none of the five post-Soviet states there is regarded by Russia as hostile or challenging. So, by the end of 1994 all the CIS neighbours of Russia were more or less favourably disposed towards Moscow.

3. Although not recognizing this in official statements, Moscow is concerned about the possibility that the foreign policy of the CIS states will be re-oriented, even more so considering the prospect that other powerful international actors will be more prominently 'present' in the FSU. Any suspicion that the Western countries—operating either individually or through such multilateral organizations as NATO, the Western European Union (WEU) or the EU—are seeking to challenge Russia's influence in the CIS zone elicits a nervous reaction in Moscow.¹⁸⁵

In fact, in seeking to have the FSU recognized as a zone of its vital interests, Moscow not only claimed preferential treatment for itself but also insisted on a lower profile for outside powers in the area.¹⁸⁶ Public debates in Russia were marked in 1994 by the use of the analogy of the Monroe Doctrine which would allegedly fit the post-Soviet realities; by the arguments in favour of an imperial pattern for organizing relations between Russia and its CIS neighbours; and by strong criticism of 'geopolitical pluralism', perceived as a

¹⁸³ Data presented by the head of the Federal Migration Service, Tatiana Regent. Gladkevich, Yu., 'Bezhtentsy' [Refugees], *Krasnaya Zvezda*, 7 Feb. 1995, p. 2.

¹⁸⁴ Kodintsev, A., 'Rossiyane vne Rossii i natsional'naya bezopasnost' RF' [Russians outside Russia and national security of the Russian Federation], *Nezavisimaya Gazeta*, 3 Oct. 1994, p. 3.

¹⁸⁵ This was clearly demonstrated by the report of the Foreign Intelligence Service, 'Russia and CIS: is there a need to correct the position of the West?', released in Sep. 1994. *Nezavisimaya Gazeta*, 22 Sep. 1994, pp. 1, 2; *Segodnya*, 22 Sep. 1994; and *Komsomol'skaya Pravda*, 22 Sep. 1994.

¹⁸⁶ Even in the arguments for involving the West in a dialogue, the West is suggested to focus mainly (or exclusively) on 'the issues of integration on the territory of the former USSR'. 'Strategiya dlya Rossii (2)' [Strategy for Russia (2)], *Nezavisimaya Gazeta*, 27 May 1994, p. 5.

deliberate strategy undermining the 'organic' influence of Russia in the post-Soviet space.¹⁸⁷

Interestingly, even the confusing evolution of Russia's attitude towards the NATO Partnership for Peace (PFP) programme was influenced by such considerations. One of the most sensitive issues for Russia was the participation of the other newly independent states; according to some interpretations, its demand for a 'special status' in the PFP programme would have given Moscow an implicit *droit de regard* with respect to its CIS partners, or at least the right to operate as their fully fledged representative.¹⁸⁸

Russia's approach towards conflict management in the FSU is also exclusionist. Although not rejecting cooperation with international institutions (primarily the OSCE), Moscow has clearly tried to downgrade their involvement and shown its reluctance to see other states' peacekeepers sent to conflict areas in the FSU.¹⁸⁹

By and large, in 1994 Moscow has been relatively successful in addressing its political concerns with respect to the 'near abroad'. All the criticism of its 'neo-imperial instincts' notwithstanding, Russia is *de facto* recognized as the most important political force within the FSU—both by its CIS partners and by the outside world.

The prospect that relations with the West, in the light of the events in Chechnya, would become cool made Moscow more active in the 'near abroad', as was clearly demonstrated by the hasty *rapprochement* with Kazakhstan¹⁹⁰ and Belarus¹⁹¹ in early 1995 and at the CIS summit meeting held in Almaty in February 1995.

VI. Conclusions

The positive record of 1994 includes the completion of Russia's troop withdrawals from the Baltic states, the playing down of the most serious tensions in the CIS and its more business-like pattern of operation, and the negotiations that were held on a number of conflicts in the FSU. For most of the year domestic developments in Russia were less explosive than in the recent past—although there were clear signs that the stabilization was only superficial.

¹⁸⁷ Migranian, A., 'Rossiya i blizhnee zarubezhie' [Russia and the near abroad], *Nezavisimaya Gazeta*, 12 Jan. 1994, pp. 1, 4; and 18 Jan. 1994, pp. 4–5, 8.

¹⁸⁸ The argument was developed by Viacheslav Nikonov, chairman of the State Duma subcommittee on international security and arms control, at the conference on Reconstructing Europe: Reconciling European Security Policies, Moscow, Apr. 1994.

¹⁸⁹ Turkey was reported to have expressed readiness to send peacekeepers to Abkhazia, a proposal which was resolutely opposed by Russia. *Segodnya*, 17 Mar. 1994, p. 2.

¹⁹⁰ On 20 Jan. 1995, during the meeting between presidents Boris Yeltsin and Nursultan Nazarbayev, 17 treaties and agreements between Russia and Kazakhstan were concluded. In particular, both sides envisaged the formation of joint armed forces, with common plans for training and use of forces, arms and equipment. Sherman (note 174), p. 2.

¹⁹¹ The flow of Russia's highest officials to Belarus, in late 1994 and early 1995, was crowned by the long expected visit of Boris Yeltsin as a symbolic manifestation of a 'breakthrough' in relations between the 2 Slavic states.

The war in Chechnya has drastically changed the overall climate both in and around Russia. Russia may have entered a phase of increasing turmoil, with the conflict in the North Caucasus serving as a catalyst to all the negative trends in domestic developments. It is to be noted, however, that an independent public opinion has also become more outspoken. Moreover, the Kremlin may become increasingly interested in neutralizing its failures and in manifesting the continuity of Russia's reformist course.

The post-Soviet geopolitical space is still an area of conflict. Four of the eight major conflict or conflict-prone zones are located in the Caucasus (Chechnya, Abkhazia, South Ossetia and Nagorno-Karabakh), three in the European part of the FSU (the Trans-Dniester region, the Baltic region and the Crimea), and one in Central Asia (Tajikistan). Russia has been involved in all of them—either as a party to the conflict or as an external 'pacifier'. Peace-keeping forces have operated in four conflict areas (South Ossetia, the Trans-Dniester region, Abkhazia and Tajikistan) and are being negotiated for deployment in another area (Nagorno-Karabakh). The conflict-management efforts of international organizations (the UN, the CSCE and others) have developed, in different forms, in all the above-mentioned areas (although in some cases, as in the Crimea, they did not go beyond rather low-profile representation). It is to be noted that the cautious and mainly symbolic activities of the OSCE in Chechnya (without any visible results at the time of writing) are in fact the first case in which Russia has accepted international involvement in a domestic Russian conflict.

In 1994 the CIS continued as an institutional infrastructure providing for multilateral interaction between the independent states which have emerged on the territory of the dissolved Soviet Union. With the evaporation of both the initial illusions and the initial scepticism about the CIS, the participating states seem to proceed from the assumption that it could play a useful albeit limited role in organizing their mutual relations.

The 'reintegration mood' is often presented as the prevailing mood of CIS developments—which is manifested by such events as the Almaty summit meeting of February 1995. However, most of the over 400 multilateral documents adopted at the CIS level remain on paper. Since multilateral interaction often is either formally unachievable or only declaratory, the CIS states seem to accept both the 'variable geometry' approach (with a limited number of participants in specific projects) and the 'individual' bilateral cooperation approach as more practical and reliable.

With all its domestic problems, Russia is still by far the central element of the geopolitical reorganization of the CIS area. Moscow does have significant leverage to create a new type of 'velvet empire', based on the financial, economic and military dependence of the post-Soviet states on Russia. However, its political hegemony is not met with much enthusiasm by the other CIS states.

8. Europe: the multilateral security process

ADAM DANIEL ROTFELD

I. Introduction

The political debate and decisions taken in 1994 regarding the security of Europe constituted a new stage in the process initiated at the turn of the decade by the collapse of the bipolar system and the breakup of multinational totalitarian states in Europe.¹ These developments enabled German unification, the peaceful division of Czechoslovakia into two independent states and the formation of 20 new sovereign states on the rubble of the former Yugoslavia and the former Soviet Union.²

The new arrangements and decisions made in 1994 were an attempt to respond to a number of new challenges: (a) how the existing security institutions in Europe might contribute to ending, limiting and preventing future outbreaks of bloody conflicts such as those that have engulfed areas of the former Yugoslavia and the former Soviet Union; (b) how the USA will accommodate its role and active involvement in European security to the new realities; (c) how to stave off the isolation of Russia and its embracing of a hegemonic and neo-imperialist policy, and pave the way to integrating the Russian Federation into the changing security structures of the European political order; (d) how to overcome the invisible but tangible division of Europe into two parts—a wealthy, stable and secure one in the west and north and another, coping with enormous economic and social problems stemming from systemic transformation and no sense of security, in the centre and east of the continent; (e) where to draw the eastern borders of Europe; and (f) how to expand NATO and the European Union.

However, the issue is neither one of formal legal interpretations of relevant treaty provisions³ nor of purely institutional arrangements. Specific interests

¹ These processes are described and analysed in the *SIPRI Yearbooks 1991–94*: Rotfeld, A. D., 'New security structures in Europe: concepts, proposals and decisions', *SIPRI Yearbook 1991: World Armaments and Disarmament* (Oxford University Press: Oxford, 1991), pp. 585–610; 'European security structures in transition', *SIPRI Yearbook 1992: World Armaments and Disarmament* (Oxford University Press: Oxford, 1992), pp. 563–82; 'The CSCE: towards a security organization', *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press: Oxford, 1993), pp. 171–218; 'Europe: towards a new regional security regime', *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 205–37; and the introductory chapters in each of these volumes.

² Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Croatia, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, the Former Yugoslav Republic of Macedonia, Moldova, the Russian Federation, Slovenia, Tajikistan, Turkmenistan, Ukraine, Uzbekistan and Yugoslavia (Serbia and Montenegro).

³ Article 237 of the 1957 Treaty of Rome provides that 'any European state may apply to join the Community'. However, the decision on enlargement must be unanimous and remains at the absolute discretion of present member states. Nuti, D. M., 'The impact of system transition on the European Community', ed. S. Martin, *The Construction of Europe: Essays in Honour of Emile Noël* (Kluwer Academic: Dordrecht–Boston–London, 1994), p. 162.

of individual great powers are, as a rule, concealed behind the façade of formal arguments or complex debates on the institutional transformation of the existing security systems. The bipolar system not only caused the subordination of the interests of the Central and East European (CEE) states to Soviet policy, but also blurred the differences in the security policies of Western states. When this system disappeared, national security interests reasserted themselves, even overriding international community or alliance interests. The declared policy of expanding and deepening European integration is accompanied by centrifugal tendencies and the growth of nationalism in the East, a remarkable differentiation and competition among the partners of the European Union (EU), and a weakening of links between Western Europe and the USA and of the US military-political presence in Europe.

II. The new agenda

In 1994 the Western states faced a dilemma: how to respond positively to the expectations of the CEE states and initiate the eastward expansion of NATO and the EU, without risking the creation of new divisions in Europe. The European security debate in 1994 centred around this issue. The mutual relations between the existing multilateral security institutions in Europe presented another important problem.

Expansion to the East

The existing security structures in Europe first took shape during the cold war. West European states, together with the USA and Canada (NATO) or independently (in the Western European Union (WEU)/EU), organized themselves with the aim of warding off a potential threat from the East. On the other hand, the Central and East European states were subordinated to the former Soviet Union in the Warsaw Treaty Organization (WTO). The Helsinki process which started in the 1970s with the Conference on Security and Cooperation in Europe (CSCE), becoming the Organization for Security and Cooperation in Europe (OSCE) in January 1995, was initiated with an aim of overcoming the partition of Europe. Its structure overrides the East-West division and embraces practically all states in the area 'from Vancouver to Vladivostok'. The collapse of the bipolar world triggered the opening of Western security institutions towards their CEE counterparts. This was institutionalized by the establishment by NATO of the North Atlantic Cooperation Council (NACC) in 1991 for consultation and cooperation on political and security issues between NATO, the former WTO states and the former Soviet republics and the creation of the Partnership for Peace (PFP) programme in January 1994 for cooperation with democratic states in the East. The CEE nations concerned do not see these new structures as a permanent solution. Joining NACC, and the PFP in particular, was considered a step towards enjoying the same security guarantees as NATO member states. The question

of enlarging the existing security structures of the West became topical in 1994. Accession to NATO is seen by the CEE states as the first stage, since this depends on arbitrary political decisions, while joining the EU involves a long-term process of adjustment of economic, legal and social systems.

The standpoints of individual states on these matters have been affected by major changes in Russia's domestic situation and security policy, the new status of Germany after unification and the evolution and loosening of links between the West European members of the Atlantic Alliance and the USA. In general the pros and cons of the process of eastward expansion of the Western security structures have not been clearly presented in the media. Experts have portrayed the process as one which should: (a) elaborate 'various forms of association or confederacy';⁴ (b) distinguish between 'serious candidates for eventual membership' and those 'too unprepared economically and/or politically';⁵ and (c) prepare criteria and a schedule for admitting new members.

On 7 July 1994, US President Bill Clinton stated before the Polish Parliament: 'Bringing new members into NATO, as I have said many times, is no longer a question of whether, but when and how. And that expansion will not depend upon the appearance of a new threat in Europe. It will be an instrument to advance security and stability for the entire region'.⁶

The decision on expansion means that NATO must define specific requirements ('if it is to consolidate political consensus'⁷) for potential candidates and for itself. There is a need to steer the right course in order properly to restructure NATO military structures, provide appropriate guidance to candidate members, and offer a framework of cooperation and consultation with Russia and Ukraine.⁸ In 1994 the issue of expanding NATO was settled; it remains to be decided whether the expansion is to be: (a) the outcome of an evolutionary process; (b) the result of a political decision to promote stability; or (c) a strategic response to negative developments in Russia (in a sense a new containment to prevent expansionism and aggressiveness).⁹

Multilateral institutions: division of labour *versus* reinforcement

As critical as the matter of eastward expansion was that of mutual relations between NATO and the EU/WEU. Important decisions regarding the multilateral security process were also adopted by the United Nations (UN) and the CSCE. In this context, it is important to distinguish between 'those which are

⁴ Blondel, J., 'The European Community and Central and Eastern Europe', ed. Martin (note 3), p. 129.

⁵ Blondel (note 4), p. 12.

⁶ Address by US President Bill Clinton to the Polish Parliament (Sejm), Warsaw, 7 July 1994, *Wireless File* (US Information Service, US Embassy: Stockholm, 7 July 1994), p. 7.

⁷ Asmus, R. D., Kugler, R. L. and Larrabee, F. S., 'NATO expansion: the next steps', *Survival*, vol. 37, no. 1 (spring 1995), pp. 7-33. On the decision to expand, see Declaration of the Heads of State and Government participating in the Meeting of the North Atlantic Council, Brussels, 11 Jan. 1994, reproduced in *SIPRI Yearbook 1994* (note 1), para 12, p. 270.

⁸ Asmus, Kugler and Larrabee (note 7), p. 7.

⁹ Asmus, Kugler and Larrabee (note 7), pp. 8-11.

omnilateral [organizations] and those which are multilateral organizations.¹⁰ Organizations also fall into two classic categories: those for collective self-defence ('those which were created to deal with external threat') and those for collective security ('those which are concerned in dealing primarily with conflicts between their own members').¹¹ Collective self-defence is provided to European states by NATO and WEU institutions, structures and mechanisms, while collective security is served by the nearly universal UN and the new omnilateral regional organization of the OSCE. The most critical challenge for the two collective self-defence organizations, created in response to the threat from the East, is to determine anew their respective tasks, functions and role in a period when no such clear menace exists. NATO decisions (Oslo, 4 June 1992) to consider CSCE-recommended activities in peacekeeping and peace enforcement and put into effect the PFP programme (Brussels, 10–11 January 1994) created a new field of activity for the Atlantic Alliance; at the same time they did not change the essence of its task—effective defence for member states against external aggression. It should be recalled that in 1992 NATO agreed to provide resources to support UN, CSCE and EC (now EU) efforts in the former Yugoslavia.

Disparate positions emerged in 1994 on NATO's current role. The states belonging both to NATO and to the EU will determine the new functions and tasks of the Atlantic Alliance. This will be influenced by the direction of development of the EU itself. Will it take on a federal form or remain an inter-governmental organization? A question remains as to whether the EU will be an organization with clear-cut functions in the sphere of security and defence or 'a Europe dealing with a wide range of issues'.¹² In this context, a new role should be defined for the WEU: it could be a military extension of the Union or a European pillar of NATO. This controversy sometimes takes on a procedural-institutional character. In practice the future role of the WEU will be determined by the European powers' attitude *vis-à-vis* the role and place of the USA in the evolving security system in Europe. It is not the various schools of thought that are at issue but the different political strategies of key West European powers: Germany (after unification), the UK and France. The common interests of the whole of Western Europe *vis-à-vis* the USA must also be taken into account.¹³

The main problem for NATO cooperation with other European security institutions is determining the place and role of the USA. Europe needs the United States and *vice versa*—a US political, military and economic presence

¹⁰ Whereas all states can be members of omnilateral organizations, the membership of multilateral organizations is determined by the member states. Roper, J., 'Relations between different European security organizations', Paper presented to the UNIDIR Conference on Transatlantic Relations and International Security, Caen, 22–23 Sep. 1994, p. 1.

¹¹ Roper (note 10), p. 3.

¹² Schmidt, P., *European Security and the Defence Identity (ESDI): A Brief Analysis from a German Point of View* (Stiftung Wissenschaft und Politik: Ebenhausen, Jan. 1995), p. 21.

¹³ David P. Calleo characterized them very succinctly: 'The US was striving for hegemony on the cheap; the Europeans for independence on the cheap'. Calleo, D. P., 'Early American views of NATO: then and now', ed. L. Freedman, *The Troubled Alliance: Atlantic Relations in the 1980s* (St Martin's Press: New York, 1983), p. 22.

in Europe is of fundamental importance both for US national security and for the position of the USA as a world power. Henry Kissinger has defined this problem in the following way:

Some Europeans advocate the European Union as a device to render America dispensable. In fact, a major American role in Europe is a prerequisite for European coherence. Without it, the European Union would founder on the fear of German domination; France would see reinsurance in a Russian option; historic European coalitions would form, compounding their traditional tenuousness with irrelevance, Germany would be tempted into a nationalist role, Russia into revanchism.¹⁴

The division of labour among the existing security institutions and organizations in Europe was put on the agenda in 1994, along with other outstanding problems. Theoretically, organizations can be seen as negotiating and legitimizing bodies, or as implementing institutions.¹⁵ European security can also be illustrated as a series of concentric circles surrounding 'the stable centre of the EU and WEU countries as well as the Atlantic Alliance, heading towards unstable peripheries'.¹⁶ (See figure 8.1.) With different goals, mechanisms and capabilities, these organizations seek to perform similar, sometimes identical, tasks connected with conflict prevention, management and resolution. These institutions are thus obliged to seek mutual reinforcement or coordination of actions rather than attempting an impossible clear-cut division of labour.¹⁷ The decisions adopted in 1994 will facilitate definition of the mutual relationships of the security organizations in Europe and their future role.

III. Towards common security in Europe

In 1994 a serious effort was made to harmonize security policy within the framework of the existing structures in Europe: the WEU, NATO, the PFP, the EU and the CSCE.

¹⁴ In his article 'Expand NATO now' (*Washington Post*, 19 Dec. 1994), Kissinger also states: 'In the end, the nations of the Atlantic area need each other. Without America, Europe turns into a peninsula at the tip of Eurasia, unable to find equilibrium much less unity and at risk of gradually subsiding into a role similar to that of ancient Greece in relation to Rome—the only outstanding question being whether America or Russia will play the role of Rome. Without Europe, America will become an island off the shores of Eurasia, condemned to a kind of pure balance-of-power politics that does not reflect its national genius. Without Europe, America's path will be lonely; without America, Europe's role will approach irrelevance. This is why America concluded twice in this century that the domination of Eurasia by a hegemonic power threatens its vital interests and has gone to war to prevent it!'

¹⁵ 'There are institutions which negotiate and legitimize a settlement in a regional crisis, and organizations which provide the necessary tools for the implementation of that settlement'. Schmidt (note 12), p. 17.

¹⁶ Skubiszewski, K., 'Zadania i perspektywy polskiej polityki zagranicznej w Europie' ['Tasks and perspectives of Poland's foreign policy in Europe'], *Rzeczpospolita*, no. 304 (31 Dec. 1994–1 Jan. 1995), p. 28.

¹⁷ From the CEE viewpoint, participation in the OSCE does not ensure the desired sense of security. As the former Polish Foreign Minister notes, the OSCE 'finds itself now at the stage of building a security based on co-operation, or at the stage of linking various elements of co-operation in a whole which, in turn, is to prepare the ground for the next stage—a collective security. Achievement of this aim by the OSCE is far off'. Skubiszewski (note 16), p. 28.

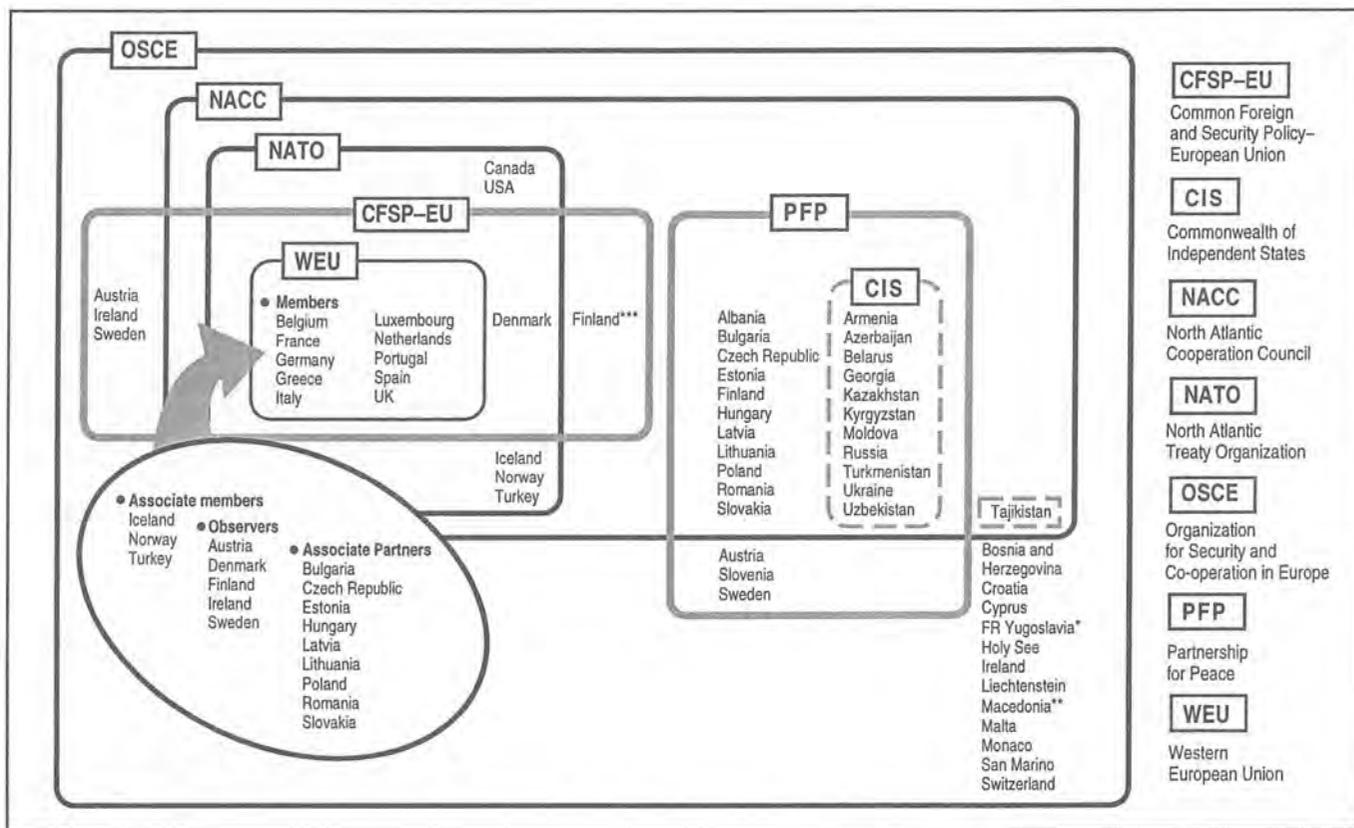


Figure 8.1. The intergovernmental multilateral European security structures

* Suspended; ** Observer status; *** Observer status in NACC

The WEU: after the Noordwijk Declaration

The role of the WEU in the sphere of European security cooperation was defined in the 1992 Treaty on European Union (signed in Maastricht in December 1991) and in the Petersberg Declaration (June 1992). They provide for the WEU both to provide the defence dimension of European integration and to act as the European pillar of NATO.¹⁸ Such a task is easier to define in a joint document than to achieve in practice. How, for instance, is the WEU's Eurocorps—seen as a nucleus of a future European army—to cooperate with NATO's Combined Joint Task Forces (CJTF), seen as a military structure to give the Alliance a measure of the flexibility necessary to perform new tasks? Some variable geometry will probably still have to be applied in dealing with the enlargement of the European Union, on the one hand, and ensuring a common defence and security policy, on the other.¹⁹

The foreign and defence ministers meeting in the WEU Council of Ministers on 14 November 1994 in Noordwijk (the Netherlands) held their first discussions with their nine Associate Partners. The meetings in Petersberg (19 June 1992), Rome (20 November 1992), Luxembourg (22 November 1993) and Kirchberg (9 May 1994) were stepping-stones in revitalizing the WEU as the 'defence component' of the EU. At Noordwijk the declared aim of the WEU was to work out 'a comprehensive Common European Defence Policy Statement in the perspective of the Intergovernmental Conference in 1996'.²⁰ The WEU contribution to the ongoing work in NATO's Combined Joint Task Forces 'by formulating criteria and modalities for effective use by WEU of CJTF' was noted with satisfaction. The main aim is to intensify cooperation and consultation between the two organizations.²¹

At Noordwijk, the ministers discussed a document (White Paper) on a common European defence policy within the EU 'which might in time lead to a common defence, compatible with that of the Atlantic Alliance'.²² The Preliminary Conclusions on the Formulation of a Common European Defence Policy attached to the Noordwijk Declaration present the definition, objectives, scope and means of a common European defence policy. They define

¹⁸ van Eekelen, W., 'Transatlantic relations in a new context', Paper presented at Ditchley Park, 22 May 1993 (Bergerdorfer Gesprächskreis).

¹⁹ The variable geometry of the WEU is reflected in different forms of participation as shown in figure 8.1. See also Eekelen, W. F., 'The future of multinational security institutions', ed. B. von Plate, *Europa auf dem Wege zur kollektiven Sicherheit? Konzeptionelle und organisatorische Entwicklungen der sicherheitspolitischen Institutionen Europas* [Europe on the Road to Collective Security? Conceptual and Organizational Developments in Europe's Political Security Institutions] (Nomos Verlagsgesellschaft: Baden-Baden, 1994), p. 36.

²⁰ The Intergovernmental Conference is to review the relevant provisions of the Maastricht Treaty (particularly Article J.4 of the Treaty on the European Union). Excerpts from the Treaty on the European Union are reproduced in *SIPRI Yearbook 1994* (note 1), pp. 251–57. The Noordwijk Declaration, WEU Council of Ministers, Noordwijk, 14 Nov. 1994. The text of the Declaration is reproduced in appendix 8A of this volume.

²¹ A report on criteria and procedures for the effective use of the CJTF was prepared by the WEU and presented to a joint Council Meeting of NATO and the WEU on 29 June 1994.

²² In this context, the Preliminary Conclusions on the Formulation of a Common European Defence Policy, WEU Council of Ministers, Noordwijk, 14 Nov. 1994, were adopted as an integral part of the Noordwijk Declaration.

the objective of a common European defence policy as 'directed towards the reduction of risks and uncertainties that might threaten the common values, fundamental interests and independence of the Union and its member states and towards contributing to the preservation of peace and the strengthening of international security, in accordance with the principles of the United Nations Charter as well as the principles of the Helsinki Final Act and the objectives of the Paris Charter'. Under a common European defence policy, WEU governments would take account of four levels of European responsibilities and interests in the field of defence: (a) direct responsibilities—for the security and defence of their own peoples and territories; (b) indirect responsibilities—'to project the security and stability presently enjoyed in the West throughout the whole of Europe'; (c) the fostering of stability in the southern Mediterranean countries; and (d) the promotion of security, stability and democratic values in the wider world, 'including through the execution of peacekeeping and other crisis management measures under the authority of the UN Security Council or the CSCE, acting either independently or through WEU or NATO'.²³ At this preliminary stage the Preliminary Conclusions demonstrate a declaratory rather than an operational approach.

The Noordwijk Declaration noted the growing role and place of the CSCE in the European security architecture, as a regional arrangement in the sense of Chapter VIII of the UN Charter. The WEU ministers supported proposals to enhance the CSCE's role by giving it greater responsibility for conflict prevention and resolution and crisis management, in compliance with Article 53 of the UN Charter, in the CSCE area.²⁴ It was stressed that the WEU must be able to provide for a European military instrument in cases where, because of the urgency of a humanitarian crisis or the need for military protection, military means must be employed.

NATO: expansion of security and stability

From the formal point of view, analysis of the communiqué adopted at the end of the Ministerial Meeting of the North Atlantic Council (Brussels, 1 December 1994)²⁵ could lead to the conclusion that there is no contradiction between the roles of the new institutions of the EU and NATO. The com-

²³ The enumeration of responsibilities also includes new security challenges, such as humanitarian emergencies; proliferation; terrorism; international crime and environmental risks; as well as those related to disarmament and the destruction of nuclear and chemical weapons.

²⁴ The first sentence of Article 53 of the UN Charter reads: 'The Security Council shall, where appropriate, utilize such regional arrangements for enforcement action under its authority'. All other provisions of articles 53 and 107 deal with the 'enemy states' clauses. The members were not required to obtain the Security Council's consent to act against those states. The 'enemy states' clauses referred to the Third Reich and its allies (i.e., apart from Germany, also Japan, Italy, Finland, Hungary, Romania and Bulgaria) and are anachronistic today, having lost their significance after those states became UN members. (Germany and Japan are being considered as possible new permanent members of the Security Council.)

²⁵ Text of the NATO Final Communiqué, Ministerial Meeting of the North Atlantic Council, Brussels, Press Communiqué M-NAC-2(94)1161, Dec. 1994, in *Wireless File* (US Information Service, US Embassy: Stockholm, 1 Dec. 1994), pp. 15–19. Excerpts from the communiqué are reproduced in appendix 8A in this volume.

muniqué expresses 'full support for the development of the European Defence and Security Identity and for the Western European Union, the development of the Combined Joint Task Forces concept . . . However, much remains to be done'. The NATO states reaffirmed their determination to put into effect the strategy initiated with the London decisions (5–6 July 1990), calling into being NACC²⁶ and creating the PFP.²⁷ The NATO ministers also welcomed the endorsement by the WEU Council of Ministers of their preliminary conclusions in Noordwijk. This work is to initiate reflection on the new European security conditions, including the French proposal that this should lead to a White Paper on European security.

In the two documents adopted in Brussels in 1994—both during the NATO summit meeting (11 January) and at the ministerial level (1 December)—an 'official optimism' prevailed. A strong commitment was declared to the transatlantic link; to the continued substantial presence of US forces in Europe as 'a fundamentally important aspect of that link';²⁸ and to the continued 'direct involvement of the US and Canada in the security of Europe'. Similar assurances were repeated in the December communiqué of the Alliance.²⁹

The December meeting of the North Atlantic Council made progress in two important areas: 'a measured progress' towards NATO expansion, and 'the strengthening' of the PFP.³⁰ A comparison of tasks allocated to the Alliance in the Declaration adopted by the January summit meeting with the December communiqué shows that: (a) the announced working relationship and closer cooperation between NATO and the new democracies in Central and Eastern Europe have been established; and (b) work has started on the definition of how NATO will expand and the principles and criteria for expansion, and consideration of the implications of membership for European security. This debate, initiated in 1994, will continue in 1995 and, as a result, the countries that are now members of the PFP 'will have a clear understanding of the obligations and requirements of NATO membership'.³¹ In December 1994, the NATO ministers reaffirmed that the Atlantic Alliance, as provided in Article 10 of the North Atlantic Pact (signed in Washington, 4 April 1949), remains open to other European states 'in a position to further the principles of the Treaty and to contribute to the security of the North Atlantic area'.³² It was

²⁶ NACC was proposed by the NATO Rome summit meeting (7–8 Nov. 1991). The first NACC meeting was held in Brussels (20 Dec. 1991); its first work plan was adopted during the extraordinary NACC meeting convened to include the former Soviet republics, proclaimed as new independent states (Brussels, 10 Mar. 1992). On 11 Feb. 1993, an *Ad Hoc* Group on Co-operation in Peacekeeping was established and in June 1994 it merged with the PFP Political–Military Steering Committee.

²⁷ 'Partnership for Peace is developing into an important feature of European Security, linking NATO and its partners and providing the basis for joint action with the Alliance in dealing with common security problems. Active participation in the Partnership for Peace will also play an important role in the evolutionary process of expansion of NATO', NATO Final Communiqué (note 25), para. 4.

²⁸ North Atlantic Council Declaration (note 7), pp. 268–72.

²⁹ NATO Final Communiqué (note 25).

³⁰ US Secretary of State Warren Christopher's news conference, *Wireless File* (note 25), p. 6.

³¹ Note 30.

³² NATO Final Communiqué (note 25), para. 5. Article 10 of the North Atlantic Treaty reads as follows: 'The parties may, by unanimous agreement, invite any other European state in a position to further the principles of the Treaty, and to contribute to the security of the North Atlantic area, to accede to this Treaty. Any state so invited may become a party to the Treaty by depositing its instruments of

decided that membership would expand on a case-by-case basis and that some nations may attain membership much earlier than others.

In response to Russia's reservations that expansion of NATO to the East would be tantamount to a new division of Europe, the ministers affirmed their determination 'to reinforce co-operative structures of security'³³ and avoid the emergence of new lines of partition.³⁴ The Alliance's position was unchanged: a cooperative European security architecture requires active participation by Russia. This was the key problem which dominated the debate in 1994, both between NATO and Russia and between NATO and the CEE applicant states. In Russian–Central European relations, the issue overshadowed other security problems.

Russia, the PFP and NATO

The view that 'European security architecture requires the active participation of Russia' has been repeatedly affirmed by NATO in various documents and statements.³⁵ The allied states both declared their support for political and economic reforms in Russia and reaffirmed their commitment to developing a far-reaching relationship with Russia, corresponding to Russia's size, importance and capabilities. As for Russia, its position radically changed at the end of 1993 and in early 1994.³⁶ The paradoxical outcome of the armed confrontation between the President and the Parliament (October 1993) and the victory won by Boris Yeltsin and the democratic reformers who supported him, as well as the result of the December 1993 election to the new Duma was a clear shift towards nationalism and neo-imperialism in Russian politics. Subsequently, Russian statements to NATO and the CEE states changed significantly, the previously cooperative tone becoming confrontational.³⁷ The head of Russian intelligence, Yevgeniy Primakov, warned that if 'the biggest military grouping in the world with colossal offensive potential' moved closer to Russia's borders, then it would call for 'a substantial reassessment of the Russian defence concept and a redeployment of armed forces, a change in operative plans.'³⁸ Foreign Minister Andrey Kozyrev predicted that expansion of NATO would lead to a drama in Russia similar to the catastrophe in the former Yugoslavia. He accused Russia's former East European allies of playing

accession with the US government', Rengger, N. (ed.), *Treaties and Alliances of the World*, 5th edition (Longman: Harlow, UK, 1990), p. 179.

³³ NATO Final Communiqué (note 25), para. 8.

³⁴ 'We are working towards an intensification of relations between NATO and its Partners on the basis of transparency and on an equal footing'. NATO Final Communiqué (note 25), para. 8.

³⁵ NATO Final Communiqué (note 25), para. 9.

³⁶ See more on this in Rotfeld in *SIPRI Yearbook 1994* (note 1), pp. 212–13.

³⁷ 'Russia warns of dangers if NATO grows eastward', *International Herald Tribune*, 6 Jan. 1994, p. 1; Katin, V., 'Russia's partnership with NATO—unequal marriage', *Nezavisimaya Gazeta*, 15 Mar. 1994, p. 1; and Migranyan, A., 'Zachem vstupať, esli možno ne vstupať?' [Why join if it is possible not to?], *Nezavisimaya Gazeta*, 15 Mar. 1994, pp. 2–3. Joining the NATO programme on the PFP will increase Russian isolation and dramatically reduce freedom of manoeuvre in foreign policy.

³⁸ Report of the Russian External Intelligence Report on 'The prospects of the NATO enlargement and Russia's interests', presented by Y. Primakov on 25 Nov. 1993, *Nezavisimaya Gazeta*, 26 Nov. 1993, p. 1.

up the 'Russian threat' to secure speedy admission to NATO and warned that admitting new members into NATO would 'lead away from a single, large Europe' and help, rather than counter, Russian nationalists.³⁹

Russia's attitude to the Partnership for Peace programme took several turns in 1994. After the original favourable assessment of the concept ('a step in the right direction'⁴⁰) doubts, reservations and even opposition were voiced.⁴¹

On 22 June 1994, Foreign Minister Kozyrev signed the PFP Framework Document in Brussels at a meeting of the North Atlantic Council (NAC). The following summary of the discussions between the NAC and the Foreign Minister was issued after the meeting:

1. Both the Alliance and Russia have important contributions to make to European stability and security. Constructive, cooperative relations of mutual respect, benefit and friendship between the Alliance and Russia are therefore a key element for security and stability in Europe and in the interest of all other states in the CSCE area . . .

2. The signature of Partnership for Peace by Russia opens a further important opportunity to develop relations through practical cooperation in the fields included in the Partnership for Peace Framework Document.

The Alliance and Russia agreed to develop an extensive Individual Partnership Programme corresponding to Russia's size, importance and capabilities.

3. They agreed to set in train the development of a far-reaching, co-operative NATO/Russia relationship, both inside and outside Partnership for Peace. This relationship, aimed at enhancing mutual confidence and openness, will be developed in a way that reflects common objectives and complements and reinforces relations with all other states, and is not directed against the interest of third countries and is transparent to others.

4. The Alliance and Russia agreed to pursue a broad, enhanced dialogue and cooperation in areas where Russia has unique and important contributions to make, commensurate with its weight and responsibility as a major European, international and nuclear power, through:

- sharing of information on issues regarding politico-security related matters having a European dimension;
- political consultations, as appropriate, on issues of common concern;
- co-operation in a range of security-related areas including, as appropriate, in the peacekeeping field.⁴²

Agreement on the Framework Document was preceded by consultations with the participation of Russian Defence Minister Pavel Grachev, who in early May 1994 called into question the desirability of Russia's accession to the PFP in the version proposed by NATO.⁴³ President Yeltsin proposed the

³⁹ *International Herald Tribune*, 11 Mar. 1994, p. 2.

⁴⁰ Mihalka, M., 'European-Russian security and NATO's Partnership for Peace', *Radio Free Europe/Radio Liberty, RFE/RL Research Report*, vol. 3, no. 33 (26 Aug. 1994), p. 37.

⁴¹ 'Grachev plan likely to upset West: Russia angles for special NATO link', *Financial Times*, 7-8 May 1994, p. 2.

⁴² Kozyrev, A. V., 'Russia and NATO: a partnership for a united and peaceful Europe', *NATO Review*, vol. 42, no. 4 (Aug 1994), p. 5.

⁴³ Pavel S. Grachev, Defence Minister of Russia, stated on 6 May 1994 that: 'What is being offered to us is not quite acceptable for Russia. We have come to the conclusion: Why should not Russia propose its own concept'. *International Herald Tribune*, 7-8 May 1994, p. 2.

recognition by NATO of his country's special status as a great power, either in a protocol within the framework of the PFP programme or in a separate bilateral document signed between NATO and the Russian Federation.⁴⁴ On 25 May at the Brussels NACC meeting Grachev submitted to NATO a document containing the main parameters of Russian participation in the implementation of the PFP programme. He proposed the transformation of European security based on NATO and other Western security structures (EU/WEU) into a bloc-free system, with NACC as its military arm and a central role for the CSCE. The drafting of a broad programme of cooperation between Russia and NATO was also proposed. Russia's goal was to create an effective mechanism for mutual consultations on the entire range of problems of European and world security, which would operate both on a regular basis and in emergencies. This would be a step towards 'a long-term system of collective security and stability in Europe under the aegis of the CSCE'.⁴⁵ Russia would: (a) not accept any arrangements that would give it the same status as that of other states which have acceded to PFP—it demanded special treatment and formal recognition for itself as a great power;⁴⁶ (b) expect NATO states to acknowledge its special rights and responsibilities for maintaining peace in the territory of the Commonwealth of Independent States (CIS); (c) seek an indirect *droit de regard* over the decision-making process within the Alliance, especially with regard to NATO expansion; and (d) seek solutions that would be a nucleus of its proposed collective security system in Europe. For Russia, accession to the PFP was to be an instrument of transformation of European security 'by making it pass through the very small eye of the Partnership for Peace needle'.⁴⁷

The meeting of the North Atlantic Council in Istanbul (9 June) stated that NATO will retain its right 'to take its own decisions on its own responsibility by consensus of its members, including decisions on the enlargement of the Alliance'. Russia was encouraged to develop 'an extensive and far-reaching Individual Partnership Programme [IPP], corresponding to its size, importance and willingness to contribute to the pursuit of shared objectives'.⁴⁸

The Framework Document signed by Kozyrev did not differ from the PFP documents signed earlier by other states. However, a document adopted in parallel with the results of the discussion (*Summary of Conclusions*) expressed

⁴⁴ 'Yeltsin expects NATO to grant special status to Russia', ITAR-TASS in English, 20 May 1994, in Foreign Broadcast Information Service, *Daily Report—Central Eurasia (FBIS-SOV)*, FBIS-SOV-94-099, 23 May 1994, p. 8.

⁴⁵ ITAR-TASS World Service in Russian, 25 May 1994, FBIS-SOV-94-101, 25 May, p. 10. In the article 'Pavel Grachev at NATO Headquarters', *Rossiyskaya Gazeta* (25 May 1994) commented: 'Everyone in NATO agrees that a nuclear power with a huge economic and military potential must play a special role in the international security system'. The reaction of the Western side was epitomized in one NATO expert's words: 'We must find a formula which does not give Russia a formal privileged status, but still permits "special consideration"'. *Atlantic News*, no. 2067 (18 Mar. 1994).

⁴⁶ Reflecting the sense of insecurity which he was denying, Kozyrev stated in an interview: 'We are not a weak country. We do not have any inferiority complex. Therefore we are ready for co-operation with NATO as an equal partner'. ITAR-TASS in English, 8 May 1994; cited in Mihalka (note 40), p. 43.

⁴⁷ Mihalka (note 40), p. 41.

⁴⁸ Final Communiqué of the Ministerial Meeting of the North Atlantic Council in Istanbul, 9 June 1994, NATO Press Communiqué M-NAC-1(94)46.

the compromise reached: it did not meet numerous Russian expectations but acknowledged the weight and responsibility of Russia as a major European, international and nuclear power. This was the assertion of an obvious fact which does not require special reaffirmation. Nevertheless the Framework Document, the Partnership and Co-operation Agreement adopted the next day (23 June) at Corfu between Russia and the EU and Russia's entry into the political dimension of the Group of Seven leading industrialized nations (G7), by special invitation to the 10–11 July meeting, together represent an initial attempt at a *de facto* shaping by the West of its strategic partnership with Russia.

The perceptions of partnership of Russia and the West differ substantially. For Russia, the PFP is not an instrument for opening the road to expansion of NATO but an alternative to, or at least a postponement of, such a decision. In the Russian understanding, the PFP should be a stage in the implementation of the pan-European security concept in which the central role would be played by NACC and the OSCE rather than the Atlantic Alliance.

After signing the PFP Framework Document, Kozyrev announced that,

We see as the main goal of the Russia–NATO partnership the establishment of a system of collective security and stability in Europe. Partnership should lead not to a juxtaposition of NATO to other institutions, but, on the contrary, to co-ordination of their activities in pursuit of their goals. One should mention here the CSCE first of all . . . This logic also applies to the NACC. Our partnership can contribute to transforming the NACC into an independent body which would promote military–political co-operation in the Euro-Atlantic area.⁴⁹

In this sense, the OSCE would fulfil the role of a European United Nations.⁵⁰

In late 1994, the course of events was unlike that suggested in the June–July decisions. Kozyrev, who was expected to sign the 'Russia–NATO' Individual Partnership Programme⁵¹ and the programme for consultations and cooperation on 2 December in Brussels, stated that he could not accept either document. He justified his refusal to sign the PFP programme of cooperation by the fact that the 1 December NATO communiqué elicited 'more questions than answers'.⁵² In his view, setting up a working group to consider the issues surrounding the admission of new states to the Alliance⁵³ calls for more

⁴⁹ Kozyrev (note 42). This article was also published in Russian by an official newspaper of the Russian Government, *Rossiyskiye Vesti*, 17 Aug. 1994.

⁵⁰ The Russian political goals were explained by Kozyrev as follows: 'Generally speaking, the CSCE should aim at co-ordinating the activities of NATO, the European Union, the Council of Europe, the WEU and the CIS in the sphere of enhancing stability and security, promoting peacekeeping and protecting human and national minority rights. Of course, this does not mean establishing the CSCE as a hierarchical leader or "commander"'. Kozyrev (note 42), p. 4.

⁵¹ On 1 Dec. 1994, the daily *Segodnya* reported: 'It is expected that a lengthy document covering about 50 pages will be signed by the Minister of Foreign Affairs of the Russian republic, Andrei Kozyrev, during his visit to Brussels on 2 December. Journalists have been informed of this today by Deputy Foreign Minister Nikolai Afanasyevskiy'.

⁵² Velekhov, L., 'Russia–NATO: betrothal miscarried', *Segodnya* 3 Dec. 1994, p. 1; and Pogorelyi, M., 'Double measure is not to Russia's liking', *Krasnaya Zvezda*, 3 Dec. 1994, p. 2.

⁵³ The NATO communiqué reads: 'Accordingly, we have decided to initiate the process of examination inside the Alliance to determine how NATO will enlarge, the principle to guide this process and the

explanation, rethinking and possible correction of the 'Russia-NATO' programme. He stated that, 'a speedy and unjustified expansion of the Alliance does not suit' Russia.⁵⁴ This startling reaction seems to have been directed to Russian public opinion and to have been caused more by the changed domestic situation than by the content of NATO's December communiqué.⁵⁵

NACC and the PFP

In 1994 the future of the Partnership for Peace programme,⁵⁶ collaboration with the North Atlantic Cooperation Council (NACC) and the issue of NATO's expansion eastwards were considered mainly in the context of the West's relations with Russia. Republican Senator Richard Lugar argued that 'the starting point (and perhaps ending point as well) for this effort appears in the first instance to be Russian-oriented'.⁵⁷ Harmonization of NACC and the PFP entered the agenda in 1994. The mission of each forum was primarily the institutionalization of NATO's cooperation with the former WTO states.

Numerous functions of the PFP and NACC are identical. The essential differences between them can be reduced to the following elements:

1. The PFP is based on bilateral relationships between NATO and the partner state, which develops an Individual Partnership Programme with the Alliance, while NACC is a multilateral forum.
2. The aim of the PFP is to engage the partners in cooperative military activities (peacekeeping, search and rescue and humanitarian operations) and promotion of transparency and democratic control of defence ministries and armed forces, while NACC is primarily for political consultation.

implications of membership. To that end, we have directed the Council in Permanent Session, with the Advice of the Military Authorities, to begin an extensive study. This will include an examination of how the Partnership for Peace can contribute concretely to this process. We will present the pursuits of our deliberations to interested Partners prior to our next meeting in Brussels'. NATO Final Communiqué (note 25), para 6.

⁵⁴ *Segodnya*, 3 Dec. 1994.

⁵⁵ The Atlantic Alliance had already announced its intention to expand NATO in Jan. 1994 and that active participation in PFP 'will play an important role in the evolutionary process of the expansion of NATO'. The Dec. 1994 communiqué does not answer the questions 'who' and 'when', but only *how* NATO will enlarge. In this respect, it contains no new elements. Russia's response can be seen as seeking to exert pressure on the Allied states and sounding out whether the Alliance is ready to make concessions.

⁵⁶ For analysis and text of the PFP documents, see *SIPRI Yearbook 1994* (note 1), pp. 233-36 and 272-74.

⁵⁷ Senator S. Lugar, 'NATO's "near abroad": new membership, new missions', speech to the Atlantic Council of the United States, Washington, DC, 9 Dec. 1993. Quoted from the Bruce George Report, 'Continental drift', North Atlantic Assembly, Nov. 1994, p. 15.

Table 8.1. PFP/NACC peacekeeping training manoeuvres, 1994

| Name | Dates/ training area | Participants | No. and type of forces | Purpose |
|----------------------------|--|--|---|--|
| Co-operative Bridge 94 | 12–16 Sep. Biedruskon/ Poznan, Poland | Bulgaria, Czech Rep., Denmark, Germany Italy, Lithuania, Poland, Romania, Slovakia, Netherlands, UK, Ukraine, USA | c. 650; ground; company and platoon- size units | Share peacekeeping experience; develop a common understand- ing of operational procedures; improve joint abilities in peace- keeping |
| Co-operative Venture 94 | 28 Sep.– 7 Oct. Skagerrak area of the North Sea/ Norwegian Sea | Belgium, Canada Denmark, Germany Italy, Lithuania, Netherlands, Norway, Poland, Russia, Spain, UK, Sweden, USA | More than 15 ships; naval and maritime air forces | Train in command control, tactics and basic maritime pro- cedures; address in detail environmental and safety issues |
| Co-operative Spirit 94 | 21–28 Oct. Harskamp area in the Veulwe, Netherlands | Canada, Czech Rep., Estonia, Germany, Lithuania, Nether- lands, Poland, Slovakia, Sweden, UK, Ukraine, USA | c. 1000; ground; company and platoon- size units | Train in peacekeeping, e.g., escorting humanitarian operations |

Source: SIPRI data base.

3. The PFP relationships are individual and assume different degrees of commitment to and measures of involvement in cooperation with NATO; in NACC, all members participate at the same level.⁵⁸

As one of its goals, the PFP programme envisaged the promotion of closer military cooperation and interoperability between the Allies and their NACC partners. NATO proposed peacekeeping training exercises, starting in 1994. To this end, the partner states were invited to send permanent liaison officers to NATO headquarters and a separate Partnership Co-ordination Cell at Mons (Belgium) that would carry out the necessary military planning.

At the NATO ministerial meeting in Istanbul in June 1994, it was decided that the PFP Political–Military Steering Committee (PMSC) and the NACC *Ad Hoc* Group (AHG) on Co-operation in Peacekeeping should closely coordinate their work, and later in the year these bodies merged to serve as the main NACC/PFP forum for consultations on political and conceptual issues related to peacekeeping. PMSC/AHG meetings are attended by NACC and PFP members and those OSCE states with experience in peacekeeping that expressed interest in cooperating with the AHG. Representatives of the OSCE

⁵⁸ See more on this in Catrina, C., 'Partnership for Peace', Paper presented at the UNIDIR Conference on Transatlantic Relations and International Security, Caen, 22–23 Sep. 1994.

Table 8.2. NACC and the PFP: a comparison

| NACC | PFP |
|---|--|
| Conduct peacekeeping operations | Conduct peacekeeping exercises |
| Military contacts incl. port visits | Military contacts incl. observation of NATO exercises |
| Develop Common Technical Base for peacekeeping | Develop Common Technical Base for peacekeeping |
| No link to NATO membership | 'Active participation . . . will play an important role in the evolutionary process of the expansion of NATO . . . taking into account political and security developments in the whole of Europe'. |
| No preconditions for joining | No preconditions for joining |
| Initially open to 'former adversaries' but with other CSCE states as observers or participants in <i>Ad Hoc</i> Group | Open to all able and willing CSCE states |
| Meets collectively | Meets at 16+1, 16+ active partners, PFP/NACC format |
| Pace decided by NATO | Pace decided by NATO |
| NATO budget funding | Partners fund their own participation |
| Consultations on political and security related matters; policy planning; defence planning and military matters incl.; democratic control of armed forces; defence resources planning and procurement; command and control; air defence; standardization and interoperability; defence programmes and budgets; crisis | Consultations as agreed by NATO in Article 4 situations with 'active partners', cooperation in transparency in defence planning and budgeting, democratic control of defence forces, capability and readiness to contribute to operations under UN and CSCE, military relations with NATO for peacekeeping and other operations, development of interoperability over long term, force planning and review process, access to certain NATO technical data relevant to interoperability |

Source: George, B., 'Continental drift', Paper published by North Atlantic Assembly, Political Committee 1994 Reports, AL 221, PC (94)5 (Nov. 1994), p. 17.

Chairman-in-Office regularly participate and members of the UN Secretariat have taken part in a number of activities.⁵⁹

In autumn 1994, the first three joint NACC/PFP peacekeeping manœuvres took place in Poland, the Netherlands and the North Sea (table 8.1).⁶⁰ Twenty states (10 NATO and 10 PFP countries) participated in one or more of these exercises. The manœuvres were also attended by observers from other states.

In the spirit of the PFP, a number of bilateral and multilateral ground and maritime peacekeeping exercises have also been carried out, with a broad range of tasks (command post, engineer, medical, maritime, naval, mine-

⁵⁹ Meeting of the North Atlantic Cooperation Council in Istanbul, Turkey, Press Release M-NACC-1(94)47, 10 June 1994; Report to Ministers by the NACC *Ad Hoc* Group on Cooperation in Peacekeeping, Press Release M-NACC-2(94)119; and Progress Report to Ministers by the Political-Military Steering Committee/*Ad Hoc* Group on Cooperation in Peacekeeping, Meeting of the North Atlantic Cooperation Council, NATO Headquarters, Brussels, 2 Dec. 1994.

⁶⁰ It is telling that Russia failed to participate in the Polish manœuvre. Although the Russian ships took part in the exercise in Skagerrak, assessment of this enterprise in the Russian press was very critical, and the main complaint was that the Russian participants were not treated as equals. Gromak, V., 'If a partnership, then a partnership of equals', *Krasnaya Zvezda*, 20 Oct. 1994, p. 3.

sweeping, search and rescue, and other exercises).⁶¹ All these pioneering exercises, aside from sharing peacekeeping experience and developing joint planning, cooperative military relations and interoperability, proved to be helpful in breaking old stereotypes and building confidence and understanding among former adversaries (e.g., NATO troop presence in Poland, German participation in the manoeuvre on Czech territory, Polish participation in NATO's engineer exercise within the major 'Chinese Eye-94' manoeuvre etc.). The exercise programme in 1995 will build on lessons learned in 1994.

The political function of the PFP programme, like that of NACC earlier, was to manage the evolving politico-military processes in the area of the former Warsaw Treaty Organization. It was originally intended as a substitute for NATO membership and 'a way to move, in an evolutionary way, the NACC towards "real world" military cooperation, thus accounting for the not overly dramatic differences between work already underway in the NACC and its *Ad Hoc* Group on Co-operation in Peacekeeping and the first PFP Work Plan'.⁶² (See table 8.2.) In the final analysis, much suggests that, like NACC, the PFP will, in line with Russian desires, become an instrument for postponing policy rather than a fast track for the CEE states to join NATO.

European Union: the Essen decision

The enlargement of the European Union by the accession of three former European Free Trade Association (EFTA) members—Austria, Finland and Sweden—is the major event in the development of the European Union since the Maastricht Treaty entered into force (on 1 November 1993). However, there was no qualitative progress in shaping the common security policy in 1994. The Common Foreign and Security Policy (CFSP)⁶³ is still a programme and a project rather than a reality; the provisions adopted in Maastricht are prescriptive rather than descriptive. On the declaratory plane, that is, agreeing on joint documents, considerable headway has been made, although joint actions to implement agreed policy are not routine but a demonstration of political unity. From the formal point of view, the CFSP covers all security aspects of foreign policy. In practice, as noted by Douglas Hurd, the Secretary of State for Foreign Affairs, 'CFSP is still in its infancy'.⁶⁴ The Essen Meeting of the European Council (9–10 Dec. 1994) and its decisions can be seen as an important stage in the process of building a new common foreign policy. The heads of state and government established in Essen a set of guidelines for short- and medium-term measures. Among the four priority areas the tasks in foreign policy were defined as follows: 'ensuring the lasting peace and

⁶¹ For the list of scheduled and planned NACC/PFP-related exercises in 1994 and 1995 see Press Release M-NACC-1(94)47 (note 59), and Work Plan for dialogue, partnership and cooperation 1994/1995, issued at the meeting of the North Atlantic Cooperation Council held at NATO Headquarters, Brussels on 2 Dec. 1994. Press Communiqué M-NACC-2(94)121.

⁶² Bruce George Report (note 57), p. 14.

⁶³ For 'Provisions on a Common Foreign and Security Policy', see *SIPRI Yearbook 1994* (note 1), pp. 251–57.

⁶⁴ Hurd, D., 'Developing the common foreign and security policy', *International Affairs*, vol. 70, no. 3 (July 1994), p. 427.

stability of the European continent and neighbouring regions by preparing for the future accession of the associated countries of Central and Eastern Europe and developing in parallel the special relationship of the Union to its other neighbours, particularly the Mediterranean countries'.⁶⁵

The declared EU intention is to prepare for the accession of all European countries with which it has concluded Europe Agreements.⁶⁶ The meeting in Essen decided on a comprehensive strategy for preparing the CEE states for accession to the EU. The report of the Council of the European Union to the Essen European Council stated that the associated CEE countries 'need to prepare for membership and to strengthen their capacity to assume the responsibilities of a member state'.⁶⁷ On the other hand, the EU is obliged to create the institutional conditions for ensuring the proper functioning of the Union after their accession. This should be done at the 1996 Intergovernmental Conference (IGC) on Political Union; accordingly, accession negotiations cannot start until after the Conference. In addition, the EU Council expressed its wish for 'a detailed analysis carried out by the Commission on the impact of enlargement in the context of the current policies of the Union and their development'.⁶⁸ In other words, the Essen meeting decided: (a) not only to postpone accession but also to make negotiation of future enlargement of the Union dependent on IGC decisions; and (b) to make sure that CEE accession does not weaken the integration process.

The recommendations agreed in Essen established concrete requirements for the associated CEE states ('a route plan . . . as they prepare for accession'); however, this not only signalled a lack of commitment on the part of the Union, but also postponed any possible decision in this matter until the more distant future. The agreed strategy is to be carried out primarily by means of a 'structured dialogue' on a trans-European dimension, the CFSP as well as home and judicial affairs. In practical terms, the dialogue will be conducted at various levels: meetings of heads of state and government will be held annually on the fringe of European Council meetings; and biannual meetings of foreign ministers will be held to discuss the full scope of relations, in particular the status and progress of the integration process. Annual meetings are also envisaged of ministers responsible for internal market development (particularly finance, economics, agriculture as well as transport, telecommunications, research and environment, culture and education). Ministers of justice and home affairs will meet biannually.

The structured relationship within the CFSP is considered by the EU as a means for overcoming the widespread sense of insecurity in Central and East-

⁶⁵ *Presidency Conclusions*, European Council Meeting, Essen, 9 and 10 Dec. 1994, p. 3.

⁶⁶ This strategy was submitted by the Council of the European Union and the Commission at the request of the European Council in Corfu (24–25 June 1994). The Partnership and Co-operation Agreement between Russia and the EU signed in Corfu marked an important stage in the development of the broad process of *rapprochement* between Russia and Western Europe.

⁶⁷ Report from the Council to the Essen European Council meeting on a strategy to prepare for the accession of the associated CCEE, attached as Annex IV to the *Presidency Conclusions* (note 65). Excerpts from the Report are reproduced in appendix 8A in this volume.

⁶⁸ Note 67.

ern Europe. At its 7 March 1994 meeting the General Affairs Council of the EU decided not only to further reinforce and broaden the dialogue at all levels, but also to open the possibility for the associated countries to align themselves with certain CFSP activities such as statements, démarches and joint actions.⁶⁹ A review of the CFSP provisions will be on the agenda for the 1996 IGC. Although it is difficult to foresee priorities of the political debate in 1996, it seems certain that security matters will play a significant role.

An open question is whether the dominant organization in European security in the future will be NATO or the EU/WEU. Will WEU decisions on military matters require NATO or EU consent? Will decisions be made within the CFSP or by the WEU Council of Ministers?⁷⁰ Will security policy within the Union be restricted solely to political declarations, while defence issues remain within NATO's purview? The political debate in 1994 did not answer these questions. For the USA, for obvious reasons, the 'pillar' remains NATO. For Britain, the challenge will be 'to marry the European wish and need to play a greater role in contributing to common defence and security with the maintenance of NATO as the essential framework underpinning European security'.⁷¹ A similar position is held by Germany, for which the transatlantic link is indispensable for security. In Germany's view, the continent needs the continuing commitment of the USA. This is also in the interests of North America, 'as this link enables it to deal with global changes in cooperation with a Europe that is a stable and predictable partner capable of taking action'.⁷² The German position can be summarized as follows: the EU and the WEU make up a European foundation of the transatlantic security order. NATO will also be strengthened if the WEU is effective.

Pact on Stability in Europe⁷³

Another concept has been produced by France. It seeks the building of a new European defence structure based on the Balladur Plan. In the introduction to the French White Paper on Defence 1994, Prime Minister Edouard Balladur wrote: 'The political identity of the European Union should eventually find its expression and reaffirmation in the field of defence. This choice aimed at the consolidation in the west of Europe of the pole of integration and stability constitutes the main strategic and political goal'.⁷⁴

⁶⁹ Practical guidelines on the implementation of this were drawn up in consultation with the associated countries in Oct. 1994.

⁷⁰ Lutz, D., 'A new security architecture in and for Europe', eds D. S. Lutz, and A. D. Rotfeld, *Security for Europe: Two Views*, Hamburg Papers on Peace Research and Security Policy, no. 87, Institute for Peace Research and Security Policy (IFSH), University of Hamburg, Hamburg, Dec. 1994, p. 12.

⁷¹ Hurd (note 64), p. 428.

⁷² White Paper 1994 on the Security of the Federal Republic of Germany and the Situation and Future of the Bundeswehr, Federal Ministry of Defence (Bonn, 1994), p. 52.

⁷³ For origins and analysis and the full text of the French Proposal for a Pact on Stability in Europe submitted to the Summit Meeting of the European Council in Copenhagen on 22 June 1993, see *SIPRI Yearbook 1994* (note 1), pp. 220–22 and 247–49.

⁷⁴ Livre blanc sur la défense 1994, Préfaces de Edouard Balladur, Premier Ministre, et François Léotard, Ministre de la Défense (Documentation Française: Paris, 1994), p. 4.

The declared aim of the French initiative was the conclusion of a Pact on Stability in Europe. Held at the request of the EU, although in reality a French initiative—and preceded by negotiations that lasted nearly a year—the Inaugural Conference (Paris, 26–27 May 1994) adopted a Concluding Document.⁷⁵ Foreign ministers from 47 CSCE states along with observers representing the CSCE, the UN, NATO, the WEU and the Council of Europe took part in the Paris Conference. The Paris decisions were addressed to the countries of Central and Eastern Europe. The objectives of stability, as defined by the Concluding Document, will be achieved ‘through the promotion of good-neighbourly relations, including questions related to frontiers and minorities, as well as regional co-operation and the strengthening of democratic institutions through co-operation arrangements to be established in the different fields that can contribute to the objective’.⁷⁶

The basis of the Pact is to be principles and commitments, as established by the UN, the CSCE and the Council of Europe, which refer, respectively, to the inviolability of frontiers, territorial integrity and respect for existing borders, and national minorities.⁷⁷ The mandate of the talks initiated in Paris aimed at reaffirming the existing frontiers and regulating the matter of national minorities in the CEE countries. However, some of those states (e.g., the Czech Republic and Poland) have already regulated these matters by treaty with all their neighbours;⁷⁸ a commitment to enter into new negotiations might—despite the declared intentions of the Pact initiators—prove counter-productive, giving a pretext to reopen matters already agreed, thus leading to destabilization, as some states warned.⁷⁹ Furthermore, the problems of minorities and frontiers, although important, ‘are only [a] few of the factors of stability in Europe’.⁸⁰ A pragmatic approach, however, took the upper hand at the Paris Conference. Agreements subject to negotiation can be a part of the process of preparing the Pact. The point is to encourage states which have not yet regulated the issues causing instability and conflicts to do so. The form and framework of such arrangements are of secondary importance and are subject to voluntary decision by the states concerned. At their request, bilateral agreements can be included in the Pact. The EU expressed its readiness to play the role of a moderator in the bilateral talks (‘at the request of the interested party’). The

⁷⁵ Concluding Document of the Inaugural Conference for a Pact on Stability in Europe, Paris, 26–27 May 1994. See text in *Europe Documents*, no. 1887/*Atlantic Document*, no. 86 (31 May 1994).

⁷⁶ Concluding Document (note 75), para. 1.5.

⁷⁷ In particular, the principles contained in the following documents: the Helsinki Final Act, 1 Aug. 1975; the 1990 Charter of Paris for a New Europe, reproduced in Rotfeld, A. D. and Stützel, W., *SIPRI, Germany and Europe in Transition* (Oxford University Press: Oxford, 1991), pp. 219–226; the Document of the Copenhagen Meeting of the CSCE (1990), reproduced in Rotfeld and Stützel, pp. 206–217; the Helsinki Final Document 1992, *The Challenges of Change*, CSCE Summit Meeting, Helsinki, 10 July 1992, reproduced in *SIPRI Yearbook 1993* (note 1), pp. 190–205; and the 1993 Vienna Declaration of the Council of Europe Summit.

⁷⁸ Poland submitted to the Conference in Paris the ‘Synopsis of Provisions for respect of frontiers and territorial integrity and the rights of national minorities contained in the treaties concluded by the Republic of Poland with its neighbours’.

⁷⁹ The Czech Republic in its *aide-memoire* of 3 May 1994 addressed to the European Union did not accept ‘the categorization of the participants in the Paris meeting’ and warned the EU that ‘the Czech Republic cannot subscribe to a project binding its participants to negotiate’.

⁸⁰ Note 79, para. 4.

key operational provision of the Paris Conference was to set up regional 'round tables' 'as a valuable means of promoting pluralistic structures of stability'.⁸¹ A Document for the organization of regional round tables defined their composition, the fields of cooperation and the working procedures. It was decided that two will be convened: a Central European and a Baltic round table.⁸² The task of the Central European round table is to consider minority issues in relations between Hungary and Slovakia and Romania. Hungary sought to include representatives of the Hungarian minority in the negotiating process. Slovakia and Romania, however, did not agree to international negotiations involving the participation of such representatives. The Baltic round table deals with the situation of Estonia, Latvia and Lithuania focusing mainly on the Russian minority and borders.⁸³

The regular sessions of the Baltic and Central European round tables, initiated in Brussels on 21–22 September 1994, marked a new stage in the process leading to the adoption in March 1995 of the Pact on Stability in Europe. From the conduct of the negotiations in 1994 one can infer that the Pact will encompass a political assessment of the situation in Europe, in particular its central and eastern parts, including the Baltic region; and a list of basic bilateral treaties and agreements between participating states, between them and the EU members, and between them and their own neighbours. The significance of such a list will be political rather than legal. It will be a *sui generis* multilateralization of bilateral arrangements. The Pact will be open to future inclusion of new arrangements. Within the Pact, projects relating to transborder cooperation and programmes promoting the solution of ethnic conflicts will be encouraged and financially supported. In the course of negotiations a list of 19 projects was submitted; projects were selected by the European Commission for inclusion in the Pact.⁸⁴ The decision was taken to transmit the Pact on Stability to the OSCE and entrust the latter with following up its implementation.

⁸¹ Note 79, para. 2.6.

⁸² Document for the organization of regional round tables, *Europe Documents* no. 1887/*Atlantic Document* no. 86 (31 May 1994), p. 5. For the content of the Presidency's Interim Report on the Stability Pact Negotiation see *Atlantic News*, no. 2668 (9 Nov. 1994), p. 4.

⁸³ Its mandate was drawn up as follows: 'The Baltic round table should discuss general political issues of the region and should promote regional co-operation relating for example to integration of populations of foreign origin, national minorities, language training, ombudsman, transborder activities and maritime co-operation, co-operation among regions of neighbouring countries'. Latvia and Estonia made interpretative statements concerning the term 'existing borders' to the effect that both states want to keep the issue of their frontiers with Russia open.

⁸⁴ Some preliminary suggestions by EU members that the Commission was going to provide a special fund for the implementation of regional cooperation within the Pact were not confirmed. Disappointment was shared by representatives of the CEE states. These projects are supposed to be financed from the regular PHARE fund. The Pact on Stability in Europe was approved at the 52-nation Conference in Paris on 20 Mar. 1995. *Europe/Documents*, no. 1927, *Atlantic Document* (Brussels), no. 90, 29 Mar. 1995, p. 3.

The Council of Europe

The activities of the Council of Europe should be seen in the framework of a broader concept of democratic security. However, from the formalistic point of view, international security does not generally fall within the competence of the Council of Europe.⁸⁵ Prior to 1989, the Council comprised exclusively the democratic nations of Western Europe which recognized a common system of values embracing primarily respect for human rights and the rights of national minorities, the rule of law and parliamentary democracy.⁸⁶ After the cold war, most of the CEE countries joined the Council of Europe. The most significant achievement of the Council has been the elaboration of 152 treaties regulating various spheres of international cooperation, particularly concerning human rights and fundamental freedoms as well as national minorities. In 1994 the Council of Europe extended its joint programme with the EC Commission (PHARE) including assistance with drafting new constitutions and examining the compatibility of legislation of some CEE states with European standards on human rights. This was addressed especially to Albania, Belarus, Bosnia and Herzegovina, Croatia, Latvia, Moldova, the Former Yugoslav Republic of Macedonia, Russia and Ukraine. The war in Chechnya has postponed the question of Russia's membership in the Council. Institutional cooperation between the Council of Europe and the OSCE was also established.⁸⁷

IV. The CSCE: activities in 1994

The evolution of the Helsinki process

In his statement at the 49th session of the UN General Assembly on 15 November 1994, the Secretary General of the CSCE, Wilhelm Höynck, made an interesting observation:

Transforming the CSCE from the traditional and very successful conference framework it has been until now into a fully operational institution was not the result of careful and long-term political planning. The CSCE was not going around looking out for new tasks to justify its post-conflict existence. It was the other way around: new challenges, new crises and indeed new armed conflicts were crying out for a structure designed to deal with these phenomena and ready to do so.⁸⁸

⁸⁵ The Statute of the Council of Europe was signed by the foreign ministers of 10 states in London on 4 May 1949 (and entered into force on 3 Aug. 1949). Rengger (note 32), pp. 295–302. As of 31 Dec. 1994 the Council was an organization of 33 member states (after Latvia's accession on 10 Feb. 1995 the Council is composed of 34 democratic states).

⁸⁶ 'The aim of the Council of Europe is to achieve a greater unity between its members for the purpose of safeguarding and realizing the ideals and principles which are their common heritage and facilitating their economic and social progress'; Rengger (note 32), p. 295.

⁸⁷ Council of Europe, Parliamentary Assembly Communication on the Activities of the Committee of Ministers (Sep. 1994–Jan. 1995), Council of Europe document 7224 (Strasbourg, 27 Jan. 1995).

⁸⁸ Statement by the Secretary General of the CSCE, Dr Wilhelm Höynck, at the 49th Session of the United Nations General Assembly, New York, 15 Nov. 1994, p. 2. The CSCE budget for 1994 was a mere US \$26 million and the staff comprised some 100 persons.

In other words, the evolution of the CSCE was not progressing as a kind of 'grand design' or being implemented in accordance with plans for a new European security architecture. The transformation of the Helsinki process was a response to acute needs and requirements. It was a continuous process of institutionalization; the CSCE was adapted through manageable forms of creative development to the new political and security environment.⁸⁹ Initially, the agenda of the Helsinki process (1975–85) was identified with human rights and Basket 3 issues (human contacts, information, culture and education); at the next stage (1986–92), the CSCE human dimension was supplemented by militarily significant aspects of security (confidence- and security-building measures, the 1990 Treaty on Conventional Armed Forces in Europe and the 1992 Open Skies Treaty). Since the 1992 Helsinki Summit Meeting, CSCE activities have been preoccupied with pursuing: (a) promotion of common values, as defined by the Paris Charter for a New Europe (human rights and fundamental freedoms, democracy and the rule of law, economic liberty, social justice and environmental responsibility); (b) conflict prevention and crisis management; and (c) development of cooperative security.

In the course of preparations for the 1994 CSCE Review Conference and Summit Meeting, agreement emerged that decisions to be adopted in Budapest should have a fundamental significance not only for the vitality of the CSCE process, as initiated in Helsinki 20 years before, but also for the European security system.⁹⁰ The expectations were very ambitious. The EU Corfu Summit Meeting adopted *A Joint Agenda for Budapest*, proposed by the Dutch and German ministers for foreign affairs. The document stated that 'the CSCE has assumed a central role in the peaceful management of change and an overriding responsibility for the prevention of new divisions in Europe'.⁹¹ Austria and Hungary submitted a set of proposals (*A Road from Vienna to the CSCE Summit in Budapest*) to strengthen the CSCE 'as a community of shared values and common security'.⁹² Canada offered a recommendation for prepar-

⁸⁹ See more on this in Decaux, E., 'CSCE institutional issues at the Budapest Conference', *Helsinki Monitor Quarterly on Security and Cooperation in Europe*, Special Issue, Budapest Review Conference, vol. 5, no. 3 (Utrecht, 1994), p. 18; and Szönyi, I. *The Institutionalization of the CSCE*, Policy Paper Series, no. 9 (Hungarian Institute of International Affairs: Budapest, Aug. 1994).

⁹⁰ The introduction to the report *Deciding the CSCE Future: Prospects for the 1994 Budapest Summit*, Report 94.3 (British-American Security Information Council: London, 1994), p. 1, reads: '[The Budapest meeting] will be significant not only because it may prove to be the last one in its current form, but also because it may be the last chance for the CSCE to make a concrete contribution to European security. Failure at Budapest may signify the political death of the CSCE'.

⁹¹ *A Joint Agenda for Budapest* by Germany and the Netherlands, 17 May 1994. The essential part of this proposal, 'Towards collective security in the CSCE area', contained two key provisions:

1. Close co-operation between international institutions is an essential element of international security. Contacts should go beyond mutual representation and information. They should be oriented towards a division of labour and an improved co-operation in the field.

2. In line with the goal of developing the CSCE's potential as a regional arrangement in the sense of Chapter VIII of the UN Charter, participating states should commit themselves 'to make every effort to achieve pacific settlement of local disputes through the CSCE before referring them to the United Nations. 'CSCE first should become the aim'. [This represents the key principle of 'CSCE first'.]

⁹² Austria and Hungary presented their joint proposal on 27 July 1994.

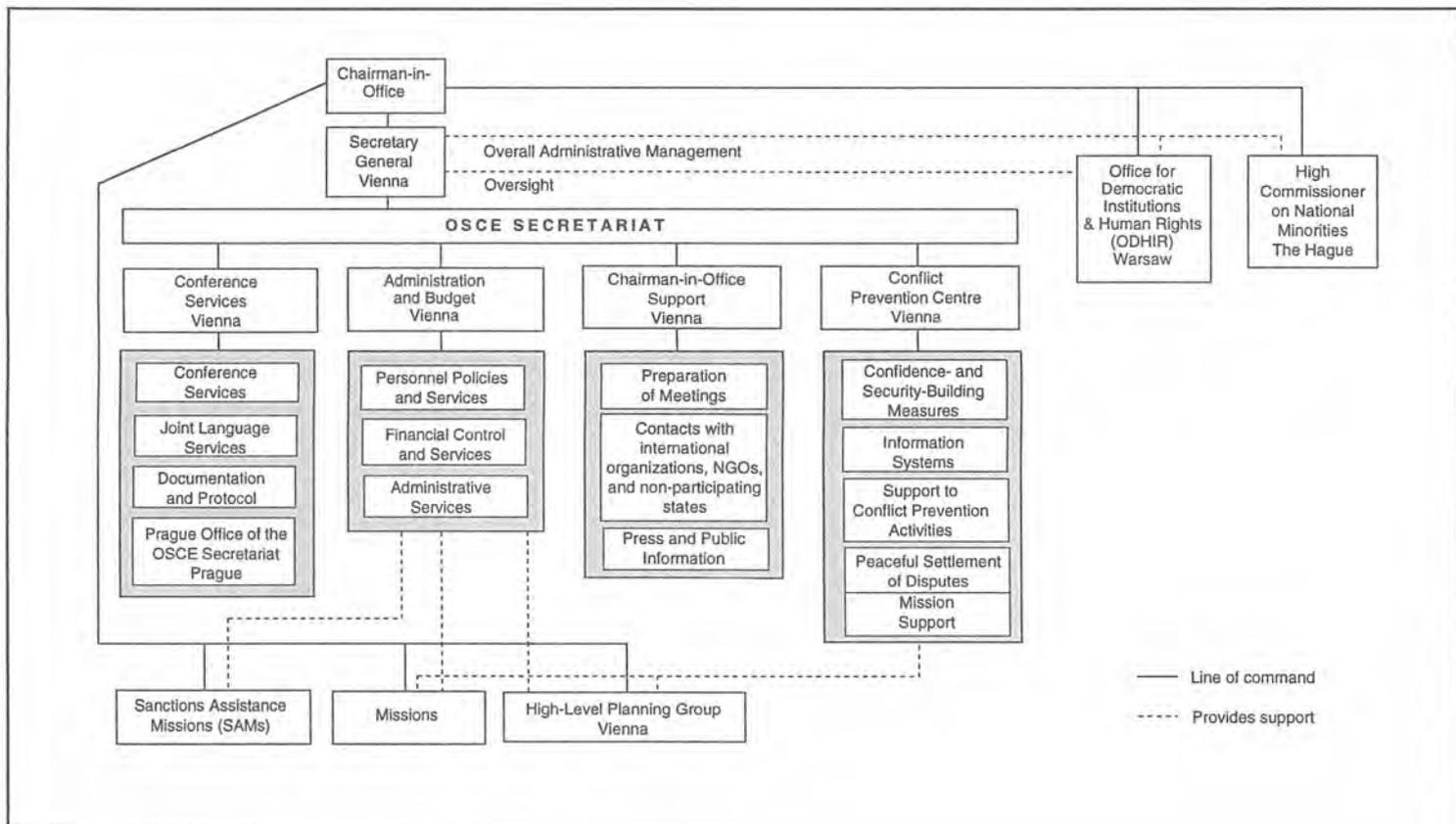


Figure 8.2. The Organization for Security and Co-operation in Europe

ing the CSCE for the 21st century.⁹³ An ambitious programme for enhancing the effectiveness of the CSCE was presented by the Russian Foreign Minister ('the central role . . . in guaranteeing security and stability'). However, the higher the expectations and hopes pinned on the outcome, the greater the opportunity for disappointment.

The media unanimously declared the Budapest Summit Meeting (5–6 December 1994) 'unsuccessful', 'disappointing', a 'failure' or even the 'end' of the CSCE⁹⁴—mainly because of the failure to agree on a common document regarding the conflict in Bosnia and Herzegovina. Clearly, adoption of such a document would have confirmed once more the common will of the 52 states to stop the war in the former Yugoslavia. Many such declarations have already been approved by the CSCE Ministerial Council. On the other hand, the value of such a document would have been questionable. It would not have changed the situation in Bosnia and Herzegovina since the OSCE's instruments and mechanisms for affecting the situation there and imposing a peace solution are much more limited, militarily and financially, than the means available to NATO or to the EU.

It is telling, however, that in Budapest a series of institutional, procedural and normative matters were agreed.⁹⁵ The Conference was transformed into a permanent Organization. Its structure was strengthened—the Ministerial, Senior and Permanent Councils replaced the former Committees; important decisions were taken on the intensification of OSCE action in relation to the Nagorno-Karabakh conflict (including the procedure for establishing the first OSCE peacekeeping operation in this region); for the first time, the 52 states were able to agree upon the Code of Conduct on politico-military aspects of security; new tasks for the Forum for Security Co-operation (FSC); and principles governing non-proliferation among participating states were also agreed. In addition, the Vienna Document 1994, including the document on Defence Planning and the Programme for Military Co-operation and Contacts, was adopted. The decision on Global Exchange of Military Information was also taken and Principles Governing Non-Proliferation were agreed.⁹⁶ The media paid little attention to these and some other December 1994 decisions—not so long ago they would have been considered a great diplomatic success. This is not because the decisions have less value than they would have had two years ago but because, in the public eye, the measure of effectiveness of security structures is determined neither by new decisions and political declarations nor by new institutions and new bodies, but by whether they help tangibly to increase security among European nations.

⁹³ *Preparing the CSCE for the Twenty-First Century*, tabled by Canada, CSCE document 676/94, Sep. 1994.

⁹⁴ 'Ambushed in Budapest', *Washington Post*, in *International Herald Tribune*, 8 Dec. 1994, p. 6; 'Abortive CSCE summit', *Rzeczpospolita* (Warsaw), 7 Dec. 1994, p. 1; 'The end of CSCE', *Rzeczpospolita* (Warsaw), 7 Dec. 1994, p. 5; and 'CSCE proved once again its inability to act', *Segodnya* (Moscow), 7 Dec. 1994, p. 1.

⁹⁵ CSCE, Budapest Document 1994, Budapest Summit Declaration: Towards a Genuine Partnership in a New Era, Budapest, 6 Dec. 1994. Excerpts are reproduced in appendix 8A.

⁹⁶ See also chapter 20 in this volume.

In contrast to the earlier pattern of political consultation and negotiations, during 1994 CSCE activities were directed at concrete action.⁹⁷ These target-oriented actions may be summarized under three interrelated headings: preventive diplomacy; development of the human dimension; and cooperative security.

Preventive diplomacy

In OSCE terms, preventive diplomacy covers different forms of pre-conflict activities aimed at early warning, conflict prevention and crisis management through diplomatic means. In 1994, preventive diplomacy was applied chiefly to the operations of nine long-duration CSCE missions: to Kosovo, Sandjak and Vojvodina;⁹⁸ Skopje; Georgia; Moldova; Tajikistan; Estonia; Latvia; Ukraine; and Sarajevo.⁹⁹ These activities were complemented by the Sanctions Assistance Missions (SAMs),¹⁰⁰ working in Albania, Bulgaria, Croatia, Hungary, the Former Yugoslav Republic of Macedonia, Romania and Ukraine. Their mandate was extended in January until 31 December 1994. More than 240 customs officers and other experts were employed by the seven SAMs and the central structure in Brussels—the Sanctions Co-ordinator's Office and the Sanctions Assistance Missions Committee (SAMCOMM—financed and partly staffed by the EU). The aim of SAMs is to provide advice and assessment to local authorities. Their activities are seen as an essential, if unspectacular, contribution to the credibility of efforts by the international community to stop the fighting in the former Yugoslavia. They are characterized by close cooperation between the OSCE, the EU/WEU and the UN.

The work of CSCE long-duration missions—difficult though is it to over-estimate their role in staving off conflicts and solving crisis situations—is relatively less known and at least for this reason deserves a brief presentation.

1. *The Mission to FYROM (Skopje)* was deployed in September 1992 with the aim of contributing 'to avoiding a spillover of the war in Bosnia-Herzegovina'.¹⁰¹ It remains in contact with the government and with all

⁹⁷ Höynck, W., 'The CSCE in the new Europe', Speech at the Royal Institute of International Affairs, London, 18 May 1994.

⁹⁸ This mission has been suspended. The authorities of the Former Republic of Yugoslavia (FRY) insisted that the resumption of the mission's activities be conditional on the FRY's 'returning' to the CSCE. Nevertheless, CSCE representatives visited the areas formerly covered by the mission. The reports from those visits were examined at the weekly meetings of the open-ended watch groups on FRY established in 1993 in the wake of expulsion of the mission. The Conflict Prevention Centre (CPC) continuously compiled weekly surveys of events in the areas of the mission. *The CSCE Secretary General Annual Report 1994*, Vienna, 14 Nov. 1994.

⁹⁹ *The CSCE Secretary General Annual Report 1994* (note 98).

¹⁰⁰ The SAMs were launched to assist the host countries in the implementation of the UN Security Council resolutions 713 (arms embargo), 757 (sanctions against Serbia and Montenegro), 787 (transshipment interdiction for sensitive goods), 820 (tightening of sanctions) and 973/94 (suspension of certain sanctions).

¹⁰¹ The mission to Skopje consists of 8 CSCE participating states and 2 members of the EC/EU Monitor Mission (ECMM) and cooperates closely with the UN Protection Force (UNPROFOR), the Council of Europe and other international institutions (including the UN High Commissioner for Refugees).

interested parties and groups. The work of the Skopje mission played an essential role in ensuring the democratic character of the presidential and parliamentary elections and assisted the authorities and the Council of Europe in holding the long-awaited census.¹⁰²

2. *The Mission to Georgia* now covers the whole of Georgia. The assigned tasks embraced: (a) promoting respect for human rights; (b) assisting Georgia in democratic institution-building; and (c) monitoring and promoting free media. In addition, the mission is to monitor the Joint Peacekeeping Forces (JPKF) in South Ossetia.¹⁰³ The main goal of the mission is to contribute to a political settlement of the conflicts in South Ossetia and Abkhazia. The key obstacle continues to be the reluctance of the parties to discuss a special status for the respective areas. The emphasis on crisis management remains in South Ossetia. In comparison to the UN activities, the OSCE plays only a supportive role in Abkhazia, but its mandate covers the whole of Georgia in terms of democracy-building institutions. The broadened scope of the mandate in 1994 is also reflected in the monitoring of the JPKF in South Ossetia.¹⁰⁴

3. *The Mission to Moldova* was deployed in April 1993. Its mandate is 'to facilitate the achievement of a lasting, comprehensive political settlement of the conflict in all its aspects' based on the following principles: consolidation of the independence, sovereignty and territorial integrity of the Moldovan state along with an understanding on a special status for the Trans-Dniester region; an agreement on the withdrawal of foreign troops; observance of human and minority rights commitments; and assistance in monitoring the implementation of agreements on a durable political settlement.¹⁰⁵ The greatest achievement of the mission's work in 1994 was the encouragement of direct contacts between the conflicting parties and the submission of specific recommendations, which resulted in the signing by the President of Moldova and the representative of the Trans-Dniester region of the joint Declaration of Principles (28 April 1994), confirming their resolve to seek a comprehensive solution to the existing problems.¹⁰⁶ The issue of withdrawal of the 14th Russian Army from the Trans-Dniester area was the subject of direct negotiations between Russia and Moldova who signed the agreement in October 1994.¹⁰⁷ On 20 July 1994, the CSCE Mission signed, after protracted negotia-

¹⁰² *The CSCE Secretary General Annual Report 1994* (note 98), p. 4.

¹⁰³ The mission includes 9 civilians and 8 military members, assisted by experts and the Office for Democratic Institutions and Human Rights (ODHIR). The JPKF were established under the Sochi Agreement of 24 Aug. 1992.

¹⁰⁴ *The CSCE Secretary General Annual Report 1994* (note 98). The mission took part in the session of the Quadripartite Commission established by the Georgian-Abkhazian agreement of 4 Apr. on the return of refugees.

¹⁰⁵ See more on this in Rotfeld, A. D., 'In search of a political settlement: the case of the conflict in Moldova', in *The Challenge of Preventive Diplomacy: The Experience of the CSCE* (Ministry for Foreign Affairs of Sweden: Stockholm, 1994), pp. 100-37.

¹⁰⁶ *The CSCE Secretary General Annual Report 1994* (note 98), p. 6.

¹⁰⁷ The 'president' of Trans-Dniester declined to take part in these talks; he stated that his 'people will never agree to withdrawal of the Russian forces'. Were it to happen, however, then 'the equipment of the 14 Army would stay in Transdnistria, because it constitutes the national property of the region'. *Segodnya*, 9 Feb. 1995, p. 3.

Table 8.3. CSCE long-term missions

| Area | Basic decisions ^a | Deployment | Profile ^b | No. of members | Location | Head of mission |
|-------------------------------|-------------------------------------|---------------------------------------|----------------------|----------------|----------------------------------|---|
| 1. Kosovo, Sandjak, Voivodina | 15th CSO 14 Aug. 92 | Sep. 1992 (withdrawn June 1993) | CP | 40 | — | — |
| 2. Skopje | 16th CSO 18 Sep. 92 | Sep. 1992 | CP | 8 | Skopje | Norman Anderson |
| 3. Georgia | 17th CSO 6 Nov. 92 | Dec. 1992 | CM | 17 | Tbilisi, Tskinvali | Hansjorg Eiff |
| 4. Estonia | 18th CSO 13 Dec. 92 | Feb. 1993 | CP | 6 | Tallinn, Kohtla- Jarve, Narva | Timo Lahelma |
| 5. Moldova | 19th CSO 4 Feb. 93 | Apr. 1993 | CM | 8 | Chisinau Tiraspol | Richard Samuel |
| 6. Latvia | 23rd CSO 23 Sep. 93 | Nov. 1993 | CP | 4–6 | Riga | Hugh Hamilton |
| 7. Tajikistan | 4th Council Meeting 1 Dec. 93 | Feb. 1994 | CM | 4 | Dushanbe | Olivier Roy |
| 8. Ukraine | 15th CSO | Nov. 1994 | CP | 6 | Kiev Simferopol | Andreas Kohlschlütter (Slawomir Dabrowa) |
| 9. Sarajevo | Permanent Committee 2 June 94 | Oct. 1994 | CM | 5 | Sarajevo | Hanspeter Kleiner |

^a CSO—Meeting of the Committee of Senior Officials.

^b CP—conflict prevention; CM—crisis management.

Sources: *CSCE Secretary General Annual Report 1994*, Vienna, 14 Nov. 1994; *The Challenge of Preventive Diplomacy: The Experience of the CSCE* (Ministry for Foreign Affairs of Sweden: Stockholm, 1994), p. 72; and *Survey of OSCE Long Term Missions and Sanctions Assistance Missions*, CPC, Vienna, 20 Jan. 1995.

tion, an agreement on the principles of cooperation between the Mission and the Joint Control Commission (Moldova, Russia and Trans-Dniester).

4. *The Mission to Tajikistan* started work in Dushanbe on 19 February 1994. Its mandate focused mainly on assisting in the development of legal and democratic political institutions and processes. In fact, in the conditions of the civil war raging since 1992 and owing to its limited capabilities, the mission found it difficult to establish effective channels of communication with the government and parliamentary bodies. The role of the mission in restoring peace in Tajikistan was thoroughly marginalized.¹⁰⁸ In view of such a situa-

¹⁰⁸ Neither did the mission's presence play a role in improving respect for human rights or holding free elections. Compare 'A hundred years before Western democracy. CSCE representatives see election [in Tadjikistan] as a farce', *Segodnya*, 28 Feb. 1995. The statement in *The CSCE Secretary General Annual Report 1994* (note 98) to the effect that 'the Mission gave high priority to co-ordination of its

tion, one would expect a clear position to be taken by the OSCE: either to stop keeping up the appearance of activity and recall the mission or to seek to affect the course of developments and accordingly enhance the mission's political standing and financial capabilities in the field.

5. *The Mission to Estonia* was deployed on 15 February 1993 and provided assistance and advice for the efforts to integrate the non-indigenous populations. The activities of the mission were oriented towards facilitating the legal and political status of the non-citizen population.¹⁰⁹ This was the chief, but not the sole, source of serious tension between Estonia and Russia. In the view of the CSCE Secretary General, the joint action of the CSCE mission and the High Commissioner on National Minorities (HCNM), Max van der Stoep, 'was a key factor in persuading Estonia to revise its law on aliens'.¹¹⁰ Another important accomplishment to which the CSCE mission contributed was the 26 July agreement between Estonia and Russia on withdrawal of Russian troops by 31 August 1994 and on social guarantees for Russian military pensioners (in which regard the agreement calls for OSCE assistance).

6. *The Mission to Latvia* started operation in November 1993. Its mandate is to address citizenship issues and other related matters and advise the Latvian Government and authorities on these issues. The mission has collected and processed data on over 1000 individual cases and conducted personal interviews. It has also discussed its findings with representatives of the government and members of parliament. Together with the HCNM, it submitted on this basis their recommendations for correction of the new citizenship law.¹¹¹ The mission contributed to the signing of four agreements between Latvia and Russia related to the withdrawal of Russian troops from Latvian territory.¹¹² Two of these agreements (on the Skrunda station and on social welfare for resident Russian military pensioners) call for CSCE assistance. The CSCE Permanent Committee decided on 30 June to appoint two CSCE representatives with the task of playing a specific role in the implementation process.

7. *The Mission to Ukraine* began work in late November 1994. The headquarters was established in Kiev and a branch office in Simferopol (Crimea). The main task is to assist the Ukrainian and Crimean authorities in their search for a political solution to the Crimea dispute: to establish a legal and political status for Crimean autonomy and rights for national minorities.

8. *The Mission to Sarajevo*, established by decision of the CSCE Permanent Committee (2 June 1994), aims to support three ombudsmen in Bosnia and

activities, in particular with respect to the UN' is devoid of sense as the role of the mission was, for various reasons, reduced to zero.

¹⁰⁹ The questions were mainly related to implementation of the Law on Aliens which came into force on 12 July 1993. The Estonian Parliament adopted in June 1994 a government proposal, supported by the mission, to extend for one year the deadline for the registration of non-citizens applying for Estonian residence, initially set by the Law on Aliens for July 1994.

¹¹⁰ Höynck, W., 'CSCE Missions in the field as an instrument of preventive diplomacy: their origin and development' in *The Challenge of Preventive Diplomacy* (note 105), p. 66.

¹¹¹ This law was adopted by the Parliament on 22 July 1994, after the fourth extraordinary reading at the initiative of the Latvian President who had sent back the already adopted law to Parliament for further consideration. *The CSCE Secretary General Annual Report 1994* (note 98), p. 9.

¹¹² The agreements were ratified by Russia and Latvia on 30 Apr. 1994.

Herzegovina to be appointed by the OSCE. The mission will cooperate with UNPROFOR and also report to the OSCE on matters pertaining to the human dimension.

The above review of the long-duration missions illustrates the range of disputes addressed. Even if their resolution is little known and often underestimated, the contribution to defusing tensions and improving mutual confidence and understanding among conflicting parties is considerable.

The Conference on Nagorno-Karabakh

The most important achievement of the CSCE in seeking to resolve armed conflicts in 1994 was the outcome of the work of the Minsk Group.¹¹³ The new Co-Chairman of the Minsk Conference, Swedish Ambassador Jan Eliasson (the other Co-Chairman is a Russian), visited the region (28 Feb.–8 March 1994), met with the leaders of Armenia and Azerbaijan and directed the work of the Group to consolidate the cease-fire and integrate all peace efforts with a view to finalizing a unified peace plan. On 12 May 1994, the parties reached agreement in Moscow to observe an informal cease-fire. The key issue was to harmonize the CSCE efforts and those undertaken by the Russian Federation.¹¹⁴ In addition to the preparation for a CSCE Monitoring Mission in support of an eventual peace agreement,¹¹⁵ as the result of intensive diplomatic efforts taken by Eliasson, the Committee of Senior Officials (CSO) decided on 16 September 1994 to actively explore the possibility of organizing a multinational CSCE peacekeeping force. (This option was in fact overtaken by the decision to start preparing an OSCE peacekeeping force.) The Budapest Summit Meeting decided 'to provide, with an appropriate resolution from the UN Security Council, a multinational peacekeeping force following agreement among the parties for cessation of the armed conflict'.

¹¹³ The decision 'to convene as soon as possible a conference on Nagorno-Karabakh under the auspices of the CSCE, to provide an ongoing forum for negotiations towards a peaceful settlement of the crisis in accordance with the principles, commitments and provisions of the CSCE' was taken by the CSO in Helsinki on 13 Mar. 1992. It was agreed by the CSCE Council of Ministers that the Conference shall meet in Minsk. Along with the states directly involved (Armenia and Azerbaijan), the following countries were appointed members of the Minsk Conference: Belarus, Czechoslovakia, France, Germany, Italy, Russia, Sweden, Turkey and the USA. The Conference is now known as the Minsk Group. Czechoslovakia was replaced by Slovakia in Jan. 1993, which in turn was replaced by Hungary when it took over the Chairmanship of the CSCE in Dec. 1993. Switzerland was added to the Group at the Budapest Summit Meeting in Dec. 1994. For CSCE documents on Nagorno-Karabakh, see Bloed, A., *The Conference on Security and Co-operation in Europe: Analysis and Basic Documents, 1972–1993* (Martinus Nijhoff: Dordrecht, 1993), pp. 841–44, 923–37 and 1209–20.

¹¹⁴ The Initial Operations Planning Group (IOPG) was essentially based on the Minsk Group timetable and on the experience generated through the negotiating process. A full CSCE Monitoring Mission (now the OSCE peacekeeping force) is expected to have a strength of more than 200 members. See more on this in *The CSCE Secretary General Annual Report 1994* (note 98), p. 11.

¹¹⁵ The opportunistic attitude of Russia towards the CSCE is best illustrated by its position on the Minsk Group. The Russian Ambassador for Nagorno-Karabakh, Vladimir Kazimirov, critically assessed and publicly rejected 'persistent pretensions to assigning to the "Minsk group" a central role in settling the Karabakh issue'. In his view, it is seeking to diminish Russia's autonomous role as a mediator. Kazimirov, V., 'Russia and the "Minsk Group" of CSCE. Time is ripe to tell the truth about the role of some "mediators" in settling the Karabakh problem', *Segodnya*, 14 Oct. 1994.

The Chairman-in-Office (CIO) was requested to develop a plan for the establishment, composition and operations of such a force. The Budapest decision on Nagorno-Karabakh gives a new dimension to ending the conflict in the region and to the new role of the OSCE as such.

Other areas of CSCE activity¹¹⁶

CSCE mechanisms

The main weakness of the CSCE/OSCE is generally understood to have been the rule of consensus in decision making. However, this should be seen in the context of two rather less well-known and underestimated aspects: first, that consensus refers to general decisions—the fact that they are supported by all states means that their binding character is not questioned, although they are of a political, not legal, nature; and second, in the OSCE, operational mechanisms work within which decisions do not call for consensus. These are: (a) in the military field—the Vienna mechanism for consultation and cooperation as regards unusual military activities;¹¹⁷ (b) in the human dimension—the Moscow mechanism;¹¹⁸ and (c) for emergency situations—the Berlin mechanism.¹¹⁹ In other words, the OSCE's relatively low effectiveness is the result of states' reluctance to accept and put into effect the adopted norms of conduct rather than of a lack of appropriate procedures, as is often claimed.

National minorities

The CSCE High Commissioner on National Minorities played an essential role in 1994 in limiting conflict situations and solving numerous disputes relating to minorities. Max van der Stoep focused on the Greek minority in Albania and the Albanian minority in Macedonia; minorities in Central Asia (Kazakhstan and Kyrgyzstan); the Hungarian minority in Slovakia and the Slovakian minority in Hungary; and the effectiveness of the Council for Ethnic Minorities in Romania and the minority provisions of Romanian legislation and the forthcoming bill on minorities in that country. The HCNM also tackled the Baltic issues and the relationship between Ukraine and its Crimean part as well as the minority situation in the Donetsk region. The Roma situa-

¹¹⁶ All the military aspects of security (i.e., conventional arms reductions, security cooperation and confidence- and security-building measures) are dealt with in chapter 20 in this volume.

¹¹⁷ The Vienna mechanism was established in 1990 as part of a new series of confidence- and security-building measures (CSBMs) in the Vienna Document 1990 of the Negotiations on CSBMs convened in accordance with the relevant provisions of the Concluding Document of the Vienna Meeting of the CSCE, Vienna, 17 Nov. 1990, Article II, para. 17. The text is reproduced in *SIPRI Yearbook 1991* (note 1), pp. 475–88.

¹¹⁸ The Vienna mechanism was supplemented by a system of missions of independent experts in the field of the human dimension of the CSCE at the Third Meeting on the Human Dimension of the CSCE in Moscow (10 Sep.–4 Oct. 1991). Document of the Moscow Meeting on the Human Dimension of the CSCE, Moscow, 3 Oct. 1991.

¹¹⁹ A mechanism for consultation and cooperation with regard to emergency situations was adopted at the First Meeting of the CSCE Council of Foreign Ministers in Berlin in June 1991. Berlin Meeting of the CSCE Council, Summary of Conclusions, Annex 2, Mechanisms for consultation and cooperation with regard to emergency situations, Berlin, 19–20 June 1991.

tion was a subject of particular concern and at his initiative it was decided to hold a seminar on this issue in cooperation with the Council of Europe.¹²⁰

The human dimension

As a consequence of the fundamental transformation of the CEE countries and the former USSR, the focus of OSCE activities in the human dimension is more and more directed towards election monitoring and providing advice on human rights and the rule of law. In this respect a substantial role is played by the Office for Democratic Institutions and Human Rights.¹²¹

Peaceful settlement of disputes

In addition to the Valletta provisions for a procedure for peaceful settlement of disputes,¹²² a new CSCE mechanism was put into effect in 1994. The Convention on Conciliation and Arbitration within the CSCE, as agreed in Stockholm on 15 December 1992,¹²³ entered into force on 5 December 1994.¹²⁴ Under the Convention, a CSCE court (Conciliation Commissions and Arbitral Tribunals, together constituting the Court of Conciliation and Arbitration) was established in Geneva. A Conciliation Commission will hear cases brought before it by common consent of two or more states. Significantly, the Convention provides for a mandatory procedure, provided that the dispute has not been settled within a 'reasonable period of time'. What this means has not been defined in precise terms. Arbitration procedure is optional.¹²⁵ There is a paradox contained in the Convention provisions: the obligatory conciliation procedure will produce non-binding proposals for settlement of a dispute, whereas the voluntary arbitration procedure will end with unconditionally binding decisions. The new procedures are costly and complex. Nevertheless, if used properly, they could become additional instruments of OSCE conflict prevention.

*The Parliamentary Assembly*¹²⁶

The third annual session of the CSCE Parliamentary Assembly adopted a Declaration (Vienna, 5–8 July 1994) to consider the proposal for a Joint Agenda with a view to strengthening the political role of the CSCE at the Budapest Summit Meeting. The Declaration suggested altering the existing consensus rule to speed up the decision-making process by requiring a 90 per cent major-

¹²⁰ *The CSCE Secretary General Annual Report 1994* (note 98), pp. 12–14.

¹²¹ The details of the ODIHR activities on monitoring elections, human dimension seminars and HCNM activities are reported in *CSCE Bulletin* (ODIHR), vol. 2, no. 3 (fall 1994). See also the working copy of the *OSCE Handbook: 20 Years of the Helsinki Final Act* (OSCE Secretariat: Vienna, 1995).

¹²² Report of the CSCE Meeting of Experts on Peaceful Settlement of Disputes, Valletta, 8 Feb. 1991.

¹²³ On the origins and text of the Convention see Rotfeld, *SIPRI Yearbook 1993* (note 1), pp. 181 and 210–11.

¹²⁴ At the end of 1994, the Convention had been signed by 34 and ratified by 12 participating states.

¹²⁵ *OSCE Handbook* (note 121), pp. 53–54 of the working copy.

¹²⁶ Having been established by the Madrid Declaration (1991), the CSCE Parliamentary Assembly had its first official meeting convened in Budapest (July 1992) and the second in Helsinki (July 1993).

ity instead of unanimity.¹²⁷ Another proposal was to establish formal procedures for consideration of CSCE Parliamentary Assembly resolutions.

Budapest: from Conference to Organization

The December 1994 Budapest Summit Meeting was widely expected to be decisive for shaping the future European security structure. It was preceded by the CSCE Review Conference (10 October–2 December 1994) at which, on the basis of proposals that had been known for several months,¹²⁸ decisions were prepared for the Summit Meeting on 5–6 December 1994.¹²⁹ At the opening session of the Review Conference, the NATO representative stated that the CSCE ‘holds a central place in developing the European security of tomorrow’.¹³⁰ Of particular significance for the Atlantic Alliance are further arms control measures and, in this context, a Code of Conduct, the appropriate harmonization of arms control, a global exchange of military information and enhancement of the Vienna Document 1992.¹³¹ Two other issues of the Programme for Immediate Action¹³² (on non-proliferation and regional arms control) deserve special attention. The NATO delegate reaffirmed that the Alliance was ready to respond to CSCE requests on peacekeeping or other operations ‘on a case-by-case basis’. NATO also stated its willingness jointly to implement the concept of mutually reinforcing institutions. Referring to NACC and PFP, the NATO representative stated that NATO had developed a new pattern of cooperation with a number of CEE and central Asian states. ‘Such endeavours must be regarded as complementary to OSCE efforts and are in no way meant to duplicate or replace them’. The language of the US and NATO proposals, on the one hand, and of Russian documents,¹³³ on the other, may well suggest that they use a similar terminology. However, ‘the central role of the CSCE’ in the Russian view implies consideration of all the other

¹²⁷ Borawski, J. and George, B., ‘The Conference on Security and Co-operation in Europe: a case of identity’, *International Defense Review, Defence* ‘95, 1995, p. 39.

¹²⁸ Those proposals included: *A Joint Agenda for Budapest* (note 91); *A Roadmap from Vienna to the CSCE Summit in Budapest* of 8 June 1994, presented in Vienna by the foreign ministers of Hungary and Austria; The Programme of Enhancing the Effectiveness of the CSCE, addressed on 23 June 1994 by the Foreign Minister of the Russian Federation to the CIO (distributed officially in Vienna on 30 Aug. 1994 as CSCE document 621/94); *Suggestions for a New Agenda for CSCE Arms Control After the Budapest Summit*, submitted by the Polish Minister for Foreign Affairs, CSCE document CSCE/FSC/SC, Rev. 1, Vienna, 7 Sep. 1994; and *Preparing the CSCE for the Twenty-First Century* (note 93). On 16 Sep 1994 the US, Swedish and other delegations also expressed their views and expectations connected with the Budapest Summit Meeting. *CSCE Newsletter* (Vienna), vol. 1, no. 9 (7 Oct. 1994).

¹²⁹ Budapest Document 1994 (note 95).

¹³⁰ Budapest CSCE Review Conference, Presentation on behalf of NATO at the opening session by the Assistant Secretary General for Political Affairs, POLADS (94)160, 1994.

¹³¹ See more on this in chapter 20 and appendix 20A in this volume.

¹³² Helsinki Final Document 1992, Annex to Helsinki Decision V, CSCE Forum for Security Co-operation: Programme for Immediate Action, reproduced in *SIPRI Yearbook 1993* (note 1), pp. 205–206.

¹³³ The Programme of Enhancing the Effectiveness (note 128). See also the US statement to the CSO meeting, Prague, 16 Sep. 1994: ‘The basic principles of the CSCE, together with its open and inclusive nature, are central to a Europe without divisions and in which the equality and independence of all States are fully respected . . . Enhancing the effectiveness of CSCE will demand both the high-level commitment of political will and sustained practical follow-up’. However, in the conclusion of this intervention one may read a strong resistance to significant changes in the existing CSCE institutional structure.

security structures in Europe coordinated by the OSCE.¹³⁴ In short, Russia's intention in the debate on the role of NATO and the other security institutions was quite transparent: to make the OSCE the basis of a regional collective security system within which military functions would rest on a transformed NACC,¹³⁵ but it was clear from the start that: 'any suggestion that other existing trans-Atlantic or European organizations might be subordinated to CSCE' was acceptable neither to NATO nor to the USA. In the US view, the Budapest Summit Meeting was to confirm the CSCE's fundamental importance as a unique regional institution with a broad security agenda and considerable scope for creative action.¹³⁶

During the negotiations, convergence of views emerged on several basic issues: (a) it was for the most part not questioned that the role of the new organization should be essential, central and indispensable in the Euro-Asian security system;¹³⁷ (b) the main thrust of CSCE activities should continue to focus on enhancing means for preventive diplomacy, crisis management and conflict resolution, including field missions and limited peacekeeping; (c) compliance and implementation were seen as the key issues; and (d) an integral part of 'a common CSCE security area' and of the comprehensive concept of European arms control is the code of conduct in the field of security.¹³⁸ Major proposals on a new arms control agenda were submitted by Poland. Of several concrete ideas, a proposal to establish a European Arms Control Agency was notable.¹³⁹ In general, there was a common denominator in the different declarations and proposals submitted: more effective use of the existing institutions rather than establishment of a new one, since the CSCE problems 'are not structural; they are political'.¹⁴⁰

Comparison of statements by the heads of state or government in Budapest (5–6 December 1994) shows that, as might be expected, the meeting was used by the partners to acquaint each other with their assessments of the process of security in Europe, not to handle procedural, technical or legal matters. The US President's statement implied that the expansion of NATO is taken for granted: 'New members will join country by country, gradually and openly'. No nation will be excluded from the process, and 'no country outside will be

¹³⁴ 'The CSCE would co-ordinate efforts of the participating States and major regional institutions—the CIS, NACC, EU, Council of Europe, NATO and WEU'. The Programme of Enhancing the Effectiveness (note 128), para. 1.

¹³⁵ The Russian programme postulated: 'The transformation of NACC into a universal mechanism for military and political co-operation functioning in close contact with the CSCE. Inclusion into the NACC of a growing number of the CSCE states'. The Programme of Enhancing the Effectiveness (note 128), para 4. On the other hand, Russia, in fact, is very cautious in accepting the role the OSCE might play on its territory. The decision to establish a permanent mission in Chechnya (as from Mar. 1995) is therefore of special significance.

¹³⁶ US statement to the CSO meeting (note 133).

¹³⁷ Speech delivered by the representative of Sweden, Ambassador Anders Björner, Prague, 16 Sep. 1994.

¹³⁸ The initial proposal was submitted by the Polish delegation in Vienna on 18 Nov. 1994, CSCE document CSCE/FSC/SC./ Rev. 1.

¹³⁹ *Suggestions for a New Agenda for CSCE Arms Control* (note 128).

¹⁴⁰ *Preparing the CSCE for the Twenty-First Century* (note 128).

allowed . . . to veto expansion'.¹⁴¹ The mandate of the OSCE is to be 'our first flexible line of defense against ethnic and regional conflicts'. Its rules should guard 'against the assertion of hegemony or spheres of influence'.¹⁴² The President's statement—although addressed to all participating states—was received as directed chiefly at Russia. In response, President Yeltsin rejected NATO expansion eastwards, stating that the search for a new place for the Alliance should 'not create new divisions, but promote European unity'.¹⁴³ Referring to these words, President Lech Walesa explained the Polish position as follows: '[A] secure Europe may be achieved through participation in the European tested structures. States which accept such solutions and are subjected to them may not be inhibited by other states which are not prepared to accept these solutions and do not observe these arguments . . . We do not want a new division of Europe . . . Adopting the code of conduct in the field of security, we are obligated to follow the norms regulating international coexistence'.¹⁴⁴

In a sense, these three statements reflect the character of the debate on the future security system in Europe. First, it is increasingly pragmatic in nature; and concerns the attitude to concrete decisions rather than procedures and abstract designs. Second, there is awareness that solutions arrived at today cannot petrify the old divisions or create new ones. Third, the security system cannot be identified with existing structures; neither should the latter be played off against each other (e.g., NATO against the OSCE), but each has, in mutual cooperation, to fulfil a substantial role. Fourth, the key task consists not in negotiating new norms and procedures but in sound implementation of the commitments already assumed. Assessed from this perspective, the Decisions adopted in Budapest mean that the role of the OSCE in solving security problems is increasing. The following decisions were made:¹⁴⁵

1. The OSCE will be a prime instrument for early warning, conflict prevention and crisis management in Europe.
2. It should pursue more systemic and practical cooperation with the UN and other European, regional and transatlantic organizations and institutions that share its values and objectives.
3. New tools adapted to new challenges for peaceful solution of disputes were created.

¹⁴¹ Remarks by the US President, Bill Clinton, at Plenary Session of 1994 Summit of the Council on Security and Co-operation in Europe, Budapest, 5 Dec. 1994.

¹⁴² Note 141.

¹⁴³ Yeltsin said: 'Some explanations that we hear imply that this is "expansion of stability" just in case developments in Russia go the undesirable way. If this is the reason why some want to move the NATO area of responsibility closer to the Russian borders, let me say this: it is too early to give up on democracy in Russia'. Address by President of the Russian Federation at the CSCE Summit, 5 Dec. 1994.

¹⁴⁴ Statement by President Lech Walesa of Poland. Budapest, 5 Dec. 1994.

¹⁴⁵ CSCE, Budapest Document 1994 (note 95). The Budapest Document 1994 is accompanied by the following Decisions: Strengthening the CSCE; Regional issues; Further development of the capabilities of the CSCE in conflict prevention and crisis management; Code of conduct. The 4 nuclear powers in the OSCE region made statements consistent with the negotiations on the CTB.

4. OSCE political consultative and decision-making bodies will be strengthened.

5. A Code of Conduct on Politico-Military Aspects of Security that set forth principles guiding the role of armed forces in democratic societies was established.

6. Full implementation and indefinite and unconditional extension of the Treaty on the Non-Proliferation of Nuclear Weapons will be pursued.

7. Discussion on a model of common and comprehensive security for Europe for the next century will be initiated.

V. Concluding remarks

1. There are enough security structures in Europe and there is no need to create new ones. NATO, the EU, the WEU and the OSCE do and will play a central and vital role in ensuring security. They would be able to end, limit and prevent future outbreaks of armed conflicts in Europe provided that: (a) this multi-layered system is not tantamount to a division of Europe into different levels of security; (b) active US involvement is an integral part of Europe's security system; an unstable Europe would threaten essential national security interests of the United States;¹⁴⁶ (c) Russia is the biggest military power on the European continent; no cooperative regime can be expected to work without comprehensive cooperation and a security partnership with Russia;¹⁴⁷ and (d) the common system of values and the code of conduct as valid within the OSCE play a significant role in building this perceived cooperative security regime. In the search for a common and comprehensive security order for Europe, the shaping of democratic institutions and civil societies is as important as the political, military, humanitarian and economic dimensions.¹⁴⁸

2. A security system is determined by threats, on the one hand, and ways and means of warding off, reducing or eliminating such threats, on the other. In the post-cold war era, multilateral security structures in Europe have to respond to menaces other than those of the past. The danger of a massive attack from the East has been effectively removed from the security agenda for the foreseeable future. In its place, local and regional conflicts have emerged, conflicts which in the past were qualified as 'internal affairs'. They constitute a major source of instability for individual states, their territorial integrity and political independence, and a challenge for the security of Europe as a whole. They can be a spillover of regional conflicts or an effect of a neo-imperialist policy of expansionism directed at neighbours. They can also result from seeking to organize a security system based on imposed hege-

¹⁴⁶ Holbrooke, R., 'America, a European power', *Foreign Affairs*, vol. 74, no. 2 (Mar./Apr. 1995), pp. 38-51.

¹⁴⁷ Brzezinski, Z., 'The premature partnership', *Foreign Affairs*, vol. 73, no. 2 (Mar./Apr. 1994), p. 67; and Brzezinski, Z., 'A plan for Europe', *Foreign Affairs*, vol. 74, no. 1 (1995), p. 26.

¹⁴⁸ Jean Monnet rightly observed: 'Nothing is possible without men, but nothing is lasting without institutions'. Holbrooke (note 146), p. 51.

monic policy, which, as a consequence, might lead to a new division of the continent into different zones of influence. In short, the move from totalitarianism to democracy is accompanied by instability inside states; this applies in particular to multinational states. All European multilateral security institutions are at the beginning of such fundamental transformations which would enable them to manage the change in Europe.

3. In autumn 1995 NATO will, as a result of the debate already initiated, take a decision on how to expand the Alliance eastwards. The NATO position will be subject to bilateral consultations and agreements with the PFP states. These decisions are expected to be made in Brussels in December 1995. The main criteria are not questioned: (a) NATO expansion must strengthen security in the entire region, including for non-members; (b) the enlargement process should be transparent and should not give the impression of being aimed at anyone; it should be an action *in favour of*, not *against* security; (c) only Alliance members and the states concerned may take decisions in this regard, sovereignly and in accordance with NATO procedures; and (d) new members should meet the criteria laid down in the 1949 Washington Treaty: they should be guided by the rule of law, pluralistic democracy and market economy, and they should adopt equal obligations and make a relevant contribution to the security policy of the entire Alliance.¹⁴⁹

4. The main sources of instability in Europe stem from the economic troubles and political volatility of the new democracies. With the lack of anchorage in the stable Western democracies, it is not unusual for nationalist and populist programmes to gain the upper hand and for border disputes or ethnic and national minority conflicts to break out. For this reason the priority in shaping a multilateral security system is inclusion of the reforming CEE states into the strategy of interlocking national interests and the mutually reinforcing Western security institutions.

Reviewing the activities of multilateral security structures leads to the conclusion that the structural and procedural changes sought, while essential, do not absolve states from the responsibility for or the necessity of making decisions adequate to existing and new threats.¹⁵⁰ Just as important as the new menaces is putting into practice the decisions and commitments already taken under international law .

¹⁴⁹ Holbrooke (note 146), p. 45.

¹⁵⁰ The following six scenarios for the use of armed forces by France, presented by the French White Paper *Livre blanc sur la défense 1994* (note 74), reflect the main hypothetical uses of armed forces in the absence of a clearly identified enemy or an easily measurable threat: (a) a regional conflict which does not affect the vital interests of France; (b) a regional conflict which may affect France's vital interests; (c) a detriment to the integrity of state territory outside metropolitan France; (d) actions undertaken on the basis of bilateral defence treaties; (e) operation in support of peace and international law; and (f) emergence of a major threat to Western Europe.

Appendix 8A. Documents on European security

NOORDWIJK DECLARATION

Noordwijk, 14 November 1994

Excerpts

1. To mark a new step on the path towards enhanced cooperation in the field of security and defence in Europe, Ministers of Foreign Affairs and Defence meet today in Noordwijk, the Netherlands, for the first time with the participation of their colleagues from the nine Associate Partner countries in the Ministerial Council of Western European Union.

I.

2. Ministers reaffirm their countries' dedication to the principles upon which the democracies are based and are resolved to preserve peace, stability and freedom in Europe and elsewhere. They recall that the construction of an integrated Europe will remain incomplete as long as it does not include security and defence.

3. The Modified Brussels Treaty and the Treaty on European Union were important steps in this process. Inspired by the same ideals, other States are progressively being associated with WEU and the European Union.

4. The Ministerial meetings in Petersberg, Rome, Luxembourg and Kirchberg have set the stage for the revitalization of WEU, as the defence component of the European Union and as a means to strengthen the European pillar of the Alliance, in its development as an effective defence organization with full operational capacities to carry out the Petersberg tasks.

5. Ministers endorsed the document approved by the Permanent Council, containing the preliminary conclusions on the formulation of a Common European Defence policy. They are determined to elaborate to the full the recommendations and considerations contained therein so that an effective Common European Defence Policy can be established in the years to come. The aim of WEU Ministers is that the present policy document will evolve into a comprehensive Common European Defence Policy Statement in the perspective of the Intergovernmental Conference of 1996.

6. Ministers considered that WEU member countries, associate members, associate partners and observers should now reflect in common on the new European security conditions, with due regard for the work already undertaken, in order to arrive at a common analysis of the problems, including those related to the security and stability of the Mediterranean basin, with which they are faced and to reach agreement as to the appropriate responses. Ministers asked the Permanent Council to initiate reflection in this area, including the proposal put forward by France to draft a White Paper on European security.

7. Ministers agreed to consider the possibility of holding a WEU meeting at Summit level before the IGC in order to finalize its political input to the Conference.

8. Ministers stressed their intention to continue to work together in close association with the North American allies. The security of the Alliance and of Europe as a whole is indivisible. The transatlantic partnership rests on a shared foundation of values and interests. Just as the commitment of the North American democracies is vital to Europe's security, a free, independent and increasingly more united Europe will contribute to the security of North America.

9. Further reinforcement of the European pillar of the Atlantic Alliance and of WEU's role in peacekeeping and crisis management will permit Europe to contribute to peace and security in a manner which will strengthen the transatlantic partnership.

II.

10. Ministers feel that the participation of Associate Partners in the meetings of the Council, according to the Kirchberg arrangements, contributes to a true strengthening of WEU and they are convinced that their greater participation in WEU activities and closer consultations and further cooperation on security questions are instrumental in enhancing stability in Europe. They express their satisfaction with the progress made in implementing the agreement on the content and modalities of a Status of Association reached at their Kirchberg meeting and asked the Permanent Council to exploit fully the

possibilities provided in those agreements, in particular those relating to the participation of Associate Partners in working groups and liaison arrangements with the Planning Cell. Ministers are resolved to continue in this direction, thus complementing developments in the European Union. They also express their appreciation of the readiness of some Associate Partners to contribute to WEU operations.

11. Ministers also reviewed the progress made in implementing the decisions taken at Kirchberg on 9 May 1994 to reinforce the relationship of the Associate Members with WEU. They express their satisfaction that Associate members are now in the process of nominating Forces answerable to WEU and officers to the Planning Cell, and are being connected to the WEUCOM network. These measures will considerably strengthen the significant contribution Associate Members are already making to WEU.

12. Ministers warmly welcome the successful outcome of the referenda in Austria, Finland and Sweden on their accession to the EU and they reiterate their hope that Austria, Finland, Sweden and Norway will accede to the EU by 1 January 1995. Bearing in mind the WEU declaration of Maastricht, they are looking forward to discussing with them their relations with WEU once they become members of the EU.

13. Ministers attach great importance to security and stability in the Mediterranean basin, which are fundamental for the security of Europe, and express satisfaction at the intensified dialogue that is being conducted on the basis of decisions taken at Kirchberg. In this respect, they note the encouraging results of the first meetings of the Mediterranean Group with government experts from Algeria, Egypt, Mauritania, Morocco and Tunisia. They welcome the initiative for a Presidency seminar on the subject.

14. In order to increase transparency and promote stability throughout Europe, Ministers underline the particular importance of establishing appropriate relationships with Russia and Ukraine.

15. Ministers acknowledge the constructive contributions from the Assembly to the further strengthening of European security.

III.

16. Ministers stress the importance of developing closer relations with the EU. In the light of the review of Article J.4 of the Treaty on European Union that will take

place during the Intergovernmental Conference of 1996, Ministers decide that WEU should make a timely contribution to the work of the Conference on the basis of its own review of the provisions of the Declaration on the role of WEU and its relationship with the EU and with the Atlantic Alliance of December 1991.

...

20. Ministers considered WEU's relations with NATO since the Council's move to Brussels and the Alliance Summit of January this year.¹ They agree that there is further scope for developing closer working relations between the two Organizations on the basis of transparency and complementarity. In this context, they note with satisfaction progress made in NATO's discussion on the issues and expressed their confidence that concrete proposals would be made to increase these relations by practical measures. Ministers recall the significant possibilities that the results of the Alliance Summit of January 1994 offer for the further development of WEU, and have taken note of the work done in WEU as a follow-up to these decisions. In particular they welcome the contribution WEU has made to the ongoing work in the Alliance of Combined Joint Task Forces by formulating criteria and modalities for effective use by WEU or CJTFs. They look forward to intensified cooperation in these matters, in particular between the corresponding working groups, and to further close consultations between the two Organizations, which will contribute to a further strengthening of WEU's operational role and to ensuring that the CJTF concept can be implemented to the full satisfaction of all Allies.

IV.

21. Ministers discussed the document containing preliminary conclusions on the formulation of a common European defence policy, in the longer term perspective of a common European defence policy within the European Union, which might in time lead to a common defence, compatible with that of the Atlantic Alliance. Ministers consider that the operational part of the document contains useful guidelines for direct concrete follow-

¹ Declaration of the Heads of State and Government of the North Atlantic Council, 11 Jan. 1994, reprinted in *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 268-72.

up in the respective WEU bodies. Along these lines they task the Permanent Council to proceed swiftly with further elaboration of the operational role of WEU.

V.

22. Ministers discussed the ongoing regional armed conflicts, particularly in Europe. They expressed their deep concern at the recent developments with respect to the former Yugoslavia, which at the moment present a growing risk of escalation.

...

28. Ministers believe that, at the appropriate time, the introduction of arms control and confidence-building measures, including in the political field, should be envisaged in order to help preserve peace and stability in the Balkan region. In the longer term a regime aimed at wider rehabilitation could also be considered in this context.

VI.

29. Ministers support efforts by the CSCE towards a stable and lasting peaceful solution to the conflict in Nagorno Karabakh, including the possibility of a CSCE peacekeeping operation based on the principles of Chapter III of the Helsinki Document 1992.

30. Ministers stress the importance they attach to the place of the CSCE in the European security architecture and its growing role, notably in the field of early-warning, conflict prevention and crisis management. They undertake to make the ongoing Review Conference and the forthcoming Summit in Budapest a success in terms of critically evaluating the implementation of existing standards and procedures with a view to better preparing the CSCE for its future tasks. They support proposals to enhance the CSCE's role as a regional arrangement in the sense of Chapter VIII of the UN Charter by giving it greater responsibility for conflict prevention and resolution and crisis management, in compliance with Article 53 of the UN Charter in the CSCE area.

31. Ministers note that substantial progress has been made in the field of arms control and disarmament in recent years. In the light of the new challenges, they reiterate their intention to promote all arms control measures aimed at enhancing stability and security in Europe as well as in other regions.

32. Ministers reiterate their hope that all instruments of ratification necessary for the entry into force of the Open Skies Treaty will

have been deposited at the time of the CSCE Budapest Summit. In this context, Ministers welcome the adoption of the Standing Operating Procedures for the WEU Group of States Parties. These procedures will contribute to the effective implementation of the Treaty.

33. Ministers welcome the success of the process initiated in Paris aimed at the conclusion of a Pact on Stability in Europe. The launching of the two 'regional round tables' has shown the progress that can be achieved through rapprochement between European States. This initiative is a major contribution to stability on our continent. Ministers recommend that this close cooperation aimed at the conclusion of the Pact on Stability in Europe should be continued so as actively to further good neighbourly relations in Central and Eastern Europe.

34. Ministers welcome the withdrawal of foreign troops from the Baltic States, which represents a significant contribution to the security situation in the region and enhances general stability in Europe.

VII.

35. Ministers underline the importance of developing further the operational role of WEU in accordance with the Declaration of Petersberg and the operational considerations of the document on a Common European Defence Policy.

...

39. Ministers welcome progress accomplished in bringing the European Corps up to full operational readiness and the incorporation of Spain, which has also recently subscribed to the Joint Declaration stating the conditions for the use of the Corps in the framework of WEU.

40. Ministers take note with interest of the positive development of the initiatives currently under consideration by France, Italy and Spain envisaging both an air maritime force and a ground force answerable to WEU.

41. Ministers take note with interest of the discussions of the Chiefs of Defence Staff during their meeting in The Hague of 3 November.

42. Ministers reiterate their commitment gradually to develop the Institute for Security Studies into a European Security and Defence Academy and request the Permanent Council to take this matter forward as a priority.

43. Ministers considered that the finalization of the appropriate financing arrangements was essential for the development of

WEU's operational capabilities. They tasked the Permanent Council to examine at the earliest opportunity the necessary arrangements, including the setting-up of a WEU operational budget.

Source: WEU Council of Ministers, Noordwijk, 14 Nov. 1994.

MINISTERIAL MEETING OF THE NORTH ATLANTIC COUNCIL HELD AT NATO HEADQUARTERS

Brussels, 1 December 1994

Excerpts

1. We have met today in Brussels for the first time under our new Chairman and the Alliance's new Secretary General, Mr. Willy Claes. We paid tribute to the outstanding achievements of the late Secretary General, Dr. Manfred Wörner, who served the Alliance with great distinction, leadership and vision.

2. We have noted the progress achieved in implementing the January 1994 NATO Summit decisions with regard to Partnership for Peace, our full support for the development of the European Defence and Security Identity and for the Western European Union, the development of the Combined Joint Task Forces concept, our approach to the problem of the proliferation of weapons of mass destruction and their delivery systems, and the Mediterranean region. However, much remains to be done.

3. We discussed today the essential role NATO continues to play in reinforcing stability and security in Europe. NATO has always been a political community of nations committed to promoting shared values and defending common interests. These and NATO's defensive capabilities are the firm foundation which make it possible for the Alliance to contribute to stability and cooperation in the whole of Europe. A strong trans-Atlantic partnership and a continued substantial presence of United States forces in Europe, as reconfirmed by the January Summit, are fundamental not only to guarantee the Alliance's core functions but also to enable our Alliance to contribute effectively to European security. We are committed to continuing the process of adaptation of the Alliance, which began in 1990 and was carried forward

at the Summit in the context of a broad approach to building political, military and economic stability for all European countries. We will continue to consult closely and in an open manner with all our Partners about the evolution of the security architecture of Europe.

4. Allies have already taken important steps to expand cooperation through the North Atlantic Cooperation Council and through the decisions of the January 1994 Summit, including the creation of the Partnership for Peace. Partnership for Peace is developing into an important feature of European security, linking NATO and its Partners and providing the basis for joint action with the Alliance in dealing with common security problems. Active participation in the Partnership for Peace will also play an important role in the evolutionary process of the expansion of NATO.

We are pleased with the rapid progress to date in the implementation of Partnership for Peace. Twenty-three countries so far have joined the Partnership. Ten Individual Partnership Programmes have been agreed and several more are close to completion. The Partnership Coordination Cell at Mons is fully operational and practical planning work has begun, especially with regard to the preparation for Partnership exercises in 1995. Together with Allies, eleven Partner countries already have appointed Liaison Officers at the Cell. Partner countries' representatives have taken up their dedicated office facilities in the new Manfred Wörner Wing at NATO Headquarters. We strongly encourage full Partner participation both at NATO Headquarters and in the Partnership Coordination Cell.

The three Partnership for Peace exercises held this Autumn with broad participation by both Allied and Partner nations launched a practical military cooperation that will improve our common capabilities. We will tomorrow present to our Partners a substantial exercise programme for next year. We welcome and encourage the large and growing number of exercises nationally sponsored in the spirit of Partnership for Peace. We also welcome and endorse a defence planning and review process within the Partnership, based on a biennial planning cycle, which will advance interoperability and increase transparency among Allies and Partners, and invite Partners to participate in a first round of this process beginning in January 1995.

We have also tasked the Council in Perma-

nent Session, the NATO Military Authorities and the Partnership Coordination Cell to expedite the implementation of the Individual Partnership Programmes. We reaffirm our commitment to provide the necessary resources. In this regard, we have requested the Council in Permanent Session to examine how best to allocate, on an annual basis, existing resources within the NATO budgets to support the Partnership and to report back to us at our Spring meeting. We have also noted the effort of Allies to provide substantial bilateral assistance in support of Partnership objectives and agreed to exchange information on our respective national efforts with a view to ensuring the maximum effectiveness in their use. However, all this can only supplement, not replace, the efforts of Partners to undertake the short-term and long-term planning necessary to fund their own participation in Partnership for Peace.

5. Our Heads of State and Government reaffirm that the Alliance, as provided for in Article 10 of the Washington Treaty, remains open to membership of other European states in a position to further the principles of the Treaty and to contribute to the security of the North Atlantic area. We expect and would welcome NATO enlargement that would reach to democratic states to our East, as part of an evolutionary process, taking into account political and security developments in the whole of Europe. Enlargement, when it comes, would be part of a broad European security architecture based on true cooperation throughout the whole of Europe. It would threaten no one and would enhance stability and security for all of Europe. The enlargement of NATO will complement the enlargement of the European Union, a parallel process which also, for its part, contributes significantly to extending security and stability to the new democracies in the East.

6. Accordingly, we have decided to initiate a process of examination inside the Alliance to determine how NATO will enlarge, the principles to guide this process and the implications of membership. To that end, we have directed the Council in Permanent Session, with the advice of the Military Authorities, to begin an extensive study. This will include an examination of how the Partnership for Peace can contribute concretely to this process. We will present the results of our deliberations to interested Partners prior to our next meeting in Brussels. We will discuss the progress made at our Spring meeting in The Netherlands.

7. We agreed that it is premature to discuss the time frame for enlargement or which particular countries would be invited to join the Alliance. We further agreed that enlargement should strengthen the effectiveness of the Alliance, contribute to the stability and security of the entire Euro-Atlantic area, and support our objective of maintaining an undivided Europe. It should be carried out in a way that preserves the Alliance's ability to perform its core functions of common defence as well as to undertake peacekeeping and other new missions and that upholds the principles and objectives of the Washington Treaty. In this context, we recall the Preamble to the Washington Treaty:

'The Parties to this Treaty reaffirm their faith in the purposes and principles of the Charter of the United Nations and their desire to live in peace with all peoples and all governments. They are determined to safeguard the freedom, common heritage and civilisation of their peoples, founded on the principles of democracy, individual liberty and the rule of law. They seek to promote stability and well-being in the North Atlantic area. They are resolved to unite their efforts for collective defence and for the preservation of peace and security.'

All new members of NATO will be full members of the Alliance, enjoying the rights and assuming all obligations of membership. We agreed that, when it occurs, enlargement will be decided on a case-by-case basis and that some nations may attain membership before others.

8. We affirm our commitment to reinforce cooperative structures of security which can extend to countries throughout the whole of Europe, noting that the enlargement of NATO should also be seen in this context. Against this background, we wish to develop further our dialogue and consolidate our relations with each of our Partners. Having just overcome the division of Europe, we have no desire to see the emergence of new lines of partition. We are working towards an intensification of relations between NATO and its Partners on the basis of transparency and on an equal footing. NATO's right to take its own decisions, on its own responsibility, by consensus among its members will in no way be affected.

9. A cooperative European security architecture requires the active participation of Russia. We reaffirm our strong support for the political and economic reforms in Russia, and we welcome the considerable contribu-

tions that Russia can make towards stability and security in Europe on a wide range of issues. We also reaffirm our commitment to developing a far-reaching relationship, corresponding with Russia's size, importance and capabilities, both inside and outside the Partnership for Peace, based on mutual friendship, respect and benefit, and we are encouraged by the progress and plans that have been made in the various elements of that relationship. We welcome also an initial programme of consultations and cooperation between the Alliance and Russia, on the basis of the Summary of Conclusions of 22 June 1994 agreed at the meeting of Russian Foreign Minister A. Kozyrev with the Council, in areas where Russia has a unique or particularly important contribution to make. In this context and with the aim of increasing European and global security, we propose using the opportunity of our regular Ministerial meetings to meet with Russian Ministers whenever useful. In the same spirit, we also propose that our experts discuss key issues like true partners. We welcome the completion of the withdrawal of Russian troops from Germany and the Baltic States, which represents a significant contribution to security as well as benefitting general stability in Europe. We also welcome the agreement between the Russian Federation and Moldova which provides for the withdrawal of the Russian 14th Army from the territory of Moldova.

10. We attach considerable importance to developing our relationship with Ukraine. An independent, democratic and stable Ukraine is of great importance for European security and stability. We are pleased that Ukraine was involved in the two Partnership for Peace field exercises in Poland and in The Netherlands. We look forward to the completion of its Individual Partnership Programme. We want to develop our cooperation with Ukraine still further. We welcome the Ukrainian Parliament's vote in favour of Ukraine's accession to the NPT, which is a fundamental step to enable this country to accede to the NPT as a non-nuclear weapon state.

11. We meet only four days before the Budapest CSCE Summit, a crucial opportunity to progress further towards our vision of a Europe whole and free. We will work individually and collectively to ensure that the CSCE fulfils effectively the vital role it should have in the construction of an inclusive security architecture. The Helsinki Accords and other CSCE documents remain

the basic definition of our common goals and standards, and the CSCE defines both the values and goals of a broad community of security and cooperation.

NATO respects and upholds the principles of the CSCE. The CSCE has developed useful methods for conflict prevention and preventive diplomacy which provide the important first line of efforts to attack the root causes of conflict. Much progress has been made in this direction since the 1992 Helsinki Summit, but the challenges have expanded since then.

12. As a regional arrangement under Chapter VIII of the UN Charter, the CSCE should play a key role for conflict prevention and crisis management and resolution in its area. In accordance with Article 52 of the UN Charter, CSCE Participating States should make every effort to achieve the peaceful settlement of local disputes through the CSCE before referring them to the UN Security Council. We support the objectives of the forthcoming CSCE Summit to:

- reinforce our commitment to the CSCE as the comprehensive forum for consultation and cooperation in Europe;

- strengthen further the CSCE's capabilities, including in decision-making, and effectiveness;

- adopt substantial agreements reached in the Forum for Security Cooperation: the Code of Conduct on Security Matters, the agreement on global exchange of military information and the increased focus on non-proliferation issues, together with a further enhancement of the Vienna Document on confidence-building measures, which will represent a solid step forward in the field of arms control and cooperative security;

- develop further the CSCE's capabilities in early warning, conflict prevention, crisis management and peacekeeping;

- reaffirm and strengthen the CSCE's fundamental role in the protection of human rights and the promotion of democratic institutions;

- foster good neighbourly relations through the conclusion of bilateral and regional agreements between and among Participating States; and

- enhance transparent and effective arms control and confidence-building measures throughout the CSCE area and at regional levels.

We fully support the activities of the CSCE to achieve a peaceful solution to the conflict

in and around Nagorno-Karabakh. This will be an opportunity to demonstrate the political determination of all the Participating States to put the CSCE principles into practice.

13. We welcome the success of the process initiated in Paris for the conclusion of a Pact for Stability in Europe. The launching of two 'regional tables' has demonstrated the progress that rapprochement among European states can bring. This initiative makes a substantial contribution to stability in our continent. We recommend continuation of this close co-operation for conclusion of the Pact for Stability in Europe, as an active contribution to good neighbourly relations in Central and Eastern Europe.

14. We welcome the endorsement by the WEU Council of Ministers in Noordwijk of preliminary conclusions on the formulation of the common European Defence Policy taking also into account the results of the NATO Brussels Summit. We welcome the WEU's decision to initiate reflection on the new European security conditions, including the proposal put forward by France that this should lead to a white paper on European security. We attach great importance to the process of cooperation that NATO and the WEU are engaged in, aimed at the effective implementation of the Summit results, especially with regard to the Combined Joint Task Forces (CJTF) concept and the possibility of making assets and capabilities of the Alliance available to the WEU. We take note that a report on criteria and procedures for effective use of CJTF has been prepared by the WEU and presented to a joint Council meeting of NATO and the WEU on 29 June 1994.

...

17. We remain fully committed to the indefinite and unconditional extension of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) at next year's Extension and Review Conference. We urge the other States Parties to the Treaty to do likewise. We will continue to support other ongoing efforts to strengthen the international non-proliferation system. In this context, we urge other states yet to accede to the Treaty to do so well before the upcoming NPT Conference. We will also work to enhance the verification regime for the NPT. In this context, we consider the recent 'agreed framework' between the United States and the Democratic People's Republic of Korea as a step towards bringing the Democratic People's Republic of

Korea into full compliance with its NPT commitments and as a contribution towards the maintenance of peace and stability in the region.

18. We continue to attach particular importance to full compliance with and fulfilment of all obligations resulting from existing disarmament and arms control agreements.

In this context, we welcome the successful completion of the second reduction phase of the CFE Treaty. This Treaty, which remains the cornerstone for European security and stability, must be fully and firmly implemented and its integrity must be preserved. The process of elimination of former Soviet weapons of mass destruction must rapidly be advanced further.

We welcome the contribution made by some Allies to that effect. We attach great importance to the negotiation of a universal and verifiable Comprehensive Test Ban Treaty. It is also important to achieve a universal ban on the production of fissile material for weapons purposes. We continue to consider as essential tasks the early entry into force of the Chemical Weapons Convention and the elaboration of measures to strengthen the Biological Weapons Convention. Noting the importance of the Open Skies Treaty in promoting openness and transparency of military forces and activities, we reiterate our hope that all signatories who have not yet ratified the Treaty will do so and that all instruments of ratification necessary for the entry into force of the Treaty will be deposited at the earliest possible time.

19. We reaffirm the importance we attach to developments around the Mediterranean. At our meeting in Athens we encouraged all efforts for dialogue and cooperation which aim at strengthening stability in this region. In this context, we welcome the recent positive steps in the Middle East peace process, which will help remove the obstacles to a more constructive relationship between the countries of the region as a whole. The NATO Summit in January reiterated the conviction that security in Europe is greatly affected by security in the Mediterranean. As agreed at our meeting in Istanbul, we have examined proposed measures to promote dialogue and are ready to establish contacts, on a case-by-case basis, between the Alliance and Mediterranean non-member countries with a view to contributing to the strengthening of regional stability. To this end, we direct the Council in Permanent Session to continue to review the situation, to develop the details of

the proposed dialogue and to initiate appropriate preliminary contacts.

20. We deplore the continuing conflict in Bosnia, which has brought about large-scale suffering, most recently in and around the Safe Area of Bihac. We reiterate our strong support for the continued efforts of the international community, including those of the Contact Group, in attempting to bring peace to the region. We continue to believe that the conflict must be settled at the negotiating table. We call on the Bosnian Serbs and all those forces which support them to end their offensive in Bihac and on all parties to agree to and honour a cease-fire and allow humanitarian aid to flow to that beleaguered population and throughout Bosnia-Herzegovina. The Bosnian Serbs should immediately and without conditions release all UN personnel currently being denied freedom of movement. We reaffirm our commitment to provide close air support for UNPROFOR and to use NATO air power, in accordance with existing arrangements with the United Nations. We will continue, together with the WEU, the maritime embargo enforcement operations in the Adriatic. We are determined to maintain Alliance unity and cohesion as we work together with the international community to find a just and peaceful solution in Bosnia and elsewhere in the former Yugoslavia.

21. The situation in Southern Caucasus continues to be of special concern. We welcome the ceasefire that has been established, but lasting peaceful and just solutions to on-going conflicts in the region, particularly in and around Nagorno-Karabakh, can only be reached under the aegis of the UN and through CSCE mechanisms. We hope that the CSCE will be in a position to contribute effectively to the peace process on Nagorno-Karabakh, including through the establishment of a CSCE multinational peacekeeping operation based on the principles of Chapter III of the Helsinki Document 1992.

22. We reiterate the Alliance's condemnation of international terrorism as stated at the NATO Summit in January.

23. We reaffirm our commitment to the Alliance's common-funded programmes.

We consider these programmes vital elements in underpinning our military structures, providing essential operating capability and strengthening Alliance cohesion. We have directed the Council in Permanent Session, taking account of the Fundamental Review of the Military Budget and the Civil Budget Priorities Review, to engage in a

wide-ranging examination of Alliance budgetary management, structures and procedures to ensure that the appropriate resources are directed towards the programmes which will have the highest priority and to report initially at the Spring session.

24. The Spring 1995 meeting of the North Atlantic Council in Ministerial Session will be held in Noordwijk, The Netherlands, in May.

Source: NATO Final Communiqué, Ministerial Meeting of the North Atlantic Council, Brussels, 1 Dec. 1994, Press Communiqué, M-NAC-2(94)116.

BUDAPEST DOCUMENT 1994

Budapest, 6 December 1994

Budapest Summit Declaration: Towards a Genuine Partnership in a New Era

1. We, the Heads of State or Government of the States participating in the Conference on Security and Co-operation in Europe, have met in Budapest to assess together the recent past, to consider the present and to look to the future. We do so as we approach the Fiftieth Anniversary of the end of World War II and the Twentieth Anniversary of the signing of the Helsinki Final Act, and as we commemorate the Fifth Anniversary of the fall of the Berlin Wall.

2. We believe in the central role of the CSCE in building a secure and stable CSCE community, whole and free. We reaffirm the principles of the Helsinki Final Act and subsequent CSCE documents. They reflect shared values which will guide our policies, individually and collectively, in all organizations and institutions to which we belong.

3. The CSCE is the security structure embracing States from Vancouver to Vladivostok. We are determined to give a new political impetus to the CSCE, thus enabling it to play a cardinal role in meeting the challenges of the twenty-first century. To reflect this determination, the CSCE will henceforth be known as the Organization for Security and Co-operation in Europe (OSCE).

4. The CSCE has been instrumental in overcoming barriers and in managing change throughout our region. Since we last met, there have been further encouraging develop-

ments. Most vestiges of the Cold War have disappeared. Free elections have been held and the roots of democracy have spread and struck deeper. Yet the path to stable democracy, efficient market economy and social justice is a hard one.

5. The spread of freedoms has been accompanied by new conflicts and the revival of old ones. Warfare in the CSCE region to achieve hegemony and territorial expansion continues to occur. Human rights and fundamental freedoms are still flouted, intolerance persists and discrimination against minorities is practised. The plagues of aggressive nationalism, racism, chauvinism, xenophobia, anti-semitism and ethnic tension are still widespread. Along with social and economic instability, they are among the main sources of crisis, loss of life and human misery. They reflect failure to apply the CSCE principles and commitments. This situation requires our resolute action. We must work together to ensure full respect for these principles and commitments as well as effective solidarity and co-operation to relieve suffering.

6. We recognize that societies in the CSCE region are increasingly threatened by terrorism. We reiterate our unreserved condemnation of all acts and practices of terrorism, which cannot be justified under any circumstances. We reconfirm our determination to combat terrorism and our commitment for enhanced co-operation to eliminate this threat to security, democracy and human rights.

7. The CSCE will be a forum where concerns of participating States are discussed, their security interests are heard and acted upon. We will further enhance its role as an instrument for the integration of these States in resolving security problems. Through the CSCE, we will build a genuine security partnership among all participating States, whether or not they are members of other security organizations. In doing so, we will be guided by the CSCE's comprehensive concept of security and its indivisibility, as well as by our commitment not to pursue national security interests at the expense of others. The CSCE's democratic values are fundamental to our goal of a community of nations with no divisions, old or new, in which the sovereign equality and the independence of all States are fully respected, there are no spheres of influence and the human rights and fundamental freedoms of all individuals, regardless of race, colour, sex, language, religion, social origin or of belonging to a minority, are vigorously protected.

8. The CSCE will be a primary instrument for early warning, conflict prevention and crisis management in the region. We have agreed that the participating States may in exceptional circumstances jointly decide that a dispute will be referred to the United Nations Security Council on behalf of the CSCE. We have also decided to pursue more systematic and practical co-operation between the CSCE and European and other regional and transatlantic organizations and institutions that share its values and objectives.

9. The CSCE has created new tools to deal with new challenges. In this regard, we welcome the entry into force of the Convention on Conciliation and Arbitration within the CSCE. We will further enhance the CSCE's role and capabilities in early warning, conflict prevention and crisis management, using, *inter alia*, CSCE peacekeeping operations and missions. We will provide consistent political support and adequate resources for CSCE efforts. We have agreed to strengthen the CSCE's political consultative and decision-making bodies and its executive action by the Chairman-in-Office, supported by the Troika, as well as other CSCE procedures and institutions, in particular the Secretary General and the Secretariat, the High Commissioner on National Minorities and the Office for Democratic Institutions and Human Rights. We have also decided to enhance our contacts and dialogue with the CSCE Parliamentary Assembly.

10. Continuing the CSCE's norm-setting role, we have established a 'Code of Conduct on Politico-Military Aspects of Security' that, *inter alia*, sets forth principles guiding the role of armed forces in democratic societies.

11. We welcome the adoption by the CSCE Forum for Security Co-operation of substantial measures, including a new, developed Vienna Document 1994. A compendium of related measures is annexed to Decision VI of the Budapest Document. In order to provide further momentum to arms control, disarmament and confidence- and security-building that adds to earlier decisions and agreements, we have directed it to continue its work in accordance with its mandate and to develop a framework which will serve as a basis for an agenda for establishing new measures of arms control, including in particular confidence- and security-building. We have also mandated it to address specific regional security problems, with special emphasis on longer-term stability in South-Eastern Europe.

12. In view of the new threats posed by the proliferation of weapons of mass destruction, we have agreed on basic principles to guide our national policies in support of common non-proliferation objectives. We are strongly committed to the full implementation and indefinite and unconditional extension of the Treaty on the Non-Proliferation of Nuclear Weapons. We welcome the recent statements by the four nuclear-weapon-States in the CSCE region relating to nuclear testing as being consistent with negotiation of a comprehensive nuclear test-ban treaty. We urge that all signatories to the Convention on the Prohibition of Development, Production, Stockpiling or Use of Chemical Weapons and on their Destruction complete the ratification process in the shortest possible time. We also underline the importance of an early entry into force and implementation of the Treaty on Open Skies.

13. In light of continuing rapid change, we deem it important to start discussion on a model of common and comprehensive security for our region for the twenty-first century, based on the CSCE principles and commitments. This discussion will take into account the CSCE's contribution to security, stability and co-operation. The Chairman-in-Office will present a progress report to the next Ministerial Council in 1995 in Budapest. The results of discussion on such a security model will be submitted to our next Summit Meeting in Lisbon in 1996.

14. We confirm the significance of the Human Dimension in all the activities of the CSCE. Respect for human rights and fundamental freedoms, democracy and the rule of law is an essential component of security and co-operation in the CSCE region. It must remain a primary goal of CSCE action. Periodic reviews of implementation of our commitments, fundamental throughout the CSCE, are critical in the Human Dimension. The enhanced capabilities of the Office for Democratic Institutions and Human Rights will continue to assist participating States, in particular those in transition. We underline the importance of human contacts in overcoming the legacy of old divisions.

15. We recognize that market economy and sustainable economic development are integral to the CSCE's comprehensive concept of security. We encourage the strengthening of co-operation to support the transition processes, regional co-operation and environmental responsibility. We welcome the role played by the relevant international organiza-

tions and institutions, such as the United Nations Economic Commission for Europe, OECD, EBRD and EIB, in support of the CSCE's economic dimension priorities. We are committed to enhancing the effectiveness of the Economic Forum and of the CSCE's other economic dimension activities. We ask the Chairman-in-Office to explore ways to integrate economic dimension issues into the tasks faced by the CSCE and report on progress at our next Summit Meeting.

16. We welcome the Declaration of Paris which launched the process aimed at the establishment of a Pact on Stability, as well as the intention expressed therein to entrust the CSCE with following the implementation of the Pact.

17. Strengthening security and co-operation in the Mediterranean is important for stability in the CSCE region. We welcome progress towards peace in the Middle East and its positive implications for European security. The common position adopted by Algeria, Egypt, Israel, Morocco and Tunisia on CSCE-Mediterranean relations encourages us to deepen the long-standing relationship and reinforce co-operation between the CSCE and the non-participating Mediterranean States.

18. We note with satisfaction the development of our relationship with Japan.

We welcome the interest of the Republic of Korea which has attended the CSCE Summit Meeting for the first time and of other States in the CSCE's experience and activities, and express our readiness to co-operate with them in areas of mutual interest.

19. In order to move towards a genuine partnership in a new era, we have today adopted the Budapest Decisions which will be implemented fully and in good faith.

20. We entrust the Ministerial Council with the further steps which may be required to implement them. The Council may adopt any amendment to the decisions which it may deem appropriate.

21. The full text of the Budapest Document will be published in each participating State, which will make it known as widely as possible.

22. The Government of Hungary is requested to transmit to the Secretary-General of the United Nations the text of the Budapest Document, which is not eligible for registration under Article 102 of the Charter of the United Nations, with a view to its circulation to all the members of the Organization as an official document of the United Nations.

BUDAPEST DECISIONS

Excerpt

I. STRENGTHENING THE CSCE

1. The new era of security and co-operation in Europe has led to a fundamental change in the CSCE and to a dramatic growth in its role in shaping our common security area. To reflect this the CSCE will henceforth be known as the Organization for Security and Co-operation in Europe (OSCE). The change in name will be effective on 1 January 1995. As of this date, all references to the CSCE will henceforth be considered as references to the OSCE.

2. The participating States are determined to exploit its potential to the fullest, and agreed in that spirit on the following goals and objectives along with structural changes needed to strengthen the CSCE and make it as effective as possible. The purpose is to strengthen the CSCE's contribution to security, stability and co-operation in the CSCE region so that it plays a central role in the promotion of a common security space based on the principles of the Helsinki Final Act.

3. The Heads of State or Government have directed that the future role and functions of the CSCE will include the following:

4. – to make vigorous use of its norms and standards in shaping a common security area;

5. – to ensure full implementation of all CSCE commitments;

6. – to serve, based on consensus rules, as the inclusive and comprehensive forum for consultation, decision-making and co-operation in Europe;

7. – to enhance good-neighbourly relations through encouraging the conclusion of bilateral regional and potential CSCE-wide agreements or arrangements between and among participating States;

8. – to strengthen further the CSCE's capacity and activity in preventive diplomacy;

9. – to further its principles and develop its capabilities in conflict resolution, crisis management and peacekeeping and in post-conflict rehabilitation, including assisting with reconstruction;

10. – to enhance security and stability through arms control, disarmament and confidence- and security-building throughout the CSCE region and at regional levels;

11. – to develop further CSCE work in the field of human rights and fundamental freedoms and other areas of the human dimen-

sion;

12. – to promote co-operation among participating States to establish strong market-based economies throughout the CSCE region;

13. – to enhance further the CSCE's problem-solving activities and abilities taking into account the whole spectrum of its responsibilities as they have developed after the adoption of the Helsinki Final Act in order to meet the new challenges and risks.

14. To accomplish these objectives, the CSCE will function as follows:

15. The next Meeting of Heads of State or Government will take place in 1996 in Lisbon preceded by a preparatory meeting. The Summit will decide on the frequency of future Summit meetings.

16. The Ministerial Council (formerly the CSCE Council) as the central decision-making and governing body of the CSCE will meet, as a rule, towards the end of every term of chairmanship at the level of Foreign Ministers.

17. The Senior Council (replacing the Committee of Senior Officials) will meet in Prague twice a year, at the minimum. An additional meeting will be held before the Ministerial Council Meeting. The Senior Council will discuss and set forth policy and broad budgetary guidelines. The participating States are encouraged to be represented at the level of political directors or at a corresponding level. The Senior Council will also be convened as the Economic Forum.

18. The Permanent Council (formerly the Permanent Committee) will be the regular body for political consultation and decision making. It can also be convened for emergency purposes. It will meet in Vienna and be composed of the permanent representatives of the participating States.

19. Overall responsibility for executive action will remain with the Chairman-in-Office (CIO). The CIO will continue to take full advantage of his/her mandate, *inter alia*, by dispatching personal representatives. The CIO will be assisted by the Troika. The term of chairmanship will normally last one calendar year.

20. The Secretary General will continue to take full advantage of his/her mandate and in support of the CIO will be more actively involved in all aspects of the management of the CSCE. He/she participates in Troika ministerial meetings.

21. The continuation of the activities of the High Commissioner on National Minorities

will be supported and his/her resources will be enhanced. The participating States will increase their efforts to implement his/her recommendations.

22. The work of CSCE missions will be given political support and follow-up from the Permanent Council. In order to ensure the fulfilment of their tasks the necessary human and financial resources will be committed by the participating States.

23. The CSCE Office for Democratic Institutions and Human Rights will be strengthened in playing an important role in CSCE activities.

24. The CIO will continue to maintain close contacts and an active dialogue with the Parliamentary Assembly (PA). The CIO will draw the recommendations of the PA to the attention of the Permanent Council and inform the PA on the activities of the CSCE.

25. The current mode of review of implementation of all CSCE commitments will be maintained. The review meeting before each Summit will be held in Vienna.

26. The CSCE will enhance co-operation with the United Nations and European and other regional and transatlantic organizations while avoiding duplication of effort. As participants in regional arrangement under Chapter VIII of the Charter of the United Nations, CSCE participating States will make every effort to achieve pacific settlement of local disputes before referring them to the United Nations Security Council.

27. As a comprehensive framework for security the CSCE will be ready to act as a repository for freely negotiated bilateral and multilateral arrangements and agreements and to follow their implementation if requested by the parties.

28. The CIO will prepare a consolidated text on decisions concerning CSCE structures and institutions by the Budapest 1995 Ministerial Council Meeting.

29. The change in name from CSCE to OSCE alters neither the character of our CSCE commitments nor the status of the CSCE and its institutions. In its organizational development the CSCE will remain flexible and dynamic. Work will be continued on issues relating to further institutional development of the CSCE including strengthening and rationalization of its instruments and mechanisms. The CSCE will regularly review its goals, operations and structural arrangements. The CSCE will review implementation of the Rome Decision on Legal Capacity and Privileges and Immu-

nities and explore if necessary the possibility of further arrangements of a legal nature. Participating States will, furthermore, examine possible ways of incorporating their commitments into national legislation and, where appropriate, of concluding treaties.

(...)

Source: Budapest Summit Meeting of the CSCE, Budapest, 6 Dec. 1994.

REPORT FROM THE COUNCIL TO THE ESSEN EUROPEAN COUNCIL ON A STRATEGY TO PREPARE FOR THE ACCESSION OF THE ASSOCIATED CCEE

Essen, 11 December 1994

Excerpts

I. Introduction

The European Council meeting of Copenhagen in June 1993 agreed that the associated countries in Central and Eastern Europe that so desire shall become members of the European Union. Accession will take place as soon as the associated country is able to assume the obligations of membership by satisfying the economic and political conditions required as set out in the conclusions of that meeting. The Union's capacity to absorb new members, while maintaining the momentum of European integration and respecting its internal cohesion and its fundamental principles is also an important consideration in the general interest of both the Union and the candidate countries.

The associated countries have made remarkable progress on the road to political and economic reform. Consistency in this reform course is the key to successful integration into the EU.

The associated countries need to prepare for membership and to strengthen their capacity to assume the responsibilities of a member state. On the European Union side, the institutional conditions for ensuring the proper functioning of the Union must be created at the 1996 Intergovernmental Conference, which for that reason must take place before accession negotiations begin. In addition, the Council wishes to have at its disposal a detailed analysis carried out by the Commission on the impact of enlargement in the

context of the current policies of the Union and their development.

The European Council in Corfu asked the Presidency and the Commission to report to it for its next meeting on progress made on the process of alignment since the Copenhagen European Council, and on the strategy to be followed with a view to preparing for accession.

The main instruments of this strategy already exist. They are the structured relations with the institutions of the Union, as decided upon in Copenhagen, and the Europe Agreements. These agreements build a flexible and dynamic framework for various forms of cooperation. As Europe Agreements with additional states are concluded by decision of the Council, those states will be brought into this strategy.

The goal of the strategy presented here is to provide a route plan for the associated countries as they prepare for accession. The essential element of the strategy is their progressive preparation for integration into the internal market of the European Union, through the phased adoption of the Union's internal market acquis. This strategy will be supported by the implementation of policies to promote integration through the development of infra-structure, cooperation in the framework of the trans-European networks, the promotion of intra-regional cooperation, environmental cooperation, as well as the Common Foreign and Security Policy, cooperation in the areas of judicial and home affairs, and in culture, education and training. This integration will be supported by the Union's PHARE programme which will develop on an indicative basis into an enhanced medium-term financial instrument with improved possibilities to promote infra-structure development and intra-regional cooperation. It is recognised that the Community acquis and Community policies will themselves continue to develop.

Politically the strategy will be realised through the development of a structured relationship between the associated countries and the Union. This will promote an atmosphere of mutual confidence and allow for the consideration of issues of common interest in a specially created framework.

This strategy will be realised through the following measures.

(...)

VI. Common Foreign and Security Policy

The structured relationship covering Common Foreign and Security Policy is especially important as a means for overcoming the widespread sense of insecurity in Central and Eastern Europe. It can reinforce efforts in the framework of the Western European Union, NATO and the partnership for peace, the Conference on Security and Cooperation in Europe and the stability pact, to increase security and stability throughout Europe. The Union and the associated countries have a common interest in preventing conflicts related to issues such as borders and frontiers, and should consult frequently on foreign and security policy issues of mutual concern.

Achievements in this field of cooperation have been considerable. The multilateral political dialogue with the associated countries is being intensified starting with the Conclusions of the Copenhagen European Council June 1993 and aiming now at acquainting the associated countries with procedures used within the EU and at the same time giving them an opportunity to be associated with Union actions.

The General Affairs Council in its 7 March 1994 meeting decided not only to further reinforce and broaden the dialogue at all levels — but also to open the possibility for the associated countries to align themselves with certain CFSP activities of the Union: statements, demarches and joint actions. Practical guidelines on implementation of this were drawn up in consultation with the associated countries in October 1994.

This process can be built upon, and cooperation made more focused and substantive, by identifying priority themes at the beginning of each Presidency.

(...)

Source: Presidency Conclusions, European Council Meeting on 9 and 10 December 1994 in Essen, Annex 4.

Part II. Weapons and technology proliferation, 1994

Chapter 9. Inventories of fissile materials and nuclear weapons

Chapter 10. Chemical and biological weapons: developments and destruction

Chapter 11. Military technology: the case of China

9. Inventories of fissile materials and nuclear weapons

DAVID ALBRIGHT, WILLIAM M. ARKIN, FRANS BERKHOUT, ROBERT S. NORRIS and WILLIAM WALKER*

I. Introduction

The year 1994 may have marked a turning-point in the development of nuclear warheads and weapon systems. Beyond the implementation of long-established modernization programmes, the UK and the USA have no plans for developing or deploying new weapon designs. Research and development (R&D) on nuclear weapons has a decidedly end-of-era feeling as they accommodate themselves to the likely agreement on a comprehensive nuclear test ban (CTB).¹ Even in China and France, where there has been resistance to an early CTB because of the modernization of their nuclear arsenals, the commitment to technological development may be waning in this field.² The nuclear arms race appears to have been largely halted, at least among the established nuclear weapon states.³ As a result, SIPRI has concluded that detailed discussion of nuclear weapon developments is less important than in the past and such developments are more appropriately reported under the rubric of arms control and disarmament in part IV of the Yearbook.⁴

Nevertheless, nuclear disarmament carries its own risks. The weapons have to be dismantled and their components stored, programmes have to be established for disposing of the surplus nuclear weapon material and steps must be taken to improve physical security in nuclear weapon states and extend international safeguards to cover their activities. The nuclear arms reductions being undertaken by the nuclear weapon states do not necessarily reduce the threat of nuclear proliferation, nor do they amount to complete nuclear disarmament. Civil nuclear programmes are also giving rise to increasing quantities of plutonium which could find its way into the wrong hands. In response, safeguards agencies are taking a number of steps to strengthen safeguards on civil programmes.

¹ See chapter 19 in this volume.

² See chapter 12 in this volume.

³ See chapter 18 in this volume.

⁴ See chapters 16–18 in this volume. For details of nuclear weapon developments in the former Soviet Union, see De Andreis, M. and Calogero, F., *The Soviet Nuclear Weapon Legacy*, SIPRI Research Report no. 10 (Oxford University Press: Oxford, forthcoming 1995).

* The inventories of plutonium and highly enriched uranium presented in section II were prepared by David Albright, Frans Berkhout and William Walker. Robert S. Norris and William M. Arkin prepared the tables of nuclear forces in section III. The chapter was coordinated at SIPRI by Eric Arnett.

In these circumstances, transparency has become an increasingly important objective of nuclear non-proliferation policy. As a contribution towards it, this chapter summarizes the results of the most recent independent efforts to assess world inventories of fissile materials and nuclear warheads. Appendix 9A provides background information on the characteristics of plutonium and highly enriched uranium and the sources of information used in drawing up inventories of these materials.

II. Inventories of plutonium and highly enriched uranium⁵

The central estimates of the world inventories of plutonium and highly enriched uranium (HEU) at the end of 1993, rounded to two significant figures, are: for plutonium, 1100 tonnes; and for HEU, 1700 tonnes.⁶

Precise error margins cannot be attached to these figures. Error margins of plus or minus 10 per cent for plutonium, and plus or minus 25 per cent for HEU, seem appropriate. These margins are strongly influenced by uncertainties over the sizes of military inventories in the nuclear weapon states, and in Russia in particular. The above inventory of plutonium excludes material that has not yet been discharged from operating commercial power reactors. Approximately 120 tonnes of plutonium are currently held in partially irradiated nuclear fuel in power reactor cores. The HEU inventory does not include material dedicated to naval reactors, which accounts for roughly another 100–200 tonnes of HEU.

Plutonium inventories

Plutonium inventories are broken down in tables 9.1 and 9.2, which present central estimates—the median of the range of most likely estimates. It is shown that the plutonium assigned to nuclear weapons comprises just under one-quarter of the world stock of plutonium. Nearly two-thirds is held in unprocessed spent fuels discharged from civilian power reactors. Figures for plutonium in the nuclear weapon states (NWS) parties to the 1968 Treaty on the Proliferation of Nuclear Weapons (NPT)⁷ are presented for the end of 1993 because that is the last date for which comprehensive estimates can be assembled. Estimates for threshold states and highly enriched uranium are to the end of 1994.

⁵ The estimates in the text and in tables 9.1–9.4 are drawn from Albright, D., Berkhout, F. and Walker, W., SIPRI, *Plutonium and Highly Enriched 1995: World Inventories, Capabilities and Policies* (Oxford University Press: Oxford, forthcoming 1995).

⁶ Measured in terms of weapon-grade uranium equivalent. See appendix 9A.

⁷ Article IX, para. 3 of the NPT defines a nuclear weapon state as one 'which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 Jan. 1967'.

Table 9.1. Central estimates of plutonium inventories, by NPT status, end of 1993Figures are tonnes of total plutonium.^a

| | NPT NWS | NPT NNWS ^b | Non-NPT states | Total |
|---------------------------------|------------|--------------------------|-------------------|--------------|
| <i>Military plutonium</i> | | | | |
| Weapon-grade | 227 | 0.03 | 0.8 | 228 |
| Reactor- and fuel-grade | 22 | .. | .. | 22 |
| Sub-total | 249 | 0.03 | 0.8 | 250 |
| <i>Civil plutonium</i> | | | | |
| In spent reactor fuels | | | | 701 |
| By ownership | 361 | 329 | 11 | |
| By location | 433 | 257 | 11 | |
| Separated plutonium | | | | 110 |
| By ownership | 89 | 21 | 0.2 | |
| By location | 100 | 10 | 0.2 | |
| Recycled plutonium | 17 | 17 | 0.1 | 34 |
| Sub-total (by ownership) | 467 | 367 | 11 | 845 |
| Sub-total (by location) | 550 | 284 | 11 | 845 |
| Total (by ownership) | 716 | 367 | 12 | 1 095 |
| Total (by location) | 799 | 284 | 12 | 1 095 |

^a 'Total plutonium' records all isotopes present in a given quantity of material, as distinct from 'fissile plutonium' which excludes the non-fissile isotopes ²³⁸Pu, ²⁴⁰Pu and ²⁴²Pu. In nuclear commerce, 'fissile plutonium' is the common measure. 'Total plutonium' is used here for clarity and because it is the standard measure adopted by safeguards agencies.

^b Includes non-Russian states formed after the breakup of the USSR, all of which have now acceded to the NPT. Substantial quantities of plutonium in spent reactor fuel are located in Lithuania and Ukraine in particular. Quantities of weapon-grade plutonium in nuclear weapons located at the end of 1993 in Belarus, Kazakhstan and Ukraine are included in the Russian inventory, and are thus included in the first column. The quantity of military plutonium for NPT non-nuclear weapon states (NNWS) is that possessed by North Korea. This quantity is still outside IAEA safeguards. The precise amount is unknown, but about 25–30 kg is believed to be contained in spent fuel and another 6–13 kg may be in separated form.

Military plutonium

Around 250 tonnes of plutonium are currently held in military stocks.⁸ The total production for military purposes was closer to 280 tonnes, the difference having been lost in wastes or consumed in weapon testing. The 22 tonnes of reactor- and fuel-grade plutonium in military arsenals were produced in US and British production reactors which have at various times been optimized to produce electricity through submitting their fuels to higher burnups. This material has been retained in the US and British military inventories.⁹

⁸ Estimates of military plutonium inventories are based mainly on knowledge of the technical characteristics of production reactors and their operating histories. In the Russian case this has been cross-checked with estimates derived by the krypton-85 method, still regarded by the US Government as the most reliable technique for assessing Russian military stocks of separated plutonium. In the US case, detailed information has been provided by the US Department of Energy.

⁹ Some fuel-grade plutonium from these reactors was blended in the 1980s with 97 per cent ²³⁹Pu to increase US supplies of weapon-grade plutonium.

Table 9.2. NWS and threshold states' inventories of weapon-grade plutonium and uranium, after losses and draw-downs, with error margins

Figures are central estimates, in tonnes.

| State or region | Plutonium (31 Dec. 1993) | Highly enriched uranium (weapon-grade equivalent) (31 Dec. 1994) |
|-----------------|-----------------------------|--|
| FSU | 131 ± 20% | 1025 ± 30% |
| USA | 85 ± 3% | 640 ± 10% |
| France | 4.8 ± 30% | 25 ± 20% |
| China | 3.5 ± 50% | 20 ± 25% |
| UK | 2.4 ± 20% | 10 ± 25% |
| Israel | 0.44 ± 25% | — |
| India | 0.35 ± 40% | — |
| Pakistan | — | 0.2 ± 30% |
| North Korea | 0.03 ± 20% | — |

All the NWS are believed to have halted plutonium production for weapons, although only the UK, the USA and Russia have officially announced such a halt. Russia continues to produce and separate weapon-grade plutonium.¹⁰ In a June 1994 agreement with the USA, which is yet to be ratified, Russia pledged not to use this plutonium in weapons and to shut down its last three production reactors by the end of the century. French and Chinese officials have said that their plutonium production for weapons has ceased, but no official announcements have been made.

All the NPT NWS have agreed to pursue a universal ban on the production of plutonium and HEU for nuclear weapons. The Conference on Disarmament (CD) established a committee in late March 1995 to negotiate a worldwide ban on fissile material production for weapons.¹¹ Reflecting divisions between the NWS and some of the threshold states, the CD was unable to agree on the exact scope of a future treaty, leading to few expectations of rapid progress on a treaty.

Much the largest inventories of weapon-grade plutonium are held by Russia and the USA. The quantities in the other three NPT NWS are smaller, reflecting the more modest scales of their nuclear arsenals.

The British, Chinese, French and Russian inventories all carry large error margins. The US figures are the most reliable, but the Department of Energy's 1993 Openness Initiative still has not gone sufficiently far to allow precise figures to be assembled. This is mainly because of uncertainties about pluto-

¹⁰ It was widely believed that Russia had stopped producing plutonium for weapon purposes in the early 1990s. However it now appears that Russia continued to produce plutonium for weapons until the autumn of 1994. Russia informed the USA in Dec. 1994 that 'on October 1, 1994, the Russian side terminated the use in weapons production of plutonium produced at' the three remaining dual-purpose reactors at Tomsk-7 and Krasnoyarsk-26. See Mikhailov, V. and O'Leary, H., Joint Russian-American Commission on Economic and Technologic Cooperation (The Gore/Chernomyrdin Commission), Report of the Nuclear Energy Committee, Moscow, 14-16 Dec. 1994, p. 1.

¹¹ Conference on Disarmament document CD/1299, 24 Mar. 1995.

mium losses and the undisclosed quantities of weapon-grade plutonium that the USA has imported from the UK in exchange for HEU and tritium. It is likely that the British and French governments have records of their plutonium inventories that approach the accuracy of the US figures. The high error margins arise here from the secrecy surrounding the British and French inventories, and the unusual difficulty in assessing them.¹² The Russian Government seems unable at present to define accurately the size, location and form of its plutonium inventory. It is unclear, for instance, whether a central inventory of weapon materials is kept by the Russian Government. Figures presented here were derived using a number of independent methods. The Chinese inventory should be regarded as particularly speculative, as there is still little information available on its fissile material production facilities or their operating histories.

Plutonium in the threshold states

The only countries in which the production of plutonium for military purposes may still be occurring are India and Israel, estimated to have accumulated stocks of about 350 kg and 440 kg of weapon-grade plutonium respectively.¹³ Together, these countries may be producing about 35–55 kg of weapon plutonium annually.

North Korea has frozen its plutonium production under an October 1994 framework agreement with the USA. Until that agreement was signed, North Korea accumulated enough weapon-grade plutonium for at least four to five nuclear weapons. A known quantity of about 25–30 kg of weapon-grade plutonium is in spent fuel, currently stored near a small, 25-Megawatt-thermal (MWth) reactor. North Korea may have produced another 6–13 kg of weapon-grade plutonium in this reactor and secretly separated it in a nearby plutonium separation plant in 1989–91.

Civil plutonium

Plutonium is an unavoidable by-product of the irradiation of uranium fuels in nuclear reactors. After a number of years in the core, the fissile content of nuclear fuel becomes depleted and has to be replaced if power outputs are to be maintained. The irradiated or spent fuel is then discharged from the reactor and stored. As a fissile material, plutonium has energy value which can be recovered by recycling it in nuclear reactors. The plutonium must first be

¹² In the British case the largest source of uncertainty is the amount of weapon-grade plutonium that has been transferred to the USA. Uncertainties over the French inventories derive *inter alia* from the lack of public information on the quantities of plutonium derived from dual-purpose thermal and fast reactors that have been allocated to military stockpiles.

¹³ The best estimate of the range around the above central estimate for Israel is 320–560 kg. The large range reflects a lack of information about the power of the Dimona reactor and its operating history. Higher estimates were calculated, up to almost 900 kg of plutonium, but it was concluded that such estimates are not consistent with available information.

Table 9.3. Civil plutonium separation and use to the end of 1993

Central estimates are kilograms of total plutonium.

| Country | Plutonium separated | Plutonium use | | Plutonium balance ^a | |
|--------------|---------------------|--------------------|------------------|--------------------------------|---------------------|
| | | Fast reactors | Thermal reactors | By ownership | By location |
| Belgium | 1 200 | 0 | 600 | 600 | 3 500 ^b |
| France | 34 100 | 5 600 ^c | 7 100 | 21 400 | 30 900 ^d |
| Germany | 18 400 ^e | 1 500 ^f | 6 000 | 10 900 | 1 800 |
| India | 350 | ~ 100 | < 10 | 250 | 250 |
| Italy | 2 800 ^g | 3 700 ^h | < 50 | -900 | 0 |
| Japan | 13 700 ⁱ | 3 600 ^j | < 50 | 10 100 ^k | 4 700 |
| Netherlands | 800 | 0 ^l | ~ 100 | 700 | 0 |
| Russia | 26 500 | 0 ^m | 0 | 26 500 | 26 500 |
| Switzerland | 600 | 0 | 1 200 | -600 | 0 |
| UK | 43 900 ⁿ | 4 700 ^o | 0 | 39 200 ^p | 40 500 ^q |
| USA | 1 500 | 0 ^r | 0 | 1 500 | 1 500 |
| Total | 143 900 | 19 200 | 15 000 | 109 700 | 109 700 |

^a The surplus includes material which has been fabricated into MOX fuel but not yet inserted into a reactor. This approach is used by the Japanese Atomic Energy Commission in publishing its plutonium inventory figures in late 1994. See 'Atomic energy White Paper unveils conditions of Japan's plutonium inventory', *Atoms in Japan*, Nov. 1994, pp. 4-7.

^b Material in store at Dessel in the form of plutonium oxide powder, fresh LWR-MOX fuel, and Kalkar fuel.

^c This does not include 6.2 t of total plutonium embedded in fabricated MOX fuel for Phénix and Superphénix which has not been inserted into those reactors.

^d Includes material separated from Belgian, German, Japanese and Swiss fuel not yet returned to the country of origin.

^e This includes some 750 kg of plutonium imported from the USA for fast reactor use.

^f Does not include plutonium used to produce the first core for the Kalkar reactor.

^g Includes some 130 kg of plutonium imported from the USA for fast reactor use.

^h This represents the 33% stake held by the Italian utility in the Superphénix reactor.

ⁱ Includes some 160 kg of plutonium imported from the USA as a critical assembly.

^j Includes plutonium used to fuel the Fugen ATR, but not material used to fuel the Monju fast reactor (about 1200 kg) since this reactor did not start operation until early 1994.

^k The Japanese plutonium inventory at the end of 1993 stood at 10 880 kg of total plutonium. However, this included an amount of material allocated to Japanese utilities by Cogema at La Hague which had not been separated from Japanese fuel. This amount is here estimated to be about 700 kg. The total amount of plutonium stored at La Hague and Sellafield was 6197 kg.

^l The Dutch stake in Kalkar FBR fuel is about 200 kg.

^m Most of the plutonium used in Russian fast and experimental reactor MOX tests is of military origin. See Solonin, V. N., 'Utilization of nuclear materials released as a result of nuclear disarmament', Paper presented to the International Symposium on Conversion of Nuclear Warheads for Peaceful Purposes, Rome, 15-17 June 1992.

ⁿ This includes material separated at Windscale/Sellafield since Mar. 1971 from Magnox power reactors and from UK Atomic Energy Authority (UKAEA) reactor fuel. Material separated before 1971 was not formally designated as 'civil' and has not been included by the British Government in its annual inventory declarations.

^o Assumes that about 800 kg of the 5 t currently in the Prototype Fast Reactor (PFR) fuel cycle came from the UKAEA's stock composed of plutonium separated from Magnox power

reactor fuel between 1969 and Mar. 1971. It is estimated that a further 300 kg of this inventory is currently in process at Sellafield.

^p At the end of Mar. 1994 the British Government announced that the inventory of civil plutonium in Britain amounted to 40 t. It is estimated that in Jan.–Mar. 1994 about 800 kg were separated at B205, the British reprocessing plant dealing with Magnox fuel.

^q Includes 1.7 t of plutonium separated from Japanese and Italian magnox fuel, but not repatriated.

^r A zero is inserted here because the 6.7 t of plutonium used to fuel the US Zero Power Plutonium Reactor and Fast Flux Test Facility came mainly from British Magnox reactors under the provisions of the US–UK Mutual Defence Agreement, or was produced by the ‘N’ military reactor at Hanford in Washington State.

made available by separation from spent fuel through reprocessing. The separated plutonium (typically in the form of plutonium oxide powder) can then be fabricated into plutonium–uranium mixed-oxide (MOX) fuel and reinserted into the reactor where it serves as a fuel. As the costs of fabricating MOX fuels are substantially higher than the costs of fabricating uranium fuels, because of plutonium’s radio-toxicity, an economic penalty is associated with the use of plutonium fuels rather than enriched uranium.

To take account of this fuel cycle, inventories of civil plutonium in table 9.1 are split into three basic categories: plutonium embedded in stored spent fuel; separated plutonium held in store; and plutonium which has been recycled, either in fast reactors or in conventional thermal reactors. Material in the last category is embedded in partially irradiated MOX fuel in reactor cores or discharged from those reactors. It does not include material which has been fabricated into MOX fuel but not yet inserted into reactors (about 10 t of plutonium in total).¹⁴

Most civil reprocessing is carried out in three NPT NWS: France, Russia and the UK. Fuel from these countries as well as from several NNWS are handled at their facilities. Plutonium separated from this fuel is expected, in most cases, to be returned to the country where the fuel originated. To take account of transfers of spent fuel to reprocessing sites, and the subsequent return of the plutonium contained in it, civil inventories have been disaggregated by ‘ownership’ (by whom the title for the plutonium is held) and ‘location’ (the physical location of plutonium at the end of 1993).

Table 9.1 shows that at the end of 1993, some 845 tonnes of plutonium had been discharged from the nuclear power reactors in 31 countries around the world. Well over half (467 t) had been discharged from reactors in NPT NWS, and 50 per cent of this had been discharged from US reactors (235 t). Nearly all this plutonium is reactor-grade.

Table 9.3 provides a detailed breakdown of plutonium balances for countries which have had spent fuel reprocessed, either domestically or at foreign plants. Since most of these figures depend, to varying degrees, on modelling

¹⁴ Most of this material is in fabricated fuel for fast reactors in France and Germany.

assumptions, error margins of plus or minus 10 per cent are ascribed to these estimates.¹⁵

Over four-fifths of the plutonium discharged from power reactors remains embedded in spent fuel and is stored at reactor sites. Just 17 per cent of discharged plutonium (144 t) has been separated by reprocessing. A greater proportion of civil plutonium has been separated in the NPT NWS (nearly 30 per cent of that discharged from their power reactors), although the USA has stored all of its civil spent fuels since 1976. Even with rapidly growing civil reprocessing over the coming decade, the proportion of discharged plutonium which is separated is unlikely to reach the 20 per cent mark.

Of the plutonium which has been separated from irradiated fuel, over three-quarters remains in store. At the end of 1993, there existed surplus stocks of 110 tonnes of civil plutonium. About 100 tonnes of this surplus stock was held in stores in NPT NWS at Sellafield in the UK (41 t), La Hague and Marcoule in France (32 t) and Chelyabinsk-65, now named Ozersk, in Russia (27 t). Over 11 tonnes and 1.5 tonnes of foreign separated plutonium were stored in France and the UK, respectively, at the end of 1993. The most significant stocks outside the NWS are in Belgium, Germany and Japan, although these are small (ranging from 1.8 t to 3.9 t) compared to stocks in the NWS. However, the NNWS own nearly 20 per cent of separated civil plutonium, the balance being stored at the British, French and Russian reprocessing sites. The quantities of separated civil plutonium in non-NPT states is relatively small. The great majority of it is in India (about 0.25 t—This category does not include any weapon-grade plutonium separated in India, which is included under military stocks.)

Of the 34 tonnes of plutonium which have been recycled, about 19 tonnes have been used in fast reactors, the rest in thermal reactors. Since the mid-1980s, however, the rate of plutonium use in fast reactors has slowed considerably, and today most recycling occurs in thermal power reactors. Although there are great uncertainties attached to forecasts of plutonium use, it seems likely that the current imbalance between plutonium separation in reprocessing, and plutonium use in fast and thermal reactors, will persist over the next decade, leading to a continuing growth in world surplus of civil plutonium. It is estimated that the current surplus of 110 tonnes will have grown to around 160 tonnes by the year 2000 if current reprocessing and recycling plans are implemented.

Inventories of highly enriched uranium

About 1700 tonnes of HEU are held in nuclear weapon stocks or associated inventories, including excess stocks.¹⁶ The actual amount of HEU produced is

¹⁵ These balances are derived through a simple subtraction of the amount of plutonium absorbed in MOX fuel (for either fast reactors or thermal reactors) from the amount of plutonium separated from spent fuel belonging to utilities in each country. The only exception is the Russian figure which includes a large amount of material separated from fuel discharged in Eastern Europe and Finland.

¹⁶ Measured here in terms of weapon-grade uranium equivalent. See appendix 9A.

higher, but several hundred tonnes have been consumed in military and civilian reactors, detonated in nuclear weapon tests, lost during processing or dedicated to naval nuclear programmes. The last category could include 100–200 tonnes of HEU, mostly contained in naval reactors, spent fuel or recovered material. The naval category is ignored here, but the HEU used in naval reactor programmes can pose a significant security risk, particularly when the HEU is fresh or in unirradiated form.

While all the NWS are believed to have halted HEU production for weapons, only the UK, the USA and Russia have officially announced such a halt. Both the USA and Russia have also halted all HEU production for non-weapon purposes. The UK does not produce HEU, but it may continue to depend on imports of HEU from the USA for its naval nuclear programme. France is believed still to produce HEU to fuel its tritium production reactors, but not for weapons. Whether China still produces HEU for non-weapon purposes is unclear, although unofficially it is believed to have stopped making HEU for nuclear weapons.

About 95 per cent of the world inventory of HEU is located in the former Soviet Union and the USA, with 60 per cent in the former USSR alone. The HEU is dispersed at many sites, particularly in the former USSR.

About 1 per cent of the world inventory of HEU is owned by non-nuclear weapon states, or dedicated to civilian purposes in nuclear weapon or non-nuclear weapon states. Current power reactor designs are fuelled with either natural or low-enriched uranium. The direct civil use of HEU is confined to research reactors and a few Russian breeder reactors. Research reactor programmes world-wide are estimated to contain about 20 tonnes of HEU. Russian military HEU is also being diluted to produce low-enriched uranium to fuel power reactors.

The vast majority of the world's HEU is in forms that are far easier to convert into nuclear weapon components than is spent fuel. Although the total quantities of plutonium and HEU are similar, most of the plutonium is in spent fuel. The quantity of military HEU existing in the world far exceeds the amounts of military and civil separated plutonium—1700 versus 360 tonnes. As a result, HEU poses the more immediate physical security challenge, at least in terms of quantities and chemical forms.

HEU in threshold countries

Pakistan is the only non-NPT state party known to possess a sizeable inventory of unsafeguarded HEU although Pakistan's Foreign Secretary declared in 1991 that the country had stopped making HEU. The central estimate for Pakistan's HEU production is 200 kg, with an error margin of plus or minus 50 kg. India and perhaps Israel have mounted programmes to develop enrichment capabilities, but there is no public evidence that they have acquired significant stocks of HEU. South Africa still possesses stocks of HEU left over from its former nuclear weapon programmes, although all of

Table 9.4. Illustrative inventories of plutonium and HEU inside and outside operational nuclear weapons, end of 1993Central estimates are tonnes.^a

| | USA | FSU | France | China | UK | Total |
|------------------------|-----|-----|--------|-------|-----|--------------------------|
| Inside weapons | | | | | | |
| Plutonium | 32 | 38 | 2 | 1 | 1 | 74 |
| HEU ^b | 210 | 250 | 11 | 7 | 5.5 | 480^c |
| Outside weapons | | | | | | |
| Plutonium | 53 | 93 | 3 | 2 | 1.5 | 153 |
| HEU ^b | 430 | 775 | 14 | 13 | 4.5 | 1 240^c |

^a Based on the following rough estimates of warhead numbers (tactical and strategic) at the end of 1993: the USA 9250; the FSU 11 000; France 500; China 300; and the UK 250.

^b Calculated in terms of weapon-grade uranium equivalent.

^c These figures are rounded.

this HEU is now under international safeguards. South Africa produced about 400 kg of HEU with enrichments over 80 per cent for seven nuclear weapons and several hundred kilograms of HEU enriched between 20 and 80 per cent that was not part of the nuclear weapon programmes.

Inventories inside and outside nuclear weapons

The quantities of fissile material held inside operational nuclear weapons are highly classified, out of concern that design information should be protected. Precise numbers of operational weapons are also not known. The figures presented in table 9.4 are therefore only illustrative. The total number of US and Russian warheads is considerably greater and includes warheads awaiting disassembly and those held in reserve. The estimate that about 75 tonnes of plutonium and just under 500 tonnes of HEU were contained in operational weapons at the end of 1993 is based upon the presumption that the average nuclear warhead contains 3–4 kg of plutonium and 15–30 kg of HEU.

The important conclusion is that the quantity of weapon-grade material held *outside* weapons, whether in retired and dismantled warheads or in other stocks, is now several times the quantity held inside operational weapons. As warhead arsenals are reduced in size, the amounts held outside weapons, and outside the weapon production system, are bound to rise. Both the USA and Russia have begun the process of bringing these surplus materials out of military stockpiles, and under civil control and international safeguards.

Excess plutonium and HEU

A large and increasing proportion of the world's inventories of plutonium and HEU is surplus to requirements. For HEU, the surplus in military stocks will soon approach 1000 tonnes, even after allowance is made for material already justifiably allocated to submarines and sustenance of down-sized nuclear

arsenals. For plutonium, the military surplus is already well over 100 tonnes. The consumption of diluted HEU in power reactors is expected to begin soon. However, no plans exist to absorb these huge excess HEU stocks in the near future because of fear of disrupting the commercial uranium and enrichment markets. There are no agreed plans for the disposition of surplus weapon plutonium. Even with best efforts, it will probably take 20–30 years to get rid of these surplus stocks.

Large surpluses of plutonium are also expected to arise from the reprocessing of civil spent fuels. The stock of separated plutonium, which today stands at 110 tonnes, is likely to approach 200 tonnes early in the next century. Whether this surplus will rise or fall thereafter, and at which rate, will depend on the extent to which current reprocessing and plutonium recycling policies in Europe, Japan and Russia are implemented. National and international policy could usefully be directed at extending the coverage of international safeguards to as much of existing stocks of HEU and plutonium as possible, and to matching the supply with the commercial and research demand for these materials. Current oversupply is needlessly threatening to international security.

III. Tables of nuclear forces

At the beginning of 1995, there were at least 20 000 nuclear warheads in the operational inventories of the NPT nuclear weapon states: 7770 strategic and several hundred tactical warheads for the USA; 8527 strategic and 2000–6000 tactical warheads¹⁷ for the Commonwealth of Independent States (CIS); 250–300 warheads for the UK; just over 500 warheads for France; and approximately 300 warheads for China.¹⁸ There were fewer than 100 warheads in Israel¹⁹ These deployments are summarized for the NPT NWS in tables 9.5–9.9. The tables include only the strategic nuclear weapons of the CIS and the USA, not their tactical nuclear weapons. The figures in the tables are best estimates based on public information but contain some uncertainties, as reflected in the notes. Figures for China are especially uncertain.²⁰

¹⁷ The figures for US and CIS tactical weapons are from section II of this chapter (table 9.4 note a) and Berkhout, F., Bukharin, O., Feiveson, H. and Miller, M., 'A cutoff in the production of fissile material', *International Security*, winter 1994/95, p. 174.

¹⁸ Israel, which is also known to have nuclear weapons, is not an NPT state party and may have conducted a nuclear test in 1979. See chapter 18 in this volume; and Miller, M. M., 'Israel', ed. E. Arnett, SIPRI, *Nuclear Weapons after the Comprehensive Test Ban: Implications for Modernization and Proliferation* (Oxford University Press: Oxford, forthcoming 1995).

¹⁹ Israel has enough plutonium for 55–95 weapons according to figures in section II. They are thought to be deployed on aerial bombs and Jericho 1, Jericho 2 and perhaps Lance missiles. See Arnett, E., 'Implications of the comprehensive test ban for nuclear weapon programmes and decision making', in Arnett (note 15).

²⁰ For more on Chinese nuclear weapons, see chapter 11 in this volume.

Table 9.5. US strategic nuclear forces, January 1995

| Type | Designation | No. deployed | Year first deployed | Range (km) ^a | Warheads x yield | Warheads in stockpile |
|-----------------------|----------------|--------------|---------------------|-------------------------|-------------------------------|-----------------------|
| <i>Bombers</i> | | | | | | |
| B-52H ^b | Stratofortress | 94 | 1961 | 16 000 | ALCM 5–150 kt ACM 5–150 kt | 1 000 400 |
| B-1B ^c | Lancer | 95 | 1986 | 19 000 | } Bombs, various | 1 400 |
| B-2 ^d | Spirit | 5 | 1993 | 11 000 | | |
| Total | | 194 | | | | 2 800 |
| <i>ICBMs</i> | | | | | | |
| LGM-30G ^e | Minuteman III | 530 | | 13 000 | | 1 590 |
| | Mk 12 | .. | 1970 | | 3 x 170 kt | 690 |
| | Mk 12A | .. | 1979 | | 3 x 335 kt | 900 |
| LGM-118A | MX/Peacekeeper | 50 | 1986 | 11 000 | 10 x 300 kt | 500 |
| Total | | 580 | | | | 2 090 |
| <i>SLBMs</i> | | | | | | |
| UGM-96A ^f | Trident I C-4 | 192 | 1979 | 7 400 | 8 x 100 kt | 1 536 |
| UGM-133A ^g | Trident II D-5 | 168 | | 7 400 | | 1 344 |
| | Mk-4 | .. | 1992 | | 8 x 100 kt | 944 |
| | Mk-5 | .. | 1990 | | 8 x 475 kt | 400 |
| Total | | 360 | | | | 2 880 |

^a Range for aircraft indicates combat radius, without in-flight refuelling.

^b B-52Hs can carry up to 20 air-launched cruise missiles (ALCMs)/advanced cruise missiles (ACM)s each, but only about 1000 ALCMs and 460 ACMs are available for deployment; the 94 B-52Hs listed above include 2 test planes at Edwards Air Force Base (AFB), California. One B-52H crashed at Fairchild AFB on 24 June 1994. The Nuclear Posture Review (NPR) released on 22 Sep. 1994 recommended retaining 66.

^c The B-1B can carry the B61 and B83 nuclear gravity bombs. Four have crashed and one is used as a ground trainer at Ellsworth AFB, South Dakota and is not considered operational. Under the terms of the START II Treaty the USA plans to 'reorient' all of its B-1Bs to conventional missions. The Air Force has begun a 10-year programme to support and equip 95 B-1B bombers for conventional roles at a cost of \$2.7 billion. The original fleet of 100 cost \$28.6 billion to acquire. These aircraft will count towards START I Treaty limits, but not towards START II Treaty limits.

^d The first B-2 bomber was delivered to the 509th Bombardment Wing at Whiteman AFB, Missouri, on 17 Dec. 1993. Four more were delivered in 1994. Three are planned for delivery in 1995, 5 in 1996 and 1 in 1997. Initially, the first 16 B-2s will be capable of carrying only the B83 nuclear bomb. Eventually all 20 operational B-2s will be capable of carrying the B61 and B83 bombs.

^e The Minuteman III intercontinental ballistic missiles (ICBMs) will be consolidated at 3 of the current 4 air force bases: F. E. Warren, Minot, Grand Forks and Malmstrom. The 500 Minuteman III silos will be retained and hence will remain treaty-accountable under START counting rules, but only 450 *missiles* will be operational. This may have been partly the result of a lack of spare W87 warheads and missiles. Thirty Minuteman III missiles, from the stockpile of spares, have been placed in empty Minuteman II silos at Malmstrom. According to the NPR the plan is to remove the 3 warheads from the Minuteman III missile and replace them with a single W87 warhead taken from the 50 MX Peacekeeper missiles that will be retired.

The last of the 150 Minuteman IIs at Ellsworth AFB, South Dakota, was removed in Apr. By the end of 1994 over 380 missiles, of an original 450, had been removed from their silos at Ellsworth, Malmstrom and Whiteman air force bases. The remaining missiles will be removed

in 1995. By the end of the year over 40 Minuteman silos at Ellsworth and at Whiteman had been blown up in accordance with procedures specified in the START treaties.

^fIn 1994, the last three Poseidon submarines were deactivated. The W76 warheads from the Trident I C-4 missiles are being fitted on Trident II submarines homeported at Kings Bay, Georgia, and are supplemented by 400 W88 warheads, the number built before production was halted.

^gA new 24-missile Ohio Class Trident submarine, the *USS Rhode Island* (SSBN-740), the 15th of the class, joined the fleet in a commissioning ceremony on 9 July. The last 3 (*USS Maine*, *USS Wyoming* and *USS Louisiana*) will be commissioned in 1995, 1996 and 1997, respectively. Two major decisions in the NPR are to reduce the number of nuclear-powered, ballistic-missile submarines (SSBNs) to 14 (all Ohio Class) by retiring 4 Bangor, Washington-based, SSBNs and to purchase additional Trident II D-5 submarine-launched ballistic missiles (SLBMs) for 4 submarines that currently carry Trident Is. When START II is implemented the number of warheads per missile is planned to be reduced from 8 to 5.

Sources: William J. Perry, Secretary of Defense, *Annual Report to the President and the Congress*, Feb. 1995, pp. 163–66, D-1; Les Aspin, Secretary of Defense, *Annual Report to the President and the Congress*, Jan. 1994, p. 7; Department of Defense, News Release No. 535-94, 'Remarks prepared for delivery by Secretary of Defense William J. Perry to the Henry L. Stimson Center', 20 Sep. 1994; Department of Defense, News Release No. 541-94, 'DOD review recommends reduction in nuclear force', 22 Sep. 1994; DOD, Nuclear Posture Review, Viewgraphs, 22 Sep. 1994; US Air Force Public Affairs, personal communications; Dunbar Lockwood, Arms Control Association; *Bulletin of the Atomic Scientists*; and Natural Resources Defense Council (NRDC).

Table 9.6. CIS strategic nuclear forces, January 1995

| Type | NATO designation | No. deployed | Year first deployed | Range (km) ^a | Warheads x yield | Warheads in stockpile |
|--------------------------|------------------|--------------|---------------------|-------------------------|---|-----------------------|
| <i>Bombers</i> | | | | | | |
| Tu-95M ^b | Bear-H6 | 27 | 1984 | 12 800 | 6 x AS-15A ALCMs, bombs | 162 |
| Tu-95M ^b | Bear-H16 | 57 | 1984 | 12 800 | 16 x AS-15A ALCMs, bombs | 912 |
| Tu-160 ^c | Blackjack | 25 | 1987 | 11 000 | 12 x AS-15B ALCMs or AS-16 SRAMs, bombs | 300 |
| Total | | 109 | | | | 1 374 |
| <i>ICBMs^d</i> | | | | | | |
| SS-18 ^e | Satan | 248 | 1979 | 11 000 | 10 x 550–750 kt | 2 480 |
| SS-19 ^f | Stiletto | 260 | 1979 | 10 000 | 6 x 550 kt | 1 560 |
| SS-24 M1/M2 ^g | Scalpel | 36/10 | 1987 | 10 000 | 10 x 550 kt | 460 |
| SS-25 ^h | Sickle | 333 | 1985 | 10 500 | 1 x 550 kt | 333 |
| Total | | 887 | | | | 4 833 |
| <i>SLBMsⁱ</i> | | | | | | |
| SS-N-18 M1 | Stingray | 224 | 1978 | 6 500 | 3 x 500 kt | 672 |
| SS-N-20 ^j | Sturgeon | 120 | 1983 | 8 300 | 10 x 200 kt | 1 200 |
| SS-N-23 | Skiff | 112 | 1986 | 9 000 | 4 x 100 kt | 448 |
| Total | | 456 | | | | 2 320 |

^a Range for aircraft indicates combat radius, without in-flight refuelling.

^b All 40 Bear-H bombers (27 Bear-H6s and 13 Bear-H16s) that were based in Kazakhstan have now been withdrawn to Russia, including some 370 AS-15 ALCM warheads.

^c 19 Blackjacks are based in Ukraine at Priluki; the remaining 6 are in Russia—1 at the Zhukovsky Flight Research Centre just south of Moscow and 5 at Engels AFB near Saratov. The Blackjacks at Priluki are poorly maintained and not 'fully operational', according to US intelligence.

^d Deactivation and retirement of ICBMs and their launchers proceeds through at least 4 stages. In step one an ICBM is removed from alert status by electrical and mechanical procedures. Next, warheads are removed from the missile. In step three the missile is withdrawn from the silo. Finally, to comply with START elimination provisions the silo is blown up and eventually filled in. The number of missiles and warheads will vary depending upon which step the analyst chooses to feature.

^e In the Sep. 1990 START I Treaty Memorandum of Understanding (MOU), the USSR declared 104 SS-18s in Kazakhstan (at Derzhavinsk and Zhangiz-Tobe) and 204 in Russia (30 at Aleysk, 64 at Dombarovski, 46 at Kartaly and 64 at Uzbur). By the end of 1994, 44 SS-18s in Kazakhstan and 16 in Russia had been removed from their silos. Under the START I Treaty, Russia is permitted to retain 154 SS-18s. If the START II Treaty is fully implemented, all SS-18 missiles will be destroyed, but Russia may convert up to 90 SS-18 silos for deployment of single-warhead ICBMs.

^f In the START I Treaty MOU, the USSR declared 130 SS-19s in Ukraine and 170 in Russia. Statements from officials indicate that by the end of 1994 Ukraine had removed 40 SS-19s from their silos at Pervomaysk.

^g Of the original 56 silo-based SS-24 M2s, 46 were in Ukraine at Pervomaysk and 10 were in Russia at Tatishchevo. By the end of 1994 the warheads of all 46 SS-24s in Ukraine had been removed and most have been transferred to Russia. All 36 rail-based SS-24 M1s are in Russia—12 each at Bershet, Kostroma and Krasnoyarsk.

^h SS-25s are deployed in both Russia and Belarus. SS-25 deployment in Belarus peaked in Dec. 1991 at 81 missiles at Lida and Mozyr. By the end of 1994 the number had decreased to 36, 18 at each base. The SS-25, which is assembled at Votkinsk in Russia, is the only CIS strategic weapon system still under production. On 20 Dec. 1994 Russia flight-tested a variant of the SS-25. This was the first indigenously produced (i.e., all-Russian) SS-25. It is planned to supplement the mobile force and also be silo-based.

ⁱ Approximately one-half of the SSBN fleet have been withdrawn from operational service. The table assumes that all Yankee Is, Delta Is and Delta IIs have been withdrawn from operational service, leaving 27 SSBNs of 3 classes (Delta III, Delta IV and Typhoon). The SS-N-18s are deployed on 14 Delta IIIs; the 120 SS-N-20s are deployed on 6 Typhoons; and the 112 SS-N-23s are deployed on 7 Delta IVs. All of these SSBNs are based on the Kola Peninsula (at Nerpichya, Olenya and Yagelnaya) except for 9 Delta IIIs which are based at Rybachi (15 km south-west of Petropavlosk) on the Kamchatka Peninsula. No additional SSBN production is expected before the year 2000.

^j The US Defense Intelligence Agency (DIA) estimates that Russia will soon flight-test and deploy a follow-on to the SS-N-20 missile during this decade.

Sources: START I Treaty Memorandum of Understanding, 1 Sep. 1990; 'Nuclear notebook', *Bulletin of the Atomic Scientists*, Mar./Apr. 1994, pp. 78–79; Natural Resources Defense Council (NRDC); Dunbar Lockwood, Arms Control Association (ACA); and International Institute for Strategic Studies (IISS), *The Military Balance 1994–1995* (Brassey's: London, 1994), pp. 111–12.

Table 9.7. British nuclear forces, January 1995^a

| Type | Designation | No. deployed | Date deployed | Range (km) ^b | Warheads x yield | Warheads in stockpile |
|-----------------------------|----------------------|--------------|-------------------|-------------------------|------------------------|-----------------------|
| <i>Aircraft^c</i> | | | | | | |
| GR.1 | Tornado ^d | 96 | 1982 | 1 300 | 1-2 x 200-400 kt bombs | 100 ^e |
| <i>SLBMs</i> | | | | | | |
| A3-TK | Polaris | 48 | 1982 ^f | 4 700 | 2 x 40 kt | 100 ^g |
| D-5 | Trident II | 16 | 1995 ^h | 7 400 | 4-6 x 100 kt | 64-96 |

^a The US nuclear weapons for certified British systems have been removed from Europe and returned to the USA, specifically for the 11 Nimrod anti-submarine warfare (ASW) aircraft based at RAF St Magwan, Cornwall, UK, the 1 Army regiment with 12 Lance launchers and the 4 Army artillery regiments with 120 M109 howitzers in Germany. Squadron No. 42, the Nimrod maritime patrol squadron, disbanded in Oct. 1992, but St Magwan will remain a forward base for Nimrods and will have other roles. The 50 Missile Regiment (Lance) and the 56 Special Weapons Battery Royal Artillery were disbanded in 1993.

^b Range for aircraft indicates combat radius, without in-flight refuelling.

^c The Royal Air Force will operate 8 squadrons of dual-capable Tornado GR.1/1A aircraft. These include 4 squadrons at RAF Bruggen, Germany (Nos 9, 14, 17, 31); 2 squadrons previously at Marham were redeployed to RAF Lossiemouth, Scotland, in 1994. They replaced the Buccaneer S2B in the maritime strike role and were redesignated Nos 12 and 617; and 2 reconnaissance squadrons at RAF Marham (Nos 2 and 13). Each squadron has 12 aircraft.

^d The US Defense Intelligence Agency (DIA) has confirmed that the RAF Tornados 'use two types of nuclear weapons, however exact types are unknown'. The DIA further concludes that each RAF Tornado is capable of carrying 2 nuclear bombs, 1 on each of the 2 outboard fuselage stations.

^e The total stockpile of WE-177 tactical nuclear gravity bombs was estimated to have been about 200, of which 175 were versions A and B. The C version of the WE-177 was assigned to selected Royal Navy (RN) Sea Harrier FRS.1 aircraft and ASW helicopters. The WE-177C existed in both a free-fall and depth-bomb modification. There were an estimated 25 WE-177Cs, each with a yield of approximately 10 kt. Following the Bush-Gorbachev initiatives of 27 Sep. and 5 Oct. 1991, British Secretary of State for Defence Tom King said: 'we will no longer routinely carry nuclear weapons on our ships'. On 15 June 1992 the Defence Minister announced that all naval tactical nuclear weapons had been removed from surface ships and aircraft, that the nuclear mission would be eliminated and that the 'weapons previously earmarked for this role will be destroyed'. The 1992 White Paper stated: 'As part of the cut in NATO's stockpile we will also reduce the number of British free-fall nuclear bombs by more than half'. A number of British nuclear bombs were returned to the UK from bases in Germany. In the table, a total inventory of strike variants of approximately 100 is assumed, including those for training and for spares. The 1993 White Paper stated that the WE-177 'is currently expected to remain in service until well into the next century'. The government announced in Mar. 1994 that it would be in service until the year 2007.

^f The 2-warhead Polaris A3-TK (Chevaline) SLBM was first deployed in 1982 and has now completely replaced the original 3-warhead Polaris A-3T SLBM, first deployed in 1968. *HMS Revenge* was retired on 25 May 1992. *HMS Renown* returned to service in late 1993 after a long refit, joining *HMS Resolution* and *HMS Repulse*.

^g It is now thought that the UK produced only enough warheads for 3 full boatloads of missiles, or 48 missiles, with a total of 96 warheads. In Mar. 1987 French President Mitterrand stated that Britain had '90 to 100 [strategic] warheads'.

^h *HMS Vanguard* conducted firings of a Trident II SLBM off the coast of Florida on 26 May and 19 June 1994. *Vanguard* went on its first patrol in Dec. 1994. The Ministry of Defence announced that 'each submarine will deploy with no more than 96 warheads, and may carry significantly fewer'.

Sources: Norris, R. S., Burrows, A. S. and Fieldhouse, R. W., *Nuclear Weapons Databook Vol. V: British, French and Chinese Nuclear Weapons* (Westview: Boulder, Colo., 1994), p. 9; and Secretary of State for Defence, *Statement on the Defence Estimates 1994*, Cmnd 2550 (Her Majesty's Stationary Office: London, Apr. 1994).

Table 9.8. French nuclear forces, January 1995

| Type | No. deployed | Year first deployed | Range (km) ^a | Warheads x yield | Warheads in stockpile |
|-------------------------------|-----------------|---------------------|-------------------------|------------------|-----------------------|
| <i>Land-based aircraft</i> | | | | | |
| Mirage IVP | 18 | 1986 | 1 570 | 1 x 300 kt ASMP | 15 |
| Mirage 2000N/ASMP | 45 ^b | 1988 | 2 750 | 1 x 300 kt ASMP | 45 |
| <i>Carrier-based aircraft</i> | | | | | |
| Super Etendard | 24 | 1978 | 650 | 1 x 300 kt ASMP | 20 ^c |
| <i>Land-based missiles</i> | | | | | |
| S3D ^d | 18 | 1980 | 3 500 | 1 x 1 Mt | 18 |
| Hadès ^e | [30] | [1992] | 480 | 1 x up to 80 kt | 30 |
| <i>SLBMs^f</i> | | | | | |
| M-4A/B | 64 | 1985 | 6 000 | 6 x 150 kt | 384 |

^a Range for aircraft assumes combat mission, without in-flight refuelling, and does not include the 90- to 350-km range of the Air-Sol Moyenne Portée (ASMP) air-to-surface missile.

^b Only 45 (3 squadrons—EC 1/4 and EC 2/4 at Luxeuil and EC 3/4 at Istres) of the 75 Mirage 2000N aircraft have nuclear missions.

^c The Super Etendard achieved a nuclear capability in 1981 with the AN 52 bomb, and eventually all 3 squadrons were capable of carrying this free-fall bomb. From Apr. 1989, the Super Etendard began receiving the ASMP missile, and by mid-1990 24 aircraft (2 squadrons) were capable of carrying the ASMP. The third squadron relinquished its AN 52s (and thus its nuclear role) in July 1991.

^d The current plan is to retain the missiles through 2010 at which time they will be replaced with a modernized version of the M4/M45.

^e Although the first regiment was activated at Suippes in eastern France on 1 Sep. 1991, the plan to deploy Hadès was shelved soon thereafter and the missiles and warheads were placed in storage. The programme had an original goal of 60 launchers and 120 missiles and was eventually cut to 15 launchers and 30 missiles. The Pluton short-range ballistic missile has been retired.

^f On returning from its 58th and final operational patrol on 5 Feb. 1991, SSBN *Le Redoutable* was retired along with the last MSBS (Mer-Sol Balistique Stratégique) M20 missiles. The remaining five submarines (*Le Terrible*, *Le Foudroyant*, *L'Indomptable*, *Le Tonnant* and *L'Inflexible*) are capable of carrying the MSBS M-4A/B missile. Although there are 80 launch tubes on the 5 SSBNs, only 4 sets of missiles were bought, and thus the number of TN 70/71 warheads in the stockpile is calculated to be 384, probably with a small number of spares. *Le Triomphant*, the first of a new class of SSBNs, was launched on 13 July 1993 and will enter service in 1996, followed by *Le Téméraire* in 2000 and *Le Vigilant* in 2002 or 2003.

Sources: Norris, R. S., Burrows, A. S. and Fieldhouse, R. W., *Nuclear Weapons Databook Vol. V: British, French and Chinese Nuclear Weapons* (Westview: Boulder, Colo., 1994),

p. 10; 'Intervention de M. François Mitterrand sur le theme de la dissuasion', Service de Presse, Présidence de la République, 5 May 1994; and *Air Actualités: Le Magazine de l'Armée de l'Air*.

Table 9.9. Chinese nuclear forces, January 1995

| Type | NATO designation | No. deployed | Year first deployed | Range (km) | Warheads x yield | Warheads in stockpile |
|--|------------------|--------------|---------------------|------------|------------------|-----------------------|
| <i>Aircraft^a</i> | | | | | | |
| H-5 | B-5 | 30 | 1968 | 1 200 | 1 x bomb | 150 |
| H-6 | B-6 | 120 | 1965 | 3 100 | 1 x bomb | |
| Q-5 | A-5 | 30 | 1970 | 400 | 1 x bomb | |
| <i>Land-based missiles^b</i> | | | | | | |
| DF-3A | CSS-2 | 50 | 1971 | 2 800 | 1 x 1–3 Mt | 50 |
| DF-4 | CSS-3 | 20 | 1980 | 4 750 | 1 x 1–3 Mt | 20 |
| DF-5A | CSS-4 | 4 | 1981 | >13 000 | 1 x 3–5 Mt | 4 |
| DF-21 | CSS-6 | 36 | 1985–86 | 1 800 | 1 x 200–300 kt | 36 |
| <i>SLBMs^c</i> | | | | | | |
| JL-1 | CSS-N-3 | 24 | 1986 | 1 700 | 1 x 200–300 kt | 24 |

^a All figures for aircraft are for nuclear-configured versions only. Hundreds of aircraft are also deployed in non-nuclear versions. Aircraft range is equivalent to combat radius. The force is assumed to have 150 bombs, with yields estimated between 10 kt and 3 Mt. The new H-7 aircraft (NATO designation B-7) is scheduled for deployment in 1995 and may or may not be nuclear-capable. The H-5 and Q-5 may no longer be in service as nuclear-capable.

^b The Chinese define missile ranges as follows: short-range, < 1000 km; medium-range, 1000–3000 km; long-range, 3000–8000 km; and intercontinental-range, > 8000 km. The nuclear capability of the M-9 is unconfirmed and thus not included. China is also developing two other ICBMs. The DF-31 with a range of 8000 km and carrying one 200–300 kt warhead is scheduled for deployment in the late 1990s; the 12 000-km range DF-41 is scheduled for deployment in around 2010 and may be MIRVed if China develops that capability.

^c There remains uncertainty as to whether one or two 09-2 SSBNs carrying the JL-1 SLBM are in service. Two JL-1 SLBMs are presumed to be available for rapid deployment on a single Golf Class test submarine (SSB). The 8000-km range JL-2 (NATO designation CSS-N-4), to carry one 200- to 300 kt warhead, will be available in the late 1990s. It is to be carried by the 09-4 SSBN, which may not be available until after the turn of the century.

Sources: Norris, R. S., Burrows, A. S. and Fieldhouse, R. W., *Nuclear Weapons Databook Vol. V: British, French and Chinese Nuclear Weapons* (Westview: Boulder, Colo., 1994), p. 11; Lewis, J. W. and Hua D., 'China's ballistic missile programs: technologies, strategies, goals', *International Security*, vol. 17, no. 2 (fall 1992), pp. 5–40; and Lewis J. W. and Xue L., *China's Strategic Seapower: The Politics of Force Modernization* (Stanford University Press: Stanford, 1994).

Appendix 9A. Plutonium and highly enriched uranium: characteristics, sources of information and uncertainties

DAVID ALBRIGHT, FRANS BERKHOUT and WILLIAM WALKER

I. Introduction

This appendix provides background information on the characteristics of plutonium and highly enriched uranium and explains how the estimates given in chapter 9 of the amounts of these fissile materials existing in the world were derived.

As indicated in chapter 9, figures for plutonium in the nuclear weapon states parties to the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) are presented for the end of 1993 because that is the last date for which comprehensive estimates can be assembled. Estimates for threshold states and for highly enriched uranium (HEU) are to the end of 1994.¹

Few governments have published statistics on holdings of plutonium and highly enriched uranium. Japan's publication in 1994 of a detailed breakdown of its plutonium inventories was the first occasion on which a government voluntarily provided information on the total stocks under its jurisdiction or held abroad on its behalf. The information that non-nuclear weapon state (NNWS) parties to the NPT routinely provide the International Atomic Energy Agency (IAEA) for safeguards purposes is held in confidence by the IAEA's Safeguards Division. Apart from the data released by the US Department of Energy in 1993 and 1994 which revealed the size and location of part of the US stock of weapon materials, information on these materials is classified by all nuclear weapon states. Ironically, more information is now in the public domain on warhead types and numbers than on inventories of warhead material.

II. Characteristics of plutonium and highly enriched uranium

The isotopes uranium-235 (²³⁵U) and plutonium-239 (²³⁹Pu) are the main fissile components in nuclear weapons. They are not easy to produce. Naturally occurring uranium consists of over 99 per cent ²³⁸U and only about 0.7 per cent ²³⁵U. In order to acquire uranium with high concentrations of ²³⁵U, uranium is usually 'enriched' through one of two physical separation processes, the gaseous diffusion or centrifuge

¹ The estimates in chapter 9 are drawn from Albright, D., Berkhout, F. and Walker, W., SIPRI, *Plutonium and Highly Enriched Uranium 1995: World Inventories, Capabilities and Policies* (Oxford University Press: Oxford, forthcoming 1995). Readers should refer to this volume for details and for a full explanation of how the aggregate figures presented here have been arrived at. The figures presented here should not be compared directly with those presented in Albright, D., Berkhout, F. and Walker, W., SIPRI, *World Inventory of Plutonium and Highly Enriched Uranium 1992* (Oxford University Press: Oxford, 1993). Estimates provided in the new book are often based on new evidence and calculations, and in some instances have been arrived at through different means. The new book therefore replaces rather than simply updates the earlier volume.

enrichment techniques. Highly enriched uranium is conventionally defined as uranium containing over 20 per cent ^{235}U . Weapon-grade uranium (WGU) is the category of HEU containing over 90 per cent ^{235}U . Uranium enriched to levels below 20 per cent, such as the low-enriched uranium used in power reactors, is not relevant to nuclear weapon designers. The primaries of most modern nuclear weapons can contain weapon-grade uranium or plutonium.² HEU of many grades has been used in the secondaries of thermonuclear weapons.

Plutonium

Plutonium does not occur naturally except in trace quantities. It is the product of the irradiation of the common isotope ^{238}U by neutrons in a nuclear reactor. If uranium fuel is irradiated for a short period (i.e., it has a low 'burnup'), the plutonium arisings tend to be rich in the isotope ^{239}Pu . At higher burnups, neutrons captured by ^{239}Pu result in the production of higher-numbered isotopes, three of which have properties which can hinder nuclear weapon design. ^{240}Pu and ^{242}Pu are spontaneous neutron-emitters, and the fissile isotope ^{241}Pu decays to americium-241 (^{241}Am) whose gamma and neutron emissions pose an increasing radiation risk.

'Weapon-grade' plutonium is conventionally defined as plutonium containing less than 7 per cent of ^{240}Pu . It is always the grade of plutonium preferred in nuclear weapons. However, effective nuclear weapons can still be constructed using 'reactor-grade' or 'fuel-grade' plutonium which contain larger proportions of the higher-numbered isotopes. As defined, fuel-grade plutonium consists of 7–18 per cent ^{240}Pu , and reactor-grade plutonium of over 18 per cent ^{240}Pu . The term 'weapon-usable' plutonium has no precise definition. It is used on occasion to convey the message that most isotopic mixtures can be used in weapons, or to imply that a given quantity of plutonium is in separated form.

Plutonium is discharged from reactors in 'spent fuel' which also contains unburnt uranium, together with radioactive wastes comprising fission products and transuranic elements. Plutonium, uranium and nuclear wastes can be separated chemically by the technique known commercially as 'reprocessing'.

Highly enriched uranium

Except where indicated, HEU is measured in quantities of WGU-equivalent, which is defined here as the amount of 93 per cent ^{235}U that would have been produced by the same exertion of separative work units (at a tails assay of 0.3 per cent) used in deriving the HEU of whichever grade. The problem of adequately accounting for and protecting all the HEU is aggravated by the difficulty faced by governmental and non-government analysts in assessing the size of the stocks. Some of this reflects the greater public demand for information about plutonium, because its production poses a much greater health risk than HEU. In many cases, governments have simply not done the work necessary to find and quantify accurately all the various HEU stocks and their locations within a country.

² The primary is the fission explosion detonated first in a thermonuclear warhead containing two or more stages (secondaries).

For outside analysts, the problem of estimating HEU stocks is further complicated by the decision by most governments to treat information about uranium enrichment plants and their output more secretly than similar information about plutonium production facilities. Even the USA has hesitated in releasing details about its HEU military stocks out of fear of revealing sensitive information about weapon designs or naval reactor fuel. The result is that public estimates of HEU stocks continue to have large uncertainties.

Only the US Government has released information on HEU, although in considerably less detail than on plutonium. It stated that it produced 994 tonnes of HEU between 1945 and the halting of production in 1992.

Almost 250 tonnes of the 994 tonnes are estimated to have been consumed in reactors, detonated in tests, exported to the UK, lost during processing or dedicated to naval reactors. The rest, about 745 tonnes, is the US military inventory (not including HEU dedicated to naval reactors but including any returns from the navy or civil programmes to US Energy Department sites.). Most of this stock is excess to actual nuclear weapon requirements.

Not all of this HEU is weapon-grade. The authors' estimate is that the original 994 tonnes had an average enrichment of 80 per cent uranium-235. The 745 tonnes of HEU that remains in the military inventory is approximately equivalent to about 640 tonnes of weapon-grade uranium recorded in table 9.2.

The other HEU inventories in table 9.2 are in terms of weapon-grade uranium equivalent, because these other governments have not made information available about their total HEU production or the average enrichment of their stockpile. The lack of official information about the capacity or operating history of their uranium enrichment plants and the non-weapon uses of HEU produced in their enrichment facilities increases the uncertainties of these other estimates.

10. Chemical and biological weapons: developments and destruction

THOMAS STOCK and ANNA DE GEER

I. Introduction

The prospects for ratification of the 1993 Chemical Weapons Convention (CWC) were significantly affected by the events of 1994.¹ The community interested in chemical disarmament focused on implementation of the CWC, and there were fewer allegations of the possession and use of chemical weapons (CW) and biological weapons (BW) in 1994 (see section II). Section III addresses the threat of CW and BW proliferation, which is expected to be of major concern for the rest of the 1990s. Section IV focuses on concerns about the slow pace of the destruction of the declared CW stockpiles, particularly as regards Russia and the USA, the two major CW possessor states. There is growing evidence that destruction of the Russian and US chemical weapon stockpiles will require the investment of substantial economic resources.

New information became available in 1994 about former Soviet dumping operations, and the scientific and technical problems related to old CW dumped at sea or buried are outlined in section V.

Section VI discusses the debate on the source of the so-called Gulf War Syndrome in soldiers who served in the Coalition forces in the 1991 Persian Gulf War and reports on the studies which have been conducted.

II. Allegations of use or possession of CW and BW

In 1994 there were few allegations of chemical weapon use. The most important allegations concentrated on the former Yugoslavia and Angola.

The allegations of CW use in the former Yugoslavia in 1994, like those in 1993, were made by all of the parties involved in the war. In January 1994 Croats accused Bosnian Croats of using poison gas, although no specific gas was named and there was no independent confirmation of such use.² In April 1994 Bosnian Croats accused Serbs of having used chemical weapons against Gorazde.³ This allegation was dismissed by the United Nations as Bosnian

¹ For further discussion, see chapter 19 in this volume.

² 'Croats accuse Muslims of using poison gas', Radio Free Europe/Radio Liberty (hereafter RFE/RL) *RFE/RL News Briefs*, vol. 3, no. 4 (10–21 Jan. 1994), supplements, p. 16.

³ 'Ganic: many killed in "gas attack"', in Foreign Broadcast Information Service, *Daily Report—East Europe (FBIS-EEU)*, FBIS-EEU-94-069, 11 Apr. 1994, p. 17.

* T. Stock (sections I, IV, V and VII), A. De Geer (section I, II, III, VI and VII)

Croat propaganda⁴ and was also denied by the Serbs, who countered with accusations that the Bosnian Croats had used chemical weapons.⁵ Serbs were again accused of using CW in Glamoc in April 1994,⁶ and in Teslic in northern Bosnia in June 1994.⁷ In addition, there were claims that the Serbs used CW against Bosnian Croats in June 1994 in Zavidovici.⁸ None of these allegations has been proved or confirmed. The accusations against the various parties to the conflict have appeared in conjunction with each other and are most likely propaganda.

In Angola, another area of internal conflict, allegations of CW use continued. In May 1994 the União Nacional Para a Independência Total de Angola (National Union for the Total Independence of Angola, UNITA) accused the Popular Movement for the Liberation of Angola (MPLA) of dropping bombs containing phosphine, napalm and phosphorus on the city of N'dalatando.⁹ In June 1994 allegations were made that the MPLA had bombed a hospital in Bie with eight bombs charged with toxic chemicals.¹⁰ This accusation was allegedly confirmed by the UNITA health services, which stated that 53 civilians who had had contact with toxic gases had been examined.¹¹ The alleged use has not been confirmed by independent sources and may be propaganda.

There were reports alleging that Laos had used CW along the Thai–Laotian border; these were immediately denied by Laos.¹²

In 1994 there were also accusations of the possession and development of CW. In 1993 there were reports that Russia was not complying with international agreements to disclose its total CW stockpile and that it was in fact developing advanced CW. These allegations continued in 1994 as Clinton Administration officials accused Russia of concealing its efforts to develop such weapons.¹³ The charges were denied by senior Russian officials as groundless. A spokesman for the Russian Defence Ministry stated that 'no binary chemical weapons had been produced'.¹⁴ The accusations were based on statements made by Vil Mirzayanov about a new chemical agent called

⁴ Reuters, "'Chemical' attack dismissed', *The Independent*, 11 Apr. 1994, p. 10. The United Nations claimed that the chemical weapons referred to by the Muslims were in fact smoke mortars 'intended to create a pall of smoke on the battlefield to obscure the enemy's vision and sow confusion'. These mortars, a UN spokesperson said, were 'not chemical weapons, were not banned under the Geneva Convention and were in the arsenals of most armies in the world'.

⁵ 'Serbs: Muslims using chemical agents', in FBIS-EEU-94-069, 11 Apr. 1994, p. 23.

⁶ 'Serbs say army used poison gas in Glamoc', in FBIS-EEU-94-077, 21 April, 1994, p. 33.

⁷ 'Serbs says Muslims using poison gas in Teslic', in FBIS-EEU-94-106, 2 June, 1994, p. 28.

⁸ 'Serbs employ tanks, chemicals in Zavidovici', in FBIS-EEU-94-124, 28 June, 1994, p. 33.

⁹ 'UNITA says MPLA using toxic weapons in N'dalatando', in Foreign Broadcast Information Service, *Daily Report-Sub-Saharan Africa (FBIS-AFR)*, FBIS-AFR-94-092, 12 May 1994, p. 7.

¹⁰ 'MPLA allegedly bombs hospital with chemical weapons', in FBIS-AFR-94-106, 2 June 1994, p. 8.

¹¹ 'UNITA confirms government use of chemical weapons', in FBIS-AFR-94-115, 15 June 1994, p. 26.

¹² 'Staff deputy chief rebuffs Thai allegation', in Foreign Broadcast Information Service, *Daily Report-East Asia (FBIS-EAS)*, FBIS-EAS-94-117, 17 June, 1994, p. 50; and 'Government denies Thai charge on chemicals', in FBIS-EAS-94-108, 6 June 1994, p. 32.

¹³ Gordon, M., 'Russia hides efforts to develop deadly poison gas, U.S. says', *New York Times*, 23 June 1994, p. 3; and Walder, M., 'Suspicious over Moscow's chemical weapons plans', *The Guardian*, 24 June 1994. The new weapons alleged to be under production are binary weapons.

¹⁴ 'Russia denies hiding chemical arms data', *New York Times*, 30 June 1994, p. 4.

Novichok. Mirzayanov was arrested in 1992 for disclosing state secrets about the Russian CW programme.¹⁵ He was tried in February 1994 and released.¹⁶ In a *Moscow News* article Mirzayanov accused Russia of continuing research and development (R&D) on binary CW.¹⁷ All charges against him were dropped in March 1994.¹⁸ In May 1994 Mirzayanov repeated his allegations in a *Wall Street Journal* article and named Substance A232, a substance which allegedly could be used in a binary weapon.¹⁹ These accusations have not been confirmed.

In March and April 1994 the British *Sunday Times* and the *Washington Post* published allegations of Russian production of BW agents,²⁰ based in part on reports from US and British inspections of major Russian biological research centres that demonstrated “substantial [biological] infrastructure with no commercial purpose” and [that] links to the Russian military remain largely intact’.²¹ Russian Government officials denied the allegations.²²

In 1994 allegations were again made that Iran and North Korea possess CW. Reports continued to list North Korea as having eight CW factories and six CW storage sites.²³ In March 1994 a North Korean soldier trained in chemical warfare defected to South Korea and made allegations of North Korean CW possession. He stated that ‘North Korea has enough chemical weapons to destroy the southern part of the peninsula without using nuclear weapons’.²⁴

Iran is regarded by the West as a nation with a CW capability, an accusation which has been repeatedly denied by Iran. In 1994 there were no new reports, although articles on CW capability listed Iran as a nation of concern.²⁵

¹⁵ See Stock, T., ‘Chemical and biological weapons: developments and proliferation’, SIPRI, *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press: Oxford, 1993), chapter 7, p. 266; and Stock, T. and De Geer, A., ‘Chemical weapon developments’, SIPRI, *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), chapter 9, pp. 327–28.

¹⁶ ‘Program views Mirzayanov case, chemical weapons’, in Foreign Broadcast Information Service, *Daily Report—Central Eurasia (FBIS-SOV)*, FBIS-SOV-94-037, 24 Feb. 1994, p. 30; and Perera, J., ‘Russians release chemist after international protest’, *New Scientist*, vol. 141, no. 1916 (12 Mar. 1994), p. 10. Mirzayanov was released following protests from the international scientific community.

¹⁷ Mirzayanov, V. and Fyodorov, L., ‘A poisoned policy’, *Moscow News*, no. 39 (27 Sep.–4 Oct. 1992), p. 9.

¹⁸ Loshak, V., ‘All charges against Vil Mirzayanov are dropped’, *Moscow News*, 18–24 Mar. 1994, p. 3. In June 1994 Mirzayanov was awarded 30 million roubles in compensation by a Russian court for having been unjustly accused. See Hiatt, F., ‘Scientist wins case in a Russian court and against state’, *International Herald Tribune*, 9 June 1994, p. 6.

¹⁹ Mirzayanov, V., ‘Poisons the treaty left out’, *Wall Street Journal*, 25 May 1994.

²⁰ Adams, J., ‘Russia’s secret biological weapons’, *Sunday Times*, 27 Mar., 1994; and Smith, J., ‘U.S. wary of Russian germ arms, despite assurances from Yeltsin, effort may be continuing’, *Washington Post*, 8 Apr. 1994, pp. 1, 28.

²¹ Smith, J., ‘U.S. wary of Russian germ arms, despite assurances from Yeltsin, effort may be continuing’, *Washington Post*, 8 Apr. 1994, pp. 1, 28.

²² ‘Commentary on biological weapons charges’, in FBIS-SOV-94-072, 14 Apr., 1994, p. 24.

²³ Jane’s Intelligence Review: Special Report, ‘Chemical and biological warfare programme’, no. 2, p. 8–10; and ‘North Korea has 8 chemical weapons factories: white paper’, *Seoul Monthly Magazine of Korea*, May 1994, p. 35. See also *SIPRI Yearbook 1994* (note 15), p. 326.

²⁴ ‘A defector warns South of chemical destruction’, *International Herald Tribune*, 23 Mar. 1994, p. 5; and *Asia Pacific Defence Reporter*, vol. 20, no. 21 (June/July, 1994), p. 23.

²⁵ See, for example, Rathmell, A., ‘Iran’s rearmament: how great a threat?’, *Jane’s Intelligence Review*, vol. 6, no. 7 (July 1994), pp. 317–22; and Reuters, ‘Iran denies it developing chemical weapons’, *Reuters North America*, 16 Aug. 1994.

Allegations about two other past programmes surfaced in 1994. In the spring of 1994 there were reports that the former Czechoslovakia had possessed CW and BW and that stockpiles of both might remain.²⁶ According to Czech newspapers, 'chemical weapons were stored in several locations throughout the Czech Republic'.²⁷ After the initial allegation of CW and BW possession, the debate focused solely on allegations that BW stockpiles had been left by the former Czech Government. These reports were not categorically denied, instead statements were made that the stocks were only bacteriological and virological materials and not weapons. The Czech military denied that its Immunology and Bacteriology Research Institute had 'produced, developed or stored military bacteriological weapons'.²⁸

In June 1994 the Romanian Defence Minister announced that former Romanian President Nicolae Ceaucescu had launched a CW programme, but that the programme had been scrapped in 1990.²⁹ To verify these claims of non-possession the USA sent an investigative team to Romania.³⁰ The findings of the investigation were not disclosed in 1994.

III. Proliferation

The US Congressional Research Service produced a study on the proliferation of CW and BW, including a table of states possessing chemical and biological weapons.³¹ It listed Iran, Iraq, Russia and the USA as the only confirmed states which possess chemical weapons. Afghanistan, Burma, China, Egypt, Ethiopia, Israel, Kazakhstan, North Korea, Syria, Taiwan, Ukraine and Viet Nam were categorized as probable possessor states. Chile, Cuba, France, South Korea, Libya, Pakistan, Somalia, South Africa and Thailand were classified as suspected of having CW programmes. For BW the list was shorter. Only Russia was registered as a confirmed possessor state while China, India, Iran, North Korea, Pakistan, Syria and Taiwan were listed as probable possessors. Egypt and Libya were suspected of having BW programmes, and Iraq was said to have shown a 'clear intent'.³²

In January 1994 there was an incident involving the German ship *Asian Senator*, which was inspected on its way to the Middle East following accusations that it was transporting illicit chemicals. Chemicals 'used for making dangerous weapons' were found.³³ It was later stated that the cargo was on its

²⁶ Garrett, B., 'Czech biological weapons?', *ASA Newsletter*, no. 41 (7 Apr. 1994), p. 7; and Garrett, B., 'Czech BW/CW stocks?', *Chemical Warfare/Chemical and Biological Defense Information Analysis Center, CBIAC Newsletter*, vol. 8, nos 1 and 2 (winter/spring 1994), pp. 1, 9.

²⁷ See Garrett, 'Czech BW/CW stocks?' (note 26).

²⁸ 'Military denies developing bacteriological arms', in FBIS-EEU-94-110, 8 June, 1994, p. 9.

²⁹ 'On Romania's stance as to chemical weapons', Statement made by Gheorghe Tinca, Romanian Minister of National Defence, 30 June 1994 (Romanian Embassy, Stockholm).

³⁰ Balkan News International, 'Romania denies chemical weapons, US military experts check the situation', 4-10 Sep. 1994, p. 16.

³¹ '28 June', *Chemical Weapons Convention Bulletin*, no. 25 (Sep. 1994), p. 25.

³² See note 31.

³³ Mann, J., 'Illegal chemical cargo was bound from China to Mideast', *Washington Post*, 23 Jan. 1994, p. 22. The exact chemicals exported were not specified.

way to Iraq, a violation of the UN embargo, and that the chemicals were to be used as fuel ingredients for the Iraqi missile programme.³⁴

Debate continued on the Iraqi arsenal of weapons of mass destruction and on the sources of these weapons. In 1994 the focus was on the USA and the Reagan Administration. Allegations were made that during the 1980s the Commerce Department approved the export of lethal viruses to Iraq.³⁵ According to US Senator Donald W. Riegle, Jr, these viruses and bacteria 'were shipped to Iraqi government agencies by American Type Culture Collection', an organization that exports biological specimens world-wide.³⁶ The viruses could have been used in building up an Iraqi biological warfare programme.

There were reports in a German newspaper that North Korea had transferred CW and BW technology to the Middle East,³⁷ but these reports were not confirmed.

Libya and its alleged CW production plant at Tarhuna remained a proliferation concern. It was apparently confirmed that Belgium, Germany and the UK were the main Western suppliers of dual-use technology to the Tarhuna plant.³⁸ It was also reported that the plant, scheduled to become operational in 1995, will be capable of producing 1000 tonnes (t) of mustard gas, 90 t of sarin and 1300 t of soman annually.³⁹

IV. CW destruction

The US–Russian Agreement on the Destruction of Chemical Weapons

In 1994 there was concern about how the two major possessors of chemical weapons, Russia and the USA, will meet their pledges to achieve chemical disarmament and to destroy their CW stockpiles. During a January 1994 summit meeting President Bill Clinton and President Boris Yeltsin reaffirmed their commitment to promote the implementation of a comprehensive ban on CW and agreed to conclude work as rapidly as possible on implementing the necessary documents for the 1990 bilateral Agreement on the Destruction of

³⁴ 'Bonn discovers, halts chemicals bound for Iraq', in Foreign Broadcast Information Service, *Daily Report–West Europe (FBIS-WEU)*, FBIS-WEU-94-016, 25 Jan., 1994, p. 17. A similar incident took place in the summer of 1993 when the Chinese cargo vessel *Yin He* created an international incident. The *Yin He* was bound for Iran and accused by US Intelligence of carrying illegal chemicals used in the production of CW. China protested and claimed the cargo did not contain such chemicals. After three weeks the ship was finally examined and no prescribed chemicals were found. See *SIPRI Yearbook 1994* (note 15), p. 318. Additional information on Iraq is presented in chapter 19 in this volume.

³⁵ Bradsher, K., 'Senator says U.S. let Iraq get lethal viruses', *New York Times*, 10 Feb. 1994, p. 9.

³⁶ Merida, K. and Mintz, J., 'Rockville firm shipped germ agents to Iraq, Riegle says', *Washington Post*, 10 Feb. 1994, p. 8.

³⁷ DPRK, "'Transferring" weapons technology to Mideast', in FBIS-EAS-94-110, 8 June, 1994, p. 39.

³⁸ 'Germans in Libya weapons link', *Financial Times*, 4 Mar. 1994, p. 2; and Aloisi, S., 'Tarhunah chemical weapons plant described', *Milan Panorama*, 16 Apr. 1994, pp. 107–9, in FBIS-NES-94-078, 22 Apr. 1994, p. 14.

³⁹ Aloisi (note 38); and 'Commentary: close the dual-use door', *Defence News*, vol. 9, no. 9 (7–13 Mar. 1994), p. 14.

Chemical Weapons.⁴⁰ A 'plan-of-work' was agreed for 1994, including a timetable for a CW inventory at all Russian storage sites.⁴¹ In February 1994 Russia and the USA submitted an official document to the Organisation for the Prohibition of Chemical Weapons Preparatory Commission (OPCW PrepCom) which contained the major points of the agreed understanding on measures for the preparation and implementation of the second phase of the 1989 Wyoming Memorandum of Understanding (MOU),⁴² and which was signed at a January 1994 summit meeting.⁴³ The signing of this document inaugurates phase II. Under the plan, an exchange of detailed data on a chemical weapon production facility, a CW storage facility and a CW development facility or establishment was to be facilitated not later than 90 days after the signing of the January 1994 document. In addition, data on all CW stockpile and production facilities were to be provided not later than mid-May 1994. All 5 inspections (2 routine inspections, 1 trial challenge inspection and 2 challenge inspections) were to be conducted on the territory of the other country, beginning by mid-June 1994 and finishing by mid-November 1994. Trial inspections are designed to develop procedures for conducting the challenge inspections which would be carried out at suspected CW development, production or storage sites. In April the first information exchange took place.⁴⁴ By the end of May 1994 both sides had exchanged data on three CW sites and on all CW facilities.⁴⁵ However, the data provided were still disputed,⁴⁶ as was the interpretation of the declaration requirements and definitions under the MOU.⁴⁷

In August 1994 the USA conducted the first trial challenge inspection, as agreed under Phase II of the MOU, at the Russian CW storage site at Pochep (Bryansk oblast).⁴⁸ A month later Russia held its first inspection at Pine Bluff Arsenal at Pine Bluff, Arkansas.⁴⁹ In October both sides met in Moscow to discuss the ongoing data dispute.⁵⁰ Among other matters, disagreement about

⁴⁰ The text of the Agreement is reproduced in SIPRI, *SIPRI Yearbook 1991: World Armaments and Disarmament* (Oxford University Press: Oxford, 1991), appendix 14A, pp. 536–39.

⁴¹ 'U.S., Russia sign plan to help Russia destroy chemical arms', *Chemical & Engineering News*, vol. 72, no. 3 (17 Jan. 1994), p. 12.

⁴² Lundin, S. J., 'Multilateral and bilateral talks on chemical and biological weapons', SIPRI, *SIPRI Yearbook 1990: World Armaments and Disarmament* (Oxford University Press: Oxford, 1990), chapter 14, pp. 531–32.

⁴³ 'Letter from the Alternate Representative of the United States of America and the Deputy Head of the Delegation of the Russian Federation addressed to the Executive Secretary of the Preparatory Commission for the OPCW transmitting the text of understanding on measures for the preparation and implementation of the second phase of the Wyoming Memorandum of Understanding dated September 23, 1989'. PC-VI/4, 15 Feb. 1994.

⁴⁴ Office of Technology Assessment (OTA), *Proliferation and the Former Soviet Union*, US Congress, OTA-ISS-605 (US Government Printing Office: Washington, DC, Sep. 1994), p. 16; and Institute for Defense and Disarmament Studies, '28 May', *Arms Control Reporter* (IDDS: Brookline, Mass.), sheet 704.B.577, Oct. 1994.

⁴⁵ See *Arms Control Reporter* (note 44).

⁴⁶ 'Moscow opposes public argument with U.S. on chemical arms', in FBIS-SOV-94-123, 27 June 1994, pp. 9–10.

⁴⁷ '30 June', *Arms Control Reporter*, sheet 704.B.583, Oct. 1994.

⁴⁸ '24-27 August', *Arms Control Reporter*, sheet 704.B.584, Oct. 1994.

⁴⁹ '24-27 September', *Arms Control Reporter*, sheet 704.B.584, Oct. 1994.

⁵⁰ '10-14 October', *Arms Control Reporter*, sheet 704.B.585, Oct. 1994.

the interpretation of the requirement to declare CW development facilities or establishments was discussed. The bilateral Destruction Agreement was also discussed, but no progress was made on the Russian desire to convert a larger quantity of its CW agents⁵¹ instead of destroying them.

In October 1994 Russia conducted its second inspection at the Tooele Army Depot storage facility at Tooele, Utah,⁵² and the USA held its second and third inspections at the Shuchye facility (Kurgan oblast)⁵³ and at Maradikovsky (Kirov oblast). Both countries concluded their remaining inspections by mid-December.

In March 1994 the US General Accounting Office (GAO) submitted a report on the status of the MOU and the bilateral Destruction Agreement.⁵⁴ The report noted that both countries had failed to implement all of the key aspects of the two agreements and have not yet begun to verify each other's declared CW stockpiles and facilities under the 1989 MOU. Ratification and implementation of the bilateral Destruction Agreement are still pending. The main issue of disagreement relates to the conversion of former CW production facilities and to the Russian proposal to convert chemicals that are components of chemical weapons to civilian use.⁵⁵

The US CW destruction programme

The debate about CW destruction in the USA in 1994 was much influenced by the fact that US Army finalized its review of alternative destruction technologies in 1994. In February 1994 the National Research Council (NRC) presented its recommendations⁵⁶ on chemical destruction technologies based on the June 1993 report of its Committee on Review and Evaluation of the Army Chemical Disposal Program.⁵⁷ The report presented findings and 21 recommendations in seven categories: expeditious progress, risk analyses, public concerns, current systems, alternatives, stockpile safety and staffing needs. In evaluating stockpile safety it was noted that the M55-rockets with propellant stabilization were at greatest risk to deteriorate and become increasingly hazardous; however, these rockets should be safe until 2007 or later. The most important recommendation of the NRC report was that there should be continued implementation of baseline incineration technology at the Johnston

⁵¹ See *Arms Control Reporter* (note 50).

⁵² '24 October', *Arms Control Reporter*, sheet 704.B.585, Oct. 1994.

⁵³ 'The bilateral track of chemical weapons disarmament', *CWC Chronicle*, vol. 1, issue 7 (Nov. 1994), pp. 1-2.

⁵⁴ US General Accounting Office (GAO), *Arms Control: Status of U.S.-Russian Agreements and the Chemical Weapons Convention*, Report to the Chairman, Committee on Foreign Relations, US Senate, GAO/NSIAD-94-136, 15 Mar. 1994.

⁵⁵ '22-29 November [1993]', *Arms Control Reporter*, sheet 704.B.560-1, Jan. 1994.

⁵⁶ Committee on Review and Evaluation of the Army Chemical Stockpile Disposal Program, Board on Army Science and Technology, Commission on Engineering and Technical Systems, *Recommendations for the Disposal of Chemical Agents and Munitions* (National Research Council: Washington, DC, 1994).

⁵⁷ Committee on Alternative Chemical Demilitarization Technologies, Board on Army Science and Technology, Commission on Engineering and Technical Systems, *Alternative Technologies for the Destruction of Chemical Agents and Munitions* (National Research Council: Washington, DC, 1993).

Atoll Chemical Agent Disposal System (JACADS), which is located on Johnston Atoll in the Pacific south-west of Hawaii.⁵⁸

The NRC Committee on Review and Evaluation of the Army Chemical Stockpile Disposal Program advised the Army to improve its system for monitoring emissions from destruction facilities before starting work at continental US destruction sites owing to the high rate of false alarms at JACADS.⁵⁹

After delivery of the NRC report the Army had 60 days to submit its own assessments to Congress under the 1993 Defense Authorization Act.⁶⁰ In addition, the Army was required to consider the recommendations of the Citizen Advisory Commission for each stockpile location. A pertinent February 1994 GAO report noted the delay of the Chemical Stockpile Emergency Preparedness Program, established in 1988, which is now scheduled to be completed in 2003 instead of 1994.⁶¹

In March 1994 a GAO report outlined the status of alternative chemical destruction technologies and drew the conclusion that none of the eight technologies under consideration could be used on a sufficient scale to meet the 31 December 2004 US deadline for finalization of destruction. At least 3 more years (i.e., a maximum of 7 years) will be needed, and by that time the 10-year destruction deadline under the CWC may have been exceeded.⁶²

On 11 April 1994 the US Army submitted its long-awaited report on alternative chemical destruction technologies to Congress.⁶³ The report contained an evaluation of the NRC recommendations and comments by the Citizen Advisory Commissions.⁶⁴ The report stated that 'No other alternative technologies are sufficiently mature to merit meaningful comparison with the baseline incineration technology'. It was also noted that no alternative technology would be able to meet the 2004 deadline for destruction of the US CW stockpile. The report pointed to findings that continuous storage of the munitions would be more risky than using incineration to destroy them. The Army agreed to investigate and test neutralization as a potential alternative, as recommended by the NRC, and will ask Congress for funding to do so. If successfully developed, neutralization technology could be used for the destruction of the low-volume bulk sites (e.g., those at the Newport Army

⁵⁸ Program Manager for Chemical Demilitarization, Department of the Army, *U.S. Army's Alternative Demilitarization Technology Report for Congress: Executive Summary*, 11 Apr. 1994.

⁵⁹ Ember, L., 'Army plans to continue burning chemical arms', *Chemical & Engineering News*, vol. 72, no. 16 (18 Apr. 1994), p. 7.

⁶⁰ See *SIPRI Yearbook 1993* (note 15), p. 286.

⁶¹ US GAO, *Chemical Weapon Stockpile: Army's Emergency Preparedness Program Has Been Slow to Achieve Results*, Report to the Chairman, Subcommittee on Environment, Energy, and Natural Resources, Committee on Governmental Operations, US House of Representatives, GAO/NSIAD-94-91, Feb. 1994.

⁶² US GAO, *Chemical Weapons Destruction: Advantages and Disadvantages of Alternatives to Incineration*, Report to the Chairman, Subcommittee on Environment, Energy, and Natural Resources, Committee on Governmental Operations, US House of Representatives, GAO/NSIAD-94-123, Mar. 1994.

⁶³ The Army was required by Public Law 102-484 of 23 Oct. 1992, to submit this report by 31 Dec. 1993. The deadline was later extended to 60 days after the Committee on Review and Evaluation of the Army Chemical Stockpile Disposal Program had delivered its final report.

⁶⁴ See Program Manager for Chemical Demilitarization, *Alternative Technologies Report and Technical Appendixes* (note 58); and Ember (note 59).

Ammunition Plant at Newport, Indiana, and at Aberdeen Proving Ground at Edgewood, Maryland).⁶⁵ Following an NRC recommendation, the Army agreed to add carbon filters to the baseline process. In addition, the Army agreed to conduct new risk assessments for each CW storage site and to launch an extensive public outreach programme to provide information to and receive input from the communities where the destruction facilities are located. The risk-perception report for all eight storage sites was to be finalized by November 1994.⁶⁶

If Congress approves funding, a study will be conducted on the two most promising alternative technologies: (a) neutralization, which is especially useful for GB (sarin), followed by incineration; and (b) neutralization in combination with biological degradation. These two technologies might be used for agent in bulk storage containers which is not in munitions.

At an April 1994 US Senate hearing before the Armed Services Subcommittee on Nuclear Deterrence, Arms Control and Defence Intelligence, it was stated that it might be imprudent to delay the US destruction schedule because opponents of incineration might then achieve a prohibition on the future use of incineration. It was first estimated that destruction costs would exceed the 1993 estimate of \$8.6 billion;⁶⁷ the figure was later increased to \$10 billion.⁶⁸ (Table 10.1 presents an estimate of the life-cycle costs for the US destruction programme.⁶⁹)

For fiscal year (FY) 1995 President Clinton requested a total of \$851 million for the Chemical Stockpile Disposal Program and the Non-Stockpile Chemical Material Programme, including the costs for construction of new facilities.⁷⁰ The request allocated \$575 million for CW agent destruction for FY 1995.⁷¹ After the bill had passed both the House and Senate, the total amount was \$599.5 million, including \$24 million for construction of facilities, \$355.8 million for operations and maintenance, \$199 million for procurement of equipment and \$20.7 million for R&D, particularly on alternative technologies.⁷²

⁶⁵ 'Army releases report on alternative technologies', *Chemical Demilitarization Update*, special edn, Apr. 1994, p. 1.

⁶⁶ *Chemical Demilitarization Update*, vol. 3, issue 2 (Oct. 1994), p. 6.

⁶⁷ '26 April', *Chemical Weapons Convention Bulletin*, no. 24 (June 1994), p. 26.

⁶⁸ '1 October', *Chemical Weapons Convention Bulletin*, no. 26 (Dec. 1994), p. 24.

⁶⁹ US GAO (note 62), p. 17.

⁷⁰ '7 February', *Chemical Weapons Convention Bulletin*, no. 24 (June 1994), p. 14. In the budget request for FY 1995, \$276 million was earmarked for construction activities at two new disposal sites: Umatilla Army Depot at Hermiston, Oregon (\$179 million) and Pine Bluff Arsenal (\$97 million). See *Military Construction Appropriations for 1995*, Hearings before a Subcommittee of the Committee on Appropriations House of Representatives, part 5, 2 Mar. 1994, 79-381 O (US Government Printing Office: Washington, DC, 1994), p. 74. In May 1994 the House of Representatives allocated \$51.2 million for FY 1995 for both facilities and recommended that the remainder be provided in FY 1996. The bill passed the Senate and was signed in August 1994. See 'Military construction bill wins final approval', *Congressional Quarterly*, vol. 52, no. 32 (13 Aug. 1994), p. 2370.

⁷¹ 'Defense spending', *Congressional Quarterly*, vol. 52, no. 32 (13 Aug. 1994), p. 2366.

⁷² '12 August', *Arms Control Reporter*, sheet 704.E-1.34; and *Chemical Demilitarization Update*, vol. 3, issue 2 (Oct. 1994), p. 3.

Table 10.1. Cost of the US CW destruction programme, 1985–94

Figures are in US \$. Figures in italics are percentages.

| Year | Cost | Increase | Cumulative increase |
|-------------------|------|-----------|---------------------|
| 1985 | 1.7 | – | – |
| 1986 | 2.0 | <i>18</i> | <i>18</i> |
| 1987 ^a | – | – | – |
| 1988 | 3.4 | <i>70</i> | <i>100</i> |
| 1989 ^a | – | – | – |
| 1990 ^a | – | – | – |
| 1991 | 6.5 | <i>91</i> | <i>282</i> |
| 1992 | 7.9 | <i>22</i> | <i>365</i> |
| 1993 | 8.6 | <i>9</i> | <i>406</i> |
| 1994 | 10.0 | <i>16</i> | <i>488</i> |

^a For the years 1987, 1989 and 1990 no official figures are available. Figures for 1994 are estimates.

Sources: United States General Accounting Office (GAO), *Chemical Weapons Destruction: Advantages and Disadvantages of Alternatives to Incineration*, Report to the Chairman, Subcommittee on Environment, Energy, and Natural Resources, Committee on Governmental Operations, House of Representatives, GAO/NSIAD-94-123, Mar. 1994; and '1 October', *Chemical Weapons Convention Bulletin*, no. 26 (Dec. 1994), p. 24.

The systemization process at the Tooele Chemical Disposal Facility (TOCDF) continued in 1994 and is planned to be completed by February 1995. In October 1994 it was announced that the beginning of destruction operations will be delayed by approximately six months owing to the additional time needed for review and approval of a large number of modification requests to the Resource Conservation and Recovery Act (RCRA)⁷³ permit.⁷⁴

In March 1994 the NRC Stockpile Committee issued part II of its evaluation of the JACADS Operational Verification Test (OVT). This report recommended changes and improvements at the TOCDF before actual (full-scale) agent destruction starts.⁷⁵ In autumn 1994 Hurricane John led to the evacuation and temporary closing of JACADS. However, no significant damage was reported, and CW destruction operations were to restart by mid-November.⁷⁶

The Russian CW destruction programme

Russia does not have a final approved programme for destruction of its CW stockpile and may not have the appropriate technology.⁷⁷ However, Russian

⁷³ The RCRA regulates the treatment, storage and disposal of hazardous waste. The 1976 RCRA was amended in 1984 and 1986.

⁷⁴ *Chemical Demilitarization Update*, vol. 3, issue 2 (Oct. 1994), p. 5.

⁷⁵ Peterson, C. R., 'Disposing of chemical warfare agents and munitions stockpiles', *Arms Control Today*, vol. 24, no. 5 (June 1994), pp. 8–13.

⁷⁶ *Chemical Demilitarization Update* (note 74).

⁷⁷ US GAO (note 54), p. 17.

authorities have stressed their willingness to keep their commitment to early ratification of the CWC, which includes a 10-year destruction schedule (with a possible extension of up to 15 years).

In an interview in February 1994 the head of the public relations department of the President's Committee on CBW Convention Problems confirmed the earlier estimates regarding the composition of the Russian CW stockpile, which consists of 32 300 t of organophosphorus compounds (stored in aviation, missile and artillery charges) and 7700 t of vesicants (mustard gas, lewisite and mixtures of both). The storage sites are located at: Shuchye (Kurgan oblast), Kizner (Udmurtia Republic), Maradikovskiy (Kirov oblast), Leonidovka (Penza oblast) and Pochev (Bryansk oblast).⁷⁸ Lewisite is stored in Kambarka (Udmurtia Republic), and smaller amounts of mustard gas, lewisite and mixtures of them are stored in Gorny (Saratov oblast).⁷⁹ Table 10.2 presents an overview of the storage sites and the agents present at them. Information is also now available about the distribution of the CW agents in munitions or bulk form (see table 10.3).

In 1994 discussion continued about the accuracy of the official total figure of 40 000 t for the Russian CW stockpile. Allegations were made that in the summer and autumn of 1993 quantities of CW had been destroyed in order to reduce the total amount to 40 000 t.⁸⁰ Former Head of the Russian Federation President's Committee on Matters Pertaining to Chemical and Biological Weapons Problems Academician Anatoliy Kuntsevich agreed in March 1994 that the actual figure exceeds 40 000 t.⁸¹ It is worth noting that one of the two Russian whistle blowers, Vil Mirzayanov, in a March 1994 State Duma Committee on International Affairs hearing on the CWC, pointed to the discrepancy between the declared size of the stockpile and the quantity actually produced, which according to him was more than 400 000 t.⁸²

Local opposition is growing in the regions where storage sites are located and where future destruction plants are planned. Such is the case, for example, in Pochev, where 7000 t of aircraft CW bombs are stored.⁸³

The destruction or conversion of former CW production facilities, long-debated in Russia, began in 1994. A former production plant for sarin and soman near Volgograd,⁸⁴ which had been mothballed after the cessation of production activities, will be destroyed.⁸⁵ In May 1994 the Government of the Republic of Chuvashia decided to destroy a former nerve gas factory at

⁷⁸ The storage site is located 5 km from Pochev; 7000 t of aircraft CW bombs are stored there. FBIS-SOV-94-128, 5 July 1994, pp. 26-27.

⁷⁹ '1 February', *Chemical Weapons Convention Bulletin*, no. 24 (June 1994), p. 12.

⁸⁰ 'Chemical weapons exceeded estimates', *RFE/RL News Briefs*, vol. 3, no. 13 (21-25 Mar. 1994), p. 1; and FBIS-SOV-94-048, 11 Mar. 1994, p. 28.

⁸¹ 'Program reviews chemical weapons development', in FBIS-SOV-94-129, 6 July 1994, pp. 27-28.

⁸² 'Report on destruction of chemical weapons arsenal', in FBIS-SOV-94-058, 25 Mar. 1994, pp. 26-27.

⁸³ 'Planned Bryansk CW destruction plant opposed', in FBIS-SOV-94-063, 1 Apr. 1994, p. 33.

⁸⁴ *SIPRI Yearbook 1993* (note 15), p. 279.

⁸⁵ 'Russia "unilaterally" converting chemical production', in FBIS-SOV-94-078, 22 Apr. 1994, p. 38.

Table 10.2. Chemical weapon distribution at the Russian storage sites

| Storage site | Percentage of CW stock | VX | Sarin | Soman | Yperite | Lewisite | Yperite/lewisite mixture | Phosgene |
|-----------------------------|------------------------|----|-------|-------|---------|----------|--------------------------|----------|
| Pochep, Bryansk oblast | 18.8 | + | + | + | - | - | - | - |
| Maradikovsky, Kirov oblast | 17.4 | + | + | + | - | - | + | - |
| Leonidovka, Penza oblast | 17.2 | + | + | + | - | - | - | - |
| Shuchye, Kurgan oblast | 13.6 | + | + | + | - | - | - | + |
| Kizner, Udmurtia Republic | 14.2 | + | + | + | - | + | - | - |
| Kambarka, Udmurtia Republic | 15.9 | - | - | - | - | + | - | - |
| Gorny, Saratov oblast | 2.9 | - | - | - | + | + | + | - |

Source: Russian Federation, *Conception: Destruction of Chemical Armament* (draft), 1994, p. 5.

Table 10.3. Russian CW agents by method of storage

| CW agent | Percentage stored in munitions and devices | Percentage CW agent stored in bulk (tanks) |
|---|--|--|
| V agent (viscous V agent) | 100 | — |
| Sarin | 100 | — |
| Soman (viscous soman) | 100 | — |
| Mustard gas | — | 100 |
| Lewisite and Mixture mustard gas/lewisite | 10 | 90 |
| Lewisite | 2 | 98 |
| Phosgene | 100 | — |

Source: Russian Federation, *Conception: Destruction of Chemical Armament* (draft), 1994, p. 4.

Novocheboksarsk, which is now owned by the Khimprom Production Association. It has been kept in reserve mode since 1987, when production ceased.⁸⁶

In March a Deputy Chief of Radiation, Chemical and Biological Protection Troops stated in an interview that Russia has 'completed work on elaborating the concept of destruction of toxic chemical agents'.⁸⁷ It was expected that the draft destruction plan would be presented to the State Duma in mid-April 1994. In March the Deputy Chairman of the State Duma Committee on International Affairs pointed out that 'the sites where the destruction of the chemical weapons is to take place have yet to be chosen. As you can see . . . the settling of these matters with local authorities and, moreover, with local inhabitants is running into considerable difficulties'.⁸⁸ To speed up the process of finalizing the Russian CW destruction programme a government commission was established under the Deputy Prime Minister.⁸⁹

In a message to the 6th plenary meeting of the OPCW Preparatory Commission in April 1994 the Russian Foreign Minister reaffirmed Russia's willingness to ratify the CWC and announced that the plan for the destruction of the Russian CW stockpile was being completed.⁹⁰

The figures presented in 1994 for the cost of the Russia CW destruction programme have increased dramatically from those presented in the past. In March 1994 during the State Duma hearings on CW destruction a figure of

⁸⁶ 'Destruction of chemical weapon equipment begins', in FBIS-SOV-94-098, 20 May 1994, p. 33; and Smithson, A. E., 'Russia wants plastics, too', *Bulletin of the Atomic Scientists*, vol. 50, no. 3 (May/June 1994), pp. 14-15.

⁸⁷ 'Concept for chemical weapons destruction finalized', in FBIS-SOV-94-044, 7 Mar. 1994, p. 27.

⁸⁸ 'Report on destruction of chemical weapons arsenal' (note 82).

⁸⁹ 'Military guarantees safety of chemical arms depots', in FBIS-SOV-94-128, 5 July 1994, pp. 26-27.

⁹⁰ 'Message from the Minister of Foreign Affairs of the Russian Federation to Participants in the sixth session of the Preparatory Commission for the Organisation for the Prohibition of Chemical Weapons', PC-VI/15, 8 Apr. 1994.

2.5 trillion roubles was given for the total cost.⁹¹ For 1994, 10.4 billion roubles were allocated.⁹² The first phase of the destruction operations at Kambarka and Gorny is expected to cost 500 billion roubles.⁹³ A US publication estimated the total cost of the Russian destruction programme at \$5–6 billion, with at least \$1 billion in foreign assistance required.⁹⁴

By the end of June 1994 the two houses of the Russian Parliament approved the 1994 federal budget legislation, including 115.96 billion roubles for the elimination of CW to meet Russia's international commitments.⁹⁵

In April a two-day international symposium on CW destruction was held in Moscow.⁹⁶ The symposium was opened by Kuntsevich, who had been dismissed by President Yeltsin from his position as Head of the Russian Federation President's Committee on Matters Pertaining to Chemical and Biological Weapons Problems two weeks earlier.⁹⁷ The official statement on Kuntsevich's dismissal read: 'The committee for conventions on chemical and biological weapons under the Russian president agreed to the transportation and storage of poisonous substances in a major populated area. That is why its chief Anatoliy Kuntsevich was dismissed by presidential decree'.⁹⁸ He was replaced in June by Pavel Syutkin, who previously served as deputy chairman.⁹⁹ The agenda of the Moscow symposium was broad and focused on CW destruction issues. However, compared to the first conference in May 1993, there was little progress and no clear indication of what the final decision would be on the sites chosen for CW destruction in Russia. Russian experts again presented their proposal to convert lewisite into pure arsenic to be used in civilian production.

In autumn 1994 two draft Russian Council of Minister decrees on the creation of facilities for CW destruction in Kambarka and Gorny were reviewed and the Law on the Destruction of Chemical Weapons in Russia was submitted to the Government and the State Duma.¹⁰⁰ A plant is scheduled to be constructed in Kambarka by the end of 1997, and destruction of lewisite will start in 1998. Destruction will be based on neutralization and subsequent electrolysis to process the pure arsenic.

⁹¹ 'CBW official informs Parliament on weapons' in FBIS-SOV-94-058, 25 Mar. 1994, p. 27; and 'Company seeks to recycle chemical weapon poisons' in FBIS-SOV-94-170, 1 Sep. 1994, p. 26.

⁹² 'Official views cost of CW destruction program' in FBIS-SOV-94-060, 29 Mar. 1994, pp. 22–23.

⁹³ 'Report on destruction of chemical weapons arsenal' (note 82); and '24 March', *Chemical Weapons Convention Bulletin*, no. 24 (June 1994), p. 20.

⁹⁴ US GAO (note 54), p. 17.

⁹⁵ '24 June', *Chemical Weapons Convention Bulletin*, no. 25 (Sep. 1994), p. 24.

⁹⁶ 'Convention on chemical disarmament to be ratified', in FBIS-SOV-94-077, 21 Apr. 1994, p. 29.

⁹⁷ 'Yeltsin dismisses biological, chemical weapons aide', in FBIS-SOV-94-067, 7 Apr. 1994, p. 25; and 'Kostikov explains CW chief's dismissal', in FBIS-SOV-94-068, 8 Apr. 1994, p. 32.

⁹⁸ Kuntsevich was also alleged to have violated labour regulations. See 'Yeltsin dismisses biological, chemical weapons aide' (note 97). In addition it was noted that Kuntsevich had spent many years developing CW, and 'it is difficult for a person to part from his child even if the child is dangerous one'. See also 'Kostikov explains CW Chief's dismissal' (note 97).

⁹⁹ '22 June', *Arms Control Reporter*, sheet 704.E-2.116.

¹⁰⁰ 'Chemical Weapons destruction concept urged', in FBIS-SOV-94-189, 29 Sep. 1994, pp. 38–40.

International support for Russian CW destruction

Russia and the USA signed an agreement in July 1992¹⁰¹ under which the USA will provide up to \$25 million in assistance to Russia for CW destruction.¹⁰² Most of the money will be used to develop a comprehensive destruction plan.¹⁰³ In addition, \$30 million has been allocated to assist Russia to develop and set up an analytical CW destruction laboratory.¹⁰⁴ This laboratory is to develop quality control measures, conduct environmental studies and train scientists and technicians.¹⁰⁵ The Vernadskiy Institute of Geochemistry and Analytical Chemistry in Moscow is to be the central CW destruction analytical laboratory.¹⁰⁶ A US contractor was hired to develop a comprehensive plan for the Russian destruction programme under the January 1994 agreed work plan. A programme management system will also be developed to: (a) estimate costs, (b) set up a comprehensive public outreach and education programme, and (c) develop criteria for destruction facilities. The Chemical Weapons Destruction Support Office in Moscow,¹⁰⁷ established in 1993, continued its work and will be the coordination office for US support to Russia.

In May 1994 the US Defense Nuclear Agency awarded a \$7.4 million contract to Bechtel National Inc. of San Francisco for 'Russian chemical weapons destruction support'.¹⁰⁸ In 1994 Russian and US representatives met to work out the best way to administer the US financial support.¹⁰⁹ The USA has insisted that before it provides most of the funds to Russia a specific plan must be established for exchanging information on the Russian CW stockpile.

In May 1994 the US Assistant Defense Secretary for Atomic Energy announced that President Clinton would ask Congress for an additional \$500 million to construct a CW destruction facility in Russia, on the condition that Russia made progress in compliance with the CWC.¹¹⁰ This plant would be a pilot project, which might be followed by a second destruction facility, also funded by the USA.

In FY 1993 Germany provided \$2.9 million to support the Russian CW destruction programme.¹¹¹ At the end of 1993 a mobile laboratory was handed over to the Russian Ministry of Defence; it can be used for effective monitor-

¹⁰¹ *SIPRI Yearbook 1993* (note 15), p. 280.

¹⁰² This is a part of the funding under the legislation sponsored by Senators Sam Nunn and Richard Lugar. Since 1992 the US Congress has approved \$1.2 billion for this programme which is to help Russia and other former Soviet republics destroy their weapons of mass destruction.

¹⁰³ US GAO (note 54), p. 17.

¹⁰⁴ *SIPRI Yearbook 1994* (note 15), p. 336.

¹⁰⁵ 'Chemical arms to be destroyed', *Signal*, vol. 48, no. 7 (Mar. 1994), p. 8.

¹⁰⁶ US GAO (note 54), p. 18; and 'U.S. to supply "nearly \$30 million" for CW destruction', in FBIS-SOV-94-022, 2 Feb. 1994, p. 2.

¹⁰⁷ *SIPRI Yearbook 1994* (note 15), p. 336.

¹⁰⁸ *ASA Newsletter*, no. 42 (16 June 1994), p. 23.

¹⁰⁹ Hitchens, T. and St LeSueur, S., 'Critics fear misuse of U.S. aid to destroy Russian arms', *Defense News*, vol. 9, no. 25 (27 June-3 July 1994), p. 14.

¹¹⁰ Hitchens, T., 'U.S. eyes Russian chemical aid: Congress may increase funding for deconstruction site', *Defense News*, vol. 9, no. 20 (23-29 May 1994), p. 34.

¹¹¹ The support focused on helping to finance the destruction of mustard gas and lewisite and exploring the feasibility of extracting arsenic from lewisite for commercial purposes.

ing of CW destruction. The laboratory, valued at 1.3 million Deutschmark, is to be deployed in the Saratov oblast.¹¹²

A German-US consortium—controlled by the US companies Lurgi Environmental Participating Organization Ltd (LUB) and Raytheon,¹¹³ and the German companies Uhde GmbH (a branch of Hoechst AG) and EST (a subsidiary of DASA)—was created to set up enterprises in Russia.¹¹⁴

Sweden continues its support to Russia.¹¹⁵ The Swedish National Defence Research Establishment (FOA) conducted risk assessment analysis for the storage site at Kambarka where 6000 t of lewisite are stored.¹¹⁶

CW destruction technologies

In the USA discussion of alternative destruction technologies continued in 1994. Following the NRC recommendations¹¹⁷ on CW destruction technologies and the US Army report to Congress on alternative chemical destruction technologies, \$20.7 million were allocated in the FY 1995 budget for R&D, primarily on alternative technologies. Research will focus on two technologies: stand-alone neutralization, and neutralization followed by biodegradation. The intent is not to replace the incineration technology, but rather to find a back-up system for the two storage sites where only bulk agents are stockpiled (Aberdeen Proving Ground and the Newport Army Ammunition Plant). Neutralization alone, however, will not meet the CWC 'irreversibility' requirement. This means that a combination with another process such as secondary oxidation would be required.¹¹⁸ Table 10.4 presents an overview of the alternative destruction technologies and their capabilities and availability.

The *Silver II* process,¹¹⁹ which was developed by the British Atomic Energy Authority and Scotland-based company SubSea Offshore Ltd, has been successfully tested in experiments with VX, tabun, sarin and mustard gas in pure, weaponized and thickened forms.¹²⁰ Based on the reduction of silver II ions, which have been oxidized from the normal silver I ion state in an electrochemical cell, to normal silver I ions the chemical warfare agent is oxidized to carbon dioxide, carbon monoxide, mineral acids and protons. This process has been demonstrated to be a viable alternative technology for the destruction of CW agents and munitions containing CW agents, especially the M55-rockets.

¹¹² 'Germany provides chemical weapons monitoring equipment', in FBIS-SOV-93-246, 27 Dec. 1993, p. 29.

¹¹³ The Raytheon Company installed and operates equipment at JACADS.

¹¹⁴ 'International Consortium to clean Russian CWs', *Military Technology, MILTECH*, vol. 18, no. 3 (1994), p. 101.

¹¹⁵ *SIPRI Yearbook 1994* (note 15), p. 337.

¹¹⁶ Blomgren, J., 'Kemvapen förstörs: Ryssland får svensk experthjälp i avvecklingsprojekt' ['Chemical weapons are destroyed: Russia receives Swedish expert help in destruction project'], *Svenska Dagbladet*, 16 Sep. 1994, p. 7.

¹¹⁷ See *Recommendations for the Disposal of Chemical Agents and Munitions* (note 56).

¹¹⁸ Peterson, C. R., 'Disposing of chemical warfare agents and munitions stockpiles', *Arms Control Today*, vol. 24, no. 5 (June 1994), pp. 8–13.

¹¹⁹ *SIPRI Yearbook 1994* (note 15), p. 338.

¹²⁰ 'Cleaning up CW disposal', *Jane's Defence Weekly*, vol. 22, no. 12 (24 Sep. 1994), pp. 20–21.

Table 10.4. Destruction and decontamination capabilities and availability of alternative technologies and whether they can or cannot destroy/decontaminate

| Technology | Chemical agent | Explosive propellants | Metal parts | Dunnage | Estimated year of full-scale operation |
|-------------------------------|----------------|-----------------------|-------------|---------|--|
| Baseline incineration | Yes | Yes | Yes | Yes | Currently |
| Molten salt oxidation | Yes | Yes | No | No | 2007–2008 |
| Fluidized bed oxidation | Yes | Yes | No | No | 2007–2008 |
| Molten metal pyrolysis | Yes | Yes | Yes | No | 2007–2008 |
| Plasma arc pyrolysis | Yes | No | No | No | 2007–2011 |
| Steam gasification | Yes | No | No | No | 2007–2011 |
| Wet air oxidation | Yes | Yes | No | No | 2007–2008 |
| Supercritical water oxidation | Yes | Yes | No | No | 2007–2008 |
| Chemical neutralization | Yes | No | No | No | 2007–2008 |

Source: *Chemical Weapons Destruction: Advantages and Disadvantages of Alternatives to Incineration* (General Accounting Office: Washington, DC, Mar. 1994), tables 1 and 3, pp. 5, 8; and Smithson, A. E., *The US Chemical Weapons Destruction Program: Views, Analysis, and Recommendations*, Report no. 13 (Henry L. Stimson Center: Washington, DC, 1994).

V. Old CW ammunition

Sea-dumped chemical weapons

In January 1994 the third meeting of the *Ad Hoc* Working Group on Dumped Chemical Munition of the Baltic Marine Environment Protection Commission of the Helsinki Commission (HELCOM CHEMU) was held in Copenhagen.¹²¹ At the meeting the Russian delegation stated that 'the data submitted to the Ministry of Environment Protection does not contain any reference to dumping of chemical weapons in the Baltic Sea after 1947'. However, there is scepticism about this statement, especially in light of the many allegations of later dumping operations by the former Soviet Union, including dumping in the Baltic Sea.¹²² The Working Group presented its final report, which included conclusions and recommendations for further action,¹²³ to the March 1994 Helsinki Commission ministerial meeting. The report contained a recommendation 'not to recover chemical munitions from the Helsinki Convention Area', owing to the risks associated with such recovery.

¹²¹ Helsinki Commission, *Press Release*, Baltic Marine Environment Protection Commission, Copenhagen, 21 Jan. 1994; see also *SIPRI Yearbook 1994* (note 15), pp. 339–40.

¹²² *SIPRI Yearbook 1993* (note 15), pp. 282–83; and Lundin, S. J., Stock, T. and Geissler, E., 'Chemical and biological warfare and arms control developments in 1991', SIPRI, *SIPRI Yearbook 1992: World Armaments and Disarmament* (Oxford University Press: Oxford, 1992), chapter 6, p. 172.

¹²³ *Ad Hoc* Working Group on Dumped Chemical Munition (HELCOM CHEMU), 'Report on Chemical Munitions Dumped in the Baltic Sea', Report to the 16th Meeting of the Helsinki Commission, 8–11 Mar. 1994.

The ministerial meeting decided to prolong the mandate of the Working Group for an additional year.¹²⁴ Denmark will continue to lead the work of the group. Two more meetings were held in June¹²⁵ and September 1994.¹²⁶ The discussion focused on: (a) the chemical processes of warfare agents and the ecological effects of such processes; (b) the state of corrosion of dumped chemical munitions; (c) the Baltic Guidelines for fishermen on how to deal with dumped chemical munitions; and (d) the Baltic Guidelines on how the appropriate authorities should deal with incidents where such munitions are 'caught' by fishermen. Draft guidelines were developed for c and d.

An earlier report submitted by Latvia stated that Latvia had not dumped chemical munitions after re-establishment of its independence and that no further information on the issue had been obtained from Russia.¹²⁷ Poland stated that it had not dumped chemical munitions.¹²⁸

Germany hosted the third meeting of the Working Group in December 1994. All participating states were to provide information on dumping activities, especially those conducted after 1947.

In 1994 it also became known that the former Soviet Union had dumped large amounts of CW into the northern seas in the 1950s and 1960s.¹²⁹ It was reported that near the town of Petschenga,¹³⁰ close to the Norwegian border, rail cars arrived with bombs and artillery shells filled with mustard gas, which were then shipped to the Polar Sea. It was also claimed that other areas in the Barents Sea, Kara Sea, White Sea, Sea of Okhotsk and Sea of Japan were used by the former Soviet Union for dumping.¹³¹ An account of a 1961 ocean dumping operation in the Arctic Ocean of mustard gas bombs and other chemical munitions by the former Soviet Union was presented by a man who had participated.¹³²

Old chemical weapons in Russia

According to press accounts, large amounts of Adamsite are buried near Shikhandy, the former Soviet CW test site.¹³³ The first reported figures ranged

¹²⁴ Baltic Marine Environment Protection Commission, Helsinki Commission, Convention on the Protection of the Marine Environment of the Baltic Sea Area, 1974 (Helsinki Convention), Report of the 15th Meeting, Helsinki, Finland, 8–11 Mar. 1994, HELCOM 15/18.

¹²⁵ 'Ad Hoc Working Group on Dumped Chemical Munition (HELCOM CHEMU), Report of the 4th Meeting, Copenhagen, Denmark, 16–17 June 1994, HELCOM CHEMU 4/5.

¹²⁶ 'Ad Hoc Working Group on Dumped Chemical Munition (HELCOM CHEMU), Report of the 5th Meeting, Copenhagen, Denmark, 22 Sep. 1994, HELCOM CHEMU 5/4.

¹²⁷ 'Ad Hoc Working Group on Dumped Chemical Munition (HELCOM CHEMU) (note 125), p. 4.

¹²⁸ 'Ad Hoc Working Group on Dumped Chemical Munition (HELCOM CHEMU) (note 126), p. 4.

¹²⁹ 'Bericht über russische Chemiewaffen im Eismeer' [Report of Russian chemical weapons in Polar Sea], *Neue Zürcher Zeitung*, 13–14 Feb. 1994, p. 8; and 'Sowjetische Chemiewaffen im Eismeer versenkt' [Soviet chemical weapons sunk in the Polar Sea], *Süddeutsche Zeitung*, 12–13 Feb. 1994, p. 6.

¹³⁰ Umnov, V., 'Will the Baltic Sea be saturated with mustard gas?', *Moscow News*, no. 23 (10–16 June 1994), p. 13.

¹³¹ '100 000 Tonnen C-Waffen in russischen Meeren' [100 000 tonnes of chemical weapons in Russian Sea], *Neue Zürcher Zeitung*, 22 Jan. 1994, p. 9.

¹³² 'Chemical weapons dumping after WWII reported', in FBIS-SOV-94-030, 14 Feb. 1994, p. 31.

¹³³ 'Program reviews chemical weapons development' (note 81).

from more than 4000 t to 8000 t.¹³⁴ Later a lower figure was presented by the former deputy chief of Shikhany, who stated that in 1962, 3200 t of adamsite were abandoned in an open trench at the base.¹³⁵ There is currently no plan to dig up this enormous amount of adamsite, as it is not now technically possible for Russia to destroy it.

In Moscow during restoration work near All Hallow's Church, several buried containers of mustard gas were unearthed.¹³⁶

VI. The Gulf War Syndrome

The Gulf War Syndrome continued to be debated in 1994 and was still not satisfactorily explained.¹³⁷ In January 1994 the US Department of Defense (DOD) and the Department of Health and Human Services formed a task force together with the Veterans Administration to investigate the possible causes of the syndrome.¹³⁸ Senator Riegle continued his investigation of possible explanations for the symptoms experienced by the Persian Gulf War veterans. In February 1994 a Senate report was released which listed a cocktail 'of biological and chemical warfare agents'¹³⁹ as the prime suspect for the Gulf War Syndrome. According to Senator Riegle there could be no other logical explanation of the symptoms 'than that they were caused by exposure to biological and/or chemical agents'.¹⁴⁰ In May 1994 a congressional report was released stating that there was indeed 'strong evidence that Iraq attacked U.S. troops with chemical weapons during the Gulf War'.¹⁴¹ This view is partly supported by the investigation carried out on behalf of the Senate Armed Services Committee. According to that investigation 'chemical agents were present in the theater of operations during the Persian Gulf War', although the report did not mean that Iraq had used CW.¹⁴² The Under Secretary of Defense for Personnel and Readiness stated that 'We have concluded that Iraq did not use chemical or biological weapons during the war'.¹⁴³ Instead several scenarios were offered including an accident in the Coalition forces involving CW

¹³⁴ 'Chemical weapons dumping after WWII reported' (note 132).

¹³⁵ '5 June', *Chemical Weapons Convention Bulletin*, no. 25 (Sep. 1994), p. 19.

¹³⁶ 'Moscow workmen find containers of suspected mustard gas', in FBIS-SOV-94-180, 16 Sep. 1994, pp. 31-32.

¹³⁷ Unexplained illnesses suffered by veterans of the 1991 Persian Gulf War have been labelled 'Gulf War Syndrome'. See also *SIPRI Yearbook 1994* (note 15), pp. 328-30.

¹³⁸ 'Panel formed to probe source of Persian Gulf War illnesses', *Chemical & Engineering News*, vol. 72, no. 5 (31 Jan. 1994), p. 15.

¹³⁹ Tisdall, S., 'Iraq "used US biotoxins in Gulf War"', *The Guardian*, 11 Feb. 1994, p. 5.

¹⁴⁰ Tisdall (note 139).

¹⁴¹ Associated Press, 'Iraq used toxic arms in war, report says', *International Herald Tribune*, 26 May 1994, pp. 1, 5.

¹⁴² 'Senator says chemical agents were released in Gulf War', *Congressional Quarterly*, 19 Mar. 1994, p. 682.

¹⁴³ Ember, L., 'Gulf troop exposure to chemical arms charged', *Chemical & Engineering News*, vol. 72, no. 22 (30 May 1994), p. 6.

agents or a chemical cloud resulting from Coalition bombing of Iraqi CW facilities.¹⁴⁴

Another panel investigating the cause of the symptoms rejected the idea that they constituted a single medical syndrome but did recommend that extensive research be carried out on the almost 700 000 troops that served in the Persian Gulf.¹⁴⁵ This was in line with the view of the Under Secretary of Defense for Personnel and Readiness, who said that the 'Pentagon had concluded that Iraq did not use chemical or biological weapons during the war and that there were no conclusive reports of troops having symptoms caused by exposure to chemical or biological warfare agents'.¹⁴⁶

There was much debate in Congress about the Gulf War Syndrome, and in October 1994 a bill was passed authorizing the Department of Veterans Affairs to provide compensation for those veterans suffering from it.¹⁴⁷

Both British and US troops experienced the Gulf War Syndrome. In the UK there were suggestions that the syndrome might stem from the large stocks of insecticides which the British forces maintained in the war zone. However, the British Ministry of Defence claims that there is no medical link between the insecticides and the illnesses.¹⁴⁸ In the USA it was claimed that the drug given to troops to protect them from nerve gas attacks, in combination with insecticides, could have caused some of the symptoms.¹⁴⁹

Claims that Iraq had used CW in the Persian Gulf War were denied by Iraq.¹⁵⁰ Kuwait has declared that 'in the aftermath of the Kuwait liberation war, [Kuwait] is free of any abnormal diseases'.¹⁵¹

VII. Conclusions

Although the number of reports of alleged use of CW decreased in 1994 they continued to occur especially as regards the former Yugoslavia and Angola. Greater attention was focused on accusations of current or past possession and development of CW or BW. The countries named in 1994 included the former Czechoslovakia, Libya, North Korea, Romania and Russia.

Reports of proliferation of BW or CW continued in 1994, and the number of countries accused of involvement in proliferation activities was of the same magnitude as in past years.

¹⁴⁴ Senator says chemical agents were released in Gulf War', *Congressional Quarterly*, 19 Mar. 1994, p. 682.

¹⁴⁵ Gavaghan, H., 'NIH panel rejects Persian Gulf Syndrome', *Nature*, vol. 369, no. 6475 (5 May 1994), p. 8.

¹⁴⁶ Associated Press (note 141).

¹⁴⁷ Ember, L., 'Sick Gulf vets get aid: chemical arms link probed', *Chemical & Engineering News*, vol. 72, no. 43 (24 Oct. 1994), p. 22.

¹⁴⁸ Fairhall, D., 'MOD denies chemicals link with Gulf "fever"', *The Guardian*, 9 Aug. 1994, p. 8.

¹⁴⁹ Katz, I., 'US Gulf troops "not warned about toxins"', *Guardian Weekly*, vol. 151, no. 7 (14 Aug. 1994), p. 5. See also *SIPRI Yearbook 1994* (note 15), p. 328.

¹⁵⁰ Reuters, 'Iraq denies weapons allegations', *The Independent*, 27 May 1994, p. 11.

¹⁵¹ 'Officials deny "abnormal diseases" surfaced after war', in FBIS-NES-94-050, 15 Mar. 1994, p. 12.

Implementation of the Destruction Agreement between Russia and the USA progressed. The second phase of the 1989 Wyoming Memorandum of Understanding was completed in mid-December 1994.

CW destruction is of major concern for the entry into force of the CWC. Both the primary possessor states, Russia and the USA, face problems. In the USA construction of CW destruction facilities is delayed. The overall cost of the US destruction programme is growing. In the final evaluation of alternative destruction technologies submitted by the US Army it was noted that there is no alternative to the currently used baseline incineration technique. However, additional funding has been provided for research on alternative technologies. Russia has not yet approved a final CW destruction programme, and estimates of its total cost approach those of the US programme. No destruction facility is functional, and debate about the accuracy of the declared total amount of the Russian CW stockpile continues. International support for Russia's CW destruction is essential, and the contribution that will be needed continues to grow.

The issue of CW dumped at sea in the past is being debated and is of particular concern to the countries around the Baltic Sea.

The origin of the so-called Gulf War Syndrome remains unknown, and new theories about its origin were advanced. The US Senate has indirectly acknowledged that the syndrome exists by approving a bill to compensate veterans suffering from illnesses acquired during the Persian Gulf War.

11. Military technology: the case of China

ERIC ARNETT

I. Introduction

China's military technology programmes had a strong effect on its foreign policy in 1994 but showed few signs of progress on major design projects. A continuing series of nuclear weapon tests supporting the development of a warhead for three new strategic missiles has led China to take a conservative position on the comprehensive test ban (CTB) treaty at the Conference on Disarmament (CD). Two nuclear tests were conducted in 1994 and two more are expected in 1995. Relations with the USA were complicated, even though the two countries resumed military contacts for the first time since 1989, by exports of ballistic missile components to Pakistan, transferred in part to raise money to maintain one of the Chinese missile design bureaus. A broad range of other research and development (R&D) programmes have also attracted the attention of critics abroad, particularly work on warships and submarines that might later become part of a significant power-projection and sea-denial force.

Despite the critical attention attracted by these programmes, there are many signs indicating that the Chinese military technology base remains weak and has been further weakened by the process of reform begun in the late 1970s, despite some countervailing new strengths. There is no sign that Chinese weapon designers made significant progress during 1994 on the new guidance systems required to improve the accuracy of China's strategic ballistic missiles or to arm them with multiple independently targetable re-entry vehicles (MIRVs). Chronic problems with the design of Chinese nuclear-powered ballistic-missile submarines (SSBNs) have apparently led to the suspension of SSBN production pending completion of the new 09-4 SSBN. There is no sign of self-sufficiency being achieved in the design of fighter aircraft, and a number of projects seem to have reached a state of limbo, awaiting advice from foreign firms on designs and components. Despite much speculation in the international press, the level of foreign cooperation in Chinese military R&D programmes still appears to be low. Sino-Russian cooperation was set back in 1994 by the tightening of export controls and a trade deal that reduced the role of barter. The ability of the military technology base to exploit imported civilian technology and management practices remains limited.

As a result of these developments, declining prestige and a continuing lack of resources, officials of the Commission on Science, Technology and Industry for National Defence (COSTIND)—the ministry-level agency responsible for military R&D, production and procurement—are suffering from low morale, as are personnel at the military R&D institutes which COSTIND coor-

dinates. As talented scientific personnel and engineers are leaving for the civilian sector, these organizations remain isolated from the rapidly developing civilian economy and their military design bureaus have not been reformed from the Soviet model of research management.

Nevertheless, a primary objective of the reform movement has been to strengthen the military technology base through developing the civilian economy. Further reforms might invigorate the military technology base, especially if a broader range of foreign technologies becomes available and a change in conditions provides COSTIND with more resources and prestige. This chapter assesses these trends in the light of what is now known about China's military technology base.¹ Section I provides a brief introduction to the military technology base and the process of reform begun by paramount leader Deng Xiaoping, followed by an assessment of the strengths and weaknesses of the Chinese military R&D establishment in section II. Section III summarizes public information on the resources available for military R&D before an evaluation of the status of current programmes in section IV.

Sources of information on Chinese military R&D

This chapter relies on public information regarding China's military R&D establishment and programmes. More such information of better quality has been available in the Deng era, although it remains inadequate for confident research and conclusions. Most information comes either from the Chinese Government in an official form that cannot be confirmed independently and may be distorted by reporting or political biases or from outside observers who rely on Chinese sources or speculation, neither of which is necessarily reliable. Statistics from the Chinese Government are summarized in this chapter, but not necessarily endorsed. The chapter does not repeat information from other sources that have been demonstrated to be unreliable and gives greater weight to reports that are based on direct observation during visits to named facilities and to statements of named officials. Nevertheless, it must be acknowledged that facilities may be opened to foreign visitors on a selective basis and that Chinese officials cannot be assumed to be speaking accurately simply because they allow themselves to be named. Although the conclusions drawn must be tempered by these data problems, the picture that emerges is sufficiently consistent for the propositions mentioned above to be examined, in section II, and the conclusions to be evaluated. This chapter was offered to several COSTIND officials and Chinese researchers, none of whom has been willing to comment.

¹ This chapter addresses only military R&D, not production, operation or strategic impact. Nor does it assess Chinese exports of military and dual-use technology, which are discussed in chapters 14 and 15 in this volume. It is the third in a series of case studies on military R&D, begun in *SIPRI Yearbook 1993* and conducted by SIPRI's Project on Military Technology, which addresses related questions more completely in the cases of India, Iran and Pakistan as well as China in ed. E. Arnett, E., SIPRI, *Beyond Threat Perception: Military Technology and Offensive Capacity in Southern Asia* (Oxford University Press: Oxford, forthcoming). Jaquelin Cochran provided essential research support for this chapter.

China's military technology base

China has sought self-sufficiency in military systems since the Communists took power in 1949 and particularly since 1960, when cooperation with the USSR came to an end. The official history of China's military technology base concludes that China must continue 'to persist in mainly relying on ourselves and put [a] foothold on the base of own power':

For a large country like China, the defence modernization can not be realized by buying weapons and equipment. It is not only the question whether you can afford it or not, but also for the most advanced technology, especially those so-called 'sensitive technology', the defence high-tech, you can not get it even if you want to buy. Even though the agreement or contract is signed, once the political changes, the agreement or contract will be cut down . . . China will always adhere to the fundamental guideline that the development of defence science and technology should mainly depend on its own strength.²

China's military technology base has passed through four distinct phases since 1949: early dependence on Soviet cooperation, independent development of a few key capabilities, stagnation during the Cultural Revolution and reinvigoration during the Deng era, albeit at a lower priority than that given to civilian technologies. A goal of the Deng era reforms has been indigenous design and production of military systems comparable to those available in the West.

Soviet cooperation lasted for a decade after the Communists consolidated power in 1949. Then, from 1958, efforts were focused on nuclear weapons, missiles, space-launch vehicles and satellites. During the Great Leap Forward (1958–60) the initial enthusiasm and ideological fervour led to a wide range of indigenous design projects that far exceeded China's abilities. China continued to produce the conventional weaponry that was once licensed by the USSR as unauthorized copies. The fraction of national effort devoted to the military industry peaked in the early 1970s at about 10 per cent of the gross national product (GNP). By that time, however, the Cultural Revolution (1966–76) was well under way and the National Defence Science and Technology Commission (NDSTC, COSTIND's predecessor) came under attack from Red Guard factions. Advanced research essentially ceased.³ The nuclear weapon programme was purged, although some managers and programmes were protected and R&D continued at a reduced level.⁴ Major conventional weapon programmes were disrupted; some were delayed by two decades and others never entered production at all.

² COSTIND, *China Today: Defence Science and Technology* (National Defence Industry Press: Beijing, 1993), pp. 890, 892.

³ Zita, K., 'China's telecommunications and American strategic interests', US Congress, Joint Economic Committee, *China's Economic Dilemmas in the 1990s: The Problems of Reforms, Modernization and Interdependence*, S Pt. 102–21, vol. 2 (US Government Printing Office: Washington, DC, 1991), p. 490.

⁴ Lewis, J. W. and Xue Litai, *China Builds the Bomb* (Stanford University Press: Stanford, Calif., 1988); and Ostrov, B. C., *Conquering Resources: The Growth and Decline of the PLA's Science and Technology Commission for National Defense* (M. E. Sharpe: London, 1991).

Economic reform

After the death of Mao in 1976, Deng was rehabilitated and modernization of the four main production sectors was launched, military modernization being ranked fourth (behind agriculture, industry, and science and technology) and seen as supporting the others. The military technology base, which had first claim on talented students and other resources, was seen mainly as an asset to support the rest of the economy, while retaining its mission of preparing to modernize the armed forces at an appropriate time. The Central Military Commission (CMC) directed that the remaining military R&D effort should focus on completing design of an intercontinental ballistic missile (ICBM) which was flight-tested in 1980; a submarine-launched ballistic missile (SLBM) which was flight-tested in 1982 and delivered to the People's Liberation Army Navy (PLAN) aboard a diesel-powered submarine built from a 1950s Soviet design in 1983; a communications satellite which was launched in 1984; and an indigenous SSBN commissioned in 1987, to be followed by R&D on a few key capabilities necessary for national defence. Other projects were cancelled.⁵

In August 1982 COSTIND was created, merging the NDSTC and the National Defence Industry Office. According to Chinese sources, military procurement had fallen by about 50 per cent since the beginning of reforms in the late 1970s⁶ and production of many systems had ceased altogether.⁷ Scientists and engineers began leaving the military production ministries. By 1986 all the military production ministries but one were producing a greater volume of civilian goods than military, according to official statistics.⁸ Industrial growth rates were so high that, despite the increase in civilian production, military output may also have increased in some ministries during the 1980s.⁹

Military reform

In 1984 the Deng Administration officially recognized that a major war was not inevitable, in fact was unlikely for the foreseeable future (at least 50 years), and military planning priorities shifted to planning for limited wars of low or medium intensity on China's borders.¹⁰ Deng made it clear that large-scale military procurement expenditure would not be forthcoming until eco-

⁵ COSTIND (note 2), pp. 118–19. The number of major projects was cut from 35 to 20, despite resistance from the production ministries (pp. 120–21).

⁶ Procurement would fall another 20% by 1986. Folta, P. H., *From Swords to Plowshares: Defense Industry Reform in the PRC* (Westview Press: Boulder, Colo., 1992), pp. 19, 21.

⁷ Most of the complex non-nuclear systems were copy-produced. Frankenstein, J., 'The People's Republic of China: arms production, industrial strategy and problems of history', ed. H. Wulf, *SIPRI, Arms Industry Limited* (Oxford University Press: Oxford, 1993), pp. 284–86.

⁸ The civilian output of the Ministry of Nuclear Industry exceeded its military output in 1990.

⁹ Folta (note 6), p. 196. See table 11.1.

¹⁰ Shulong Chu, 'China and strategy: the PRC girds for limited, high-tech war', *Orbis*, spring 1994, p. 177; and Lewis, J. W. and Xue Litai, *China's Strategic Seapower: The Politics of Force Modernization in the Nuclear Age* (Stanford University Press: Stanford, Calif., 1994), p. 100. The 1984 decision was made public at the 1985 Central Military Committee.

conomic goals had been achieved.¹¹ Unused military production capacity was to be converted to civilian production, and operations that did not convert would be allowed to go bankrupt. The military production ministries were freed from the stipulation that they should conduct R&D only when COSTIND ordered them to and were encouraged to fund R&D themselves with loans and new sources of revenues, including exports of civilian or military goods.¹² The ministries themselves saw that diverting R&D assets from military to civilian projects was the only way to develop competitive civilian goods that might earn profits in the market.¹³

Scientific reform

In March 1986 China presented its first national high-technology development plan, the 863 Plan (for the year and month of its conception), designed to promote 'dual-use technology . . . integrating military/civilian use and giving first place to civilian use'.¹⁴ It gave COSTIND a formal role of supporting national technology goals.¹⁵ The 863 Plan involved 7100–10 000 researchers through 1990.¹⁶ The China National Science Foundation (CNSF) was also 'formally inaugurated' in 1986, having been created at a low level in 1982, and immediately began to eclipse COSTIND. The CNSF has sought to reform Chinese science through peer-reviewed projects for basic research, targeting promising experts and recent graduates. In 1992, 80 000 researchers were being supported by the CNSF on a budget of Y 2.3 billion.¹⁷ In August 1988 COSTIND's role in scientific reform was further reduced with the creation of the Huoju Jihua (Torch Plan), which emphasized civilian projects with market prospects, including the training and mobilization of 100 000 scientists in urban technology parks modelled on the Chinese interpretation of Silicon Valley in the United States. By 1994 there were 52 such development zones in China, and COSTIND was no longer the main resource in the development of the civilian economy. The CNSF and the Torch Plan typified the development

¹¹ Hua Di, 'China's arms proliferation in perspective: prospects for change due to economic reforms', eds W. T. Wander and E. H. Arnett, *The Proliferation of Advanced Weaponry: Technology, Motivations and Responses* (American Association for the Advancement of Science: Washington, DC, 1992), pp. 126–27.

¹² Latham, R. J., 'China's defense industrial policy: Looking toward the year 2000', ed. R. H. Yang, *SCPS PLA Yearbook 1988/89* (Sun Yat-Sen Center for Political Studies: Kaoshiung, Republic of China, 1989), p. 85.

¹³ Chen Zisheng, 'Conversion efforts to speed up development of enterprises', China Association for the Peaceful Use of Military Industrial Technology (CAPUMIT), *Restructuring the Military Industry: Conversion for the Development of the Civilian Economy* (Publishing House of Electronic Industry: [Beijing], 1994), pp. xxxvi, 206.

¹⁴ Shouyun Wang, 'Conversion, dual-use and technology transfer', CAPUMIT (note 13), p. 105; and COSTIND (note 2), pp. 152–53.

¹⁵ Ding Henggao, the Director of COSTIND, is deputy chair of the Leading and Co-ordination Group for the 863 Plan.

¹⁶ Not even these comparatively low numbers of researchers were all fully engaged in 863 projects. A 1994 report counted only 200 'experts participating directly' and 1000 'indirectly'. 'The 863 program', *Peace*, Mar. 1994, p. 21.

¹⁷ Hu Jian, 'The role of the China National Science Foundation in conversion', CAPUMIT (note 13), p. 217.

of entrepreneurial and academic science approaches that were supporting the economy more directly and were largely isolated from COSTIND.¹⁸

Even with its reduced influence, applying its expertise in military technology to civilian goods was still officially COSTIND's highest priority as the 1990s began.¹⁹ The international response to the 1989 Tiananmen Square incident ensured that self-sufficiency in military goods would continue to be a major responsibility. Chinese military leaders have expressed considerable interest in the technologies used by the USA against Iraq, as well as the poor performance of their own technology and similar Soviet equipment in the hands of the Iraqis. The next few decades are seen as a period of relative calm in the region during which long-term investments in military technology can be made without the distractions of short-term crises.

II. Reform and military innovation

The implications of China's reforms and rapid economic growth for its military technology base are important elements in the debate on the future of its military capabilities. One view sees China's ability to produce military technology indigenously as limited, while acknowledging that it presents an inherent, if latent, threat. According to this view, China's military technology base remains 'underdeveloped'²⁰ and reform will interfere with the development of an advanced military technology base as much as it supports it.²¹ Even access to foreign technology will not remedy the problem.²² The contrary view sees China's military technology base becoming stronger as the rest of the economy advances.²³ There are two strands to this latter position. One, reflecting China's development goals, sees economic growth improving China's indigenous science and technology regardless of what other actors do.²⁴ The other

¹⁸ Baark, E., 'China's policy response to the challenge of new technology', eds C. Brundenius and B. Göransson, *New Technologies and Global Restructuring: The Third World at the Crossroads* (Taylor Graham: London, 1993).

¹⁹ COSTIND (note 2), p. 3; and Ding Henggao, 'Present situation and future tasks of the military science and technology', *Science and Technology Daily*, 2 Nov. 1989 (in Chinese).

²⁰ Pollack, J. D., 'Sources of instability and conflict in northeast Asia', *Arms Control Today*, Nov. 1994, p. 5. 'The PLA faces the high probability of merely being locked into a higher level of technological obsolescence than is now the case.' Gallagher, M., 'China's illusory threat to the South China Sea', *International Security*, vol. 19, no. 1 (summer 1994), p. 181. See also Skebo, R. J., Man, G. K. and Stevens, G. H., 'Chinese military capabilities: problems and prospects', Joint Economic Committee (note 3), p. 663.

²¹ Folta (note 6), p. 197.

²² 'Acquisition [of foreign technology] has not been matched by an effective programme of diffusion and assimilation.' Hardt, J. P. and Kaufman, R. F., 'Chinese model for change: prospects and problems', Joint Economic Committee (note 3), p. XIII. See also Gill, B. and Taeho Kim, SIPRI, *Chinese Arms Acquisitions from Abroad* (Oxford University Press: Oxford, forthcoming 1995).

²³ 'That China will continue to close the gap and develop a flexible and increasingly sophisticated force structure is not in doubt.' Shambaugh, D., 'Growing strong: China's challenge to Asian security', *Survival*, summer 1994, p. 32. 'China's military-industrial complex is on the verge of a number of breakthroughs and production of qualitatively improved ground, air, naval . . . and nuclear systems.' Shambaugh, D., personal communication, 24 Jan. 1995.

²⁴ 'The growing economy means that spending on research and development will eventually lead to a more impressive capability.' 'Conference in Hong Kong', *IISS Newsletter*, autumn 1994, p. 8.

sees imported technology as a crucial enabler.²⁵ Some believe even that permitted civilian exports to China²⁶ and exposure to Western management techniques in joint ventures and conversion cooperation²⁷ could play a significant role in developing the military technology base. Whereas observers concerned about new Chinese capabilities focus on recent and possible future developments, those who see Chinese military R&D as limited cite both long-standing and new weaknesses in the Chinese technology base.

This section reviews the effects of reform on the Chinese scientific and engineering community and considers what the new evidence about China's military technology base means for the competing schools of thought about its future.²⁸ On balance, the analysis in this section supports the conclusion that indigenous R&D and imported civilian technology do not pose the threat of dramatically improved weaponry claimed by the pessimistic school. Further imports of military technology will contribute to advanced indigenous production only if they involve licensed production or other direct technology transfer; the most important technologies of concern will continue to be difficult for Chinese organizations to copy-produce.²⁹

Strengths of the Chinese military technology base

China's development of nuclear weapons and delivery systems demonstrates that it has been able to marshal the resources necessary for major albeit straightforward technological projects and to integrate them. This success is due in part to the abilities of the personnel involved and their leaders, as well as access to adequate resources. Few states could devote the level of economic resources to creating a military technology base that China did, while the chronic threats to Chinese security during the 1950s and 1960s validated that use of resources in the eyes of its sponsors.

Although some observers emphasize the newly invigorated civilian economy and access to imported technology, perhaps the most important new source of strength in the Chinese military R&D establishment is the open

²⁵ Chong-Pin Lin, 'Chinese military modernization: perceptions, progress and prospects', *Security Studies*, vol. 3, no. 4 (summer 1994); and Triplett, W. C., 'Inside China's scary new military-industrial complex', *Washington Post*, 8 May 1994, p. C3.

²⁶ 'As [civilian electronics, communications and aerospace] industrial efforts mature, [China] will be in a strong position to manufacture advanced military systems and components'. Klare, M. T., 'The next great arms race', *Foreign Affairs*, summer 1993, p. 140; and Remarks of Tom Lantos in US Congress, House of Representatives, Committee on Foreign Affairs, *US Security Policy Toward Rogue Regimes* (US Government Printing Office: Washington, DC, 1994), p. 42.

²⁷ 'It is highly probable that collaborative defence conversion activities with industrialized nations will have a "spin-on" effect on the Chinese defense technology and industrial base.' Bitzinger, R. A. and Chong-Pin Lin, "'Off the books": analyzing and understanding Chinese defense spending', ed. J. Lilley, *Conference Report: 5th Annual AEI Conference on the People's Liberation Army* (American Enterprise Institute: Washington, DC, 1994), p. 6.

²⁸ This analysis focuses only on the effect of the Chinese military technology base, not on the national strength that is inherent in economic growth and a large population. Nor does it assess the ability of Chinese organizations to produce, operate and maintain military technology or the significance for regional stability of 'low-tech' military programmes.

²⁹ COSTIND uses this term where some Western sources use 'reverse engineer' or 'clone'.

acknowledgement of past mistakes, especially those of an ideological nature. For example, the official history of the aviation industry observes:

The design of the Q-5 [attack aircraft] began during the 'big leap forward'. Some of our comrades could not keep their brains 'cool' under the influence of 'Left' ideological trend. Some young designers were in extraordinary zeal but short of knowledge in aircraft development laws. They put forward not only a 'left' but also a ridiculously childish slogan: 'Work without letup for one year to fly the aircraft before celebrating National Day'. The development of the Q-5 was thus brought on to a rough and bumpy road since its very beginning.³⁰

In addition to learning from the Great Leap Forward to keep immediate goals within one's abilities, memories of the Cultural Revolution are directly responsible for a new appreciation of the importance of science and scientists in the national effort for development, as well as an aversion for the instability that has accompanied excessive ideological zeal in the past.

In 1985 Premier Zhao Ziyang said, 'The biggest obstacle to the accomplishment of the four modernizations . . . lies in talented personnel—we lack scientific, technical and managerial personnel'.³¹ Official statistics indicate that 'technical personnel' working in state-owned units at about that time (1986) numbered 820 000, a dramatic increase from 11 000 in 1952 and 260 000 in 1978. Since then, the number has again more than tripled to 2.8 million in 1991.³²

Despite lingering pre-reform practices, Deng-era reforms have included some managerial improvements that reduce formalization, most notably a contract system for R&D as well as production that places responsibility on individual managers and plant directors and an incentive system that allows them to profit from exceeding their contracted quotas or developing new products. China's civilian software and information technology sector has been judged to be especially effective.³³ Other new strengths include improving 'interconnectedness' (horizontal and vertical communication within the scientific community) through better communication and more mobility in the scientific labour force and access to Israeli and Russian military technology and Western civilian technology, including management and manufacturing practices. In 1982 the Central Committee launched a programme under which the military industries would be encouraged to exchange technically skilled

³⁰ China Aerospace Technology Import–Export Company, *China Today: Aviation Industry* (CATIC: Beijing, 1989), p. 151. COSTIND's official history concurs that 'some designers were . . . divorced from reality, blindly chose new materials and equipment, and pursued high performance' because of their enthusiasm for 'left' ideology. COSTIND (note 2), p. 630. These two publications demonstrate a new ideological conformity and document instances of technological over-reach similar to those criticized.

³¹ Xinhua, 20 Mar. 1985, reported in Foreign Broadcast Information Service, *Daily Report–China* (FBIS-CHI), FBIS-CHI, 22 Mar. 1985, p. K5, cited in Chong K. Yoon, 'Problems of modernizing the PLA: domestic constraints', ed. L. M. Wortzel, *China's Military Modernization: International Implications* (Greenwood Press: New York, 1988), p. 11.

³² *China Statistical Yearbook 1992* (China State Statistical Information and Consultancy Center: Beijing, 1992), p. 704. The precise meaning of the term 'technical personnel' is not specified.

³³ Baark (note 18), p. 176; and W. Frieman, personal communication, 3 Mar. 1995.

personnel with civilian enterprises, primarily to aid the conversion effort.³⁴ In 1989 the government decided to declassify 2237 military R&D projects in the hope that they would bolster civilian efforts.³⁵ The China Defence Science and Technology Information Centre (CDSTIC), COSTIND's information clearing-house, maintains a technology and patent database that is available online to military users across China.³⁶ Labour reforms make it easier for those with technical training to move among related institutes and thereby offer a means of collecting and disseminating information on techniques and results. It is also easier for scientists and engineers to travel abroad.

Technology imports

Access to imported technology

China's access to Western military technology is strictly limited. In the 1980s China pursued a series of low-quantity arms purchases with the objective of copy-producing advanced systems and components from Western examples,³⁷ but since the Tiananmen Square incident only Israeli and Russian military technology has been available.³⁸ Press reports indicate that China may be soaking up some surplus technical labour from the Russian military technology base.³⁹ Continued civilian imports from the West are also of concern to some observers. Transfers of management techniques and process machinery have also been criticized.⁴⁰

³⁴ Xinhua, 'CPC Central Committee's 13 March 1985 decision on the reform of the science and technology management system', 19 Mar. 1985, reported in FBIS-CHI, 21 Mar. 1985, cited in Folta (note 6), p. 94.

³⁵ *China Daily*, 24 Jan. 1990, reported in FBIS-CHI-90-018-S, 26 Jan. 1990, p. 42; and COSTIND (note 2), p. 804.

³⁶ The CDSTIC has also been used to assemble open-source intelligence on foreign technology in support of military R&D projects. COSTIND (note 2), pp. 801–802; and personal communication, May 1994.

³⁷ Gill and Kim (note 22).

³⁸ Israel is involved in Chinese combat aircraft, air-to-air missile and tank programmes. This in turn has led to further speculative claims that Israel might sell China a broad range of military electronics, but none of these claims has been confirmed by a reliable source. Israel acknowledges working with China but has stated that no US technology was involved without appropriate licence. Orders for Russian systems said to be under consideration include bomber, fighter, surveillance and transport aircraft, air-defence missiles, tanks, destroyers and submarines. These speculations are summarized in Gill and Kim (note 22). There are also reports (from a US senator and an unnamed CIA official) of Russian involvement in the ICBM and SSBN programmes. George, A., 'China uses Russian know-how on ICBM', *Flight International*, 22 Dec.–4 Jan. 1994; and D. Shambaugh, personal communication, 24 Jan. 1995.

³⁹ Figures vary between a few and 'thousands' of Russians, most of them going only for short visits. Cheung observes that only 300 and perhaps 'scores' more were there permanently in 1993. Tai Ming Cheung, 'China's buying spree', *Far Eastern Economic Review*, 8 July 1993, p. 24; Tyler, P. E., *New York Times*, 10 Nov. 1993, p. 15; and Fialka, J. J., 'US fears China's success in skimming cream of weapons experts from Russia', *Wall Street Journal*, 14 Oct. 1994, p. 12. Chinese and Russian officials say that no more than a few—'in single figures' according to the Russian Foreign Ministry—technicians were involved. ITAR-TASS, 'PRC Foreign Ministry denial on Russian defense experts', 2 June 1994 (in Russian), reported in Foreign Broadcast Information Service, *Daily Report—Central Eurasia (FBIS-SOV)*, FBIS-SOV-94-107, 3 June 1994, p. 11.

⁴⁰ Bitzinger and Lin (note 27) paraphrase D. Cheng: 'Experience in co-producing the MD-82 jetliner with the McDonnell Douglas Corporation has also helped the Chinese improve quality control for mili-

China and Russia signed a trade deal in September 1994 said to decrease the role of barter, effectively making major military systems much more expensive and therefore less readily available.⁴¹ The quality of the Russian technology available to the Chinese is also limited.⁴² Russian systems may be delivered without state-of-the-art components, whether for political, strategic or simply logistic reasons.⁴³ Russia's export control laws were significantly tightened in 1994 and are specifically designed to maintain a qualitative edge over customers and competitors and prevent copy-production. All exports are reviewed by the Russian Government.⁴⁴

Greater access to Russian technology may already be leading to disagreements between COSTIND and the armed services over technology—disagreements which COSTIND is said to be winning at present⁴⁵ but which may undercut technological capabilities in the long run. The decision of the Central Military Commission to continue to limit foreign purchases to interim systems and examples to be copy-manufactured forces the services to continue to rely on indigenous technology of inferior quality and gives them an incentive to undermine COSTIND's position.⁴⁶ Furthermore, it makes clear that differences exist within the People's Liberation Army (PLA) that may act as a brake on modernization even if the organization increases its domestic political prestige.

If Western military imports begin again, it is likely that they will be constrained by stipulations that are similar to, if not stronger than, those of the 1980s. Thus, technology is likely to be limited to areas in which hardware can be transferred or licence-produced while minimizing the amount of independent design expertise transferred.⁴⁷

tary aircraft production'. The MD-82 components are fabricated by Shanghai Aviation Industry Corporation, which does not manufacture combat aircraft.

⁴¹ Urusov, M., 'Chinese-Russian talks end, military and economic agreements signed', *Moscow News*, 9-15 Sep. 1994, p. 1. Foreign Minister Qian Qichen reiterated that China could not afford major purchases from Russia during the same trip. 'Chinese FM comments on purchase of Russian arms', *East European Report*, 11-17 Sep. 1994, p. 39. Barter played a major role in the Su-27 deal, for which only 35% hard currency was paid, as well as an earlier purchase of Il-28s. *Russian Far East Update*, Aug. 1993, p. 11, cited in Moltz, J. C., 'From military adversaries to economic partners: Russia and China in the new Asia', *Journal of East Asian Affairs*, vol. 9, no. 1 (winter/spring 1995), pp. 170-71; and Tai Ming Cheung, 'Ties of convenience: Sino-Russian military relations in the 1990s', ed. R. H. Yang, *China's Military: The PLA in 1992/1993* (Westview Press: Oxford, 1993), p. 66.

⁴² In at least one case, Russia reportedly turned down the Chinese request to equip the Su-27s with the latest air-to-air missiles, the AA-10 and AA-11, in favour of the older AA-8 and AA-9. Cheung (note 41), p. 65. The Chinese Su-27s are equipped with the older Sorbtsya electronic countermeasures pods. Ryan, S. L., 'The PLA Navy's search for a blue water capability', *Asian Defense Journal*, May 1994, p. 32.

⁴³ Russian suppliers are not always able to rely on subcontractors, and Russia is competing with China for the Iranian and Pakistani markets, among others.

⁴⁴ Zaloga, S., 'A one-carrier navy: Russia sells off its smaller aircraft carriers', *Armed Forces Journal International*, Mar. 1995, p. 54. For details, see chapter 14 in this volume.

⁴⁵ Shambaugh (note 23), p. 52; and Shambaugh, D., 'The insecurity of security: the PLA's evolving doctrine and threat perceptions towards 2000', *Journal of Northeast Asian Studies*, winter 1995.

⁴⁶ This common dynamic is most pronounced in India. Arnett, E., 'Military technology: the case of India', *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994).

⁴⁷ Gill and Kim (note 22).

China's ability to absorb imported technology

Although COSTIND has made 'absorbing and digesting' imported technology an explicit aim of its technology plans, there remain constraints on its ability to do so. Most of China's contacts with foreign organizations and ideas during the Deng era have had little to do with the development of a national technology base, whether military or civilian. Most joint ventures are limited to Chinese production of low-technology foreign-designed civilian goods using foreign manufacturing processes and management techniques.⁴⁸ Few of the products produced in China are high-technology goods, accounting for only some 5 per cent of exports, 70–80 per cent of which are sold in the less developed countries.⁴⁹

Chinese commentators complain about a lack of high-level coordination of technology imports.⁵⁰ While this complaint is of limited validity in the civilian sector, systematic high-level coordination would seem to be essential if military R&D is to exploit the technology made available in other areas.⁵¹ When new technology is made available on the civilian side of a military enterprise, it is unlikely to cross to the military side since the research facilities are usually separated, both administratively and psychologically.⁵² Military R&D personnel often disdain civilian technology that might otherwise be 'spun on'.⁵³ Transferred foreign processes and products often stay within the group which first adopted them, leading to duplication of research efforts.⁵⁴ Without adequate protection of intellectual property, Western firms are reluctant to share technology with Chinese partners, and Chinese recipients tend to guard competitive advantages jealously in the absence of some method of compensation or other inducement rather than sharing them.⁵⁵

In any case, China's preferred method of acquiring technology, copy-production, cannot be applied as effectively to high-technology products or their materials and manufacturing processes. If a small number of electronic kits are delivered, they will be difficult to copy-produce; if many are bought, the high cost of modern electronics spread over a large force structure will be

⁴⁸ AVIC President Zhu Yuli: 'Our co-operation with foreign countries is [only] a kind of manufacturing co-operation . . . What is the use of design people?'. Mecham, M., 'With many suitors, China seeks equal partnerships', *Aviation Week & Space Technology*, 25 Oct. 1993, p. 23.

⁴⁹ Xinhua, 'Official says technology export market diversified', 21 Sep. 1993, reported in FBIS-CHI, 22 Sep. 1993, p. 47, cited in Segal, A. M., 'High time for high tech? China's program for an indigenous high technology capability', *Journal of Northeast Asian Studies*, summer 1993, p. 61.

⁵⁰ Wang Shouyun, 'Perfecting an improved technology import strategy', *International Trade Journal*, no. 4, 1987 (in Chinese), in JPRS-CAR-88-004, 12 Feb. 1988, p. 53.

⁵¹ 'China's main forces in scientific research are cut off from digesting, absorbing and innovating' imported technologies. Hu Jian, 'On the role of institutions of higher education and scientific research units in digesting, absorbing and innovating imported technologies', *Research Management*, no. 2 (Mar. 1989), pp. 14–18 (in Chinese); and Conroy, R., 'Domestic and foreign technology: factors influencing assimilation and diffusion capabilities', ed. T. Leuenberger, *From Technology Transfer to Technology Management in China* (Springer-Verlag: Berlin, 1990), p. 21.

⁵² Baark (note 18), p. 171. Testing facilities are often not collocated with research facilities. In contrast, although new production lines have been built for 'conversion' goods, production of civilian and military goods at the same site is apparently common.

⁵³ Baark, E., personal communication, 14 Feb. 1995.

⁵⁴ Zita (note 3), p. 491; and Conroy (note 51), p. 23.

⁵⁵ Conroy (note 51), p. 28.

a major expense.⁵⁶ Although Russian scientists and engineers may know some things about designing components that their Chinese counterparts do not, they come from similar, stifling bureaucratic milieus and, having enjoyed first call on many resources during the cold war, have little experience operating under the Chinese military's current budget constraints.

Obstacles to military innovation

The management of military technology programmes in China continues to resemble that typical of the bureaucratic structures of the Soviet Union, exported to China in the 1950s, even as other R&D styles catch on elsewhere in the economy.⁵⁷ Many in the bureaucracy remain throwbacks to the time of their Soviet training and less interested in technological innovation than political continuity.⁵⁸ Although Western firms are increasing their presence and the popularity of their management practices in China, Chinese Government-run organizations remain practically immune to these practices. Western partners in joint ventures have to struggle to implement management reforms that are taken for granted in other countries.

The Soviet model of military R&D that still dominates the Chinese military technology base is characterized by centralization and formalization.⁵⁹ Continuing formalization and lack of interconnectedness in China are the most notable characteristics of the Soviet style remaining in China, but China's and in particular COSTIND's leaders still see merit in 'avoiding decentralization and repetition' as well.⁶⁰ 'A variety of bureaucratic, ideological and cultural attitudes among conservatives and the old guard, and rigidities of central planning, impede progress especially with regard to innovation.'⁶¹ Centrally planned quotas and targets may push bureaucracies to rush systems into service or give them no incentive to push them into service at all. Military R&D organizations are still evaluated on the basis of their ability to get their systems certified quickly, and preferably receive a national technology award, and do not have a continuing role in getting military projects into production and operation.⁶²

Chinese military R&D organizations retain a highly vertical bureaucratic structure with little horizontal communication to facilitate transmission of

⁵⁶ Electronics now account for 70% of the cost of Western tactical missiles and 30% of the cost of combat aircraft. US Congress, Senate Committee on Armed Services, *Statement by the Director of Defense Research and Engineering* (Department of Defense: Washington, DC, 17 June 1994).

⁵⁷ Baark (note 18).

⁵⁸ This cohort of middle-ranking bureaucrats increased its power in the late 1980s. Baark, E., 'Fragmented innovation: China's science and technology reforms in retrospect', Joint Economic Committee (note 3), pp. 531–39.

⁵⁹ Evangelista, M., *Innovation and the Arms Race: How the United States and the Soviet Union Develop New Military Technologies* (Cornell University Press: Ithaca, N.Y., 1988), pp. 29, 52. Evangelista contrasts these with the US model's complexity, interconnectedness and organizational slack.

⁶⁰ COSTIND (note 2), p. 4.

⁶¹ Hardt (note 22), p. xiii.

⁶² COSTIND (note 2). This contrasts with civilian and export projects, which are independent and must make a profit.

expertise, innovative ideas or scientific results. Even with scientists working at factory sites or in the new technology parks, a highly vertical organization structure interferes with effective communication among the sites or among inventor, producer and customer.⁶³ Their proximity to manufacturing facilities may not have overcome managerial problems that prevent able scientists from effectively attacking problems of an applied nature: 'China has impressive theoretical potential but little seasoned managerial know how. Advances of basic research do not effectively lead to product innovation . . . With no technology management, good ideas often never leave the labs'.⁶⁴ There is still little interaction with the civilian economy of the sort that promotes 'spin-on' or 'bubble up' (military application of civilian R&D), which is increasingly the focus of military innovation in the West.

Many of the strengths of the immediate post-revolutionary period carry in themselves weaknesses. For example, the sense of national purpose that motivated Chinese scientists in the period of confrontation with the superpowers also led programme managers to rush systems into production prematurely and to take on too many projects of too high a level of sophistication. The nuclear weapon and delivery system programmes absorbed a disproportionate share of China's scientific talent through the early 1980s, leaving little for other projects. The egalitarianism that collocated research institutes with production facilities was also a symptom of the anti-intellectualism that led to the purges of the scientific community during the Cultural Revolution and other ideological campaigns.⁶⁵

Although China's economic reforms are often seen as offering an opportunity for military advancement that is only positive, economic reform is making the military production organizations less attractive employers than private firms, which can offer higher salaries (by a factor of 10 or more) and better locations.⁶⁶ Reform has also begun to free scientific and engineering labour from government-assigned jobs in specific work units. The increase in numbers of Chinese students going abroad for study since the beginning of reform—they are now the largest group of foreign students in the USA⁶⁷—has recently been matched by a growing tendency of these students to delay their return to China, many preferring to wait until the government changes. Since 1989, some students in China are no longer assigned to a work unit upon

⁶³ Baark (note 18), p. 168; and Ostrov (note 4), p. 38.

⁶⁴ Zita (note 3), p. 491.

⁶⁵ Only the shared perception that the nuclear programme was uniquely important allowed it to command resources and overcome Mao's strong anti-intellectualism (encompassing a distaste for scientists and engineers), which hampered other military technology programmes. Lewis and Xue (note 4), p. 228.

⁶⁶ Plants in the interior account for half of military production capacity and claimed more technical experts than the rest of the country's industries combined. Lewis and Xue (note 10), p. 94. Most jobs in military R&D are still collocated with these plants. In contrast, most of the new civilian research parks are in Beijing and the coastal cities, as are new facilities built by foreign firms and joint ventures. Lewis, Hua and Xue claim that the best scientists and engineers were the first to leave for the civilian sector, and indeed sought to leave from the very beginning of the effort to move the industry inland. Lewis, J. W., Hua Di and Xue Litai, 'Beijing's defense establishment: Solving the arms-export enigma', *International Security*, vol. 15, no. 4 (spring 1991), p. 102.

⁶⁷ Broaded, C. M., 'China's response to the brain drain', *Comparative Education Review*, vol. 37, no. 3 (1993), p. 277.

graduation but may choose their jobs.⁶⁸ Many of those assigned to sites in the interior simply refuse to report.⁶⁹

Foreign cooperation and the pragmatism of reform have also dissipated the crisis atmosphere and ideological fervour that led to successful innovation during the Mao era. COSTIND now suffers from a loss of resources, prestige and morale.⁷⁰ In order to compensate for reductions in funding from the government, design bureaus are pursuing export projects which are highly duplicative, at least in the aircraft, electronics and missile sectors.⁷¹ As seen in section III, there are indications of both idle technical labour and idle production capacity.

III. Resources available for military R&D

The reforms of the 1980s have enabled China's economy to become one of the largest in the world,⁷² and it continues to grow at a rate of over 10 per cent annually. Military applications lay a smaller relative claim on these resources than they once did. The US Arms Control and Disarmament Agency (ACDA) estimates that China's total military expenditure remained steady between 1981 and 1991, but rapid growth in GNP over the decade means that the fraction represented by military expenditure declined significantly.⁷³ Revenues at the PLA's disposal may be increasing as it becomes more involved in commercial activities,⁷⁴ but the fraction of these used for R&D is not known.

The budget of the Ministry of National Defence

There are two main components of Chinese military expenditure: (a) the budget of the Ministry of National Defence (MND), which includes the PLA's administrative, operating, maintenance and personnel costs; and (b) funds for R&D, production and procurement, which have been coordinated by COSTIND since it was created in 1982. The MND budget is published annu-

⁶⁸ Xinhua, 6 Jan. 1988, reported in FBIS-CHI, 11 Jan. 1988, p. 39, cited in Folta (note 6), p. 95.

⁶⁹ In one case, fewer than 30% checked in. Lewis and Xue (note 10), pp. 102, 285.

⁷⁰ Xue Litai, personal communication to J. Cochran, 30 Sep. 1994; and G. Deshingkar, personal communication, 12 Jan. 1995.

⁷¹ Lewis, J. W. and Hua Di, 'China's ballistic missile programs: technologies, strategies and goals', *International Security*, fall 1992, pp. 35-37; and COSTIND (note 2).

⁷² China's gross national product is difficult to measure in terms that are comparable to those of other countries. Estimates of China's GNP vary by more than a factor of 7. It is estimated to be between 3rd and 12th largest in the world. World Bank, *World Development Report 1994* (Oxford University Press: Oxford, 1994), pp. 166-67; and Arms Control and Disarmament Agency, *World Military Expenditure and Arms Transfers 1991-1992* (US Government Printing Office: Washington, DC, 1994), p. 38.

⁷³ Arms Control and Disarmament Agency (note 72), p. 58. The dollar values of these estimates depend heavily on the exchange rate used. The CIA shared ACDA's assessment of military expenditure as a fraction of GNP for 1990 (3.5%) but put it at \$12 billion (Y 57 billion), in comparison with ACDA's \$50 billion. Harris, J. *et al.*, 'Interpreting trends in Chinese defense spending', Joint Economic Committee (note 3), p. 676. Using other conversion rates or methods of assessment, China's military expenditure has been estimated to be as high as \$100 billion. Selection of methods and figures for comparison depends strongly on the objective of the analysis.

⁷⁴ Bergstrand, B.-G. *et al.*, 'World military expenditure', *SIPRI Yearbook 1994* (note 46), section V (contributed by D. Shambaugh), pp. 443-44.

ally, but COSTIND's is not.⁷⁵ The MND budget was cut deeply in the first two years of reform and had fallen to half its 1979 level in real terms by the end of the 1980s, but has enjoyed real growth in the early 1990s, reaching Y 52 billion in 1994.⁷⁶ During this period, more than 1 million soldiers were demobilized,⁷⁷ the number of ministry staff was reduced as was waste in operations, and much of the cost of logistics and support was relieved by selling operations and using facilities such as airfields, ports, railroads and the military telephone system for civilian purposes.

Resources for military R&D and production

The activities coordinated by COSTIND can be estimated using three measures: military production output, the size of the military production and engineering workforce, and estimates of R&D expenditure. These are all incomplete and inexact, especially given the deficiencies in official reporting (such as double counting and simple exaggeration). Nevertheless, they represent an improvement over the data that were previously available.

Military production output

Output figures for the military production ministries were first published in 1985 (see table 11.1).⁷⁸ According to these and other official figures, output from the four main military production ministries—aviation, astronautics, nuclear industry and ordnance—doubled during the 1980s as they began producing more consumer goods, but military production decreased by half, from Y 9.0 billion in 1979 to Y 4.5 billion in 1990.⁷⁹ COSTIND's official history says that total military production capacity (which also includes electronics and shipbuilding concerns that no longer report to the CMC) had fallen by

⁷⁵ Heaton, W. R., 'The People's Republic of China', eds D. J. Murray and P. R. Viotti, *The Defense Policies of Nations: A Comparative Study* (Johns Hopkins University Press: Baltimore, 1988), p. 365; Acharya, A. and Evans, P. M., *China's Defence Expenditures: Trends and Implications* (Becker Associates: Concord, Ontario, 1994), p. 41; and Xue Litai, personal communication to J. Cochran, Nov. 1994. This division of responsibility is common in the Soviet model. Some analysts prefer not to refer to this figure as the MND budget, although they accept that it covers the activities described here.

⁷⁶ Y 52 billion (about \$6.0 billion) represents a gross increase of about 20% over 1993, but a real decrease of about 20% (from \$7.4 billion) given the 35% devaluation of the yuan in early 1994. During the same period annual consumer price inflation averaged over 23%. *International Financial Statistics*, Nov. 1994, p. 163. MND was given a gross increase of 22% to Y 63 billion (\$7.5 billion) in the draft budget for 1995, a year in which the government hopes for 15% inflation. The net result is likely to be a slight real increase over 1993. Karniol, R., 'China's defence budget continues to rise', *Jane's Defence Weekly*, 18 Mar. 1995, p. 17.

⁷⁷ The demobilization was announced in July 1985 and included a small number of COSTIND personnel in the first phase. One justification for the demobilization made by Yang Shangkun, then Permanent Deputy Chairman of the CMC, was to release funds for military R&D. Ngok Lee, *China's Defence Modernization and Military Leadership* (Australian National University Press/Pergamon Australia: Sydney, 1989), p. 11. Yang's promise was not immediately made good: 'the Government did not provide additional subsidies for defence enterprises'. Huai Guomo, 'Practice and prospect of military conversion in China', CAPUMIT (note 13).

⁷⁸ *China Economic Yearbook, 1985-1988* (Economic Management Publishing House: Beijing, 1985-88). These figures and other official military production statistics are summarized in Folta (note 6), pp. 208-63.

⁷⁹ Estimated from official statistics by Folta (note 6), p. 122.

Table 11.1. Estimated value of military output from Chinese military production ministries, 1983–92

Figures are in billion 1992 yuan.

| Industry | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
|--------------|-------|-------|------|--------|--------|-------|--------|-------|------|------|
| Nuclear | .. | (6.0) | 2.5 | 1.4 | (1.4) | (1.6) | (1.5) | .. | .. | .. |
| Aviation | (11) | (8.8) | 4.9 | 2.3 | .. | .. | .. | .. | .. | 3.3 |
| Electronics | .. | .. | (19) | .. | .. | .. | (7.2) | (5.9) | .. | .. |
| Ordnance | (9.9) | (6.6) | 7.9 | 4.2 | .. | (7.6) | .. | (3.1) | .. | .. |
| Shipbuilding | .. | .. | 1.3 | 1.0 | .. | .. | (0.56) | (1.0) | .. | 1.3 |
| Space | .. | 1.4 | 1.2 | (0.77) | (0.82) | 0.62 | .. | .. | .. | 1.5 |

Sources: Calculated from official figures for civilian output and civilian output as a fraction of total output. Figures in plain typeface are derived from *China Economic Yearbook, 1985–89* (Economic Management Publishing House: Beijing, 1985–1989) and should be seen as the most consistent. Figures in brackets are also derived from other official sources provided in Folta, P. H., *From Swords to Plowshares: Defense Industry Reform in the PRC* (Westview Press: Boulder, Colo., 1992), pp. 222–56, but may be less consistent. Figures in italics are derived from or improved with statistics from China Association for the Peaceful Use of Military Industrial Technology (CAPUMIT), *Restructuring the Military Industry: Conversion for the Development of the Civilian Economy* (Publishing House of Electronic Industry: [Beijing], 1994), pp. 247, 255, 258, 261.

two-thirds by 1988,⁸⁰ and a COSTIND official said that it was only Y 2.9 billion in 1993.⁸¹ These figures are of little use for comparison with other countries but are suggestive of trends over time in China. It is not known how China accounts for production of dual-use items.

The military production and R&D workforce

It can be estimated from official sources that in the mid-1980s the workforce of the military production ministries totalled about 3 million, of whom fewer than 600 000 were ‘engineers’.⁸² There is no reliable measure of how many of these engineers worked on military projects and how many were involved in the conversion effort. Zhong reports that 300 000 researchers were working on

⁸⁰ COSTIND (note 2), p. 147. Production capacity does not necessarily equal production. Idle capacity can be destroyed or converted without affecting active capacity.

⁸¹ COSTIND vice-minister Huai Guomo cited in Research Institute on Peace and Security, ‘China’, *Asian Security 1994–95* (Brassey’s: London, 1994).

⁸² This term is not well defined by Chinese sources. Although many Chinese scientists and engineers are quite able, it is not clear that all those given these and similar titles possess the same skills as their counterparts in other countries, nor that they work directly on R&D projects or testing. Available figures for the 1990s suggest that the size of the production organizations has not changed significantly. Arnett, E., ‘Military research and development in South Asia: limited capacities despite impressive resources’, ed. E. Arnett (note 1); and Lewis and Xue (note 10), p. 102. By comparison, the CIS military R&D workforce in 1991 was 1.3 million. Deger, S., ‘Conversion of the military industrial complex and the reform of the Russian industrial sector’, CAPUMIT (note 13), p. 76. Over the following 2 years, the military R&D workforce declined by more than 60%. Yurlov, B., *Delovoy Mir*, 16 Jan. 1993, cited in Leiter, S. and Mitchell Levy, C., *Russian Military R&D: Are the Regions Taking Charge?* (RAND Arroyo Center: Santa Monica, Calif., 1993), pp. 1–2.

military R&D in institutes and industries in 1992,⁸³ suggesting that a substantial fraction of the military R&D workforce of the mid-1980s has retired, is working elsewhere or is idle.⁸⁴ Zhu Yuli, president of the Aviation Industries of China (AVIC), said that 10 000 'engineers, senior technicians and designers' were working for him in 1993, in comparison with roughly 180 000 'engineers' estimated to be working in AVIC's predecessor, the Ministry of Aeronautics Industry, in 1984. Former COSTIND chairman, the late Nie Rongzhen, reported that the military technology base was still working to 'streamline its engineering staff' in 1991.⁸⁵

Chinese expenditure on military R&D

Since reform began, government funding of military R&D has decreased. In the mid-1980s it was briefly replaced by independent R&D funded by or in anticipation of profits from arms sales,⁸⁶ domestic and foreign, but that source of revenue has also been reduced. There is some recent speculation that government funding of military R&D is again increasing in the early 1990s, but this cannot yet be confirmed.⁸⁷ While it is often assumed that trends in Chinese R&D, procurement and overall military expenditure follow those of the MND budget, this assumption appears unwarranted. China's experience is probably more accurately seen as a precursor of experiences which other countries are undergoing now, with force levels and procurement falling, salaries for remaining personnel increasing per capita, and R&D intended to support the civilian economy with dual-use goods while providing for the ability to modernize and reconstitute forces.

While these trends are generally understood, demonstrating them with figures is difficult given the sparse official figures and difficulties in assigning an appropriate rate of conversion. Nevertheless, it is useful to review the most credible figures. In the late 1980s Chinese Government funding for military

⁸³ Zhong B., 'Defence industry's peaceful products', *China Daily*, 7 Jan. 1993, p. 1, cited in Sichor, Y., *Military to Civilian Conversion in China: From the 1980s to the 1990s* (Peace Research Centre: Canberra, 1993), p. 9. Ma Bin gives the same number for 'production and research in the national defence industry' in 1993. Ma Bin, 'Military conversion: a national development strategy', CAPUMIT (note 13), p. 31.

⁸⁴ In 1988 Westlake was told by Xian personnel that 1500 of the corporation's 15 000 workers were idle or engaged in 'welfare work'. Westlake, M., 'From the ground up: China makes plans for total aircraft assembly', *Far East Economic Review*, 7 Apr. 1988, p. 116.

⁸⁵ Mecham (note 48), p. 23; COSTIND (note 2), p. 3.

⁸⁶ Deng had made clear that the military production ministries' investment (including R&D) would increasingly have to be funded by the ministries themselves through new loan programmes and sales of civilian and military goods. Lewis, Hua and Xue (note 66), p. 102. These sales in turn provided revenues, some of which were used for R&D, according to Hua (note 11). According to one account, the military production ministries were initially reluctant to seek sources of funding other than the government, but finally began taking loans to support independent R&D. Liu Zhongmo and Fan Kai-Jun, 'Changes in military industrial research institutes within China's overall conversion activities', CAPUMIT (note 13), p. 231. Loans secured for R&D are often used instead for consumption and capital construction. Conroy (note 51), p. 36.

⁸⁷ 'As a result of defense spending increases, the military is . . . investing heavily to improve its indigenous production capabilities'. Clapper, R. J., 'The worldwide threat to US interests', *Defense Issues*, vol. 10, no. 5 (17 Jan. 1995).

Table 11.2. Estimated government expenditure on military R&D in China and in the democratic countries which spent over \$200 million per year, 1992–94

Figures are US\$ m.

| Country | Year ^a | Government expenditure on military R&D |
|---------|-------------------|--|
| Canada | 1992 | 210 |
| China | 1994 | 1 000 |
| France | 1992 | 4 700 |
| Germany | 1992 | 1 600 |
| India | 1994/95 | 320 |
| Italy | 1993 | 530 |
| Japan | 1992 | 660 |
| Russia | 1994 | 1 000 |
| Spain | 1993 | 290 |
| Sweden | 1992 | 450 |
| UK | 1993 | 3 900 |
| USA | 1994 | 42 000 |

^a Calendar years except for India, for which the fiscal year is given.

Note: Because of budget and conversion uncertainties, figures for China and Russia are accurate only to one significant digit. Others are accurate to two significant digits.

Sources: *OECD Major Science and Technology Indicators*, Apr. 1994, pp. 46–47; chapter 12 in this volume; and Government of India, *Defence Services Estimates 1994/95* (Government of India Press: New Delhi, 1994).

R&D was said to be less than \$1 billion per year,⁸⁸ having fallen from the equivalent of about one-seventh of the MND budget in the 1970s to about one-eighth in the late 1980s and one-tenth in 1990.⁸⁹ Funds for R&D from military exports should decrease as the volume of exports decreases.⁹⁰ Profits from arms exports fell by 80 per cent between 1988 and 1992, according to the US Central Intelligence Agency (CIA).⁹¹ COSTIND officials reportedly

⁸⁸ Frankenstein (note 7), p. 311, citing CIA, *The Chinese Economy in 1988 and 1989* (CIA: Washington, DC, 1989), p. 17.

⁸⁹ Frankenstein (note 7), p. 311, citing CIA (note 88), p. 17; and Maruyama, N., *Industrialization and Technological Development in China* (Institute of Developing Economies: Tokyo, 1990), p. 54. Government appropriations for R&D at the Ministry for Space Industry were cut by two-thirds after the 1984 defence reorientation. Hua (note 11), p. 3. Hua says this decision led directly to the ministry's decision to develop a line of short-range ballistic missiles for export.

⁹⁰ According to SIPRI data, the volume of arms exports delivered by China has declined by 75% since its peak in 1987. Revenues from exports probably follow a similar trend.

⁹¹ 'Over the cliff', *Aviation Week & Space Technology*, 3 Aug. 1992, p. 9. The gross revenue from sales to other developing countries (China's main market) fell from \$5.8 billion in 1987 to \$2.5 billion in 1990 and \$300 million in 1993 as China was driven out of the Iranian, Iraqi and Saudi markets. Grimmett, R. F., *Conventional Arms Transfers to the Third World, 1986–1993* (Library of Congress, Congressional Research Service: Washington, DC, 1994), p. 8. Much of the revenue from foreign sales is earned from Poly Group Corporation's sales of surplus equipment from PLA stocks, including the older DF-3 missiles sold to Saudi Arabia. Cheung (note 41), p. 68. Poly's sales do not directly benefit the military production ministries and corporations, which have their own foreign trade companies, coordinated by COSTIND through the New Era Corporation: the China Aerospace Corporation (CASC), the China Aerospace Technology Import–Export Company (CATIC), the China National Electronics Import–Export Corporation (CNEIC), the China Nuclear Industry Corporation, the China Precision

say that their budget has increased over the three years 1992-94,⁹² as was promised in 1985 after funds were released by demobilization. Lack of funds is seen as hampering R&D in some areas.⁹³ These figures can be compared with the most recent figures available from the democratic countries which spend over \$200 million on military R&D annually (table 11.2).

IV. Status of the major programmes in 1994

COSTIND retains the primary administrative responsibility for indigenous military technology, including setting the research agenda, establishing requirements and coordinating production, but most major decisions are made in the CMC. COSTIND finances and coordinates the R&D and production activities of the five corporations and one ministry responsible for military production (reorganized and renamed in 1993, with continued innovation in names since then): the China Nuclear Industry Corporation, AVIC, the Ministry of Electronics Industry, the China North Industry Corporation (NORINCO), the China Shipbuilding Industry Corporation and the China Space Industry Corporation. (These corporations and ministries in turn operate the trading companies listed in footnote 91.) COSTIND also funds and coordinates military R&D for other ministries and corporations, the Chinese Academy of Sciences, and various academies and universities. It receives guidance in 'steering' national R&D from the State Science and Technology Commission, a primarily consultative body.⁹⁴

Nuclear weapons⁹⁵

China's nuclear weapon programme has advanced at a slow but steady pace for more than 35 years. In 1994 China conducted its 40th and 41st nuclear weapon tests and it is expected to conduct another one or two before signing the CTB treaty in 1995 or 1996, according to COSTIND officials.⁹⁶ Continuing nuclear modernization is driven by strategic concerns about the possibility of soured relations with Russia or the USA in addition to domestic factors. If relations deteriorated, the significance would increase of military questions about the small nuclear force's ability to survive a pre-emptive strike and the

Machinery Import-Export Corporation (CPMIC), the China Shipbuilding Trading Corporation and NORINCO.

⁹² Shambaugh, D., 'The insecurity of security' (note 45), p. 29. Shambaugh in a personal communication with the author, 24 Jan. 1995, says that this is a real increase.

⁹³ Tactical radar is one. *Jane's Radar and Electronic Warfare Systems 1994-1995* (Jane's Information Group: Coulsdon, 1994), p. 35; and Lei Xun, 'Promoting international co-operation for military conversion', CAPUMIT (note 13), p. 223.

⁹⁴ For a discussion of the SSTC's similar role in energy policy, see Lieberthal, K. and Oksenberg, M., *Policy Making in China: Leaders, Structures, and Processes* (Princeton University Press: Princeton, 1988), pp. 78-82.

⁹⁵ The discussion in this section follows Lewis and Hua (note 71).

⁹⁶ See chapter 18 in this volume.

Table 11.3. Status of major Chinese R&D programmes, 1994

| Programme | Status | Expected initial operational capability |
|---|----------------------|---|
| <i>Built to government requirements</i> | | |
| Dongfeng-31 ICBM | Advanced development | 1996?; awaits warhead certification |
| Dongfeng-41 ICBM | Advanced development | Next century; awaits warhead certification |
| Julang-2 SLBM | Advanced development | Next century?; awaits warhead certification |
| 09-4 SSBN | Development | Next century?; awaits Julang-2 |
| Aircraft-carrier | Initial development? | Next century? |
| Helicopter-carrier | Under construction? | Late 1990s? |
| 39 Class submarine | Fitting out? | 1996?; first example launched in 1994? |
| Luhu Class destroyer | Operational | First example commissioned in 1994 |
| Yuting Class LST | Fitting out | 1996; first example launched in 1994 |
| <i>Independently developed</i> | | |
| JH-7 fighter-bomber | Advanced development | Awaits orders |
| 3 fighter types | Development | Await foreign partners; 'J-10' after 2005? |
| 6 tactical missile types | Operational | M-9, M-11 operational; others await orders |

ability of warheads to reach their targets if the other nuclear weapon powers developed and deployed anti-missile systems.⁹⁷

Strategic missiles

Like the USA and USSR in the 1980s, China is concerned about the vulnerability of its land-based missiles. This concern is heightened by the weaknesses of the submarine force, an apparent reduction in emphasis on the bomber force,⁹⁸ China's no-first-use policy, which means that Chinese planners must take into account the ability to ride out a pre-emptive attack, and the poor performance of Iraq's air defences—much more advanced and robust than China's—against modern bomber forces using stealth and defence suppression technologies (e.g., electronic warfare and anti-radar missiles).

The COSTIND R&D programmes that passed important milestones in 1994, or about which more information became available, are discussed below and summarized in table 11.3.⁹⁹

Most of China's land-based missile force, like that of Russia, is mobile and most vulnerable when it comes out of hiding and erects missiles in preparation for launch. A new ICBM, the 8000-kilometre Dongfeng (East Wind) DF-31,

⁹⁷ China and Russia signed agreements in 1994 detargeting their missiles and pledging not to use nuclear weapons first against each other. ITAR-TASS, 'Yeltsin, Jiang sign nuclear missile pact', FBIS-SOV-94-107, 6 Sep. 1994, p. 12.

⁹⁸ China appears to be phasing out its nuclear bomber force as the Soviet-designed Hong H-5 and H-6 bombers age. The Qiang (attacker) Q-5 is sometimes referred to by Western sources as nuclear capable, but the evidence suggests that its only nuclear role was as a carrier of test bombs during the era of atmospheric testing. CATIC (note 30); and COSTIND (note 2). There is no evidence that the Jianhong JH-7 fighter-bomber will be nuclear certified.

⁹⁹ This chapter does not attempt to characterize Chinese military production or to assess China's force structure or operational capabilities. China's alleged biological warfare programme is not discussed. See Smith, R. J., 'China may have revived germ weapons program, US officials say', *Washington Post*, 24 Feb. 1993; and chapter 10 in this volume.

is being developed with solid fuel to reduce the delay between emerging from hiding and launch, which lasts for about three hours with the liquid-fuel DF-5 ICBM. China has considerable experience with smaller solid-fuel engines but has had trouble casting the engines for the DF-31, which are 2 metres in diameter. Deployment of the DF-31 is imminent and only awaits certification of the warhead. A similar SLBM, the Julang (Great Wave) JL-2, and the 12 000-km DF-41 ICBM should follow within the decade.

Chinese engineers are developing new guidance technologies that may improve accuracy and eventually allow them to deploy MIRVs. Improved guidance would allow them to reduce the yield of the warheads from the multi-megaton range of current missiles to below the 200- to 300-kt yield anticipated for the DF-31, JL-2 and DF-41. After difficulties in the 1970s and 1980s with the star-tracking methods of guidance used on US and Russian SLBMs,¹⁰⁰ Chinese missile designers reportedly use the US Global Positioning System (GPS) for pre-launch and mid-course corrections.¹⁰¹ GPS is vulnerable to jamming and electromagnetic pulse¹⁰² and is inadequate for accurate delivery unless augmented by a system for maintaining accuracy through re-entry.

Warheads

China's continuing programme of nuclear testing indicates that the warhead to be shared by the DF-31, JL-2 and DF-41 has not yet been certified. Chinese nuclear weapon designers have had difficulty miniaturizing their warheads, a step that would increase the range of the carrier missile, given a fixed throw-weight, and improve the prospects for accommodating additional warheads, guidance systems and countermeasures for defeating missile defences. A future MIRV would have to use the DF-31 warhead if the MIRV capability were developed under the CTB.

Strategic missile submarines

China is developing a new SSBN, the 09-4, to carry the JL-2 SLBM. The 09-2 or Xia Class, which carries the medium-range JL-1 SLBM, has been operational since 1988. Originally intended to cover targets in the USA, it finds itself without a role. Alleged plans to deploy as many as seven more SSBNs are unlikely to be realized because of the current restrictions on procurement. Construction of SSBNs and nuclear attack submarines appears to have

¹⁰⁰ Star-tracking is adequate to make a missile like the US Trident II capable of destroying hard targets at ranges equivalent to those of the DF-31, but only with additional error compensation systems that require small, fast computers. MacKenzie, D., *Inventing Accuracy: An Historical Sociology of Nuclear Missile Guidance* (MIT Press: Cambridge, Mass., 1990).

¹⁰¹ Lewis and Xue (note 10), p. 119. GPS uses satellites instead of stars to give relative position.

¹⁰² Roos, J. G., 'A pair of Achilles' heels: how vulnerable to jamming are US precision-strike weapons?', *Armed Forces Journal International*, Nov. 1994, p. 21; and Lachow, I., *The Global Positioning System and Cruise Missile Proliferation: Assessing the Threat* (Harvard University Center for Science and International Affairs: Cambridge, Mass., 1994). The latter also concludes that GPS is of limited utility for guiding ballistic missiles because of their high speed.

stopped following the cancellation of the 09-3 SSBN in the early 1980s pending completion of the 09-4.¹⁰³

Conventional systems for power projection

Improved relations with India and Russia have made it possible for China to focus its conventional weapon programmes on power projection on and over the sea. The People's Liberation Army Air Force is deploying its forces on the eastern and southern coasts, while the PLAN is self-consciously moving from a posture appropriate for coastal defence to one of sea control over the extent of its territorial claims and Exclusive Economic Zone.¹⁰⁴ Sea control requires air superiority, sea surveillance, and command and control capabilities in addition to appropriate warships.

Combat aircraft

China's main producers of combat aircraft are developing new projects in the hope of winning domestic and foreign procurement contracts. If they are able to develop the new aircraft to the satisfaction of the armed services, that development may have important implications for the region and for the international market. Acceptance will mean a bureaucratic victory for COSTIND and a reprieve for the combat aircraft industry in China. Rejection will increase pressure for import or licensed production of more advanced Russian aircraft that might be seen as more threatening in the region and will have major economic impacts in both China (where the procurement budget will face a struggle to accommodate Russian planes 10 times more expensive than their Chinese counterparts) and Russia (where a withering military aircraft industry might be revived by major Chinese orders).¹⁰⁵ China is gaining experience with high-performance aircraft with its single squadron of Su-27 Flanker aircraft.¹⁰⁶

¹⁰³ Sheaffer, E., *Posture Statement* (US Naval Intelligence: Washington, DC, 1993), p. 30. Earlier reports that a second 09-2 had been delivered to the navy in 1993 now appear to have been in error. Lewis and Xue (note 10), p. 121. Domestic opposition that might lead to cancellation of the 09-4 is described in Lewis and Xue (note 10), p. 236.

¹⁰⁴ Ji Guoxing quotes an unspecified government position: 'The offshore defence strategy calls for preventing incursions by defending as far forward of the 200 km [EEZ] limit as possible'. Ji Guoxing, 'The multilateralisation of Pacific Asia: A Chinese perspective', *Asian Defence Journal*, July 1994, p. 24. EEZs are defined in the United Nations Convention on the Law of the Sea, which entered into force on 16 Nov. 1994, but China's claims in the East and South China Seas are contested.

¹⁰⁵ If rumours that China will produce Russian aircraft under licence are true, the domestically designed models will be much more difficult for COSTIND to sell to the services. Fulghum, D. A. and Proctor, P., 'China seeks to build MiG-31', *Aviation Week & Space Technology*, 5 Oct. 1992. First Deputy Defense Minister Andrey Kokoshin's comment—'At this stage it is a question, specifically, of supplying a batch of Su-27s'—suggests that the licensed production deal has not been consummated. Moscow Russian Television Network, 'Kokoshin promotes military co-operation with China', 1 June 1994 (in Russian), translated in FBIS-SOV-94-107, 3 June 1994, p. 10.

¹⁰⁶ Other rumoured Russian orders include MiG-29s, MiG-31s, Su-24s, more Su-27s, Su-30s and Tu-22Ms as well as airborne early-warning (AEW) and transport aircraft. None of these have been confirmed, and some are almost certainly incorrect. According to SIPRI data on confirmed deliveries, China received no systems in 1994, only 1 aged Il-28 bomber and 4 Il-76 transports in 1993, and the 26 Su-27 fighters in 1992. Russia reported unspecified deliveries of 20 combat aircraft and 6 trainers (presumably

Little is known about the Chinese fighters thought to be in development, but they apparently share common elements. All of them began as airframe designs meant to adopt imported engines, electronics and weapon systems. The first, the Jianhong (fighter-bomber) JH-7 was developed by Xian, which previously built Soviet-designed medium bombers, as an export product with hopes of some domestic procurement.¹⁰⁷ It is thought to have flown for the first time in 1988 and moved into flight trials in 1990¹⁰⁸ and may have entered low-rate production. After Western military assistance was cut off in 1989, the designers resigned themselves to using Chinese engines, materials and electronics.¹⁰⁹ There is no evidence of progress towards guided bombs or submunitions dispensers, although development of the Model 245 guidance system for air-to-surface missiles was begun in 1985.¹¹⁰

Like Xian, China's two producers of fighter aircraft, Chengdu and Shenyang, have also continued to design new airframes in the hope of winning foreign partners and customers. Chengdu officials have mentioned one aircraft, the FC-1, and Shenyang two (in addition to the firms' older-design J-7 and J-8 fighters). The official Chinese designations for these aircraft are unknown, but they have been referred to by Western observers variously as the J-9, J-10, J-11 and J-12.¹¹¹ All were to be export products relying heavily on imported electronics, engines and materials. Since the end of Western military assistance in 1989, there have been persistent rumours about other sources of technology.¹¹²

In the case of the J-10, Israeli and Russian cooperation has been rumoured. According to one rumour, Russia may supply as much as two-thirds of the design work, engines and electronics on one of the planes.¹¹³ Rumours from unnamed 'Chinese sources' and 'US government experts on the Chinese military' concerning Israeli cooperation with Chengdu and perhaps Xian on the programme reappeared in 1994, accompanied by speculation about a flight-test in early 1996. These reports were not specific about the technologies

the Su-27s) to the UN Register of Conventional Arms for 1992 and none for 1993 (see appendix 14D in this volume). No other Russian military aircraft are known to have been transferred to China.

¹⁰⁷ In 1988, the PLAAF had not placed an order and PLAN interest appears to have waned after an investment of Y 500 million in the early 1980s. 'Chinese B-7 set for November take-off', *Jane's Defence Weekly*, 10 Sep. 1988, p. 505.

¹⁰⁸ Fink, D. E. and Proctor, P., 'China aviation: at a critical crossroads', *Aviation Week & Space Technology*, 11 Dec. 1989, p. 58; and *MILAVNEWS*, 'B-7 progress', Jan. 1990, NL-339, p. 5.

¹⁰⁹ Its avionics and terrain-following radar are of Chinese design. Fink (note 108), p. 58; and Skebo (note 20), p. 674.

¹¹⁰ COSTIND (note 2), pp. 721, 727.

¹¹¹ The aircraft to which these designations have been applied also change periodically. The first Western use of the designations J-9 and J-10 for the two new Shenyang fighters was in O'Lone, R. G. and Fink, D. E., 'Chinese air force developing few new aircraft designs', *Aviation Week & Space Technology*, 7 Dec. 1987, p. 59. The designations J-9, J-10 and J-11 were linked with cancelled programmes by PLAAF officials in 1987. *Jane's All the World's Aircraft 1988-1989* (Jane's Publishing Co.: London, 1988), p. 34. The J-12 was cancelled during the Cultural Revolution. Since Chinese officials refer only to unspecified fighter aircraft, it is difficult to tell to which they are referring. In some cases, they may simply mean upgrades of the Chengdu J-7, a copy from a Soviet design of the 1950s, the MiG-21.

¹¹² 'New fighter flies', *MILAVNEWS*, Nov. 1991, NL-361, p. 3; and Skebo (note 20), p. 673.

¹¹³ Cheung (note 41), p. 24.

transferred.¹¹⁴ Israel would be supplying technology from its cancelled Lavi (Lion) close-air support/interdiction aircraft programme, perhaps including a jammer, a look-down/terrain-following radar and radar warning receiver of older design. The Lavi was also to have had a limited air-to-air capability.¹¹⁵ Israeli officials, while conceding that Israeli firms are cooperating with Chinese customers, say that US–Israeli relations are too precious and Chinese export practices too reckless for Israel to allow significant transfers of military technology.¹¹⁶

Domestic production projects seem likely to succeed to the extent that they would rely on imported engines and electronics, and therefore leave China liable for hard-currency costs and vulnerable to political changes, which the self-sufficiency effort is meant to avoid. If China were to go it alone, progress would be slow. China's most advanced cockpit designed indigenously, that of the Shenyang J-8 II, was assessed in 1989 to be equivalent to 'an early generation F-4'.¹¹⁷ China has had little help with cockpit design since then. Active control (fly by wire) has also been under investigation since the early 1980s¹¹⁸ but is said to be absent from the aircraft in development. China has almost no experience with electronic warfare (EW) and is not well positioned to develop a capability in this most fast-moving area of military technology. By the time the official history of China's aerospace industry was written in 1987, its accomplishments in the EW field were limited to a single air-to-air fire control radar, the JL-7.¹¹⁹ Since then, China has begun research on the JL-10 look-down radar, but look-down/shoot-down radar, a technology for attacking lower flying targets that has been available in the West for decades, has not been achieved.¹²⁰

¹¹⁴ 'Israel co-operates with China on secret fighter', *Flight International*, 2–8 Nov. 1994, p. 4; Barrie, D., 'Chinese tonic', *Flight International*, 9–15 Nov. 1995, p. 16; and Mann, J., 'US says Israel gave combat jet plans to China', *Los Angeles Times*, 28 Dec. 1994, p. 1. See also Fulghum, D. A., 'New Chinese fighter nears prototyping', *Aviation Week & Space Technology*, 13 Mar. 1995, pp. 26–27; and Fulghum, D. A., 'China pursuing two-fighter plan', *Aviation Week & Space Technology*, 27 Mar. 1995, pp. 44–45.

¹¹⁵ *Jane's All the World's Aircraft 1987–1988* (Jane's Publishing Co.: London, 1987), p. 38.

¹¹⁶ Arnett, E., Travel report for SIPRI base on interview conducted in Israel, 1995 (unpublished). Israel does seek leverage over China, in part to influence its export behaviour, but transfer of military technology is risky, particularly given its limited effectiveness. Israel has not directly denied the rumours about the J-10, in part because of a policy of not responding directly to any allegation related to military exports.

¹¹⁷ Fink (note 108), p. 70. The USA fielded early-generation F-4s in the 1960s. Engineers with the US firm Grumman reported that each of the 50 J-8 II cockpits they examined was unique, suggesting that the avionics design never stabilized, a sign of poor project management, and would be hard to maintain or improve. Wilborn, T. L., *Security Cooperation with China: Analysis and a Proposal* (US Army War College: Carlisle, Pa., 1994), p. 8.

¹¹⁸ CATIC (note 30), p. 83.

¹¹⁹ CATIC (note 30), pp. 282–83. An EW variant of the H-6 exists (pp. 87, 144–45), but its electronics suite is unknown. The 1980s saw development of indigenous radar warning receivers and some ability to jam, but the early 1990s military electronics R&D was slowed by constantly changing priorities. COSTIND (note 2), p. 740. For an assessment of EW more broadly that comes to the same, equally negative conclusion, see Lee (note 77), pp. 34–38.

¹²⁰ COSTIND (note 2), p. 726; and *Jane's Radar and Electronic Warfare Systems 1994–1995* (note 93), p. 273. Claims that some J-8s are equipped with an indigenous look-down/shoot-down radar appear to be mistaken. Zhang, H., 'China heads toward blue waters', *International Defense Review*, Nov. 1993, p. 880. Shenyang promised that an export version, the F-8 II, would be available with the JL-10 in 1994.

On the other hand, in-flight refuelling is a simple technology that is already installed on the export version of the J-8 II, the F-8 II.¹²¹ It remains to be seen whether Chinese pilots are up to the challenge of close formation flying that is necessary in operationally mastering the technology.

*Tactical missiles*¹²²

Just as China's combat aircraft producers began work on new designs for export during the 1980s, at least three of China's military production corporations began work on tactical ballistic missiles for export in the hope of replacing funds cut from their R&D budget. Two of these, the M-9 and M-11, were later inducted into the Chinese force structure as the DF-15 and DF-11, respectively, and are seen as offering some interim capability to strike tactical targets not covered by piloted aircraft. Other missiles reported include the 8610, the DF-25, the M-7 and the M-18. Chinese designers claim to have developed digital guidance and terminal homing for shorter-range missiles that could increase their military utility when armed with high explosive (rather than nuclear) warheads. It is not clear that the PLA has adequate battle-field surveillance capabilities to support the use of tactical missiles against movable targets.

Aircraft- and helicopter-carriers

The status of China's rumoured aircraft-carrier project has been thrown into doubt. After speculation that China would import a carrier had been laid to rest, a report to the National People's Congress in 1993 indicated that the PLAN plans to build two 48 000-tonne carriers by 2005 and Y 10 billion (\$2 billion) has been allocated for the project.¹²³ The report, which has not been made public, is said to concede that China will not be able to develop carrier-based aircraft, of which 40 would be embarked on each carrier, or adequate anti-air or anti-submarine protection.¹²⁴ Reports in 1994 suggest that the project has stalled again, but the PLAN is still lobbying for it.¹²⁵

Designing a carrier similar to those operated by France or the USA would be extremely difficult, whereas a carrier capable of handling vertical/short take-off and landing (V/STOL) aircraft is fairly straightforward and adequate for most purposes. Such a vessel would require China to purchase, co-develop or design a V/STOL aircraft, like the British/US Harrier or those built by the Russian Yakovlev firm. Chinese officials are said to have considered co-development of the troubled Yak-141 'Freestyle', but Yakovlev has since moved strongly away from military production to emphasize its proven com-

¹²¹ Fink (note 108); and Beaver, P., 'Carriers key to Chinese air power', *Jane's Defence Weekly*, 15 Sep. 1993, p. 23.

¹²² The discussion in this section follows Lewis and Hua (note 71).

¹²³ Paraphrased in Beaver (note 121). The Russian *Admiral Gorshkov*, decommissioned in 1994, displaced 44 000 tonnes loaded. US carriers are significantly larger.

¹²⁴ Lee (note 77), p. 72. COSTIND has been working on the latter since at least 1983.

¹²⁵ 'Plans to construct an aircraft carrier have been scrapped': 'Modernization: PLA-Navy first', *World Aerospace and Defense Intelligence*, 8 Apr. 1994, p. 10.

petitiveness in the civilian sector.¹²⁶ For the foreseeable future, China is likely to develop little more than a flat-topped ship embarking a compliment of helicopters and may already be constructing one.¹²⁷

Other ships

The year 1994 witnessed a number of developments in Chinese naval architecture and shipbuilding. A diesel submarine thought to be the first of the Song or 39 Class was reportedly launched in May 1994. The 39 Class is designed to launch anti-ship missiles while submerged, an increasingly common capability in Asian navies and one seen by Chinese planners as crucial to establishing a forward maritime defence perimeter.¹²⁸ The PLAN's first Luhu Class destroyer was commissioned in 1994. It is reckoned to be a 'major step forward', primarily because of the foreign technology incorporated.¹²⁹ In 1992 the first 3700-tonne Yuting Class tank-landing ship was seen being fitted out in Shanghai; it should have been launched in 1994. Begun in the 1980s,¹³⁰ the Yuting Class is the first Chinese landing ship to embark helicopters. Two more are thought to be under construction.¹³¹ There were no reports in 1994 related to the Jiangwei Class frigate or the Dayun Class resupply ship, which have been seen as indicating PLAN interest in longer deployments.

Electronics and command and control

A surface action group centred around a single helicopter-carrier and accompanying landing ships is vulnerable to air attack, even when supported with land-based fighters refuelled in the air, unless warning and control systems were supporting them.¹³² China's greatest effort in command and control has come in the field of strategic automated air-defence systems, a concept devel-

¹²⁶ Ozhegov, A., 'Conversion of the Russian military aircraft industry', ed. R. Forsberg, *The Arms Production Dilemma: Contraction in the World Combat Aircraft Industry* (MIT Press: Cambridge, Mass., 1994), pp. 74, 79.

¹²⁷ Preston, A. (ed.), 'China's carrier plans', *NAVINT*, 4 June 1993, p. 1. Gill and Kim (note 22) cite speculation in Seoul and Taipei about the helicopter-carrier project appearing in *Korea Herald*, 14 July 1993. See also *Joong-Ang Ilbo*, 13 July 1993; and Opall, B., 'Taipei cites rising need for diesel sub fleet', *Defense News*, 18–24 July 1994.

¹²⁸ Preston, A., 'World navies in review', *US Naval Institute Proceedings*, Mar. 1995, p. 112; and Starr, B., "'Designed in China": a new SSK is launched', *Jane's Defence Weekly*, 13 Aug. 1994, p. 3. Xue Litai says that China's newest submarine design is the 5-year-old Ming or K3 Class and that no new submarines were launched in 1994. Personal communication to J. Cochran, Nov. 1994. See also his discussion of the 39 and K3 Classes in Lewis and Xue (note 10), p. 230. Xue agrees that the 39 Class, like the 37 Class (modified from the Soviet Romeo Class design), carries anti-ship cruise missiles. The defence perimeter is meant to be roughly 400 km from China's coast. *Jane's Fighting Ships 1993–1994* speculates that the 39 Class will be similar to the Agosta Class, which can fire cruise missiles from its torpedo tubes. *Jane's Fighting Ships 1993–1994* (Jane's Information Group: Coulsdon, 1993), p. 116.

¹²⁹ *Jane's Fighting Ships 1994–1995* (Jane's Information Group: Coulsdon, 1994), p. 117. A second was launched in 1993 and is expected to be commissioned in 1995. The third may have been delayed by problems acquiring the GE LM 2500 gas turbine.

¹³⁰ COSTIND (note 2), p. 672.

¹³¹ *Jane's Fighting Ships 1994–1995* (note 129), p. 130. These relatively small landing ships are the largest ever operated by China, but are similar to the Yukan Class, operated since 1980.

¹³² Such a force would also be vulnerable to submarine attack, and Chinese anti-submarine warfare shows little sign of improving.

oped in the West in the 1960s and fielded by China in 1985.¹³³ An airborne warning radar like those on the US E-2 Hawkeye and E-3 Sentry is in development, and may have been for quite some time.¹³⁴ The closest Chinese equivalent to the US Aegis ship-borne air-defence system is the 'Rice Screen' radar observed on the Luhu Class and other destroyers and frigates as early as 1984. Rice Screen is 'similar to [the US 1960s vintage] Hughes SPS-39A'.¹³⁵ Rumours that Israel is helping China design radars similar to those of the E-2 and Aegis are not well substantiated. In general, a 1989 assessment that naval electronics and electronic warfare systems are 'obsolete' and 'inadequate' still appears to be valid.¹³⁶

V. Conclusions

Public information about the status of Chinese military technology projects and the reform of the military technology base both support the school of thought that sees the technology base as weak and weakening under present circumstances. Since China's professed long-term goal is a stronger military technology base, it is interesting to consider the conditions under which the military technology base might be significantly strengthened and whether such a strengthening would be apparent to outside observers.

This chapter identifies several areas of weakness which could not be compensated for by the still extremely limited access to civilian and military technology from abroad. These weaknesses include a lack of resources and prestige, with attendant loss of morale; continued reliance in the military sector on management practices that are typical of the Soviet model; a lack of cooperation with the civilian sector and loss of expertise to civilian enterprises and projects; and the first signs of an emergent difference of objectives between COSTIND and the armed services.

If the weakness of the military technology base were only accounted for by lack of resources and government inattention, it might be expected that China could easily mobilize if its security situation were to change for the worse.¹³⁷ Furthermore, while such changes might be observable, there could be a significant time-lag between a decision to redirect resources to military R&D and clear indications of such a redirection. Such a lag in strategic warning could be exacerbated by the false warnings that are already apparent in public sources.

¹³³ COSTIND (note 2), p. 748. 'Very little seems to be happening on any [new] air defence network' in China, and the air defence network in place suffers from 'major weaknesses, such as an outmoded command, control and communications system'. *Jane's Radar and Electronic Warfare Systems 1994-1995* (note 93), pp. [14], 11.

¹³⁴ *Jane's Radar and Electronic Warfare Systems 1994-1995* (note 93), p. 233; and Lee (note 77), p. 74. A Swedish package of radars and other sensors for airborne surveillance apparently was never delivered. 'Sweden, China plan co-operative ventures', *Aviation Week & Space Technology*, 19 May 1986, p. 18.

¹³⁵ *Jane's Radar and Electronic Warfare Systems 1994-1995* (note 93), p. 158; and *Jane's Fighting Ships 1994-95* (note 129), pp. 119, 123.

¹³⁶ Lee (note 77), p. 70.

¹³⁷ Xue Litai, personal communication to J. Cochran, 30 Sep. 1994.

The problems of Chinese military R&D appear to run deeper, however. Without larger transfers of military technology, it may only be possible to take full advantage of the available technology after political as well as economic reform. The conditions that will make it possible for China to exploit its new technological advantages—including better management of the military sector and more cooperation between the military and civilian sectors—will only be brought about if the Communist Party relaxes control. Political reform will be a necessary but not sufficient condition for organizations to be better able to exploit technology; it could leave the military technology base relatively untouched. Even if reform does eventually come to the military R&D establishment, it will work against ingrained interests and procedures without the benefit of new incentives. It is also likely to yield greater transparency.

Nor is greater access to foreign technology likely create a ripple effect in the technology base. If a redirection of resources were accompanied or preceded by greater access to foreign military technology, Chinese military production could quickly reach a more advanced level. Further, many of the most significant military technologies are components or sub-systems and more difficult to monitor. On the other hand, components are also among the most sensitive technologies for suppliers and the most difficult to copy-produce, making it less likely that exporters will include them in transfers of major weapon systems and less likely that Chinese designers will be able to fit them into indigenous systems without cooperation. Further, major weapon systems—should they become more widely available from abroad—will aggravate the bureaucratic problems of the military technology base by creating an incentive for the armed services to oppose indigenous designs, perhaps to a debilitating extent. Despite COSTIND's apparent victory in the first round of this dispute, its declining influence suggests that it may not fare as well in future rounds, despite the current emphasis on domestic design and copy production. In the long run, successful economic reform might provide the armed services with adequate resources for a heavier reliance on imports, which would entail both diminished influence for COSTIND and greater transparency. Indeed, increased transparency is likely to be both a condition of supply and a consequence, whether intended or not.

In the unlikely event of China's leadership turning to the PLA for a successor to Deng, the odds are that the required additional reforms will not even be attempted and more advanced technology will not be forthcoming. In short, the PLA might conceivably rule China, but it would do so without a competitive military technology base and with strictly limited access to military imports. More probably, China will eventually develop a more advanced military technology base and be allowed access to more military imports, but only under conditions that are consistent with a more reassuring security policy.

Part III. Military expenditure, arms production and trade, 1994

Chapter 12. World military expenditure

Chapter 13. Arms production

Chapter 14. The trade in major conventional weapons

12. World military expenditure

PAUL GEORGE, ROBERT BEDESKI, BENGT-GÖRAN BERGSTRAND, JULIAN COOPER and EVAMARIA LOOSE-WEINTRAUB*

I. Introduction

World military spending has been in decline since reaching a peak in 1987.¹ The absence of reliable military expenditure data for many countries, most notably China and Russia but also countries throughout the non-industrialized world, makes the estimation of aggregate world military expenditure an impossible task. In many cases the problem of inadequate reporting of military expenditure is compounded by unreliable economic data on inflation and gross domestic product (GDP). For SIPRI to be able to substantiate a figure for total world military expenditure, an essential first step is for all states to make such information available through the United Nations Unified Reporting System for security expenditure.²

It is evident that increases or decreases in military expenditure occur asymmetrically, with great variations between countries and regions. Military expenditure is decreasing in most of the major spending states—the Western democracies and Russia—but shows no sign of abating in some of the most volatile regions of the world—the Middle East and South Asia. Two of the major military spenders in the Middle East, Iran and Saudi Arabia, have increased their expenditure in constant prices by 42.5 per cent and 12.9 per cent respectively since 1992. In South Asia the equivalent increases for India and Pakistan since 1992 are 12 per cent and 19.5 per cent respectively. Moreover, upward pressures on military budgets are increasingly evident and spending levels remain unjustifiably high in many countries. These patterns of behaviour are reinforced by entrenched military and political systems which still view national strength in terms of large standing armies and the possession of advanced weapon systems.

All states have a right to provide for their own national security. However, military expenditure often contributes less to the security of states than to

¹ See Bergstrand, B.-G., Ball, N., Kosiak, S., Loose-Weintraub, E., Shambaugh, D. and Whitlock, E., 'World military expenditure', SIPRI, *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 389–453.

² For a description of the UN Reporting System, see Ball, N., *Security and Economy in the Third World* (Princeton University Press: Princeton, N.J., 1988), pp. 97–106.

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Table 12.1. NATO distribution of military expenditure by category, 1985–94

Figures are in US \$m. at 1990 prices and exchange rates. Figures in italics are percentage changes from previous year.

| | | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|----------------------|------------------|---------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <i>North America</i> | | | | | | | | | | | |
| Canada | Personnel | 4 967 | 5 246 | 5 296 | 5 280 | 5 526 | 5 773 | 5 144 | 5 231 | 4 976 | 4 771 |
| | Other oper. exp. | 3 745 | 3 426 | 3 435 | 3 675 | 3 461 | 3 718 | 3 353 | 3 333 | 3 119 | 3 167 |
| | Equipment | 2 038 | 2 269 | 2 458 | 2 338 | 2 123 | 1 963 | 1 885 | 1 950 | 2 003 | 1 990 |
| | Equip. change | | <i>11.4</i> | <i>8.3</i> | <i>-4.9</i> | <i>-9.2</i> | <i>-7.5</i> | <i>-4.0</i> | <i>3.4</i> | <i>2.7</i> | <i>-0.7</i> |
| USA | Personnel | 117 490 | 119 947 | 118 906 | 121 771 | 122 403 | 112 058 | 116 206 | 111 658 | 104 415 | 96 653 |
| | Other oper. exp. | 109 971 | 122 627 | 117 581 | 115 294 | 111 829 | 122 468 | 84 195 | 111 658 | 109 528 | 108 766 |
| | Equipment | 80 520 | 86 442 | 87 772 | 80 317 | 81 068 | 75 930 | 73 435 | 65 063 | 59 204 | 50 219 |
| | Equip. change | | <i>7.4</i> | <i>1.5</i> | <i>-8.5</i> | <i>0.9</i> | <i>-6.3</i> | <i>-3.3</i> | <i>-11.4</i> | <i>-9.0</i> | <i>-15.2</i> |
| <i>Europe</i> | | | | | | | | | | | |
| Belgium | Personnel | 3 017 | 3 050 | 3 116 | 3 061 | 3 175 | 3 177 | 3 155 | 2 455 | 2 485 | 2 449 |
| | Other oper. exp. | 953 | 1 072 | 1 018 | 980 | 946 | 924 | 920 | 797 | 732 | 710 |
| | Equipment | 608 | 643 | 657 | 577 | 468 | 367 | 375 | 308 | 250 | 252 |
| | Equip. change | | <i>5.7</i> | <i>2.2</i> | <i>-12.3</i> | <i>-18.8</i> | <i>-21.7</i> | <i>2.3</i> | <i>-17.9</i> | <i>-18.9</i> | <i>0.8</i> |
| Denmark | Personnel | 1 406 | 1 414 | 1 469 | 1 574 | 1 584 | 1 547 | 1 543 | 1 502 | 1 507 | 1 463 |
| | Other oper. exp. | 745 | 668 | 721 | 657 | 612 | 620 | 612 | 577 | 693 | 715 |
| | Equipment | 361 | 353 | 397 | 391 | 347 | 395 | 426 | 471 | 387 | 365 |
| | Equip. change | | <i>-2.2</i> | <i>12.4</i> | <i>-1.5</i> | <i>-11.2</i> | <i>13.8</i> | <i>7.9</i> | <i>10.6</i> | <i>-17.8</i> | <i>-5.7</i> |
| Germany | Personnel | 17 898 | 19 346 | 19 960 | 20 000 | 20 515 | 22 049 | 22 196 | 22 090 | 20 159 | 18 755 |
| | Other oper. exp. | 12 851 | 9 972 | 10 102 | 10 262 | 9 635 | 8 041 | 7 059 | 7 162 | 8 003 | 7 471 |
| | Equipment | 5 746 | 8 137 | 8 155 | 7 767 | 7 628 | 7 491 | 6 118 | 5 014 | 3 750 | 3 407 |
| | Equip. change | | <i>41.6</i> | <i>0.2</i> | <i>-4.8</i> | <i>-1.8</i> | <i>-1.8</i> | <i>-18.3</i> | <i>-18.0</i> | <i>-25.2</i> | <i>-9.2</i> |
| Greece | Personnel | 2 696 | 2 386 | 2 379 | 2 373 | 2 349 | 2 476 | 2 359 | 2 338 | 2 311 | 2 380 |
| | Other oper. exp. | 1 054 | 792 | 740 | 656 | 535 | 475 | 498 | 480 | 390 | 453 |
| | Equipment | 656 | 610 | 663 | 950 | 836 | 827 | 744 | 891 | 918 | 922 |
| | Equip. change | | <i>-7.0</i> | <i>8.7</i> | <i>43.2</i> | <i>-12.0</i> | <i>-1.2</i> | <i>-10.1</i> | <i>19.8</i> | <i>3.0</i> | <i>0.4</i> |

| | | | | | | | | | | | |
|-------------|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Italy | Personnel | 10 863 | 11 648 | 13 393 | 13 938 | 14 266 | 14 400 | 15 195 | 14 653 | 14 585 | 14 729 |
| | Other oper. exp. | 4 533 | 4 158 | 4 086 | 4 630 | 4 496 | 4 231 | 4 077 | 4 256 | 4 035 | 4 111 |
| | Equipment | 3 673 | 3 714 | 4 676 | 4 943 | 4 982 | 4 091 | 3 864 | 3 451 | 3 988 | 4 064 |
| | Equip. change | | 1.1 | 25.9 | 5.7 | 0.8 | -17.9 | -5.5 | -10.7 | 15.6 | 1.9 |
| Luxembourg | Personnel | 58 | 60 | 68 | 76 | 72 | 77 | 75 | 84 | 79 | 86 |
| | Other oper. exp. | 8 | 9 | 9 | 17 | 11 | 10 | 10 | 10 | 8 | 12 |
| | Equipment | 3 | 2 | 3 | 3 | 4 | 3 | 6 | 5 | 3 | 3 |
| | Equip. change | | -18.5 | 43.9 | -18.1 | 24.4 | -12.4 | 86.4 | -11.1 | -44.5 | 8.1 |
| Netherlands | Personnel | 3 763 | 3 827 | 4 072 | 4 106 | 4 101 | 4 000 | 3 953 | 4 075 | 3 889 | 3 670 |
| | Other oper. exp. | 1 507 | 1 776 | 1 816 | 1 520 | 1 695 | 1 655 | 1 640 | 1 602 | 1 440 | 1 353 |
| | Equipment | 1 720 | 1 515 | 1 352 | 1 542 | 1 344 | 1 328 | 1 117 | 1 006 | 917 | 952 |
| | Equip. change | | -11.9 | -10.7 | 14.1 | -12.9 | -1.2 | -15.9 | -9.9 | -8.9 | 3.9 |
| Norway | Personnel | 1 426 | 1 475 | 1 490 | 1 495 | 1 435 | 1 470 | 1 525 | 1 563 | 1 219 | 1 261 |
| | Other oper. exp. | 848 | 860 | 912 | 899 | 809 | 825 | 734 | 789 | 955 | 1 025 |
| | Equipment | 831 | 653 | 702 | 617 | 836 | 767 | 724 | 871 | 934 | 941 |
| | Equip. change | | -21.4 | 7.5 | -12.2 | 35.5 | -8.2 | -5.6 | 20.2 | 7.3 | 0.7 |
| Portugal | Personnel | 926 | 995 | 1 027 | 1 153 | 1 302 | 1 371 | 1 442 | 1 592 | 1 527 | 1 519 |
| | Other oper. exp. | 310 | 359 | 322 | 330 | 255 | 246 | 248 | 235 | 276 | 243 |
| | Equipment | 44 | 95 | 158 | 183 | 217 | 193 | 164 | 44 | 138 | 158 |
| | Equip. change | | 114.9 | 66.6 | 15.6 | 18.9 | -11.0 | -15.3 | -73.4 | 216.8 | 14.5 |
| Spain | Personnel | .. | .. | 4 968 | 5 093 | 5 540 | 5 613 | 5 677 | 5 639 | 5 497 | 5 259 |
| | Other oper. exp. | .. | .. | 2 159 | 2 018 | 2 059 | 2 082 | 1 825 | 1 623 | 2 047 | 1 726 |
| | Equipment | .. | 2 083 | 2 469 | 1 934 | 1 769 | 1 150 | 1 132 | 884 | 1 191 | 1 083 |
| | Equip. change | | | 18.5 | -21.7 | -8.5 | -35.0 | -1.6 | -21.9 | 34.7 | -9.1 |
| Turkey | Personnel | 1 480 | 1 509 | 1 498 | 1 354 | 2 027 | 2 567 | 2 650 | 2 799 | 3 463 | 2 935 |
| | Other oper. exp. | 1 676 | 1 931 | 1 653 | 1 426 | 1 447 | 1 515 | 1 420 | 1 322 | 1 252 | 1 112 |
| | Equipment | 545 | 811 | 911 | 856 | 756 | 1 063 | 1 240 | 1 425 | 1 455 | 2 173 |
| | Equip. change | | 48.7 | 12.3 | -6.1 | -11.6 | 40.5 | 16.7 | 14.9 | 2.1 | 49.3 |

| | | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|-------------|------------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| UK | Personnel | 15 242 | 16 718 | 16 599 | 16 543 | 16 113 | 16 149 | 17 133 | 16 268 | 15 796 | 14 968 |
| | Other oper. exp. | 14 937 | 13 632 | 13 875 | 12 072 | 14 032 | 14 478 | 14 175 | 13 073 | 8 606 | 8 133 |
| | Equipment | 11 758 | 10 803 | 10 513 | 10 324 | 8 974 | 7 120 | 7 971 | 6 722 | 9 441 | 9 149 |
| | Equip. change | | -8.1 | -2.7 | -1.8 | -13.1 | -20.7 | 12.0 | -15.7 | 40.4 | -3.1 |
| NATO Europe | Personnel | .. | .. | 70 040 | 70 765 | 72 478 | 74 896 | 76 903 | 75 059 | 72 517 | 65 487 |
| | Other oper. exp. | .. | .. | 37 414 | 35 467 | 36 533 | 35 102 | 33 220 | 31 926 | 28 436 | 27 067 |
| | Equipment | .. | 29 419 | 30 656 | 30 086 | 28 162 | 24 794 | 23 881 | 21 093 | 23 373 | 23 470 |
| | Equip. change | | | 4.2 | -1.9 | -6.4 | -12.0 | -3.7 | -11.7 | 10.8 | 0.4 |
| NATO total | Personnel | .. | .. | 194 242 | 197 817 | 200 407 | 192 727 | 198 252 | 191 947 | 181 908 | 170 911 |
| | Other oper. exp. | .. | .. | 158 430 | 154 436 | 151 823 | 161 288 | 120 768 | 146 917 | 141 084 | 139 000 |
| | Equipment | .. | 118 130 | 120 886 | 112 741 | 111 352 | 102 688 | 99 201 | 88 105 | 84 581 | 75 679 |
| | Equip. change | | | 2.3 | -6.7 | -1.2 | -7.8 | -3.4 | -11.2 | -4.0 | -10.5 |

Note: NATO data on the distribution between the different spending categories include a fourth category—infrastructure—which is of minor importance and has been excluded. The NATO data show percentage shares and the dollar amounts here have been calculated using these percentages and the total expenditures shown in table 12A.2. Calculations are based on rounded input data.

Sources: NATO, Financial and Economic Data Relating to NATO Defence, Press release M-DPC-2(94) 125, 14 Dec. 1994; and *NATO Review*, no. 1 (1990), p. 31; no. 1 (1991), p. 33; no. 1 (1992), p. 33; Feb. 1993, p. 33; and Apr. 1994, p. 33.

regional instability and economic hardship. Rather than increasing security, it intensifies uncertainty between states and reduces opportunities for economic and social development. In many developing countries the impact of military spending on the well-being of the population is acute: it diverts scarce resources from other priorities such as health care and education.

Section II of this chapter provides an overview of developments in NATO, with a more detailed analysis of the Clinton Administration's first clear statement of US security policy. Sections III and IV analyse military expenditure in Russia and Central and Eastern Europe (CEE) respectively. Because of the unreliability or unavailability of official data for the countries of the Commonwealth of Independent States (CIS), SIPRI has not been able to include data for all these states in the tables of military expenditure in appendix 12A. It is a matter of particular concern that, while defence spending data became more readily available from the CEE countries directly after the dissolution of the Warsaw Treaty Organization (WTO), it has subsequently become much more difficult to get access to transparent disaggregated defence budgets for these countries. Section V focuses on trends and developments in Japanese defence spending. Finally, because military spending is showing alarming rates of growth in developing regions in the post-cold war era, section VI discusses military spending patterns in South America and South and South-East Asia.

II. NATO

Overall NATO military spending in 1994 was very much in line with the declining trend identified for previous years, although the spending patterns of individual states, as shown in table 12A.2, vary.³ As noted in the *SIPRI Yearbook 1994*, the NATO countries fall roughly into four categories: (a) in Belgium, Spain, the UK and the USA military spending increased rapidly, reached a clear peak and then declined; (b) in Denmark and Greece military expenditure shows a trend of long-term stability. Fairly stable spending trends also characterize Canada, France, Italy, Norway and Portugal, where after a long period of increase spending has now levelled off; (c) in Germany and the Netherlands military spending was stable for a long period but has been falling rapidly recently; and (d) in Luxembourg and Turkey military spending still shows an increasing trend. Although high inflation makes calculation of real Turkish military spending uncertain, preliminary data for 1994 suggest a spending level two-thirds higher in real terms than in 1988.

Table 12.1 presents data on the distribution of military spending in the NATO countries. Since the late 1980s, NATO (except for France) has published data on four categories of expenditure: 'personnel', 'equipment', 'infrastructure' and 'other operating expenditures'. For NATO as a whole, spending

³ Bergstrand *et al.* (note 1), pp. 390–99. NATO military spending figures in this *Yearbook* have been recalculated based on CPI-deflated data and taking 1990 as the base year. It is not known what deflator NATO uses. There are therefore some differences between this year's figures and the constant-value data published by NATO, and between the figures published here and those in the *SIPRI Yearbook 1994* which used the 1985 base year.

for weapon procurement has fallen in 1994 more than twice as rapidly as general NATO military spending.⁴ The aggregated decline in NATO procurement is, however, much influenced by falling US purchases. In 1994 US procurement was around \$50 billion compared with some \$88 billion in 1987.

The United States

President Bill Clinton's defence budget request for fiscal year (FY) 1995 is widely considered to represent the first clear statement of his Administration's security priorities.⁵ These objectives were defined in a major examination of US defence policy in the post-cold war period, which was commissioned by then Secretary of Defense Les Aspin shortly after Clinton took office, the Bottom-Up Review (BUR). It started from the basic policy assumption that threats to the USA should determine the future force size and structure.⁶ The president was offered four force alternatives in the BUR and decided on the Pentagon's preferred 'win-win' option. This called for the maintenance of force levels sufficient to win two nearly simultaneous major regional conflicts (MRCs).⁷ The two-MRC force, according to the recommendations of the BUR, would include 10 army divisions, 12 aircraft-carriers and 20 air force fighter wings. Active-duty force levels would stabilize at 1.4 million personnel by 1999. The Future Years Defense Program (FYDP) for 1995 gives estimates of \$1.2 trillion for the cost of implementing the BUR over the five-year (1995-99) defence planning period.⁸

The two-MRC policy was controversial from the moment the president announced it in September 1993. Attention focused on the apparent shortfall between military commitments and the resources devoted to meeting them. Critics of the proposal argued that the force requirements for the two-MRC scenario could not be met under Clinton's budget proposals. The size of the shortfall is difficult to determine but it is clearly significant. The General Accounting Office (GAO) has quoted a shortfall of \$150 billion in the funds necessary to support priority defence programmes over the next five years; the Pentagon argues that it must close a \$40 billion gap;⁹ other sources indicate a shortfall of \$50 billion if the military requirements proposed in the BUR are to be met;¹⁰ Defense Secretary William Perry, who played a major role in the

⁴ In 1990 constant US dollars, total NATO expenditure was \$450 648 million in 1993 and \$429 658 million in 1994, a fall of 4.65%.

⁵ The 1994 US defence budget was largely a carry-over from the end of the Bush Administration.

⁶ McInnes, C., 'US defence policy and forces in Europe', *Brassey's Defence Yearbook, 1994* (Brassey's: London, 1994), pp. 149-66.

⁷ The other choices were: (a) the Bush Base Force; (b) the ability to fight and win one major war while holding down an enemy in a separate conflict until sufficient resources could be made available to win that second conflict (a 'win-hold-win' capability); and (c) the capability to win one major war while retaining sufficient forces to deal with low-intensity conflicts, peacekeeping operations or humanitarian or disaster relief elsewhere. See McInnes (note 6).

⁸ US General Accounting Office, *Future Years Defense Program*, July 1994, p. 1.

⁹ *Defence Industry Digest*, Apr. 1994, pp. 16-17.

¹⁰ *Armed Forces Journal International*, Jan. 1994, pp. 19-20.

BUR, has argued that the budget proposals can only work if the military adopt radical procurement reforms.¹¹

Whatever the shortfall, the Pentagon clearly faces a serious funding challenge and has been prompted to propose the elimination of, or major reductions in, weapon development programmes. The Pentagon's solution to its resources problem appears to hinge on faith in future low inflation rates, its ability to trim procurement costs and the disposal of surplus facilities. It is estimated, for example, that at least \$20 billion can be saved through lower inflation.¹² The total defence budget could undoubtedly be kept down in the short term if the military were forced to make do with the large inventories it accumulated in the 1980s. However, the Department of Defense (DOD) has already warned the Administration that procurement cuts cannot be sustained after 1996. Defense Secretary Perry has called for an increase in procurement funding of 20 per cent over the period 1996–99.¹³

If new funds are not found, Clinton's projected budgets will not cover the recovery in procurement which will be required to maintain the force of 1.4 million active-duty personnel necessary in the two-MRC force envisaged. Nevertheless, the Administration appears to be determined to find significant savings in the procurement area. The procurement request for FY 1995 is \$43 billion, '\$1 billion less than the fiscal 1994 procurement budget and only one-third of the inflation-adjusted size of the procurement budget in fiscal 1985'.¹⁴ Savings from base closures have also not materialized as anticipated and are reportedly some 23 per cent less than originally envisaged. Furthermore, additional costs associated with base closures, such as environmental clean-up and reparations, have been underestimated by as much as \$20 billion¹⁵ or 60 per cent¹⁶ and will rise as clean-up standards become stricter in the future. Environmental restoration and pollution prevention have been characterized as among the fastest growing items in the defence budget.

The funds-to-forces shortfall and the associated question of force readiness have become a political concern for the Clinton Administration. That President Clinton was aware of the political ramifications of reductions in defence spending was first reflected in his State of the Union address on 25 January 1994, in which he expressly declared: 'We must not cut defense further'.¹⁷ The military's share of the national budget continued its overall decline in 1994, but it became clear towards the end of the year that the Administration was becoming increasingly sensitive to Republican Party attacks on its military policy. Following the devastating defeat of the Democrats in the congressional elections of November 1994, military funding emerged as a potentially urgent personal political survival issue for the president. Whether or not aiming to head off further Republican attacks on his 'softness' on defence issues, shortly

¹¹ *Congressional Quarterly*, 29 Jan. 1994, p. 182.

¹² *Congressional Quarterly*, 12 Feb. 1994, p. 335.

¹³ *Defense News*, vol. 9, no. 6 (14–20 Feb. 1994), p. 8.

¹⁴ *Congressional Quarterly*, 12 Feb. 1994, p. 335.

¹⁵ *Aviation Week and Space Technology*, 8 Aug. 1994, p. 24.

¹⁶ US General Accounting Office (note 8), pp. 9–10.

¹⁷ *Congressional Quarterly*, 29 Jan. 1994, p. 179.

after the electoral débâcle Clinton announced an additional \$25 billion for the defence budget for the period FY 1995–2001.¹⁸ This will add \$2 billion to military spending in each of FYs 1996 and 1997, \$3 billion in each of FYs 1998 and 1999, \$6 billion at the turn of the century and \$9 billion in FY 2001. Of the \$25 billion only \$6 billion is earmarked for modernization, with the bulk of the increase slated to meet the priorities accorded by the president to improved readiness, pay rises and quality of life improvements.¹⁹ This increase will help to reduce the shortfall in funding facing the Pentagon. Its impact was further enhanced by the decision announced by Defense Secretary Perry on 9 December 1994 to cut major weapon programmes by \$7.7 billion over the same period.

With the political significance of defence spending now firmly on the front burner in Washington, the issue to watch most closely in 1995 is that of base closures. The base closures thus far recommended by the Base Realignment and Closure Commission (BRAC) have not kept pace with reductions in force levels. Closures from BRAC's first recommendations will cut the number of bases by 15 per cent between 1985 and 1999;²⁰ numbers of troops will fall by 30 per cent over that period. In 1988, 1991 and 1993 the first-round base closures under BRAC are estimated to have eliminated some 150 000 jobs. There are thus strong indications that the president will be tempted to postpone further base closures until after the 1996 election.²¹ Rather than articulating a clear strategy for post-cold war defence policy planning, the BUR has instead generated conflicting signals about the direction of US military spending into the next century.

The 1995 defence budget

The 1995 budget request and the five-year defence planning projections continue the trend apparent since the end of the cold war of declining resources for defence. The 1995 request is higher than the budget for FY 1994 in cash terms but for the tenth successive year (with the exception of 1992 when it rose slightly in real terms after the Persian Gulf War) it will not keep pace with inflation. Moreover, defence accounted for more than 40 per cent of the budget throughout the 1960s. By the end of this decade it will become only the fourth largest item, after social security, human services and interest payments on the national debt, and will consume only about 13.5 per cent of the budget.²²

Table 12.2 shows projected discretionary funding for defence until the year 2000. It is important to note the distinction between budget authority and budget outlays. After the president's budget request is approved by Congress,

¹⁸ 'Clinton makes preemptive strike on military spending', *International Herald Tribune*, 3–4 Dec. 1994, p. 3.

¹⁹ *Jane's Defence Weekly*, 10 Dec. 1994, p. 3.

²⁰ *Budget of the United States Government, Fiscal Year 1996* (US Government Printing Office: Washington, DC, 1995), p. 127.

²¹ *Congressional Quarterly*, 7 May 1994, p. 1133.

²² *The Guardian*, 8 Feb. 1994, p. 4.

Table 12.2. Summary of US funding for national defence, 1994–2000
Discretionary funding in current US \$b.

| | 1994 Actual | 1995 ^a Est. | Proposed | | | | |
|---|----------------|---------------------------|--------------|--------------|--------------|--------------|--------------|
| | | | 1996 | 1997 | 1998 | 1999 | 2000 |
| Department of Defense military (051) | | | | | | | |
| Budget authority | 250.5 | 253.5 | 246.7 | 243.5 | 250.5 | 257.1 | 266.9 |
| Outlays | 269.4 | 260.8 | 250.9 | 246.8 | 245.0 | 250.4 | 258.7 |
| Atomic energy defence activities (053) | | | | | | | |
| Budget authority | 10.9 | 10.3 | 11.2 | 10.0 | 9.3 | 9.3 | 9.2 |
| Outlays | 11.9 | 10.5 | 10.8 | 10.3 | 9.7 | 9.4 | 9.3 |
| Other defence-related activities (054) | | | | | | | |
| Budget authority | 0.9 | 0.3 | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 |
| Outlays | 0.9 | 0.8 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 |
| Total national defence (050) | | | | | | | |
| Budget authority | 262.2 | 264.1 | 258.3 | 253.9 | 260.2 | 266.8 | 276.5 |
| Outlays | 282.2 | 272.1 | 262.2 | 257.5 | 255.1 | 260.2 | 268.3 |

^a Includes proposed emergency supplementals and savings proposals.

Source: *Budget of the United States Government, Fiscal Year 1996* (US Government Printing Office: Washington, DC, 1995), p. 124.

funds are appropriated for specific programmes and projects. However, this budget 'authority' is not necessarily spent in the year it is appropriated. The long lead times required to develop modern weapon systems mean that actual spending, or 'outlays', often take a number of years.

The budget highlights readiness and technological superiority as the means by which the smaller US military will be able to meet its objectives up to the end of the century. Readiness is to be enhanced through the support of training programmes, increases to operations and maintenance (O&M) accounts by 5.6 per cent, fully funding high operating tempos and increasing depot maintenance by 20 per cent. To maintain the kind of technological advantages demonstrated during Operation Desert Storm in 1991, the budget proposes funding of \$9.3 billion for defence science and technology programmes. By retaining the technological dominance of the USA, it is believed that fewer new weapon systems will be required.²³ The drop in procurement funding in FY 1995 will be partially offset by weapon surpluses in the short term.

The emphasis on readiness provides a much needed boost in training funds for the army. The army is scheduled for the biggest increase in O&M funding of all the services—from \$19.7 billion in 1994 to \$21.5 billion in 1995. This is required because the army has borne the brunt of the spiralling costs of peacekeeping and other missions throughout the world. At that level of fund-

²³ *Budget of the United States Government, Fiscal Year 1995* (US Government Printing Office: Washington, DC, 1994), p. 228.

Table 12.3. US military operating rates, 1985–95

| | 1985 | 1990 | 1993 | 1994 | 1995 |
|------------------------------------|-------|-------|-------|-------|-------|
| <i>Army</i> | | | | | |
| Tank km per crew/year ^a | 1 543 | 1 355 | 1 110 | 1 480 | 1 480 |
| Flying hours per crew/month | 13.1 | 14.2 | 13.5 | 14.5 | 14.5 |
| <i>Navy</i> | | | | | |
| Flying hours per crew month | 25 | 24 | 24 | 24 | 24 |
| Ship steaming days per quarter: | | | | | |
| Deployed forces | 53.6 | 54.2 | 54.9 | 50.5 | 50.5 |
| Non-deployed forces | 27.4 | 28.1 | 28.3 | 29 | 29 |
| <i>Air Force</i> | | | | | |
| Flying hours per crew month: | | | | | |
| Fighters | 19.0 | 20.4 | 20.7 | 20.3 | 19.7 |
| Bombers ^b | .. | .. | 21.8 | 18.0 | 19.9 |

^a Shown in miles in the original.

^b Bomber flying hours were not separately identified prior to 1993.

Source: *Budget of the United States Government, Fiscal Year 1995* (US Government Printing Office: Washington, DC, 1994), p. 228.

ing, tank crews will get 1480 km of travel during training in 1995 (compared to 1110 km in 1993) and army pilots will continue with training schedules that allow 14.5 flying hours each month (see table 12.3). Gains in O&M funding are balanced by the anticipated reduction in the army's procurement account from \$6.9 billion in 1994 to \$6.1 billion in 1995. Partly as a result, 57 procurement and research, development, testing and evaluation (RDT&E) programmes will be cancelled and a further 77 allowed to lapse between FY 1995 and FY 1999.²⁴

The number of surface ships in the navy will be reduced to 373 in FY 1995 (from 546 in FY 1990). The object is to have a navy of 346 ships at the end of 1999. A new replacement aircraft-carrier (CVN-76) is funded in FY 1995 to maintain 11 active carriers (and one training carrier) into the next decade. In order to maintain its nuclear submarine industrial base, the navy plans to procure a third and final SeaWolf attack submarine in FY 1996 and the first New Attack Submarine in FY 1998. Decommissioning of older surface ships will continue alongside the introduction of 16 new Aegis DDG-51 Class destroyers from 1996 through to 2001. The air force's biggest loss in the FY 1995 budget, the cancellation of the F-16 after FY 1994, had already been announced when the BUR was introduced.

The 1996 defence budget request

The FY 1996 defence budget request of \$258.3 billion in budget authority and \$262 billion in outlays represents a fall in real terms of almost 5 per cent from

²⁴ *Armed Forces Journal International*, Mar. 1994, p. 8.

FY 1995.²⁵ Under the new FY 1996–2001 defence plan, defence spending is projected to fall from 3.8 per cent of GDP in FY 1995 to 2.9 per cent in FY 2000; this compares with an average DOD share of GDP during the mid-1950s to mid-1960s of 8.5 per cent²⁶ and 6.5 per cent at the peak of the Reagan defence build-up in FY 1986.²⁷

The FY 1996 budget request contains several items designed to enhance the quality of military life, notably a 2.4 per cent pay rise effective from January 1996, pay rises at levels allowed by current law up to the end of the century and funding for a new cost-of-living allowance for military personnel living in 'high-cost' areas in the continental USA.²⁸ It cuts procurement by nearly \$9 billion below the level projected in the FY 1995 defence plan:²⁹ contrasted with increases in funding levels for O&M and military personnel of some \$4 billion and \$2.5 billion respectively in the FY 1996 request, these cuts suggest that the Administration is simply shifting funds to support its force readiness objectives in the short term. The Administration's expectation that it will be able to reverse the process and finance large procurement funding increases by cutting O&M and personnel costs during the remaining years of the FY 1996–2001 defence plan is probably over-optimistic.³⁰

III. Russia

Efforts to analyse Russian defence spending are still frustrated by inadequate data. In this respect there has been little improvement during 1994.

As in the two preceding years, defence spending in Russia in 1994 fell in line with GDP, which fell by 15 per cent after a 12 per cent drop in 1993.³¹ Following the turbulent autumn of 1993 and the attempted coup, elections to a new Federal Assembly and changes in the composition of the cabinet, the government of Prime Minister Viktor Chernomyrdin attempted to maintain its policy of macroeconomic stabilization. The control of inflation remained the first priority of the Ministry of Finance. Initial optimism that the armed forces and defence industry would be subject to more generous treatment in 1994 soon evaporated as the government showed its determination to hold military spending at a constant share of a declining GDP, following the policy line established in 1992 and 1993.³² Throughout the first half of the year a bitter struggle was waged over the defence budget. The financial squeeze on the armed forces, intensified by the manner in which budget funds were transferred to the Ministry of Defence during the year, exacerbated the internal problems of the forces and further reduced morale, putting on the agenda the

²⁵ Defense Budget Project, *Initial Analysis of the FY 1996 Clinton Defense Budget Request* (Defense Budget Project: Washington, DC, 6 Feb. 1995), p. 1.

²⁶ *Budget of the United States Government, Fiscal Year 1995* (note 23), p. 225.

²⁷ Defense Budget Project (note 25), p. 3.

²⁸ *Budget of the United States Government, Fiscal Year 1996* (note 20), p. 125.

²⁹ Defense Budget Project (note 25), p. 1.

³⁰ Defense Budget Project (note 25), p. 2.

³¹ *Rossiyskaya Gazeta*, 8 Feb. 1994 and 21 Jan. 1995.

³² Bergstrand *et al.* (note 1), p. 421.

need for more determined reform and additional reductions in personnel.³³ Similarly, by the end of the year a further severe contraction in the output of the defence industry stimulated efforts to devise a more effective restructuring policy. The year ended on a note of uncertainty. With the 1995 budgetary process already well advanced, the military action in Chechnya threatened to unravel the draft budget and undermine the strategy of economic transformation.

While the rate of inflation moderated, it remained high. In 1994 consumer price inflation was 220 per cent per year as opposed to 840 per cent in 1993, but it remained subject to considerable monthly variation, dropping to a low of 4 per cent per month in August, but rising to almost 17 per cent per month in December.³⁴ The impact of inflation on defence spending is very difficult to determine in the absence of any price deflators for military expenditure as a whole or its principal components. Statistics for GDP also remain unreliable, fail to capture all the activity of the expanding private sector and are deflated by endemic under-reporting for purposes of tax avoidance.

The budgetary process

The experience of 1994 and the evidence available on the 1995 budget suggest that the Russian defence budgetary process has become institutionalized with relatively stable actors and procedures. The first stage is an assessment of funding requirements by the Ministry of Defence taking into account the order for weapons and other military hardware. The latter is elaborated by the Ministry in association with the Ministry of Economics and the State Committee for the Defence Industry. After approval by the Security Council, the Defence Order—the order to the defence industry for the production of weapons and other military hardware—is given preliminary approval by a government decree permitting specific orders to be placed with enterprises. The Ministry of Defence presents its own claim for funding to the government. Meanwhile the Ministry of Finance, taking account of the provisional forecast of the Ministry of Economics for GDP and the rate of inflation for the budget year, prepares a first draft of the state budget with its assessment of the possible volume of spending on defence. It has become the practice to base this assessment on a constant, approximately 5 per cent, share of GDP.

This draft budget is discussed by the government with departmental bids for spending. Revisions are made and an amended draft is then submitted to the Duma, the lower house of the Federal Assembly, where it is considered by the relevant committees, in particular the Budget Committee. It is discussed at three readings by both chambers. The upper house (the Federation Council) can reject the budget at its third reading, but this decision can be overturned by a two-thirds majority of all the deputies of the Duma. Failure to agree a budget leaves the government, in effect the Ministry of Finance, to set its own

³³ See also chapter 13, section IV in this volume.

³⁴ *Summary of World Broadcasts*, SU/0365,WA/6 (6 Jan. 1995).

levels of state expenditure in line with the forecasts of the Ministry of Economics and overall economic policy.

The experience of 1993, 1994 and the early stages of the 1995 budget process suggests that the best chance for the Ministry of Defence to influence the outcome is in the early stages when the Ministry of Finance is preparing its initial draft. Thereafter, the chances of winning significant concessions are limited if the government is determined to pursue a course of budget stringency. Parliament has become a central actor in the budgetary process. The military-industrial interest has to contend with rival lobbies, in particular that for agriculture, and has proved unable to command a majority in the lower house. A striking feature of the budgetary process is the vigour with which the debate is prosecuted in the press and the extent to which it has become politicized. Unfortunately, this often involves tendentious use of figures, which are rarely defined with any precision, and emotional charges and counter-charges.

The Russian defence budget for 1994 was finally approved in early June after a protracted struggle over a period of almost nine months. The budgetary process began in the autumn of 1993 shortly before the storming of the Parliament building. During the year the Ministry of Defence had been working on a long-term programme for the armament of the forces, a draft of which was presented to the government at the beginning of September. Proposals for the Defence Order for 1994 were based on this draft programme and prepared in two variants, one providing for an increase on, the other for a retention of, the 1993 level of expenditure.³⁵ The Finance Minister, Boris Fedorov, was reported as advocating a sharp reduction.³⁶ In October 1993 preliminary indications suggested that the Ministry of Finance envisaged a 1994 defence budget of 6 trillion roubles in 1993 prices, while the Ministry of Defence was claiming that at least 9 trillion roubles was required.³⁷

In November 1993 President Boris Yeltsin signalled his concern that the potential for the development of new weapons was being damaged: he issued a presidential instruction to the effect that research and development (R&D) spending should represent at least 10 per cent of total military expenditure.³⁸ After discussion in the Security Council, on 21 December 1993 the government approved the defence order for 1994, apparently at the same level as 1993.³⁹ In January 1994 the Security Council returned to the question of military-technical policy and the Defence Order and, following Yeltsin's lead, declared in favour of an increase in the R&D share of the military budget to 10 per cent.⁴⁰

³⁵ 'The defence order: the Ministry of Finance has the word', *Krasnaya Zvezda*, 6 Oct. 1993 (in Russian).

³⁶ *Komsomol'skaya Pravda*, 16 Sep. 1993 (in Russian).

³⁷ *Summary of World Broadcasts*, SU/1831 S1/1, 28 Oct. 1993.

³⁸ *Rossiyskie Vesti*, 18 Nov. 1993; and *Nezavisimaya Gazeta*, 8 June 1994.

³⁹ 'In 1994 military expenditure will not grow', *Kommersant Daily*, 26 Nov. 1993 (in Russian); 'A minister who cannot be a lobbyist is a bad minister', *Kommersant Daily*, 14 May 1994 (in Russian); and 'The defence order for 1994 will not be reduced', *Segodnya*, 25 Dec. 1994 (in Russian).

⁴⁰ 'Russian arms programme: the Russian soldier will become more battleworthy', *Kommersant Daily*, 21 Jan. 1994 (in Russian); and 'New types of weapons come into being in the Kremlin', *Rossiyskie Vesti*, 21 Jan. 1994 (in Russian).

At the beginning of February, the Ministry of Finance sent the draft budget to the Prime Minister. Revenue was set at 116 trillion roubles and expenditure at 171 trillion roubles, giving a deficit of 55 trillion roubles, representing 7.4 per cent of forecast GDP. Defence spending was to amount to 5.5 per cent of GDP, keeping the same share as that originally planned for 1993. The Ministry of Defence was reported to have been requesting 8 per cent of GDP.⁴¹

Almost immediately the Ministry of Defence began to lobby for increased expenditure. At a press conference on 16 February, General Vasiliy Vorobev, head of the Ministry of Defence's Main Directorate for the Military Budget and Finance, claimed that the Ministry's requirements had been met in 1993 to only 65 per cent, while the planned allocation for 1994 represented only one-third of the sum requested. He said that expenditure on the maintenance of the armed forces would be halved in comparison to 1993 and procurement reduced to less than 20 per cent of its 1993 figure.⁴²

While the military were lobbying, the Ministry of Finance was revising its original draft. A revised draft budget submitted to the government on 3 March provided for expenditure of 182 trillion roubles, revenues of 120 trillion roubles and a deficit of 61.5 trillion roubles. Defence expenditure was set at 37.12 trillion roubles, or 20.4 per cent of total outlays.⁴³

Vorobev returned to the attack, claiming that the budget was approximately 40 per cent of the amount requested by the Ministry. In his view the Ministry of Finance had adopted a purely abstract approach to setting the military budget, based on the proportion (5 per cent) of GDP spent on defence in 1993. No account had been taken of price changes for goods procured for the forces.⁴⁴ At the end of March the draft budget was submitted for approval by the Duma. A hint of parliamentary battles to come was provided by the Speaker of the Federation Council, Vladimir Shumeiko. Interviewed by *Krasnaya Zvezda*, he underlined his links with the armed forces and asserted that the army should receive all that it required.⁴⁵

It was decided at a meeting of leading representatives of the Ministry of Defence, the Defence Committee of the Duma and the Ministries of Economics and Finance, held in the office of Yeltsin's security adviser, that the Defence Committee would propose an increase in defence expenditure to 55 trillion roubles. Yeltsin's backing was claimed for this initiative.⁴⁶ Chernomyrdin spoke in the Duma in support of a tough budget and the proposal to raise defence spending was voted down. With some amendments, the budget was approved at its first reading on 11 May: 237 for and 77 against with 12 abstentions. Total budget expenditure was set at 194.5 trillion roubles and rev-

⁴¹ 'Premier supports tough stance of the Ministry of Finance', *Segodnya*, 10 Feb. 1994 (in Russian).

⁴² *Summary of World Broadcasts*, SU/1926 S1/1, 19 Feb. 1994; and *Kommersant Daily*, 17 Feb. 1994 (in Russian).

⁴³ *Summary of World Broadcasts*, SU/1937 C/1, 4 Mar. 1994; and SU/1938 C/7, 5 Mar. 1994.

⁴⁴ 'The military budget without abstractions and illusions', *Krasnaya Zvezda*, 12 Mar. 1994 (in Russian).

⁴⁵ 'The Army must have all . . . and come first of all', *Krasnaya Zvezda*, 5 Apr. 1994 (in Russian).

⁴⁶ 'The President agrees to a 1.5-fold increase in Russia's military budget', *Segodnya*, 11 May 1994 (in Russian); and 'The search for 18 trillion roubles continues', *Krasnaya Zvezda*, 27 May 1994 (in Russian).

enue at 124.5 trillion roubles, with a ceiling to the deficit set at 70.02 trillion roubles.⁴⁷ The decision to set a limit on the deficit was crucial, making it almost impossible for a higher level of defence spending to be approved without a corresponding increase in budget revenue.

Recognizing the determination of the government not to allow an increase in the budget deficit, parliamentarians favouring increased military spending began to seek additional sources of budget revenue. Sergey Glaz'ev, Chairman of the Economic Policy Committee (EPC) of the Duma, proposed a package of revenue-raising measures, including a highly optimistic estimate of possible additional proceeds from privatization, to a total value of 30 trillion roubles. This would allow a defence budget of 55 trillion roubles and some additional social spending. The Budget Committee of the Duma refused to support this proposal, but did acknowledge the possibility that some redistribution within the existing draft budget could secure additional defence spending of up to 4 trillion roubles. Furthermore, the Budget Committee backed the idea of the creation of an extra-budget fund for assistance to the armed forces, which it thought could raise an estimated 5–7 trillion roubles from the proceeds from the second, post-voucher stage of privatization.⁴⁸

On 2 June the Federation Council adopted a resolution on the 1994 budget also calling for defence expenditure of 55 trillion roubles. There were now two different proposals involving different distributions: (a) that of the EPC of the Duma for expenditure of 11.1 trillion roubles on procurement, 5.1 trillion roubles on R&D and 28 trillion roubles on O&M;⁴⁹ and (b) that of the Federation Council for expenditure of 12 trillion roubles on procurement, 5.5 trillion roubles on R&D (closer to the 10 per cent of the total originally proposed by Yeltsin) and 25.8 trillion roubles on personnel and O&M.

On 8 June, without debating the proposals for defence spending of 55 trillion roubles, the Duma approved the government's draft budget of 3 March at its second reading by a substantial majority—226 in favour and 40 against, with 32 abstentions. None of the members of the Defence Committee voted against the budget. The approved budget now included an additional allocation to defence of 3.5 trillion roubles above the level of the March draft, raising the total to 40.6 trillion roubles, and provision for the creation of an extra-budget fund for defence.⁵⁰

The Council of the Federation signalled to the Duma that the battle was not over. On 21 June it voted (by 102 for and 9 against) in favour of an appeal to the Duma for a revision of the military budget during the third reading.⁵¹ The appeal was in vain. The Duma finally approved the budget on 24 June—273

⁴⁷ *Summary of World Broadcasts*, SU/1996 C/1, 13 May 1994; and 'We are all hostages of the MIC', *Rossiyskaya Gazeta*, 7 June 1994 (in Russian).

⁴⁸ 'The search', *Krasnaya Zvezda*, 27 May 1994 (in Russian); 'What is needed today for the defence of Russia?', *Nezavisimaya Gazeta*, 28 May 1994 (in Russian); and 'Defence expenditure is becoming a reality', *Kommersant Daily*, 28 May 1994 (in Russian).

⁴⁹ 'The struggle over the 18 trillion', *Krasnaya Zvezda*, 7 June 1994 (in Russian).

⁵⁰ 'The draft federal budget has been backed by the State Duma', *Segodnya*, 9 June 1994 (in Russian); and *Summary of World Broadcasts*, SU/2018 C/1, 9 June 1994.

⁵¹ *Summary of World Broadcasts*, SU/2030 B/3, 24 June 1994.

Table 12.4. Planned Russian military expenditure, 1994

Figures are in b. current roubles. Figures in italics are percentages.

| | Budget allocation | Share of total expenditure |
|--|-------------------|----------------------------|
| OBDA | 40 626.00 | <i>20.89</i> |
| OBDA/GDP | | <i>5.60</i> |
| <i>Other defence-related</i> | | |
| Civil defence and mobilization | 344.35 | <i>0.17</i> |
| Subsidies to 'closed' towns ^a | 583.20 | <i>0.30</i> |
| Payments to dependants and children of servicemen | 150.22 | <i>0.08</i> |
| Clean-up of nuclear accidents ^b | 115.67 | <i>0.06</i> |
| Disarmament measures ^c | 837.63 | <i>0.43</i> |
| Conversion | 755.47 | <i>0.39</i> |
| Total defence expenditure | 43 412.54 | <i>22.32</i> |
| Total expenditure | 194 495.31 | |
| Total defence expenditure as share of GDP: <i>5.99</i> | | |

^a Twenty-six closed territories and towns of the Ministry of Defence (allocation of 249.5 billion roubles) and nine closed towns of the nuclear weapons industry under the Ministry of Atomic Energy (333.7 billion roubles).

^b Expenditure relating to military activities only (Chelyabinsk region and the Semipalatinsk nuclear test site). Costs of 858 billion roubles for the Chernobyl site are excluded.

^c Measures undertaken in accordance with international agreements for the liquidation, reduction or limitation of weapons.

Sources: *Rossiyskaya Gazeta*, 6 July 1994 (in Russian); Government of the Russian Federation, *Federalny byudzhët Rossiyskoi Federatsii na 1995 god. Proyekt* [Federal Budget of the Russian Federation for 1995, Draft], Moscow, Oct. 1994 (in Russian).

in favour, 80 against, 8 abstentions and 89 not voting at all. The Communist, Agrarian, Russia's Choice and Women of Russia factions voted decisively in favour; the Liberal Democratic Party of Russia, in a change of position, voted against. On the same day the opposition of the Federation Council evaporated: the budget was approved without debate. The collapse of opposition can be explained by the fact that failure to approve the budget would have left the government free to pursue its own budgetary policy for the rest of year, and the deputies probably concluded that a poor budget with the force of law was better than none at all. The budget battle finally ended when Yeltsin signed the Law on the Budget on 3 July. Spending on national defence was set at 40.6 trillion roubles. Article 32 of the budget provided for the creation of an extra-budget fund provided that the resources for it could be found.

In September the military's scepticism about the extra-budget fund was proved to have been well-founded: it was confirmed that the fund would not be created as incomes from privatization had not achieved an adequate level.⁵² Also in September the 1994 Defence Order was finally revised by government decree: orders for the delivery of 175 types of military hardware were reported

⁵² 'What the months ahead are preparing for us', *Krasnaya Zvezda*, 24 Sep. 1994 (in Russian).

Table 12.5. Russian military-related expenditure in the 1994 budget

Figures are in b. current roubles.

| | Budget expenditure |
|--|--------------------|
| Internal troops of the Ministry of Interior | 1 249.23 |
| Border troops of the Federal Border Service | 1 799.98 |
| Railway troops of Ministry of Railways | 275.67 |
| Road construction directorate of the Ministry of Defence | 170.62 |
| Russian Defence Sports and Technical Org. (ROSTO) | 8.68 |
| Total | 3 504.18 |

Sources: *Rossiyskaya Gazeta*, 6 July 1994 (in Russian); Government of the Russian Federation, *Federalny byudzhet Rossiyskoi Federatsii na 1995 god. Proyekt* [Federal Budget of the Russian Federation for 1995, Draft], Moscow, Oct. 1994 (in Russian).

cancelled and work frozen on more than 1000 R&D projects.⁵³ By this time, however, the Ministry of Defence was engaged in a new struggle: work was under way on the preparation of the budget for 1995.

Planned military expenditure

Planned military expenditure in the 1994 federal budget is presented in table 12.4. Two points about the total figure should be made. First, there is a distinction between the official budget defence allocation (OBDA), the 'national defence' article of the budget law, which covers basic allocations to the Ministry of Defence and to the nuclear weapons-related activities of the Ministry of Atomic Energy, and various defence-related allocations included under other chapters of the budget.

Table 12.4 includes the same categories of defence-related expenditure as those included in the equivalent table of the *SIPRI Yearbook 1994*⁵⁴ with the exception of housing construction, for which no separate budget item was present in 1994. The budget was prepared on the basis of a Ministry of Economics forecast of annual GDP of 725 trillion roubles. The OBDA share of GDP was held at under 6 per cent, but its share of total federal budget expenditure rose, from 16.5 per cent in 1993 to almost 21 per cent in 1994. Second, OBDA and the other defence-related categories considered so far do not include several military-related activities previously under the Ministry of Defence which in recent years have been transformed into independent organizations or subordinated to other state agencies, notably those covered by the budget heading 'law enforcement activity and security bodies'. Data are incomplete, but table 12.5 shows planned spending that could be considered as being of a paramilitary character. In addition an unidentified part of the allocation (1176 billion roubles) to the Federal Counter-Intelligence Service should

⁵³ 'The Army wants a worthy status', *Krasnaya Zvezda*, 17 Nov. 1994 (in Russian).

⁵⁴ Bergstrand *et al.* (note 1), p. 425.

Table 12.6. The structure of the planned OBDA, 1994

Figures are in b. current roubles. Figures in italics are percentages.

| | Expenditure | Share of total |
|---------------------------|------------------|----------------|
| Personnel, O&M | 22 105.38 | <i>54.41</i> |
| Procurement | 8 442.00 | <i>20.78</i> |
| R&D | 2 433.00 | <i>5.99</i> |
| Construction | 4 778.25 | <i>11.76</i> |
| Pensions | 1 993.75 | <i>4.91</i> |
| Ministry of Atomic Energy | 873.62 | <i>2.15</i> |
| Total | 40 626.00 | <i>100.00</i> |

Sources: *Rossiyskaya Gazeta*, 6 July 1994 (in Russian); Government of the Russian Federation, *Federalny byudzhel Rossiyskoi Federatsii na 1995 god. Proyekt* [Federal Budget of the Russian Federation for 1995. Draft], Moscow, Oct. 1994 (in Russian).

probably be included. These expenditures would raise total military-related spending to almost 47 trillion roubles, 24 per cent of total expenditure and 6.5 per cent of GDP.

The structure of the planned OBDA is shown in table 12.6. In comparison with 1993, the shares of personnel and O&M and of procurement rose. Notwithstanding President Yeltsin's concern and the commitment to a 10 per cent share for R&D, its proportion of total expenditure declined even further, from 10.6 per cent in 1992 and 7.2 per cent in 1993 to only 6 per cent in 1994.⁵⁵

The contraction of the science base of the defence industry and the progressive erosion of its capability are giving rise to mounting concern.

Financial allocations

The elaboration and approval of a defence budget do not necessarily secure trouble-free funding for the armed forces. The Ministry of Finance, striving to maintain the budget deficit at a level compatible with macroeconomic stability in conditions of declining output and diminishing budget revenues, attempted to keep a tight rein on military spending throughout the year by releasing funds in small instalments as the revenue position permitted. During the first half of 1994, in the absence of an approved budget, the Ministry of Finance provided funding guided only by the funding shares of the previous year. Instalments of funding were, moreover, usually paid through the commercial banking system, and the parties concerned sometimes delayed payment deliberately in order to take advantage of high rates of interest to earn income for themselves. When the payments were eventually made, the value of the sums transferred had been reduced by inflation.

During the first quarter of 1994, actual allocations to OBDA amounted to 4.6 per cent of GDP, but in the second quarter the defence share of GDP fell to

⁵⁵ For equivalent data for 1989–93, see Bergstrand *et al.* (note 1), p. 426.

3.5 per cent. The absence of an agreed budget probably strengthened the position of the Ministry of Finance.⁵⁶ In the first nine months of 1994, in accordance with the budget, 25 530 billion roubles should have been allocated to defence, 20.5 per cent of total expenditure. In reality only 16 470 billion roubles were spent and the share of OBDA in total budget expenditure fell to 17.8 per cent.⁵⁷ At a session of the Duma at the end of the year, Deputy Defence Minister Andrey Kokoshin claimed that the debt to the Ministry of Defence amounted to 8.7 trillion roubles, suggesting a total OBDA during the year of little more than 32 trillion roubles, or 80 per cent of the plan. The decline in output was, however, larger than originally forecast, resulting in a final GDP in current prices of 630 trillion roubles, from which an actual defence share of approximately 5.1 per cent can be estimated.⁵⁸

Trend of defence spending

In the absence of appropriate price indices it is impossible to analyse with any precision the overall trend of Russian defence spending. The approximately constant share of GDP suggests that in real terms military expenditure has followed the movement of output. Since 1991 Russia's GDP, as reported by the State Committee for Statistics, has fallen by 39 per cent in real terms,⁵⁹ suggesting a similar decline in actual OBDA.

Reductions in funding have further exacerbated the disintegration within the armed forces and the defence industry. Programmes for new weapons have been frozen or abandoned, the equipment stock of the forces is ageing, which is leading to rising repair costs, training has been cut back further and funding has been inadequate to meet the need for housing and tackle the many social problems that afflict the armed forces.

It is not surprising that financial stringency has focused attention on the question of the scale of the armed forces under the Ministry of Defence. In the early months of 1994 Defence Minister Pavel Grachev made public his conviction that the armed forces of Russia should not be reduced to the target number of 1.5 million servicemen approved by parliament in June 1992. He favoured an authorized strength of at least 2.1 million, similar to the actual authorized strength of 2.2 million at the beginning of the year, and left no doubt that in his view anything less than 1.9 million would threaten Russia's security.⁶⁰ The budget for 1994 included a target figure for 1 January 1995 of 1 917 400. The authorized number of civilian personnel in the forces was to remain unchanged at 600 000.⁶¹ Grachev was overruled by the government: the first draft budget for 1995 included a target of 1 469 900 servicemen by 1 January 1996. In August 1994 Grachev again declared that 1.9 million was

⁵⁶ *Russian Economic Trends*, vol. 3, no. 3 (1994), p. 19.

⁵⁷ 'In the dry language of figures', *Krasnaya Zvezda*, 19 Nov. 1994 (in Russian).

⁵⁸ *Summary of World Broadcasts*, SUW/0368 WA/4, 27 Jan. 1994.

⁵⁹ *Ekonomika i Zhizn'*, vol. 5, no. 2 (1995) (in Russian).

⁶⁰ *Summary of World Broadcasts*, SU/1916 S2/2, 8 Feb. 1994; SU/1949 S1/1, 18 Mar. 1994; and SU/1971 S1/3, 14 Apr. 1994.

⁶¹ *Rossiyskaya Gazeta*, 6 July 1994 (in Russian).

the lower limit and claimed that the number of branches of the armed forces would have to be reduced if the 1.5 million target was to be enforced.⁶² It appears that Grachev's determined opposition produced results. Yeltsin is reported to have signed a decree on 24 October setting out targets for the further reduction in size of the armed forces. Grachev immediately announced that the target number for the end of 1995 was 1.7 million, a figure repeated by Yeltsin when he met the top command staff of the armed forces in November.⁶³ The question of the appropriate size of the armed forces has important implications for Russian military spending and is likely to remain a contentious issue.

IV. Central and Eastern Europe

The CEE countries—Bulgaria, the Czech Republic, Hungary, Poland, Romania and the Slovak Republic—continued to reduce military expenditure in real terms in 1994, primarily for economic reasons. The military problems, shared to varying degrees by all the former WTO member states, revolve around the nationalization of defence, the redeployment, restructuring and depoliticization of the armed forces, the redefinitions of national military doctrines, the preponderance of Soviet equipment and the undue dependence on the former Soviet Union for the supply of spare parts.⁶⁴

The enthusiasm of the CEE countries for early membership of NATO has not been encouraged by the Alliance, which is itself undergoing reorientation and adaptation in the face of new geopolitical realities. Cooperation within the framework of the North Atlantic Cooperation Council (NACC) is being offered as a preparatory stage, and all the CEE countries have joined the Partnership for Peace (PFP) programme.⁶⁵ In order to demonstrate a willingness to participate in multilateral missions, these countries have also all made available core contingents for peacekeeping missions. All these efforts are severely constrained by the acute shortage of funds for defence in the region as a whole.

Although the official published defence budgets are lacking in sufficient detail to serve as measures of defence costs, these official statistics are useful for identifying trends. Principal among these trends is the continuing evidence that the official defence budgets for some CEE countries do not express the true state of affairs. There are two basic reasons for this. First, there is probably still a difference between the prices paid by the defence industries and normal prices, so that real military spending as a percentage of GDP in

⁶² *Summary of World Broadcasts*, SU/2082 S1/2, 24 Aug. 1994.

⁶³ Fel'gengauer, P., 'Supreme Commander Boris Yeltsin cuts "dead souls"', *Segodnya*, 26 Oct. 1994 (in Russian). According to this article, the actual size of the forces, as opposed to authorized strength, was then no more than 1.7 million: *Summary of World Broadcasts*, SU/2138 S1/2, 28 Oct. 1994; and SU/2154 S1/2, 16 Nov. 1994.

⁶⁴ For a more detailed review of these countries, see Loose-Weintraub, E., 'Military expenditure in Central and Eastern Europe', SIPRI, *SIPRI Yearbook 1993* (Oxford University Press: Oxford, 1994), appendix 9A, pp. 398–414; and Bergstrand *et al.* (note 1), pp. 432–40.

⁶⁵ See Glossary for details of the PFP partners; on the PFP see also chapter 8 in this volume.

Table 12.7. The Czech Republic's military expenditure allocation, 1993–94
 Figures are in current m. korunas. Figures in italics are percentages.

| | 1993 | 1994 |
|------------------------------|---------------|---------------|
| Operating cost ^a | 17 852 | 20 176 |
| <i>Share of total</i> | <i>82.7</i> | <i>75.3</i> |
| Investment cost ^b | 3 731 | 6 616 |
| <i>Share of total</i> | <i>17.3</i> | <i>24.7</i> |
| Total | 21 583 | 26 792 |
| <i>Share of total</i> | <i>100</i> | <i>100</i> |

^a Includes O&M, personnel (military and civilian), pensions and other social expenditure.

^b Includes procurement, construction and R&D.

Source: Statistics provided by the Embassy of the Czech Republic in Stockholm, 22 Feb. 1995.

domestic currency is substantially underestimated. Second, a wide range of military-related items are omitted from the official defence budget and are financed partly or entirely by agencies and ministries other than the ministries of defence.

The reporting of military expenditure is far less comprehensive than the reporting of general economic data, although even the latter in many economies in transition still present severe problems. While it is becoming more reliable and reporting is consistent with UN principles, statistical reporting may still retain traces of the misinformation practised by previous regimes. Another factor is the relative loss of control over the economy by the governments in question, massive tax evasion being the most evident among several symptoms of government failure. An unknown proportion of economic activity is therefore under-reported or completely escapes official recording.

The Czech Republic

The defence budget for 1994 was some 27 billion korunas (\$956.1 million), compared to 21.58 billion korunas (\$794.1 million) in 1993.⁶⁶ The bulk of the funds, 75.3 per cent, is spent on operating cost, while funds for procurement and R&D are relatively small. The situation is compounded by the gradual removal of army repair shops which can be sold to civilians under the privatization programme. This adds to the degradation of equipment. The whole CEE region is also lacking spare parts from former Soviet military equipment which must now be imported on a commercial basis from Russia and paid for in scarce hard currency.

⁶⁶ *Europa World Yearbook, 1994*, vol. 1, p. 937; *Jane's Intelligence Review, Europe*, Jan. 1994, p. 16; and the Czech submission to the CSCE Instrument for Standardized International Reporting of Military Expenditure, provided by the Embassy of the Czech Republic, Stockholm, 15 Jan. 1994.

Table 12.8. The Slovak Republic's military expenditure allocation, 1993–94

Figures are in current m. Slovak korunas. Figures in italics are percentages.

| | 1993 | 1994 |
|------------------------------|--------------|--------------|
| Operating costs ^a | 7 945 | 8 754 |
| <i>Share of total</i> | <i>92.0</i> | <i>91.1</i> |
| Investment cost ^b | 684 | 860 |
| <i>Share of total</i> | <i>7.9</i> | <i>8.9</i> |
| Total | 8 629 | 9 614 |
| <i>Share of total</i> | <i>100</i> | <i>100</i> |

^a Includes O&M, personnel (military and civilian), pensions and other social expenditure.

^b Includes procurement, construction and R&D.

Source: Adapted from the Slovak Ministry of Defence budget: information for 1993 provided by the Embassy of the Slovak Republic in Stockholm, 28 Jan. 1994; and for 1994 provided by the Foreign Liaison Department, Ministry of Defence, Bratislava, 28 Feb. 1995.

The Slovak Republic

The 1994 Slovak defence budget was 9.6 billion Slovak korunas (\$315.2 million), according to one source 6.5 per cent of GDP.⁶⁷ Operating cost absorbed 91.1 per cent; only 8.9 per cent was for procurement and construction. Attempts to restructure the large military factories concentrated in the Vah valley and central Slovakia have had limited results. India has ordered armoured recovery vehicles (ARVs) for \$31.5 million from Slovakia. India and Slovakia have also concluded a deal to produce ARVs under licence in India. The deal, which includes technology transfer, will be a step towards meeting India's requirement of 400 ARVs.⁶⁸

Apart from possible tank upgrade contracts, new investment and joint ventures with foreign companies to shift from producing tanks to tractors, fork-lift trucks and construction machinery were all predicated on a post-communist reconstruction boom in the former Soviet states which so far has failed to materialize. Unemployment in areas where the defence industries were concentrated remains very high.⁶⁹

Hungary

While Hungary can build on the Basic Principles of National Defence in the Republic of Hungary, adopted by the parliament in 1993, it is also, like the rest of the region, confronted with the twofold task of overcoming the vestiges of the legacy of the WTO while preparing for its long-term goal of full NATO membership. The first task implies redressing whatever force imbalances and

⁶⁷ *Jane's Defence Weekly*, 23 July 1994, p. 8; and the SIPRI military expenditure data base.

⁶⁸ *Military and Arms Transfer News*, 12 Aug. 1994, p. 11.

⁶⁹ International Monetary Fund, *World Economic Outlook*, Oct. 1994, p. 68.

Table 12.9. Hungarian military expenditure allocation: official figures, 1990–94
 Figures are in current b. forint. Figures in italics are percentages.

| | 1990 | 1991 | 1992 | 1993 | 1994 |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| Operating cost ^a | 41.5 | 47.6 | 53.9 | 61.1 | 62.8 |
| <i>Share of total</i> | <i>79.3</i> | <i>88.1</i> | <i>88.8</i> | <i>94.7</i> | <i>94.6</i> |
| Investment cost ^b | 10.8 | 6.4 | 6.8 | 3.4 | 3.6 |
| <i>Share of total</i> | <i>20.7</i> | <i>11.9</i> | <i>11.2</i> | <i>5.3</i> | <i>5.4</i> |
| Total | 52.3 | 54.0 | 60.7 | 64.5 | 66.4 |
| <i>Share of total</i> | <i>100</i> | <i>100</i> | <i>100</i> | <i>100</i> | <i>100</i> |

^a Includes O&M, personnel (military and civilian), pensions and other social expenditure.

^b Includes procurement, construction and R&D.

Source: Compiled from the Hungarian federal defence budgets for 1990–93, information provided by the Hungarian Library of Parliament, 1994: United Nations, *Reduction of Military Budgets, Military Expenditures in Standardized Form Reported by States, Report of the Secretary-General*, UN document A/49/190, 29 June 1994, pp. 45–47.

equipment deficiencies remain; the latter requires increasing cooperation and participation in multilateral activities. These efforts will be delayed by the acute shortage of funds available for defence. The greatest problem of the government is how to finance the high budget deficit, which was anticipated to be equivalent to more than seven per cent of GDP in 1994.⁷⁰ Hungary is further burdened by a gross foreign debt which amounted to \$25.5 billion by the end of 1993.⁷¹ UN sanctions against the former Yugoslavia and the recession in Western Europe have affected demand for Hungarian exports, and GDP fell by about two per cent in 1993, the fourth consecutive year of decline.⁷²

While the share of GDP spent on defence has declined from 2.5 per cent in 1990 to 1.7 per cent in 1994, the decline in real value has been even more dramatic.⁷³ Hungary's defence spending of about 66.4 billion forint in 1994 was less than half the outlay of 1989 in real terms. With 94.6 per cent of the defence budget allocated for operating cost, only 5.4 per cent has been spent on arms procurement and R&D.

Poland

The defence budget for 1994 amounted to 49 133 billion zlotys (\$2.1 billion), about 2.5 per cent of GDP.⁷⁴ Operating cost accounted for 83.3 per cent. The

⁷⁰ *Atlantic News*, vol. 28, no. 2671 (19 Nov 1994), p. 3.

⁷¹ *Financial Times*, 15 June 1994, p. 3.

⁷² World Bank, *Trends in Developing Economies 1994: Extracts*, vol. 1: Eastern Europe and Central Asia (World Bank: Washington, DC), 1994, pp. 32–33.

⁷³ Sauerwein, B., 'Defence adequacy: the Hungarian defence forces', *Jane's Intelligence Review*, vol. 6, no. 10 (Oct. 1994), p. 440.

⁷⁴ United Nations Definition of Military Budgets provided by the Polish Ministry of National Defence, 21 Dec. 1994; and *Defence News*, 17–23 Oct. 1994, p. 3.

Table 12.10. Polish military expenditure allocation: official figures, 1990–94

Figures are in current b. zlotys. Figures in italics are percentages.

| | 1990 | 1991 | 1992 | 1993 | 1994 |
|------------------------------|---------------|---------------|---------------|---------------|---------------|
| Operating cost ^a | 9 947 | 13 487 | 19 726 | 32 587 | 40 913 |
| <i>Share of total</i> | <i>66.6</i> | <i>73.7</i> | <i>80.9</i> | <i>81.9</i> | <i>83.3</i> |
| Investment cost ^b | 4 998 | 4 813 | 4 648 | 7 216 | 8 220 |
| <i>Share of total</i> | <i>33.4</i> | <i>26.3</i> | <i>19.1</i> | <i>18.1</i> | <i>16.7</i> |
| Total | 14 945 | 18 300 | 24 374 | 39 803 | 49 133 |
| <i>Share of total</i> | <i>100</i> | <i>100</i> | <i>100</i> | <i>100</i> | <i>100</i> |

^a Includes O&M, personnel (military and civilian) pensions and other social expenditure.^b Includes procurement, construction and R&D.Source: *UN Definition of Military Budgets*, provided by the Polish Ministry of National Defence, 21 Dec. 1994.

biggest shift in the structure of defence spending in Poland, as in all the countries of Europe, has been in arms procurement. In the area of defence research, the Polish Parliament's Science Committee is seeking funding for a combat version of the Sokol W-3 helicopter called the Huzar, for a new battle tank, the Gorilla, and for the further development of the PZL-130 trainer aircraft.⁷⁵ It is unlikely that there will be financing for these projects since the share of arms procurement in total military expenditure for Poland for 1994 was only about 12 per cent. A downturn in military production will continue, partly as a result of the reduction of conventional forces following the 1990 Treaty on Conventional Armed Forces in Europe and partly because of the profound systemic transformation which has changed the status and role of the entire military sector.

Far-reaching reorganization and restructuring of the armed forces are also under debate in Poland. A regrouping of the forces from western to eastern Poland which involved the creation of a new Military District of Cracow in south-central Poland is putting a major strain on the defence budget, as is the cost of membership in the PFP. The initial cost of participation is estimated at around \$25 million, which would pay for the cost of Poland's participation in joint exercises and the establishment of a military mission at NATO headquarters in Brussels.⁷⁶ A request of the Ministry of National Defence for up to 500 billion zlotys (\$20.6 million) to implement the PFP programme is awaiting approval.⁷⁷ Defence budgets have declined from 3 per cent of GDP in 1987 to 2.1 per cent of GDP in 1993.⁷⁸

⁷⁵ *Defense News*, vol. 50, no. 9 (19–25 Dec. 1994), pp. 1, 21.⁷⁶ *Rzeczpospolita*, 27 Jan. 1994.⁷⁷ *Defense News*, vol. 9, no. 50 (15–25 Dec. 1994), p. 1.⁷⁸ van den Doel, T., *Central Europe: The new Alliance? The Road from Visegrad to Brussels* (Westwind Press: Boulder, Colo., 1994), p. 70; and Korbinski, A., 'The Polish military at a time of change', Radio Free Europe/Radio Liberty (hereafter RFE/RL), *RFE/RL Research Report*, vol. 3, no. 30 (29 July 1994), p. 21.

Bulgaria⁷⁹

Although Bulgaria has been one of the few examples in the Balkans of peace and stability and has not been caught in the net of ultra-nationalism, it is facing numerous complicating factors in its post-communist transition. The war in Bosnia and Herzegovina and the Macedonian dispute with its potential for spillover are threats to the fledgling post-communist state and the economy has been seriously affected by UN sanctions against the former Yugoslavia. Clearly, the Bulgarian Government could not have anticipated that the UN trade embargo on Serbia and Montenegro would continue, but it has resulted in Bulgaria's export chances to the West being restricted, and the costs to Bulgaria have been estimated at \$3.5 billion in 1993 and \$4.2 billion in 1994.⁸⁰ Political uncertainty has also been a serious impediment to Bulgaria's implementing a new set of laws and regulations concerning the lines of responsibility and authority between the armed forces and the new democratic structure of government. The constitution is imprecise as to the respective powers of the president, the prime minister, the defence minister and the Chief of the General Staff: these should be defined in a Defence and Armed Forces Bill which at the time of writing had not been adopted by the National Assembly.⁸¹

For the armed forces, lack of funding is one of the chief problems. The defence budget for 1994 is 12.9 billion leva (\$433 million), which is 2.75 per cent of GDP.⁸² The tight budget means that only a small proportion of the army's equipment can be updated, although the need for modernization is acute.⁸³

Romania

The Romanian Parliament approved the expenses for defence purposes as proposed in the 1994 draft budget—1248 billion lei (\$1.1 billion). Defence Minister Gheorghe Tinca defended the sum requested as absolutely necessary in order to keep the army on an operational level. An offer of an additional 10 billion lei to cover expenses required for the PFP programme was, however, rejected by the Defence Minister on the grounds that the costs of the PFP Individual Partnership Programmes are not yet known.⁸⁴

The share of arms procurement, at over 25 per cent, is still the highest for all the CEE countries, but Romania's arms industry has nevertheless suffered

⁷⁹ It has not been possible to obtain sufficient data from Bulgaria for 1994 to produce a table.

⁸⁰ 'Instabilities in post-Communist Europe 1994', *Conflict Studies Research Center Newsletter*, July 1994, pp. 15–17.

⁸¹ Lefebvre, S., 'The Bulgarian Army in the throes of change', *Jane's Intelligence Review, Europe*, Nov. 1994, pp. 487–89.

⁸² Engelbrekt, K., 'Bulgaria's evolving defence policy', *RFE/RL Research Report*, vol. 3, no. 32 (Aug. 1994), pp. 45–51; and 'Bulgaria seeks European course: weak reform attempts in the armed forces', *Neue Zürcher Zeitung*, 7 Apr. 1994.

⁸³ In 1993, 5% of the budget was used for that purpose: see Mladenov, A. and Beaver, P., 'Bulgaria poised for reform', *Jane's Defence Weekly*, no. 15 (2 Oct. 1993).

⁸⁴ *Balkan News International and East European Report*, 29 May–5 June, 1994, p. 22.

Table 12.11. Romanian military expenditure allocation: official figures, 1990–94
 Figures are in current m. lei. Figures in italics are percentages.

| | 1990 | 1991 | 1992 | 1993 | 1994 |
|-----------------------|---------------|---------------|----------------------------|----------------|------------------|
| Personnel | 5 917 | 10 764 | 42 000 | 97 763 | 470 422 |
| <i>Share of total</i> | <i>17.5</i> | <i>33.2</i> | <i>26.5</i> | <i>37.4</i> | <i>37.7</i> |
| O&M ^a | 5 749 | 7 704 | 61 068 | 101 437 | 433 335 |
| <i>Share of total</i> | <i>17.0</i> | <i>23.8</i> | <i>38.5</i> | <i>38.8</i> | <i>34.7</i> |
| Procurement | 21 151 | 12 807 | 52 901 | 57 570 | 317 142 |
| <i>Share of total</i> | <i>62.6</i> | <i>39.5</i> | <i>33.4</i> | <i>22.0</i> | <i>25.4</i> |
| Construction | 527 | 653 | 959 | 2 800 | 21 000 |
| <i>Share of total</i> | <i>1.6</i> | <i>2.0</i> | <i>0.6</i> | <i>1.1</i> | <i>1.7</i> |
| R&D | 448 | 450 | 1 590 | 2 060 | 6 434 |
| <i>Share of total</i> | <i>1.3</i> | <i>1.4</i> | <i>1.0</i> | <i>0.8</i> | <i>0.1</i> |
| Total | 33 792 | 32 378 | 158 518^b | 261 630 | 1 248 333 |
| <i>Share of total</i> | <i>100</i> | <i>100</i> | <i>100</i> | <i>100</i> | <i>100</i> |

^a Includes civilian personnel cost.

^b The 1992 Submission to the United Nations gives the total figure of 138.558 million lei; however, this does not include an additional 20 million lei which was approved by the Parliament in July 1992, of which 5 million lei was for O&M and 15 million lei for capital expenditure, according to an Economic Committee Meeting with Cooperating Partners, Brussels, 30 Sep.–2 Oct. 1992.

Source: Laws of military budgets 1982–92, Ministry of National Defence, Bucharest, submitted through the Romanian Embassy, Stockholm, 30 Nov. 1992; for 1993–94, CSCE: Instrument for Standardized International Reporting of Military Expenditure, submitted by the Romanian Embassy, Stockholm, 20 Dec. 1994.

badly in the country's attempted transition to a reform economy, mainly as a result of the dramatic fall in orders and shortage of funding. Romania is seeking closer ties with the West and is trying to modernize its air defence infrastructure and operational procedures.⁸⁵ In return for NATO assistance, Romania will set aside a number of military assets and facilities for use in future peacekeeping missions and exercises.

Even though there has been substantial progress in the implementation of structural reform in Romania, there are enormous difficulties still to be faced. The reform of the armed forces and civil–military relations is constrained by both external and internal factors. Abroad, Romania is concerned and influenced by what it perceives as a security vacuum in Europe, by the armed conflicts in the former Yugoslavia and by the political situation in Russia. Domestically, political uncertainty and limited budgets are seen as primary factors affecting the planned development of the armed forces. Sanctions on Serbia and Montenegro have put additional strain on the Romanian economy, costing Romania an estimated \$200 million per year.⁸⁶

⁸⁵ *Balkan News International and East European Report*, 13 July–8 Aug. 1994, p. 12.

⁸⁶ *Europa World Yearbook*, 1994, vol. 2, p. 2466.

V. Japan

Since 1990, the reduction in Russian forces in Asia, especially in Viet Nam and the North Pacific, has taken pressure off Japan's security concerns. However, Japan's perception of the long-term implications of China's modernization of its maritime and air military capabilities motivates a continued defence commitment. The possibility of North Korea developing a nuclear weapon capacity with delivery vehicles also motivates the maintenance of vigilant defences. Non-military security threats present further concerns. A serious economic crisis on the Chinese mainland could prompt an exodus of refugees to Japan, which would require an organized military force to deal with it. Humanitarian relief after natural disasters such as earthquakes is also part of the defence forces' mission: the need was demonstrated in the Kobe earthquake in January 1995.

While major changes have been taking place within the context of the 1960 US–Japanese Treaty of Mutual Cooperation and Security,⁸⁷ certain structural features of the budgetary process make the prospect of immediate shifts in the Japanese security system unlikely. At the same time, undermanning in the armed forces and some flexibility in training exercises give the defence budget the resilience to absorb cuts at a time when the armed forces' mission is being redefined and the economy is experiencing difficulties.

Defence planning

The National Defense Program Outline of 29 October 1976 sets out the basic defence posture of modern Japan. It stipulates the level of defence forces that should be maintained in peacetime and provides the guidelines for improving Japan's defence capabilities.⁸⁸ Japan's security treaty with the USA remains an important part of Japan's defence posture in emphasizing balance in organization and deployment. The Mid-Term Defense Program (MTDP) provides the basic frame of reference for defence planning. The MTDP for FYs 1991–95 was adopted in December 1990 to reflect the international changes brought about by the end of the cold war and was revised in December 1992, a year ahead of schedule, in response to continuing changes in the country's domestic and international situation.⁸⁹

The budget process

Defence budgets have tended to stress continuity and are viewed not only from the perspective of efficiency and contribution to security capability but also from that of their effect on the economy and in the context of relations with the USA. The question of defence capacity is controversial, and getting

⁸⁷ *United States Treaties and Other Alliances*, vol. 11, pt. 2 (1960), pp. 1632–51.

⁸⁸ Japan Defense Agency, *Defense of Japan 1990* [Defense Agency: Tokyo, 1990], p. 247.

⁸⁹ Japan Defense Agency, *Defense of Japan 1993* [Defense Agency: Tokyo, 1993], pp. 92–96.

the 'biggest bang for the yen' or ensuring maximum value for money remains the major priority. Several actors are involved in defence budget preparation.

The Japanese Defense Agency (JDA) is responsible for preparing the country's defence budget. Under the 1947 constitution and as a result of early controversy over the legitimacy of the agency, it is technically below the rank of ministry and lacks some of the prestige of other ministries in government. It is not always the most important actor in defence budget formulation. The JDA is responsible for management of the Japanese Self-Defense Forces (SDF), which are divided into three arms: the Ground Self-Defense Forces (GSDF), the Maritime Self-Defense Forces (MSDF) and the Air Self-Defense Forces (ASDF). Its budget plan is submitted to the Ministry of Finance⁹⁰ around mid-June for the coming fiscal year (which starts on 1 April). The ministry tries to achieve a balance among government ministries. The defence and foreign aid budgets tended to be exempt from budgetary stringency until the start of the present economic downturn in 1992. When items of the defence budget are politically sensitive, broader consultation may be necessary.⁹¹ The full budget request for the next fiscal year is presented for cabinet approval by late December and it officially submits the budget to the Diet for ratification. It is rarely amended.

The Ministry of Foreign Affairs (MOFA) is responsible for all security treaty matters and sets broad policy. Its influence is wielded through several avenues, including the National Security Council. The JDA takes the lead in technical matters and procurement within the policy framework set by the cabinet, the Diet and MOFA. One concern within the government is that a security decision will alienate the USA and possibly provoke retaliation or market restriction. The US Congress has been critical of Japan's so-called free ride, so MOFA has supported modest increases in defence spending and burden-sharing.

The Ministry of International Trade and Industry (MITI), the successor to the former Munitions Ministry, plays a vital role in security budgeting. MITI exerts influence both through the National Security Council and through officials who have been seconded to key JDA positions, especially in the aircraft ordnance/equipment bureau. Japanese defence procurement is also influenced by a nationalist (and MITI-supported) drive to produce weapons and equipment domestically. The defence policy-making establishment recognizes that Japan's capability to defend itself against potential threats, particularly in the face of a weakening US presence in Asia and a decline in US economic power, rests on its ability to field superior technology in the form of advanced weapon systems.⁹²

⁹⁰ Telephone conversation with Mr H. Tsuchimoto, Embassy of Japan in Ottawa, 2 Feb. 1995.

⁹¹ A meeting of the Prime Minister, some Cabinet members and the JDA Director-General was held on 22 Aug. 1994 to discuss the selection of a multi-function aircraft because of media reports that the manufacturer had already been selected: *Mainichi Shimbun*, 23 Aug. 1994, morning edition, p. 2, reported in Foreign Broadcast Information Service, *Daily Report-East Asia (FBIS-EAS)*, FBIS-EAS-94-164, 24 Aug. 1994, p. 9.

⁹² Chinworth, M. W., *Inside Japan's Defense: Technology, Economics and Strategy* (Brassey's: Washington, DC, 1992), pp. 38-39. While the USA was spending around 50% or more of total R&D on

Table 12.12. Japanese military expenditure and GNP, 1991–95

Figures are in b. current yen by fiscal year. Figures in italics are percentage changes from previous year.

| | 1991 | | 1992 | | 1993 | | 1994 | | 1995 | |
|----------------------------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
| | b. yen | Change | b. yen | Change | b. yen | Change | b. yen | Change | b. yen | Change |
| GNP forecast | 459 600 | 5.5 | 483 700 | 5.0 | 495 300 | 4.9 | 494 000 | 0.0 | 487 000 | -0.7 |
| General budget | 70 347 | 8.2 | 72 218 | 2.7 | 72 355 | 0.2 | 73 082 | 1.0 | 70 987 | -2.9 |
| Military exp. (initial) | 4 386 | 5.45 | 4 552 | 3.8 | 4 541 | 1.96 | 4 884 | 0.9 | 4 724 | -0.86 |

Source: Figures provided by the Embassy of Japan, Ottawa.

The usual pattern for the JDA is to purchase major weapon systems on a five-year cycle, submitting annual budgets to the Ministry of Finance. In 1986 these mid-term estimates were elevated to official government programmes, which committed the government and Ministry of Finance to achieve the goals of the five-year plans and made denial of weapon programmes more difficult. Each mid-term estimate requires nearly three years to draw up and involves other ministries which have security interests, including MOFA, the Ministry of Finance and MITI. This may result in *de facto* redefinition of defence policy with the introduction of new technology and systems. Successive cycles have advanced sophistication, which in turn has led to new policy considerations.⁹³ The Japanese Government uses a system of deferred payments on major expenditures, paying very little on individual units during the first three years of a contract (usually five years), with the bulk of funds being transferred in the final two years of an order.

Tomiichi Murayama, who became Prime Minister after the July 1993 general election, reversed the long-standing opposition of his party, the Social Democratic Party (SDP), to the defence forces as unconstitutional but has not supported higher growth in the defence budget.⁹⁴

Budget trends

Tables 12.12 and 12.13 show defence budget trends for the period FY 1991–95. The effects of economic recession on the general budget since 1993 are shown in table 12.12.

With the loss of the Liberal Democratic Party (LDP) majority in the Diet in July 1993 and the subsequent formation of a coalition government, some

defence, Japan's share has been less than 20%, with businesses giving priority to 'projects that will provide a net technological gain to the domestic economy and/or serve as a source of innovation for other industries and sectors'.

⁹³ Chinworth (note 92), pp. 49–50.

⁹⁴ *Kyodo*, 28 July 1994, reported in FBIS-EAS-94-146, 29 July 1994, p. 15.

Table 12.13. Japanese military expenditure as share of GNP, 1991–95

Figures are percentages.

| | 1991 | 1992 | 1993 | 1994 | 1995 |
|--|------|------|------|------|------|
| Defence share of GNP | 0.95 | 0.94 | 0.93 | 0.94 | 0.94 |
| Defence share of General Account Budget | 6.2 | 6.3 | 6.4 | 6.4 | 6.7 |

Source: Embassy of Japan, Ottawa.

fierce battles have been fought over the defence budget. In the July 1994 deliberations over the defence budget, the three coalition partners in government, the SDP, the LDP and Sakigake, agreed to curtail the MTDP. Meeting its targets would have required a 7.7 per cent increase in the defence budget.⁹⁵ None the less, even greater cuts in other areas of government spending have allowed defence spending to expand in proportion to the national budget.

For FY 1995 the government has imposed a ceiling of 0.9 per cent on all budget increases—down from the 2.8 per cent originally requested by the JDA. The JDA submitted its FY 1995 budget request in August 1994 for 4724 billion yen.⁹⁶ The SDP insisted on a growth rate of less than 0.9 per cent, while the LDP demanded a minimum of 1.4 per cent—a reduction from its initial target of 1.95 per cent, the ceiling in 1994. The Minister of Finance agreed to the 0.9 per cent increase, since anything lower would have made cuts in spending on US forces in Japan unavoidable and thus harmed US–Japanese relations.⁹⁷ This was the lowest increase since 1961.⁹⁸ One measure to keep costs down is to cut back on an additional portion of financial assistance for the stationing of US armed forces in Japan. Japan contributes to their upkeep, and any increase in its contributions would make it vulnerable to charges of paying for ‘mercenaries’. Under a 1991 special agreement, Japan was originally scheduled to shoulder an additional 30 billion yen in FY 1995 in order to pay all the wages of Japanese workers and all utility costs at US military bases in the country.⁹⁹ Another cost-cutting measure is to reduce the number and scope of training exercises, with savings of 3.5 billion yen in the MSDF and GSDF.

In response to a potential threat from North Korea, the JDA is to determine whether Japan should develop theatre missile defences to intercept ballistic missiles. The USA has proposed joint development of the system referred to as a smaller version of the former Strategic Defense Initiative (SDI). As the

⁹⁵ *Kyodo* (note 94), p. 21.

⁹⁶ *Japan Times* (electronic edition), 14 Aug. 1994.

⁹⁷ *Kyodo*, 3 Aug. 1994, reported in FBIS-EAS-94-149, 4 Aug. 1994, pp. 6–7.

⁹⁸ It should be noted that, unlike that of NATO countries, reported Japanese military expenditure does not include military pensions. If pensions were included, Japanese military spending figures would be considerably higher. See Japan Defense Agency (note 88), p. 172.

⁹⁹ *Kyodo* (note 97), p. 6.

major ally, the USA has been a factor (possibly even a silent partner influencing technology and weapon systems) in Japanese defence budgeting.

A nine-member Advisory Group on Defence Issues, a private advisory panel, presented a report on 12 August 1994 and a proposed reduction in the legislated strength of SDF troops from the current 274 000 to 240 000.¹⁰⁰ Present troop strength is estimated at 234 000 and the ceiling has never been reached because the GSDF have been unable to recruit enough soldiers. The proposed cut in the ceiling therefore does not mean a reduction in the actual numbers of the armed forces, but would involve down-sizing their organizational structure and some base closures.¹⁰¹

Several general controls also exist on Japan's defence spending. The existence of the SDF remains a constitutional grey area, accepted because of the state's need for protection of sovereignty, the price of living in a troubled part of the world, and increasingly part of the dues paid for playing a full part in the international community. A second inhibition is domestic public opinion. Memories of wartime devastation and the military dictatorship up to 1945 have traditionally made the post-war armed forces an 'illegitimate child' of the Japanese state. Article Nine of the constitution outlaws war as an instrument of national policy. Third, several of Japan's Asian neighbours had experience of Japanese imperialism before 1945 and fear that defence upgrading will lead to the slippery slope of revived militarism. Combined with Japan's powerful economy, the possibility of a rearmed Japan provokes reactions that could be inimical to Tokyo's interests. Fourth, the parties on the left (the SDP and Communists) have been highly critical not only of rising defence budgets but also of the very existence of the SDF. Economic rationality tends to rule out military spending as an efficient instrument for economic growth. Military spending is politically risky and the export of weapons, which might make possible larger volumes of production and therefore lower unit costs, is prohibited. Finally, the decline of LDP power in the Diet and the new strength of the SDP have made unlikely any large increases in military expenditure for the foreseeable future.

Prime Minister Murayama plans to promote disarmament as well as international cooperation in accordance with the spirit of the constitution. The Director General of the JDA, Tokuichiro Tamazawa, has stated the importance of SDF participation in peacekeeping operations, saying that international contributions can be the 'main pillar' of SDF activities.¹⁰² Although the beginning of Japanese participation in peacekeeping operations has been bound by restrictions, the armed forces are moving in the direction of a new international mission which replaces its cold war orientation against possible Soviet threats and could enhance Japan's global status while preserving its ability to defend the nation and respond to domestic disturbances.

¹⁰⁰ *Japan Times* (electronic edition), 31 Aug. 1994.

¹⁰¹ *Japan Times* (note 100).

¹⁰² *Japan Times* (electronic edition), 20 Sep. 1994.

VI. The developing world

South America

An examination of general developments in South America¹⁰³ since the mid-1980s shows that the most striking features of the region as a whole are the renunciation of authoritarian forms of government and the increasingly widespread assertion of representative democracy. South America is in the middle of an election marathon. In 1994, the region's two largest countries, Brazil and Mexico, elected new presidents, while in the first half of 1995 attention focuses on Argentina and Peru, where re-election of the incumbent presidents is possible following constitutional amendments. Elections do not of course alone signify a victory of democracy. They are, however, milestones along the long road towards establishing a political culture which seeks conflict resolution through consensus and compromise rather than by force of arms.

The movement towards peace and democracy in South America must be viewed in conjunction with progress towards human and civil rights. Although the transition to democracy has eliminated the blatant human rights violations of the military era, civil rights continue to be widely abused. The problems of violence are made worse by an increase in crime and the growth of drug cartels; in many regions unemployment, underemployment and population growth pave the way for social unrest; poverty persists. The wealthiest 20 per cent of the population in Argentina is 16 times richer than the poorest.¹⁰⁴

For the economies of South America, the 1980s were the 'lost decade': a debt and confidence crisis shook the whole region; there were drastic declines in GNP and a clear increase in poverty. Since the beginning of the 1990s, growth has averaged over 3 per cent. Market reforms have been introduced, state-owned enterprises are being privatized and tariffs have been slashed, import substitution dropped and licences and other restrictions abolished in favour of liberalization. Between 1991 and 1993 alone the average tariff for the region was more than halved (from 26 per cent to 12 per cent).¹⁰⁵ The successes in external trade—at a time of continuing recession in the international economy—are mainly attributable to the increase in intra-regional trade. This for its part has been facilitated by regional and subregional integration: for example, a Southern Cone customs union was formalized on 17 December 1994 in the Ouro Preto Protocol¹⁰⁶ between the members of El Mercado Común del Sur (the Southern Cone Common Market, Mercosur)—Argentina, Brazil, Paraguay and Uruguay—and established on 1 January 1995.

Underlying all these reforms, however, is the still uncertain role of the military in the future development of the region.

¹⁰³ In little more than a decade, from 1979 to 1991, 7 South American countries replaced military dictatorships or military-dominated regimes with elected governments: Argentina (1983), Bolivia (1982), Brazil (1985), Chile (1990), Ecuador (1979), Paraguay (1989) and Peru (1980).

¹⁰⁴ 'Reforming Latin America', *The Economist*, 26 Nov. 1994, p. 51.

¹⁰⁵ 'Reforming Latin America' (note 104), p. 52.

¹⁰⁶ 'Mercosur presidents give go-ahead for "almost" full customs union in January 1995', *Latin American Regional Reports, Southern Cone Report*, RS 94-10 (29 Dec. 1994), p. 1.

Military spending in real terms in most South American countries appeared to continue to decline in 1994. The fall possibly reflects in part the 'return to democracy': civilian governments are trying to make the military sector bear its share of public expenditure cuts. However, the secrecy which traditionally surrounds military budgets makes it difficult to evaluate the true level of military spending in South America. The means by which governments hide military expenditure, including double bookkeeping, extra-budgetary accounts, highly aggregated budget categories and the manipulation of foreign exchange allocations, are all practised by developing countries but by no means confined to the developing world. Some South American civilian governments have, for example, in the past understood or been convinced that austerity measures taken to meet the problems of debt repayment and other economic ills are not to apply to the armed forces.¹⁰⁷ Military expenditure reductions are often more cosmetic than real.

*Argentina*¹⁰⁸

Military expenditure is still a highly political issue in Argentina, although, according to the Defence Minister, 'Argentina faces a period of low conflicts and relations between neighbour countries have reached an intensity that has no precedents'.¹⁰⁹

The principal feature of political-military development in Argentina since the advent of democracy is the government's interest in cooperative security.¹¹⁰ While there have been some significant UN deployments abroad by South American countries, and Argentina has contributed forces to the United Nations Protection Force (UNPROFOR) in Croatia, any significant peace-keeping efforts within the region or in other parts of the world in the future are likely to be considered financially difficult. Regionally, Argentina wants to keep a military balance and recognizes the importance of multilateral co-operation. As Defence Minister Oscar Camilión stated: 'United Nations peace-keeping operations are very important tasks for Argentina and should be a principal role of the armed forces in countries like ours'.¹¹¹ Internally, Argentina is strengthening civil society and the military-civil relationship in order to reinforce domestic political institutions. The armed forces are in a pivotal position: their acquiescence in democratic procedures and firm adherence to democratic norms are a *sine qua non* of democratic development.

Privatization is one of the most contentious issues in contemporary Argentine politics and affects both the civilian and military sectors. Defence products have not found adequate international markets, while the domestic market

¹⁰⁷ *Jane's Defence Weekly*, vol. 4, no.14 (5 Oct 1985); *Latin American Weekly Report*, WR-86-31 (10 Aug 1986); *Latin American Regional Report*, RS-88-06 (3 Aug. 1988).

¹⁰⁸ SIPRI has introduced a new programme on the military expenditure of South America. Argentina is the first country to be studied.

¹⁰⁹ Fontana, A., *Argentina-NATO: Perspectives on Global Security*, Argentina-NATO Seminar on Global Security, 12-13 Oct. 1993 (Argentine Council for International Relations [CARI]: Buenos Aires, 1994), p. 31.

¹¹⁰ Fontana (note 109), p. 153.

¹¹¹ d'Odorico, J, 'New attitudes in Argentina', *Armed Forces Journal International*, Aug. 1994, p. 12.

has been severely restricted by recession and the declining military budget. Military heavy industry is chronically short of capital and modern technology. Rather than acting as a spur to development, it has become a drag on the military budget and the state budget in general. The armed forces also own large amounts of valuable real estate located in some of the major cities. Efforts at privatization in mid-1991 foundered, in large part because political opposition and military procrastination slowed the process. A major issue for the armed forces was who was to keep the proceeds from the sale of military property. The military was less than enthusiastic about selling its properties without the assurance that the funds would be returned for its use instead of being part of general government revenues.¹¹²

Starting in 1992, it was intended to sell most of the Buenos Aires Campo de Mayo military complex as well as other important urban properties. The defence industries were to be rationalized¹¹³ and sold off. The revenue generated was to help offset the military foreign debt of about \$5 billion and be applied against the modernization programme, the cost of which was estimated as early as 1988 at \$2 billion.¹¹⁴

The defence budget for 1992 was \$1.75 billion at current prices, or 9.65 per cent of total government expenditure.¹¹⁵ In mid-1991 a Services Rationalization Plan was announced and laid down a series of measures, the main ones being: (a) total and irreversible termination of the Condor-II project to develop a medium-range surface-to-surface missile; (b) the privatization of national defence companies; and (c) restructuring and down-sizing of the armed forces.¹¹⁶ As a result, the army received the largest share—42 per cent—of the 1992 budget. A decree of 21 September 1994 formally abolished conscription for military service. Mandatory one-year service is now replaced by voluntary service in one of the three branches of the armed forces.¹¹⁷ A special amount of \$298 million has been set aside in the 1995 defence budget to finance the change-over.¹¹⁸ To finance modernization and restructuring of the army, a special request of \$57.3 million above the planned budget for 1993–96 was endorsed in principle by the government.¹¹⁹ The policy of reducing personnel should represent, in relation to 1991, a reduction of personnel expenditure by 10.2 per cent in 1993 and 23 per cent in 1995; the army hopes to save \$212 million.¹²⁰

¹¹² Zagorski, P., 'Civil-military relations and Argentinian democracy: the armed forces under the Menem Government', *Armed Forces & Society*, vol. 20, no. 3 (spring 1994), pp. 423–37.

¹¹³ de Lestapis, F., ed., *Military Power, Latin America* (Société I³C: Paris, 1993), pp. 13–20.

¹¹⁴ Correa, R., 'Armed forces to sell real estate properties', *Somos*, 22 July 1991; *Foreign Broadcast Information Service, FBIS LAT-91-171* (4 Sep. 1991), pp. 29–30.

¹¹⁵ de Lestapis (note 113), pp. 13–20.

¹¹⁶ de Lestapis (note 113), p. 10.

¹¹⁷ *Defense & Economy World Report*, no. 1300 (Oct. 1994), p. 1183.

¹¹⁸ Argentinean Budget Law 1995 (Ministerio de Economía y Obras y Servicios Públicos: Buenos Aires, 1 Jan. 1995).

¹¹⁹ *International Defense Review*, Dec. 1992, p. 1147.

¹²⁰ *International Defense Review*, Dec. 1992, p. 1148.

In 1993 defence expenditure was reported at \$4.2 billion.¹²¹ There are two possible reasons for this increase: a different definition has been applied, and personnel outlays appear for the first time to have included large Treasury subsidies to retirement funds, which were excluded in previous years. The 1994 defence budget was \$3.9 billion (including pensions of \$1.8 billion); payroll costs at \$1.7 billion account for 76 per cent of the budget of \$2.1 billion if pensions are excluded.¹²² By October 1994 there were persistent rumours that the military had demanded an increase in the defence budget to allow for a 50 per cent increase in salaries. Economy Minister Domingo Cavallo has insisted that there are no funds to meet the pay demand of the armed forces.

The navy has traditionally received the largest share of the budget for the armed services, for example, 40 per cent of the total defence budget of \$1.1 billion in 1991. By 1992 this had fallen to 28 per cent¹²³ and the navy is now faced with a reduction in resources. Because of the size of the debt owed by the Astilleros Domecq Garcia Shipyard to Thyssen, the German ship-builder, only two of four submarines ordered, the first of which was laid down as early as 1983, have so far been completed.¹²⁴ In an attempt to improve the economic situation the government—so far unsuccessfully—is trying both to sell off the submarines and to privatize the shipyard. The eventual new owners will be obliged to finish construction of the last 20 per cent of the third submarine, *Santa Fe*, while the fourth ship on order is only 40 per cent complete.¹²⁵

The air force received 22 per cent of the defence budget in 1992.¹²⁶ As part of the general reduction in strength and equipment, the PERFA 2000 Plan¹²⁷ provides for a significant modification of the structure and organization of the air force. However, because of political decisions and austerity measures within the armed forces for 1994–2000, it is not certain that this plan can be implemented in a satisfactory manner. Only the upgrading of about 40 US Skyhawk A-4 M aircraft (ex-US Marine Corps) is being carried out under a three-year programme costed at \$200 million,¹²⁸ following the lifting of the military sales embargo imposed by the USA during the Falkland/Malvinas War in 1982. Ultimately the air force would like to acquire the US F-16 fighter—as would Chile—but it is awaiting a change in the US Government's policy on sales of advanced fighters to the region. For the time being, the US

¹²¹ UN General Assembly, *Reduction of Military Budgets, Military Expenditure in Standardized Form Report of the Secretary General*, UN document no. A/49/190, 7 Nov. 1994; and *Latin American Weekly Report*, 3 June 1993, p. 250.

¹²² *Latin American Regional Reports, Southern Cone*, FS-94-08 (20 Oct. 1994), p. 2; and *International Herald Tribune*, 25 Nov. 1994, pp. 1, 7.

¹²³ de Lestapis (note 113), p. 11.

¹²⁴ *Jane's Fighting Ships 1994–95*, p. 12.

¹²⁵ Rodríguez, J. M., 'La industria de defensa Argentina', *Tecnología Militar*, no. 3 (1 June 1994), p. 30.

¹²⁶ de Lestapis (note 113), p. 11.

¹²⁷ PERFA is the Plan Esquemática de Reestructuración de la Fuerza Aérea el Año 2000 (Services Rationalization Plan for the Air Force, 2000).

¹²⁸ *Jane's Defence Weekly*, 7 Jan. 1995, p. 5.

State Department remains opposed to the sale of the F-16 fighter to the area, fearing that it could create an arms race between Chile and Argentina.¹²⁹

It is obvious that the security sector plays a complex role in the development process of Argentina. Military policy has not been given a clear definition of mission by the present government, which seems not to be able to conceive of any genuine role for the armed forces. A statement of military policy guiding the supposed military restructuring currently under way has been repeatedly postponed, which has led to discontent and inefficient expenditure in all three service branches. Nor can this 'non-definition' when it appears serve as a guide for military planning, arms acquisition or training. Although free-market policies have achieved results in taming hyper-inflation, bringing greater discipline to bear on public sector deficits and generating trade surpluses, for most South American countries the goal of stable and sustainable growth is surrounded by uncertainty. At a time of resource constraints restructuring of the armed forces and privatization of the arms industry require the sort of political and financial capital governments often do not have or are unwilling to expend.

Before it is possible to analyse what importance the armed forces play in shaping the future of Argentina, the level and composition of military expenditure need to be more open to public scrutiny. Only then will an evaluation of the role the military sector plays in promoting or hindering development be possible.

South Asia¹³⁰

Deep-rooted hostility between India and Pakistan has made South Asia one of the most militarized areas of the world for almost 50 years. Serious differences over Kashmir maintained a high level of tension between the two countries in 1994 and put upward pressure on their military budgets. Elsewhere in the region, the unresolved conflicts in Afghanistan and Sri Lanka continued to demand the use of scarce resources to fund the military sector. Because of the continuing civil war and the absence of reliable information on military expenditure by various factions, this section does not cover the situation in Afghanistan. The following case studies of India and Pakistan are based on available information about their respective defence budgets for FY 1994/95. A brief discussion of Sri Lanka highlights recent political developments which might lend impetus to the search for a peaceful solution of the ethnic conflict there.¹³¹

¹²⁹ *Defense News*, vol. 9, no. 13 (4–10 Apr. 1994), p. 26.

¹³⁰ For the purposes of this chapter, South Asia comprises Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka.

¹³¹ See chapter 1, appendix 1A in this volume.

India

India's FY 1994/95 defence budget proposal of Rs 230 billion (about \$7.3 billion) represents a spending increase over 1993/94 of approximately 11 per cent after inflation.¹³² The rise in India's defence spending is driven by its security concerns with Pakistan. The major potential trigger for a clash between India and Pakistan is the separatist movement in Kashmir. India has long accused Pakistan of supporting the low-intensity conflict in Kashmir and has devoted substantial military resources to counter-insurgency operations there. It is estimated that the maintenance of five divisions in the Kashmir Valley costs India at least \$1 million per day.¹³³ A further \$100 million a year is required to sustain military operations on the Siachen Glacier, where India and Pakistan have been embroiled in a meaningless conflict on the 'roof of the world' for 10 years.¹³⁴ Smouldering ethnic conflicts and insurgent movements in Assam in the north-east of the country and concerns that the Sri Lankan civil war might spill over into Tamil Nadu in the south are additional costly priorities for the Indian armed forces. The climate of Sino-Indian relations has improved markedly since an agreement to stabilize the military situation along the Line of Actual Control in the Himalayan Mountains was signed during Prime Minister Narasimha Rao's visit to Beijing in September 1993; even so demarcation problems have held up the proposed phased force reductions.¹³⁵ Up to 30 per cent of the total Indian armed forces remain permanently deployed, at great expense, to face a potential Chinese threat along the northern border. Although the prospect of nuclear confrontation between India and Pakistan is the worst security nightmare in South Asia, the internal security situation in India places more immediate demands on the defence budget.

New Delhi's response to these conditions, together with its growing concern about the looming obsolescence of much of its Soviet-supplied military equipment, has been an increase in military spending. The 1994/95 Defence Services Estimates provide Rs 111.28 billion (\$3.6 billion) for the army, Rs 36.18 billion (\$1.16 billion) for the air force and Rs 13.52 billion (\$0.435 billion) for the navy. Capital outlay for the three services together is Rs 68.32 billion (\$2.1 billion).¹³⁶ All branches of the armed forces gain increases in the proposed budget, but manpower costs soak up considerable resources which could otherwise be used to enhance military capability. In short, as personnel costs show no sign of decreasing, there are serious limits to the armed services' chances of maintaining operability and upgrading equipment. Exercises and training are routinely cut and decisions to purchase new equipment are similarly put off. Yet the demands on the defence budget for 'crucial' hardware increase unabashedly: the army needs new self-propelled guns, the navy has to replace an ageing aircraft-carrier, and the air force requires new jet

¹³² Rettle, J., 'India steps up defence budget', *The Guardian*, 1 Mar. 1994, p. 6.

¹³³ Gupta, S., 'India's armed forces set new priorities', *The World in Conflict*, 1994/95, pp. 125–30.

¹³⁴ Gupta (note 133), p. 126.

¹³⁵ 'Border breakdown', *Far Eastern Economic Review*, 22 Sep. 1994, p. 12.

¹³⁶ Government of India, *Defence Services Estimates, 1994–95*, 1994, pp. 4–5.

trainers and must upgrade its front-line fighters.¹³⁷ Prime Minister Rao assured the nation's military leaders in a speech in October 1994 that India's vital defence needs would be met but that they should learn to live within tight budgets.¹³⁸

Although this appears to indicate moderation in high-level thinking on defence spending, it should be noted that there is considerable understatement in India's reported defence expenditure. Much of the security expenditure incurred in the border areas is not included in the defence budget. Paramilitary units such as the Border Security Force, the Indo-Tibetan Rifles and the Assam Rifles are funded through the general budget by the Home Ministry. According to one source, if these costs and the military-related expenditures of the atomic energy and space departments were included the Indian defence budget would be in the order of Rs 5 billion higher in the current year.¹³⁹

Pakistan

Not surprisingly, the Indian budget has generated calls in Pakistan for a similar increase in Pakistani military expenditure. Some reports indicate that the government will seek an increase of at least 2 per cent above inflation for FY 1995/96.¹⁴⁰ In fact, Pakistan has steadily increased its defence allocations since 1990: in current prices they amounted to Rs 63 billion in 1990/91, Rs 71 billion in 1991/92 and Rs 83 billion in 1992/93.¹⁴¹ Defence spending was set at Rs 89 billion for 1993/94 but reportedly reached more than Rs 93 billion.¹⁴² Pakistan's continuing dispute with India also drives the defence budget, although with a more serious social cost in Pakistan: more than one-third of the national budget is earmarked for the military and this expenditure exceeds spending on education and health by more than 20 times.¹⁴³

In the 1994/95 budget, covering the year from July 1994, Rs 101.85 billion (\$3.29 billion) were allocated for defence. According to another report, this represents an increase of 14.3 per cent over the 1993/94 defence budget and 8.6 per cent over actual expenditure in 1993/94.¹⁴⁴ Islamabad argues that the

¹³⁷ Raghuvanshi, V., 'Regional strife may spur spending rise in India', *Defense News*, 17–23 Jan. 1994, p. 12. Not surprisingly, most of these urgent requirements have been identified by former military officers. See, for example, Sinha, Lt-Gen. S. K. (Retd), 'Unavoidable hike', *Hindustan Times*, 31 Mar. 1994, p. 78; Nath, R., 'Don't forget defence in the budget', *The Tribune* (Chandigarh), 2 Feb. 1994, p. 80; and interview with the Chief of Naval Staff, 'The Navy has no money for new ships', *Asian Age* (New Delhi), 20 Aug. 1994, p. 84.

¹³⁸ Gupta (note 133), p. 126; Raghuvanshi, V., 'India Prime Minister calls for defence review', *Defense News*, vol. 9, no. 43 (31 Oct.–6 Nov. 1994), p. 21.

¹³⁹ Gangadharan, S. 'Defense spending hike only notional', *Economic Times* (New Delhi), 15 Mar. 1994, p. 77.

¹⁴⁰ Dixit, A., 'South Asian arms bazaar', *Armed Forces Journal International*, June 1994, p. 30.

¹⁴¹ Figures supplied by the Pakistan Embassy, Stockholm, from the Pakistan Ministry of Defence, 23 Dec. 1992.

¹⁴² Karniol, R., 'Pakistan budget seeks real-term growth', *Jane's Defence Weekly*, 16 July 1994, p. 12.

¹⁴³ Matthews, R., 'Country survey IV: Pakistan', *Defence and Peace Economics*, vol. 15 (1994), p. 315.

¹⁴⁴ 'Pakistan', *Asian Recorder*, 13–19 Aug. 1994, p. 24168.

defence budget has not increased in real terms;¹⁴⁵ however, an increase of 6.9 per cent would have been sufficient to compensate for inflation.¹⁴⁶ Moreover, it is believed that the majority of defence-related imports do not even appear as defence budget items, but are charged against the general budget.¹⁴⁷ The defence budget process is not subject to normal cabinet scrutiny. Calls by some legislators in Pakistan's National Assembly for greater transparency in the defence budget have thus far been unsuccessful.

The Pakistani military has never had any difficulty in securing its perceived requirements from the government and, in contrast to the case of India, there will be no shortage of funds to be spent on armaments. The Pressler Amendment, by which US military aid to Pakistan was cut at the end of 1990,¹⁴⁸ initially had a serious effect on the air force. Delivery of 71 F-16 fighters, for which Pakistan has paid \$650 million, has been embargoed by the USA. Similarly, P-3C anti-submarine aircraft and helicopters have not been forthcoming and the navy has had to return eight leased frigates to the USA.¹⁴⁹ Nevertheless, the impact of the US embargo on Pakistan's combat capability has been negligible. Chinese and French arms suppliers have moved rapidly with offers to fill the procurement gaps. Most importantly, the Pressler Amendment has not had a noticeable impact on Pakistan's nuclear weapon development programme.

Defence spending is entered as a single line in the Pakistan budget, so that it is difficult to determine its breakdown. It has been reported that the armed forces have been granted an across-the-board salary increase of 35 per cent for 1994/95.¹⁵⁰ It is clear, however, that procurement will feature heavily in the coming years. In what is to be one of its largest defence purchases, Pakistan has agreed to buy three Agosta 90B air-independent diesel electric submarines from France. The contract, reportedly worth \$950 million, includes a major transfer of technology and a \$100 million upgrade of the Karachi shipyard. The first submarine, to be built in France, is to be delivered in 1998; the second will be shipped to Karachi for completion. The third submarine will be completely built in Pakistan in 2002.¹⁵¹ Meanwhile negotiations are under way with Washington to resolve the outstanding problem of the undelivered F-16s. One possible outcome is that the USA will assist Pakistan to find another

¹⁴⁵ Rizvi, A. B., 'Pakistan Army and regional stability, pressure of rising Indian defence budget', *Asian Defence Journal*, Nov. 1994, pp. 32-39.

¹⁴⁶ Karniol (note 142), p. 12.

¹⁴⁷ Karniol (note 142), p. 12; and 'Pakistan' (note 142), 13-19 Aug. 1994, p. 24168.

¹⁴⁸ The Pressler Amendment was passed by the US Congress in 1986 and specified that the continuation of economic and military aid to Pakistan was contingent on annual certification by the US President that Pakistan was not developing nuclear weapons. Following the end of the Soviet occupation of Afghanistan, it was decided in Feb. 1989 that this certification could no longer be provided. Civilian aid projects were terminated in 1994. See Cloughley, B., 'Pakistan's defence strategy and the nuclear option', *The World in Conflict*, 1994/95 (note 133), pp. 115-19.

¹⁴⁹ Cloughley (note 148), pp. 115-19.

¹⁵⁰ Karniol (note 142), p. 12.

¹⁵¹ Lewis, J., 'First Agosta boat set for delivery in 1998', *Jane's Defence Weekly*, 1 Oct. 1994, p. 1.

buyer for these aircraft, thereby freeing the \$650 million down-payment and enabling Pakistan to upgrade its air force from another source.¹⁵²

Sri Lanka

Military expenditure in Sri Lanka has increased in current prices from Rs 1.7 billion (\$70.8 million) in 1983 to over Rs 20 billion (\$416 million) in 1994¹⁵³ and is directly linked to the ongoing civil war against the Liberation Tigers of Tamil Eelam (LTTE) in the north. The army has expanded to an authorized strength of 105 000 from only 12 000 in 1963.¹⁵⁴ There is some hope that the war, and hence military spending, will be curtailed in the coming months. The new government of Prime Minister Chandrika Kumaratunga suspended a wide-ranging arms deal with Russia and offered to hold peace talks with the main Tamil separatist group, the Tamil Tigers, shortly after taking office in September 1994. The arms deal included some 200 BMP infantry fighting vehicles, six to eight Mil Mi-17 multi-purpose helicopters, up to three transport aircraft (possibly Antonov An-12s) and two or three patrol boats with an overall value of perhaps \$72–100 million.¹⁵⁵ Shortly after the election, renewed terrorist attacks by the LTTE forced the government to back off from the peace talks but by the end of the year these were given fresh momentum. It remains to be seen whether the Sri Lankan government will succeed in ending the conflict with the LTTE and make further progress in reducing the drain of defence spending on the country's economy.

The ASEAN states¹⁵⁶

The Association of South-East Asian Nations (ASEAN) includes some of the most dynamic economies in the world. Whether or not there is a correlation between economic strength and military spending levels, the growing resources of the states in the region clearly facilitate higher military spending.¹⁵⁷ Malaysia, Singapore and Thailand are all adding modern weapon systems to their inventories but deny that they are involved in anything more serious than normal military modernization. Indonesia has acquired most of the naval fleet of the former German Democratic Republic (GDR). Only the Philippines has been hampered in enhancing its military capabilities by fiscal constraints. The extent of weapon purchases in the region has generated considerable debate

¹⁵² The F-16 down-payment is only part of an estimated \$1230 billion that Pakistan has tied up in unfulfilled military contracts with US firms: see 'Pakistan asks US to refund money by selling held-up weapons', *Asian Defence Journal*, no. 2795, p. 90.

¹⁵³ Gunasekera, R., 'Sri Lanka: Tigers on the prowl', *The World in Conflict, 1994/95* (note 133), pp. 120–24.

¹⁵⁴ Gunasekera (note 153), pp. 120–24. On the civil war, see also chapter 1 in this volume.

¹⁵⁵ 'Arms deal on hold for talks', *Jane's Defence Weekly*, 10 Sep. 1994, p. 21.

¹⁵⁶ Formed in 1968 by Indonesia, Malaysia, the Philippines, Singapore and Thailand. Brunei became a member upon independence in 1984. Viet Nam is expected to join ASEAN in July 1995.

¹⁵⁷ Gill, B., 'Arms acquisitions in East Asia', *SIPRI Yearbook 1994* (note 1), pp. 551–62.

over whether this indicates an incipient arms race.¹⁵⁸ The nature of the military build-up in the region suggests contingency planning to meet the dramatic changes in strategic conditions brought about by the withdrawal of the US military presence from the Philippines and of Russian forces from Viet Nam following the end of the cold war. Nevertheless, it clearly has the potential to be destabilizing and should be viewed with concern.¹⁵⁹ The types of weapon system being purchased by some states—advanced aircraft, warships and helicopters—are a clear indication that major resources are being committed to enhancing their power-projection capabilities.

Indonesia

Indonesia's defence budget, at about 4.5 trillion new rupiahs in 1994, is the lowest per capita in ASEAN.¹⁶⁰ Despite claims that Indonesia may be under-reporting its military budget by 25–50 per cent,¹⁶¹ the country is hardly a profligate defence spender, certainly not in comparison to Malaysia, Singapore or Thailand. The Indonesian defence budget, 20 per cent of which is for expenditure on the national police, represented only 7.07 per cent of public expenditure in FY 1993/94,¹⁶² compared with 10.9 per cent in the Philippines and 24 per cent in Singapore.¹⁶³ There is also no high-level support for defence spending increases. In a speech in the summer of 1994, President Suharto reportedly told the country's top military leaders that funding for the services would continue to be meagre and only sufficient to maintain the minimum requirements for the defence of national sovereignty.¹⁶⁴

Nevertheless, some spending increases have become necessary because of the purchase of much of the fleet of the former GDR following the reunification of Germany. Although the 39-vessel fleet was acquired at bargain-basement prices (\$12.7 million), initial estimates of the cost of refurbishing the ships amount to \$640 million.¹⁶⁵ Defence officials say that the navy will pay for refurbishment on an instalment basis, starting in FY 1995/96.¹⁶⁶ There is no indication that the costs of refurbishment will require a more sustained level of growth in the defence budget.

Moreover, even if pressures were to build up for increased military expenditure, the government's freedom of action has been somewhat compromised by the curtailment of US military assistance over human rights issues. Australia has offered to provide additional training to Indonesia's armed forces and is exploring the possibility of joint ventures to produce armaments and equip-

¹⁵⁸ See, for example, Acharya, A., 'Why the rush in arms upgrading in Southeast Asia?', *Asian Defence Journal*, vol. 4 (1994), pp. 27–30.

¹⁵⁹ Mak, J. N., 'Trust and confidence needed', *Asia-Pacific Defence Reporter*, 1995 annual reference edition, vol. 21, no. 6/7 (Dec. 1994–Jan. 1995), pp. 22–24.

¹⁶⁰ 'One on one, Lt-Gen. Herman Mantiri', *Defense News*, vol. 9, no. 43 (31 Oct.–6 Nov. 1994), p. 30.

¹⁶¹ 'Intelligence, under budget', *Far Eastern Economic Review*, 9 June 1994, p. 12.

¹⁶² Information supplied by the Embassy of the Republic of Indonesia, Stockholm, 22 Nov. 1994.

¹⁶³ McBeth, J., 'Hidden currents', *Far Eastern Economic Review*, 18 Aug. 1994, pp. 27–28.

¹⁶⁴ McBeth (note 163), pp. 27–28.

¹⁶⁵ McBeth, J., 'Techno-battles', *Far Eastern Economic Review*, 7 Apr. 1994, pp. 26–28.

¹⁶⁶ McBeth (note 165), pp. 26–28.

ment with Indonesia to help compensate for the US cuts.¹⁶⁷ This is not expected to alter the fundamental economic and political conditions underlying defence spending levels.

*Malaysia*¹⁶⁸

Malaysian military spending is slated to increase markedly by the end of the decade. According to one source, it is expected to grow from current levels of about 3.1 per cent of GDP to about 5 or 6 per cent by the late 1990s.¹⁶⁹ The Defence Minister has stated that defence spending over the next few years will not exceed 4 per cent of GNP and that any increase will not be at the expense of the country's other priorities.¹⁷⁰ Whatever the precise figure proves to be, it is clear that growth in military expenditure continues unabated. At 6185 billion ringgits, the request for FY 1994/95 is 60 per cent higher than the previous year's budget.¹⁷¹ Moreover, defence and internal security received the biggest increase in the 1991–95 Sixth Malaysia Plan, rising from 7.2 per cent of the total allocations to 15.3 per cent, or 10.6 billion ringgits (\$4.2 billion) over the period of the Plan.¹⁷² The Defence Minister argues that these increases are required because the armed forces need to replace obsolete equipment if they are to meet the new security challenges posed by the need to control the country's very large Exclusive Economic Zone.¹⁷³

The major beneficiaries are the navy and the air force. Equipment purchases for these two services reflect a clear government priority to enhancing force-projection capabilities and enabling Malaysia to sustain military operations in distant areas. The budget increases for the navy in the 1991–95 Plan will enable the navy to double its present fleet size by adding up to 54 new vessels. These will include offshore patrol vessels (OPVs), landing ships, amphibious assault hovercraft, support ships and other vessels.¹⁷⁴ Under the navy's 20-year Expansion and Modernization Programme (FY 1990–2010), two Yarrow-built Lekiu Class frigates will be delivered in 1996 at a cost of \$600 million. Mine-hunters and more offshore patrol boats will also be acquired.¹⁷⁵ To enhance its ability to patrol the Exclusive Economic Zone, the navy has an immediate requirement to replace its current fleet of some 20 OPVs, which are more than 25 years old. At a cost of \$1.2 billion, the OPV replacement programme is the largest single fleet modernization project in the country's history.¹⁷⁶ Malaysia also reportedly intends to acquire conventional submarines. However, no

¹⁶⁷ 'Regional briefing: Indonesia', *Far Eastern Economic Review*, 11 Aug. 1994, p. 13.

¹⁶⁸ See also Gill (note 157), pp. 557–59.

¹⁶⁹ Opall, B., 'Malaysian Air Force shifts priorities to pilots', *Defense News*, 24–30 Oct. 1994, p. 20.

¹⁷⁰ Interview with the Malaysian Defence Minister, *Asian Defence Journal*, vol. 6 (1994), pp. 22–29.

¹⁷¹ 'World briefs and trends', *Defense and Economy World Report*, Feb. 1994, p. 1032.

¹⁷² Young, P. L., 'Looking outward, Southeast Asian Air Forces gear up for external threats', *Armed Forces Journal International*, Feb. 1994, pp. 26–28.

¹⁷³ 'Najib speaks out: views from Malaysia', *Asian Defence Journal*, vol. 6 (1994), pp. 22–29.

¹⁷⁴ 'MAF: vision of a force', *Asian Defence Journal*, vol. 6 (1994), pp. 10–15.

¹⁷⁵ 'MAF: vision of a force' (note 174), pp. 10–15.

¹⁷⁶ 'MAF: vision of a force' (note 174), pp. 10–15.

funds will be available to develop a sub-surface capability until the Seventh Malaysia Plan for 1996–2000.¹⁷⁷

The air force has continued to procure advanced fighter aircraft and contracts have been signed for the purchase of eight F/A-18D Hornet strike aircraft and 18 Russian MiG-29 air superiority fighters. The first MiG-29 delivery is expected in April 1995 and the F/A-18Ds should begin to enter service in 1997. The MiG contract, reportedly worth \$550 million, includes cash, barter and offset components. Under the barter agreement, Malaysia will supply Russia with \$95 million worth of refined palm oil over a five-year period.¹⁷⁸ The cost of integrating the Russian aircraft into what has hitherto been a Western-supplied air force remains to be seen, but concerns have been raised about the potential drain on the defence budget should maintenance costs be higher than anticipated.¹⁷⁹ The air force will also acquire 28 Hawk aircraft by the end of 1995 as part of the 1988 UK–Malaysia arms deal, which included \$370 million in controversial aid for the Pergau Dam project.¹⁸⁰ Ten Hawk trainers have already been delivered.

To calm the concerns of army leaders who have felt left out in the current round of purchases for the navy and air force, the Defence Minister has given assurances that their needs will be given equal emphasis in the next stage of modernization.¹⁸¹ Indeed, the Malaysian army has reportedly laid claim to nearly half the country's military modernization budget over the next five years.¹⁸² Army modernization requirements include attack helicopters, airborne and ground transports, main battle tanks and other systems needed for the development of Malaysia's new rapid deployment force.

The Philippines

Of all the ASEAN nations, the Philippines has been the most restricted in achieving military modernization because of budget constraints. A 15-year modernization programme of \$11.7 billion, announced in 1989, has been stretched out over 22 years and the military is reportedly considering selling some of its land holdings to offset budget shortfalls.¹⁸³ Although virtually every type of military equipment in the Philippine armed forces needs replacing, funds are simply not available. Requirements for counter-insurgency operations within the country and a weak economy preclude major investments in modernization programmes for the foreseeable future.

¹⁷⁷ 'Intelligence, submarine fever', *Far Eastern Economic Review*, 17 Feb. 1994, p. 12.

¹⁷⁸ Karniol, R., 'Malaysia signs to buy 20 MiG-29 fighters', *Jane's Defence Weekly*, 18 June 1994, p. 14.

¹⁷⁹ Young (note 172), pp. 26–28.

¹⁸⁰ 'MAF: vision of a force' (note 174), pp. 10–15.

¹⁸¹ 'MAF: vision of a force' (note 174), pp. 10–15.

¹⁸² Denny, S. and Opall, B., 'Malaysia Army raids budget', *Defense News*, vol. 9, no. 40 (10–16 Oct. 1994), pp. 1, 36.

¹⁸³ Opall, B., 'Modernization effort fuels Pacific arms buys', *Defense News*, 24–30 Oct. 1994, pp. 10, 22.

Singapore

Singapore is the most easily able of all the ASEAN states to maintain high levels of military expenditure based on the firm foundation of consistently strong economic performance. The country's defence spending is pegged to an upper limit of 6 per cent of GDP. It has not reached this limit and has fallen consistently since 1985 to about 4.5 per cent, but will rise in cash terms as the economic boom continues. The FY 1994/95 defence budget is \$2.8 billion.¹⁸⁴

Because of its small size, weak strategic location and trade-dependent economy, Singapore's defence policy has always been based on maintaining a qualitative edge over its more populous neighbours. This is reflected in programmes to upgrade its air and naval forces with F-16 fighters and missile corvettes.¹⁸⁵ Plans to establish a submarine force based on second-hand German boats before the end of the century, together with the introduction of modern mine-hunting vessels and fast-attack craft, demonstrate Singapore's commitment to securing its vital sea links.¹⁸⁶

*Thailand*¹⁸⁷

Defence spending in Thailand increased from 81.5 billion baht in 1993 (\$3.2 billion) to 86.5 billion baht in 1994 (\$3.4 billion). Much of this expenditure is directed at the modernization of the navy and advanced aircraft purchases for the air force. The air force will acquire 14 F-16As and 4 F-16Bs in 1995, with further purchases of training aircraft and surveillance planes also expected.¹⁸⁸ Russian efforts to break into the Thai market with sales of advanced fighter aircraft have come to nought.

The navy has been the beneficiary of the greatest growth in resources over the last decade as its role has expanded from a traditional coastal patrol force to a fleet with blue-water operational aspirations. Personnel levels have risen from about 32 000 in 1980 to some 60 000 today.¹⁸⁹ By the end of the decade, the navy expects to take delivery of the region's first light aircraft-carrier, a fleet replenishment ship and two frigates from China to add to four already delivered. Five corvettes, a new naval dockyard, new patrol craft and amphibious landing craft will also be acquired.¹⁹⁰

Pending the delivery of the Spanish-built aircraft-carrier in 1997, which will be equipped with a ski-jump ramp capable of launching vertical/short take-off and landing (V/STOL) fighters, the navy will enhance its air combat capability with the introduction of 18 A-7E Corsair fighters in 1995.¹⁹¹ Talks are

¹⁸⁴ Huxley, T., 'Singapore forces shape up', *Jane's Defence Weekly*, 19 Nov. 1994, pp. 25-26.

¹⁸⁵ 'Interview with the Minister for Defence, Republic of Singapore', *Asian Defence Journal*, vol. 3 (1994), pp. 24-27.

¹⁸⁶ Grazebrook, A. W., 'More regional naval growth, Singapore', *Asia-Pacific Defence Reporter*, 1995 annual reference edition, vol. 21, no. 6/7 (Dec. 1994-Jan. 1995), pp. 12-17.

¹⁸⁷ See also Gill (note 157), pp. 557-59.

¹⁸⁸ 'The regional military balance', *Asian Defence Journal*, no. 1 (1994), pp. 14-23.

¹⁸⁹ 'The RTN's two-ocean ambition', *Jane's Defence Weekly*, 3 Dec. 1994, pp. 17-22.

¹⁹⁰ Karniol, R. and Lok, J. J., 'Thai Cabinet approves submarine acquisition', *Jane's Defence Weekly*, 14 Jan. 1995, p. 2.

¹⁹¹ 'The RTN's two-ocean ambition' (note 189), pp. 17-22.

under way with Spain to transfer up to 12 used AV-8A Harrier jump jets to Thailand, ostensibly for offshore rescue and counter-narcotics missions. US policy planners reportedly have no concerns that the transfer of these V/STOL aircraft might contribute to a regional arms race.¹⁹² A long-expected decision to seek an underwater capability to complete the balance of a true blue-water fleet has been taken with the approval of a \$800 million procurement programme for three advanced submarines.¹⁹³

VII. Conclusions

Military expenditure remains a highly sensitive topic of discussion in many countries. Although the continuing decline in global military expenditure, led by the USA and Russia, is encouraging, there is no room for complacency if wasteful and dangerous levels of military spending elsewhere are to be brought under firm control. The risk of war between the major powers has been considerably reduced since the end of the cold war but instability in much of the rest of the world is a dominant feature of the new geopolitical landscape. Poverty, inequality and ethnic discrimination continue to fuel internal conflicts, and challenges to state authorities from insurgent groups and separatist elements are likely to increase as the constraints provided by the cold war blocs diminish. Nor has the end of the cold war eliminated the traditional root causes of conflict between states. Geopolitical ambitions and the insecurity of national leaders still provide plentiful opportunities for states to have recourse to war to solve their disputes. Given these unstable conditions, many governments, both in the industrialized and in the developing countries, are under intense pressure to increase expenditure on the military. The maintenance or improvement of the declining trend in world military spending, at a time when the disruptions brought about by the end of the cold war have yet to run their course, will require adroit diplomacy and diligence on the part of those who wish to prevent a return to the debilitating arms races of the past. To sustain reductions in military spending worldwide, policy makers and citizens of democracies must have reliable information on military expenditure. Ultimately, a major constraint on those who would seek to increase military spending is credible and transparent data.

¹⁹² Opall, B., 'US backs Harrier sale to Thailand', *Defense News*, 24–30 Jan. 1994, pp. 4, 36.

¹⁹³ Karniol and Lok (note 190), p. 2.

Appendix 12A. Tables of world military expenditure

PAUL GEORGE, BENGT-GÖRAN BERGSTRAND and EVAMARIA LOOSE-WEINTRAUB

Sources and methods are explained in appendix 12B. Conventions used are explained at the end of table 12A.3.

Table 12A.1. World military expenditure, in current price figures, 1985–94

Figures are in local currency, current prices.

| | | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|-------------------------|---------------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|-----------|
| NATO¹ | | | | | | | | | | | |
| <i>North America</i> | | | | | | | | | | | |
| Canada | m. C. dollars | 10 332 | 10 970 | 11 715 | 12 336 | 12 854 | 13 473 | 12 830 | 13 111 | 13 293 | 12 966 |
| USA | m. dollars | 258 165 | 281 105 | 288 157 | 293 093 | 304 085 | 306 170 | 280 292 | 305 141 | 297 637 | 286 366 |
| <i>Europe</i> | | | | | | | | | | | |
| Belgium | m. francs | 144 183 | 152 079 | 155 422 | 150 647 | 152 917 | 155 205 | 157 919 | 132 819 | 129 602 | 132 088 |
| Denmark | m. kroner | 13 344 | 13 333 | 14 647 | 15 620 | 15 963 | 16 399 | 17 091 | 17 129 | 17 390 | 17 431 |
| France | m. francs | 186 715 | 197 080 | 209 525 | 215 073 | 225 331 | 231 911 | 240 936 | 238 874 | 241 199 | 246 403 |
| Germany ² | m. D. marks | 58 650 | 60 130 | 61 354 | 61 638 | 63 178 | 68 376 | 65 579 | 65 536 | 60 596 | 58 320 |
| Greece | m. drachmas | 321 981 | 338 465 | 393 052 | 471 820 | 503 032 | 612 344 | 693 846 | 835 458 | 932 995 | 1 052 760 |
| Italy | b. lire | 17 767 | 19 421 | 22 872 | 25 539 | 27 342 | 28 007 | 30 191 | 30 813 | 32 364 | 34 179 |
| Luxembourg | m. francs | 2 265 | 2 390 | 2 730 | 3 163 | 2 995 | 3 233 | 3 681 | 3 963 | 3 740 | 4 135 |
| Netherlands | m. guilders | 12 901 | 13 110 | 13 254 | 13 300 | 13 571 | 13 513 | 13 548 | 13 900 | 13 103 | 12 904 |
| Norway | m. kroner | 15 446 | 16 033 | 18 551 | 18 865 | 20 248 | 21 251 | 21 313 | 23 638 | 22 929 | 24 165 |
| Portugal | m. escudos | 111 375 | 139 972 | 159 288 | 194 036 | 229 344 | 267 299 | 305 643 | 341 904 | 352 504 | 378 722 |
| Spain | m. pesetas | 674 883 | 715 306 | 852 767 | 835 353 | 923 375 | 922 808 | 947 173 | 927 852 | 1 054 902 | 1 020 642 |
| Turkey ³ | b. lira | 1 235 | 1 868 | 2 477 | 3 789 | 7 158 | 13 866 | 23 657 | 42 320 | 77 717 | 146 638 |
| UK | m. pounds | 18 301 | 18 639 | 19 269 | 19 290 | 20 868 | 22 287 | 24 380 | 22 850 | 22 686 | 22 439 |

Other Europe

| | | | | | | | | | | | |
|-----------------------------|---------------|----------|----------|----------|----------|--------|--------|--------|----------|----------|----------|
| Albania | m. leks | 953 | 978 | 1 011 | 955 | 965 | 990 | .. | .. | .. | .. |
| Austria | m. schillings | 16 786 | 17 940 | 16 972 | 16 597 | 17 849 | 17 537 | 18 208 | 18 419 | 19 019 | 19 744 |
| Bulgaria | m. leva | 1 010 | [1 203] | [1 396] | 1 405 | 1 682 | 1 658 | 3 948 | 5 771 | 8 655 | 12 900 |
| Croatia ⁴ | m. kuna | | | | | | | 21.4 | 190.6 | 3 043.6 | 8 120 |
| Cyprus ⁵ | m. C. pounds | 17.6 | 13.0 | 15.4 | 19.1 | 18.9 | 22.9 | 28.6 | 28.7 | 116.6 | 205.0 |
| Czech Rep. ⁶ | m. korunas | | | | | | | | | 21 583 | 26 792 |
| Czechoslovakia ⁷ | m. korunas | 27 393 | 28 300 | 28 496 | 29 236 | 43 784 | 41 900 | 43 037 | 48 503 | | |
| Estonia ⁸ | m. kroons | | | | | | | .. | 61.1 | 166.1 | 264.8 |
| Finland | m. markkaa | 5 482 | 6 100 | 6 396 | 7 046 | 7 411 | 8 089 | 9 739 | 10 206 | 9 829 | 9 119 |
| German DR | m. marks | 18 069.1 | 19 430.1 | 20 897.4 | 21 647.0 | .. | | | | | |
| Hungary | b. forints | 37.7 | 25.8 | 28.4 | 38.0 | 47.7 | 52.3 | 54.0 | 60.7 | 64.5 | 66.4 |
| Ireland | m. Ir. pounds | 285 | 304 | 293 | 297 | 306 | 359 | 388 | 396 | 385 | 408 |
| Latvia ⁹ | m. lati | | | | | | | .. | [15 600] | 13 227 | 10 332 |
| Lithuania ¹⁰ | | | | | | | | 169.3 | 2 720.5 | 86 | .. |
| Malta | m. liri | 6.1 | 6.5 | 8.0 | 7.4 | 7.4 | 6.7 | 7.0 | 7.8 | [8.2] | [8.7] |
| Poland | b. zlotys | 315 | 381 | 468 | 742 | 2 214 | 14 945 | 18 300 | 24 374 | 39 803 | 49 133 |
| Romania | b. lei | [30.8] | [32.7] | [29.0] | [31.2] | [33.3] | 33.8 | 32.4 | 158.5 | 261.6 | 1 248.3 |
| Slovak Rep. ¹¹ | m. korunas | | | | | | | | | 8 629 | 9 614 |
| Slovenia ¹² | m. tolaras | | | | | | | 3 774 | 18 299 | 20 463 | .. |
| Sweden | m. kronor | 22 926 | 24 552 | 26 039 | 28 036 | 31 037 | 34 974 | 35 744 | 35 746 | 36 518 | 37 154 |
| Switzerland | m. francs | 5 043 | 4 776 | 4 716 | 4 956 | 5 431 | 6 052 | 6 202 | 6 249 | 5 753 | 6 036 |
| Yugoslavia ¹³ | m. new dinars | 46 | 97 | 197 | 568 | 6 113 | 5 180 | .. | .. | .. | .. |
| CIS¹⁴ | | | | | | | | | | | |
| Belarus ¹⁵ | | | | | | | | 15 070 | [17 084] | 177 303 | .. |
| Kazakhstan | b. roubles | | | | | | | .. | 23.7 | 140.8 | .. |
| Russia | tr. roubles | | | | | | | .. | .. | (10 090) | 40 626 |
| Ukraine ¹⁶ | | | | | | | | 7.0 | 112.3 | 547.1 | 21 597.0 |
| Middle East | | | | | | | | | | | |
| Bahrain | m. dinars | 56.6 | 60.4 | 60.3 | 70.4 | 73.6 | 81.2 | 89.2 | 94.6 | 94.4 | [95.8] |
| Egypt | m. Eg. pounds | 2 943 | 3 309 | 3 364 | 3 118 | 3 048 | 3 504 | 4 223 | .. | .. | .. |

| | | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|-----------------------|----------------|---------|---------|---------|---------|---------|---------|----------|----------|----------|-----------|
| Iran ¹⁷ | b. rials | (455) | (486) | (473) | (524) | (624) | (727) | (861) | (952) | (1 601) | (2 089) |
| Iraq | m. dinars | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Israel | m. new shekels | 4 939 | 7 523 | 8 379 | 9 121 | 10 566 | 12 940 | [14 778] | 16 619 | 17 539 | [18 625] |
| Jordan | m. dinars | 189.0 | 209.0 | 209.0 | 209.9 | 210.0 | 205.0 | 282.2 | 238.8 | .. | .. |
| Kuwait ¹⁸ | m. dinars | 415 | 377 | 373 | 476 | 610 | 2 585 | 3 674 | 1 852 | .. | .. |
| Lebanon ¹⁹ | b. pounds | .. | .. | .. | .. | .. | .. | .. | 401 | 523 | 540 |
| Oman | m. riyals | 744.9 | 665.4 | 583.6 | 519.0 | 571.9 | 656.2 | 557.4 | 679.5 | 650.1 | .. |
| Saudi Arabia | m. riyals | 71 992 | 62 418 | 60 726 | 52 150 | 48 945 | 50 000 | 100 000 | 54 300 | 61 636 | [61 944] |
| Syria | m. pounds | 13 000 | 14 440 | 14 327 | 14 612 | 16 654 | 18 429 | 32 483 | 33 412 | [36 231] | [36 946] |
| United Arab Emirates | m. dirhams | 7 500 | 6 900 | 5 827 | 5 827 | 5 827 | (5 827) | (5 827) | (5 827) | (5 827) | .. |
| Yemen ²⁰ | m. rials | 2 616 | 2 808 | 3 124 | 5 533 | 6 030 | 10 382 | 13 227 | 16 812 | .. | .. |
| South Asia | | | | | | | | | | | |
| Bangladesh | m. taka | 5 790 | 7 495 | 9 080 | 9 290 | 10 750 | 11 450 | 11 965 | 13 980 | 16 095 | 17 290 |
| India | b. rupees | 76.3 | 98.2 | 115.2 | 129.0 | 140.4 | 150.7 | 160.3 | 172.5 | 205.2 | 226.3 |
| Nepal | m. rupees | 557 | 659 | 739 | 831 | 985 | 1 285 | 1 577 | .. | .. | .. |
| Pakistan | m. rupees | 33 736 | 38 471 | 43 315 | 46 808 | 50 261 | 57 898 | 67 276 | 76 554 | 92 010 | [107 134] |
| Sri Lanka | m. rupees | (4 614) | (4 351) | (6 001) | (4 732) | (4 573) | (6 736) | (10 317) | (10 148) | .. | .. |
| Far East | | | | | | | | | | | |
| Brunei ²¹ | m. B. dollars | 223.9 | 239.9 | 219.5 | 358.6 | 362.8 | 419.4 | .. | .. | .. | .. |
| China ²² | b. yuan | 19.2 | 20.1 | 21.0 | 21.8 | 25.1 | 29.0 | 33.0 | 37.8 | 42.6 | 52.4 |
| Indonesia | b. new rupiahs | (2 196) | (1 963) | (1 852) | (1 913) | (2 086) | (2 487) | (2 768) | (3 380) | (4 040) | (4 581) |
| Japan | b. yen | 3 086.5 | 3 291.9 | 3 473.9 | 3 654.6 | 3 864.9 | 4 099.4 | 4 329.3 | 4 518.0 | 4 546.3 | 4 648.3 |
| Korea, North | m. won | 3 935 | 3 975 | 3 971 | 3 863 | 4 060 | 4 314 | 4 466 | 4 582 | 4 692 | 4 800 |
| Korea, South | b. won | 3 957 | 4 372 | 4 628 | 5 268 | 5 921 | 6 665 | 7 892 | 8 709 | 9 040 | 10 390 |
| Malaysia | m. ringgits | 2 700 | 4 075 | 3 611 | 2 241 | 2 761 | 3 043 | 4 323 | 4 500 | 4 951 | 5 367 |
| Mongolia | m. tugriks | 764 | 790 | 793 | 900 | 850 | 592 | [888] | 1 184 | 2 493 | 7 214 |
| Myanmar ²³ | m. kyats | 1 668 | 1 700 | 1 355 | 1 632 | 3 689 | 5 160 | 5 924 | 8 366 | [11 688] | [15 640] |
| Philippines | m. pesos | 7 610 | 11 587 | 12 549 | 16 788 | 20 580 | 23 321 | 26 010 | 26 321 | 28 248 | [30 367] |

| | | | | | | | | | | | |
|----------------------|----------------|--------|----------|--------|--------|---------|---------|---------|----------|-----------|----------|
| Singapore | m. S. dollars | 2 309 | 2 224 | 2 216 | 2 427 | 2 751 | 3 266 | 3 495 | 3 799 | [4 083] | [4 437] |
| Taiwan | b. T. dollars | 152 | 158 | 155 | 174 | 199 | 219 | 233 | 248 | [258] | [276] |
| Thailand | m. baht | 43 363 | 42 147 | 42 812 | 44 831 | 48 846 | 55 502 | 64 961 | 74 625 | 81 500 | [86 461] |
| Viet Nam | b. dong | .. | .. | 103 | 792 | 2 047 | 3 319 | 4 292 | [3 730] | 3 168 | 4 730 |
| Oceania | | | | | | | | | | | |
| Australia | m. A. dollars | 6 269 | 6 862 | 7 138 | 7 197 | 7 540 | 8 180 | 8 611 | 8 820 | 9 048 | 9 279 |
| Fiji | m. F. dollars | 16.2 | 16.5 | 31.3 | 35.3 | 43.1 | 45.2 | 47.9 | 45.9 | 49.4 | 40.8 |
| New Zealand | m. NZ. dollars | 833 | 1 023 | 1 173 | 1 336 | [1 341] | [1 300] | 1 210 | 1 097 | 1 102 | 1 118 |
| Papua New Guinea | m. kina | 34.3 | 36.4 | 38.5 | 40.1 | 45.6 | 65.6 | 50.1 | 56.5 | 54.4 | [57.1] |
| Africa | | | | | | | | | | | |
| Algeria | m. dinars | 4 793 | 5 300 | 5 805 | 6 084 | 6 500 | [8 470] | 10 439 | [19 140] | 29 810 | 46 800 |
| Angola | m. kwanzas | 34 306 | 32 629 | 36 585 | 43 961 | 58 267 | 52 391 | .. | .. | 3 060 000 | .. |
| Benin | m. francs | 8 900 | 9 100 | 10 700 | 11 000 | 9 100 | 8 935 | [8 018] | [7 100] | [7 610] | [7 910] |
| Botswana | m. pulas | 40 | 65 | 124 | 171 | 207 | 291 | 348 | [357] | 365 | [384] |
| Burkina Faso | m. francs | 11 425 | 13 658 | 14 385 | 15 463 | 20 173 | 18 778 | .. | .. | .. | 17 372 |
| Burundi | m. francs | 4 200 | 4 780 | 3 910 | .. | .. | .. | .. | .. | .. | .. |
| Cameroon | m. francs | 47 452 | 50 339 | 48 165 | 45 118 | 48 750 | 49 674 | 47 597 | 49 550 | 50 810 | [51 559] |
| Cape Verde | m. escudos | 311 | 357 | 360 | 366 | .. | .. | .. | 215 | .. | .. |
| Central African Rep. | m. francs | 6 189 | 5 892 | 5 610 | .. | .. | .. | .. | .. | .. | .. |
| Chad | m. francs | 17 000 | 16 850 | 20 307 | .. | .. | .. | .. | .. | .. | .. |
| Congo | m. francs | 25 000 | 25 625 | 30 208 | .. | .. | .. | .. | .. | .. | .. |
| Côte d'Ivoire | m. francs | 35 353 | [36 127] | 36 900 | 38 155 | 41 368 | 41 895 | 40 671 | 41 503 | .. | .. |
| Djibouti | m. francs | 4 751 | 4 632 | .. | .. | .. | .. | .. | .. | .. | .. |
| Ethiopia | m. birr | 928 | 969 | 1 174 | 1 506 | 1 769 | 1 921 | 1 231 | 684 | 681 | .. |
| Gabon | m. francs | 42 900 | 47 100 | 43 407 | .. | .. | .. | .. | .. | .. | .. |
| Ghana | m. cedis | 3 432 | 4 605 | 6 659 | 4 603 | 6 106 | 9 006 | 15 230 | 23 242 | 39 481 | .. |
| Guinea-Bissau | m. pesos | 738 | 1 251 | 2 168 | .. | 8 027 | .. | .. | .. | .. | .. |
| Kenya | m. shillings | 2 396 | 2 941 | 4 111 | 4 454 | 4 703 | 5 648 | 5 279 | 5 027 | [7 888] | [9 946] |
| Lesotho | th. maloti | 23 783 | 30 539 | 36 836 | 38 523 | 59 321 | 62 505 | 62 393 | 99 243 | [103 375] | [92 675] |

| | | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|---------------------|---------------|--------|--------|--------|--------|---------|---------|---------|---------|----------|----------|
| Liberia | m. dollars | 24.4 | 23.0 | 25.8 | 26.5 | .. | 56.7 | 20.5 | 21.6 | 35.4 | 41.3 |
| Libya | m. dinars | 1 096 | 819 | 549 | 582 | .. | .. | .. | .. | .. | .. |
| Madagascar | m. francs | 33.5 | 39.8 | 39.2 | .. | 51.3 | 53.5 | 55.8 | [60.7] | 65.6 | .. |
| Malawi | m. kwachas | 34.1 | 46.1 | 47.8 | 51.7 | 62.9 | 66.4 | 66.5 | 67.8 | 69.6 | .. |
| Mali | m. francs | 13 | 13 | 13 | 14 | 15 | 14 | .. | 17 | .. | .. |
| Mauritania | m. ouguiyas | .. | .. | .. | .. | 3 230 | 3 240 | 3 230 | 3 430 | 3 640 | .. |
| Mauritius | m. rupees | 36 | 39 | 47 | 63 | 96 | 136 | 164 | 186 | 179 | .. |
| Morocco | m. dirhams | 6 453 | 6 467 | 6 687 | 6 425 | 7 193 | 7 873 | 8 832 | 10 075 | 10 093 | [10 607] |
| Mozambique | m. meticaïs | 11 031 | 12 436 | 41 700 | 58 200 | 102 400 | 136 000 | 178 000 | 259 300 | 416 800 | .. |
| Namibia | m. rand | 126 | 161 | 190 | 219 | 151 | 124 | 169 | 183 | 181 | .. |
| Niger | m. francs | 4 900 | 5 000 | 5 300 | 5 700 | 5 749 | 12 315 | .. | .. | .. | .. |
| Nigeria | m. nairas | 1 068 | 878 | 749 | 1 720 | 2 220 | 2 286 | 2 400 | 3 990 | 4 500 | .. |
| Rwanda | m. francs | 2 760 | 3 050 | 2 979 | 2 800 | 2 809 | 7 964 | 13 184 | .. | 16 582 | .. |
| Senegal | m. francs | 28 235 | 28 490 | 28 784 | 28 967 | 30 293 | 30 685 | 29 480 | .. | .. | .. |
| Seychelles | m. rupees | .. | .. | .. | .. | 74 | 79 | 88 | 76 | .. | .. |
| Sierra Leone | m. leones | 29 | 65 | (156) | 293 | 861 | 1 876 | 6 846 | 13 316 | [16 429] | [20 269] |
| Somalia | m. shillings | 1 751 | 2 511 | 3 000 | 7 918 | 4 200 | .. | .. | .. | .. | .. |
| South Africa | m. rand | 3 845 | 4 356 | 6 366 | 8 265 | 9 626 | 10 108 | 9 672 | 9 748 | 9 472 | 10 295 |
| Sudan | m. pounds | 473 | 650 | 850 | .. | .. | .. | .. | .. | .. | .. |
| Swaziland | m. emalangeni | 13.7 | 15.8 | 16.0 | 18.7 | 21.6 | 34.7 | 38.7 | [43.6] | [54.4] | 75.3 |
| Tanzania | m. shillings | 3 202 | 4 319 | 6 090 | 7 418 | 8 855 | 10 823 | 12 196 | .. | .. | .. |
| Togo | m. francs | 8 632 | 9 200 | 13 047 | 12 834 | 13 354 | 13 817 | 12 900 | 11 825 | .. | .. |
| Tunisia | m. dinars | 180 | 164 | 161 | 200 | 222 | 218 | 224 | 237 | .. | .. |
| Uganda | m. shillings | 722 | 1 836 | 5 612 | 14 597 | 29 760 | 47 926 | 60 167 | 61 711 | 64 000 | .. |
| Zaire ²⁴ | m. old zaïres | 1 672 | 2 489 | 7 330 | 15 010 | 22 895 | .. | .. | .. | 633 563 | .. |
| Zambia | m. kwachas | 167 | 480 | 637 | 717 | 896 | 2 156 | 13 785 | .. | 18 798 | 22 907 |
| Zimbabwe | m. Z. dollars | 449 | 568 | 652 | 704 | 800 | 950 | 1 116 | 1 269 | 1 437 | 1 616 |

Caribbean

| | | | | | | | | | | | |
|---------------------|-----------------|-------|-------|-------|-------|-------|-------|-------|----|----|----|
| Barbados | m. Bar. dollars | 23.6 | 17.9 | 15.8 | 18.0 | 20.7 | .. | .. | .. | .. | .. |
| Cuba | m. pesos | 1 335 | 1 307 | 1 300 | 1 274 | 1 377 | 1 380 | .. | .. | .. | .. |
| Dominican Rep. | m. pesos | 158.7 | 199.5 | 190.6 | 241.6 | 283.5 | 340.5 | 429.0 | .. | .. | .. |
| Haiti | m. gourdes | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Jamaica | m. dollars | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Trinidad and Tobago | m. pesos | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |

Central America

| | | | | | | | | | | | |
|----------------------|------------------|-------|-------|-------|---------|-------|-------|---------|--------|-----------|-----------|
| Belize | th. B. dollars | 6 526 | .. | .. | [7 836] | 8 711 | 9 538 | 9 466 | 10 584 | 11 050 | [11 496] |
| Costa Rica | b. colones | [1.1] | [1.3] | [1.5] | 1.5 | 1.7 | 2.0 | 2.3 | 3.0 | 3.9 | .. |
| El Salvador | m. colones | 543.9 | 709.4 | 768.4 | 777.3 | 925.5 | 974.9 | 1 010.6 | 974.7 | [1 156.0] | [1 283.2] |
| Guatemala | m. quetzales | 196.9 | 219.0 | 351.8 | 387.1 | 416.2 | 502.0 | 552.5 | .. | .. | .. |
| Honduras | m. lempiras | 150.0 | 137.5 | 141.3 | 150.0 | 247.0 | 276.0 | .. | .. | 290.0 | .. |
| Mexico | m. new pesos | 297 | 465 | 1 043 | 2 077 | 2 642 | 2 815 | [2 958] | 3 100 | [3 401] | [3 639] |
| Nicaragua | m. gold córdobas | .. | .. | .. | .. | .. | 32.2 | 211.1 | 211.1 | 224.0 | .. |
| Panama ²⁵ | m. balboas | 92.0 | 105.0 | 103.8 | 102.9 | 101.9 | 73.1 | 78.6 | 79.3 | .. | .. |

South America

| | | | | | | | | | | | |
|-------------------------|---------------|--------|--------|---------|---------|---------|---------|-----------|-----------|-----------|---------|
| Argentina ²⁶ | | 491 | 952 | 2 459 | 10 307 | 304 | 5 237 | [14 125] | 1 739 | [1 825] | .. |
| Bolivia | m. bolivianos | .. | 146.6 | 173.9 | 179.5 | 224.5 | 356.7 | 421.9 | 435.9 | 503.0 | [530.8] |
| Brazil ²⁷ | | 3.9 | 12.0 | 41.6 | 428.5 | 6 786.2 | 142.2 | 447.7 | 4 881.9 | .. | .. |
| Chile ²⁸ | b. pesos | 74.8 | 89.7 | 100.3 | 126.4 | 137.5 | 165.2 | 203.6 | 249.4 | 291.2 | 334.7 |
| Colombia | m. pesos | 58 206 | 79 058 | 100 452 | 155 134 | 206 518 | 289 454 | 344 994 | 513 961 | 1 035 025 | .. |
| Ecuador | m. sucres | 19 743 | 25 598 | 35 442 | 61 275 | 102 000 | 156 000 | [260 000] | [419 825] | .. | .. |
| Paraguay | m. guaranies | 15 937 | 20 097 | 26 885 | 32 643 | 59 654 | 81 376 | 141 643 | 159 110 | .. | .. |
| Peru ²⁹ | | 6 501 | 10 720 | 21 702 | 90 500 | 2 | 130 | 479 | 1 001 | .. | .. |
| Uruguay | m. new pesos | 13 | 23 | 31 | 58 | 114 | 233 | 363 | .. | .. | .. |
| Venezuela | m. bolivares | 4 622 | 6 099 | 9 005 | 12 934 | 14 110 | 24 350 | 46 896 | 46 250 | .. | .. |

| | | | | | | | | | | |
|-----------------------------|-------------------|----------|----------|----------|---------|----------|----------|---------|----------|----------|
| Cyprus | 45 | 33 | 38 | 45 | 43 | 50 | 60 | 56 | 217 | .. |
| Czech Rep. ³³ | <i>m. korunas</i> | | | | | | | | [10 263] | [11 597] |
| Czechoslovakia ⁷ | 1 715 | 1 762 | 1 774 | 1 816 | 2 683 | 2 334 | 1 520 | 1 547 | | |
| Finland | 1 826 | 1 975 | 1 989 | 2 085 | 2 058 | 2 116 | 2 447 | 2 499 | 2 356 | 2 167 |
| German DR | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Hungary | 1 193 | 775 | 784 | 907 | 974 | 827 | 637 | 582 | 505 | 442 |
| Ireland | 556 | 571 | 533 | 530 | 525 | 596 | 623 | 617 | 592 | 613 |
| Malta | 21 | 22 | 26 | 24 | 24 | 21 | 22 | 23 | [24] | [24] |
| Poland | 1 746 | 1 824 | 1 758 | 1 776 | 1 523 | 1 573 | 1 090 | 999 | 1 192 | 1 105 |
| Romania | [1 531] | [1 589] | [1 395] | [1 461] | [1 544] | 1 507 | 526 | 828 | 385 | 566 |
| Slovak Rep. ³³ | <i>m. korunas</i> | | | | | | | | [3 853] | .. |
| Slovenia ³² | <i>m. tolar</i> | | | | | | [1 755] | [2 770] | [1 674] | .. |
| Sweden | 5 234 | 5 387 | 5 499 | 5 573 | 5 762 | 5 909 | 5 540 | 5 392 | 5 273 | 5 260 |
| Switzerland | 7 934 | 7 455 | 7 255 | 7 484 | 7 950 | 8 407 | 8 143 | 7 885 | 7 023 | 7 296 |
| Yugoslavia ¹³ | 4 064 | 4 285 | 4 351 | 4 562 | 3 699 | 458 | .. | .. | .. | .. |
| Middle East | | | | | | | | | | |
| Bahrain | 148 | 162 | 165 | 192 | 215 | 216 | 235 | 250 | 250 | [252] |
| Egypt | 3 633 | 3 296 | 2 803 | 2 208 | 1 780 | 1 752 | 1 764 | .. | .. | .. |
| Iran ¹⁷ | (17 212) | (15 556) | (11 776) | (10 131) | (9 865) | (10 673) | (10 793) | (9 709) | (13 571) | (13 842) |
| Iraq | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Israel | 7 123 | 7 324 | 6 808 | 6 374 | 6 141 | 6 418 | [6 159] | 6 187 | 5 886 | [5 650] |
| Jordan | 443 | 490 | 491 | 462 | 368 | 309 | 393 | 320 | .. | .. |
| Kuwait ³⁴ | 1 506 | 1 353 | 1 331 | 1 674 | 2 077 | .. | .. | .. | .. | .. |
| Lebanon ¹⁹ | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Oman | 1 943 | 2 213 | 1 743 | 1 685 | 1 736 | 1 707 | 1 407 | 1 658 | 1 473 | .. |
| Saudi Arabia | 19 071 | 17 077 | 16 873 | 14 356 | 13 336 | 13 351 | 25 455 | 13 835 | 15 541 | [15 619] |
| Syria | 4 506 | 3 675 | 2 283 | 1 731 | 1 770 | 1 642 | 2 687 | 2 525 | [2 449] | [2 302] |
| United Arab Emirates | 2 303 | 2 088 | 1 662 | 1 662 | 1 653 | (1 587) | (1 512) | (1 433) | (1 352) | .. |
| Yemen ²⁰ | .. | .. | .. | .. | .. | 925 | 589 | 234 | .. | .. |

| | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| South Asia | | | | | | | | | | |
| Bangladesh | 265 | 309 | 342 | 320 | 336 | 331 | 323 | 362 | 416 | 434 |
| India | 6 528 | 7 727 | 8 331 | 8 530 | 8 734 | 8 607 | 8 038 | 7 742 | 8 658 | 8 680 |
| Nepal | 32 | 32 | 32 | 33 | 36 | 43 | 46 | .. | .. | .. |
| Pakistan | 2 156 | 2 376 | 2 555 | 2 537 | 2 525 | 2 667 | 2 772 | 2 881 | 3 322 | [3 444] |
| Sri Lanka | (207) | (181) | (232) | (160) | (139) | (168) | (230) | (203) | .. | .. |
| Far East | | | | | | | | | | |
| Brunei ²¹ | 134 | 140 | 127 | 205 | 204 | 231 | .. | .. | .. | .. |
| China ²² | 6 641 | 6 497 | 6 243 | 5 375 | 5 332 | 6 069 | 6 571 | 6 924 | 6 668 | 6 648 |
| Indonesia | (1 781) | (1 505) | (1 300) | (1 243) | (1 273) | (1 350) | (1 373) | (1 560) | (1 699) | (1 788) |
| Japan | 22 799 | 24 161 | 25 470 | 26 597 | 27 519 | 28 313 | 28 945 | 29 690 | 29 511 | 29 877 |
| Korea, North | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Korea, South | 7 280 | 7 829 | 8 043 | 8 546 | 9 083 | 9 417 | 10 202 | 10 599 | 10 495 | 11 300 |
| Malaysia | 1 091 | 1 634 | 1 445 | 874 | 1 048 | 1 125 | 1 531 | 1 522 | 1 620 | 1 688 |
| Mongolia | .. | .. | .. | .. | .. | 15 | [21] | 8 | 6 | 8 |
| Myanmar ²³ | 623 | 580 | 371 | 385 | 685 | 814 | 706 | 818 | [867] | [919] |
| Philippines | 456 | 689 | 719 | 884 | 966 | 959 | 901 | 837 | 835 | [819] |
| Singapore | 1 358 | 1 325 | 1 315 | 1 418 | 1 569 | 1 802 | 1 865 | 1 981 | [2 080] | [2 184] |
| Taiwan | 6 250 | 6 451 | 6 279 | 6 984 | 7 661 | 8 080 | 8 304 | 8 459 | [8 487] | [8 869] |
| Thailand | 2 049 | 1 956 | 1 939 | 1 956 | 2 022 | 2 169 | 2 402 | 2 649 | 2 794 | [2 892] |
| Viet Nam ³⁵ | .. | .. | 172 | 325 | 482 | 781 | 552 | [408] | 301 | .. |
| Oceania | | | | | | | | | | |
| Australia | 6 607 | 6 630 | 6 359 | 5 975 | 5 823 | 5 888 | 6 006 | 6 093 | 6 139 | 6 189 |
| Fiji | 15 | 15 | 27 | 27 | 32 | 31 | 30 | 28 | 28 | 23 |
| New Zealand | 777 | 843 | 835 | 894 | [849] | [776] | 704 | 632 | 627 | 627 |
| Papua New Guinea | 47 | 47 | 48 | 48 | 52 | 70 | 50 | 54 | 49 | [51] |

| | | | | | | | | | | |
|--------------------------|-----|-------|-----|-----|-----|-------|------|---------|-------|---------|
| Africa | | | | | | | | | | |
| Algeria | 871 | 859 | 874 | 866 | 846 | [945] | 925 | [1 288] | 1 665 | 2 155 |
| Angola | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Benin | .. | .. | .. | .. | .. | 33 | [28] | [24] | [25] | [25] |
| Botswana | 35 | 51 | 90 | 114 | 124 | 156 | 167 | [148] | 132 | [126] |
| Burkina Faso | 41 | 50 | 54 | 56 | 74 | 69 | .. | .. | .. | 55 |
| Burundi | 33 | 37 | 29 | .. | .. | .. | .. | .. | .. | .. |
| Cameroon | 215 | 212 | 179 | 178 | 182 | 182 | 172 | 176 | 175 | [173] |
| Cape Verde | 6 | 6 | 6 | 6 | .. | .. | .. | 3 | .. | .. |
| Central African Republic | 21 | 19 | 20 | .. | .. | .. | .. | .. | .. | .. |
| Chad | 56 | 64 | 82 | .. | .. | .. | .. | .. | .. | .. |
| Congo | 99 | 99 | 115 | .. | .. | .. | .. | .. | .. | .. |
| Côte d'Ivoire | 159 | [152] | 145 | 140 | 151 | 154 | 147 | 145 | .. | .. |
| Djibouti | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Ethiopia | 479 | 554 | 689 | 825 | 899 | 928 | 438 | 220 | 212 | .. |
| Gabon | 214 | 180 | 167 | .. | .. | .. | .. | .. | .. | .. |
| Ghana | 41 | 45 | 46 | 24 | 26 | 28 | 40 | 55 | 75 | .. |
| Guinea-Bissau | .. | .. | 4 | .. | 5 | .. | .. | .. | .. | .. |
| Kenya | 171 | 201 | 260 | 254 | 237 | 246 | 192 | 141 | [152] | [130] |
| Lesotho | 17 | 19 | 20 | 19 | 26 | 24 | 20 | 28 | [25] | [21] |
| Liberia | .. | .. | .. | .. | .. | 57 | 20 | 21 | 34 | .. |
| Libya | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Madagascar | 46 | 47 | 41 | .. | 38 | 36 | 34 | [33] | 32 | .. |
| Malawi | 30 | 36 | 29 | 24 | 26 | 24 | 22 | 18 | 14 | .. |
| Mali | .. | .. | .. | 53 | 54 | 52 | .. | 64 | .. | .. |
| Mauritania | .. | .. | .. | .. | 43 | 40 | 38 | 37 | 36 | .. |
| Mauritius | 3 | 4 | 4 | 5 | 7 | 9 | 10 | 11 | 10 | .. |
| Morocco | 987 | 909 | 916 | 859 | 933 | 955 | 992 | 1 070 | 1 020 | [1 019] |
| Mozambique | 118 | .. | 123 | 114 | 143 | 129 | 127 | 127 | 144 | .. |
| Namibia | 90 | 102 | 107 | 109 | 65 | 48 | 58 | 54 | 49 | .. |
| Niger | 15 | 16 | 19 | 20 | 21 | 45 | .. | .. | .. | .. |

| | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Nigeria | 390 | 304 | 232 | 346 | 297 | 284 | 264 | 304 | 218 | .. |
| Rwanda | 37 | 42 | 39 | 36 | 35 | 96 | 133 | .. | 136 | .. |
| Senegal | 104 | 99 | 105 | 107 | 112 | 113 | 110 | .. | .. | .. |
| Seychelles | .. | .. | .. | .. | 14 | 15 | 16 | 13 | .. | .. |
| Sierra Leone | 4 | 5 | (5) | 7 | 12 | 12 | 22 | 26 | [26] | [26] |
| Somalia ³⁶ | 44 | 47 | 44 | 63 | .. | .. | .. | .. | .. | .. |
| South Africa | 3 028 | 2 894 | 3 641 | 4 188 | 4 254 | 3 908 | 3 243 | 2 871 | 2 542 | 2 188 |
| Sudan | 715 | 789 | .. | .. | .. | .. | .. | .. | .. | .. |
| Swaziland | 9 | 9 | 8 | 9 | 9 | 13 | 14 | [14] | [15] | 18 |
| Tanzania | 56 | 57 | 62 | 57 | 54 | 55 | 51 | .. | .. | .. |
| Togo | 33 | 34 | 48 | 47 | 50 | 51 | 47 | 43 | .. | .. |
| Tunisia | 284 | 244 | 224 | 261 | 270 | 248 | 236 | 236 | .. | .. |
| Uganda | 84 | 82 | 83 | 73 | 92 | 112 | 110 | 74 | 72 | .. |
| Zaire ²⁴ | 47 | 43 | 68 | 77 | 58 | .. | .. | .. | .. | .. |
| Zambia | 96 | 182 | 169 | 122 | 67 | 74 | 247 | .. | 39 | 22 |
| Zimbabwe | 336 | 371 | 379 | 381 | 384 | 388 | 370 | 296 | 263 | 241 |
| Caribbean | | | | | | | | | | |
| Barbados | 14 | 11 | 9 | 10 | 11 | .. | .. | .. | .. | .. |
| Cuba | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Dominican Rep. | 79 | 91 | 75 | 66 | 53 | 40 | 33 | .. | .. | .. |
| Haiti | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Jamaica | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Trinidad and Tobago | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Central America | | | | | | | | | | |
| Belize | 4 | .. | .. | [4] | 4 | 5 | 4 | 5 | 5 | [5] |
| Costa Rica | [26] | [28] | [28] | 23 | 23 | 22 | 19 | 21 | 24 | .. |
| El Salvador | 195 | 193 | 167 | 141 | 143 | 121 | 110 | 95 | [95] | [95] |
| Guatemala | 118 | 96 | 137 | 136 | 131 | 112 | 92 | .. | .. | .. |

| | | | | | | | | | | |
|----------------------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|
| Honduras | 113 | 100 | 100 | 102 | 152 | 138 | .. | .. | 90 | .. |
| Mexico | 1 487 | 1 243 | 1 208 | 1 122 | 1 189 | 1 001 | [857] | 778 | [778] | [778] |
| Nicaragua | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Panama ²⁵ | 94 | 107 | 105 | 104 | 103 | 73 | 78 | 77 | .. | .. |
| South America | | | | | | | | | | |
| Argentina | 1 506 | 1 502 | 1 739 | 1 626 | 1 505 | 1 074 | [1 065] | 1 052 | [998] | .. |
| Bolivia | .. | 83 | 86 | 76 | 83 | 112 | 110 | 101 | 107 | [108] |
| Brazil ²⁷ | 1 466 | 1 863 | 1 961 | 2 580 | 2 945 | 2 031 | 1 279 | 1 162 | .. | .. |
| Chile ²⁸ | 598 | 600 | 557 | 610 | 571 | 541 | 547 | 580 | 604 | 616 |
| Colombia | 353 | 404 | 417 | 502 | 531 | 576 | 527 | 618 | 1 015 | .. |
| Ecuador | 169 | 178 | 191 | 208 | 197 | 203 | [228] | [238] | .. | .. |
| Paraguay | 45 | 43 | 47 | 46 | 67 | 66 | 93 | 90 | .. | .. |
| Peru ²⁹ | 2 327 | 2 157 | 2 350 | 1 279 | 826 | 691 | 499 | 603 | .. | .. |
| Uruguay | 183 | 196 | 165 | 191 | 207 | 199 | 153 | .. | .. | .. |
| Venezuela | 474 | 561 | 644 | 716 | 424 | 519 | 745 | 559 | .. | .. |

| | | | | | | | | | |
|---------------------------|-------|-------|-------|-------|-------|-------|--------|-------|-------|
| Finland | 1.7 | 1.7 | 1.7 | 1.6 | 1.5 | 1.6 | 2.0 | 2.1 | 2.1 |
| German DR | .. | .. | .. | .. | .. | | | | |
| Hungary | 3.6 | 2.4 | 2.3 | 2.6 | 2.8 | 2.5 | 2.3 | 2.2 | 1.9 |
| Ireland | 1.6 | 1.6 | 1.4 | 1.3 | 1.2 | 1.3 | 1.4 | 1.3 | 1.3 |
| Latvia ⁹ | | | | | | | | .. | .. |
| Lithuania ¹⁰ | | | | | | | | .. | .. |
| Malta | 1.3 | 1.3 | 1.5 | 1.2 | 1.1 | 0.9 | 0.9 | 0.9 | [0.9] |
| Poland | 3.0 | 2.9 | 2.8 | 2.5 | 1.9 | 2.5 | 2.2 | 2.1 | 2.5 |
| Romania | [3.8] | [3.9] | [3.4] | [3.6] | [4.2] | 3.9 | 1.5 | 2.6 | 1.4 |
| Slovak Rep. ¹¹ | | | | | | | | | .. |
| Slovenia ¹² | | | | | | | 1.1 | 1.9 | 1.1 |
| Sweden | 2.6 | 2.6 | 2.5 | 2.5 | 2.5 | 2.6 | 2.5 | 2.5 | 2.5 |
| Switzerland | 2.2 | 2.0 | 1.9 | 1.8 | 1.9 | 1.9 | 1.9 | 1.8 | 1.7 |
| Yugoslavia ¹³ | 4.0 | 4.3 | 3.9 | 3.7 | 2.2 | .. | .. | .. | .. |
| Middle East | | | | | | | | | |
| Bahrain | 4.1 | 5.0 | 5.1 | 5.6 | 5.5 | 5.5 | 6.0 | 6.2 | 5.9 |
| Egypt | 7.9 | 7.8 | 6.5 | 5.1 | 4.0 | 3.6 | 3.8 | .. | .. |
| Iran | (2.9) | (3.0) | (2.5) | (2.4) | (2.3) | (2.1) | (1.8) | (1.5) | (1.8) |
| Iraq | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Israel | 17.4 | 16.9 | 14.7 | 13.0 | 12.3 | 12.3 | [10.9] | 10.3 | 9.6 |
| Jordan | 9.6 | 9.9 | 9.7 | 9.5 | 9.0 | 7.8 | 10.2 | 7.4 | .. |
| Kuwait ¹⁸ | 6.4 | 7.2 | 6.0 | 8.2 | 8.5 | 48.7 | 117.4 | 33.6 | .. |
| Lebanon ¹⁹ | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Oman | 21.6 | 23.8 | 19.4 | 17.7 | 17.7 | 16.2 | 14.2 | 15.4 | 12.3 |
| Saudi Arabia | 22.9 | 23.0 | 22.0 | 18.3 | 15.7 | 12.8 | 23.2 | 11.9 | 12.7 |
| Syria | 15.6 | 14.4 | 11.2 | 7.9 | 8.0 | 6.9 | 10.3 | 9.0 | [7.6] |
| United Arab Emirates | 7.5 | 8.7 | 6.7 | 6.7 | 5.8 | (4.7) | (4.7) | (4.5) | (4.3) |
| Yemen ²⁰ | 8.4 | 7.3 | 7.2 | .. | .. | .. | 19.8 | 18.1 | .. |
| South Asia | | | | | | | | | |
| Bangladesh | 1.3 | 1.5 | 1.6 | 1.5 | 1.5 | 1.5 | 1.4 | 1.5 | .. |
| India | 3.0 | 3.4 | 3.6 | 3.4 | 3.2 | 2.9 | 2.7 | 2.5 | 2.7 |

| | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Nepal | 1.3 | 1.3 | 1.2 | 1.2 | 1.3 | 1.4 | 1.5 | .. | .. |
| Pakistan | 7.1 | 7.5 | 7.6 | 6.9 | 6.5 | 6.8 | 6.6 | 6.3 | 6.8 |
| Sri Lanka | (2.8) | (2.4) | (3.1) | (2.1) | (1.8) | (2.1) | (2.8) | (2.4) | .. |
| Far East | | | | | | | | | |
| Brunei ²¹ | 2.9 | 4.6 | 3.7 | 6.2 | 6.2 | 6.4 | .. | .. | .. |
| China ²² | 2.2 | 2.1 | 1.9 | 1.5 | 1.6 | 1.6 | 1.6 | 1.6 | 1.4 |
| Indonesia | (2.3) | (1.9) | (1.5) | (1.3) | (1.2) | (1.3) | (1.2) | (1.3) | (1.4) |
| Japan | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Korea, North | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Korea, South | 4.8 | 4.6 | 4.1 | 4.0 | 4.0 | 3.7 | 3.7 | 3.6 | 3.4 |
| Malaysia | 3.5 | 5.7 | 4.5 | 2.5 | 2.7 | [2.6] | 3.3 | 3.1 | 3.0 |
| Mongolia | .. | .. | .. | .. | .. | .. | [2.6] | 1.1 | 0.7 |
| Myanmar ²³ | 3.0 | 2.9 | 2.0 | 2.1 | 3.0 | 3.4 | 3.3 | 3.7 | [3.6] |
| Philippines | 1.3 | 1.9 | 1.8 | 2.1 | 2.2 | 2.2 | 2.1 | 2.0 | 1.9 |
| Singapore | 5.9 | 5.8 | 5.2 | 4.9 | 4.8 | 4.9 | 4.8 | 4.8 | [4.6] |
| Taiwan | 6.1 | 5.5 | 4.8 | 5.0 | 5.1 | 5.2 | 5.0 | 4.8 | [4.5] |
| Thailand | 4.3 | 3.8 | 3.4 | 3.0 | 2.8 | 2.7 | 2.9 | 3.1 | 3.0 |
| Viet Nam | .. | .. | 4.2 | 6.0 | 8.4 | 8.7 | 6.1 | [3.7] | .. |
| Oceania | | | | | | | | | |
| Australia | 2.7 | 2.7 | 2.5 | 2.3 | 2.1 | 2.2 | 2.2 | 2.2 | 2.2 |
| Fiji | 1.2 | 1.1 | 2.1 | 2.2 | 2.3 | 2.2 | 2.2 | 2.0 | 2.1 |
| New Zealand | 1.8 | 1.9 | 1.9 | 2.0 | [1.9] | [1.8] | 1.6 | 1.4 | 1.4 |
| Papua New Guinea | 1.4 | 1.4 | 1.3 | 1.3 | 1.5 | 2.1 | 1.4 | 1.4 | 1.1 |
| Africa | | | | | | | | | |
| Algeria | 1.6 | 1.8 | 1.9 | 1.9 | [1.5] | [1.6] | 1.3 | [2.0] | 2.7 |
| Angola | .. | .. | .. | .. | .. | .. | .. | .. | [6.5] |
| Benin | 1.9 | 2.0 | 2.3 | 2.3 | 1.9 | 1.8 | [1.5] | [1.3] | [1.3] |
| Botswana | 1.9 | 2.5 | 3.8 | 3.7 | 3.6 | 4.4 | 4.7 | [4.1] | [3.6] |

| | | | | | | | | | |
|----------------------|------|-------|-------|------|------|------|-----|-------|-------|
| Burkina Faso | 2.5 | .. | .. | .. | 2.6 | 2.4 | .. | .. | .. |
| Burundi | 3.0 | 3.4 | 2.7 | .. | .. | .. | .. | .. | .. |
| Cameroon | 1.2 | 1.3 | 1.3 | 1.2 | 1.4 | 1.5 | 1.5 | 1.7 | .. |
| Cape Verde | 2.4 | 2.3 | 2.0 | 1.8 | .. | .. | .. | 0.8 | .. |
| Central African Rep. | 2.0 | 1.8 | 1.8 | .. | .. | .. | .. | .. | .. |
| Chad | 5.7 | 6.0 | 8.3 | .. | .. | .. | .. | .. | .. |
| Congo | 2.6 | 4.0 | 4.4 | .. | .. | .. | .. | .. | .. |
| Côte d'Ivoire | 1.1 | [1.1] | 1.2 | 1.2 | 1.3 | 1.4 | 1.4 | 1.4 | .. |
| Djibouti | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Ethiopia | 8.9 | 8.7 | 10.1 | 12.4 | 14.2 | 14.8 | 9.1 | 4.5 | .. |
| Gabon | 2.7 | 3.0 | 4.2 | .. | .. | .. | .. | .. | .. |
| Ghana | 1.0 | 0.9 | 0.9 | 0.4 | 0.4 | 0.4 | 0.6 | 0.8 | 1.0 |
| Guinea-Bissau | .. | 2.7 | 2.3 | .. | 2.2 | .. | .. | .. | .. |
| Kenya | 2.4 | 2.5 | 3.1 | 2.9 | 2.7 | 2.9 | 2.4 | 1.9 | [2.7] |
| Lesotho | 4.5 | 5.0 | 5.1 | 4.0 | 4.8 | 4.3 | 3.7 | 5.1 | [4.7] |
| Liberia | 2.3 | 2.2 | 2.3 | 2.3 | .. | .. | 1.5 | 1.6 | 2.7 |
| Libya | 15.2 | 12.7 | .. | .. | .. | .. | .. | .. | .. |
| Madagascar | 1.8 | 1.8 | 1.4 | .. | 1.3 | 1.2 | 1.1 | [1.1] | 1.1 |
| Malawi | 1.8 | 2.1 | 1.8 | 1.5 | 1.4 | 1.3 | 1.1 | 1.0 | 0.8 |
| Mali | .. | .. | .. | .. | .. | .. | .. | 2.8 | .. |
| Mauritania | .. | .. | .. | .. | 4.0 | 3.8 | 3.5 | 3.3 | 2.9 |
| Mauritius | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 |
| Morocco | 5.0 | 4.2 | 4.3 | 3.5 | 3.7 | 3.7 | 3.7 | 4.1 | 3.9 |
| Mozambique | 7.5 | 7.4 | 9.9 | 8.9 | 10.2 | 9.9 | 9.0 | 9.4 | 10.4 |
| Namibia | 4.4 | 4.8 | 5.4 | 4.9 | 2.9 | 2.2 | 2.7 | 2.5 | 2.2 |
| Niger | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 1.8 | .. | .. | .. |
| Nigeria | 1.5 | 1.2 | 0.7 | 1.2 | 1.0 | 0.9 | 0.7 | 0.7 | 0.5 |
| Rwanda | 1.6 | 1.8 | 1.7 | 1.5 | 1.5 | 4.1 | 6.2 | .. | 7.6 |
| Senegal | 2.5 | 2.3 | 2.1 | 2.0 | 2.1 | .. | 1.8 | 1.8 | .. |
| Seychelles | .. | .. | .. | .. | 4.3 | 4.0 | 4.4 | 3.4 | .. |
| Sierra Leone | 0.5 | 0.5 | (0.6) | 0.8 | 1.4 | 1.6 | 4.6 | (0.6) | .. |

| | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 |
|----------------------------|-------|-------|-------|-------|------|------|-------|------|-------|
| Somalia | 2.0 | 2.1 | 1.8 | .. | .. | .. | .. | .. | .. |
| South Africa | 3.1 | 3.1 | 3.9 | 4.2 | 4.1 | 3.8 | 3.2 | 3.0 | 2.6 |
| Sudan | 2.8 | 2.3 | 2.0 | .. | .. | .. | .. | .. | .. |
| Swaziland | 1.5 | 1.4 | 1.2 | 1.1 | 1.0 | 1.5 | .. | .. | .. |
| Tanzania | 2.7 | 2.7 | 2.7 | 2.2 | 2.2 | 2.1 | 1.7 | .. | .. |
| Togo | 2.6 | 2.5 | 3.5 | .. | .. | .. | 2.8 | 2.4 | .. |
| Tunisia | 2.6 | 2.3 | 2.0 | 2.3 | 2.3 | 2.0 | 1.9 | 1.7 | .. |
| Uganda | 2.9 | 3.1 | 2.7 | 2.5 | 2.7 | 3.3 | 3.0 | 1.8 | 1.7 |
| Zaire²⁴ | 0.5 | 0.5 | 0.9 | 0.9 | 0.7 | .. | .. | .. | .. |
| Zambia | 2.4 | 3.7 | 3.2 | 2.4 | 1.6 | 1.9 | 6.3 | .. | 1.3 |
| Zimbabwe | 6.1 | 6.8 | 7.0 | 6.4 | 6.1 | 6.3 | 5.0 | 4.4 | 3.8 |
| Caribbean | | | | | | | | | |
| Barbados | 1.0 | 0.7 | 0.5 | 0.6 | 0.6 | .. | .. | .. | .. |
| Cuba | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Dominican Rep. | 1.1 | 1.3 | 1.0 | 0.9 | 0.7 | 0.5 | 0.4 | .. | .. |
| Haiti | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Jamaica | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Trinidad and Tobago | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Central America | | | | | | | | | |
| Belize | 1.6 | .. | .. | [1.2] | 1.2 | 1.2 | 1.1 | 1.1 | 1.1 |
| Costa Rica | [0.5] | [0.5] | [0.5] | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 |
| El Salvador | 3.8 | 3.6 | 3.3 | 2.8 | 2.9 | 2.4 | 2.1 | 1.8 | [1.7] |
| Guatemala | 1.8 | 1.4 | 2.0 | 1.9 | 1.8 | 1.5 | 1.2 | .. | .. |
| Honduras | 2.1 | 1.8 | 1.7 | 1.6 | 2.4 | 2.2 | .. | .. | 1.3 |
| Mexico | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 | [0.3] | 0.3 | [0.3] |
| Nicaragua | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| Panama²⁵ | 1.9 | 2.0 | 1.9 | 2.2 | 2.2 | 1.5 | 1.4 | 1.3 | .. |

South America

| | | | | | | | | | |
|----------------------|-----|-----|-----|-----|-----|-----|-------|-------|-------|
| Argentina | .. | 1.0 | 1.1 | 0.9 | 0.9 | 0.8 | [0.8] | 0.8 | [0.7] |
| Bolivia | .. | 1.6 | 1.7 | 1.5 | 1.5 | 2.0 | 1.9 | 1.8 | 1.8 |
| Brazil ²⁷ | 0.3 | 0.3 | 0.4 | 0.5 | 0.5 | 0.4 | 0.3 | 0.3 | .. |
| Chile ²⁸ | 2.8 | 2.6 | 2.2 | 2.1 | 1.8 | 1.8 | 1.7 | 1.7 | 1.6 |
| Colombia | 1.2 | 1.2 | 1.1 | 1.3 | 1.4 | 1.4 | 1.3 | 1.6 | 2.4 |
| Ecuador | 1.8 | 1.9 | 2.0 | 2.0 | 2.0 | 1.9 | [2.1] | [2.2] | .. |
| Paraguay | 1.1 | 1.1 | 1.1 | 1.0 | 1.3 | 1.3 | 1.7 | 1.6 | .. |
| Peru ²⁹ | 3.5 | 3.0 | 3.0 | 2.1 | 1.9 | 2.1 | 1.4 | 1.8 | .. |
| Uruguay | 2.7 | 2.6 | 1.9 | 2.1 | 2.4 | 2.4 | 1.8 | .. | .. |
| Venezuela | 1.0 | 1.2 | 1.3 | 1.5 | 0.9 | 1.1 | 1.5 | 1.1 | .. |

¹ Official NATO publications provide the data for member countries and reflect NATO's definition of military spending rather than domestic budgetary information.

² Figures on German military expenditure refer to West Germany up to and including 1990 and to united Germany from 1991.

³ It is difficult to estimate the change in Turkey's military spending in real terms because of consistently high inflation rates. The SIPRI estimate of Turkish military spending in real terms is principally based on the NATO assumption that expenditure remained stable in 1994.

⁴ Croatia declared its independence from the former Yugoslavia in June 1991 and was recognized by the European Community in Jan. 1992 and the UN in May 1992.

⁵ Data up to and including 1992 may not include full procurement costs. Figures for 1993 are taken from the 1993 Submission to the United Nations and for 1994 from the budget approved for the year.

⁶ The Czech Republic was formed after the breakup of Czechoslovakia on 1 Jan. 1993.

⁷ Czechoslovakia split into the Czech Republic and the Republic of Slovakia on 1 Jan. 1993.

⁸ Estonia became independent in Sep. 1991.

⁹ Latvia became independent in Sep. 1991.

¹⁰ Lithuania became independent in Sep. 1991. Figures for 1991 and 1992 are in million roubles; for 1993 in million litai.

¹¹ The Slovak Republic was formed after the breakup of Czechoslovakia on 1 Jan. 1993.

¹² Slovenia declared its independence from the former Yugoslavia in June 1991 and was recognized by the European Community in Jan. 1992 and by the UN in May 1992.

¹³ Serbia and Montenegro announced the creation of the Federal Republic of Yugoslavia on 27 Apr. 1992.

¹⁴ Figures on military expenditure are not available for the other 8 CIS member states.

¹⁵ Figures for 1992 are in million roubles; and for 1993 in million vouchers.

¹⁶ Figures up to and including 1992 are in billion roubles; and from 1993 in billion karbovanets.

¹⁷ Data reported from open sources may underestimate Iran's military expenditure. The series should be seen as a trend indicator rather than an expenditure level indicator.

¹⁸ Data include contributions made to the allied forces for the liberation of Kuwait.

¹⁹ In the early 1990s Lebanon experienced hyper-inflation and there are no IMF data for inflation or for GDP.

²⁰ The People's Democratic Republic of Yemen (South Yemen) and the Yemen Arab Republic (North Yemen) merged in May 1990 to form the Republic of Yemen. Data from 1984–89 refer to North Yemen and from 1990 to the unified state.

²¹ Outlays include only allocations made to the Royal Brunei Armed Forces proper.

²² Data reflect official budget figures only.

²³ Data reported from open sources may underestimate Myanmar's military expenditure.

²⁴ Because of hyper-inflation in the early 1990s data are very unreliable. Figures for 1993 and after are in billion old zaïres.

²⁵ Panama's Army was abolished by the National Assembly in Aug. 1994.

²⁶ Because of hyper-inflation and currency changes figures are unreliable. Figures for 1985–88 are in million australes; for 1989–91 in billion australes; and for 1992–93 in million new pesos. Data in this table are based primarily on figures from the *Government Finance Statistics Yearbook*.

²⁷ Because of hyper-inflation and currency changes figures are unreliable. Figures for 1985–89 are in reais; and for 1990–92 in thousand reais.

²⁸ Data reported from open sources may underestimate Chile's military expenditure.

²⁹ Because of hyper-inflation in the late 1980s figures are unreliable. Figures for 1985–88 are in bilio intis; and for 1989–94 in million new soles.

³⁰ This series is based on the data provided in the local currency series, deflated to 1990 price levels and converted into dollars at 1990 period-average exchange rates. Local consumer price indices (CPI) are taken as far as possible from *International Financial Statistics (IFS)* published by the International Monetary Fund. For the most recent years, the CPI is estimated on the basis of the first 3–9 months of the year. Period-average exchange rates are taken as far as possible from *IFS*.

³¹ Official NATO publications provide the data for member countries and reflect NATO's definition of military spending rather than domestic budgetary information. The figures here have been calculated to 1990 as the base year and using a CPI deflator. There are therefore some differences between this year's figures and the constant-value data published by NATO, which use the 1985 base year. There are also differences between the figures published here and those in the *SIPRI Yearbook 1994*.

³² Figures are in local currency and constant 1990 prices. Croatia and Slovenia declared their independence from the former Yugoslavia in June 1991 and were recognized by the European Community in Jan. 1992 and the UN in May 1992.

³³ Figures are in local currency and constant 1990 prices. The Czech Republic and Slovakia were formed after the breakup of Czechoslovakia on 1 Jan. 1993.

³⁴ Because of the Iraqi occupation of Kuwait, figures are calculated using 1989 as base year. Data include contributions made to the allied forces for the liberation of Kuwait.

³⁵ Because of lack of data on inflation this series is unreliable. 1987–89 figures use 1989 as the base year; 1990–94 use 1990 as the base year.

³⁶ In 1985 prices.

³⁷ The share of gross domestic product (GDP) is calculated in local currency. GDP data are taken where possible from *IFS* and the UN *National Accounts Statistics: Main Aggregates and Detailed Tables*.

Conventions in tables

| | | | |
|-----|--------------------------------------|-----|---|
| .. | Data not available or not applicable | th. | thousand |
| – | Nil or a negligible figure | m. | million |
| () | Uncertain data | b. | billion (thousand million) |
| [] | SIPRI estimate | \| | break in statistical series (e.g. for currency changes) |

Appendix 12B. Sources and methods

The military expenditure project collects information on and monitors trends in military spending throughout the world. The data provide a solid basis for comparisons and evaluations of military spending and of the economic burden of such expenditure.

Data are presented in three different ways: (a) in local currency and current prices, i.e., the basic input data; (b) in US dollars and constant prices, to show real changes; and (c) as the ratio of military expenditure to gross domestic product (GDP). SIPRI military expenditure data are therefore transparent. Tables of military expenditure in current and constant prices, as well as military spending as a share of GDP, are published annually in the *SIPRI Yearbook* where they are presented as a 10-year time-series of military spending for individual countries. For many countries it is not possible to apply an internationally standardized definition of military expenditure. The ambition, therefore, is to provide the best available time-series for each country according to a specific definition for that country.

I. Methods and definitions

The military expenditure data base is the basis for the tables published in the *SIPRI Yearbook*.¹ All figures in the *Yearbook* are presented on a calendar-year basis on the assumption that military expenditure occurs evenly throughout the fiscal year. This permits the provision of a uniform picture of trends in military expenditure even though there is no common fiscal year for the budgetary information reported by individual countries. The consumer price index (CPI) is used to deflate current prices into constant values, and period-average market exchange rates are used to convert domestic currencies to US dollars using the base year (currently 1990) exchange rate. The ratio of military expenditure to GDP or gross national product (GNP) is calculated in domestic currency (at current prices).

A basic problem arises from the dearth of disaggregated military spending data for most countries, which makes it difficult to set a common definition of military expenditure for all states throughout the time period covered in the military expenditure series. SIPRI has traditionally used the NATO definition of military expenditure as a broad guideline for all countries. Where possible, the following items are included: all current and capital expenditure on the armed forces and in the running of defence departments and other government agencies engaged in defence projects and space activities; the cost of paramilitary forces, border guards and police when judged to be trained and equipped for military operations; military research and development, testing and evaluation costs; and costs of retirement pensions of service personnel and civilian employees. Military aid is included in the expenditure of the donor countries. Items on civilian defence, interest on war debts and veterans' payments are excluded.

¹ See SIPRI, *SIPRI Yearbook 1990: World Armaments and Disarmament* (Oxford University Press: Oxford, 1990), appendix 5B, pp. 201–202; SIPRI, *SIPRI Yearbook 1991: World Armaments and Disarmament* (Oxford University Press: Oxford, 1991), appendix 5B, pp. 179–80; and SIPRI, *SIPRI Yearbook 1992: World Armaments and Disarmament* (Oxford University Press: Oxford, 1992), appendix 7B, pp. 269–70.

The United Nations Unified Reporting System might become a useful source of reliable military expenditure data in the future. However, despite its promise of providing greater disaggregation of data in a uniform fashion, the UN system has thus far proved a disappointment. Few countries report their military spending under the UN system and even fewer do so consistently and accurately. Participating states of the Organization for Security and Co-operation in Europe (OSCE) are required to report their military spending along the lines of the UN definition, raising the possibility of far more information on a large number of states becoming available from this source in the future. To date, this resource is restricted for OSCE use only, with free access for representatives of member states. Many governments, however, offer SIPRI the same information in response to individual requests.

II. Sources

The data are collected from national and international publications such as defence budgets, government financial statistics and other economic information and are stored electronically. Supplementary material on military expenditure is collected through systematic scanning and analysis of a wide range of journals, magazines and newspapers. This information is integrated into the data base to provide the broadest possible overview of developments in global military expenditure. Where accurate data are not available estimates are made based on economic indicators and trend analysis. SIPRI estimates are presented in square brackets in the military expenditure tables. In some cases data from different sources are contradictory. Where it is not possible for SIPRI to make a definitive judgement on the accuracy of the data these figures are presented in round brackets signifying 'uncertain'. This distinction between SIPRI estimates and uncertain data is introduced for the first time in the 1995 *Yearbook* and applies to the military expenditure data only.

For the majority of countries in the SIPRI data base, military expenditure estimates are derived primarily from the International Monetary Fund *Government Finance Statistics Yearbook*. Information on the CPI, exchange rates and GDP/GNP are taken from the IMF *International Financial Statistics Yearbook*. Official NATO publications provide the data for member countries and reflect NATO's definition of military spending rather than domestic budgetary information. Data for Central and East European countries are taken primarily from domestic budgets provided by their respective embassies in Stockholm or from the ministries of defence in certain countries. Because of the current unreliability or non-availability of data and the general statistical chaos prevailing in Russia and the Commonwealth of Independent States, military expenditure tables are not produced for all these countries.

Supplementary information for all countries, particularly for those for which no official information can be found, is sought from a wide variety of sources. In addition to analysing journals, newspapers, defence white papers and standard reference works, the military expenditure project writes to all countries with diplomatic accreditation in Stockholm every year to request current defence budget information. In many cases SIPRI does receive useful material from this effort but, unfortunately, very often information is not forthcoming. Other sources regularly consulted include: the UN publication *National Accounts Statistics: Main Aggregates and Detailed Tables*, *Länderbericht* of the German Statistical Office and *Europa World Yearbook*.

13. Arms production

ELISABETH SKÖNS and KSENIA GONCHAR*

I. Introduction

Far-reaching structural changes are taking place in the production of military equipment. The continued decline of the market has forced the arms industry steadily to reduce its arms production capacity. Challenges to the industries and to the societies in which they are located are many. Short- and long-term solutions are being sought in several directions—diversification, down-sizing, conversion, export and increased government support.

In the countries of the Organisation for Economic Co-operation and Development (OECD),¹ the industry and individual companies have by and large been successful in adapting to these changes. The main problems are those confronting the customer (the procurement agencies) and the political authorities in the affected regions: the maintenance of the production base, imperfect competition in a context of increasing concentration among supplier firms and structural unemployment. In Russia and Central and Eastern Europe the problems are of a different magnitude, being related not only to cuts in arms procurement and reductions in military exports but also to the transformation of the entire economy and the political system.

This chapter describes the behaviour of the arms industry in an environment of falling demand for its products. Section II presents the standard SIPRI 'top 100' list of arms-producing companies in the OECD and the developing countries, whose sales are shown in detail in appendix 13A. Section III describes the behaviour of companies sector by sector, and the fourth and final section deals with developments in the Russian arms industry and the direction in which it is heading.

II. The SIPRI 'top 100'

Stagnation continues in the production and sale of military equipment in the OECD and the developing countries. The 100 major arms-producing companies in 1993 had combined arms sales of about \$156 billion as against \$166 billion in 1992, a fall of about 6 per cent.² If all companies which produce armaments were included in the calculation, the decline in sales would prob-

¹ A list of members of the OECD is given in the Glossary.

² This trend reflects the actual rate of reduction in the volume of arms sales, because the distortions of dollar sales data by inflation and the movements of exchange rates tended to balance each other out for this group of companies during 1993.

* Section IV was contributed by Ksenia Gonchar.

Table 13.1. Regional/national shares of arms sales for the top 100 arms-producing companies in the OECD and developing countries, 1993 compared to 1992

Figures for sales in 1993 are in US \$b. Figures in italics are percentages.

| Number of companies, 1993 | Region/country | Share of total arms sales | | Arms sales 1993 |
|---------------------------|-----------------------------|---------------------------|--------------|-----------------|
| | | 1992 | 1993 | |
| 46 | USA | 59.8 | 62.4 | 97.4 |
| 38 | <i>West European OECD</i> | 33.5 | 30.6 | 47.8 |
| 12 | France | 13.2 | 12.0 | 18.8 |
| 11 | UK | 9.9 | 9.2 | 14.3 |
| 8 | FRG | 5.3 | 5.2 | 8.1 |
| 2 | Italy | 2.3 | 1.8 | 2.8 |
| 2 | Switzerland | 1.1 | 0.9 | 1.4 |
| 2 | Sweden | 1.0 | 0.8 | 1.2 |
| 1 | Spain | 0.7 | 0.7 | 1.1 |
| 9 | <i>Other OECD</i> | 4.0 | 4.4 | 6.9 |
| 8 | Japan | 3.8 | 4.2 | 6.5 |
| 1 | Canada | 0.3 | 0.2 | 0.4 |
| 7 | <i>Developing countries</i> | 2.7 | 2.6 | 4.0 |
| 4 | Israel | 1.5 | 1.5 | 2.3 |
| 2 | India | 0.8 | 0.7 | 1.1 |
| 1 | South Africa | 0.4 | 0.4 | 0.6 |
| 100 | | 100.0 | 100.0 | 156.1 |

Source: Appendix 13A.

ably have been greater because of the continuing process of concentration of production in fewer companies.

The statistics for the top 100 companies show a shift during 1993 in the regional distribution of arms sales from Western Europe towards the USA and Japan (table 13.1). This picture is somewhat skewed by exchange-rate movements. Thus, while the dollar value of the arms sales of the 11 British companies fell by almost 13 per cent, at constant prices and in pounds sterling they rose by one per cent. The eight Japanese companies present a contrast: the dollar value of their arms sales increased by about four per cent, although in constant-price yen it fell by nine per cent. In reality, therefore, the shift is less marked than table 13.1 suggests.

The companies for which arms sales changed most between 1992 and 1993 are listed in table 13.2.³ The table reflects both the large-scale restructuring measures which are taking place within the arms industry and the more direct effects of reduced demand for military equipment. The companies which have been involved in major merger and acquisition activities include General Electric as sellers and Lockheed, Martin Marietta, Loral and GM Hughes Electronics as buyers. The increase for the German shipbuilder Bremer

³ The gains by Japanese companies are to a significant extent illusory as they result from exchange-rate movements (the appreciation of the yen by 14% against the US dollar in 1993), as are the reductions by British firms: the value of sterling fell by 15% against the US dollar.

Table 13.2. Companies whose arms sales changed the most, 1993

Figures are in US \$m. Figures in italics are percentages.

| Company/subsidiary | Country | Arms sales | | Change | |
|--|---------|------------|--------|---------|---------|
| | | 1992 | 1993 | 1992-93 | 1992-93 |
| <i>Companies with decreased arms sales</i> | | | | | |
| General Electric | USA | 5 300 | 2 400 | -2 900 | -55 |
| Harsco | USA | 770 | 460 | -310 | -40 |
| Rheinmetall | FRG | 780 | 520 | -260 | -33 |
| Oerlikon-Bührle | Switz. | 1 120 | 760 | -360 | -32 |
| Alliant Tech Systems | USA | 1 010 | 700 | -310 | -31 |
| FIAT | Italy | 950 | 660 | -290 | -31 |
| IRI/Finmeccanica | Italy | 2 930 | 2 090 | -840 | -29 |
| Motorola | USA | 640 | 470 | -170 | -27 |
| Dassault Aviation | France | 2 160 | 1 590 | -570 | -26 |
| Avondale Industries | USA | 500 | 370 | -130 | -26 |
| Boeing | USA | 4 700 | 3 800 | -900 | -19 |
| BAe | UK | 7 070 | 5 950 | -1 120 | -16 |
| Thomson S.A. | France | 4 980 | 4 240 | -740 | -15 |
| Daimler Benz/DASA | FRG | 4 120 | 3 540 | -580 | -14 |
| GEC | UK | 3 750 | 3 210 | -540 | -14 |
| <i>Companies with increased arms sales</i> | | | | | |
| Lockheed | USA | 6 700 | 10 070 | +3 370 | +50 |
| Preussag/HDW | FRG | 320 | 480 | +160 | +50 |
| Hunting | UK | 330 | 490 | +160 | +48 |
| Martin Marietta | USA | 4 400 | 6 500 | +2 100 | +48 |
| Ishikawajima-Harima | Japan | 570 | 840 | +270 | +47 |
| Bremer Vulkan | FRG | 640 | 860 | +220 | +34 |
| Mitsui Shipbuilding | Japan | 240 | 310 | +70 | +29 |
| Kawasaki Heavy Industries | Japan | 900 | 1 130 | +230 | +26 |
| Loral | USA | 3 050 | 3 750 | +700 | +23 |
| General Motors/GM Hughes Electronics | USA | 6 000 | 6 900 | +900 | +15 |

Note: All parent companies with a change in arms sales of 25 per cent or more or with sales of \$500 million or more are included. They are ranked according to the relative change in arms sales, as calculated in current dollars.

Source: Appendix 13A.

Vulkan is the result of its consolidation of companies, mainly in the former German Democratic Republic.

Other companies which lost sales in 1993 have since then taken decisions on or implemented structural changes. This includes Harsco, which has merged its defence activities with those of FMC; Alliant Tech Systems, which has signed an agreement to acquire the aerospace operations of Hercules; and FIAT, which has announced large staff reductions at its defence and aerospace subsidiary, FIAT Aviazione.

The only companies to gain higher sales without acquiring facilities from competitors were Preussag, through its submarine yard HDW, and Hunting, as a result of privatization of the management of its nuclear weapon design and production facilities at Aldermaston.

In spite of stagnating arms sales, a high proportion of the companies is characterized by above-average market values and high profits. The average value of the stocks of the leading arms-producing firms in France, the UK and the USA increased by almost 50 per cent during 1993; the average rise on the financial markets in these countries was in the range of 7–23 per cent.⁴

Many US companies have been able to achieve significantly increased profits. This has been possible through rising incomes from divestitures, rationalizations, personnel cuts and other forms of cost reduction. The most pronounced example is GM Hughes Electronics, which through its acquisition in 1992 of the missiles division of General Dynamics was able to consolidate work from five production facilities into one and thereby increase capacity utilization from 30 to 85 per cent, allowing a 30 per cent reduction in the production costs of missiles.⁵ Profits continued to rise during 1994 but are expected to reach a ceiling and stabilize.⁶

In Europe, with its smaller and more fragmented market, the potential for consolidation is smaller and costs continue to be a severe problem. This raises a number of policy issues for governments: about collaborative European programmes, about internationalization of the industry, about subsidies to arms producers and the level of the defence budget, about arms export policy and about priorities in the preservation of domestic arms production capabilities.⁷

In France the government has imposed a requirement on the arms industry to reduce costs by 2 per cent per year to enable it to maintain its procurement programme intact during the period 1995–2000.⁸ This strategy has been strongly resisted by the industry and its outcome is therefore highly uncertain.⁹ Demands from the industry for continued subsidies will most likely be met favourably by the government in order to preserve the industrial base.

⁴ 'Coping with the downturn', *International Defense Review*, no. 3 (1994), p. 57.

⁵ 'The price of consolidation may soar in future', *Defense News*, 4–20 Mar. 1994, p. 33.

⁶ Spurling, M., 'Firms continue profit gains, but Wall Street backs off', *Defense News*, 1–7 Aug. 1994, p. 6.

⁷ Some of these alternatives are discussed from an economic perspective in Smith, R., 'Is Europe pricing itself out of the market?', *RUSI Journal*, Feb. 1994, pp. 47–51.

⁸ 'Les industriels soumis aux gains de productivité' [Manufacturers forced to make productivity gains], *La Tribune Desfossés*, 1 Apr. 1994, p. 10 (in French); and 'The Jane's interview' with France's Defence Minister François Léotard, *Jane's Defence Weekly*, 18 June 1994, p. 56.

⁹ 'Fronde des industriels de l'armement contre la DGA' [Criticism of DGA from arms manufacturers], *La Tribune Desfossés*, 28 Oct. 1994, p. 11 (in French). In early 1995 a major defence contractor, SNECMA, took the unusual step of rejecting a government contract for 25 engines for the Rafale fighter aircraft because it included a cost reduction clause. It has been argued that if, as expected, more companies join a boycott of military orders this may even lead to a change in the close relationship between the French arms industry and the Government: see Hébert, J.-P., 'Un nouveau système de production d'armements' [A new system of arms production], *Le Débat Stratégique: Lettre d'Information et de Débat du CIRPES*, no. 18 (Jan. 1995), p. 4 (in French).

The German arms industry has experienced the deepest cuts in domestic arms procurement among European countries.¹⁰ Production has been cut by almost half over four years.¹¹ The implementation of such deep cuts without resort to a mass expansion of arms exports has been facilitated by the high degree of diversification of arms-producing companies in Germany.¹²

European armaments cooperation as a means of cost reduction through economies of scale did not develop according to plan in 1994, but was set on a more modest course. At a meeting of the Western European Armaments Group of the Western European Union (WEU) in November 1994, the 13 member countries¹³ agreed to postpone the establishment of a common European Armaments Agency, as called for in the 1992 Maastricht Treaty. The decision was made on the grounds that 'conditions do not currently exist for the creation of an agency conducting the full range of procurement activities on behalf of member nations'.¹⁴ However, ministers expressed continued interest in cooperation in that they 'approved the principles for the operation of such an organization', 'agreed that national armaments directors would continue their considerations on this subject' and 'agreed to consider favourably the Franco-German initiative to create a new armaments cooperation structure as a subsidiary body under the modified Brussels Treaty'.¹⁵ The latter, originally conceived as a bilateral body to be created in 1995, will be open for all WEU members to join.¹⁶ On this much reduced basis, the UK has also agreed to consider participation.

In Japan the major producers of military equipment have not been severely affected by the cuts in Japan's arms procurement budget, not only because the decline has been less dramatic in Japan than in most other parts of the world, but also because they are less dependent on arms sales. Large conglomerates like Kawasaki and Mitsubishi have been able to shift workers from military-related research and development (R&D) and manufacture to non-military operations. The companies facing problems are subcontractors which are generally more dependent on defence contracts: 13 per cent of secondary subcontractors to major producers are dependent to more than 50 per cent on mili-

¹⁰ For statistics on volume changes in arms procurement in NATO countries, see Bergstrand, B.-G., Ball, N., Kosiak, S., Loose-Weintraub, E., Shambaugh, D. and Whitlock, E., 'World military expenditure', SIPRI, *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 400–401 and chapter 12, table 12.1 in this volume.

¹¹ Employment in the arms industry fell from 280 000 to 140 000 between 1989 and 1993 and is expected to fall by another 40 000 by the end of 1995. Since employment statistics also reflect changes in productivity, however, this does not translate into a directly proportionate fall in production. See Lock, P. and Voß, W., 'The German arms industry in a European context: a study in successful downsizing', *Defence and Peace Economics*, vol. 5 (1994), pp. 341–48, which also presents an interesting analysis of the future role of the German arms industry in European armaments cooperation; and 'Germany views the way to go', *Jane's Defence Weekly*, 18 June 1994, p. 52.

¹² In the 8 German companies in the SIPRI 'top 100' list (appendix 13A) arms sales accounted for 14% of total sales. The average across the 100 companies was 38%.

¹³ Includes the 9 members of the WEU (see Glossary for a list), Denmark, Norway and Turkey.

¹⁴ Declaration of the WEU Council of Ministers, adopted on 14 Nov. 1994 in Noordwijk, reprinted in *Europe/Documents* no. 1910, *Atlantic Documents* no. 87 (19 Nov. 1994), p. 7.

¹⁵ Declaration of the WEU Council of Ministers (note 14).

¹⁶ 'WEU edges toward a European defence', *Jane's Defence Weekly*, 26 Nov. 1994, p. 11; and 'France, Germany see expanded partnership', *Defense News*, 5–11 Dec. 1994, p. 14.

Table 13.3. Acquisitions across industrial sector boundaries, 1993–94

| Buyer company | Country | Sector ^a | Company purchased | Country | Sector | Comments |
|---------------|---------|---------------------|-------------------|---------|----------------------|---------------|
| Alliant Tech | USA | SA/O | Hercules | USA | Ac El | Agreed 1994 |
| BAe/ | UK | Ac Mi SA/O | VSEL | UK | Sh | Competition |
| GEC | UK | El | VSEL | UK | Sh | not completed |
| GKN | UK | MV | Westland | UK | Ac | Agreed 1994 |
| Loral | USA | Mi | IBM | USA | El | Implemented |
| | | | Federal Systems | | (systems integrator) | 1 Jan. 1994 |

^a Abbreviations and acronyms used are explained in appendix 13A.

tary work.¹⁷ Restructuring, which until now has been confined to intra-group measures such as amalgamation of affiliated companies, is therefore expected to gather momentum among small and medium-sized contractors according to Keidanren, the Japan Federation of Economic Organizations.¹⁸

III. Sectors of the OECD arms industry

Conditions for restructuring vary depending on industrial sector and product. Differences in factors such as the market for the civilian products of the sector, the similarity between military and civilian products, the lead time of military products and the R&D intensity of the products necessarily have an impact on the environment for structural change.

Companies in the arms industry are not always organized according to industrial sector and disaggregated data on sectoral military sales are rarely provided, which makes sectoral analysis difficult. In the following sections and tables, companies are grouped in the sector where they have the greater part of their military sales. In some cases a company appears in two sectors.

Acquisitions across sector boundaries go in two directions. Some companies choose to concentrate their arms production activities on fewer industrial sectors while others make acquisitions which broaden their range of military products (table 13.3).

Summarizing company behaviour by sector and disregarding some national variations, the following main lines of development can be identified.

1. The military aerospace sector is characterized by large companies which are becoming larger as a result of concentration on a national basis. International activity is still characterized by cooperation rather than mergers or

¹⁷ Smith, C., 'New world, few orders: Japan's arms makers feel the post-cold war heat', *Far Eastern Economic Review*, vol. 158, no. 4 (26 Jan. 1995), pp. 54–56.

¹⁸ Hineno, Y., Chairman for the Subcommittee on Policy Planning, Defense Production Committee, Keidanren, 'Challenges for the Japanese defense industry', Paper presented at the International Symposium on Challenges for the Defence Industry by the Royal Swedish Academy of Engineering Sciences and the Royal Swedish Academy of War Sciences, Stockholm, 1 Nov. 1994.

acquisitions. The share of military sales in total sales has dropped significantly during the period 1988–93, by an average of eight per cent for the major producers in military aerospace.

2. The military electronics sector is characterized by large companies which are getting larger through concentration on both a national and an international basis. The share of military sales in total sales has been relatively constant in this sector during the period 1988–93, in contrast to the general trend for the ‘top 100’ companies.

3. The military vehicles sector is characterized by small companies which resist concentration. Well-known companies such as Alvis, GKN Defence and Vickers in the UK, LOHR and Panhard in France, and OTO Breda (formerly Oto Melara) in Italy are not among the top 100 companies at all.

4. The artillery and ordnance sector has also seen some internationalization: British Aerospace (BAe) owns German Heckler & Koch and the French company GIAT owns Belgian FN Herstal.

5. The shipbuilding sector can be divided into designers and manufacturers. Designers are small and internationalized companies, and manufacturers are medium-to-large companies which are not internationalized. On average, military sales of the major producers have remained unchanged over the period 1988–93 both in dollar values and as a proportion of total sales.

Military aerospace

This is the sector of the arms industry which is under the strongest pressure to reduce its capacities for military production. The sharp deterioration of the military aerospace market has been accompanied by continued decline in the demand for commercial aircraft. This environment leaves the industry with few choices other than to cut down, either through cooperation or through fierce competition.¹⁹

Strict measurement of the size of remaining overcapacities is impossible, since procurement programmes and plans are in flux in many countries. Estimates of global over-capacity in the combined civil and military aerospace industry range around 30 per cent.²⁰ In the military part of the industry excess capacity is much greater. One estimate suggests that the level of production of advanced combat aircraft in the seven primary producer countries²¹ will drop by two-thirds over the period 1994–99.²²

¹⁹ Hayward, K., *The World Aerospace Industry* (Duckworth/Royal United Services Institute for Defence Studies: London, 1994) develops the implications of these two scenarios.

²⁰ ‘Playing to win’, *Flight International*, 2 Sep. 1992, p. 51.

²¹ The primary producers are France, Germany, Italy, Russia, Sweden, the UK and the USA. China, for instance, is defined as a secondary producer: see Forsberg, R., *The Arms Production Dilemma*, CSIA Studies in International Security, no. 7 (MIT Press: Cambridge, Mass. and London, 1994), p. 245.

²² Forsberg (note 21), table 12.1, p. 274.

Table 13.4. The major producers in military aerospace, 1993

Figures are in US \$m. Figures in italics are percentages.

| Company (parent) | Country | Industrial sector ^a | Arms sales | | | | Profits Change 1988-93 |
|--|---------|-----------------------------------|---------------|--------------------------------|----------------------------|---------------|------------------------------|
| | | | Level 1993 | Change 1988-93 ^b | Share ^c 1993 | Share 1988 | |
| <i>Aircraft and helicopters</i> | | | | | | | |
| Aérospatiale Groupe | France | Ac Mi | 2 860 | +24 | 32 | 45 | -240 |
| Boeing | USA | Ac Mi | 3 800 | -14 | 15 | 26 | +630 |
| BAe | UK | Ac A Mi SA/O | 5 950 | +9 | 37 | 55 | -625 |
| CASA (INI) | Spain | Ac | 440 | -12 | 49 | 72 | +61 |
| DASA (Daimler Benz) | FRG | Ac El Eng Mi | 3 250 | .. | 29 | .. | .. |
| Dassault Aviation | France | Ac | 1 590 | -24 | 80 | 70 | -25 |
| Eurocopter (Aérospatiale/DASA) | France | Ac | 920 | .. | 52 | .. | .. |
| Finmeccanica ^d | Italy | Ac El Eng Mi | 1 930 | .. | 28 | .. | .. |
| Grumman ^e | USA | Ac El | 2 700 | -10 | 84 | 83 | -28 |
| Hercules ^f | USA | Ac Mi | 600 | -33 | 22 | 32 | -153 |
| Israel Aircraft Industries | Israel | Ac El Mi | 1 120 | +40 | 77 | 75 | -66 |
| Kawasaki Heavy Ind. | Japan | Ac Eng Sh | 1 130 | .. | 12 | .. | +63 |
| Lockheed ^g | USA | Ac | 10 070 | +20 | 77 | 81 | -202 |
| McDonnell Douglas | USA | Ac Mi | 9 050 | -4 | 62 | 65 | +46 |
| Mitsubishi Heavy Ind. | Japan | Ac Mi MV Sh | 2 380 | -16 | 10 | 19 | +234 |
| Northrop ^e | USA | Ac El Mi SA/O | 4 480 | -16 | 88 | 92 | -8 |
| Rockwell | USA | Ac El Mi | 3 350 | -33 | 31 | 42 | -250 |
| Saab-Scania | Sweden | Ac El Mi | 320 | -41 | 9 | 8 | -310 |
| United Technologies ^h | USA | Ac El Eng Mi | 4 200 | -7 | 20 | 25 | -172 |
| Westland ⁱ | UK | Ac | 480 | +7 | 71 | 71 | +11 |
| <i>Aerospace engines</i> | | | | | | | |
| Allison ^j | USA | Eng | 480 | .. | 75 | .. | .. |
| Fiat | Italy | Eng | 660 | -57 | 2 | 4 | -3 048 |
| General Electric | USA | Eng | 2 400 | -62 | 4 | 12 | +929 |
| MTU (DASA) | FRG | Eng | 470 | -52 | 25 | 52 | -124 |
| Pratt & Whitney (UTC) | USA | Eng | 1 600 | .. | 27 | .. | .. |
| Rolls Royce ^j | UK | Eng | 1 580 | +12 | 30 | 40 | -171 |
| SNECMA Groupe | France | Eng | 1 060 | -17 | 31 | 44 | .. |
| Volvo Flygmotor (Volvo) | Sweden | Eng | 150 | +0 | 32 | 37 | -27 |
| <i>Missiles</i> | | | | | | | |
| GM Hughes Electr. (GM) | USA | El Mi | 6 110 | -11 | 45 | 61 | -4 |
| Loral | USA | El Mi | 3 750 | +257 | 94 | 88 | +140 |
| Martin Marietta ^g | USA | El Mi | 6 500 | +51 | 69 | 75 | -338 |
| Matra Hachette (Lagardère) ^k | France | Mi | 970 | -7 | 10 | 32 | -30 |
| Raytheon | USA | El Mi | 4 500 | -18 | 49 | 67 | +203 |

^a Abbreviations used are explained in appendix 13A. ^b Calculated in current prices, US\$. ^c Share of arms sales in total sales of the company. ^d Parent company of Alenia. ^e Grumman and Northrop merged in 1994. ^f Acquired by Alliant Tech Systems in 1994. ^g Lockheed and Martin Marietta will merge in 1995. ^h Parent company of Sikorsky. ⁱ Acquired by GKN in 1994. ^j Rolls Royce will acquire Allison in 1995. ^k 1988 data are for Matra Groupe.

Source: Appendix 13A.

The global aerospace industry is dominated by the USA, with sales more than three times the combined sales of the West European companies and 13 times those of the Japanese aerospace industry. Sales to the military market account for more than half of European aerospace sales, but this share is falling. In the USA the military share in aerospace sales is only about one-third, although it is increasing. In Japan the aerospace industry has a higher dependence on military sales (around 75 per cent) than in most other countries, because it was built up primarily through licensed production of military aircraft and missile systems.²³ US aerospace sales have fallen during each of the three years 1992–94. Hopes for increased exports²⁴ did not materialize: US aerospace exports fell by \$1 billion in 1994 and military aircraft exports fell by 47 per cent.²⁵

The shift away from military sales in aerospace has proceeded rapidly. The prime contractor companies in military aerospace have been able to reduce the share of military sales in total sales over the period 1988–93, when total aerospace sales were falling (table 13.4). Two major exceptions, because of their acquisitions, are Loral and Martin Marietta. Profits have generally not been negatively affected by this decline: many companies have increased profits. Mergers and acquisitions contribute significantly to capacity reduction. Two mega-mergers agreed in 1994 will reinforce this trend: Northrop's take-over of Grumman and Lockheed's merger with Martin Marietta.

Northrop emerged as the buyer of Grumman in April 1994 after a competition with Martin Marietta for the purchase. Grumman had tried to compensate for the loss of defence contracts by cutting costs and reducing its workforce and production capacity.²⁶ Northrop, the principal subcontractor of the F/A-18 fighter aircraft with a very high share of its sales in the military market, hopes to gain 'critical mass' in some of its core defence activities by this acquisition. Another step in this direction was its agreement in July 1994 to increase its share in Vought Aircraft from 49 to 100 per cent.²⁷ The combined arms sales of the two merged companies in 1993 amounted to over \$7 billion. The new company, Northrop Grumman, has announced plans to reduce its workforce by about 9000 by end-1995, that is, a reduction by almost one-fifth.²⁸

²³ For a brief description of the current status of the Japanese aerospace industry, and especially its military segment including each of the major firms, see 'Japan's aerospace industry—an overview', *Asian Defence Journal*, no. 3 (1994), pp. 34–40.

²⁴ When presenting its 1993 survey, the US Aerospace Industries Association (AIA) stated that it saw reasons for optimism, one of which was exports: see, e.g., 'Surviving in rough times', *Interavia*, vol. 49, no. 583 (Oct. 1994), p. 8.

²⁵ The value of total US aerospace sales fell to \$113 billion in 1994. Of this fall \$32 billion was in military aircraft (down 2.5% on 1993) and \$7.3 billion in missiles (down 10% on 1993): see preliminary statistics of the AIA as reported in, e.g., 'US aerospace sales continue to decline', *Interavia Air Letter*, 19 Dec. 1994, p. 6.

²⁶ Employment was cut from 34 000 in 1987 to 17 900 in 1993. Grumman decided in Jan. 1994 to cut its floor-space by nearly one-third over a two-year period: 'Grumman to cut 500 jobs in move to reduce costs', *Financial Times*, 19 Jan. 1994, p. 16.

²⁷ The acquisition was made by buying the remaining 51% share from the Carlyle Group, as provided for when Northrop and the Carlyle Group jointly acquired Vought Aircraft from LTV in 1992.

²⁸ 'Northrop Grumman calls layoffs "painful but necessary"', *Defense News*, 26 Sep.–2 Oct. 1994, p. 26.

Lockheed and Martin Marietta announced in August 1994 that they planned to merge their companies into one, Lockheed Martin, from early 1995 with the purpose of reducing costs through consolidation. The first priority for the merged company was to merge the space and missiles divisions. This merger was the latest step so far in a chain of consolidation. Lockheed acquired the fighter aircraft operations of General Dynamics (F-16) in 1993; Martin Marietta acquired the aerospace division of General Electric in 1993 and the space operations of General Dynamics in 1994. The combined arms sales of the two merged companies in 1993 amounted to \$16 billion.

The ongoing concentration in military aerospace production will undermine competition further. One example is the competition for the US Department of Defense (DOD) Joint Primary Aircraft Training System (JPATS) programme, in which Northrop Grumman, after its two acquisitions, participates in three of the seven competing teams.²⁹ The activities of Lockheed and Martin Marietta overlap primarily in intelligence-gathering satellites, with TRW as the only other US producer. The DOD, however, has taken the position that in this case the benefits of consolidation outweigh anti-trust considerations.³⁰ The effect on competition of mergers and acquisitions in the arms industry was the focus of investigation by a US Defense Science Board task force in 1994, with the main purpose of establishing whether the arms industry required special consideration under US anti-trust policies.³¹

The European aerospace industry has responded less actively in 1994 to the pressure to reduce capacity. Its traditional strategy of combining in consortia applying the principle of *juste retour* seems, however, to have reached its limits, and more radical measures are imminent. The exception is the German conglomerate DASA, which in 1995 has changed its name to Daimler-Benz Aerospace, after its parent company. After having consolidated the German aerospace industry in a five-year restructuring process, it has decided to reduce capacity during 1994–96 to an extent involving cuts of 20 000 jobs and to intensify its efforts to contribute to the integration of European aerospace industry through joint ventures, cooperation projects or mergers.³²

In the UK the restructuring process intensified in 1994 and will probably culminate in 1995. The two main defence contractors, BAe and GEC, which in 1993 were involved in negotiations for a merger, had by end-1994 become

²⁹ These are Northrop/Embraer (Super Tucano 2), Grumman/Agusta (S-211A) and Vought/FMA (Pampa-2000): see 'Northrop to complete Vought aircraft buy', *Aviation Week & Space Technology*, 18 July 1994, p. 27.

³⁰ See, e.g., 'Lockheed Martin: Building a giant', *Jane's Defence Weekly*, 10 Sep. 1994, pp. 37–38. The Federal Trade Commission agreed to the merger in Jan. 1995, but with several conditions designed to maintain competition: see 'Trade body puts curbs on Lockheed Martin', *Jane's Defence Weekly*, 21 Jan. 1995, p. 8.

³¹ Its recommendations were due in Jan. 1995: 'Panel to back defense role in mergers', *Aviation Week & Space Technology*, 21 Mar. 1994, p. 61; and *Defense News*, 5–11 Dec. 1994, p. 36.

³² Aérospatiale and DASA agreed in 1994 on a plan to merge their tactical missile divisions and satellite divisions into a single holding company in which they will share ownership, but by end-1994 this plan still required approval by the French Government: see, e.g., 'France eyes mergers to hone competitive edge', *Defense News*, 5–11 Dec. 1994, p. 8; and 'Die Dasa will unter neuem Namen durchstarten' [DASA wants to start again under a new name], *Süddeutsche Zeitung*, 2 Jan. 1995, p. 19 (in German).

fierce competitors for dominance in British naval systems integration (see the section on military shipbuilding below). BAe's strategy of focusing its activities in defence and aerospace was further implemented by the sale of its car subsidiary, Rover, to German BMW, and through continued planning of a joint venture in guided weapons with the French missile firm Matra Hachette. The sale of Rover will raise the share of military sales in BAe's total sales from about one-third to almost two-thirds, and in the military sector the company is very dependent on exports: in 1993 military exports accounted for 83 per cent of total defence sales. This is one reason why continuation of the Eurofighter 2000 programme is vital to BAe.³³

The negotiations between BAe and Matra are among several initiatives aimed to concentrate European capacity in missiles technology. In parallel there are Franco-German plans to merge the tactical missile activities of Aérospatiale and DASA in anti-aircraft and anti-armour.³⁴ In 1994 DASA and Thomson-CSF agreed to form a joint venture in missile propulsion activities.³⁵

Military electronics

In the military procurement of electronics there is a high dependence on commercial technology. The share of arms sales in total sales shown in table 13.5 is therefore an underestimate of the electronics sector's contribution to arms procurement. Reflecting primarily the defence divisions of electronics firms or their prime-contract sales to defence departments, the arms sales in the SIPRI statistics cover final military electronic systems, such as radar systems, air defence systems, guidance and control systems, and training and simulation. Many firms in this sector also supply sub-components and equipment through their commercial divisions to other firms in the arms industry.

The electronics industry is one of the industrial sectors with the highest degree of internationalization. It is characterized by companies which have a broad global net of subsidiaries, R&D cooperation and joint ventures.³⁶ While internationalization in commercial electronics intensified in the mid-1980s, large-scale international mergers and acquisitions in military electronics began in the late 1980s in Western Europe and to some extent in other OECD countries.

³³ British Aerospace, *Annual Report 1993*, p. 6; and Willett, S., Gummett, P. and Clarke, M., *Eurofighter 2000*, London Defence Studies no. 23 (King's College, London, Centre for Defence Studies: London, Sep. 1994).

³⁴ Negotiations have been going on since early 1993. In a related deal, Matra Marconi Space agreed in July 1994 to acquire the space systems activities of BAe: 'MATRA seals £56 m deal', *The Guardian*, 20 July 1994, p. 12.

³⁵ The merger will be between DASA's subsidiary Bayern Chemie and the Thomson-CSF subsidiary Thomson-Brandt Armements' division for tactical missile propulsion systems to form a joint venture with annual sales of about \$100 million: see *Interavia Air Letter*, 19 July 1994, p. 5.

³⁶ Described in OECD surveys, such as 'The European experience in advanced electronics', *STI Review*, no. 9 (1991); and *Globalisation of Industrial Activities* (OECD: Paris, 1992). For a description of the globalization of the semiconductor industry, see Ziegler, J. N., 'Semiconductors', eds R. Vernon and E. B. Kapstein, *Defense and Dependence in a Global Economy* (Congressional Quarterly Inc.: Washington, DC, 1992), pp. 155-82.

Table 13.5. The major producers in military electronics, 1993

Figures are US \$m. Figures in italics are percentages.

| Company (parent) | Country | Industrial sector ^a | Arms sales | | | | Profits Change 1988-93 |
|------------------------------------|---------|-----------------------------------|---------------|-------------------|----------------------------|---------------|------------------------------|
| | | | Level 1993 | Change 1988-93 | Share ^b 1993 | Share 1988 | |
| Allied Signal | USA | Ac El Oth | 1 410 | -6 | <i>12</i> | <i>13</i> | -52 |
| Dassault Electronique | France | El | 490 | -4 | <i>71</i> | <i>75</i> | -10 |
| E-Systems | USA | El | 1 870 | +56 | <i>89</i> | <i>83</i> | +46 |
| Federal Systems (IBM) ^c | USA | El | 1 400 | .. | <i>61</i> | .. | .. |
| GEC | UK | El | 3 210 | +8 | <i>22</i> | <i>25</i> | +8 |
| Harris | USA | El | 700 | +2 | <i>23</i> | <i>33</i> | +10 |
| ITT | USA | El | 970 | -30 | <i>4</i> | <i>7</i> | +96 |
| Litton Industries | USA | El Sh | 3 170 | +9 | <i>91</i> | <i>60</i> | -102 |
| Loral ^c | USA | El Mi | 3 750 | +257 | <i>94</i> | <i>88</i> | +140 |
| Raytheon | USA | El Mi | 4 500 | -18 | <i>49</i> | <i>67</i> | +203 |
| Rockwell | USA | Ac El Mi | 3 350 | -33 | <i>31</i> | <i>42</i> | -250 |
| SAGEM Groupe | France | El | 580 | +66 | <i>25</i> | <i>22</i> | +63 |
| Siemens | FRG | El | 990 | +24 | <i>2</i> | <i>2</i> | +408 |
| Smiths Industries | UK | El | 480 | -9 | <i>44</i> | <i>42</i> | -70 |
| Texas Instruments | USA | El | 1 840 | -14 | <i>22</i> | <i>33</i> | +106 |
| Thomson-CSF (Thomson S.A.) | France | El Mi | 4 240 | -2 | <i>70</i> | <i>77</i> | -900 |
| Unisys | USA | El | 1 500 | -40 | <i>19</i> | <i>25</i> | -116 |
| Westinghouse Electric | USA | El | 2 180 | -16 | <i>25</i> | <i>21</i> | -1 149 |

^a Abbreviations used are explained in appendix 13A.^b Share of arms sales in total sales of the company.^c Loral acquired Federal Systems from IBM in 1994.

Source: Appendix 13A.

Several transactions in 1994 reinforced this trend in Europe. The most significant of these were two Franco-British acquisitions. One of these was the acquisition by the large British electronics company GEC of half of a Franco-British joint venture, Ferranti-Thomson Sonar Systems (FTSS), from Ferranti International, which went bankrupt in 1993. Together with the owner of the other half of this company—Thomson-CSF, the French leader in military electronics—GEC stated that this purchase represented the first stage of a wider agreement embracing their activities in the sonar systems field in France, the UK and certain other countries.³⁷ The other significant event in 1994 was the agreement by Thorn EMI to sell its defence group, consisting of two military electronics units in missile and optical technology, to Thomson-CSF.

There was also an increased concentration of the military electronics industry on the national level in 1994, especially in the UK but also in Germany

³⁷ 'GEC buys 50 per cent of sonar company', *Defense News*, 21-27 Nov. 1994, p. 25; and 'GEC takes half of Ferranti-Thomson', *Jane's Defence Weekly*, 26 Nov. 1994, p. 5.

Table 13.6. The major producers of military vehicles, 1993

Figures are US \$m. Figures in italics are percentages.

| Company (parent) | Country | Industrial sector ^a | Arms sales | | | | Profits Change 1988-93 |
|---|---------|-----------------------------------|---------------|-------------------|----------------------------|---------------|------------------------------|
| | | | Level 1993 | Change 1988-93 | Share ^b 1993 | Share 1988 | |
| Fiat | Italy | Eng MV | 660 | -57 | 2 | 4 | -3 048 |
| FMC | USA | MV Sh Oth | 950 | 0 | 25 | 29 | -93 |
| General Dynamics ^c | USA | MV Sh | 3 000 | -63 | 94 | 84 | -70 |
| GIAT Industries | France | A MV SA/O | 1 300 | +13 | 80 | 100 | -120 |
| Harsco | USA | MV | 460 | +15 | 32 | 31 | +42 |
| Krauss-Maffei (Mannesmann) | FRG | El MV | 310 | -18 | 34 | 53 | 0 |
| Mitsubishi Heavy Industries | Japan | Ac Mi MV Sh | 2 380 | -16 | 10 | 19 | +234 |
| Oshkosh Truck | USA | MV | 420 | +40 | 66 | 75 | .. |
| TAAS | Israel | A MV SA/O | 440 | -6 | 95 | 98 | .. |
| Textron | USA | Ac Eng MV | 1 600 | +7 | 18 | 21 | +145 |
| Thyssen Henschel (Thyssen Industrie) | FRG | MV | 210 | .. | 60 | .. | .. |
| VSEL Consortium | UK | MV Sh | 690 | -17 | 99 | 100 | +30 |

^a Abbreviations used are explained in appendix 13A.^b Share of arms sales in total sales of the company.^c The sharp drop in arms sales for General Dynamics reflects the sale of its military aerospace operations rather than a cut in sales of military vehicles.

Source: Appendix 13A.

and the USA. This will lead the industry further into international acquisitions and cooperation linkages during the coming years.

Military vehicles, artillery, ordnance and ammunition

In military vehicles there is vast over-capacity which seems to be larger here than in any other sector of the arms industry, although it cannot be strictly measured. Several factors contribute to this. Procurement of military vehicles has been more affected by the end of the cold war than that of other types of military equipment because of the reduction of land forces in the European theatre and because the transfer between NATO countries of equipment limited by the 1990 Treaty on Conventional Armed Forces in Europe (CFE Treaty) has met a significant share of the demand for armoured vehicles (and artillery) in Europe.

The sharp drop in domestic demand in the main producer countries has resulted in fierce competition in export markets, with strong government support to offer attractive export packages, including large-scale industrial offset arrangements. A few large deals in Middle Eastern and Asian countries have

Table 13.7. The major producers of artillery, ordnance and ammunition, 1993

Figures are US \$. Figures in italics are percentages.

| Company (parent) | Country | Industrial sector ^a | Arms sales | | | | Profits | |
|------------------------------------|---------|-----------------------------------|---------------|-------------------|----------------------------|---------------|-------------------|--|
| | | | Level 1993 | Change 1988-93 | Share ^b 1993 | Share 1988 | Change 1988-93 | |
| Alliant Tech Systems | USA | SA/O | 700 | .. | 90 | .. | .. | |
| Bofors | Sweden | A SA/O | 400 | -51 | 90 | 88 | -30 | |
| Diehl | FRG | El Mi SA/O | 810 | +33 | 44 | 45 | .. | |
| Eidgenössische Rüstungsbetriebe | Switz. | A Ac Eng SA/O | 680 | +24 | 92 | 92 | +6 | |
| GIAT Industries | France | A MV SA/O | 1 300 | +13 | 80 | 100 | -120 | |
| Hunting | UK | SA/O | 490 | +11 | 31 | 62 | -8 | |
| Oerlikon-Bührle | Switz. | A Ac El SA/O | 760 | -18 | 38 | 32 | +67 | |
| Olin | USA | El SA/O Oth | 320 | -26 | 13 | 19 | -190 | |
| Ordnance Factories | India | A SA/O Oth | 740 | -53 | 90 | 99 | .. | |
| Rheinmetall | FRG | A El SA/O | 520 | -20 | 27 | 35 | -71 | |
| SNPE | France | A SA/O | 310 | +11 | 42 | 49 | -65 | |
| TAAS | Israel | A MV SA/O | 440 | -6 | 95 | 98 | .. | |
| Thiokol | USA | Eng SA/O | 520 | -10 | 43 | 54 | +31 | |

^a Abbreviations used are explained in appendix 13A.^b Share of arms sales in total sales of the company.

Source: Appendix 13A.

been at the centre of companies' struggle for survival and will continue to be so for the next few years. The export market has, however, not been sufficient, and several companies are close to finishing their order books and facing closure or bankruptcy in the near future.

A process of concentration which started slowly in France and the UK in the early 1990s is gaining momentum. In the USA, two of the three largest producers of military vehicles, FMC and Harsco, merged their land systems activities in 1994, forming a joint venture, United Defense Ltd. The other major producer, General Dynamics, which is the only US producer of main battle tanks, is currently entirely dependent on exports for the production of new tanks. Domestic orders are only for the modernization and upgrading of existing tanks and are at least partly motivated by the need to maintain an industrial base for tank production.

In Europe, the military vehicle industry has not yet seen any major restructuring; instead competition has become very stiff. In light armoured vehicles, companies have established several international cooperation programmes, but this has not resulted in any significant reductions in capacity. The large French land system producer GIAT Industries experienced heavy losses in 1993 and 1994 and faced bankruptcy by end-1994 unless the French Government provides FF 1.5 billion in subsidies.

In artillery, ordnance and ammunition the rate of closures and concentration is faster. Domestic orders have been cut to a level at which national industry cannot survive. Several ammunition manufacturing plants have been closed down.³⁸ Two major international concentration measures were initiated in 1994, one Franco-British and one Franco-German: the first the beginning of negotiations to merge the small arms and ammunition activities of GIAT Industries and the Royal Ordnance division of BAe,³⁹ the second a decision to merge the ammunition, bombs and missile warheads activities of DASA and Thomson-CSF.⁴⁰ These mergers represent a significant increase in the concentration of the European ammunition industry.

Military shipbuilding

By the end of 1993, neither sales nor profits had fallen as sharply in naval shipbuilding as in other sectors of the arms industry (table 13.8). This is in large part the result of much longer lead times in shipbuilding, which delay the impact of reduced orders.

Restructuring in shipbuilding is taking place in an environment of slight upturn in the civilian market, which is dominated by Japanese and South Korean companies, rapid progress in manufacturing technology and a strong reorientation in naval demand towards smaller ships with greater technological sophistication and heavier armaments.

Most of the major companies in naval shipbuilding are by tradition specialized in ship construction and repair. With the exception of a few companies which are also engaged in the production of military vehicles they are not as diversified as firms in other sectors of the arms industry. This is changing with the increasing importance of electronics in naval ship construction. Today it is possible for electronics companies to be the prime contractors in large naval projects. This was the case with the huge contract for two French frigates ordered by Saudi Arabia in 1994, for which the electronics firm Thomson-CSF had a 30 per cent share in the contract value and was prime contractor, with the shipbuilding company DCN as a subcontractor.⁴¹

Several decisions taken in 1993 and 1994 will work towards the reduction of capacity in naval shipbuilding in the long term through concentration of the number of suppliers in naval shipbuilding (the UK and the USA) and through integration of civil and military shipbuilding (France). German yards, as an exception to this trend, are operating at almost full capacity, to a great extent on naval export contracts. While in the USA the government is supporting the

³⁸ For instance, Diehl's plant in Röthenbach and Dutch Eurometaal's plant in Liebenau, Germany: see 'German plants to close', *Jane's Defence Weekly*, 13 Feb. 1993, p. 15.

³⁹ 'UK, French plan ammunition marriage: GIAT, Royal Ordnance to finalize agreement on common subsidiary by 1995', *Defense News*, 10-16 Oct. 1994, p. 14. In addition, Royal Ordnance is discussing a joint venture in explosives and propellants with the French state-owned company SNPE: see 'SNPE and RO planning explosives venture', *Jane's Defence Weekly*, 25 Feb. 1995, p. 8.

⁴⁰ This merger is between the Thomson-Brandt Armements (TBA) subsidiary of Thomson-CSF and the Wirksysteme operations of DASA's Dynamics Systems Division: see 'A further merging of the mighty', *Jane's Defence Weekly*, 30 July 1994, p. 37.

⁴¹ 'France to supply Saudi frigates', *Financial Times*, 23 Nov. 1994, p. 4.

Table 13.8. The major producers in military shipbuilding, 1993

Figures are US \$m. Figures in italics are percentages.

| Company (parent) | Country | Industrial sector ^a | Arms sales | | | | Profits Change 1988-93 |
|-------------------------------------|---------|-----------------------------------|---------------|-------------------|----------------------------|---------------|------------------------------|
| | | | Level 1993 | Change 1988-93 | Share ^b 1993 | Share 1988 | |
| Avondale Industries | USA | MV Sh | 370 | -18 | 79 | 79 | -13 |
| Bath Iron Works | USA | Sh | 600 | .. | 100 | .. | .. |
| EN Bazan | Spain | Sh | 330 | -13 | 80 | 82 | -87 |
| Blohm & Voss (Thyssen Industrie) | FRG | MV Sh | 320 | +23 | 52 | 38 | +24 |
| Bremer Vulkan | FRG | El Sh | 860 | +562 | 23 | 20 | -53 |
| DCN | France | Sh | 3 440 | +14 | 97 | 100 | .. |
| Devonport Management | UK | Sh | 340 | -24 | 91 | .. | .. |
| Fincantieri (IRI) | Italy | Sh | 100 | -60 | 6 | 28 | +109 |
| General Dynamics ^c | USA | MV Sh | 3 000 | -63 | 94 | 84 | -70 |
| HDW (Preussag) | FRG | Sh | 480 | +55 | 51 | 49 | +45 |
| Ishikawajima-Harima | Japan | Eng Sh | 840 | +40 | 9 | 10 | -5 |
| Kawasaki Heavy Ind. | Japan | Ac Eng Sh | 1 130 | .. | 12 | .. | +63 |
| Kockums (Celsius) | Sweden | Sh | 100 | .. | 34 | .. | .. |
| Litton Industries ^d | USA | El Sh | 3 170 | +9 | 91 | 60 | -102 |
| Mitsui Shipbuilding | Japan | Sh | 310 | .. | 10 | .. | .. |
| Newport News (Tenneco) | USA | Sh | 1 860 | +11 | 100 | .. | +50 |
| Sumitomo Heavy Ind. | Japan | A Sh | 310 | .. | 7 | .. | .. |
| Vosper Thornycroft | UK | Sh | 320 | +129 | 89 | 84 | +10 |
| VSEL Consortium | UK | MV Sh | 690 | -17 | 99 | 100 | +30 |

^a Abbreviations used are explained in appendix 13A.^b Share of arms sales in total sales of the company.^c Electric Boat Division. The sharp drop in arms sales for General Dynamics reflects the sale of its military aerospace operations rather than a cut in naval activities.^d Ingalls Shipbuilding Division.

Source: Appendix 13A.

remaining naval industrial base beyond current requirements for reasons of capability preservation, the British military shipbuilding industry is going through the most radical restructuring, influenced by government decisions in awarding contracts. Swan Hunter went into receivership in 1993 as a result of losing an order for a helicopter-carrier and the Devonport dockyard was offered for sale in 1994, with VSEL as one of the major bidders. The subsequent takeover bid for VSEL by BAe and counter-bid by GEC pitted the two major British arms producers against each other as rival bidders. This signified not only the attraction of a government contract of £2.5 billion for Trafalgar Class submarines expected by VSEL but even more the close relation between naval electronics and ship construction: the latter is increasingly approaching the role of a complement to the former.⁴²

⁴² See Gray, B., 'Sea change in UK defence', *Financial Times*, 1-2 Oct. 1994, p. 7.

BAe is already involved in ship design through BAeSEMA, its joint venture in naval electronics, which produces ship and submarine command and control systems. GEC both owns one of the other two British shipyards, Yarrow, and is engaged in naval electronics through GEC Marconi and its recent acquisitions of Ferranti Defence Systems units. The European Commission refrained from examination of the bids after being convinced by the British Government that most of the proposed mergers would involve military production, which falls outside its obligatory jurisdiction. Both bids were, however, referred to the British Monopolies and Mergers Commission on the grounds of competition (in the case of GEC) and 'wider public issue concerns' (in the case of BAe),⁴³ indicating the lack of an official position on the policy issues involved.

IV. Russia

Cuts in defence expenditure, the decline of arms production, pressures to preserve the structure of the defence complex and a lack of effective decision making at the political level have resulted in a completely unbalanced interrelation between national security planning, spending priorities and the real processes of transformation of the defence industry, which have their own, often chaotic, dynamics.

Two extreme points of view on the state of the Russian defence industry are to be encountered today. One predicts its complete collapse in the near future as a result of reduced financing and the general free fall of industry. The facts that hundreds of defence enterprises are standing still, that the defence complex has declined dramatically in the pay hierarchy of industry in general and that close to two million jobs were lost from military industry over the period 1991–94 support this view. The other view, based on the negative, destructive image of the military–industrial complex (MIC) which was popular in the late 1980s, argues that, notwithstanding the sharp decline in military expenditure, other public needs are more urgent: systemic transformation makes the need to support financial stabilization, anti-inflationary measures and social stability more important aspects of national security than direct military expenditure.⁴⁴

Is the defence industry then a victim or a butcher of the reforms and democracy in the new Russia? The answer seems to be less straightforward than the question and should be looked for in the more general social and economic context of Russian reality in 1994.

This section examines down-sizing in the defence complex, the development of a defence industrial policy and the change to civilian production. The

⁴³ 'VSEL inquiry pointless, GEC says', *The Guardian*, 10 Dec. 1994, p. 22; 'Heseltine puts battle for VSEL on hold', *The Independent*, 8 Dec. 1994; and 'MMC to rule on bids for VSEL', *Jane's Defence Weekly*, 17 Dec. 1994, p. 6.

⁴⁴ See, for example, Zhuravlev, A., 'Vse my zalozhniki VPC' [We are all hostages of the military–industrial complex], *Rossiyskaya Gazeta*, 7 June 1994. The author derives the figure of 80 trillion roubles for the military budget for 1994 and insists that it will lead to the resumption of the arms race, the blocking of military reforms and continuing general technological backwardness. He supports his estimates using the budget figures and expenditure hidden in non-military articles.

literature on these issues is still fairly limited, fragmented and not free from partisan political influence. Nevertheless information on the Russian military sector has become available to an extent which was previously unthinkable. While bearing in mind the drawbacks and lack of refinement in the official data and information on the Russian military sector, it has been possible to base this section primarily on Russian sources with the purpose of introducing an insider's view on the debates and on the process of adjustment in the Russian defence industry.

Output in the defence industry

Profound changes have taken place in the Russian defence industry during the past four years and will continue in the immediate future. Several developments should be stressed, in particular radical down-sizing, the reform of the procurement system⁴⁵ and great reductions in capacities and reserves for the mobilization of production.⁴⁶ There is ample reason to expect major changes in the industrial composition of the defence complex in the coming months.

The down-sizing of the defence industry was the effect of several factors: the steady decline in 'investment items' (arms procurement and R&D) in the defence budget in line with a serious fall in gross national product (GNP) and federal government expenditure generally; the poor general economic situation; and poor financial discipline in government payments for federal contracts. Since 1992, when the share of procurement fell to 16.1 per cent of total military expenditure,⁴⁷ a relatively stable share for procurement, military R&D and construction allocations in the defence budgets has meant an ever-decreasing volume of goods and services purchased by the military. There has furthermore been a second demand shock when civilian demand fell, which because of the high degree of civilian diversification of the defence-related industries has clearly worsened the prospects for output and development. Of the enterprises subordinated to the State Committee for the Defence Industries, 50 per cent are diversified to as much as 75 per cent civilian products as a proportion of total output, and only 16 per cent of them manufacture primarily military goods and services.⁴⁸

Hoped-for extra-budgetary funds to finance military needs have not materialized.⁴⁹ In addition, allocated expenditures are not provided on schedule.

⁴⁵ Efforts to reform the procurement system have so far been confined to the procedures for distribution and payment of contracts. The Ministry of Defence has managed to achieve control over the contracting rights for both R&D and manufacturing, in contrast to previous years, when this authority rested mainly with the Military-Industrial Commission of the Council of Ministers of the USSR.

⁴⁶ Decree of the President on the Reduction of Mobilization Capacities and Mobilization Reserves: see *Rossiyskaya Gazeta*, 13 July 1994).

⁴⁷ Bergstrand (note 10), table 12.10, p. 426.

⁴⁸ Centre for Economic Analysis of the Government of the Russian Federation, *Russia-1994*, no. 1 (1994), p. 198.

⁴⁹ It was believed that the defence budget could be raised by the creation of an extra-budget fund from revenues from privatization. However, this stage of mass privatization did not yield the expected profits and resulted instead in additional expenses. The use of extra-budget funds is also discussed in chapter 12 in this volume.

Table 13.9. Indicators of economic decline of the Russian defence industries, 1991–94^a

| | Total output | | | Employment | | | Salaries | |
|-------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------------------|----------------------------------|
| | 1992 as % of 1991 | 1993 as % of 1992 | 1994 as % of 1993 | 1992 as % of 1991 | 1993 as % of 1992 | 1994 as % of 1993 | 1992 as % of industry average | 1993 as % of industry average |
| Aircraft | 84 | 81 | (49) | 91 | 90 | (85) | 71 | 68 |
| Ammunition and special chemicals | 70 | 82 | (62) | 90 | 89 | (81) | 71 | 63 |
| Armaments | 84 | 82 | (54) | 93 | 91 | (85) | 68 | 64 |
| Atomic industry | 100 | 103 | (77) | 97 | 97 | (94) | 114 | 119 |
| Communications equipment | 74 | 78 | (55) | 87 | 82 | (82) | 56 | 51 |
| Electronics | 72 | 66 | (49) | 92 | 81 | (76) | 54 | 44 |
| Radio | 84 | 93 | (55) | 87 | 86 | (82) | 53 | 53 |
| Shipbuilding | 89 | 88 | (76) | 90 | 90 | (86) | 77 | 87 |
| Space | 94 | 95 | (71) | 89 | 89 | (82) | 66 | 69 |
| Total defence complex | 82 | 84 | (65) | 91 | 88 | (84) | 69 | 67 |

^a Includes civilian and military production in the defence complex.

Sources: Centre for Economic Analysis of the Government of the Russian Federation, *Russia–1994*, no. 1 (1994), p. 144; and no. 4 (1995), p. 130.

Table 13.10. Russian military production in selected sectors, 1991–94

By volume of output.

| Arms production sector | 1992 as % of 1991 | 1993 as % of 1991 | 1994 (first 6 months) as % of first 6 months of 1991 |
|---|----------------------|----------------------|--|
| <i>Military production</i> ^a | 62.0 | 52.1 | 31.8 |
| Aircraft (incl. helicopters) | .. | 26.3 | .. |
| Ammunition | .. | 18.6 | .. |
| Armoured <i>matériel</i> | .. | 20.0 | .. |

^a Figures on the decline in military production include the Ministry of Atomic Energy and therefore differ from the data originating from the State Committee for the Defence Industries. If the nuclear branch is excluded, then military output in the MIC was at 49.5 per cent of its 1991 level in 1992 and 32.5 per cent of its 1991 level in 1993. It was forecast to be 20 per cent of its 1991 level in 1994: see Vitebsky, V., 'Does the military-industrial complex act as a motor of the national economy?', *Military Parade*, Sep./Oct. 1994, p. 93.

Sources: Glukhikh, V., 'Russian military-industrial complex: a view from the inside', *Military Parade*, Mar./Apr., 1994, p. 10; 'Itogi raboty Goskomoboronproma za yanvar-dekabr 1993 goda' [Results of the work of the State Committee for the Defence Industries January–December 1993], *Segodnya*, 1 Feb. 1994; and Centre for Economic Analysis of the Government of the Russian Federation, *Russia-1994*, no. 1 (1994), p. 141.

The Ministry of Finance is heavily indebted in all budget categories. For the first nine months of 1994, for example, only half of the defence budget allocations for that period had actually been spent.⁵⁰ This fact and lack of experience in coping with an inflationary budget have seriously reduced the value of most of the allocations for military purposes. Many of the directors of enterprises today therefore consider military contracts as unprofitable and uncertain, which creates a strong motivation to look for civilian market niches.

Calculations from the data presented in table 13.9 show a general fall in the combined civilian and military output in all branches of the defence complex of around 55 per cent over the period 1991–94. One of the puzzles is that the most depressed branches in these years were high-technology industries: output fell in the electronics branch by 77 per cent, in communications equipment by 68 per cent and in aircraft by 67 per cent. 'Hardware' production was declining relatively more slowly. Until 1994 the atomic industry performed fairly successfully, mainly because of the export of enriched uranium and rising energy prices. In 1994 it is clear, however, that the decline in output throughout the defence complex has accelerated strongly and also involved the relatively wealthy branches such as the atomic industry and shipbuilding.

Labour leaving the defence industry voluntarily has been absorbed mainly by the informal economy. It can be argued that it is mostly the more capable, skilled and younger employees who have left (for work which has no relation to their education and professional experience), thus creating a deficit of cer-

⁵⁰ For the first 9 months of 1994 actual military expenditure amounted to 16 trillion roubles; according to the budget plan 30 trillion should have been spent out of a budget of 40 trillion roubles.

Table 13.11. Employment in the Russian defence complex, 1991–93

Employment figures are in thousands. Figures in italics are percentages.

| | 1991 employ- ment | 1992 employ- ment | 1992 as % of 1991 employment | 1993 employ- ment | 1993 as % of 1991 employment |
|-----------------------------|-------------------------|-------------------------|------------------------------------|-------------------------|------------------------------------|
| Defence complex | (5 300) | 4 889 | <i>92.0</i> | 4 223 | <i>80.0</i> |
| Military production and R&D | (2 120) | 1 467 | <i>69.6</i> | 845 | <i>39.9</i> |
| Civilian production and R&D | (3 180) | 3 422 | <i>107.6</i> | 3 378 | <i>106.0</i> |

Note: Employment at the military enterprises of the Ministry of Atomic Energy is not included. Figures for 1991 are the author's calculations.

Sources: Centre for Economic Analysis of the Government of the Russian Federation, *Russia–1993*; *Russia–1994*, no. 1 (1993) and no. 1 (1994); and 'Itogi raboty Goskomoboronproma za yanvar–dekabr 1993 goda' [Results of the work of the State Committee for the Defence Industries, January–December 1993], *Segodnya*, 1 Feb. 1994.

tain skills in the defence industry. Bearing in mind the impending restructuring of the MIC, further redundancies can be expected and will be painful, especially for engineers, who have very poor re-employment prospects in the declining economy.

It is difficult to estimate with any reasonable certainty what proportion of this decline is accounted for by military output. It is reported that the output of military electronics in 1993 fell by 64 per cent on 1992, while the civilian output of the same branch fell by 27 per cent.⁵¹ Table 13.10 provides data for some other branches of the defence complex. Military output has been falling especially fast since 1991, and by the end of 1993 it was less than one-third of the level of 1991, the last year of the Soviet Union's existence.⁵²

An important factor behind the decline in Russian arms production is the dynamics of prices. There is reason to believe that the long-standing practice of underpricing military technology and hiding true costs has rebounded on military purchasers since price liberalization.⁵³ In 1992, because of accumulated reserves of *matériel*, the rate of inflation for military hardware was lower than the average in industry. In 1993 this changed and high cost inflation made arms production one of the most inflationary sectors of the economy, especially in shipbuilding and the ammunition industry (see table 13.12).

This analysis of the dynamics of Russian defence financing and output would be incomplete without an assessment of the role of arms exports as a source of investment financing for military production and conversion, especially in view of the hopes for arms export revenue. These hopes were embodied in the huge contracts which Russian foreign trade institutions placed with the defence enterprises in 1992 without realistic estimates of demand on the international arms market. Weaponry has therefore been pro-

⁵¹ Centre for Economic Analysis of the Government of the Russian Federation (note 48), p. 140.

⁵² This figure excludes the nuclear branch. See note to table 13.10.

⁵³ Bergstrand (note 10), pp. 421–22.

Table 13.12. Inflation in the Russian defence industry, 1993

Figures are the monthly percentage rate of inflation, averaged over the year.

| | Average inflation index | Inflation index in military production | Inflation index in civilian production |
|----------------------------------|-------------------------|--|--|
| Aircraft | 8.1 | 11.7 | 6.8 |
| Ammunition and special chemicals | 8.2 | 12.3 | 7.7 |
| Armaments | 8.4 | 11.9 | 7.3 |
| Communications equipment | 8.2 | 9.7 | 7.6 |
| Electronics | 6.6 | 6.7 | 6.8 |
| Radio | 7.5 | 10.0 | 6.4 |
| Space industry | 8.5 | 11.9 | 7.7 |
| Shipbuilding | 8.0 | 12.6 | 6.3 |

Source: 'Itogi raboty Goskomoboronproma za yanvar–dekabr 1993 goda' [Results of the work of the State Committee for the Defence Industries, January–December 1993], *Segodnya*, 1 Feb. 1994.

duced without being paid for, which has seriously complicated the financial situation of the defence enterprises, while arms exports declined dramatically.

An ever shrinking world arms market, being dominated by the buyers, will hardly compensate for the declining domestic market for Russian weaponry for the majority of arms manufacturers.⁵⁴ On the other hand, however low the level of Russian arms exports, their value in 1994 is comparable to the domestic arms procurement budget of the same year. Another important change is the increasing share of exports paid for in hard currency in the year of delivery.⁵⁵ It is true that only a very limited number of the around 2000 existing arms producers participate effectively in the arms trade, but it may be assumed that for the military 'superstars', especially from the aircraft industry, export revenue is starting to play the decisive role. It is worth suggesting that participation in the international arms trade will be the decisive factor in selecting the 'winners' and 'losers' among the arms manufacturers.

Rosvooruzhenie,⁵⁶ the state company for exports and imports of arms and military technology, is very unlikely to develop into an establishment with an active, independent policy of financing the defence industry. In the first six months of its existence it invested 150 billion roubles in more than 60 enterprises (about \$75 million at the mid-1994 exchange rate).⁵⁷ The funds were

⁵⁴ See also chapter 14 in this volume.

⁵⁵ In 1992 the volume of military exports paid for in the year of delivery remained virtually unchanged at 96.4% of the 1991 level. Moreover, the volume of arms sales for hard currency paid for in the year of delivery rose by almost one-third compared to 1991. Another \$1 billion was paid in kind in the form of consumer goods in 1992: see *Military Parade*, May/June 1994, p. 15.

⁵⁶ On the setting up of Rosvooruzhenie, see Bergstrand (note 10), p. 430.

⁵⁷ Fillin, S., 'Rosvooruzhenie State Company and the enterprises of the military-industrial complex: a new stage of partnership', *Military Parade*, Nov./Dec, 1994, pp. 14–15.

allocated to enterprises which had export contracts to help to provide working capital: thus Rosvooruzhenie has performed rather like an export credit organization. Some relations are developing between Rosvooruzhenie and enterprises with high-quality but very specialized and potentially exportable production. In this case Rosvooruzhenie gives contracts to enterprises with hopes of future exports. Experience of advance contracting in 1992 suggests that this policy could result in growing debts, overstocked warehouses and increasing costs to maintain the weaponry purchased. In December 1994 a new institution with significant power and ambitions to control arms exports and production was established—the State Committee of Military–Technical Policy, directly under the president.⁵⁸ Although it is too early to reach definite conclusions, it might be suggested that the role of arms exports in the accumulation of investment resources to support the arms industry will grow.

Defence industrial policy

The changes discussed above have been rather chaotic and reflect more the adjustment of the defence industry to the declining economy and diminishing state power than deliberate actions coordinated as part of a well-articulated military–industrial policy. The latter has been subject to political infighting and competition between different institutions of the military establishment. Given that the Defence Ministry has the greatest likelihood of becoming the main decision-making institution in the field of arms production (it has managed to insist on the right to be a main contractor in military R&D and procurement), it is worth paying special attention to its concept of defence industrial policy.⁵⁹

Summarizing its main features, several points may be made. Plans are being imposed to get rid of obsolete weapons; to cut the number of types of arms under production in favour of high-technology weaponry; and to balance major weapon systems with adequate development of infrastructure. Among the first priorities will be equipment for mobile forces with combat and transport aircraft; support of strategic nuclear forces, especially with command, control, communications and intelligence (C³I) systems; development and production of new electronic systems; and development of high-precision ammunition. Where the Defence Ministry's vision of the composition of industry is concerned, it clearly intends to establish integrated large industrial enterprises able to manufacture both military and civilian products, based mainly on the dual-use technologies approach where possible. Banks, insur-

⁵⁸ *Rossiyskaya Gazeta*, 10 Jan. 1995 (in Russian).

⁵⁹ The public version of military technology policy, formulated by the Defence Ministry, was mainly presented in a series of interviews with First Deputy Defence Minister Andrey Kokoshin. See, for example, Kokoshin, A., 'Oborona Rossii opiraetsya na ekonomiku' [The Russian defence rests on the economy], *Izvestia*, 20 July 1992 (in Russian); Kokoshin, A., 'Voennye vyruchayut promyshlennost', oboronshiki—armiyu' [The military helps industry, the defence industry helps the Army], *Izvestia*, 19 Jan. 1993, p. 5 (in Russian); and Kokoshin, A., 'National industrial policy: a new system of values and ideas behind their realisation', *Military Parade*, May/June 1994, pp. 9–13.

ance companies and investment funds are also invited to participate in this integration, financial–industrial groups being one possible form for this.

It is still unclear to what extent these intentions have already been implemented or have had any chance to be implemented at all. Until now the policy of postponing radical decisions has mostly been at work—trying to maintain the size and the structure of the defence complex and to compensate for losses on the domestic market by promoting arms exports. This approach has led to the majority of failures: the intention to retain the same organizational structure was rather unrealistic and has conflicted with the mainstream of economic reforms. Moreover, it did not motivate changes in management methods or companies' culture and has thus led to losses of the main competitive advantage of the defence industry—a high-value labour force and technology. On the other hand it may be argued that the 'soft' pattern of defence industrial reform allowed the industry to learn some important lessons and to avoid mass unemployment. In fact, the majority of non-viable enterprises are no longer operational, given that their core labour force has quit in search of better salaries and more secure jobs.

Some signs of attempts to introduce urgent restructuring of the defence complex and a coordinated national security and defence industrial policy did appear in 1994. The principal goal of this 'new thinking' is to reshape the defence complex and to shed the responsibility of supporting from the defence budget those, mainly low-technology, enterprises whose production meets neither military or civilian demand. On the other hand stricter control and pressure will be exercised over the remaining enterprises involved in military R&D and production.

These plans were formalized in the decision of the government 'On Measures to Stabilize the Economic Situation of the Defence Complex Enterprises' in December 1994.⁶⁰ According to this document, the restructuring of the defence industry is to be finished in the first half of 1995. The core of the defence complex will be organized in the form of federal scientific–technical centres which will fulfil most state military contracts and a relatively small number of 'federal enterprises' (*kazyenniye predpriyatiya*). Up to 1000 enterprises will be released from the defence complex and may be converted into joint-stock companies. Federal enterprises will be promised advance payments for state contracts, more discipline in payments for state contracts and early pension rights for released workers, and will lose a certain part of their managerial independence to enable state control over their activities.

The final results of these reforms are unclear because no data are available on the volume and structure of the property subject to federal or treasury ownership. It is no less difficult to predict how the ever weakening state will fulfil its obligations to support and manage its property. Increasing numbers of redundancies may be expected from enterprises freed for market development,

⁶⁰ Resolution no. 1399 enacted on 19 Dec. 1994. See 'O merakh po stabilizatsii ekonomicheskogo polozheniya predpriyatiya i organizatsii oboronnogo kompleksa' [On measures for the stabilization of the economic situation of enterprises and organizations of the defence complex], *Ekonomika i Zhizn'*, no. 1 (1995), supplement, p. 7 (in Russian).

the development of new processes of property redistribution and new capital mobility across sectors. It is also important that those enterprises remaining under the supervision of the Defence Ministry are involved in the far-reaching process of industrial consolidation.

The aircraft and space industries were selected as the state's top priorities in defence industrial policy, but even this most privileged sector has suffered a sharp decline. According to the Deputy Chairman of the State Committee for the Defence Industries, at least 450 aircraft of all types (military and civilian) were produced in 1993,⁶¹ a reduction by roughly 75 per cent on 1991.⁶² The state contract for military aircraft accounted for only 16 aircraft in 1994.⁶³ Both economic constraints and a new technology policy in the field of military aviation have led to this dramatic decline.⁶⁴ Many experts expect further cuts in the still too large fleet of combat aircraft in accordance with the reversed military doctrine. Priority will be given to the multi-role MiG-29M and Su-35 fighters and to military transport planes and helicopters to support the 'air-mobility' of the future reduced, rapid-reaction type of army. These plans may reportedly result in a reduction of the fleet of military aircraft to 20–40 per cent of its former size and in its radical restructuring: professionals assume that combat aircraft as such will account for no more than 50–60 per cent of the fleet, with the remaining 40–50 per cent made up of support aircraft.⁶⁵

What might this mean for the aircraft industry? First of all, it will mean concentration and, second and more important, a reduction in the number of prime contractors. Some signs of this kind of development have already emerged. Thus, by late 1994 the merger of the MiG design bureau and MAPO⁶⁶ (the general producer of MiG fighters) was announced. This decision was taken not without doubts on the part of the MiG bureau, which has in the last two years made energetic attempts to expand its pilot production shops and to receive international certificates for its production lines in the hope of serial subcontracting from the West. The new scientific–financial–industrial group will include the complete cycle of research, design, production, banking and sales as well as after-sales service.

The fall in domestic demand for aircraft has created more pressure to export. While in 1994 only 10 combat aircraft were manufactured for the domestic

⁶¹ Bratikhin, A., 'Russian aircraft at Farnborough', *Military Parade*, July/Aug. 1994, p. 38. In the new edition of *Rossiia—1994* data are provided for the first time on the civilian production of the aircraft industry: 250 aircraft and 64 helicopters in 1993, and 106 aircraft and 44 helicopters during the first 9 months of 1994: see Centre for Economic Analysis of the Government of the Russian Federation, *Rossiia—1994* [Russia—1994], no. 4 (1995), p. 131 (in Russian).

⁶² Glukhikh, V., 'Russian military-industrial complex: a view from the inside', *Military Parade*, Mar./Apr. 1994, p. 10. The original reads 'a reduction by 3.8 times'.

⁶³ According to a presentation of A. Shulunov, Chairman of the League of Defence Enterprises, at the Carnegie Seminar in Moscow, Nov. 1994.

⁶⁴ Fedosov, Y., 'Russia's technical policy in the field of military aviation', *Military Parade*, July/Aug. 1994, p. 39.

⁶⁵ Fedosov (note 64).

⁶⁶ The full name is Moscow Aviation Scientific–Industrial Unit MiG-MAPO: see *Krasnaya Zvezda*, 3 Dec. 1994 (in Russian).

market, 85 were produced for export.⁶⁷ In contrast to previous years, the Russian aircraft industry now presents much more sophisticated and aggressive strategies to promote export policy. Along with often successful attempts to sell modern aircraft, much effort is being invested in the modernization and servicing of aircraft which are already being exported. Thus the MiG-21-93, an upgraded version of the MiG-21, was actively marketed at the Farnborough Air Show together with the technologies of modernization.

Submarine building is also subject to concentration: only one of four shipyards—Severodvinsk—is left, with the docks operating at much reduced capacity. In addition to repairs, the first new-generation multi-purpose submarine was laid down at this shipyard in late 1993. Other shipyards (in Nizhniy Novgorod, two in St Petersburg and one in Komsomolsk-on-Amur) are awaiting a government decision about their fate.

As mentioned above, electronics is the most depressed branch among defence-related sectors of the economy. A dramatic crisis was brought about not only by declining military and civilian demand but also by the general low competitiveness of Russian electronics, which became especially visible after the domestic market was opened up to components and finished products from abroad. The unfavourable cost performance of the Russian products has shifted demand even for the microchips used in military electronics to foreign producers. In this case, concentration can hardly help. The Government has therefore chosen another approach to support the electronics industry—the establishment of a federal fund for the development of electronics, the major task of which is to return managerial control over the fragmented and hardly operational industry to the state. The functions and power delegated to the fund are rather impressive: it is designed as an investment, contracting and new-technology promoting institution, able to reorganize enterprises, guarantee credits with security and control property which has remained in state ownership. Financing will come from budget allocations, special taxing of businesses and profits from the state stock of shares of privatized enterprises.⁶⁸

The change to civilian production

The issue of conversion has dominated debates on the adjustment strategies of the Russian defence complex, presenting mostly a history of failures and some fragmented success stories. In fact conversion policy could not but fail in the macroeconomic sense given the general economic and political context of reforms in the defence complex. Several factors are at work here.

1. The transformation has been taking place in a very sick economy, which has failed to provide the investment, effective demand and incentives needed

⁶⁷ *Krasnaya Zvezda*, 3 Dec. 1994 (in Russian). The 85 produced for export were, however, not delivered in 1994; see appendix 14B in this volume and Forsberg (note 21), appendix table 1, p. 293, which gives the same numbers as a forecast for 1994 aircraft production.

⁶⁸ 'On the Federal Fund for Development of Electronic Technics; Decision of the Government of the Russian Federation', 12 Jan. 1995, *Sobranie zakonodatel'stva Rossiyskoy Federatsii* [Collection of laws of the Russian Federation], no. 4 (23 Jan. 1995), pp. 529–35 (in Russian).

for the resumption of economic growth. After the demand shock from the military market came a second, a deterioration of demand for the most traditional products of the Russian defence enterprises—high-technology civilian products. This leaves only a few markets available for conversion and other forms of civilian adjustment of the former defence enterprises.

2. The policy of postponing difficult decisions has postponed the much needed industrial restructuring and the imperfect market could hardly provide the signals and tools for it. Time was lost and available resources were exhausted, removing the motivation for defence industry managers to attempt market-oriented adjustments and creating vain hopes for opportunities for further government favours. Moreover, many of the capable and potentially viable enterprises in the civilian market faced high exit barriers from the defence complex, such as restrictions, special rules for privatization and obligations to keep up mobilization capacity,⁶⁹ which have made many optimal options of economic adjustment either illegal or impossible. This has reduced the initial advantages of the existing low entry barriers to the not-too-crowded domestic markets.

3. However attractive the strategy of conversion, it can hardly solve the problems of specialized and often outdated factories or, at the other extreme, very science-intensive establishments with high technological risk and exotic and non-convertible—on the modern Russian market—technologies. Most of the strategies used in these cases in the West—liquidation, mergers with commercial firms, acquisitions or civilian export promotion—have been impossible in the Russian environment with its very poor capital mobility.

State conversion programmes, which were the main instrument of government policy in this field in the late 1980s, are losing their role: the share of the state budget allocated for conversion fell from 2.5 per cent in 1992 to 0.4 per cent in the 1995 budget proposal.⁷⁰ If all sources of defence conversion financing are taken into account, then loans from the commercial banks are now the main source, while the federal budget, the fund for conversion and regional budgets are gradually reducing their allocations. Enterprises' own investment has also declined (except in the nuclear industry).⁷¹

The inefficiency of state financing of conversion is one of the major reasons for the restructuring of sources of finance. Suggestions are therefore being made to the effect that state conversion expenditure should be reoriented away

⁶⁹ Decree of the President on the Reduction of Mobilization Capacities and Mobilization Reserves (note 46). The decree not only stated the need to reduce the scale of the mobilization system, but also allowed enterprises which had no obligations to keep mobilization capacity open to convert or lease it. This permission would have been especially important some years ago, when released capacity was frozen in mobilization reserves, which hampered conversion. Unfortunately for today's depressed industry, the elimination of this barrier to conversion will hardly stimulate growth.

⁷⁰ Centre for Economic Analysis of the Government of the Russian Federation (note 48); see also table 12.4 in this volume.

⁷¹ Thus over 1992–93 the share of total expenditure for conversion accounted for by the federal budget fell from 24% to 18%, that of the conversion fund fell from 22% to 13%, that of companies' own expenditure fell from 23% to 19%, and that of investment increased from 31% to 48%. The proportion of investment accounted for by bank loans increased from 31% to 47.5%: see Centre for Economic Analysis of the Government of the Russian Federation (note 48), p. 144.

Table 13.13. The economic situation at 158 defence enterprises, 1992–93

Figures show the percentage of enterprises surveyed.

| | Change between 1992 and 1993 | | | No reply |
|--|------------------------------|-----------|------|----------|
| | Increase | No change | Fall | |
| Industrial output: military | 8 | 7 | 80 | 5 |
| Industrial output: civilian | 36 | 10 | 53 | 1 |
| Exports: military | 9 | 8 | 28 | 55 |
| Exports: civilian | 15 | 12 | 26 | 47 |
| Employment | 4 | 6 | 88 | 2 |
| Civilian demand | 11 | 18 | 68 | 3 |
| Accumulated civilian products at warehouses | 59 | 22 | 13 | 6 |
| Manufacture of dual-use products | 21 | 25 | 8 | 46 |
| Investments | 17 | 12 | 46 | 25 |

Source: Centre for Economic Analysis of the Government of the Russian Federation, *Russia—1994*, no. 3 (1994), pp. 135–39.

from support to the enterprises to the stimulation of demand in markets other than military/government ones, granting money to particular buyers, especially in the field of infrastructure.⁷² These ideas represent a significant change in the way of thinking of the defence authorities.

An analysis of the economic situation at enterprise level was carried out in May–July 1994 in 158 enterprises by the Centre for Economic Analysis of the Government of the Russian Federation. The results, presented in table 13.13, show that, although signs of depression were present at most of the enterprises surveyed, a relatively high proportion reported growth in civilian output (36 per cent), the continuance of exports and growing use of dual-use technologies for civilian production. The majority of directors considered that general economic development (insolvency of customers, expensive credits, high taxes and the poor functioning of the banking system) were influencing their economic situation far more than the dynamics of the military market. Eighteen per cent of enterprises surveyed considered it reasonable to stop military production because the market is unpredictable and payments from the state budget unreliable. Nevertheless 84 per cent still received some state support in the form of easy credits. Production was running below 50 per cent of capacity in 57 per cent of the enterprises (although 4 per cent reported that they were using over 75 per cent of capacity).

There are certain inconsistencies between some of the results of adjustment at the microeconomic level and the critical macroeconomic situation, which may be explained by the increasing creativity of managers of defence enterprises and the lessons learned from the failures of the previous years. Adjustment strategies at the microeconomic level demonstrate a growing hetero-

⁷² See, for example, Kokoshin, A., 'National industrial policy' (note 59), pp. 11–12.

genity and an inventiveness of responses to the challenges of transformation. In many respects this is puzzling, given the general assumption that defence industry managers are unable to adjust. In fact, the experience gained by the most capable managers, the rapid development of entrepreneurship, the spinning off and starting up of small competitive firms and the emerging alliances between capital of non-market and market origin (mostly banks and former defence enterprises) may help to establish competitive clusters in the Russian economy, which could become catalysts for growth.

V. Conclusions

Declining arms procurement in most parts of the world has resulted in reduced production, both for national procurement and for export, in the great majority of the major arms-producing countries.⁷³ The arms sales of the 100 major arms-producing companies in the OECD and developing countries have continued to decline: by \$10 billion from 1992 to 1993. In Russia the reduction in demand for military equipment has been even sharper. Domestic procurement has dropped to around one-fifth of the 1991 level and Russia's share in world arms exports has declined significantly.

The adjustment of production to demand has in the OECD countries largely been left to industry, with little government intervention. Companies have responded by down-sizing and introducing relatively drastic restructuring strategies. In the USA capacity reductions have to a great extent taken the form of company mergers and acquisitions. In the smaller national markets of Europe this strategy has not been easy to implement, but rationalization is necessary, and several major cross-border takeovers and joint ventures are likely to be implemented in the next year or two. The situation in Russia is more complicated, not only because of the more drastic cuts required but also because restructuring is taking place in a period of transition of the political and economic system. The early optimism over conversion has subsided because of both failures in financing and concepts and the lack of civilian purchasing power. The emerging Russian military-industrial policy appears to be to obtain state control over a core of the military industry, to restructure sources of finance and to let a large part of the remaining military production facilities close down.

⁷³ China is the one possible exception: see Frankenstein, J., 'The People's Republic of China: arms production, industrial strategy and problems of history', ed. H. Wulf, SIPRI, *Arms Industry Limited* (Oxford University Press: Oxford, 1994), pp. 271-319.

Appendix 13A. The 100 largest arms-producing companies, 1993

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Table 13A contains information on the 100 largest arms-producing companies in the OECD and the developing countries ranked by their arms sales in 1993.¹ Companies with the designation *S* in the column for rank in 1993 are subsidiaries; their arms sales are included in the figure in column 6 for the holding company. Subsidiaries are listed in the position where they would appear if they were independent companies. In order to facilitate comparison with data for the previous year, the rank order and arms sales figures for 1992 are also given. Where new data for 1992 have become available, this information is included in the table; thus the 1992 rank order and the arms sales figures for some companies which appeared in table 13A in the *SIPRI Yearbook 1994* have been revised.

Sources and methods

Sources of data. The data in the table are based on the following sources: company reports, a questionnaire sent to over 400 companies, and corporation news published in the business sections of newspapers and military journals. Company archives, marketing reports, government publication of prime contracts and country surveys were also consulted. In many cases exact figures on arms sales were not available, mainly because companies often do not report their arms sales or lump them together with other activities. Estimates were therefore made.

Definitions. Data on total sales, profits and employment are for the entire company, not for the arms-producing sector alone. Profit data are after taxes in all cases when the company provides such data. Employment data are either a year-end or a yearly average figure as reported by the company. Data are reported on the fiscal year basis reported by the company in its annual report.

Exchange rates. To convert local currency figures into US dollars, the period-average of market exchange rates of the International Monetary Fund, *International Financial Statistics*, was used.

Key to abbreviations in column 5. A = artillery, Ac = aircraft, El = electronics, Eng = engines, Mi = missiles, MV = military vehicles, SA/O = small arms/ordnance, Sh = ships, and Oth = other.

¹ For the membership of the Organisation for Economic Co-operation and Development, see the Glossary. For countries in the developing world, see appendix 14C.

Table 13A. The 100 largest arms-producing companies in the OECD and the developing countries, 1993

Figures in columns 6, 7, 8 and 10 are in US\$ million.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-------------------|------|----------------------------|---------|-----------------|------------|-------------------|-------------|-------------|--------|------------|
| Rank ^a | | | | | Arms sales | | Total sales | Col. 6 as | Profit | Employment |
| 1993 | 1992 | Company ^b | Country | Industry | 1993 | 1992 ^c | 1993 | % of col. 8 | 1993 | 1993 |
| 1 | 3 | Lockheed | USA | Ac | 10 070 | 6 700 | 13 071 | 77 | 422 | 83 500 |
| 2 | 1 | McDonnell Douglas | USA | Ac El Mi | 9 050 | 9 290 | 14 487 | 62 | 396 | 70 016 |
| 3 | 4 | General Motors, GM | USA | El Eng Mi | 6 900 | 6 000 | 138 220 | 5 | 2 466 | 711 000 |
| 4 | 10 | Martin Marietta | USA | El Mi | 6 500 | 4 400 | 9 436 | 69 | 21 | 92 000 |
| S | S | GM Hughes Electronics (GM) | USA | El Mi | 6 110 | 5 550 | 13 518 | 45 | 798 | 78 000 |
| 5 | 2 | British Aerospace | UK | Ac A El Mi SA/O | 5 950 | 7 070 | 16 161 | 37 | - 347 | 87 400 |
| 6 | 9 | Raytheon | USA | El Mi | 4 500 | 4 670 | 9 201 | 49 | 693 | 63 800 |
| 7 | 7 | Northrop | USA | Ac El Mi SA/O | 4 480 | 4 960 | 5 063 | 88 | 96 | 29 800 |
| 8 | 6 | Thomson S.A. | France | El Mi | 4 240 | 4 980 | 11 920 | 36 | - 705 | 99 895 |
| S | S | Thomson-CSF (Thomson S.A.) | France | El Mi | 4 240 | 4 980 | 6 055 | 70 | - 405 | 48 858 |
| 9 | 11 | United Technologies, UTC | USA | Ac El Eng | 4 200 | 4 300 | 21 081 | 20 | 487 | 168 600 |
| 10 | 8 | Boeing | USA | Ac El Mi | 3 800 | 4 700 | 25 438 | 15 | 1 244 | 125 500 |
| 11 | 19 | Loral | USA | El Mi | 3 750 | 3 050 | 4 009 | 94 | 228 | .. |
| 12 | 12 | Daimler Benz | FRG | Ac El Eng Mi MV | 3 540 | 4 120 | 59 116 | 6 | 372 | 366 736 |
| 13 | 13 | DCN | France | Sh | 3 440 | 3 790 | 3 543 | 97 | .. | 26 892 |
| 14 | 15 | Rockwell International | USA | Ac El Mi | 3 350 | 3 750 | 10 840 | 31 | 562 | 77 028 |
| S | S | DASA (Daimler Benz) | FRG | Ac El Eng Mi | 3 250 | 4 060 | 11 266 | 29 | - 420 | 86 086 |
| 15 | 14 | GEC | UK | El | 3 210 | 3 750 | 14 570 | 22 | 811 | 86 121 |
| 16 | 16 | Litton Industries | USA | El Sh | 3 170 | 3 380 | 3 474 | 91 | 65 | 32 300 |
| 17 | 18 | General Dynamics | USA | MV Sh | 3 000 | 3 200 | 3 187 | 94 | 309 | 30 500 |
| 18 | 17 | Aérospatiale Groupe | France | Ac Mi | 2 860 | 3 290 | 8 979 | 32 | - 251 | 43 913 |
| 19 | 20 | Grumman | USA | Ac El | 2 700 | 2 980 | 3 225 | 84 | 59 | 17 900 |
| 20 | 23 | TRW | USA | MV Oth | 2 470 | 2 600 | 7 948 | 31 | 195 | 61 200 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-------------------|------|---------------------------------------|---------|------------------|------------|-------------------|-------------|-------------|---------|------------|
| Rank ^a | | | | | Arms sales | | Total sales | Col. 6 as | Profit | Employment |
| 1993 | 1992 | Company ^b | Country | Industry | 1993 | 1992 ^c | 1993 | % of col. 8 | 1993 | 1993 |
| 21 | 5 | General Electric | USA | Eng | 2 400 | 5 300 | 60 562 | 4 | 4 315 | 222 000 |
| 22 | 22 | Mitsubishi Heavy Industries | Japan | Ac Mi MV Sh | 2 380 | 2 680 | 25 036 | 10 | 718 | 68 057 |
| 23 | 26 | Westinghouse Electric | USA | El | 2 180 | 2 100 | 8 875 | 25 | - 326 | 103 063 |
| 24 | 21 | IRI | Italy | Ac El Eng Mi Sh | 2 090 | 2 930 | 46 551 | 4 | - 6 487 | 327 226 |
| | S | Finmeccanica (IRI) | Italy | Ac El Eng Mi | 1 930 | 2 730 | 6 971 | 28 | 9 | 52 587 |
| | S | Alenia (Finmeccanica) | Italy | Ac El Eng Mi | 1 930 | 2 110 | 3 053 | 63 | .. | 24 650 |
| 25 | 33 | E-Systems | USA | El | 1 870 | 1 650 | 2 097 | 89 | 121 | 16 703 |
| 26 | 24 | Tenneco | USA | Sh | 1 860 | 2 270 | 13 255 | 14 | 426 | 75 000 |
| | S | Newport News (Tenneco) | USA | Sh | 1 860 | 2 270 | 1 860 | 100 | 225 | 21 800 |
| 27 | 27 | Texas Instruments | USA | El | 1 840 | 2 000 | 8 523 | 22 | 472 | 59 048 |
| | S | Pratt & Whitney (UTC) | USA | Eng | 1 600 | 2 000 | 5 942 | 27 | 156 | 33 000 |
| 28 | 30 | Textron | USA | Ac El Eng MV Oth | 1 600 | 1 700 | 9 078 | 18 | 379 | 56 000 |
| 29 | 25 | Dassault Aviation | France | Ac | 1 590 | 2 160 | 1 998 | 80 | 41 | 9 758 |
| | S | Aérospatiale (Aérospatiale Groupe) | France | Ac Mi | 1 590 | 1 910 | 5 401 | 29 | - 161 | 25 637 |
| 30 | 29 | Rolls Royce | UK | Eng | 1 580 | 1 760 | 5 284 | 30 | 87 | 49 200 |
| 31 | 28 | CEA | France | Oth | 1 540 | 1 780 | 3 226 | 48 | .. | 5 980 |
| 32 | 31 | Unisys | USA | El | 1 500 | 1 700 | 7 743 | 19 | 565 | 49 000 |
| 33 | 34 | Allied Signal | USA | Ac El Oth | 1 410 | 1 580 | 11 827 | 12 | 411 | 86 400 |
| 34 | 37 | IBM | USA | El Oth | 1 400 | 1 320 | 62 716 | 2 | - 8 101 | 256 207 |
| | S | Federal Systems (IBM) | USA | El Oth | 1 400 | 1 320 | 2 292 | 61 | 58 | 10 000 |
| 35 | 32 | GIAT Industries | France | A MV SA/O | 1 300 | 1 660 | 1 627 | 80 | - 204 | 17 250 |
| 36 | 35 | Carlyle | USA | Ac El Oth | 1 200 | 1 530 | 5 000 | 24 | .. | .. |
| 37 | 51 | Kawasaki Heavy Industries | Japan | Ac Eng Sh | 1 130 | 900 | 9 625 | 12 | 154 | 23 913 |
| 38 | 39 | Israel Aircraft Industries | Israel | Ac El Mi | 1 120 | 1 270 | 1 449 | 77 | - 87 | 15 500 |

| | | | | | | | | | | |
|----|----|---|-----------|--------------------|-------|-------|--------|-----|---------|---------|
| 39 | 40 | INI | Spain | Ac A El MV Sh | 1 110 | 1 210 | 18 715 | 6 | - 982 | 129 380 |
| 40 | 46 | GTE | USA | El | 1 100 | 1 050 | 19 748 | 6 | 900 | .. |
| 41 | 38 | SNECMA Groupe | France | Eng Oth | 1 060 | 1 280 | 3 455 | 31 | - 142 | 23 993 |
| 42 | 50 | Siemens ^d | FRG | El | 990 | 930 | 49 385 | 2 | 1 199 | 391 000 |
| 43 | 41 | ITT | USA | El | 970 | 1 200 | 22 762 | 4 | 913 | 98 000 |
| 44 | 47 | Matra Hachette ^e | France | El Mi Oth | 970 | 1 030 | 9 532 | 10 | 27 | 41 904 |
| 45 | 45 | FMC | USA | A MV Oth | 950 | 1 110 | 3 754 | 25 | 36 | 20 696 |
| 46 | 42 | Celsius | Sweden | A El MV SA/O Sh | 920 | 1 170 | 1 490 | 62 | 80 | 15 217 |
| S | S | Eurocopter Group (Aérospatiale/ DASA, FRG) | France | Ac | 920 | 1 290 | 1 775 | 52 | - 82 | 10 513 |
| 47 | 64 | Bremer Vulkan | FRG | El Sh | 860 | 640 | 3 714 | 23 | - 116 | 28 141 |
| S | S | Matra Défense (Matra Hachette) | France | Mi Oth | 860 | 770 | 864 | 100 | .. | .. |
| 48 | 44 | Gencorp | USA | Ac El Eng Mi SA/O | 850 | 1 120 | 1 905 | 45 | 43 | 13 300 |
| S | S | Aerojet (Gencorp) | USA | Ac El Eng Mi SA/O | 850 | 1 120 | 872 | 97 | 53 | .. |
| S | S | SNECMA (SNECMA Groupe) | France | Eng | 840 | 810 | 1 916 | 44 | - 122 | 13 084 |
| 49 | 69 | Ishikawajima-Harima | Japan | Eng Sh | 840 | 570 | 9 721 | 9 | 105 | 27 448 |
| 50 | 53 | Mitsubishi Electric | Japan | El Mi | 820 | 860 | 27 927 | 3 | 186 | 111 053 |
| 51 | 54 | Diehl | FRG | El Mi SA/O Oth | 810 | 840 | 1 825 | 44 | .. | 14 076 |
| S | S | Vought Aircraft (Carlyle/ Northrop) | USA | Ac | 800 | 0 | 1 000 | 80 | .. | .. |
| 52 | 43 | Oerlikon-Bührle | Switzerl. | Ac A El SA/O | 760 | 1 120 | 2 026 | 38 | 43 | 14 770 |
| 53 | 52 | Ordnance Factories ^f | India | A SA/O Oth | 740 | 870 | 820 | 90 | .. | .. |
| 54 | 48 | Alliant Tech Systems | USA | SA/O | 700 | 1 010 | 775 | 90 | 32 | 4 900 |
| 55 | 57 | Harris | USA | El | 700 | 780 | 3 099 | 23 | 111 | 28 300 |
| 56 | 56 | VSEL Consortium | UK | MV Sh | 690 | 780 | 699 | 99 | 58 | 7 329 |
| 57 | 59 | Eidgenössische Rüstingsbetriebe | Switzerl. | Ac A Eng SA/O | 680 | 770 | 736 | 92 | 7 | 3 909 |
| 58 | 49 | FIAT | Italy | Eng MV | 660 | 950 | 34 667 | 2 | - 1 133 | 260 951 |
| 59 | 61 | Denel | S. Africa | Ac A El Mi MV SA/O | 640 | 740 | 876 | 73 | 73 | 14 000 |
| 60 | 67 | Hercules | USA | Ac Mi | 600 | 600 | 2 773 | 22 | -33 | 14 083 |
| 61 | 62 | Bath Iron Works | USA | Sh | 600 | 720 | .. | .. | .. | .. |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-------------------|------|------------------------------------|---------|--------------|------------|-------------------|-------------|-------------|--------|------------|
| Rank ^a | | | | | Arms sales | | Total sales | Col. 6 as | Profit | Employment |
| 1993 | 1992 | Company ^b | Country | Industry | 1993 | 1992 ^c | 1993 | % of col. 8 | 1993 | 1993 |
| 62 | 58 | Thyssen | FRG | MV Sh | 590 | 770 | 20 264 | 3 | - 601 | 141 009 |
| S | S | Thyssen Industrie (Thyssen) | FRG | MV Sh | 590 | 770 | 4 917 | 12 | 79 | 44 867 |
| 63 | 66 | SAGEM Groupe | France | EI | 580 | 600 | 2 302 | 25 | 94 | 14 495 |
| 64 | 55 | Rheinmetall | FRG | A MV EI SA/O | 520 | 780 | 1 898 | 27 | - 24 | 15 523 |
| 65 | 63 | Thiokol | USA | Eng SA/O | 520 | 650 | 1 210 | 43 | 64 | 9 300 |
| 66 | 72 | Dassault Electronique | France | EI | 490 | 510 | 693 | 71 | 9 | 3 599 |
| 67 | 99 | Hunting | UK | SA/O | 490 | 330 | 1 591 | 31 | 25 | 14 538 |
| 68 | 70 | Smiths Industries | UK | EI | 480 | 550 | 1 090 | 44 | 106 | 11 200 |
| 69 | 71 | Westland Group | UK | Ac | 480 | 510 | 673 | 71 | 32 | 8 536 |
| S | S | Systemtechnik Nord (Bremer Vulkan) | FRG | EI | 480 | 300 | 635 | 76 | .. | 2 426 |
| 70 | - | Preussag | FRG | Sh | 480 | 320 | 14 087 | 3 | 117 | 73 319 |
| S | S | HDW (Preussag) | FRG | Sh | 480 | 320 | 945 | 51 | 53 | 4 291 |
| S | S | Allison (General Motors) | USA | Eng | 480 | 200 | 641 | 75 | - 177 | 4 300 |
| S | S | MTU (DASA) | FRG | Eng | 470 | 690 | 1 894 | 25 | - 106 | 15 347 |
| 71 | 81 | Dyncorp | USA | Ac EI | 470 | 430 | 950 | 49 | .. | .. |
| 72 | 65 | Motorola | USA | EI | 470 | 640 | 16 963 | 3 | 1 022 | 120 000 |
| 73 | 60 | Harsco | USA | MV | 460 | 770 | 1 422 | 32 | 88 | 14 200 |
| 74 | 89 | Ceridian | USA | EI Oth | 450 | 400 | 886 | 51 | -30 | 7 600 |
| 75 | 75 | TAAS | Israel | A MV SA/O | 440 | 480 | 463 | 95 | -79 | 5 200 |
| S | S | CASA (INI) | Spain | Ac | 440 | 460 | 893 | 49 | 9 | 8 398 |
| 76 | 74 | Teledyne | USA | Eng EI Mi | 440 | 500 | 2 492 | 18 | - 117 | 21 000 |
| 77 | 87 | Mitre | USA | EI | 430 | 410 | .. | .. | .. | .. |
| 78 | 80 | Labinal | France | EI | 420 | 430 | 1 508 | 28 | 12 | 16 248 |
| 79 | 77 | Oshkosh Truck | USA | MV | 420 | 460 | 635 | 66 | 1 | 2 200 |

| | | | | | | | | | | |
|-----|----|--|----------|-------------|-----|-----|--------|-----|--------|---------|
| 80 | 83 | Rafael | Israel | SA/O Oth | 420 | 410 | 420 | 100 | -30 | 4 970 |
| 81 | 88 | AT&T | USA | El | 400 | 400 | 67 156 | 1 | -3 794 | 308 700 |
| | S | S Bofors (Celsius) | Sweden | A MV SA/O | 400 | 680 | 445 | 90 | 14 | 5 040 |
| 82 | 79 | Lucas Industries | UK | Ac | 390 | 440 | 3 851 | 10 | 37 | 48 900 |
| 83 | 84 | NEC | Japan | El | 390 | 410 | 32 192 | 1 | 59 | 147 910 |
| 84 | 78 | CAE Industries | Canada | El | 380 | 450 | 796 | 48 | -306 | 8 500 |
| 85 | 76 | Racal Electronics | UK | El | 380 | 480 | 1 332 | 29 | .. | .. |
| | S | S SAGEM (SAGEM Groupe) | France | El | 370 | 390 | 997 | 37 | 40 | 5 759 |
| 86 | 73 | Avondale Industries | USA | Sh | 370 | 500 | 471 | 79 | -9 | .. |
| 87 | 94 | Esco Electronics | USA | El | 370 | 370 | 460 | 80 | 5 | 4 600 |
| 88 | 96 | Koor Industries | Israel | A El | 350 | 350 | 2 348 | 15 | 124 | 17 184 |
| 89 | - | Toshiba | Japan | El Mi | 350 | 320 | 41 645 | 1 | 109 | 175 000 |
| | S | S Sextant Avionique (Thomson-CSF/Aérospatiale) | France | El | 340 | 360 | 867 | 39 | .. | 6 919 |
| | S | S Hollandse Signaalapparaten (Thomson-CSF, France) | Netherl. | El | 340 | 360 | 352 | 97 | -60 | 2 998 |
| 90 | 86 | Devonport Management | UK | Sh | 340 | 410 | 375 | 91 | .. | 4 650 |
| | S | S EN Bazan (INI) | Spain | Eng Sh | 330 | 430 | 412 | 80 | -78 | 8 186 |
| | S | S Blohm & Voss (Thyssen Ind.) | FRG | MV Sh | 320 | 160 | 613 | 52 | 15 | 5 109 |
| 91 | 91 | Hindustan Aeronautics | India | Ac Mi | 320 | 390 | 338 | 95 | .. | .. |
| 92 | 85 | Saab-Scania | Sweden | Ac El Mi | 320 | 410 | 3 553 | 9 | 12 | 26 945 |
| 93 | - | Vosper Thornycroft | UK | Sh | 320 | 310 | 359 | 89 | 22 | 2 019 |
| 94 | 97 | Olin | USA | El SA/O Oth | 320 | 350 | 2 423 | 13 | -92 | 12 400 |
| 95 | 95 | Sundstrand | USA | Ac Oth | 320 | 360 | 1 383 | 23 | 141 | 9 300 |
| 96 | - | Logicon | USA | Oth | 320 | 290 | 320 | 100 | 21 | .. |
| 97 | 92 | Mannesmann | FRG | MV El | 310 | 370 | 16 913 | 2 | -310 | 127 695 |
| | S | S Krauss-Maffei (Mannesmann) | FRG | MV El | 310 | 370 | 919 | 34 | 1 | 5 045 |
| 98 | 93 | SNPE | France | A SA/O | 310 | 370 | 734 | 42 | -56 | 6 158 |
| 99 | - | Mitsui Shipbuilding | Japan | Sh | 310 | 240 | 3 136 | 10 | 25 | 7 000 |
| 100 | - | Sumitomo Heavy Industries | Japan | A Sh | 310 | 270 | 4352 | 7 | .. | .. |

.. Data not available.

^a Companies with the designation S in the column for rank are subsidiaries. The rank designation in the column for 1992 may not correspond to that given in table 13A in the *SIPRI Yearbook 1994*. A dash (-) in this column indicates either that the company did not produce arms in 1992, in which case there is a zero (0) in column 7, or that it did not rank among the 100 largest companies in table 13A in the *SIPRI Yearbook 1994*, in which case figures for arms sales in 1992 do appear in column 7.

^b Names in brackets after the name of the ranked company are the names of the holding companies.

^c A zero (0) in this column indicates that the company did not produce arms in 1992, but began arms production in 1993, or that in 1992 the company did not exist as it was structured in 1993.

^d Arms sales estimate for 1993 based on 1992 arms sales share.

^e Matra Hachette changed its name to Lagardère in 1994.

^f Data are for 1992.

Note: The author acknowledges assistance in the data collection provided by Arcadi Oliveres, Centre d'Estudis sobre la Pau i el Desarmament (Barcelona), Agnès Courades Allebeck (Paris), Defence Research & Analysis (London), Ken Epps (Ontario), Ernst Gülcher (Antwerp), Jean-Paul Hébert, CIRPES (Paris), Peter Hug (Bern), Masako Ikegami (Uppsala), Keidanren (Tokyo), Rudi Leo (Vienna), Rita Manchandi (New Delhi), Reuven Pedatzur (Tel Aviv), Giulio Perani (Rome), Gülay Günlük-Senesen (Istanbul), Pierre de Vestel (Brussels) and Werner Voß (Bremen).

14. The trade in major conventional weapons

IAN ANTHONY, PIETER D. WEZEMAN and SIEMON T. WEZEMAN

I. Introduction

The global trend-indicator value of foreign deliveries of major conventional weapons in 1994 is estimated by SIPRI to have been \$21 725 million in constant (1990) US dollars. The index produced using the SIPRI valuation system is not comparable to official economic statistics such as gross domestic product, public expenditure and export/import figures. The purpose of the valuation system is to enable the aggregation of data on physical arms transfers. Similar weapon systems require similar values and SIPRI has created an index of trend-indicator values which can be aggregated in a number of different ways. The SIPRI system for evaluating the arms trade was designed as a *trend-measuring device*, to permit the measurement of changes in the total flow of major weapons and to illustrate its geographical pattern. For a more detailed description of the method used in calculating the trend-indicator value, see appendix 14C. The revised estimate for the trend-indicator value for 1993 is \$24 494 million. It is usual for the figures for the most recent years to be revised upwards as new and better data become available. It seems that the volume of deliveries of major conventional weapons has remained reasonably stable since 1991 after a steep decline from the peak year of 1987.

In 1994 the second annual report containing returns to the United Nations Register of Conventional Arms was released by the Secretary-General. Section II of this chapter, which discusses the main trends in the trade in major conventional weapons, examines the returns to the Register against the background of the information contained in the SIPRI arms trade data base and archives.

Section III discusses developments in Russia as they affect the arms trade. After the breakup of the former Soviet Union the defence industry in Russia experienced a period of dislocation and crisis. Section III examines how Russia has begun to position itself with regard to the post-cold war international arms market.

Appendix 14D looks at the progress of the group of government experts who produced a report on the further development of the United Nations Register of Conventional Arms in 1994.

Appendix 14E describes the recent development of the arms industry in and arms exports by South Africa. The far-reaching reform of the military establishment underway in South Africa includes an evaluation of the defence industry. Over the past few years a significant amount of new information

about the capacity and performance of South Africa's defence industry has become available.

Appendix 14F examines the impact of the availability of light weapons in parts of South Asia against the background of the local security environment.

II. The major suppliers and recipients

As noted above, allowing for the tendency for revisions to the most recent data, the global volume of deliveries of major conventional weapons appears to have been stable during the period 1991–94 after a period of rapid decline between 1987 and 1991.

Looking at the data in appendix 14A it is possible to see more details of the distribution of these reductions among importing states. The largest reductions have taken place in the group of countries aggregated as 'developing', a group which received 66 per cent of total deliveries of major conventional weapons in 1985 against 58 per cent in 1994.¹ There are several explanations for this shift. One explanation, which is underlined by the shifting regional distribution of deliveries in table 14A.1, is the reduced importance of the Middle East. While Middle Eastern countries accounted for 31 per cent of the total volume of major weapon deliveries in 1985, in 1994 this percentage was 24 per cent. The reduction in the importance of the Middle East as a recipient region reflects several developments. First, the end of the 1980–88 Iraq–Iran War; second, the reductions in supply to the region by the former Soviet Union and third, the mandatory United Nations arms embargo in place against Iraq. This trend has been interrupted to some extent by the impact of transfers made after the 1991 Persian Gulf War. However, in several of the countries on the Arabian peninsula—including Kuwait and Saudi Arabia—governments have been under both fiscal and political pressure to reduce military expenditures and it remains to be seen whether all of the announced acquisition programmes are completed.

The changing distribution of deliveries is also reflected in the fact that while the volume of deliveries of major conventional weapons to European countries has fallen during the period 1985–94, the percentage share in the global total has increased. While European countries accounted for 26 per cent of deliveries of major conventional weapons in 1985, in 1994 they accounted for 31 per cent. This increase in share has occurred in spite of the significant reduction in major weapons acquisition by members of the former Warsaw Treaty Organisation. The increase partly reflects the fact that in the period 1990–94 south-east Europe has seen significant deliveries of major conventional weapons—almost entirely as a result of acquisitions by Greece and Turkey.

¹ It should be noted that the data here relate only to international transfers of major conventional weapons. In many industrialized countries a significant proportion of overall acquisition is accounted for by the production of equipment designed domestically. Membership of the various regional groupings and international organizations is listed in appendix 14A.

Table 14.1. The 25 leading suppliers of major conventional weapons, 1990–94

The countries are ranked according to 1990–94 aggregate exports. Figures are trend-indicator values expressed in US \$m., at constant (1990) prices. Totals are rounded.

| Suppliers | 1990 | 1991 | 1992 | 1993 | 1994 | 1990–94 |
|-------------------------------|---------------|---------------|---------------|---------------|---------------|----------------|
| 1 USA | 10 648 | 13 041 | 13 801 | 12 905 | 11 959 | 62 354 |
| 2 USSR/Russia | 10 459 | 3 838 | 3 385 | 3 388 | 842 | 21 912 |
| 3 Germany, FR | 1 656 | 2 505 | 1 487 | 1 726 | 3 162 | 10 536 |
| 4 UK | 1 509 | 1 156 | 1 020 | 1 278 | 1 593 | 6 557 |
| 5 France | 2 220 | 1 090 | 1 113 | 1 159 | 705 | 6 287 |
| 6 China | 1 245 | 1 117 | 1 157 | 1 257 | 1 204 | 5 980 |
| 7 Netherlands | 267 | 453 | 432 | 356 | 558 | 2 065 |
| 8 Italy | 287 | 360 | 479 | 514 | 357 | 1 997 |
| 9 Czechoslovakia ^a | 753 | 60 | 221 | 474 | 79 | 1 587 |
| 10 Switzerland | 282 | 386 | 344 | 83 | 46 | 1 142 |
| 11 Korea, North | 0 | 138 | 86 | 420 | 43 | 687 |
| 12 Sweden | 248 | 121 | 129 | 56 | 91 | 646 |
| 13 Yugoslavia | 60 | 543 | 21 | 0 | 0 | 624 |
| 14 Canada | 67 | 15 | 131 | 161 | 208 | 582 |
| 15 Ukraine | .. | .. | 400 | 23 | 0 | 423 |
| 16 Israel | 74 | 93 | 39 | 73 | 87 | 367 |
| 17 Spain | 87 | 65 | 57 | 39 | 116 | 363 |
| 18 Slovakia | .. | .. | .. | 145 | 150 | 295 |
| 19 Brazil | 74 | 43 | 59 | 24 | 61 | 262 |
| 20 German DR | 245 | .. | .. | .. | .. | 245 |
| 21 Poland | 152 | 63 | 0 | 1 | 0 | 216 |
| 22 Norway | 10 | 91 | 0 | 47 | 61 | 209 |
| 23 Korea, South | 53 | 53 | 0 | 48 | 38 | 192 |
| 24 Pakistan | 62 | 129 | 0 | 0 | 2 | 192 |
| 25 Moldova | .. | .. | 14 | 0 | 175 | 189 |
| Others | 433 | 168 | 399 | 316 | 188 | 1507 |
| Total | 30 891 | 25 527 | 24 776 | 24 494 | 21 725 | 127 414 |

^a For the years 1990–92 the data refer to the former Czechoslovakia; for 1993–94 the data refer to the Czech Republic.

Source: SIPRI arms trade data base.

In this year's SIPRI Yearbook the structure of tables on the leading suppliers and recipients has been changed in order to include coverage of more countries. Whereas in past years these tables have contained data for the 15 leading suppliers of major conventional weapons, coverage has been extended to the 25 leading suppliers. However, data are now presented as a single global figure for each country rather than, as before, being divided into deliveries to industrialized and developing countries.

The extension of the country coverage brings into table 14.1 several countries which have not previously featured as significant arms exporters. In 1993 and 1994 South Korea delivered armoured vehicles—the Korean Infantry Fighting Vehicle—to Malaysia for use by Malaysian forces engaged in United Nations peacekeeping missions.

Table 14.2. The 50 leading recipients of major conventional weapons, 1990–94

The countries are ranked according to 1990–94 aggregate exports. Figures are trend-indicator values expressed in US \$m., at constant (1990) prices. Totals are rounded.

| Recipients | 1990 | 1991 | 1992 | 1993 | 1994 | 1990–94 |
|--------------------------------|-------|-------|-------|-------|-------|---------|
| 1 Saudi Arabia | 2 459 | 1 331 | 1 073 | 2 534 | 1 602 | 8 999 |
| 2 Japan | 2 272 | 2 386 | 1 608 | 1 199 | 919 | 8 383 |
| 3 Turkey | 804 | 954 | 1 640 | 2 281 | 2 135 | 7 814 |
| 4 Greece | 1 221 | 568 | 2 732 | 881 | 973 | 6 375 |
| 5 India | 1 599 | 1 494 | 1 166 | 966 | 773 | 5 998 |
| 6 Egypt | 755 | 1 234 | 1 263 | 1 367 | 1 370 | 5 990 |
| 7 Germany, FR | 1 084 | 1 005 | 1 267 | 1 202 | 629 | 5 187 |
| 8 Taiwan | 553 | 867 | 416 | 974 | 1 069 | 3 878 |
| 9 Afghanistan | 2 466 | 1 212 | 0 | 0 | 0 | 3 678 |
| 10 Israel | 29 | 1 373 | 1 097 | 585 | 557 | 3 640 |
| 11 Pakistan | 743 | 605 | 389 | 949 | 819 | 3 505 |
| 12 Iran | 776 | 175 | 283 | 1 193 | 780 | 3 206 |
| 13 China | 125 | 151 | 1 976 | 679 | 2 | 2 932 |
| 14 Canada | 200 | 969 | 561 | 435 | 691 | 2 857 |
| 15 Spain | 799 | 126 | 275 | 670 | 964 | 2 834 |
| 16 Thailand | 437 | 630 | 838 | 154 | 679 | 2 739 |
| 17 Korea, South | 686 | 395 | 537 | 481 | 613 | 2 713 |
| 18 Kuwait | 282 | 616 | 953 | 622 | 80 | 2 552 |
| 19 Indonesia | 202 | 238 | 69 | 397 | 1 451 | 2 357 |
| 20 UK | 78 | 873 | 1 128 | 61 | 52 | 2 193 |
| 21 USA | 203 | 444 | 418 | 572 | 509 | 2 147 |
| 22 Australia | 437 | 253 | 450 | 748 | 221 | 2 109 |
| 23 United Arab Emirates | 936 | 127 | 172 | 465 | 389 | 2 090 |
| 24 Portugal | 101 | 1 103 | 3 | 300 | 491 | 1 998 |
| 25 France | 45 | 981 | 384 | 137 | 66 | 1 612 |
| 26 Finland | 100 | 98 | 519 | 635 | 143 | 1 495 |
| 27 Hungary | 36 | 27 | 0 | 1 071 | 4 | 1 137 |
| 28 Netherlands | 208 | 300 | 186 | 126 | 273 | 1 092 |
| 29 Switzerland | 317 | 236 | 286 | 84 | 148 | 1 070 |
| 30 Norway | 376 | 251 | 194 | 151 | 94 | 1 066 |
| 31 Bulgaria | 633 | 398 | 12 | 0 | 0 | 1 043 |
| 32 Myanmar | 197 | 226 | 34 | 338 | 248 | 1 042 |
| 33 Algeria | 384 | 561 | 38 | 20 | 20 | 1 023 |
| 34 Singapore | 400 | 317 | 70 | 158 | 70 | 1 014 |
| 35 USSR/Russia | 974 | 36 | 0 | 0 | 0 | 1 010 |
| 36 Czechoslovakia ^a | 835 | 126 | 4 | .. | .. | 965 |
| 37 Chile | 203 | 85 | 268 | 119 | 263 | 938 |
| 38 Syria | 28 | 138 | 341 | 188 | 194 | 889 |
| 39 Romania | 659 | 38 | 46 | 43 | 50 | 836 |
| 40 Poland | 497 | 246 | 49 | 19 | 5 | 816 |
| 41 Angola | 748 | 0 | 0 | 49 | 0 | 797 |
| 42 Korea, North | 651 | 30 | 34 | 15 | 13 | 743 |
| 43 Brazil | 201 | 165 | 65 | 72 | 217 | 719 |
| 44 Italy | 81 | 114 | 79 | 252 | 171 | 698 |
| 45 Belgium | 223 | 225 | 89 | 103 | 55 | 694 |
| 46 German DR | 649 | .. | .. | .. | .. | 649 |
| 47 Bangladesh | 161 | 126 | 258 | 0 | 75 | 620 |

| Recipients | 1990 | 1991 | 1992 | 1993 | 1994 | 1990-94 |
|--------------|---------------|---------------|---------------|---------------|---------------|----------------|
| 48 Morocco | 111 | 89 | 26 | 147 | 181 | 554 |
| 49 Venezuela | 100 | 186 | 67 | 52 | 147 | 553 |
| 50 Bahrain | 402 | 50 | 64 | 26 | 8 | 550 |
| Others | 2 424 | 1 351 | 1 351 | 976 | 1 513 | 7 615 |
| Total | 30 891 | 25 527 | 24 776 | 24 494 | 21 725 | 127 414 |

^a For the years 1990-92 the data refer to the former Czechoslovakia; for 1993-94 the data refer to the Czech Republic.

Source: SIPRI arms trade data base.

Moldova delivered 12 MiG-29 fighter aircraft to South Yemeni separatists during the civil war fought in that country.² Of these aircraft, which were flown in combat by foreign mercenaries, seven were destroyed during the war. The government of Yemen had no intention of keeping four aircraft captured in serviceable condition and it is assumed that these aircraft will be re-sold.

Among the 50 recipient countries included in table 14.2 Spain and Taiwan are two that have recorded significant increases in the volume of their imports.

Taiwan has received combat helicopters of two types, the Model 209 Cobra and the Model 206 Kiowa from the United States as well as taking delivery of the first of 4 E-2C Hawkeye airborne early warning aircraft. The Taiwanese Navy has commissioned additional Cheng Kung (modified US FFG-7) Class frigates as well as leasing ex-US Navy Knox Class frigates and Newport Class landing ships.

Spain has been the recipient of surplus equipment from the United States and France in 1993 and 1994. Some of this equipment was transferred as part of the NATO Equipment Transfer and Equipment Rationalization Programme—usually referred to as the cascade—associated with the implementation of the 1990 Treaty on Conventional Armed Forces in Europe (the CFE Treaty). However, Spain has also leased ex-US Navy Knox Class frigates and Newport Class landing ships. Spain also commissioned additional Santa Maria (modified US FFG-7) Class frigates in 1994.

In 1994 the second year of submissions to the UN Register of Conventional Arms took place. By 1 March 1995, 88 states had submitted returns to the United Nations Centre for Disarmament Affairs describing their arms transfer activity in agreed equipment categories for calendar year 1993.³ Comparing the returns with the information in the SIPRI data base and archive produces the following observations.⁴

² Foreign Broadcast Information Service, *Daily Report—Central Eurasia (FBIS-SOV)*, FBIS-SOV-94-184, 22 Sep. 1994, p. 60; and interview with Abdel Rabuh Hadi, Vice President of Yemen, *Defense News*, 19-25 Dec. 1994, p. 22.

³ Additional information on the development of the UN Register is contained in appendix 14D.

⁴ The comparability of SIPRI and UN data is not perfect because of differences in coverage and definitions and because not all countries report to the UN Register. Estimates of deliveries of conventional

The UN data reinforced the impression that transfers of major conventional weapons are concentrated in a relatively small number of states with a handful of exporters accounting for the great majority of deliveries. Particularly prominent as suppliers are the United States and Germany.

The Register confirmed that Germany and, to a lesser extent, the Netherlands continued to dispose of surplus equipment through foreign transfers. From national data provided outside the framework of the United Nations—for example, information provided to the Congress—it is known that the USA is also disposing of significant amounts of surplus equipment. However, the USA provides a minimum of information on its returns to the UN, and so the Register is of limited usefulness in describing these transfers.

Among the importing countries, the UN Register confirms that Greece and Turkey have received large quantities of surplus weapons because both countries give very precise information about what has been imported. However, the information—while precise—is different from that provided by the United States, which is their principal supplier.⁵

As a result of the data provided by the UN Register some significant revisions have been made to the SIPRI data reflecting new information about deliveries. In the cases of Saudi Arabia, Greece, Pakistan and Iran estimates have been revised upwards for 1993, while for the cases of India and Indonesia estimates were revised downwards. The Register also contained interesting reports from Belarus, Bulgaria, China, Iran, Romania and Ukraine—countries whose arms transfer behaviour is not well documented in public sources. However, interpreting exactly what some of the reports mean remains difficult because of the lack of detail they contain.

Belarus reported the transfer of 21 armoured vehicles to Bulgaria which were then re-exported to Angola. In addition to these armoured vehicles (identified by Bulgaria as BMP-1 infantry fighting vehicles) Bulgaria exported an additional 29 BMP-1s and 24 T-62 tanks to Angola.

Romania reported exports of artillery to Nigeria for the second consecutive year. In September 1993, in response to an official protest by the Armenian Foreign Ministry, the Ukrainian Foreign Ministry denied transferring tanks to Azerbaijan.⁶ According to the Foreign Ministry, Ukraine was repairing and returning Azerbaijani tanks rather than providing any new material. However, in its return to the UN Register, Ukraine lists 100 tanks and 10 combat aircraft transferred to Azerbaijan in 1993. Late in 1994 there were additional reports of new shipments of tanks from Ukraine to Azerbaijan.⁷

arms according to UN definitions are contained in Sislin, J. and Wezeman, S. T., *1994 Arms Transfers: A Register of Deliveries from Public Sources* (Monterey Institute of International Studies: Monterey, Calif., 1995).

⁵ This situation is not unique. For example, the USA reported exports of 998 missiles and missile launchers to Canada in 1993 while Canada reported imports of 45 items in the same category. Neither country disaggregated the data into different missile types. *United Nations Register of Conventional Arms: Report of the Secretary General*, UN document A/49/352, 1 Sep. 1994; and *United Nations Register of Conventional Arms: Report of the Secretary General: Corrigendum*, UN document A/49/352/corr.1, 8 Nov. 1994.

⁶ *Radio Free Europe/Radio Liberty (RFE/RL) News Briefs*, 13–17 Sep. 1993, p. 7.

⁷ FBIS-SOV-94-208, 28 Oct. 1994, p. 41.

China and Iran also provided information on their bilateral arms transfers—reporting the export of 25 undesignated combat aircraft by China. These are believed to be F-7 fighter aircraft. Iran also provided a report on its 1992 imports retrospectively. Among the arms transfers widely reported in public sources but not reported by Iran are mobile SS-1 Scud missiles and missile launchers apparently transferred by North Korea. The UN Register contains no verification provisions and—as a voluntary exercise—does not require governments to make a full submission. Therefore, it is not possible to say with certainty whether or not the transfers of missiles and launchers reported in public sources did take place in 1993.

The United States

According to SIPRI estimates the trend-indicator value of deliveries of major conventional weapons by the USA in 1994 was \$11 959 million. Compared with 1993 this represents a decrease of 7 per cent. The USA continued to dominate the international trade in major conventional weapons, accounting for 55 per cent of deliveries of major conventional weapons in 1994.

In February 1995 the Clinton Administration described its conventional arms transfer policy—a description originally promised for December 1993. US conventional arms transfer policy is intended to serve five broad goals:

1. To ensure that US forces can continue to enjoy technological advantages over potential adversaries;
2. To help allies and friends deter or defend themselves against aggression while promoting inter-operability with US forces when combined operations are required;
3. To promote regional stability in areas critical to US interests while preventing the proliferation of weapons of mass destruction and their missile delivery systems;
4. To promote peaceful conflict resolution and arms control, human rights, democratization and other US foreign policy objectives;
5. To enhance the ability of the US defence industrial base to meet US defense requirements and maintain long-term military technological superiority at lower cost.⁸

Prior to the latest review US security assistance programmes were intended to: increase the ability of US security partners to defend and deter against aggression and shoulder more of the common defence burden; help maintain strong and cohesive defence arrangements with allies and secure access to

⁸ The policy is contained in Presidential Decision Directive (PDD) 34 and is a classified document. However, the policy is described in 'Conventional arms transfer policy' (text of White House fact sheet), *Wireless File* (United States Information Service, US Embassy: Stockholm, 17 Feb. 1995), pp. 17–18. The delay in release was caused by a disagreement on three specific details in the policy statement between the responsible agencies—the State Department, Department of Defense, Department of Commerce and the Arms Control and Disarmament Agency. The details were: first, whether the US Government should sponsor overseas arms sales through financial support to US contractors attending foreign weapon exhibitions. The February policy statement said that this would be done only for those cases where a given transfer had already been approved. Second, whether a government loan guarantee programme should be established to assist with the financing of arms transfers. No such proposal was contained in the policy statement. Third, whether US allies should be offered a new defence technology sharing arrangement in exchange for co-operation in multilateral export control. There is no such proposal in the policy statement.

military facilities throughout the world; promote regional stability by controlling the volume and types of weaponry deployed around the world; strengthen the economies of countries with which the USA had security relationships; and foster human rights, democratic values and institutions.⁹

There is considerable continuity in the rationale for the USA to export weapons—though inevitably there are differences over whether or not to permit specific transfers. The only new policy goal among those listed was an explicit reference to the need to support the US defence industrial base. The explanatory text which accompanied the policy statement did expand on the promotion of arms transfer restraint at both a global and regional level.

The Clinton Administration has given high priority to the promotion of exports in general and some anticipated that this approach might be reflected in the policy on arms transfers. In other areas where subsidies are not prohibited by international agreement the United States operates federal programmes administered by the Department of Agriculture and the Department of Commerce. Whether or not a specific instrument such as an export credit scheme administered by the US Export-Import bank should be established to assist with financing arms transfers—where there are no rules regulating the financial aspects of international trade—was a contentious issue in the preparation of the policy statement.¹⁰ In the event these provisions were not contained in the policy statement. Moreover, one analyst closely involved with the discussion suggested that a consensus was emerging within the US Administration that ‘arms exports are primarily matters of diplomacy and national security policy rather than of commerce and foreign trade policy’.¹¹

Decision making remains case-by-case with no automatic prohibitions on any given transfer. The statement on arms transfer policy was accompanied by a list of 12 general criteria taken into account when taking decisions. However, these criteria did not add to the undertakings to which the USA committed itself in the Co-operation Principles Governing Conventional Arms Transfers adopted by the CSCE Forum for Security Co-operation in 1993.¹²

Along with these general criteria, the text contained seven criteria taken into account when considering exports of items that could contribute to upgrades of platforms already in the inventory of another country. These criteria were:

1. Upgrade programmes must be well-defined to be considered for approval.
2. Upgrades should be consistent with the general conventional arms transfer criteria.

⁹ *The Management of Security Assistance* (Defense Institute of Security Assistance Management: Wright Patterson Air Force Base Ohio, May 1992), pp. 12–26.

¹⁰ The Export-Import Bank, which is part of the State Department, is legally prohibited from financing arms sales to developing countries and has a policy of not financing arms sales to any country. For a discussion, see *Arms Sales Monitor*, no. 26, 30 July 1994.

¹¹ Benson, S., ‘National security and economic considerations in US conventional arms transfer policy’, *The Nonproliferation Review*, vol. 2, no. 1 (fall 1994), p. 24. As Benson points out, this is less true for dual-use technologies whose military impact is more ambiguous and whose commercial significance is far greater than conventional arms.

¹² Discussed in Lachowski, Z., ‘Conventional arms control in Europe’, *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 589–90.

3. There will be a presumption of denial of exports to upgrade programmes that lead to a capability beyond that which the USA would be willing to export directly.

4. Careful review of the total scope of proposed upgrade programmes necessary to ensure that US licensing decisions are consistent with US policy on transfers of equivalent net systems. US contributions to upgrade programmes initiated by foreign prime contractors should be evaluated against the same standard.

5. Protection of US technologies must be ensured because of the inherent risk of technology transfer in the integration efforts that typically accompany an upgrade project.

6. Upgrades will be subject to standard US Government written end-use and re-transfer assurances by both the integrator and final end-user.

7. Benchmarks should be established for upgrades of specific types of system to provide a baseline against which individual arms transfer proposals and departures from established policy can be measured and justified.¹³

These criteria were very welcome in that they both underline the growing importance of the market for upgrades to existing equipment and also represent the first evidence that the issue is being evaluated and addressed in a systematic and comprehensive manner by any government.

Western Europe

Collectively, transfers by the members of the European Union represented 30 per cent of major conventional weapons delivered in 1994 according to SIPRI estimates.

France and Germany were both successful in concluding some large contracts for major conventional weapons during the year. In both cases naval equipment made up a significant proportion of new agreements. Modern conventional submarines have long been a mainstay of German arms exports. In 1994 a new agreement was reached with South Korea for the transfer of three Type-209/1200 submarines. France was also successful in a competition to supply Pakistan with three very advanced ocean-going submarines of the Agosta-90 Class. For the UK deliveries of the Hawk series of jet trainer aircraft now represent the most significant export activity in regard to major conventional weapons. In the period 1990–94 more than 100 Hawk aircraft of all types have been delivered to foreign customers. Moreover, further deliveries will take place under existing contracts with Indonesia, Malaysia, Oman and Saudi Arabia while additional orders are expected. These figures exclude 270 T-45 Goshawk jet trainers for the US Navy, a joint venture between British Aerospace and McDonnell Douglas of the United States. The Goshawk is expected to enter full-scale production in 1995.

¹³ See note 8.

The arms embargo on the former Yugoslavia

The most contentious arms trade issue for Western Europe in 1994 did not relate to an issue of market performance. Rather, it stemmed from the discussion within the United Nations and elsewhere of the arms embargo on the former Yugoslavia.

Of the countries of the former Yugoslavia only the Federal Republic of Yugoslavia (i. e., Serbia and Montenegro) is subject to broad trade sanctions. Bosnia and Herzegovina (including Bosnian Serbs), Croatia, the Federal Yugoslav Republic of Macedonia (FYROM) and Slovenia are subject to an arms embargo established by UN Resolution 713 of 25 September 1991. Under this resolution member states must 'immediately implement a general and complete embargo on all deliveries of weapons and military equipment'. However, the member states are left to define 'weapons and military equipment' according to national criteria. Many materials of military value may fall outside national definitions of military equipment—e.g., transport helicopters, trucks and many other items.¹⁴

West European countries (regarded as the principle supporters of upholding the current Resolution) faced considerable pressure from members of the US Congress and some governments—particularly those in the Muslim world—to modify the terms of the arms embargo on countries of the former Yugoslavia.¹⁵

The European Union is in the process of discussing arms transfer policy as part of the process of European political union.¹⁶ Member states see this issue as a subject for intergovernmental joint action and an *ad hoc* working group of EU members was set up in December 1991 to examine how far harmonization and consensus in this area could advance.¹⁷ One useful step that the EU countries have taken is to harmonize national lists of items subject to United Nations or European Union embargoes.¹⁸

III. Russia

It is now widely accepted that the Russian defence industry will have to be fundamentally restructured in the face of the dramatic decline in the demand for its products. Nevertheless, given the size of the defence industry inherited

¹⁴ See Anthony, I. *et al.*, 'Arms production and arms trade', *SIPRI Yearbook 1994* (note 12), chapter 13 for a discussion of procedural aspects of the arms embargo.

¹⁵ The different strands of congressional opinion are captured in the questioning of Deputy Secretary of State Strobe Talbott in *Impact of a Unilateral United States Lifting of the Arms Embargo on the Government of Bosnia-Herzegovina*, Hearing before the Committee on Armed Services, US Senate, 23 June 1994.

¹⁶ See chapter 15 in this volume.

¹⁷ Eavis, P., 'EC regulations', ed. J. Thurlow, *Worldwide Guide to Export Controls* (Export Control Publications: Chertsey, 1994).

¹⁸ *Arms and Dual-use Export Controls: Priorities for the European Union* (Saferworld: Bristol, June 1994), p. 9.

from the Soviet Union, Russia will remain a major defence industrial power in global comparative terms even after a significant rationalization.¹⁹

There is no single statement of the value of Russian arms exports and officials from different Russian agencies have given different figures in interviews and public statements. These statements are never accompanied by an explanation of exactly what the figures include or the basis on which they were compiled.

According to Rosvooruzheniye—the state agency created in November 1993 and largely responsible for coordinating and managing Russian arms exports—arms exports in 1992 were worth \$2.329 billion, a figure which rose to \$2.504 billion in 1993. The preliminary forecast for 1994 was \$3.4 billion and the value of anticipated agreements was expected to reach \$5–6 billion in 1995.²⁰ Actual foreign currency receipts from arms exports have been given as \$4.24 billion in 1992 and \$2.028 billion in 1993.²¹ According to Valeriy Tretyak, First Deputy Director General of Rosvooruzheniye, virtually all of these foreign currency receipts are returned to the manufacturers.²²

According to a statement by Oleg Davidov, Minister for Foreign Economic Relations, in May 1994 the value of Russian arms exports in 1992 was \$2.3 billion, but the value fell in 1993 to \$1.2 billion.²³ In January 1994 Victor Glukikh, Chairman of the State Committee for the Defence Branches of Industry, gave the value of Russian arms exports in 1993 as \$2.117 billion.²⁴

In the period immediately after the dissolution of the USSR the administrative organs responsible for decision making in the area of arms export policy were dissolved as part of the process of eliminating the influence of the Communist Party.²⁵ By 1994 revisions in the decision-making structure and the administrative system for implementing export policy were still being made.

In spite of these changes, the outline of a new Russian arms transfer policy can now be seen. Three types of foreign military cooperation are being pursued with varying degrees of success.

First, Russia has tried to re-establish defence industrial ties between the research, design and production units located on the territory of the former Soviet Union. These ties are being sought both through the Commonwealth of Independent States (CIS) and through bilateral agreements. Second, Russia has consolidated its arms transfer relationship with some of the more important clients of the former Soviet Union. Third, Russia has begun to try and penetrate new markets. Russian officials and industrialists have been

¹⁹ For further discussion see chapter 13 of this volume.

²⁰ FBIS-SOV-94-190, 30 Sep. 1994, p. 17.

²¹ Felgengauer, P., 'Russia's arms sales lobbies', *Perspective*, vol. 5, no. 1 (Sep.–Oct. 1994), pp. 1, 7.

²² Tretyak, V., 'Russia's political and economic interests', *Military Parade*, Nov.–Dec. 1994, pp. 12–13.

²³ *International Defense Review*, May 1994, p. 54.

²⁴ FBIS-SOV-94-019, 28 Jan. 1994, p. 28; *East European Report*, 24–30 Apr. 1994, p. 38. A Committee for the Defence Branches of Industry was established after the short-lived Ministry for Industry was abolished in Oct. 1992. The Committee incorporated most state agencies which oversaw defence industrial activity in the Soviet Union—the State Military and Industrial Commission of the Soviet Union and eight of the nine ministries which oversaw defence production. This body was upgraded to a State Committee in 1993, giving its Chairman the equivalent of cabinet rank.

²⁵ Peterson, C. C., 'Moscow's new arms bazaar', *Orbis*, vol. 38, no. 2 (spring 1994).

extremely active in efforts to market equipment in countries that were never Soviet clients. These efforts have focused on South-East Asia, the Persian Gulf and Latin America. In one case—that of China—Russia has moved to restore a very significant old market.

Other forms of foreign military technical cooperation that were important to the Soviet Union have not been restored to the same extent. Central European countries—all of which have military inventories built around Soviet weapons—have largely tried to avoid restoring ties with Moscow. In part this reflects their preference for cooperation with other countries—ideally with the members of NATO. In part it also reflects the dramatic reductions in military expenditure across Central Europe—a trend which shows no sign of reversal.²⁶ Nevertheless, even in Central Europe defence industrial ties with Russia have not been broken entirely.

The background environment

All political constituencies in Russia now appear to support Russian arms transfers in what are considered legitimate markets.²⁷

While there is disagreement about the exact amount from arms transfers, it is clear that arms transfers do bring in some hard currency receipts. In 1993 the value of Russian exports (merchandise trade only) has been estimated at \$40 billion by the US State Department.²⁸ Therefore, accepting the highest of the values offered by Russian officials for arms exports for 1993 arms exports represent roughly 6 per cent of the value of Russian exports.

As they do yield hard currency receipts, who should exercise control over arms transfers has become a contentious element within the Russian Council of Ministers. This issue is discussed further below.

From a political perspective, issues related to arms transfers have become a central element in developing or consolidating close relations between Russia and many foreign countries.²⁹ From an economic perspective foreign sales are seen to offer at least some relief to a defence industry in crisis which would otherwise have to be supported entirely from public expenditures. Export sales cannot compensate for the scale of reductions in domestic acquisition. However, accepting that some producers will fail is different from actively advocating measures that reduce foreign sales.

²⁶ See chapter 12 in this volume.

²⁷ Support for this position is widespread in the Parliament as well as the executive branch of government; see, e.g., statements of Sergey Yushenkov, Chairman of the Committee on Defence, State Duma in FBIS-SOV-94-105, 1 June 1994, p. 7 and FBIS-SOV-94-124, 28 June 1994, p. 15. Even critics of current export policy such as Alexei Arbatov, a member of the State Duma, believe that 'as long as international arms exports are not prohibited or severely constrained by agreements among major exporters, such exports may continue to constitute some portion of Russia's foreign trade'; Arbatov, A., 'Russian aerospace exports: a commentary' ed. R. Forsberg, *The Arms Production Dilemma: Contraction and Restraint in the World Combat Aircraft Industry* (MIT Press: Cambridge, Mass, 1994), p. 108.

²⁸ US Department of State, *Russia: Economic Policy and Trade Practices*, Washington, DC, Feb. 1994, p. 1.

²⁹ Foye, S., 'Russian arms exports after the cold war', *RFE/RL Research Report*, vol. 2, no. 13 (26 Mar. 1993); and Blank, S., 'Challenging the new world order: The arms transfer policies of the Russian Republic', *The Journal of Slavic Military Studies*, vol. 6, no. 1 (June 1993).

In foreign policy terms there have been important changes in emphasis which have had an impact on attitudes towards arms transfers.³⁰ In the Persian Gulf Russia seeks to maintain relations with Iraq—formerly an important market for Soviet goods—and normalize relations with Iran—an emerging market for Russian goods.³¹ These countries also influence regional stability in the Caucasus and Central Asia. Russia has sought to improve its relationships with the other Persian Gulf states. High priority is also being given to building relations with states in North-East Asia (defined to include China) and South-East Asia.

Arms export policy and regulation

Given this background, what are the implications for the pattern and volume of Russian arms exports? Russia's general position on arms exports is identical to that of the other major suppliers. As noted above, the Russian Government is reluctant to forgo economic and employment benefits which may derive from export sales without a demonstrable reason.

This view was also manifest in Russia's ideas about the appropriate goals and procedures for a new multilateral export control organization being discussed after the dissolution of COCOM embargo.³² The Russian national security concept for 1994 made two specific proposals: to hold talks with major arms suppliers to define quotas for the arms trade and to set up a Conference of Arms Exporting Countries to regulate the international market for arms.³³ When President Boris Yeltsin addressed the United Nations in September 1994 he raised the idea of a multilateral discussion under the aegis of the UN again referring to regulation.³⁴

In the area of major conventional weapons, foreign sales seem to be under full state control. However, as noted above, there are inter-agency rivalries and disputes over the issue of how control should be exercised.

Until late 1994 arms export policy was established by the Commission on Military Technical Co-operation with Foreign Countries (KVTS) which is supervised by First Deputy Prime Minister Oleg Soskovets. The Commission was an inter-agency body on which the Ministry of Foreign Affairs, the Ministry of Defence, the Ministry of Foreign Economic Relations, the Ministry of Economics, the Service of External Intelligence and the State Customs Committee were all represented.³⁵

In December 1994 this body was replaced by a State Committee on Military and Technical Co-operation.³⁶ This body was still supervised by Soskovets but

³⁰ See chapter 7 in this volume for a further development of this theme.

³¹ 'Moscow-Tehran-Baghdad oil axis seen in works', FBIS-SOV-94-197, 12 Oct. 1994, pp. 1-2; and Lukin, V., 'Does Russia act wisely in the Middle East?', *Moscow News*, no. 43 (28 Oct.-3 Nov. 1994), pp. 1, 3.

³² See chapter 15 in this volume.

³³ 'Russia's National Security Concept for 1994', reprinted in FBIS-SOV-94-03, 25 Feb. 1994, p. 50.

³⁴ Address by President Boris Yeltsin to the General Assembly, 26 Sep. 1994.

³⁵ FBIS-SOV-94-169, 31 Aug. 1994, p. 31.

³⁶ *East European Report*, 29 Jan.-4 Feb. 1994, p. 41.

Sergey Sveshnikov was appointed to chair the Committee. Whereas the previous Commission reported to the Council of Ministers, the new State Committee was accountable direct to the President and has wide-ranging responsibilities including licensing exports of conventional arms.

Within the Ministry of Defence a Committee on Military Technical Policy has assumed many of the policy planning functions previously performed by the State Committee for the Defence Branches of Industry.³⁷ This Committee discusses issues of science, research and development and production. It includes industrialists who therefore have a chance to influence military research and development policy as well as arms procurement. However, since hard currency receipts from arms exports have become more important to the survival of the defence industry, it seems inconceivable that they are not also discussed in this Committee.

While the final configuration of decision making is unclear, it appears likely that three bodies will now exercise primary responsibility in setting and implementing state policy: the new State Committee, the Ministry of Defence and Rosvooruzheniye. While it is too early for any definitive prediction, it is probable that the role of the State Committee for the Defence Branches of Industry and the Foreign Ministry (which is not represented on the new State Committee) in setting arms export policy will diminish.

Applications to export controlled items originate with one of three agencies: (a) Rosvooruzheniye; (b) Promexport (an organ of the State Committee for the Defence Branches of Industry); or (c) Voentech (the agency responsible for disposal of equipment from the inventory of the Russian armed forces).³⁸ The issue of which government and industrial entities should have the right to initiate contacts with potential foreign customers has been extremely contentious and regulations in this regard have been revised several times. With the creation of Rosvooruzheniye it appeared that producers would lose the right (exercised through the State Committee) to conduct discussions with potential customers. However, the fact that at least some enterprises still have the right to make independent contacts with potential foreign customers was confirmed by President Yeltsin in June 1994.³⁹

Whoever initiates a foreign sale, it is necessary to have government approval to proceed with a transfer.⁴⁰ Under the previous process, licence applications were first reviewed by the Service of External Intelligence and the Export Control Commission of the Ministry of Defence (under the authority of the First Deputy Minister of Defence). Without the assent of these bodies a request never reaches the stage of formal licence consideration.

³⁷ There is some overlap in the membership of the Committee on Military Technical Policy in the Ministry of Defence and the new State Committee. Bacon, E., 'Russia's arms exports: a triumph for marketing?', *Jane's Intelligence Review*, vol. 6, no. 6 (June 1994), pp. 268–70.

³⁸ Anthony *et al.* (note 14), pp. 491–92; Peterson, C. C., 'Moscow's new arms bazaar', *Orbis*, vol. 38, no. 2 (spring 1994); and Kortunov, S., 'National export control system in Russia', *Comparative Strategy*, vol. 13, no. 2 (Apr.–June 1994).

³⁹ Barry, M. J., 'Privatization, conversion and restructuring in Russia's military industrial complex: macroeconomic implications of a sector set apart', *Comparative Strategy*, vol. 13, no. 4 (Nov–Dec 1994), p. 425.

⁴⁰ FBIS-SOV-94-137, 18 July 1994, p. 13.

Until December 1994 requests to export were also reviewed by the Ministry of Foreign Affairs and the Ministry for Foreign Economic Relations. No application was approved over the objection of one of these Ministries.

The Ministry of Foreign Economic Relations evaluated the creditworthiness of the potential customer and their past record of payment for equipment supplied earlier. This function no longer appears to be fulfilled by the Ministry of Foreign Economic Relations but appears to have passed to the new State Committee. Some former specialists from the Ministry of Foreign Economic Relations now sit on the State Committee.

The Ministry of Foreign Affairs evaluated the impact of any application on relations with third parties. However, the role of the Ministry of Foreign Affairs now appears to be limited to developing guidelines to be taken into account by the State Committee in its decisions. The Ministry of Foreign Affairs will not be involved in reviewing the individual licence applications.

The Ministry of Defence remains a central player in the process and considers several criteria in making its decision whether or not to approve a licence application. First, products are not exported unless the equipment in service with the Russian armed forces is considered 3–7 years (depending on the system) ahead in terms of combat capability. Second, the size of the order must exceed a specified volume (which is set on a system-by-system basis). This is to avoid sales where it is clear that the recipient will try to reverse-engineer the product. Third, offensive weapons cannot be exported to unstable neighbouring countries.

Russian marketing strategy and prospects

Under the overall framework of this policy industrialists and officials have developed a marketing strategy intended to maximize Russian arms sales. In addition to adopting a high profile at several major international defence equipment exhibitions in the past two years, Russia has staged several such events. High-level delegations have toured prospective markets in South-East Asia and South America and brought officials from those countries to Russia in an effort to develop new arms transfer relationships.⁴¹

Russia has tried to re-establish defence industrial ties between the research, design and production units located on the territory of the former Soviet Union. These ties are being sought primarily through the CIS, but have usually taken the form of bilateral government-to-government agreements between Russia and CIS partners.⁴²

Russia has also consolidated its arms transfer relationship with some of the more important clients of the former Soviet Union. Framework agreements

⁴¹ Martov, A., 'Russia's Asian sales onslaught', *International Defense Review*, May 1994, pp. 49–54; and 'Russia's arms exports: back to business', *Defense News*, 3–9 Oct. 1994, pp. 14–15.

⁴² Agreements relating to arms production were signed during the 15 Apr. Moscow summit meeting between leaders of CIS countries, *The Guardian*, 19 Apr. 1994. The development of Russia's relations with the countries of the former Soviet Union is discussed more fully in Baranovsky, V., 'Conflict developments on the territory of the former Soviet Union', *SIPRI Yearbook 1994* (note 12), chapter 6 and in chapter 7 in this volume.

with Syria seem unlikely to be translated into deliveries of major new systems at least for several years. The main obstacle to the approval of licences that would permit fulfilment of framework agreements reached with Syria has been the size of the Syrian debt inherited from the former Soviet Union. First Deputy Prime Minister Oleg Soskovets visited Damascus in Apr. 1994 for discussions with Syrian Defence Minister Mustapha al-Tlas on how Syria and Russia might reach agreement on the matter of debt.⁴³ According to Israeli Prime Minister Yitzhak Rabin, President Yeltsin had told him that new deliveries would not be obstructed if Syria began to make repayments on its existing \$11 billion debt to Russia.⁴⁴

Representatives of the highest level of the Russian Government have also been involved in the consolidation of relations with China and India, including the discussion of military-technical cooperation.

Russia and China are currently implementing agreements dating from 1990 that cover the transfer of fighter aircraft, transport aircraft and surface-to-air missile systems.⁴⁵

Since much of China's military inventory consists of equipment of Soviet design there are many possibilities for military-industrial cooperation between Russia and China. Both countries are keen to explore these possibilities and the issue of future cooperation and there has been regular contact between Russian and Chinese industrialists and officials.⁴⁶ However, few final agreements for follow-on transfers appear to have been reached.⁴⁷

There are several constraints on the development of Sino-Russian military-industrial cooperation. Yevgeny Bazhanov, head of the Institute of Contemporary Problems in the Russian Ministry for Foreign Affairs, has observed that for Russia, relations with China 'are fundamental, because of the immense frontier between our two countries and because of the huge Chinese population.' According to Bazhanov, while the supply of weapons to China undoubtedly brings some benefits, 'we may be witnessing a transformation in the balance of forces in Asia in China's favour, which would then threaten us

⁴³ *Jerusalem Post* (international edition), 7 May 1994, p. 24; and *Jane's Defence Weekly*, 14 May 1994, p. 3.

⁴⁴ *Jerusalem Post* (international edition) 9 July 1994, p. 24; *Jane's Defence Weekly*, 9 July 1994, p. 28; and *Defense News*, 4-10 July 1994, p. 15.

⁴⁵ Ya-chün Chang, 'Peking-Moscow relations in the post-Soviet era', *Issues & Studies*, vol. 30, no. 1 (Jan. 1994); Bouchkin, A. A., *Russia's Far Eastern Policy in the '90s: Priorities and Prospects*, Paper no. 40 of the Russian Littoral Project, University of Maryland at College Park, Mar. 1994; and *An Analysis of Current Status of Talks on Arms Reduction in the Border Area and Arms Trade between Russia and China* (Kanwa Translation Information Centre: Toronto, Aug. 1994).

⁴⁶ Seven Chinese military delegations visited Russia in 1994. When Prime Minister Victor Chernomyrdin visited China in June 1994 he was accompanied by First Deputy Minister of Defence Andrei Kokoshin. FBIS-SOV-94-107, 3 June 1994, p. 10. First Deputy Prime Minister Oleg Soskovets visited Defence Minister Chi Haotian in July 1994 to discuss the development of military industrial co-operation among other matters. FBIS-SOV-94-134, 13 July 1994, p. 4.

⁴⁷ Most often mentioned in this regard are further sales of Su-27 fighter aircraft and new agreements for MiG-29 and Su-30 fighter aircraft, T-80 tanks and an improved version of the Kilo Class diesel submarine. Reports also occasionally mention the MiG-31 and Su-35 fighter aircraft, Tu-22M Backfire bomber and Sovremenny Class destroyers. *World Aerospace and Defence Intelligence*, 14 Jan. 1994, p. 17; *Asian Recorder*, 27 Aug.-2 Sep. 1994, p. 24192; *Moscow News*, 7-13 Oct. 1994, p. 8; and *Jane's Defence Weekly*, 19 Nov. 1994, p. 1.

directly.⁴⁸ Although there has been an improvement in political relations between Beijing and Moscow, China is still seen by some Russians as 'the only power that may present a direct military threat to Russia's military security in the long-run'.⁴⁹

Russia and China have also had different positions on the issues of technology transfer and the financing of arms transfers. China's preference has been for technology transfers which enhance the national capacity to produce equipment.⁵⁰ Russia on the other hand has a preference for the transfer of manufactured goods. During the visit of Prime Minister Victor Chernomyrdin to China in mid-1994 a document was signed outlining the structure of financial arrangements in Sino-Russian trade. The agreement will apparently reduce the tendency for trade to be financed through barter and permit a larger proportion of trade to be paid for in hard currency.⁵¹

Russia and India—whose armed forces depend heavily on equipment of Soviet origin—have also discussed future military-technical cooperation. The issue of arms and technology transfers has been raised at the highest level with Prime Minister Narasimha Rao apparently requesting approval for the transfer to India of additional MiG-29 fighter aircraft during Yeltsin's visit to New Delhi in June 1994.⁵² In July 1994 Air Chief Marshal S. K. Kaul and his deputy, Air Marshal S. R. Deshpande visited Russia for discussions while Defence Secretary K. A. Nambiar visited Russia twice in 1994.

Russia and India agree that future military-industrial cooperation is desirable. However, persistent reports that new agreements have been signed for transfers of major systems appear to have been premature.⁵³ Discussions focus on several issues. Whereas Soviet-Indian trade relations were based on administrative agreements, the financial aspects of future cooperation have become more central for both countries. As noted above, for Russia the foreign exchange earnings from arms sales have become an important determinant of whether or not to proceed with a given transfer. Moreover, Russia is still interested in receiving payment for past transfers but cannot reach agreement with India on the ruble/rupee exchange rate that should be the basis for calculating the bilateral debt.⁵⁴ For India on the other hand controlling public

⁴⁸ FBIS-SOV-94-221, 16 Nov. 1994, p. 10.

⁴⁹ Arbatov, A., 'Russian aerospace exports: a commentary', ed. R. Forsberg, *The Arms Production Dilemma: Contraction and Restraint in the World Combat Aircraft Industry* (MIT Press: Cambridge Mass., 1994), p. 106.

⁵⁰ This issue is dealt with in chapter 11 in this volume.

⁵¹ *Moscow News*, 9-15 Sep. 1994, p. 1.

⁵² *Defense News*, 27 June-3 July 1994, p. 28.

⁵³ Systems other than the MiG-29 that figure consistently in press reports are the Su-30 and Su-35 fighter aircraft, Ka-50, Mi-35 and Mi-28 attack helicopters, T-80 tanks, 152-mm calibre self-propelled howitzers and additional Kilo Class submarines, *Aviation Week & Space Technology*, 25 July 1994, pp. 58-59; *Jane's Defence Weekly*, 30 July 1994, p. 4; *Defense News*, 3-9 Oct. 1994, pp. 1, 36; *Defense News*, 17-23 Oct. 1994, p. 58; FBIS-SOV-94-205, 24 Oct. 1994, p. 15; FBIS-SOV-94-207, 26 Oct. 1994, p. 12; and *Jane's Defence Weekly*, 5 Nov. 1994, p. 1.

⁵⁴ According to one account India has proposed a rate of 300 roubles to 1 rupee and Russia has proposed 30 roubles to 1 rupee. *Aviation Week & Space Technology*, 25 July 1994, pp. 58-59.

expenditure and managing foreign exchange reserves are central elements of the economic policy of the current government.⁵⁵

A second, and more traditional, issue being addressed in India is the future size and content of the armed forces. In the present economic conditions the armed forces are apparently examining step-by-step reductions in the number of different system types in service to ease the management of logistics and maintenance.⁵⁶

A third and related issue being re-visited in India is the future of India's indigenous defence research, development and production capacities. One analysis has concluded that in the face of new market realities 'the managers of India's nascent military technology base were right to abandon their quixotic quest for an unattainable autarky in favour of a more co-operative approach'.⁵⁷ However, the place of Russian industry in that cooperation was placed in doubt after the events of 1991-92 in Russia. Many of the recent agreements reached between Russia and India appear to have been aimed at solving some of these problems in repair and maintenance of equipment supplied to India under previous agreements. As Indian Air Vice-Marshal S. Krishnaswamy noted with some understatement there was a 'hiccup' in supply relations.⁵⁸

Over the next few years production of several systems assembled in India under Soviet licences will end and it is unclear whether production assets built up in India around these programmes will close, produce equipment of Indian design or begin production of follow-on Russian equipment types.⁵⁹

Russia and the United States have taken fundamentally different approaches to relations with Iran and Iraq. Russia's arms transfer relationship with Iran became a significant issue in relations between Moscow and Washington in 1994. The USA has staked out a policy of the 'dual containment' of Iran and Iraq.⁶⁰ Under this approach the sovereignty and security of the six Gulf Cooperation Council members would be enhanced by security guarantees, pre-positioning of US military equipment and arms transfers. At the same time the military capabilities of Iraq and Iran would be kept at the same level and, if possible, degraded through export restrictions.

Russia, by contrast, has adopted a policy of 'constructive engagement' towards both Iran and Iraq. Relations between the central government and regions of Russia with a significant Muslim population are potentially volatile. Given this and the recent history of Soviet and Russian engagement in Afghanistan and the Caucasus, Russian policy has been to try and avoid being

⁵⁵ See chapter 12 in this volume.

⁵⁶ *Aviation Week & Space Technology*, 25 July 1994, pp. 49-50.

⁵⁷ See Arnett, E., 'Military technology: The case of India', *SIPRI Yearbook 1994* (note 12), p. 364.

⁵⁸ For example, of 122 fighter aircraft engines sent to CIS countries for repair between July 1990 and Jan. 1992, only 79 were returned to India by June 1992; *Aviation Week & Space Technology*, 25 July 1994, pp. 49-50.

⁵⁹ For example, the MiG-27 production line in Bangalore, the T-72 production line in Avadi and the BMP-2 production line in Shankarpally, Andhra Pradesh.

⁶⁰ The phrase 'dual containment' is attributed to Martin Indyk, Senior Director for Near East and South Asia at the National Security Council; Marr, P., 'The United States, Europe and the Middle East: An uneasy triangle', *Middle East Journal*, vol. 48, no. 2 (spring 1994).

seen as anti-Islam. This desire has been reinforced by Russian policies towards the war in Bosnia and the civil war in Chechnya. The nature of ties with governments of Persian Gulf countries, including Iran, as well as other Muslim countries—such as Malaysia and Turkey—are an important dimension of Russian foreign policy. These ties include arms transfers if requested by the recipient government and where consistent with Russia's overall policies on arms transfers.

In most cases this policy has been uncontroversial.⁶¹ However, Washington has raised the issue of arms transfers to Iran to the highest level by making it a central issue when President Yeltsin visited Washington in September 1994. During the press conference that followed the meeting President Yeltsin said that Russia would honour existing agreements but make no further arms sales to Iran. According to Yeltsin 'those are the grounds upon which Bill Clinton agreed that we are going to participate in the post-COCOM era'. Clinton replied that the two leaders had 'reached a conceptual agreement in principle about how we would proceed, and then we agreed to let our experts on this matter work through it . . . [W]e cannot say that it is resolved'.⁶²

The USA did not know the content and scope of the existing agreements that Yeltsin had referred to. In 1989 President Gorbachev signed agreements believed to run for 10 years and involve the transfer and support of MiG-29 fighter aircraft, T-72 tanks and an unspecified number of SA-5 surface-to-air missile complexes. In addition, Russia would provide maintenance and ancillary support services for Iraqi combat aircraft which flew to Iran on the eve of the 1991 Persian Gulf War.

Israeli analysts have suggested that Iran has a long-term goal of establishing an air force with around 300 modern fighter aircraft as a nucleus.⁶³ As well as the MiG-29 fighter aircraft and Su-24 fighter bombers that Iran already operates a wide variety of possible acquisitions from Russia have been mentioned in media reports with the most persistent reports referring to MiG-31 fighters, Tu-22M bombers (armed with medium-range cruise missiles) and A-50 airborne command and control platforms. However, none of these new agreements was confirmed in 1994.

Efforts have also been made to repair Russia's relations with Iraq—although these are unlikely to lead to major arms transfers until the United Nations mandatory arms embargo on that country is lifted.⁶⁴

Russia has begun to try and penetrate new markets. In 1994 Russia made its first ever arms transfer agreements with Brazil, and Malaysia. Argentina, Peru, South Korea and Thailand were also mentioned as countries with a strong interest in major items of Russian military equipment.

⁶¹ There has been no objection to Russian sales to, for example, Kuwait, Malaysia, Turkey or the United Arab Emirates. Benson, S., 'National security and economic considerations in US conventional arms transfer policy', *The Nonproliferation Review*, vol. 2, no. 1 (fall 1994), p. 21.

⁶² Quoted in *Arms Sales Monitor*, no. 27 (30 Nov. 1994).

⁶³ Kam, E., 'The Iranian threat', *Middle East Military Balance 1993-94* (Jaffee Center for Strategic Studies: Tel Aviv, 1994), p. 83.

⁶⁴ FBIS-SOV-94-180, 16 Sep. 1994, pp. 14-15; and *The Independent*, 12 Oct. 1994.

Appendix 14A. Tables of the volume of the trade in major conventional weapons, 1985–94

IAN ANTHONY, GERD HAGMEYER-GAVERUS, PIETER D. WEZEMAN and SIEMON T. WEZEMAN

Table 14A.1. Volume of imports of major conventional weapons
Figures are SIPRI trend-indicator values, as expressed in US \$m., at constant (1990) prices.

| | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| World total | 39 713 | 44 118 | 46 377 | 38 585 | 37 798 | 30 891 | 25 527 | 24 776 | 24 494 | 21 725 |
| Developing world | 26 202 | 28 523 | 30 791 | 22 610 | 21 541 | 17 817 | 13 492 | 12 566 | 13 165 | 12 622 |
| LDCs | 1 079 | 1 716 | 1 355 | 2 287 | 3 486 | 3 127 | 1 671 | 307 | 359 | 348 |
| Industrialized world | 13 511 | 15 595 | 15 586 | 15 975 | 16 257 | 13 074 | 12 035 | 12 210 | 11 329 | 9 103 |
| Europe | 10 349 | 11 958 | 12 230 | 12 952 | 13 091 | 10 065 | 8 033 | 9 143 | 8 327 | 6 762 |
| EU | 2 126 | 3 118 | 2 942 | 4 162 | 4 827 | 3 865 | 5 463 | 6 190 | 3 766 | 3 766 |
| Other Europe | 8 223 | 8 839 | 9 288 | 8 789 | 8 264 | 6 200 | 2 569 | 2 953 | 4 562 | 2 996 |
| Americas | 3 441 | 2 997 | 3 406 | 1 895 | 2 440 | 1 742 | 2 365 | 1 616 | 1 516 | 1 882 |
| North | 1 285 | 1 105 | 1 370 | 908 | 776 | 447 | 1 421 | 1 007 | 1 121 | 1 206 |
| Central | 794 | 749 | 336 | 231 | 385 | 443 | 145 | .. | 3 | .. |
| South | 1 361 | 1 144 | 1 701 | 756 | 1 279 | 852 | 799 | 609 | 392 | 676 |
| Africa | 4 204 | 3 644 | 3 221 | 2 448 | 1 940 | 1 700 | 846 | 626 | 317 | 297 |
| Sub-Saharan | 2 447 | 2 435 | 2 601 | 1 980 | 495 | 1 206 | 196 | 547 | 149 | 96 |
| Asia | 9 170 | 11 814 | 11 530 | 11 378 | 13 787 | 10 634 | 8 878 | 7 548 | 6 482 | 7 296 |
| Middle East | 12 146 | 12 817 | 15 390 | 9 039 | 5 771 | 6 297 | 5 080 | 5 307 | 7 056 | 5 263 |
| Oceania | 403 | 889 | 601 | 875 | 769 | 453 | 326 | 536 | 796 | 225 |
| ASEAN | 1 178 | 1 071 | 1 400 | 1 316 | 824 | 1 084 | 1 282 | 1 105 | 860 | 2 741 |
| NATO | 4 149 | 4 697 | 5 693 | 6 668 | 7 519 | 5 449 | 8 055 | 9 003 | 7 204 | 7 171 |
| OECD | 7 101 | 8 085 | 8 409 | 9 697 | 10 442 | 8 644 | 11 137 | 11 949 | 9 962 | 9 024 |
| OPEC | 10 256 | 10 044 | 9 738 | 6 663 | 6 108 | 5 788 | 3 546 | 2 788 | 5 360 | 4 559 |
| OSCE | 11 629 | 12 961 | 13 433 | 13 630 | 13 830 | 10 468 | 9 446 | 10 122 | 9 155 | 7 962 |

Note: Tables 14A.1 and 14A.2 show the volume of trade for the different regional groupings to which countries are assigned in the SIPRI arms trade data base. Since many countries are included in more than one group totals cannot be derived from the tables. The following countries are included in each group:

Developing world: Afghanistan, Algeria, Angola, Argentina, Bahamas, Bahrain, Bangladesh, Barbados, Belize, Benin, Bhutan, Bolivia, Botswana, Brazil, Brunei, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo, Costa Rica, Côte d'Ivoire, Cuba, Cyprus, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Ethiopia, Fiji, Gabon, Gambia, Ghana, Guatemala, Guinea, Guinea Bissau, Guyana, Haiti, Honduras, India, Indonesia, Iran, Iraq, Israel, Jamaica, Jordan, Kenya, Kiribati, North Korea, South Korea, Kuwait, Laos, Lebanon, Lesotho, Liberia, Libya, Madagascar, Malawi, Malaysia, Maldives, Mali, Marshall Islands, Mauritania, Mauritius, Mexico, Fed. States of Micronesia, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Qatar, Rwanda, Samoa, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Singapore, Solomon Islands, Somalia, South Africa, Sri Lanka, St Vincent & the Grenadines, Sudan, Suriname, Swaziland, Syria, Tahiti, Taiwan, Tanzania, Thailand, Togo, Tonga, Trinidad & Tobago, Tunisia, Tuvalu, Uganda, United Arab Emirates, Uruguay, Vanuatu, Venezuela, Viet Nam, Yemen (1991–), North Yemen (–1990), South Yemen (–1990), Zaire, Zambia, Zimbabwe.

Least developed countries (LDCs):^a Afghanistan, Bangladesh, Benin, Bhutan, Botswana, Burkina Faso, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea,

Table 14A.2. Volume of exports of major conventional weapons

Figures are SIPRI trend-indicator values, as expressed in US \$m., at constant (1990) prices.

| | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| World total | 39 713 | 44 118 | 46 377 | 38 585 | 37 799 | 30 891 | 25 527 | 24 777 | 24 494 | 21 725 |
| Developing world | 2 476 | 2 785 | 4 615 | 3 428 | 1 994 | 1 600 | 1 635 | 1 571 | 1 994 | 1 493 |
| LDCs | 2 | 31 | 91 | 3 | .. | .. | .. | .. | .. | .. |
| Industrialized world | 37 237 | 41 333 | 41 762 | 35 157 | 35 805 | 29 291 | 23 892 | 23 206 | 22 500 | 20 232 |
| Europe | 27 641 | 29 392 | 27 927 | 23 654 | 25 292 | 18 467 | 10 778 | 9 256 | 9 402 | 8 042 |
| EU | 8 514 | 8 001 | 7 372 | 6 129 | 7 696 | 6 160 | 5 637 | 4 611 | 5 108 | 6 548 |
| Other Europe | 19 127 | 21 392 | 20 554 | 17 525 | 17 596 | 12 308 | 5 141 | 4 644 | 4 293 | 1 494 |
| Americas | 9 793 | 12 094 | 14 235 | 11 797 | 10 584 | 10 799 | 13 106 | 14 104 | 13 143 | 12 229 |
| North | 9 554 | 11 907 | 13 817 | 11 493 | 10 502 | 10 716 | 13 056 | 13 932 | 13 065 | 12 167 |
| Central | .. | .. | 1 | .. | 1 | 4 | 2 | 99 | 53 | .. |
| South | 239 | 187 | 417 | 304 | 81 | 79 | 48 | 73 | 24 | 61 |
| Africa | 104 | 85 | 247 | 125 | .. | 37 | 33 | 87 | 34 | .. |
| Sub-Saharan | 73 | 48 | 162 | 63 | .. | 7 | 33 | 87 | 34 | .. |
| Asia | 1 771 | 1 814 | 3 316 | 2 442 | 1 502 | 1 366 | 1 438 | 1 265 | 1 763 | 1 343 |
| Middle East | 381 | 709 | 633 | 557 | 410 | 114 | 111 | 64 | 142 | 107 |
| Oceania | 23 | 24 | 18 | 10 | 10 | 108 | 62 | 1 | 10 | 3 |
| ASEAN | 65 | 26 | 68 | 42 | 8 | 1 | 1 | 4 | 14 | 38 |
| NATO | 18 097 | 19 918 | 21 240 | 17 642 | 18 290 | 16 885 | 18 784 | 18 544 | 18 221 | 18 777 |
| OECD | 18 722 | 20 503 | 21 749 | 18 383 | 18 932 | 17 554 | 19 380 | 19 101 | 18 439 | 18 944 |
| OPEC | 73 | 98 | 242 | 252 | 26 | 33 | 18 | .. | 57 | 20 |
| OSCE | 37 195 | 41 299 | 41 744 | 35 148 | 35 794 | 29 183 | 23 834 | 23 188 | 22 322 | 20 059 |

Ethiopia, Gambia, Guinea, Guinea Bissau, Haiti, Laos, Lesotho, Liberia, Malawi, Maldives, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, Sierra Leone, Somalia, Sudan, Tanzania, Togo, Uganda, Vanuatu, Yemen (1991-), North Yemen (-1990), South Yemen (-1990).

Industrialized world: Albania, Armenia (1992-), Australia, Austria, Azerbaijan (1992-), Belarus (1992-), Belgium, Bosnia and Herzegovina (1992-), Bulgaria, Canada, Croatia (1992-), Czechoslovakia (-1992), Czech Republic (1993-), Denmark, Estonia (1991-), Finland, France, Georgia (1992-), FR Germany (-1990), German DR (-1990), Germany (1990-), Greece, Hungary, Iceland, Ireland, Italy, Japan, Kazakhstan (1992-), Kyrgyzstan (1992-), Latvia (1991-), Liechtenstein, Lithuania (1991-), Luxembourg, Macedonia (1992-), Malta, Moldova (1992-), Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia (1992-), Slovakia (1993-), Slovenia, (1992-), Spain, Sweden, Switzerland, Tajikistan (1992-), Turkey, Turkmenistan (1992-), UK, Ukraine (1992-), USA, USSR (-1991), Uzbekistan (1992-), Yugoslavia (-1991), Yugoslavia (Serbia and Montenegro) (1992-).

Europe: Albania, Armenia (1992-), Austria, Azerbaijan (1992-), Belarus (1992-), Belgium, Bosnia and Herzegovina (1992-), Bulgaria, Croatia (1992-), Cyprus, Czechoslovakia (-1992), Czech Republic (1993-), Denmark, Estonia (1991-), Finland, France, Georgia (1992-), FR Germany (-1990), German DR (-1990), Germany (1990-), Greece, Hungary, Iceland, Ireland, Italy, Latvia (1991-), Liechtenstein, Lithuania (1991-), Luxembourg, Macedonia (1992-), Malta, Moldova (1992-), Monaco, Netherlands, Norway, Poland, Portugal, Romania, Russia (1992-), Slovakia (1993-), Slovenia (1992-), Spain, Sweden, Switzerland, Turkey, UK, Ukraine (1992-), USSR (-1991), Yugoslavia (-1991), Yugoslavia (Serbia and Montenegro) (1992-).

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European Union (EU): Belgium, Denmark, France, FR Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal (1986–), Spain (1986–), UK.

Other Europe: This group is made up of the non-EU countries in the Europe group listed above.

Americas: Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St Vincent & the Grenadines, Suriname, Trinidad & Tobago, Uruguay, USA, Venezuela.

North America: Canada, Mexico, USA.

Central America: Barbados, Bahamas, Belize, Costa Rica, Cuba, Dominica, Dominican Republic, Guatemala, Haiti, Honduras, Jamaica, Nicaragua, Panama, El Salvador, St Vincent & the Grenadines, Trinidad & Tobago.

South America: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela.

Africa: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Djibouti, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zaire, Zambia, Zimbabwe.

Sub-Saharan Africa: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Djibouti, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zaire, Zambia, Zimbabwe.

Asia: Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia, China, India, Indonesia, Japan, Kazakhstan (1992–), North Korea, South Korea, Kyrgyzstan (1992–), Laos, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Taiwan, Tajikistan (1992–), Thailand, Turkmenistan (1992–), Uzbekistan (1992–), Viet Nam.

Middle East: Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates, Yemen, North Yemen, South Yemen.

Oceania: Australia, Fiji, Kiribati, Marshall Islands, Fed. States of Micronesia, New Zealand, Papua New Guinea, Samoa, Solomon Islands, Tahiti, Tonga, Tuvalu, Vanuatu.

Association of South-East Asian Nations (ASEAN): Brunei, Indonesia, Malaysia, Philippines, Singapore, Thailand.

NATO: Belgium, Canada, Denmark, France, FR Germany, Germany, Greece, Iceland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Turkey, UK, USA.

Organization for Economic Co-operation and Development (OECD): Austria, Australia, Belgium, Canada, Denmark, Finland, France, FR Germany (–1990), Germany (–1990), Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, UK, USA.

Organisation of Petroleum Exporting Countries (OPEC): Algeria, Ecuador (–1992), Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, Venezuela.

Organization for Security and Co-operation in Europe (OSCE): Albania (1991–), Armenia (1992–), Austria, Azerbaijan (1992–), Belarus (1992–), Belgium, Bosnia and Herzegovina (1992–), Bulgaria, Canada, Croatia (1992–), Cyprus, Czechoslovakia (–1992), Czech Republic (1993–), Denmark, Estonia (1991–), Finland, France, Georgia (1992–), FR Germany (–1990), German DR (–1990), Germany (1990–), Greece, Hungary, Iceland, Ireland, Italy, Kazakhstan (1992–), Kyrgyzstan (1992–), Latvia (1991–), Liechtenstein, Lithuania (1991–), Luxembourg, Malta, Moldova (1992–), Monaco, Netherlands, Norway, Poland, Portugal, Romania, Russia (1992–), San Marino, Slovakia (1993–), Slovenia (1992–), Spain, Sweden, Switzerland, Tajikistan (1992–), Turkey, Turkmenistan (1992–), UK, Ukraine (1992–), USA, USSR (–1991), Uzbekistan (1992–), Yugoslavia (–1991), Yugoslavia (Serbia and Montenegro) (1992–).

^aAs defined by the International Monetary Fund.

Appendix 14B. Register of the trade in and licensed production of major conventional weapons, 1994

IAN ANTHONY, GERD HAGMEYER-GAVERUS, PIETER D. WEZEMAN and SIEMON T. WEZEMAN

This register lists major weapons on order or under delivery, or for which the licence was bought and production was under way or completed during 1994. 'Year(s) of deliveries' includes aggregates of all deliveries and licensed production since the beginning of the contract. Sources and methods for the data collection, and the conventions, abbreviations and acronyms used, are explained in appendix 14C. Entries are alphabetical, by recipient, supplier and licensor.

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|---|
| Algeria | | | | | | | |
| S: Egypt | (200) | Fahd | APC | 1992 | 1992-94 | (153) | For Gendarmerie |
| L: UK | 3 | Kebir Class | Patrol craft | (1990) | | | |
| Angola | | | | | | | |
| S: Spain | 2 | C-212-300MPA Aviocar | Maritime patrol | (1990) | | | |
| Switzerland | 8 | PC-7 Turbo Trainer | Trainer | (1989) | 1990 | 6 | |
| Argentina | | | | | | | |
| S: USA | 40 | A-4M Skyhawk II | Fighter/ground attack | 1993 | | | Ex-US Marine Corps; incl 6 TA-4 trainer version; deal worth \$125 m incl 8 spare engines, maintenance and support |
| | 3 | C-130B Hercules | Transport | 1992 | | | Ex-US Air Force; aid |
| | 20 | OV-1 Mohawk | Reconnaissance plane | 1993 | 1993-94 | 20 | Ex-US Army |
| | (15) | Super King Air 200 | Transport | (1993) | | | Ex-US Air Force and Army |
| | 1 | Cherokee Class | Tug | (1993) | 1994 | 1 | Ex-US Navy; for use as OPV |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|---|
| L: Germany, FR | 3 | TR-1700 Type | Submarine | 1977 | | | In addition to 2 delivered direct; original order for 4 cut to 3 |
| Australia | | | | | | | |
| S: Canada | 97 | LAV-25 | AIFV | 1992 | 1994 | (10) | Deal worth \$163 m; incl 25 Bison APCs, 10 ARVs, 9 APC/command posts, 10 ambulances and 10 surveillance version |
| Sweden | 8 | 9LV | Fire control radar | (1991) | | | For 8 Meko 200ANZ Type (Anzac Class) frigates |
| | 8 | Sea Giraffe 150 | Surveillance radar | 1991 | | | For 8 Meko 200ANZ Type (Anzac Class) frigates |
| USA | 3 | P-3B Orion | ASW/maritime patrol | 1994 | | | Ex-US Navy; for training |
| | 8 | 127mm/54 Mk-42 Mod-9 | Naval gun | (1989) | | | For 8 Meko 200ANZ Type (Anzac Class) frigates |
| | 8 | AN/SPS-49 | Surveillance radar | 1993 | | | For 8 Meko 200ANZ Type (Anzac Class) frigates |
| | 2 | AN/SPS-67 | Surveillance radar | 1993 | 1994 | 2 | On 2 ex-US Navy Newport landing ships |
| | 2 | Phalanx | CIWS | 1993 | 1994 | 2 | On 2 ex-US Navy Newport Class landing ships |
| | 8 | Seasparrow VLS | ShAM system | (1991) | | | For 8 Meko 200ANZ Type (Anzac Class) frigates |
| | .. | RIM-7M Seasparrow | ShAM | (1991) | | | For 8 Meko 200ANZ Type (Anzac Class) frigates |
| | 1 | Adams Class | Destroyer | 1993 | 1994 | 1 | Ex-US Navy; deal worth \$2.2 m; for spares |
| | 2 | Newport Class | Landing ship | 1993 | 1994 | 2 | Ex-US Navy; deal worth \$95 m |
| L: Germany, FR | 10 | Meko 200ANZ Type | Frigate | 1989 | | | Incl 2 for New Zealand; option on 2 more for New Zealand; Australian designation Anzac Class |
| Italy | 6 | Gaetta Class | MCM ship | 1994 | | | Australian designation Huon Class |
| Sweden | 6 | Type 471 | Submarine | 1987 | | | Deal worth \$2.8 b; Australian designation Collins Class |
| Austria | | | | | | | |
| S: France | 22 | RAC | Surveillance radar | 1994 | | | Deal worth \$105 m (offsets \$298 m) |
| | 500 | Mistral | Portable SAM | 1993 | 1993-94 | (247) | Deal worth \$129 m incl launchers (offsets \$344 m) |
| UK | 102 | M-109A2 155mm | Self-propelled gun | 1994 | 1994 | 102 | Ex-UK Army |
| USA | 54 | M-109A5 155mm | Self-propelled gun | (1993) | 1994 | (10) | |

| | | | | | | | |
|-------------------|------|-------------------|--------------------|--------|---------|-------|--|
| Bahrain | | | | | | | |
| S: Netherlands | 13 | M-110A2 203mm | Self-propelled gun | 1993 | 1994 | 13 | Ex-Dutch Army; deal worth \$7.5 m incl 3 M-577-A2s, 2 M-578s, spare parts and ammunition |
| | 3 | M-577A2 | APC/command post | 1993 | 1994 | 3 | Ex-Dutch Army; deal worth \$7.5 m incl 13 M-110A2s, 2 M-578s, spare parts and ammunition |
| | 2 | M-578 | ARV | 1993 | 1994 | 2 | Ex-Dutch Army; deal worth \$7.5 m incl 13 M-110A2s, 3 M-577A2s, spare parts and ammunition |
| USA | 14 | Bell-209/AH-1E | Helicopter | (1993) | | | Ex-US Army |
| Bangladesh | | | | | | | |
| S: China | (21) | F-7M Airguard | Fighter | 1992 | | | Replacing aircraft lost in cyclone |
| UK | 1 | Island Class | OPV | (1993) | 1994 | 1 | Ex-UK Navy |
| | 4 | River Class | Minesweeper | 1994 | 1994 | 4 | Ex-UK Navy |
| Belgium | | | | | | | |
| S: France | 714 | Mistral | Portable SAM | 1988 | 1991-94 | (600) | Deal worth \$93 m incl 118 launchers (offsets 75%) |
| | 290 | Mistral | Portable SAM | 1991 | | | Deal incl 24 launchers |
| Italy | 15 | SF-260D | Trainer | 1992 | 1994 | (5) | |
| USA | 545 | AIM-9M Sidewinder | Air-to-air missile | 1988 | 1990-94 | (500) | Deal worth \$49 m |
| | 940 | AIM-9M Sidewinder | Air-to-air missile | 1989 | | | Deal worth \$80 m |
| L: Italy | 45 | A-109BA | Helicopter | 1988 | 1992-94 | 45 | Incl 28 A-109HA armed version |
| Bolivia | | | | | | | |
| S: USA | 1 | C-130B Hercules | Transport | 1993 | | | Ex-US Air Force; deal worth \$1 m |
| Brazil | | | | | | | |
| S: France | 20 | AS-550L1 Fenec | Helicopter | 1992 | 1992-94 | (20) | Deal worth \$25 m |
| | .. | Mistral | Portable SAM | 1994 | | | |
| | .. | Mistral | Portable SAM | 1994 | | | For Navy |
| Germany, FR | 4 | Grajau Class | Patrol craft | 1993 | | | |
| Italy | .. | FILA | Fire control radar | (1987) | 1989-94 | (18) | |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|--|
| Russia | 112 | SA-18 | Portable SAM | 1994 | 1994 | (112) | Incl 56 launchers |
| Sweden | 5 | Erieye | Airborne radar | 1994 | | | Deal worth \$125 m; for EMB-120 AEW aircraft |
| UK | 9 | Super Lynx | ASW helicopter | 1993 | | | Deal worth \$221 m incl refurbishment of 5 Brazilian Navy Lynx to Super Lynx; for Navy |
| | 4 | MM-38 ShShMS | ShShM system | 1994 | | | On 4 ex-UK Navy Broadsword Class frigates |
| | 8 | Seawolf ShAMS | ShAM system | 1994 | | | On 4 ex-UK Navy Broadsword Class frigates |
| | 8 | Type 911 | Fire control radar | 1994 | | | On 4 ex-UK Navy Broadsword Class frigates |
| | 4 | Type 967/968 | Surveillance radar | 1994 | | | On 4 ex-UK Navy Broadsword Class frigates |
| | .. | Seawolf | ShAM | 1994 | | | For 4 Broadsword Class frigates |
| | 4 | Broadsword Class | Frigate | 1994 | | | Ex-UK Navy |
| | 3 | River Class | Minesweeper | 1994 | | | Ex-UK Navy |
| USA | 1 | AN/SPS-67 | Surveillance radar | 1994 | 1994 | 1 | On 1 ex-US Navy Newport Class landing ship |
| | 1 | Phalanx | CIWS | 1994 | 1994 | 1 | On 1 ex-US Navy Newport Class landing ship |
| | 1 | Newport Class | Landing ship | 1994 | 1994 | 1 | Ex-US Navy; 2-year lease worth \$2 m |
| L: Germany, FR | 3 | Type 209/1400 | Submarine | 1984 | 1994 | 1 | In addition to 1 delivered direct; Brazilian designation Tupi Class |
| Singapore | 4 | Grajau Class | Patrol craft | 1987 | 1993-94 | 4 | |
| UK | 50 | L-118 105mm | Towed gun | 1991 | | | Deal worth \$60 m |
| Brunei | | | | | | | |
| S: Indonesia | 1 | CN-235M Phoenix | Transport | 1989 | | | Status uncertain |
| | 3 | CN-235MPA | Maritime patrol | 1989 | | | |
| Canada | | | | | | | |
| S: France | 6 | Airbus A310-300 | Transport | (1993) | 1993-94 | (6) | Canadian designation CC-150 Polaris |
| | 28 | LG-1 105mm | Towed gun | 1994 | | | Deal worth \$13 m |
| | 4 500 | Eryx | Anti-tank missile | 1992 | 1993-94 | (1 300) | Deal incl 425 launchers (offsets 100%) |
| Netherlands | 4 | DA-08 | Surveillance radar | 1986 | 1991-94 | (4) | For refit of 4 Tribal Class frigates |
| | 4 | LW-08 | Surveillance radar | 1986 | 1991-94 | (4) | For refit of 4 Tribal Class frigates |

| | | | | | | | |
|-------------------|------------|--------------------|-----------------------|-------------|-------------|------------|---|
| | 8 | STIR | Fire control radar | 1986 | 1991-94 | (8) | For refit of 4 Tribal Class frigates |
| | 24 | STIR | Fire control radar | (1985) | 1991-94 | (14) | For 12 Halifax (City) Class frigates |
| Sweden | 12 | Sea Giraffe 150 | Surveillance radar | (1985) | 1991-94 | (9) | For 12 Halifax (City) Class frigates |
| UK | .. | Starburst | Portable SAM | (1992) | | | |
| USA | 12 | AN/SPS-49 | Surveillance radar | 1985 | 1991-94 | (9) | For 12 Halifax (City) Class frigates |
| | 6 | Phalanx | CIWS | 1986 | 1991-94 | (6) | For first 6 Halifax (City) Class frigates |
| | 4 | Phalanx | CIWS | 1987 | 1991-94 | (4) | For refit of 4 Tribal Class frigates |
| | 6 | Phalanx | CIWS | 1990 | 1994 | (3) | Deal worth \$32 m; for second batch of 6 Halifax (City) Class frigates |
| | 12 | RGM-84A ShShMS | ShShM system | 1983 | 1991-94 | (9) | For 12 Halifax (City) Class frigates |
| | 12 | Seasparrow VLS | ShAM system | 1983 | 1991-94 | (9) | Deal worth \$75 m incl missiles, for 12 Halifax (City) Class frigates |
| | 4 | Standard VLS | ShAM system | 1986 | 1991-94 | (4) | For refit of 4 Tribal Class frigates |
| | .. | RGM-84A Harpoon | ShShM | 1988 | 1991-94 | (144) | For 12 Halifax (City) Class frigates |
| | 116 | RIM-66M Standard 2 | ShAM | 1986 | 1991-94 | (116) | For 4 refitted Tribal Class frigates |
| | .. | RIM-7H Seasparrow | ShAM | 1984 | 1991-94 | (196) | Deal worth \$75 m incl 12 Seasparrow VLS SHAM systems; for 12 Halifax (City) Class frigates |
| L: USA | 100 | Bell 412 | Helicopter | 1992 | 1994 | (3) | Deal worth \$558 m; Canadian designation CH-146 Griffon |
| Chile | | | | | | | |
| S: Belgium | 5 | Mirage VBA | Fighter/ground attack | 1994 | | | Ex-Belgian Air Force; incl 1 Mirage VBP trainer version |
| | 20 | Mirage V MIRSIP | Fighter/ground attack | 1994 | 1994 | (2) | Ex-Belgian Air Force Mirage Vs rebuilt to MIRSIP standard; incl 5 trainer version; deal worth \$54 m incl 5 Mirage V fighters |
| France | 6 | AS-532SC Cougar | ASW helicopter | 1988 | 1992-94 | (6) | Part of deal worth \$77 m; for Navy |
| | .. | AM-39 Exocet | Anti-ship missile | 1992 | | | For 6 Navy AS-532SC helicopters |
| | .. | Mistral | Portable SAM | (1990) | 1990-94 | (1 000) | |
| Germany, FR | (30) | Bo-105CB | Helicopter | 1985 | 1986-94 | (30) | Assembled in Chile |
| Israel | 1 | Phalcon | AEW&C aircraft | (1989) | 1994 | 1 | Chilean designation Condor |
| | 4 | AMDR | ShAM system | (1989) | 1993 | (1) | For refit of 4 Prat (County) Class destroyers |
| | (2) | Barak ShAMS | ShAM system | 1989 | 1993 | 1 | For refit of 2 Prat (County) destroyers |
| | 4 | EL/M-2106 | Surveillance radar | (1989) | 1993 | (1) | For refit of 2 Prat (County) Class destroyers |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|---|
| | .. | Barak | ShAM | 1989 | 1993 | (32) | For 2 refitted Prat (County) Class destroyers |
| | .. | Python III | Air-to-air missile | (1988) | 1992-94 | (60) | For upgraded Mirage 50 (Pantera) and F-5E (Tigre III) fighters |
| Spain | 4 | C-212-300 Aviocar | Transport | 1994 | 1994 | (4) | Deal worth \$45 m |
| USA | 8 | P-3A Orion | ASW/maritime patrol | (1992) | 1992-94 | 8 | Ex-US Navy; delivered unarmed; incl 2 for spares; for Navy |
| L: Canada | 1 | OPV-75m | OPV | 1994 | | | Production for export |
| Switzerland | .. | Piranha 8x8D | APC | (1991) | 1993-94 | 22 | |
| UK | .. | Rayo | MRL | 1986 | | | Status of production uncertain |
| China | | | | | | | |
| S: Canada | 1 | TG-10 Brushfire | Fighter | (1994) | | | Prior to licensed production |
| Russia | 7 | Il-76M Candid B | Transport | 1993 | 1993 | 4 | |
| | 26 | Su-27 Flanker | Fighter | 1993 | | | |
| | .. | AA-8 Aphid | Air-to-air missile | 1993 | | | For Su-27 fighters |
| | (4) | Kilo Class | Submarine | 1994 | | | Deal may incl technology transfer and licensed production of more |
| USSR | (2) | Ka-27 Helix A | ASW helicopter | (1991) | | | For Navy |
| L: Canada | .. | TG-10 Brushfire | Fighter | 1994 | | | |
| France | .. | SA-321H Super Frelon | Helicopter | (1981) | 1985-89 | 3 | Chinese designation Z-8 |
| | (30) | AS-365N Dauphin 2 | Helicopter | 1988 | 1992-94 | 3 | Chinese designation Z-9A-100 Haitun |
| Israel | .. | Python III | ShAM | (1989) | 1990-94 | 2 613 | Chinese designation PL-8H |
| | .. | Python III | Air-to-air missile | 1990 | 1990-94 | 4 037 | Chinese designation PL-9 |
| Colombia | | | | | | | |
| S: Canada | 12 | Bell 212 | Helicopter | (1994) | | | |
| USA | 12 | Model 280FX | Helicopter | 1994 | | | Deal worth \$4.1 m |

| | | | | | | | |
|-----------------------|-----|-----------------------|----------------------|--------|---------|-------|---|
| | 2 | De Toledo Class | Patrol craft | 1992 | 1994 | 2 | For Coast Guard |
| <hr/> | | | | | | | |
| Cyprus | | | | | | | |
| S: France | .. | MM-40 CDS | Coast defence system | 1989 | | | |
| | .. | MM-40 Exocet | ShShM | 1989 | | | For MM-40 CDS coast defence system |
| <hr/> | | | | | | | |
| Czechoslovakia | | | | | | | |
| S: France | .. | R-550 Magic 2 | Air-to-air missile | (1993) | 1994 | (2) | For evaluation |
| <hr/> | | | | | | | |
| Denmark | | | | | | | |
| S: France | (9) | RAC | Surveillance radar | 1991 | | | |
| | (9) | TRS-2630 Gerfaut | Surveillance radar | 1991 | | | |
| Germany, FR | 3 | TRS-3D | Surveillance radar | 1993 | 1994 | (3) | For refit of 3 Niels Juel Class corvettes |
| | 6 | TRS-3D | Surveillance radar | 1990 | 1993-94 | 4 | For 6 Flyvefisken Class (Stanflex 300 Type) patrol craft/MCM ships |
| Netherlands | 14 | Leopard 1 ARV | ARV | 1993 | 1993-94 | (9) | Ex-Dutch Army |
| | 8 | Leopard 1 BL | Bridge layer | 1993 | 1994 | (4) | Ex-Dutch Army |
| Sweden | 13 | 9LV | Fire control radar | (1988) | 1989-94 | (11) | For 13 Flyvefisken Class (Stanflex 300 Type) patrol craft/MCM ships |
| USA | 4 | Seasparrow VLS | ShAM system | 1993 | | | Deal worth \$20 m; option on more; for 4 Flyvefisken Class (Stanflex 300 Type) patrol craft/MCM ships |
| | .. | AIM-120A AMRAAM | Air-to-air missile | (1994) | | | For F-16 fighters |
| | 840 | FIM-92A Stinger | Portable SAM | 1991 | 1994 | (280) | |
| | .. | RIM-7H Seasparrow | ShAM | (1994) | | | For 4 Flyvefisken Class (Stanflex 300 Type) patrol craft/MCM ships |
| <hr/> | | | | | | | |
| Egypt | | | | | | | |
| S: USA | 24 | AH-64A Apache | Combat helicopter | 1990 | 1994 | (24) | Deal worth \$488 m incl 492 AGM-114A missiles; aid |
| | 46 | F-16C Fighting Falcon | Fighter | 1991 | 1994 | (10) | Peace Vector IV programme worth \$1.6 b incl spare engines and armament; incl F-16D trainer version; from Turkish production line |
| | 10 | SH-2F Seasprite | ASW helicopter | 1994 | | | Ex-US Navy; refurbished to SH-2G before delivery |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|--|
| | 2 | 127mm/54 Mk-42 Mod-9 | Naval gun | 1993 | 1994 | 2 | On 2 ex-US Navy Knox Class frigates |
| | 78 | M-113A2 | APC | 1994 | | | Ex-US Army; deal worth \$15 m |
| | 25 | M-48 Chaparral | AAV(M) | 1990 | 1992-94 | (25) | Deal worth \$220 m incl 432 MIM-72H missiles and radar |
| | (7) | M-577A2 | APC/command post | 1990 | 1992-94 | (7) | Fitted with Trackstar radar for use with Chaparral AAV(M)s |
| | 340 | M-60A3 Patton II | Main battle tank | 1993 | | | Ex-US Army; deal worth \$84 m incl ammunition, spares and support |
| | 2 | AN/SPG-53 | Fire control radar | 1993 | 1994 | 2 | On 2 ex-US Navy Knox Class frigates |
| | 2 | AN/SPS-10 | Surveillance radar | 1993 | 1994 | 2 | On 2 ex-US Navy Knox Class frigates |
| | 2 | AN/SPS-40B | Surveillance radar | 1993 | 1994 | 2 | On 2 ex-US Navy Knox Class frigates |
| | 2 | Phalanx | CIWS | 1993 | 1994 | 2 | On 2 ex-US Navy Knox Class frigates |
| | 2 | RGM-84A ShShMS | ShShM system | 1993 | 1994 | 2 | On 2 ex-US Navy Knox Class frigates |
| | (7) | Trackstar | Surveillance radar | 1990 | 1992-94 | (7) | On M-577A2 APCs; for use with Chaparral AAV(M)s |
| | 492 | AGM-114A Hellfire | Anti-tank missile | 1990 | 1994 | (492) | For AH-64A helicopters |
| | 7 511 | BGM-71D TOW 2 | Anti-tank missile | 1988 | 1989-94 | (3 000) | Deal worth \$180 m incl 180 launchers, 504 night vision sights and spares; may be assembled in Egypt |
| | 432 | MIM-72H Chaparral | SAM | 1990 | 1992-94 | (432) | For Chaparral AAV(M)s |
| | 32 | RGM-84A Harpoon | ShShM | 1994 | 1994 | 32 | Deal worth \$57 m; for 2 Knox Class frigates |
| | 29 | UGM-84A Sub Harpoon | SuShM | 1990 | 1992-94 | (15) | For 4 refitted Romeo Class submarines; deal worth \$69 m |
| | 2 | Knox Class | Frigate | 1993 | 1994 | 2 | Ex-US Navy; lease worth \$6 m |
| | 3 | Swiftships MCM Type | MCM ship | 1991 | 1994 | (1) | |
| L: Germany, FR | .. | Fahd | APC | 1978 | 1986-94 | (636) | Developed for Egyptian production; incl production for export |
| USA | 499 | M-1A1 Abrams | Main battle tank | 1988 | 1991-94 | (324) | Deal worth \$2 b incl 25 delivered direct |
| | .. | AIM-9P Sidewinder | Air-to-air missile | (1988) | 1990-94 | (2 211) | |

| | | | | | | | |
|----------------|-----|---------------------|--------------------|--------|---------|-----|--|
| Estonia | | | | | | | |
| S: Denmark | 1 | Maagen Class | Patrol craft | (1994) | 1994 | 1 | Ex-Danish Navy |
| Germany, FR | 2 | Kondor Class | Minesweeper | (1993) | | | Former GDR equipment; armament and minesweeping gear removed before delivery |
| | 6 | Osa I Class | Fast attack craft | (1993) | | | Former GDR equipment; armament removed before delivery |
| <hr/> | | | | | | | |
| Fiji | | | | | | | |
| S: Australia | 3 | ASI-315 | Patrol craft | 1992 | 1994 | 1 | Pacific Forum aid programme |
| <hr/> | | | | | | | |
| Finland | | | | | | | |
| S: France | 10 | TRS-2230/15 | Surveillance radar | 1990 | 1992-94 | (8) | Deal worth \$200 m |
| Germany, FR | 2 | Do-228-200MP | Maritime patrol | 1992 | 1994 | 2 | For Border Guard |
| Sweden | 4 | Giraffe 100 | Surveillance radar | 1992 | 1993-94 | (2) | |
| UK | .. | Marksman | AAA system | 1992 | 1993-94 | (6) | For use on T-55 main battle tank chassis |
| USA | 64 | F/A-18C/D Hornet | Fighter | 1992 | | | Incl 7 F/A-18D trainer version; limited assembly of 57 in Finland |
| | .. | AIM-120A AMRAAM | Air-to-air missile | 1992 | | | For 64 F/A-18C/D fighters |
| | .. | AIM-9M Sidewinder | Air-to-air missile | 1992 | | | For 64 F/A-18C/D fighters |
| <hr/> | | | | | | | |
| France | | | | | | | |
| S: Brazil | 80 | EMB-312 Tucano | Trainer | 1991 | 1993-94 | 12 | Deal worth \$170 m |
| USA | 2 | E-2C Hawkeye | AEW&C aircraft | 1994 | | | For Navy |
| | 5 | KC-135 Stratotanker | Tanker/transport | 1994 | | | Ex-US Air Force; deal worth \$220 m; refurbished to KC-135R before delivery |
| <hr/> | | | | | | | |
| L: USA | 55 | MLRS 227mm | MRL | 1985 | 1985-94 | 54 | |
| | .. | VT-1 | SAM | 1991 | 1994 | 311 | For Crotale NG SAM and Crotale NG Naval ShAM systems; incl for export |
| <hr/> | | | | | | | |
| Gabon | | | | | | | |
| S: France | (5) | Mygale | SAM system | (1990) | 1992-94 | (5) | |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|---|
| Germany, FR | | | | | | | |
| S: France | 200 | Apache/MAW | ASM | 1992 | 1994 | (2) | For Tornado IDS fighters; FRG designation MAW |
| Italy | .. | Argos 73 | Surveillance radar | 1991 | | | |
| Netherlands | 4 | LW-08 | Surveillance radar | (1989) | 1994 | (1) | For 4 Brandenburg Class (Type 123) frigates |
| | 5 | SMART | Surveillance radar | 1989 | 1994 | (1) | For 4 Brandenburg Class (Type 123) frigates and 1 shore-based training centre |
| | 8 | STIR | Fire control radar | 1989 | 1994 | (2) | For 4 Brandenburg Class (Type 123) frigates |
| USA | 5 | AN/FPS-117 | Surveillance radar | 1992 | 1994 | (2) | Deal worth \$94 m incl 2 simulators and spares (offsets 100%); FRG designation RRP-117 |
| | 12 | Patriot SAMS | SAM system | (1986) | 1992-94 | (12) | Modified to GE Patriot in FRG |
| | 4 | Seasparrow VLS | ShAM system | 1989 | 1994 | (1) | For 4 Brandenburg Class (Type 123) frigates |
| | 175 | AIM-120A AMRAAM | Air-to-air missile | 1991 | | | For modified F-4F fighters |
| | 1 230 | BGM-71D TOW 2 | Anti-tank missile | 1993 | | | Deal worth \$25 m |
| | 1 644 | MIM-104 Patriot | SAM | 1984 | 1989-94 | (1 644) | |
| | .. | RIM-7H Seasparrow | ShAM | 1989 | 1994 | (16) | For 4 Brandenburg Class (Type 123) frigates |
| L: Singapore | | | | | | | |
| USA | 4 | Grajau Class | Patrol craft | 1993 | | | For export to Brazil |
| | .. | AIM-120A AMRAAM | Air-to-air missile | 1989 | | | Deal worth \$81 m |
| | 4 500 | FIM-92A Stinger | Portable SAM | 1987 | 1992-94 | (3 257) | |
| | (1 065) | RIM-116A RAM | ShAM | 1985 | 1989-94 | (773) | For Navy |
| Ghana | | | | | | | |
| S: Italy | 4 | MB-339A | Jet trainer | 1987 | 1987-94 | 4 | |
| Greece | | | | | | | |
| S: France | 2 | MM-40 CDS | Coast defence system | 1991 | 1993-94 | (2) | |
| | 5 | TRS-3050 Triton | Fire control radar | (1986) | 1994 | (1) | For 5 Jason Class landing ships |
| | 2 | TRS-3050 Triton G | Surveillance radar | (1990) | 1993-94 | (2) | For 2 Osprey 55 Type patrol craft |
| | 5 | TRS-3220 Pollux | Surveillance radar | (1986) | 1994 | (1) | For 5 Jason Class landing ships |
| | .. | MM-40 Exocet | ShShM | 1991 | 1993-94 | (36) | For 2 MM-40 coast defence systems |

| | | | | | | | | |
|-------------|----------------|-------------------|----------------------|-------------------|---------|--|--|---|
| Germany, FR | 27 | RF-4E Phantom II | Reconnaissance plane | 1991 | 1992-94 | (27) | Ex-FRG Air Force; incl 7 for spares; gift | |
| | 88 | M-110A2 203mm | Self-propelled gun | (1990) | 1994 | 88 | Ex-FRG Army; aid | |
| | 158 | RM-70 122mm | MRL | 1991 | 1994 | 158 | Former GDR equipment | |
| | 501 | BMP-1 | AIFV | 1991 | 1992-94 | 501 | Former GDR equipment; part of 'Materialhilfe' aid programme worth \$605 m | |
| | 75 | Leopard 1A1 | Main battle tank | (1991) | 1993-94 | 75 | CFE cascade; ex-FRG Army; part of 'Rüstungs-sonderhilfe' aid programme; refurbished to A5GR standard before delivery | |
| | 200 | M-113A1 | APC | (1991) | 1994 | 200 | CFE cascade; ex-FRG Army | |
| | 12 | SA-8b SAMS | AAV(M) | (1991) | 1994 | (12) | Former GDR equipment; aid | |
| | 120 | ZSU-23-4 Shilka | AAV(G) | 1991 | 1994 | (72) | Former GDR equipment; part of 'Materialhilfe' programme worth \$605 m; status uncertain | |
| | 11 500 | AT-4 Spigot | Anti-tank missile | (1991) | 1993-94 | (11 500) | Former GDR equipment | |
| | .. | RIM-7M Seasparrow | ShAM | (1988) | 1992 | (16) | For 4 Meko 200HN Type (Hydra Class) frigates | |
| 924 | SA-8b Gecko | SAM | (1991) | 1994 | (924) | Former GDR equipment; for 12 SA-8B AAV(M)s | | |
| 1 | Lüneburg Class | Depot ship | 1994 | 1994 | 1 | Ex-FRG Navy | | |
| Netherlands | 177 | M-113A1 | APC | 1991 | | | Ex-Dutch Army | |
| | 4 | DA-08 | Surveillance radar | (1989) | 1992 | 1 | For 4 Meko 200HN Type (Hydra Class) frigates | |
| | 3 | LW-08 | Surveillance radar | 1992 | 1993-94 | 2 | On 3 ex-Dutch Navy Kortenaer Class frigates | |
| | 4 | MW-08 | Surveillance radar | (1989) | 1992 | 1 | For 4 Meko 200HN Type (Hydra Class) frigates | |
| | 3 | RGM-84A ShShMS | ShShM system | 1992 | 1993-94 | 2 | On 3 ex-Dutch Navy Kortenaer Class frigates | |
| | 3 | Seasparrow ShAMS | ShAM system | 1992 | 1993-94 | 2 | On 3 ex-Dutch Navy Kortenaer Class frigates | |
| | 8 | STIR | Fire control radar | 1989 | 1992 | 2 | For 4 Meko 200HN Type (Hydra Class) frigates | |
| | 3 | STIR | Fire control radar | 1992 | 1993-94 | 2 | On 3 ex-Dutch Navy Kortenaer Class frigates | |
| | 3 | WM-25 | Fire control radar | 1992 | 1993-94 | 2 | On 3 ex-Dutch Navy Kortenaer Class frigates | |
| | 3 | ZW-06 | Surveillance radar | 1992 | 1993-94 | 2 | On 3 ex-Dutch Navy Kortenaer Class frigates | |
| | 3 | Kortenaer Class | Frigate | 1992 | 1993-94 | 2 | Ex-Dutch Navy; deal worth \$211 m | |
| | Norway | .. | Penguin Mk-2-7 | Anti-ship missile | 1993 | 1994 | (12) | Deal worth \$21 m; for Navy S-70B/SH-60B helicopters; option on more |
| | | 12 | AH-64A Apache | Combat helicopter | (1991) | | | Deal worth \$505 m incl 3 spare engines, support and spares; option on 8 more |
| USA | 9 | Bell 209/AH-1P | Combat helicopter | 1994 | | | Ex-US Army; deal worth \$2.4 m | |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|---|
| | 40 | F-16C Fighting Falcon | Fighter | 1993 | | | Peace Xenia programme worth \$1.8 b incl 10 spare engines and 40 LANTIRN pods; incl 8 F-16D trainer version |
| | 5 | S-70B/SH-60B Seahawk | ASW helicopter | 1991 | 1994 | 3 | Deal worth \$161 m; option on 3 more; Greek designation Aegean Hawk |
| | 4 | 127mm/54 Mk-42 Mod-9 | Naval gun | (1988) | 1992 | 1 | For 4 Meko 200HN Type (Hydra Class) frigates |
| | 100 | M-30 107mm | Mortar | 1991 | 1994 | (100) | CFE cascade; ex-US Army |
| | 9 | MLRS 227mm | MRL | 1994 | | | |
| | 8 | Phalanx | CIWS | 1988 | 1992 | 2 | For 4 Meko 200HN Type (Hydra Class) frigates |
| | 6 | Phalanx | CIWS | (1993) | 1993-94 | (4) | For refit of 3 Kortenaer (Elli) Class frigates |
| | 4 | RGM-84A ShShMS | ShShM system | 1989 | 1992 | 1 | For 4 Meko 200HN Type (Hydra Class) frigates |
| | 4 | Seasparrow VLS | ShAM system | 1988 | 1992 | 1 | For 4 Meko 200HN Type (Hydra Class) frigates |
| | 446 | AGM-114A Hellfire | Anti-tank missile | 1991 | | | For 12 AH-64A helicopters |
| | 52 | AGM-88B HARM | ARM | 1994 | | | Deal worth \$27 m incl spares and training equipment; for F-16 fighters |
| | 1 500 | FIM-92A Stinger | Portable SAM | 1988 | 1989-94 | (1 500) | Deal worth \$124 m incl 500 launchers |
| | 32 | RGM-84A Harpoon | ShShM | 1993 | 1994 | (32) | Part of deal worth \$170 m incl torpedoes, ASROC and ammunition for Knox Class frigates |
| | .. | RIM-7H Seasparrow | ShAM | (1992) | 1993-94 | (48) | For 3 Kortenaer Class frigates |
| | .. | UGM-84A Sub Harpoon | SuShM | (1989) | 1993-94 | (8) | For 8 Type 209 (Glavkos Class) submarines |
| L: Austria | 53 | Pandur | APC | 1993 | 1994 | (8) | Incl production for export |
| Denmark | 2 | Osprey 55 Type | Patrol craft | 1990 | 1993-94 | (2) | Greek designation Hellenic 56 Type |
| Germany, FR | 3 | Meko 200HN Type | Frigate | 1988 | | | Deal worth \$1.2 b incl 1 delivered direct (offsets \$250 m); partly financed by FRG and USA; Greek designation Hydra Class |
| Hungary | | | | | | | |
| S: Romania | (12) | Yak-52 | Trainer | 1994 | 1994 | (12) | |

| India | | | | | | | |
|--------------|----------|----------------------|-----------------------|--------|---------|---------|---|
| S: France | .. | PSM-33 | Surveillance radar | 1988 | 1990-94 | (5) | |
| Germany, FR | 1 | Aditya Class | Support ship | 1987 | | | Option on 1 more |
| Italy | (6) | Seaguard TMX | Fire control radar | 1993 | | | For 3 Project 16A Improved Godavari Class frigates |
| Russia | 3 | SS-N-2 ShShMS | ShShM system | 1993 | | | For 3 Project 16A Improved Godavari Class frigates |
| | .. | SS-N-22 Sunburn | ShShM | 1992 | | | For Delhi Class (Project 15 Type) destroyers |
| | .. | SS-N-2e Styx | ShShM | 1993 | | | For 3 Project 16A Improved Godavari Class frigates |
| Slovakia | .. | VT-72B | ARV | 1994 | | | Deal worth \$32 m; incl assembly from kits |
| USSR | 8 | Bass Tilt | Fire control radar | 1983 | 1989-94 | 5 | For 8 Khukri Class corvettes |
| | 7 | Bass Tilt | Fire control radar | (1987) | 1991-93 | (3) | For 7 Vibhuti (Tarantul I) Class fast attack craft |
| | 8 | Cross Dome | Surveillance radar | (1983) | | | For 8 Khukri Class corvettes |
| | 7 | Plank Shave | Surveillance radar | (1987) | 1991-93 | (3) | For 7 Vibhuti (Tarantul I) Class fast attack craft |
| | 8 | Plank Shave | Surveillance radar | (1983) | 1989-94 | (5) | For 8 Khukri Class corvettes |
| | 8 | SS-N-2 ShShMS | ShShM system | 1983 | 1989-94 | 5 | For 8 Khukri Class corvettes |
| | 7 | SS-N-2 ShShMS | ShShM system | 1987 | 1991-93 | 3 | For 7 Vibhuti (Tarantul I) Class fast attack craft |
| | .. | SA-N-5 Grail | ShAM | (1983) | 1989-94 | (200) | For 8 Khukri Class corvettes |
| | .. | SA-N-5 Grail | ShAM | 1987 | 1991-93 | (120) | For Vibhuti (Tarantul I) Class fast attack craft |
| | .. | SS-N-2d Styx | ShShM | 1983 | 1989-94 | (40) | For 8 Khukri Class corvettes |
| | .. | SS-N-2d Styx | ShShM | 1987 | 1991-93 | (24) | For 7 Vibhuti (Tarantul I) Class fast attack craft |
| <hr/> | | | | | | | |
| L: France | .. | SA-315B Lama | Helicopter | (1993) | 1994 | (1) | Indian designation Cheetah |
| | .. | SA-316B Alouette III | Helicopter | 1962 | 1965-94 | (209) | Also produced for civil use; incl some assembled from kits; Indian designation Chetak |
| | (15 000) | Milan 2 | Anti-tank missile | 1992 | 1993-94 | (6 151) | |
| Germany, FR | 33 | Do-228MP | Maritime patrol | 1983 | 1987-94 | (23) | For Coast Guard |
| | 2 | Type 209/1500 | Submarine | 1981 | 1992-94 | (2) | Indian designation Shishumar Class |
| Korea, South | 7 | Sukanya Class | OPV | 1987 | 1990-94 | (5) | |
| Netherlands | 212 | Flycatcher | Fire control radar | (1987) | 1988-94 | (122) | Indian designation PIW-519 |
| UK | 15 | Jaguar International | Fighter/ground attack | 1993 | 1994 | (5) | |
| | .. | Cymbeline Mk-1 | Tracking radar | (1988) | 1989-94 | (24) | Indian designation MUFAR |
| | 2 | Magar Class | Landing ship | 1985 | 1994 | (1) | |
| USSR | 165 | MiG-27L Flogger J | Fighter/ground attack | 1983 | 1984-94 | (127) | Indian designation Bahadur |
| | .. | BMP-2 | AIFV | 1983 | 1987-94 | (1 200) | Indian designation Sarath |
| | 325 | T-72 | Main battle tank | (1980) | 1990-94 | (325) | Indian designation Ajeya |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|---|
| | .. | AT-4 Spigot | Anti-tank missile | 1983 | 1990-94 | (1 200) | For BMP-2 AIFVs |
| | 7 | Tarantul I Class | Fast attack craft | 1987 | 1991-93 | (3) | Indian designation Vibhuti Class; more planned |
| Indonesia | | | | | | | |
| S: France | 20 | LG-1 105mm | Towed gun | 1994 | | | Deal worth \$17.5 m incl ammunition and support; for Marines |
| Germany, FR | 16 | Muff Cob | Fire control radar | 1992 | 1993-94 | (16) | Former GDR equipment; on 16 Parchim Class corvettes |
| | 30 | Strut Curve | Surveillance radar | 1992 | 1993-94 | (28) | Former GDR equipment; on 16 Parchim Class corvettes, 12 Frosch I Class landing and 2 Frosch II Class supply ships |
| | 12 | Frosch I Class | Landing ship | 1992 | 1993-94 | (12) | Part of deal for 39 former GDR ships; refitted before delivery |
| | 2 | Frosch II Class | Supply ship | 1992 | | | Part of deal for 39 former GDR ships; refitted before delivery |
| | 9 | Kondor Class | Minesweeper | 1992 | 1994 | 9 | Part of deal for 39 former GDR ships; refitted before delivery |
| | 16 | Parchim Class | Corvette | 1992 | 1993-94 | (16) | Part of deal for 39 former GDR ships; refitted before delivery |
| UK | 12 | Hawk 100 | Fighter/trainer | 1993 | | | Option on 16 more |
| | 12 | Hawk 200 | Fighter/ground attack | 1993 | | | |
| | (14) | AR-325 | Surveillance radar | 1989 | 1991-94 | (8) | |
| L: Germany, FR | 4 | PB-57 Type | Patrol craft | 1993 | | | Indonesian designation Singa Class |
| Iran | | | | | | | |
| S: China | (75) | F-7M Airguard | Fighter | (1991) | 1993-94 | (50) | |
| | (10) | ESR-1 | Surveillance radar | 1992 | 1994 | 5 | For 10 Hudong Class fast attack craft |
| | (10) | Rice Lamp | Fire control radar | 1992 | 1994 | 5 | For 10 Hudong Class fast attack craft |
| | .. | C-802 | ShShM | 1992 | 1994 | (40) | For 10 Hudong Class fast attack craft |

| | | | | | | | |
|----------------|-------|-----------------------|--------------------|--------|---------|-------|---|
| | (10) | C-802 ShShMS | ShShM system | 1992 | 1994 | 5 | For 10 Hudong Class fast attack craft |
| | (10) | Hudong Class | Fast attack craft | 1992 | 1994 | 5 | Order may be for 12 |
| Korea, North | .. | SS-1 Scud/9P117M TEL | Mobile SSM system | (1991) | 1993 | (5) | |
| Russia | (48) | MiG-29S Fulcrum C | Fighter | 1992 | | | Status uncertain |
| | .. | BMP-2 | AIFV | 1992 | 1993-94 | (160) | |
| | 1 | Kilo Class | Submarine | 1993 | | | Status uncertain |
| USSR | .. | Su-24 Fencer | Fighter/bomber | (1991) | | | May be up to 24 |
| | (200) | T-72 | Main battle tank | 1989 | 1993-94 | (200) | |
| Ukraine | (16) | SS-N-22 Sunburn | ShShM | (1993) | | | For coast defence system |
| <hr/> | | | | | | | |
| L: Netherlands | 5 | Hendijan Class | Transport ship | (1991) | 1992-94 | 5 | |
| <hr/> | | | | | | | |
| Ireland | | | | | | | |
| S: Spain | 2 | CN-235MP Persuader | Maritime patrol | 1991 | 1994 | 2 | Deal worth \$53.9 m incl 1 CN-235M transport version |
| <hr/> | | | | | | | |
| Israel | | | | | | | |
| S: France | 4 | AS-565SA Panther | ASW helicopter | 1994 | | | Deal worth \$48 m; sold through USA ; partly financed by USA; for Navy |
| Germany, FR | 2 | Dolphin Class | Submarine | 1991 | | | Deal worth \$570 m; financed by FRG |
| Russia | 45 | BRDM-2 | Scout car | 1994 | | | For PLO police in Gaza; gift |
| USA | 21 | F-15I Strike Eagle | Fighter/bomber | 1994 | | | Deal worth \$1.76 b (offsets \$1 b); financed by USA |
| | 50 | F-16A Fighting Falcon | Fighter | 1994 | 1994 | (35) | Ex-US Air Force; incl F-16B trainer version |
| | 6 | S-65A/CH-53D Stallion | Helicopter | 1992 | 1994 | (2) | Ex-US Air Force; deal worth \$13.2 m |
| | 10 | S-70/UH-60 Blackhawk | Helicopter | (1993) | 1994 | 10 | Ex-US Army |
| | 6 | MLRS 227mm | MRL | 1994 | 1994 | (1) | Deal incl 726 rockets, 720 training rockets and support |
| | 6 | M-577A2 | APC/command post | 1993 | | | |
| | 3 | Phalanx | CIWS | (1989) | 1994 | .1 | For 3 Saar 5 Type (Eilat Class) corvettes |
| | 3 | RGM-84A ShShMS | ShShM system | (1989) | 1994 | 1 | For 3 Saar 5 Type (Eilat Class) corvettes |
| | 300 | AIM-9S Sidewinder | Air-to-air missile | 1990 | 1993-94 | (200) | Deal worth \$32 m incl support |
| | .. | FIM-92A Stinger | Portable SAM | (1993) | 1993-94 | (200) | |
| | .. | RGM-84A Harpoon | ShShM | (1989) | 1994 | (16) | For 3 Saar 5 Type (Eilat Class) corvettes |
| | 3 | Saar 5 Class | Corvette | 1989 | 1994 | 1 | Built in USA to Israeli design; some weapon systems fitted in Israel; Israeli designation Eilat Class |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|---|
| Italy | | | | | | | |
| S: Germany, FR | 8 | Do-228-200 | Transport | 1990 | 1992-94 | (6) | For Army |
| UK | 24 | Tornado ADV F Mk-3 | Fighter | 1993 | | | Ex-UK Air Force; 10-year lease worth \$454 m |
| USA | 3 | AV-8B Harrier II Plus | Fighter/ground attack | 1991 | 1994 | 3 | For Navy |
| | 13 | AV-8B Harrier II Plus | Fighter/ground attack | 1990 | | | Deal worth \$522 m; assembled in Italy; for Navy |
| | 4 | AN/FPS-117 | Surveillance radar | 1990 | 1993-94 | (4) | |
| | 42 | AGM-65G Maverick | ASM | 1994 | | | Deal worth \$25 m; for AV-8B fighters |
| | 74 | AGM-88A HARM | Anti-radar missile | 1992 | 1993-94 | (74) | Deal worth \$20 m; for Tornado IDS fighters |
| | 33 | AIM-120A AMRAAM | Air-to-air missile | 1994 | | | Deal worth \$23 m; for AV-8B fighters |
| | .. | BGM-71D TOW 2 | Anti-tank missile | 1987 | 1990-94 | (1 080) | For A-129 helicopters |
| L: France | 23 000 | Milan 2 | Ant-tank missile | 1984 | 1985-94 | (15 717) | |
| USA | .. | Bell 412 | Helicopter | 1980 | 1982-94 | (89) | Incl 18 for Army, 32 for Police, 25 for Coast Guard and production for export |
| Japan | | | | | | | |
| S: Italy | 4 | 127mm/54 | Naval gun | (1988) | 1993 | (1) | For 4 Kongo Class destroyers |
| UK | 3 | BAe-125-800 | Transport | 1989 | 1992-94 | (3) | Modified in Japan for navaid calibration; Japanese designation U-125 |
| | 3 | BAe-125-800 | Transport | 1992 | | | For SAR; Japanese designation U-125A; follow-on order for up to 24 expected |
| USA | 2 | Boeing 767 AWACS | AEW&C aircraft | 1993 | | | Deal worth \$840 m |
| | 2 | Boeing 767 AWACS | AEW&C aircraft | 1994 | | | Deal worth \$773 m |
| | 3 | Beechjet 400T | Transport | 1992 | 1994 | 3 | For training; option on 6 more; Japanese designation T-400 |
| | 1 | C-130H Hercules | Transport | 1994 | | | |
| | .. | S-76C | Helicopter | 1993 | 1994 | (2) | For Maritime Safety Agency; for SAR |
| | 11 | MH-53E Sea Dragon | Helicopter | (1987) | 1989-94 | (11) | For Navy |
| | 36 | MLRS 227mm | MRL | 1993 | | | Deal worth \$362 m; status of Japanese production uncertain |

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|-------------|-------|-----------------------|---------------------|--------|---------|-------|--|
| | 12 | AN/SPG-62 | Fire control radar | (1988) | 1993 | (3) | For 4 Kongo Class destroyers |
| | 12 | AN/SPG-62 | Fire control radar | (1988) | 1993 | (3) | For 4 Kongo Class destroyers |
| | 2 | AN/SPY-1D | Surveillance radar | | 1992 | | Part of Aegis air defence system for 2 Kongo Class destroyers |
| | 1 | AN/SPY-1D | Surveillance radar | (1993) | | | Part of Aegis air defence system for fourth Kongo Class destroyer |
| | 6 | Phalanx | CIWS | 1988 | 1993 | (2) | Deal worth \$66 m; for 3 Kongo Class destroyers |
| | .. | Phalanx | CIWS | 1993 | | | Deal worth \$7.7 m; for fourth Kongo Class destroyer |
| | 3 | RGM-84A ShShMS | ShShM system | 1994 | | | For 3 Kongo Class destroyers |
| | 3 | Standard VLS | ShAM system | 1990 | | | Part of Aegis air defence system for 3 Kongo Class destroyers |
| | 75 | AGM-84A Harpoon | Anti-ship missile | 1990 | 1991-94 | (67) | Deal worth \$125 m |
| | 16 | AGM-84A Harpoon | Anti-ship missile | 1994 | | | |
| | 19 | RIM-66M Standard 2 | ShAM | (1993) | | | |
| | 56 | RIM-66M Standard 2 | ShAM | 1994 | | | |
| | .. | RIM-7H Seasparrow | ShAM | 1993 | | | Deal worth \$13.4 m |
| L: France | .. | MO-120-RT-61 120mm | Mortar | 1992 | 1993-94 | 108 | |
| Germany, FR | .. | FH-70 155mm | Towed gun | (1982) | 1984-94 | 393 | |
| Italy | 3 | Sparviero Class | Fast attack craft | 1990 | 1993 | 2 | Deal worth \$170 m; option on 3 more; Japanese designation PG-01 Class |
| USA | 52 | Bell 205 Kai/UH-1J | Helicopter | 1991 | 1992-94 | 39 | For Army |
| | 83 | Bell-209/AH-1S | Combat helicopter | 1982 | 1984-94 | 75 | For Army |
| | 58 | CH-47D Chinook | Helicopter | (1984) | 1986-94 | 49 | Incl for Army |
| | 3 | EP-3C Orion | ELINT aircraft | 1992 | 1993-94 | 2 | For Navy |
| | 37 | F-15J Eagle | Fighter | 1987 | 1992-94 | 32 | Incl F-15DJ trainer version |
| | .. | Hughes-500/OH-6D | Helicopter | 1977 | 1978-94 | 192 | For Army and Navy |
| | 66 | P-3C Orion | ASW/maritime patrol | 1985 | 1987-94 | 56 | For Navy |
| | 52 | S-70B/SH-60J Seahawk | ASW helicopter | 1988 | 1991-94 | 35 | For Navy; incl 21 for SAR |
| | 64 | S-70/UH-60J Blackhawk | Helicopter | 1988 | 1991-94 | 17 | Incl 18 for Navy |
| | 1 | UP-3C Orion | EW aircraft | 1991 | 1994 | 1 | For Navy |
| | 2 | UP-3D Orion | EW aircraft | 1994 | | | For Navy |
| | 1 330 | AIM-7M Sparrow | Air-to-air missile | 1990 | 1990-94 | 815 | Deal worth \$477 m |
| | .. | BGM-71C I-TOW | Anti-tank missile | (1983) | 1985-94 | 6 751 | |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|---|
| Kampuchea | | | | | | | |
| S: Czechoslovakia | 40 | T-55 | Main battle tank | 1994 | | | Ex-Czech Army |
| Poland | .. | T-55 | Main battle tank | 1994 | | | Ex-Polish Army |
| Kiribati | | | | | | | |
| S: Australia | 1 | ASI-315 | Patrol craft | 1992 | 1994 | 1 | Pacific Forum aid programme |
| Korea, North | | | | | | | |
| S: USSR | .. | Drum Tilt | Fire control radar | (1979) | 1981-94 | (15) | For Soju Class fast attack craft |
| | .. | Drum Tilt | Fire control radar | (1987) | 1990-94 | (4) | For Taechong II (Mayang) Class patrol craft |
| | .. | Square Tie | Surveillance radar | (1979) | 1981-94 | (15) | For Soju Class fast attack craft |
| | .. | Square Tie | Surveillance radar | (1979) | 1981-93 | (9) | For Sohung Class fast attack craft |
| | .. | SS-N-2 ShShMS | ShShM system | (1979) | 1981-94 | (15) | For Soju Class fast attack craft |
| L: China | | | | | | | |
| | .. | HN-5A | Portable SAM | (1981) | 1983-94 | (600) | Number and delivery year uncertain |
| | .. | Romeo Class | Submarine | 1973 | 1975-92 | (15) | |
| Korea, South | | | | | | | |
| S: France | 984 | Mistral | Portable SAM | 1992 | 1993-94 | (400) | Deal worth \$180 m incl 130 launchers (offsets 25%) |
| Italy | 3 | 127mm/54 | Naval gun | (1993) | | | For first 3 KDX-2000 Type frigates |
| Netherlands | 3 | Goalkeeper | CIWS | (1991) | | | For first 3 KDX-2000 Type frigates |
| | 1 | MW-08 | Surveillance radar | 1994 | | | For first KDX-2000 Type frigate; option on more |
| | 2 | STIR | Fire control radar | (1992) | | | For first KDX-2000 Type frigate; option on more |
| Spain | 12 | CN-235M | Transport | 1992 | 1993-94 | 12 | Deal worth \$164 m |
| USA | 48 | F-16C Fighting Falcon | Fighter | 1991 | 1994 | (4) | Deal worth \$2.52 b incl 12 delivered direct, 36 assembled locally and 72 produced in Korea, 12 spare engines and 20 LANTIRN pods |

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|-----------------------|-------|-----------------------|---------------------|--------|---------|-------|--|
| | 8 | P-3C Orion Update 3 | ASW/maritime patrol | 1990 | | | Deal worth \$840 m incl spare engines, training and spares |
| | 80 | S-70/UH-60 Blackhawk | Helicopter | 1990 | 1990-94 | 80 | Deal worth \$500 m incl 77 assembled in South Korea |
| | 3 | AN/FPS-117 | Surveillance radar | 1990 | 1992-94 | (3) | In addition to 5 previously delivered |
| | 3 | AN/SPS-49 | Surveillance radar | (1992) | | | For first 3 KDX-2000 Type frigates |
| | 1 | RGM-84A ShShMS | ShShM system | (1992) | | | For first 3 KDX-2000 Type frigates |
| | 2 | Seasparrow VLS | ShAM system | (1994) | | | Deal worth \$57 m; for first 2 KDX-2000 Type frigates |
| | 28 | AGM-84A Harpoon | Anti-ship missile | 1992 | | | For P-3C ASW aircraft; deal worth \$58 m incl technical assistance |
| | 40 | AGM-88A HARM | Anti-radar missile | 1992 | | | For F-16 fighters |
| | 190 | AIM-120A AMRAAM | Air-to-air missile | 1993 | | | For F-16 fighters |
| | 300 | AIM-9S Sidewinder | Air-to-air missile | 1994 | 1994 | (155) | Deal worth \$34 m incl spares and support |
| | (72) | RGM-84A Harpoon | ShShM | (1992) | | | For first 3 KDX-2000 Type frigates |
| | .. | RIM-7H Seasparrow | ShAM | 1992 | | | For KDX-2000 Type frigates; deal worth \$12.7 m |
| L: Germany, FR | 2 | Type 209/1200 | Submarine | 1987 | 1994 | 2 | In addition to 1 delivered direct; Korean designation Chang Bogo Class |
| | 3 | Type 209/1200 | Submarine | 1989 | | | Korean designation Chang Bogo Class |
| | 3 | Type 209/1200 | Submarine | 1994 | | | Deal worth \$510 m; Korean designation Chang Bogo Class |
| Japan | (30) | BK-117 | Helicopter | 1990 | 1992-94 | 15 | |
| USA | 72 | F-16C Fighting Falcon | Fighter | 1991 | | | Part of deal worth \$2.52 b |
| | 242 | M-109A2 155mm | Self-propelled gun | 1989 | 1991-94 | 200 | Deal worth \$260 m |
| | (748) | K-1 ROKIT | Main battle tank | 1981 | 1984-94 | 735 | Developed for Korean production |
| Kuwait | | | | | | | |
| S: Egypt | 2 | AN/TPS-63 | Surveillance radar | (1993) | | | |
| Russia | (27) | BM-9A52 Smerch | MRL | 1994 | | | |
| | (20) | BMP-2 | AIFV | 1994 | | | |
| | (40) | BMP-3 | AIFV | 1994 | | | |
| Singapore | 2 | Al Tahaddy Class | Landing craft | (1993) | 1994 | 2 | Deal worth \$9.8 m; for Coast Guard |
| UK | 254 | MCV-80 Desert Warrior | AIFV | 1993 | 1994 | 8 | Deal worth \$740 m (offsets 30%); incl command post, repair and ARV versions |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments | |
|---|--------------------------|------------------------------|--------------------------------------|------------------------------|-----------------------------|-------------------------------|--|-------------------------------|
| USA | (250) 16 | Starburst M-113A3 | Portable SAM APC | 1994 1992 | 1994 | (8) | Deal worth \$80 m incl 50 launchers Deal worth \$32 m incl 30 M-577A3 APC/command posts; part of deal worth \$4 b; option on 109 | |
| | 218 30 | M-1A2 Abrams M-577A3 | Main battle tank APC/command post | 1992 1992 | 1994 1994 | 14 (15) | Deal worth \$4 b including spares Deal worth \$32 m incl 16 M-113A3 APCs; part of deal worth \$4 b; option on 22 | |
| | 46 6 | M-88A1 I-HAWK SAMS | ARV SAM system | 1992 1992 | | | Part of deal worth \$4 b Part of deal worth \$2.2 b | |
| | 1 | LASS | Surveillance radar | (1993) | | | Deal worth \$35 m incl support | |
| | 5 | Patriot SAMS | SAM system | (1993) | | | Deal worth \$327 m incl 210 missiles (offsets 30%) | |
| | 40 | AGM-84A Harpoon | Anti-ship missile | 1988 | | | For F/A-18C/D fighters | |
| | 210 | MIM-104 PAC-2 | SAM | (1993) | | | For 5 Patriot SAM systems | |
| | 342 | MIM-23B HAWK | SAM | 1992 | | | Part of deal worth \$2.2 b | |
| | <hr/> | | | | | | | |
| | Lebanon S: USA | 175 | M-113A2 | APC | 1994 | 1994 | 106 | Ex-US Army; deal worth \$35 m |
| <hr/> | | | | | | | | |
| Lithuania S: Germany, FR | 3 | Osa I Class | Fast attack craft | 1993 | | | Former GDR equipment; armament removed before delivery | |
| <hr/> | | | | | | | | |
| Malaysia S: France | 2 16 | MM-40 ShShMS MM-40 Exocet | ShShM system ShShM | 1993 1993 | | | For 2 Lekiu Class frigates For 2 Lekiu Class frigates | |
| Indonesia | (6) | CN-235M Phoenix | Transport | 1994 | 1994 | (3) | Option on 14 more | |
| Korea, South | 22 | KIFV | APC | 1994 | 1994 | (22) | Incl 2 ARV, 1 APC/command post and 1 ambulance version | |
| Netherlands | 2 | DA-08 | Surveillance radar | 1992 | | | For 2 Lekiu Class frigates | |

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|-------------------|-----|-------------------|-----------------------|--------|---------|------|---|
| Russia | 18 | MiG-29S Fulcrum C | Fighter | 1994 | | | Deal worth \$600 m (offsets \$220 m incl \$150 barter); incl 2 MiG-29UB trainer version |
| | .. | AA-10a Alamo | Air-to-air missile | 1994 | | | For 18 MiG-29 fighters |
| | .. | AA-11 Archer | Air-to-air missile | 1994 | | | For 18 MiG-29 fighters |
| Sweden | 2 | Sea Giraffe 150 | Surveillance radar | 1992 | | | For 2 Yarrow-built frigates |
| UK | 10 | Hawk 100 | Fighter/trainer | 1990 | 1994 | (10) | Part of deal worth \$740 m incl 18 Hawk 200 fighters, armament, training and support |
| | 18 | Hawk 200 | Fighter/ground attack | 1990 | 1994 | (12) | |
| | 3 | FH-70 155mm | Towed gun | 1993 | 1994 | (3) | |
| | 2 | Seawolf VLS | ShAM system | 1992 | | | For 2 Lekiu Class frigates |
| | 32 | Seawolf VL | ShAM | 1993 | | | For 2 Lekiu Class frigates |
| | 504 | Starburst | Portable SAM | 1993 | | | |
| | 2 | Lekiu Class | Frigate | 1992 | | | Deal worth \$600 m incl spares, training and support |
| USA | 4 | B-200T Maritime | Maritime patrol | 1992 | 1994 | 4 | |
| | 8 | F/A-18D Hornet | Fighter/trainer | 1993 | | | Option on 10 more (offsets \$250 m) |
| | 30 | AGM-65D Maverick | ASM | 1993 | | | For F/A-18D fighters |
| | 25 | AGM-84A Harpoon | Anti-ship missile | 1993 | | | For F/A-18D fighters |
| | 20 | AIM-7M Sparrow | Air-to-air missile | 1993 | | | For F/A-18D fighters |
| | 40 | AIM-9S Sidewinder | Air-to-air missile | 1993 | | | For F/A-18D fighters |
| | 1 | AN/SPS-10 | Surveillance radar | 1994 | 1994 | 1 | On 1 ex-US Navy Newport Class landing ship |
| | 1 | Phalanx | CIWS | 1994 | 1994 | 1 | On 1 ex-US Navy Newport Class landing ship |
| | 1 | Newport Class | Landing ship | 1994 | | | Ex-US Navy; deal worth \$18.3 m |
| L: Switzerland | 20 | MD3-160 Aerokriss | Trainer | 1993 | 1994 | 10 | |
| Mauritania | | | | | | | |
| S: France | 1 | OPV-54 | OPV | 1992 | 1994 | 1 | Option on 1 more |
| Mauritius | | | | | | | |
| S: Chile | 1 | OPV-75m | OPV | 1994 | | | Deal worth \$14.6 m |
| Mexico | | | | | | | |
| S: Finland | 10 | L-90TP Redigo | Trainer | (1992) | 1992-94 | (10) | For Navy |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|--|
| Morocco | | | | | | | |
| S: Denmark | 2 | Osprey 55 Type | OPV | 1990 | | | |
| France | 2 | OPV-64 | OPV | 1994 | | | |
| Italy | 2 | Albatros Mk-2 | ShAM system | 1992 | | | For 2 Assad Class corvettes |
| | 2 | Otomat/Teseo ShShMS | ShShM system | 1992 | | | For 2 Assad Class corvettes |
| | 2 | RAN-12L/X | Surveillance radar | 1992 | | | For 2 Assad Class corvettes |
| | 4 | RTN-10X | Fire control radar | 1992 | | | For 2 Assad Class corvettes |
| | 14 | Aspide | ShAM | 1992 | | | For 2 Assad Class corvettes |
| | (36) | Otomat Mk-2 | ShShM | 1992 | | | For 2 Assad Class corvettes |
| | 2 | Assad Class | Corvette | 1992 | | | Deal worth \$250 m; option on 2 more; originally built for Iraq, but embargoed |
| USA | 120 | M-60A3 Patton II | Main battle tank | 1994 | 1994 | 120 | Ex-US Army; deal worth \$21 m |
| | 1 | Newport Class | Landing ship | 1994 | 1994 | 1 | Ex-US Navy; gift |
| Myanmar | | | | | | | |
| S: China | 24 | A-5M Fantan | Fighter/ground attack | (1992) | 1994 | (12) | |
| | 10 | F-7M Airguard | Fighter | (1993) | 1994 | 10 | |
| | 2 | FT-7 | Fghter/trainer | (1993) | 1994 | 2 | |
| | .. | Y-12 | Transport | 1991 | | | |
| | 50 | Type 69-II | Main battle tank | (1993) | | | |
| Namibia | | | | | | | |
| S: India | 2 | SA-315B Lama | Helicopter | 1994 | | | Deal worth \$5.5 m incl 2 SA-316B helicopters |
| | 2 | SA-316B Alouette III | Helicopter | 1994 | | | Deal worth \$5.5 m incl 2 SA-315B helicopters |
| USA | (5) | Cessna 337/02 | Utility aircraft | 1992 | 1994 | (5) | Ex-US Air Force; incl for maritime patrol; gift |
| Nepal | | | | | | | |
| S: Germany, FR | (135) | BTR-70 | APC | 1993 | 1994 | (135) | Former GDR equipment; for Nepalese UN forces in Bosnia |

Netherlands

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|------------------|-----|---------------------|--------------------|--------|---------|-------|---|
| S: Canada | 7 | CH-47C Chinook | Helicopter | (1993) | | | Deal worth \$16 m; ex-Canadian Air Force; upgraded to CH-47D in USA before delivery |
| France | 17 | AS-532U2 Cougar | Helicopter | 1993 | | | Deal worth \$242 m (offsets 120%) |
| Germany, FR | 25 | Buffel | ARV | 1990 | 1992-94 | (25) | |
| Italy | 3 | Bell 412SP Griffon | Helicopter | 1992 | 1993-94 | (3) | Deal worth \$22.8 m; for SAR |
| USA | 2 | C-130H-30 Hercules | Transport | 1993 | 1994 | 2 | Deal worth \$127 m |
| | 6 | CH-47D Chinook | Helicopter | 1993 | | | |
| | 8 | RGM-84A ShShMS | ShShM system | 1990 | 1991-94 | 7 | Deal worth \$25 m; for 8 Karel Doorman (M) Class frigates |
| | 8 | Seasparrow VLS | ShAM system | 1985 | 1991-94 | 7 | For 8 Karel Doorman (M) Class frigates |
| | 290 | AIM-9M Sidewinder | Air-to-air missile | 1990 | 1993-94 | (290) | Deal worth \$27 m |
| | .. | RGM-84A Harpoon | ShShM | 1988 | 1991-94 | (112) | For 8 Karel Doorman (M) Class frigates |
| | .. | RIM-7H Seasparrow | ShAM | 1985 | 1991-94 | (112) | For 8 Karel Doorman (M) Class frigates |
| | .. | UGM-84A Sub Harpoon | SuShM | (1987) | 1990-94 | (40) | For 4 Walrus Class submarines |

New Zealand

| | | | | | | | |
|---------------------|----|----------------------|--------------------|--------|--|--|--|
| S: Australia | 2 | Meko 200ANZ Type | Frigate | 1989 | | | Deal worth \$554.7 m; option on 2 more |
| Sweden | 2 | 9LV | Fire control radar | 1991 | | | For 2 Meko 200ANZ Type frigates |
| | 2 | Sea Giraffe 150 | Surveillance radar | 1991 | | | For 2 Meko 200ANZ Type frigates |
| USA | 2 | 127mm/54 Mk-42 Mod-9 | Naval gun | (1989) | | | For 2 Meko 200ANZ Type frigates |
| | 2 | AN/SPS-49 | Surveillance radar | (1993) | | | For 2 Meko 200ANZ Type frigates |
| | 2 | Phalanx | CIWS | 1994 | | | Deal worth \$17.6 m; for refit of 2 Leander Class frigates |
| | 2 | Seasparrow VLS | ShAM system | 1992 | | | For 2 Meko 200ANZ Type frigates |
| | .. | RIM-7M Seasparrow | ShAM | (1991) | | | For 2 Meko 200ANZ Type frigates |

Nigeria

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|------------------|----|--------------------|------------------|--------|---------|------|---|
| S: Brazil | .. | EE-9 Cascavel | Armoured car | (1992) | 1994 | (75) | |
| Czechoslovakia | 27 | L-39Z Albatros | Jet trainer | 1991 | | | Deal worth \$100 m incl support |
| Switzerland | 7 | PC-7 Turbo Trainer | Trainer | (1993) | | | |
| UK | 80 | MBT Mk-3 | Main battle tank | 1990 | 1991-94 | (80) | Deal worth \$282 m, order may reach 150 |

| | | | | | | | |
|---------------|----|------------|---------|------|---------|------|---------------------------|
| L: USA | 60 | Air Beetle | Trainer | 1992 | 1993-94 | (24) | Modified version of RV-6A |
|---------------|----|------------|---------|------|---------|------|---------------------------|

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|--|
| Norway | | | | | | | |
| S: Finland | 22 | XA-180 | APC | 1994 | | | For Norwegian UN forces; option on more |
| France | 7 200 | Eryx | Anti-tank missile | 1993 | | | Deal worth \$115 m incl 424 launchers; option on more (offsets incl production of components) |
| | 400 | Mistral | Portable SAM | 1990 | 1992-94 | (300) | Deal worth \$60 m (offsets 75%); for refit of Hauk Class fast attack craft |
| Italy | 2 | RAT-31S | Surveillance radar | 1994 | | | |
| Sweden | 104 | CV-9030 | AIFV | 1994 | | | Deal worth \$241 m (offsets \$184 m); option on more |
| | (9) | Giraffe 50AT | Surveillance radar | 1989 | 1992-94 | (9) | Deal worth \$90 m |
| | (360) | RBS-70 Mk-2 | Portable SAM | 1989 | 1991-94 | (360) | Deal worth \$124 m incl launchers (offsets 45%) |
| UK | 2 | S-61/Sea King HAR-3 | Helicopter | 1993 | | | Deal worth \$22.2 m |
| | 4 | AWS-9 | Surveillance radar | 1994 | 1994 | 2 | Deal worth \$29 m; for refit of 4 Oslo Class frigates |
| USA | 24 | AN/TPQ-36A | Fire control radar | 1994 | | | For Norwegian Advanced Surface-to-Air Missile System |
| | 228 | AIM-120A AMRAAM | SAM | 1994 | 1994 | (18) | Deal worth \$106 m; for Norwegian Advanced Surface- to-Air Missile System |
| | 7 612 | BGM-71D TOW 2 | Anti-tank missile | 1985 | 1987-94 | (7 000) | Deal worth \$126 m incl 300 launchers and spares |
| Oman | | | | | | | |
| S: France | 2 | Crotale NG Naval | ShAM system | 1992 | | | For 2 Qahir Class (Muheet Type) corvettes |
| | 2 | DRBV-SIC | Fire control radar | (1992) | | | For 2 Qahir Class (Muheet Type) corvettes |
| | 2 | MM-40 ShShMS | ShShM system | 1992 | | | For 2 Qahir Class (Muheet Type) corvettes |
| | .. | MM-40 Exocet | ShShM | 1992 | | | For 2 Qahir Class (Muheet Type) corvettes |
| | .. | VT-1 | SAM | 1992 | | | For Crotale NG ShAM system for 2 Qahir Class (Muheet Type) corvettes |
| | 3 | Vigilante 400 Type | Patrol craft | 1993 | | | |
| Netherlands | 2 | MW-08 | Surveillance radar | 1992 | | | For 2 Qahir Class (Muheet Type) corvettes |
| | 2 | STING | Fire control radar | (1992) | | | For 2 Qahir Class (Muheet Type) corvettes |
| Pakistan | 3 | Supporter | Trainer | 1994 | 1994 | 3 | Gift |
| South Africa | 24 | G-6 Rhino 155mm | Self-propelled gun | 1994 | | | Deal worth \$120 m |
| UK | 4 | Hawk 100 | Fighter/trainer | 1989 | 1993-94 | (4) | Deal worth \$225 m incl 12 Hawk 200 fighters |

| | | | | | | | |
|-----------------|-------|-------------------|-----------------------|--------|---------|-------|---|
| | 12 | Hawk 200 | Fighter/ground attack | 1990 | 1994 | (1) | Deal worth \$225 m incl 4 Hawk 100 fighter/trainers |
| | 4 | Challenger ARV | ARV | 1993 | | | |
| | 18 | Challenger 2 | Main battle tank | 1993 | | | Deal worth \$225 m incl 4 ARV and 2 training tank version, 4 Stormer APC/command posts; option on 18 |
| | 80 | Piranha 8x8 | APC | 1994 | | | Deal worth \$138 m; incl ARV, APC/command post, 81mm mortar carrier and other versions; option on 46 more |
| | 4 | Stormer | APC/command post | 1993 | | | |
| | .. | Starstreak | SAM | 1993 | | | |
| | 2 | Qahir Class | Corvette | 1992 | | | Deal worth \$265 m; 'Muheet Project' |
| USA | (96) | AIM-9L Sidewinder | Air-to-air missile | 1990 | 1993-94 | (30) | For 16 Hawk 100/200 fighters |
| Pakistan | | | | | | | |
| S: China | 25 | K-8 Karakorum 8 | Jet trainer | 1987 | 1994 | (6) | Incl assembly; some components produced in Pakistan; prior to licensed production |
| | .. | T-85-IIAP | Main battle tank | 1990 | 1992-94 | (200) | |
| France | .. | Mistral | Portable SAM | (1991) | 1994 | (50) | For Army and Navy |
| | .. | SM-39 Exocet | SuShM | 1994 | | | Deal worth \$100 m; for 3 Agosta 90B Type submarines |
| | 2 | Agosta 90B Type | Submarine | 1994 | | | Incl 1 assembled in Pakistan; deal worth \$750 m incl 1 licensed production |
| | 1 | Eridan Class | MCM ship | 1992 | | | In addition to 1 ex-French Navy and 1 licensed production |
| Germany, FR | (120) | BTR-70 | APC | (1993) | 1994 | (120) | Former GDR equipment; gift; for Pakistani UN forces in Bosnia |
| Lebanon | 10 | Mirage IIIE | Fighter | 1994 | | | Ex-Lebanese Air Force |
| Netherlands | 1 | Racal 2459 | Surveillance radar | 1994 | 1994 | 1 | On 1 ex-Dutch Navy Poolster Class support ship |
| | 1 | Poolster Class | Support ship | (1994) | 1994 | 1 | Ex-Dutch Navy; deal worth \$5.3 m |
| Sweden | 6 | 9LV | Fire control radar | 1994 | | | For refit of 6 Amazon Class frigates |
| UK | 1 | BN-2B Maritime | Maritime patrol | 1994 | | | Deal worth \$1.4 m; for Maritime Security Agency |
| | 3 | Lynx | ASW helicopter | 1994 | 1994 | 2 | Ex-UK Navy; option on 3 more |
| | 6 | Amazon Class | Frigate | 1993 | 1993-94 | 6 | Ex-UK Navy; deal worth \$90 m |
| USA | .. | AN/TPQ-36 | Tracking radar | (1990) | | | Deal worth \$65 m |
| | 4 | AN/TPQ-37 | Tracking radar | (1985) | 1987-89 | (3) | |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|--|
| L: China | .. | K-8 Karakorum 8 | Jet trainer | 1993 | | | Status uncertain |
| | (450) | T-69-II | Main battle tank | (1990) | 1991-93 | (169) | Deal worth \$1.2 b |
| France | .. | Anza 2 | SAM | (1988) | 1989-94 | (550) | |
| | 1 | Agosta 90B Type | Submarine | 1994 | | | |
| | 1 | Eridan Class | MCM ship | 1992 | | | In addition to 1 ex-French Navy and 1 delivered direct |
| Italy | .. | Skyguard | Fire control radar | (1988) | 1989-94 | (79) | Fire control for GDF-002 35mm AA guns |
| Sweden | .. | Shahbaz | Trainer | 1987 | 1992-94 | (6) | Improved version of licence produced Supporter (Mushaq) |
| USA | 755 | M-113A2 | APC | 1989 | 1991-94 | (735) | |
| Paraguay | | | | | | | |
| S: Taiwan | 6 | T-33A T-Bird | Jet trainer | (1991) | | | Ex-Taiwanese Air Force |
| Peru | | | | | | | |
| S: Netherlands | 1 | Dokkum Class | Minesweeper | 1994 | 1994 | 1 | Ex-Dutch Navy; for use as survey ship |
| Russia | 3 | An-32 Cline | Transport | 1994 | | | Option on 3 more |
| Philippines | | | | | | | |
| S: China | 1 | LSV Type | Landing ship | 1991 | | | Delayed by lack of funds; option on 1 |
| Italy | 36 | S-211 | Trainer | 1988 | 1989-94 | 24 | Assembled from kits |
| | 18 | SF-260TP | Trainer | 1992 | 1993-94 | (18) | Deal worth \$52 m; assembled from kits |
| Russia | 20 | Yak-18T | Lightplane | (1993) | 1994 | (5) | |
| Spain | 1 | Cormoran Class | Fast attack craft | 1991 | | | Status uncertain |
| UK | 8 | Simba | APC | 1992 | 1993-94 | 8 | Prior to licensed production of 142 |
| USA | 12 | Commando V-300 | APC | 1993 | 1994 | (4) | Deal worth \$18.2 m incl 12 Commando V-300 FSV AIFVs |
| | 12 | Commando V-300 FSV | AIFV | 1993 | 1994 | (4) | Deal worth \$18.2 m incl 12 Commando V-300 APCs |
| | 3 | Besson class | Landing ship | 1992 | 1993-94 | 3 | |

| | | | | | | | |
|-----------------------|-----|-----------------------|--------------------|--------|---------|---------|---|
| L: UK | 142 | FS-100 Simba | APC | 1992 | 1994 | 15 | Deal worth \$46 m incl 8 delivered direct |
| Poland | | | | | | | |
| S: USSR | 3 | Bass Tilt | Fire control radar | (1988) | 1992-94 | (3) | For Sassnitz (Orkan) Class fast attack craft |
| L: USSR | (8) | An-28 Bryza 1 | Maritime patrol | (1992) | 1993-94 | (2) | Incl production for export |
| | .. | T-72M1 | Main battle tank | (1978) | 1981-93 | (1 610) | |
| Portugal | | | | | | | |
| S: Germany, FR | 50 | M-113A1 | APC | 1993 | | | Ex-FRG Army; aid |
| Spain | 2 | C-212-300MPA Aviocar | Maritime patrol | 1993 | 1994 | (2) | Deal worth PES 2.5 b; 50% financed by EU |
| UK | 1 | Watchman | Surveillance radar | 1993 | | | NATO aid |
| USA | 17 | F-16A Fighting Falcon | Fighter | 1990 | 1994 | 17 | Peace Atlantis programme |
| | 3 | F-16B Fighting Falcon | Fighter/trainer | 1990 | 1994 | 3 | Peace Atlantis programme |
| Qatar | | | | | | | |
| S: France | 12 | Mirage 2000-5 | Fighter | 1994 | | | For 4 Vita Class fast attack craft |
| | .. | VBL | Scout car | (1992) | 1993-94 | (10) | |
| | 4 | Crotale NG Naval | ShAM system | 1992 | | | For 4 Vita Class fast attack craft |
| | 4 | MM-40 ShShMS | ShShM system | 1992 | | | Deal worth \$280 m incl R-550 missiles; for 12 Mirage |
| | .. | MICA | Air-to-air missile | 1994 | | | 2000-5 fighters |
| | 500 | Mistral | Portable SAM | 1990 | 1992-94 | (300) | For 4 Vita Class fast attack craft |
| | .. | MM-40 Exocet | ShShM | 1992 | | | Deal worth \$280 m incl MICA missiles; for 12 Mirage |
| | .. | R-550 Magic 2 | Air-to-air missile | 1994 | | | 2000-5 fighters |
| Netherlands | 4 | Goalkeeper | CIWS | 1992 | | | For 4 Vita Class fast attack craft |
| UK | 4 | Vita Class | Fast attack craft | 1992 | | | Deal worth \$200 m |
| Romania | | | | | | | |
| S: USSR | 2 | Drum Tilt | Fire control radar | (1986) | 1989-94 | (2) | For 2 improved Tetral Class frigates |
| | 2 | Strut Curve | Surveillance radar | (1986) | 1989-94 | (2) | For 2 improved Tetral Class frigates |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|--|
| L: France | .. | SA-330 Puma | Helicopter | 1977 | 1978-94 | (190) | Incl production for export |
| UK | .. | BN-2A Islander | Transport | 1968 | 1969-93 | (460) | Incl civil versions and production for export |
| USSR | .. | Yak-52 | Trainer | 1976 | 1979-94 | (1 630) | Most for export to USSR |
| | .. | SA-7 Grail | Portable SAM | (1978) | 1978-94 | (425) | |
| Saudi Arabia | | | | | | | |
| S: Canada | 1 117 | LAV-25 | AIFV | 1990 | 1992-94 | (787) | Deal worth \$700 m; incl 113 LAV-TOW tank destroyers, 141 LAV-105mm armoured cars, 74 LAV-81mm mortar carriers and 444 other version; for National Guard |
| France | .. | Piranha 8x8 | APC | (1990) | | | |
| | 2 | Castor 2J | Fire control radar | 1994 | | | For 2 Improved La Fayette Class (F-3000S Type) frigates |
| | 2 | Crotale Naval ShAMS | ShAM system | 1994 | | | For 2 Improved La Fayette Class (F-3000S Type) frigates |
| | 2 | DRBV-26C | SURveillance radar | 1994 | | | For 2 F-300S (Improved La Fayette Class) frigates |
| | 2 | MM-40 ShShMS | ShShM system | 1994 | | | For 2 Improved La Fayette Class (F-3000S Type) frigates |
| | 2 | Sea Tiger Mk-2 | Surveillance radar | 1994 | | | For 2 F-300S (Improved La Fayette Class) frigates |
| | .. | MM-40 Exocet | ShShM | 1994 | | | For 2 Improved La Fayette Class frigates |
| | .. | VT-1 | Ship-to-air missile | 1990 | | | For 2 Improved La Fayette Class (F-3000S Type) frigates |
| | 2 | La Fayette Class | Frigate | 1994 | | | Part of deal worth \$3.4 b incl other weapons, construction of a naval base, training and support (offsets 35%) |
| Switzerland | (20) | PC-9 | Trainer | 1994 | | | Sold through UK; Part of Al Yamanah II deal |
| | .. | Piranha 8x8 | APC | 1990 | 1993 | 6 | |
| UK | 88 | WS-70 Blackhawk | Helicopter | 1993 | | | Part of Al Yamanah II deal |
| | 20 | Hawk | Jet trainer | 1994 | | | Part of Al Yamanah II deal |
| | 60 | Hawk 200 | Fighter/ground attack | 1993 | | | Part of Al Yamanah II deal |

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|------------------|---------------|----------------------|---------------------|--------|---------|--|---|
| | 48 | Tornado IDS | Fighter/bomber | 1993 | | | |
| | .. | Piranha 8x8 | APC | 1990 | 1992-94 | (159) | Deal worth \$400 m |
| | 200 | ALARM | ARM | 1986 | 1991-94 | (200) | For Tornado IDS fighters |
| | (480) | Sea Eagle | Anti-ship missile | 1985 | 1993-94 | (356) | For Tornado IDS fighters |
| USA | 3 | Sandown Class | MCM ship | 1988 | 1991-94 | 3 | Option on 3 more; Saudi designation Al Jawf Class |
| | 72 | F-15S Strike Eagle | Fighter/bomber | 1992 | | | Deal worth \$9 b incl 24 spare engines, 48 navigation pods and armament |
| | 7 | KC-130H Hercules | Tanker/transport | 1990 | | | Deal worth \$750 m incl 8 C-130H and 2 C-130H-30 transports |
| | 8 | S-70/UH-60 Blackhawk | Helicopter | 1992 | | | Deal worth \$225 m; for MedEvac use |
| | 315 | M-1A2 Abrams | Main battle tank | 1990 | 1993-94 | (315) | Deal worth \$1.5 b |
| | 150 | M-1A2 Abrams | Main battle tank | 1990 | | | |
| | 400 | M-2 Bradley | AIFV | 1990 | 1992-94 | (400) | |
| | 150 | M-60A3 Patton II | Main battle tank | 1990 | 1994 | (40) | Ex-US Army; deal worth \$206 m |
| | 2 | AN/TPS-70 | Surveillance radar | 1993 | 1994 | (1) | Peace Pulse programme worth \$18 m |
| | 8 | Patriot SAMS | SAM system | 1990 | 1993-94 | (8) | Deal worth \$984 m incl 384 missiles, 6 radars and support |
| | 13 | Patriot SAMS | SAM system | 1992 | | | Deal worth \$1.03 b incl 1 SAM system for training and 761 MIM-104 PAC-2 missiles |
| | 900 | AGM-65D Maverick | ASM | 1992 | | | For 72 F-15S fighters; mix of D and G versions |
| | 770 | AIM-7M Sparrow | Air-to-air missile | 1991 | 1992-94 | (770) | Deal worth \$365 m incl laser guided bombs |
| | 300 | AIM-7M Sparrow | Air-to-air missile | 1992 | | | For 72 F-15S fighters |
| | 300 | AIM-9S Sidewinder | Air-to-air missile | 1992 | | | For 72 F-15S fighters |
| | 1 750 | BGM-71D TOW 2 | Anti-tank missile | 1990 | 1993-94 | (1 750) | Deal worth \$55 m incl launchers |
| | 384 | MIM-104 PAC-2 | SAM | 1990 | 1993-94 | (384) | |
| 761 | MIM-104 PAC-2 | SAM | 1992 | | | Deal worth \$1.03 b incl 13 operational and 1 training Patriot SAM systems | |
| <hr/> | | | | | | | |
| Singapore | | | | | | | |
| S: France | 150 | Mistral | Portable SAM | 1992 | 1994 | (75) | Deal incl also 30 launchers; incl for Navy |
| Israel | 6 | Barak ShAMS | ShAM system | (1992) | 1993 | (3) | For 6 Victory Class corvettes |
| | (700) | Barak | ShAM | (1992) | 1993 | (50) | For 6 Victory Class corvettes |
| Jordan | 7 | F-5E Tiger II | Fighter | 1994 | | | Ex-Jordanian Air Force; deal worth \$21 m |
| Netherlands | 4 | Fokker 50 Enforcer 2 | ASW/maritime patrol | 1991 | 1994 | (1) | Deal worth \$52 m; option on 2 more |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|---|
| | 4 | Fokker 50 Utiliy | Transport | 1994 | | | |
| Sweden | 4 | Landsort Class | MCM ship | 1991 | 1994 | 1 | |
| UK | (18) | FV-180 CET | AEV | 1993 | 1994 | (6) | Option on 12 more |
| USA | 6 | CH-47D Chinook | Helicopter | 1994 | | | Incl for SAR |
| | 18 | F-16C Fighting Falcon | Fighter | 1994 | | | Deal worth \$890 m; incl 9 based in USA for training; incl F-16D trainer version |
| | 50 | AIM-7M Sparrow | Air-to-air missile | 1993 | | | For F-16C/D fighters |
| | 36 | AIM-9S Sidewinder | Air-to-air missile | 1994 | | | For F-16C/D fighters |
| | (48) | MIM-23B HAWK | SAM | 1991 | | | |
| Slovenia | | | | | | | |
| S: Canada | 2 | Bell 206B JetRanger 3 | Helicopter | 1994 | 1994 | (2) | Part of deal worth \$30 m incl 5 Bell 412 helicopters (offsets 100%) |
| | 5 | Bell 412 | Helicopter | 1994 | 1994 | (2) | Part of deal worth \$30 m incl 2 Bell 206B helicopters (offsets 100%) |
| South Africa | | | | | | | |
| S: Switzerland | 60 | PC-7 Turbo Trainer | Trainer | 1993 | 1994 | (5) | Deal worth \$130 m (offsets 55%) |
| Spain | | | | | | | |
| S: France | 1 | Mirage F-1B | Fighter/trainer | 1994 | 1994 | 1 | Ex-French Air Force |
| | 4 | Mirage F-1C | Fighter | 1994 | 1994 | 4 | Ex-French Air Force |
| | 840 | Mistral | Portable SAM | 1991 | 1992-94 | (450) | Deal worth \$154 m incl 200 launchers (offsets 50%) |
| Italy | 2 | RAN-30X | Surveillance radar | (1993) | 1994 | (2) | For Meroka CIWS on 2 FFG-7 (Santa Maria) Class frigates |
| | 4 | RAN-30X | Surveillance radar | (1992) | 1993-94 | (4) | For refit of Meroka CIWS on 4 FFG-7 (Santa Maria) Class frigates |
| | 1 | RAN-30X | Surveillance radar | (1991) | | | For Meroka CIWS on 1 AOR-90 Class support ship |
| | 1 | RAN-30X | Surveillance radar | (1993) | | | For Meroka CIWS on 1 LPD Type AALS |

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|-------------|--------|-----------------------|-----------------------|--------|---------|--|-------|---|
| Netherlands | 2 | RAT-31S | Surveillance radar | 1992 | | | (2) | Deal worth \$23.4 m (offsets 150%); option on 2 more For 2 FFG-7 (Santa Maria) Class frigates |
| | (2) | STIR | Fire control radar | (1989) | 1994 | | | |
| Qatar | 2 | Mirage F-1B | Fighter/trainer | 1994 | | | | Ex-Qatari Air Force |
| | 11 | Mirage F-1C | Fighter | 1994 | | | | Ex-Qatari Air Force; deal worth \$132 m incl 2 Mirage F-1B trainer version and spares |
| USA | 8 | AV-8B Harrier II Plus | Fighter/ground attack | 1992 | | | | Deal worth \$257 m; for Navy; final assembly in Spain |
| | 6 | S-70B/SH-60B Seahawk | ASW helicopter | 1991 | 1992 | | 2 | Deal worth \$251 m, for FFG-7 (Santa Maria) Class frigates |
| | 1 | TAV-8B Harrier II | Fighter/trainer | 1992 | | | | Deal worth \$25 m; for Navy |
| | 2 | 127mm/54 Mk-42 Mod-9 | Naval gun | 1993 | 1994 | | 2 | On 2 ex-US Navy Knox Class frigates |
| | 83 | M-110A2 203mm | Self-propelled gun | 1991 | 1993-94 | | (48) | CFE cascade; ex-US Army |
| | (31) | M-577A2 | APC/command post | 1993 | 1994 | | (15) | Ex-US Army |
| | 2 | AN/SPG-53 | Fire control radar | 1993 | 1994 | | 2 | On 2 ex-US Navy Knox Class frigates |
| | 2 | AN/SPS-10 | Surveillance radar | 1993 | 1994 | | 2 | On 2 ex-US Navy Knox Class frigates |
| | 2 | AN/SPS-10 | Surveillance radar | 1994 | 1994 | | 1 | On 2 ex-US Navy Newport Class landing ships |
| | 2 | AN/SPS-40B | Surveillance radar | 1993 | 1994 | | 2 | On 2 ex-US Navy Knox Class frigates |
| | 2 | AN/SPS-49 | Surveillance radar | (1989) | 1994 | | (2) | For 2 FFG-7 (Santa Maria) Class frigates |
| | 2 | AN/SPS-55 | Surveillance radar | (1989) | 1994 | | (2) | For 2 FFG-7 (Santa Maria) Class frigates |
| | 6 | AN/VPS-2 Modified | Fire control radar | (1977) | 1986-94 | | (6) | For 6 Meroka CIWS on 6 FFG-7 (Santa Maria) Class frigates |
| | 2 | AN/VPS-2 Modified | Fire control radar | (1991) | | | | For 2 Meroka CIWS on 1 AOR-90 Class support ship |
| | 2 | AN/VPS-2 Modified | Fire control radar | (1993) | | | | For 2 Meroka CIWS on 1 LPD Type AALS |
| | 2 | Phalanx | CIWS | 1993 | 1994 | | 2 | On 2 ex-US Navy Knox Class frigates |
| | 2 | Phalanx | CIWS | 1994 | 1994 | | 1 | On 2 ex-US Navy Newport Class landing ships |
| | 2 | RGM-84A ShShMS | ShShM system | 1993 | 1994 | | 2 | On 2 ex-US Navy Knox Class frigates |
| | 200 | AIM-120A AMRAAM | Air-to-air missile | 1990 | 1993-94 | | (200) | Deal worth \$132 m |
| | (16) | RGM-84A Harpoon | ShShM | 1989 | 1994 | | (16) | For 2 FFG-7 (Santa Maria) Class frigates |
| | 150 | RIM-66B Standard 1MR | ShAM | (1989) | 1992-94 | | (150) | Deal worth \$88 m; for FFG-7 (Santa Maria) and Baleares Class frigates |
| | 2 | Knox Class | Frigate | 1993 | 1994 | | 2 | Ex-US Navy; 5-year lease worth \$7 m |
| | 2 | Newport Class | Landing ship | 1994 | 1994 | | 1 | Ex-US Navy; lease worth \$4.6 m incl spares and training |
| L: UK | 4 | Sandown/CME Type | MCM ship | 1993 | | | | Deal worth \$381 m |
| USA | (2000) | BGM-71F TOW-2 | Anti-tank missile | 1987 | | | | Deal also incl 200 launchers |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|---|
| | 2 | FFG-7 Class | Frigate | 1990 | 1994 | 2 | Spanish designation Santa Maria Class |
| Sweden | | | | | | | |
| S: France | 2 | AS-332B Super Puma | Helicopter | 1993 | 1994 | 1 | Swedish designation Hkp-10 |
| | .. | TRS-2620 Gerfaut | Surveillance radar | 1993 | | | Deal worth \$17.6 m, for CV-90 AAV(G)s |
| Germany, FR | 350 | BMP-1 | AIFV | 1994 | 1994 | (120) | Former GDR equipment |
| | (160) | Leopard 2 | Main battle tank | 1994 | 1994 | (160) | Ex-FRG Army; deal worth \$778 m incl 120 Leopard 2 KWS (offsets 100%); refurbished to Leopard 2 KWS version in Sweden; Swedish designation Strv-121 |
| | 120 | Leopard 2 KWS | Main battle tank | 1994 | | | Deal worth \$778 m incl 160 ex-FRG Army Leopard 2 tanks (offsets 100%, incl partial assembly); option on 80; Swedish designation Strv-122 |
| | (800) | MT-LB | APC | 1993 | 1993-94 | (209) | Former GDR equipment; deal worth \$10 m incl 228 2S1 SP gun chassis for spares; incl 200 for spares |
| Italy | 5 | Bell 412SP Griffon | Helicopter | 1993 | 1993 | (1) | Deal worth \$24 m; for MEDEVAC use; option on 4 not used |
| USA | 2 | Gulfstream IV | Transport | 1992 | | | Modified for ELINT use in Sweden; Swedish designation Tp-102 |
| | 100 | AIM-120A AMRAAM | Air-to-air missile | 1994 | | | Deal worth \$190 m (offsets 100%); for JAS-39 fighters |
| Switzerland | | | | | | | |
| S: UK | 3 | Watchman | Surveillance radar | 1990 | 1992-94 | (3) | |
| USA | 34 | F/A-18C/D Hornet | Fighter | 1993 | | | Deal worth \$2.3 b; incl 8 F/A-18D trainer version |
| | .. | AGM-65B Maverick | ASM | 1991 | 1994 | (20) | For F-5E/F fighters |
| | .. | AIM-120A AMRAAM | Air-to-air missile | 1988 | | | For 34 F/A-18C/D fighters |
| | .. | AIM-9L Sidewinder | Air-to-air missile | (1988) | | | For 34 F/A-18C/D fighters |
| | 12 000 | BGM-71D TOW 2 | Anti-tank missile | (1985) | 1988-94 | (5 986) | Deal worth \$209 m incl 400 launchers and night vision sights |

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|-----------------|---------|-----------------------|--------------------|--------|---------|---------|---|
| | 3 500 | FIM-92A Stinger | Portable SAM | 1988 | 1993-94 | (1 250) | Deal worth \$315 m (offsets 70% incl production of components) |
| <hr/> | | | | | | | |
| Syria | | | | | | | |
| S: Korea, North | (150) | SS-1 Scud C | SSM | 1989 | 1991-94 | (120) | |
| Pakistan | (6) | Supporter | Trainer | 1994 | 1994 | 6 | Gift |
| Russia | 54 | MiG-29S Fulcrum C | Fighter | 1994 | | | Part of deal worth \$1.6b; status uncertain |
| | 350 | T-72 | Main battle tank | 1994 | | | Part of deal worth \$1.6b; status uncertain |
| | .. | SA-16 Gimlet | Portable SAM | 1994 | | | Part of deal worth \$1.6b; status uncertain |
| Slovakia | .. | T-72 | Main battle tank | 1992 | 1993-94 | (118) | Part of deal for 252 T-72 tanks, of which 81 delivered from Czechoslovakia before breakup |
| <hr/> | | | | | | | |
| Taiwan | | | | | | | |
| S: France | 60 | Mirage 2000-5 | Fighter | 1992 | | | Deal worth \$2.6 b (offsets 10%); option on 40 more |
| | (1 500) | MICA | Air-to-air missile | (1992) | | | Deal worth \$1.2 b incl R-550 missiles; for 60 Mirage 2000-5 fighters |
| | (500) | R-550 Magic 2 | Air-to-air missile | 1992 | | | Deal worth \$1.2 b incl MICA missiles; for 60 Mirage 2000-5 fighters |
| | 6 | La Fayette Class | Frigate | 1991 | | | Deal worth \$4.68 b |
| Italy | 1 | Alliance Class | Survey ship | 1993 | | | |
| USA | 26 | Bell-206/OH-58D Kiowa | Combat helicopter | 1992 | 1993-94 | 16 | Deal worth \$367 m |
| | 27 | Bell-209/AH-1W | Combat helicopter | 1992 | 1993-94 | (16) | Option on more |
| | 12 | C-130H Hercules | Transport | 1993 | 1993-94 | (8) | Deal worth \$620 m incl spares and support |
| | 4 | E-2C Hawkeye | AEW&C aircraft | 1993 | 1994 | (1) | Deal worth \$700 m (offsets 10%) |
| | 150 | F-16A Fighting Falcon | Fighter | 1992 | | | Deal worth \$5.8 b incl spare engines and missiles; incl F-16B trainer version |
| | 60 | T-38 Talon | Jet trainer | 1993 | 1994 | (2) | Ex-US Air Force; lease |
| | 3 | 127mm/54 Mk-42 Mod-9 | Naval gun | 1993 | 1994 | (3) | On 3 ex-US Navy Knox Class frigates |
| | 160 | M-60A3 Patton II | Main battle tank | 1991 | | | Ex-US Army; deal worth \$91 m |
| | 4 | M-88A1 | ARV | 1990 | | | |
| | .. | AN/FPS-117 | Surveillance radar | 1992 | | | |
| | 3 | AN/SPG-53 | Fire control radar | 1993 | 1994 | (3) | On 3 ex-US Navy Knox Class frigates |
| | 6 | AN/SPG-60 STIR | Fire control radar | (1989) | 1993-94 | (2) | For 6 FFG-7 (Cheng Kung) Class frigates |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|--|
| | 3 | AN/SPS-10 | Surveillance radar | 1993 | 1994 | (3) | On 3 ex-US Navy Knox Class frigates |
| | 2 | AN/SPS-10 | Surveillance radar | 1994 | | | On 2 ex-US Navy Newport Class landing ships |
| | 3 | AN/SPS-40B | Surveillance radar | 1993 | 1994 | (3) | On 3 ex-US Navy Knox Class frigates |
| | .. | AN/SPS-49 | Surveillance radar | (1989) | 1993-94 | (2) | For 6 FFG-7 (Cheng Kung) Class frigates |
| | (3) | Patriot MADS | SAM system | 1994 | | | Deal worth \$1.3 b incl missiles |
| | 3 | Phalanx | CIWS | 1993 | 1994 | (3) | On 3 ex-US Navy Knox Class frigates |
| | 6 | Phalanx | CIWS | 1991 | 1993-94 | (2) | For 6 FFG-7 (Cheng Kung) Class frigates |
| | 2 | Phalanx | CIWS | 1994 | | | On 2 ex-US Navy Newport Class landing ships |
| | 3 | RGM-84A ShShMS | ShShM system | 1993 | 1994 | (3) | On 3 ex-US Navy Knox Class frigates |
| | 1 | Standard VLS | ShAM system | 1993 | | | Deal worth \$103 m incl spares and support; for PFG-2 (Chang Chien) Class frigates |
| | 6 | Standard 1 ShAMS | ShAM system | 1989 | 1993-94 | (2) | For 6 FFG-7 (Cheng Kung) Class frigates |
| | 6 | WM-28 | Fire control radar | (1989) | 1993-94 | (2) | For 6 FFG-7 (Cheng Kung) Class frigates |
| | 684 | AGM-114A Hellfire | Anti-tank missile | (1991) | 1993-94 | (500) | For Bell 206/OH-58D and Bell 209/AH-1W helicopters |
| | 600 | AIM-7M Sparrow | Air-to-air missile | 1992 | | | For 150 F-16 fighters |
| | 900 | AIM-9S Sidewinder | Air-to-air missile | 1992 | | | For 150 F-16 fighters |
| | 200 | MIM-104 PAC-2 | SAM | 1994 | | | For 3 Patriot MADS SAM systems |
| | .. | RIM-116A RAM | ShAM | 1993 | | | For PFG-2 (Chang Chien) Class frigates |
| | 97 | RIM-66B Standard 1MR | ShAM | 1991 | 1993-94 | (80) | Deal worth \$55 m incl spares and support; for 6 FFG-7 (Cheng Kung) Class frigates |
| | 3 | Knox Class | Frigate | 1993 | 1994 | (3) | Ex-US Navy; 5-year lease worth \$225 m |
| | 2 | Newport Class | Landing ship | 1994 | | | Ex-US Navy; lease |
| L: USA | 6 | FFG-7 Class | Frigate | 1989 | 1993-94 | 2 | Taiwanese designation Cheng Kung Class |
| | 1 | Jinn Chang Class | OPV | (1992) | | | Designed for Taiwanese production; option on 9 more; 'Kwang Hua III' project |
| Thailand | | | | | | | |
| S: Canada | 20 | Bell 212 | Helicopter | 1993 | | | Deal worth \$130 m |

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|----------------|------|-----------------------|-----------------------|--------|---------|------|--|
| | .. | ADATS | SAM | 1994 | 1994 | (8) | For 1 shelterbased launcher and Skyguard fire control radars |
| China | 2 | Naresuan Class | Frigate | 1989 | 1994 | 1 | Weapons and electronics to be fitted in Thailand |
| Czechoslovakia | 36 | L-39Z Albatros | Jet trainer | 1992 | 1993-94 | (24) | Deal worth \$200 m |
| Italy | 6 | G-222 | Transport | 1994 | 1994 | 3 | Deal worth \$136 m; option on 4-6 more |
| Netherlands | 2 | LW-08 | Surveillance radar | (1989) | 1994 | (1) | For 2 Naresuan Class frigates |
| | 4 | STIR | Fire control radar | 1992 | 1994 | (2) | For 2 Naresuan Class frigates |
| Spain | 1 | Chakri Naruebet Class | Aircraft carrier | 1992 | | | Deal worth \$228 m for unarmed vessel; second planned |
| USA | 21 | A-7E Corsair II | Fighter/ground attack | 1994 | | | Ex-US Navy; incl 3 for spares; deal worth \$81.6 m |
| | 3 | E-2C Hawkeye | AEW&C aircraft | 1991 | | | Deal worth \$382 m incl support |
| | 18 | F-16A Fighting Falcon | Fighter | 1991 | | | Deal worth \$547 m incl 4 spare engines, 6 LANTIRN pods, spares, logistics and support; incl 4 F-16B trainer version |
| | 5 | P-3B Orion | ASW/maritime patrol | 1993 | 1994 | (5) | Ex-US Navy; incl 2 for spares; deal worth \$140 m incl RGM-84A missiles |
| | 6 | S-70B/SH-60B Seahawk | ASW helicopter | 1993 | | | Deal worth \$186 m incl spare engines, support and spares; for Navy |
| | 2 | 127mm/54 Mk-42 Mod-9 | Naval gun | 1992 | 1994 | 1 | On 2 ex-US Navy Knox Class frigates |
| | 2 | 127mm/54 Mk-45 | Naval gun | (1990) | 1994 | 1 | For 2 Naresuan Class frigates |
| | 20 | M-109A5 155mm | Self-propelled gun | (1991) | 1994 | (20) | Deal worth \$63 m |
| | .. | M-48A5 Patton | Main battle tank | 1990 | | | Ex-US Army |
| | 2 | AN/SPG-53 | Fire control radar | 1992 | 1994 | 1 | On 2 ex-US Navy Knox Class frigates |
| | 2 | AN/SPS-10 | Surveillance radar | 1992 | 1994 | 1 | On 2 ex-US Navy Knox Class frigates |
| | 2 | AN/SPS-40B | Surveillance radar | 1992 | 1994 | 1 | On 2 ex-US Navy Knox Class frigates |
| | 2 | LAADS | Surveillance radar | 1993 | | | Deal worth \$11.8 m |
| | 1 | Phalanx | CIWS | 1994 | | | For 1 Chakri Nareubet Class aircraft carrier |
| | 2 | Phalanx | CIWS | 1992 | 1994 | 1 | On 2 ex-US Navy Knox Class frigates |
| | 2 | RGM-84A ShShMS | ShShM system | (1991) | 1994 | (1) | For 2 Naresuan Class frigates |
| | 2 | RGM-84A ShShMS | ShShM system | 1992 | 1994 | 1 | On 2 ex-US Navy Knox Class frigates |
| | 2 | Seasparrow VLS | ShAM system | (1991) | 1994 | 1 | For 2 Naresuan Class frigates |
| | 16 | AGM-84A Harpoon | Anti-ship missile | 1990 | 1994 | (16) | For 3 P-3B ASW aircraft |
| | .. | RGM-84A Harpoon | ShShM | (1991) | 1994 | (16) | For 2 Naresuan Class frigates |
| | (48) | RIM-7H Seasparrow | ShAM | (1991) | 1994 | (24) | For 2 Naresuan Class frigates |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|---|
| | 2 | Knox Class | Frigate | 1992 | 1994 | 1 | Ex-US Navy; 5-year lease worth \$4.3 m |
| Tunisia | | | | | | | |
| S: Czechoslovakia | 12 | L-59 | Jet trainer | 1994 | | | |
| Turkey | | | | | | | |
| S: Canada | 10 | Bell 206L LongRanger | Helicopter | 1993 | | | Deal worth \$25 m incl licensed production of 14 |
| France | 20 | AS-532U2 Cougar | Helicopter | 1993 | | | Deal worth \$253 m (offsets \$162 m) |
| | 14 | TRS-22XX | Surveillance radar | (1989) | 1993-94 | (5) | Deal worth \$150 m (offsets \$63 m); incl 10 assembled in Turkey |
| Germany, FR | 46 | RF-4E Phantom II | Reconnaissance plane | 1991 | 1992-94 | 46 | Ex-FRG Air Force; part of 'Materialhilfe 3' aid programme worth \$904 m; incl 16 for spares |
| | 1 | FH-70 155mm | Towed gun | (1994) | 1994 | 1 | Ex-FRG Army; for evaluation |
| | 131 | M-110A2 203mm | Self-propelled gun | (1991) | 1994 | 131 | CFE cascade; ex-FRG Army |
| | 1 | Leopard 1A5 | Main battle tank | (1994) | 1994 | 1 | Ex-FRG Army; for evaluation |
| | 137 | M-113A1 | APC | (1991) | 1993-94 | 137 | CFE cascade; ex-FRG Army |
| | 197 | RATAC-S | Battlefield radar | 1992 | | | Most for assembly; Turkish designation Askarad |
| | 300 | FIM-43A Redeye | Portable SAM | (1991) | 1993-94 | (300) | Ex-FRG Army; aid |
| | 1 | Meko 200 Type | Frigate | 1990 | | | Deal worth \$465 m incl licensed production of 1; Turkish designation Barbaros Class |
| | 1 | Meko 200 Type | Frigate | 1994 | | | Deal worth \$525 m incl licensed production of 1; Turkish designation Barbaros Class |
| Italy | 20 | AB-206B JetRanger 3 | Helicopter | 1994 | | | Deal worth \$18.7 m; for training |
| | 100 | M-113A1 | APC | (1991) | | | CFE cascade; ex-Italian Army |
| | 4 | Seaguard | CIWS | 1990 | | | For 2 Meko 200 Type (Barbaros Class) frigates |
| | 4 | Seaguard | CIWS | (1994) | | | For 2 Meko 200 Type (Barbaros Class) frigates |
| | 5 | Seaguard TMX | Fire control radar | 1991 | | | For 5 FPB-57 Type (Yildiz Class) fast attack craft |
| | .. | Aspide | ShAM | (1990) | | | For 2 Meko 200 Type (Barbaros Class) frigates |
| Netherlands | 2 | STIR | Fire control radar | (1990) | | | For 2 Meko 200 Type (Barbaros Class) frigates |
| | 2 | STIR | Fire control radar | (1994) | | | For 2 Meko 200 Type (Barbaros Class) frigates |

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|--------|-------|----------------------|---------------------|---------|---------|-------|---|
| Russia | 19 | Mi-17 Hip H | Helicopter | (1994) | | | Deal worth \$65 m; for Gendarmerie |
| UK | 5 | AWS-6 | Surveillance radar | (1991) | 1994 | (1) | For 5 FPB-57 Type (Yildiz Class) fast attack craft |
| | 2 | AWS-6 | Surveillance radar | (1990) | | | For 2 Meko 200 Type (Barbaros Class) frigates |
| | 2 | AWS-6 | Surveillance radar | (1994) | | | For 2 Meko 200 Type (Barbaros Class) frigates |
| | 2 | AWS-9 | Surveillance radar | (1990) | | | For 2 Meko 200 Type (Barbaros Class) frigates |
| | 2 | AWS-9 | Surveillance radar | (1994) | | | For 2 Meko 200 Type (Barbaros Class) frigates |
| USA | 7 | KC-135 Stratotanker | Tanker/transport | 1994 | | | Ex-US Air Force; refurbished to KC-135R before delivery |
| | 10 | P-3A Orion | ASW/maritime patrol | 1991 | | | Ex-US Navy |
| | 12 | SH-2F Seasprite | ASW helicopter | 1994 | | | Ex-US Navy; deal worth \$115 m incl support and 2 for spares; refurbished before delivery; for Navy |
| | 2 | SH-2F Seasprite | ASW helicopter | 1994 | | | Ex-US Navy; for spares |
| | 4 | 127mm/54 Mk-42 Mod-9 | Naval gun | 1993 | 1994 | 4 | On 4 ex-US Navy Knox Class frigates |
| | 2 | 127mm/54 Mk-45 | Naval gun | (1990) | 1994 | (1) | For 2 Meko 200 Type (Barbaros Class) frigates |
| | 2 | 127mm/54 Mk-45 | Naval gun | (199 4) | | | For 2 Meko 200 Type (Barbaros Class) frigates |
| | 24 | MLRS 227mm | MRL | 1993 | | | Deal worth \$289 m incl 1772 rocket pods, spares and support |
| | 124 | Commando V-150 | APC | 1992 | 1992-94 | (124) | For Police and Gendarmerie |
| | (250) | M-113A2 | APC | (1991) | 1994 | (250) | CFE cascade; ex-US Army |
| | 658 | M-60A3 Patton II | Main battle tank | (1991) | 1993-94 | (658) | CFE cascade; ex-US Army |
| | 4 | AN/SPG-53 | Fire control radar | 1993 | 1994 | 4 | For 4 ex-US Navy Knox Class frigates |
| | 4 | AN/SPS-10 | Surveillance radar | 1993 | 1994 | 4 | For 4 ex-US Navy Knox Class frigates |
| | 4 | AN/SPS-40B | Surveillance radar | 1993 | 1994 | 4 | For 4 ex-US Navy Knox Class frigates |
| | 5 | AN/TPQ-36 | Tracking radar | 1992 | | | Deal worth \$28 m |
| | 4 | Phalanx | CIWS | 1993 | 1994 | 4 | For 4 ex-US Navy Knox Class frigates |
| | 4 | RGM-84A ShShMS | ShShM system | 1993 | 1994 | 4 | For 4 ex-US Navy Knox Class frigates |
| | 2 | RGM-84A ShShMS | ShShM system | 1990 | | | For 2 Meko 200 Type (Barabros Class) frigates |
| | 2 | RGM-84A ShShMS | ShShM system | (1994) | | | For 2 Meko 200 Type (Barbaros Class) frigates |
| | 5 | RGM-84A ShShMS | ShShM system | (1991) | 1994 | (1) | For 5 FPB-57 Type (Yildiz Class) fast attack craft |
| | 2 | Seasparrow ShAMS | ShAM system | 1990 | | | For 2 Meko 200 Type (Barabaros Class) frigates |
| | 2 | Seasparrow VLS | ShAM system | 1994 | | | For 2 Meko 200 Type (Barbaros Class) frigates |
| | (274) | AGM-65G Maverick | ASM | 1991 | 1993-94 | (200) | |
| | 100 | AGM-88A HARM | Anti-radar missile | 1993 | 1994 | (25) | For F-16 fighters |
| | 80 | AIM-120A AMRAAM | Air-to-air missile | 1993 | | | Deal worth \$52 m; for F-16 fighters |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|--|
| | 200 | AIM-9M Sidewinder | Air-to-air missile | (1992) | | | Deal worth \$23 m |
| | 310 | AIM-9S Sidewinder | Air-to-air missile | 1990 | 1993-94 | (200) | Deal worth \$30 m incl training missiles |
| | 32 | RGM-84A Harpoon | ShShM | 1993 | 1994 | (32) | For 4 Knox Class frigates; deal worth \$170 m incl 64 ASW torpedoes, 40 ASROC ASW missiles, ammunition and support equipment |
| | 40 | RGM-84A Harpoon | ShShM | 1990 | | | Deal worth \$62 m |
| | .. | RGM-84A Harpoon | ShShM | (1994) | | | For 2 Meko 200 Type (Barbaros Class) frigates |
| | .. | RGM-84A Harpoon | ShShM | (1991) | 1994 | (16) | For 5 FPB-57 Type (Yildiz Class) fast attack craft |
| | .. | UGM-84A Sub Harpoon | SuShM | (1993) | 1994 | (6) | For 4 Type 209/1400 (Preveze Class) submarines |
| | 4 | Knox Class | Frigate | 1993 | 1994 | 4 | Ex-US Navy; 5-year lease |
| L: Canada | 14 | Bell 206L LongRanger | Helicopter | 1993 | | | Deal worth \$25 m incl 10 delivered direct |
| Germany, FR | 2 | FPB-57 Type | Fast attack craft | 1991 | 1994 | 1 | Deal worth \$143 m; Turkish designation Yildiz Class |
| | 3 | FPB-57 Type | Fast attack craft | 1993 | | | Deal worth \$250 m; Turkish designation Yildiz Class |
| | 1 | Meko 200 Type | Frigate | 1990 | | | Deal worth \$465 m incl 1 delivered direct; Turkish designation Barbaros Class |
| | 1 | Meko 200 Type | Frigate | 1994 | | | Deal worth \$525 m incl 1 delivered direct; Turkish designation Barbaros Class |
| | 4 | Type 209/1400 | Submarine | 1987 | 1994 | 1 | Turkish designation Preveze Class |
| Spain | 50 | CN-235M | Transport | 1991 | 1992-94 | 13 | Deal worth \$550 m incl 2 delivered direct |
| USA | 152 | F-16C Fighting Falcon | Fighter | 1984 | 1987-94 | 152 | Peace Onyx programme worth \$4.2 b incl 2 F-16C and 6 F-16D delivered direct; incl F-16D trainer version |
| | 40 | F-16C Fighting Falcon | Fighter | 1992 | | | Deal worth \$2.8 b incl 12 spare engines |
| | 40 | F-16C Fighting Falcon | Fighter | 1994 | | | Deal worth \$1.8 b |
| | 650 | AIFV | AIFV | 1988 | 1990-94 | 275 | Deal worth \$1.08 b incl 830 APC, 48 tank destroyer and 170 APC/mortar carrier version (offsets \$705 m) |
| | 170 | AIFV-AMV | APC/mortar carrier | 1988 | 1993-94 | 70 | Deal worth \$1.08 b incl 650 ICV, 830 APC and 48 tank destroyer version (offsets \$705 m) |
| | 830 | AIFV-APC | APC | 1988 | 1991-94 | 530 | Deal worth \$1.08 b incl 650 ICV, 48 tank destroyer and 170 APC/mortar carrier version (offsets \$705 m) |

| | | | | | | | |
|-----------------------------|---------|--------------------|--------------------|------|---------|--------|--|
| | 48 | AIFV-ATV | Tank destroyer | 1988 | 1991-94 | 48 | Deal worth \$1.08 b incl 650 ICV, 830 APC and 170 APC/mortar carrier version (offsets \$705 m) |
| Tuvalu | | | | | | | |
| S: Australia | 1 | ASI-315 | Patrol craft | 1992 | 1994 | 1 | Pacific Forum aid programme |
| UK | | | | | | | |
| S: Germany, FR | 5 | G-115D | Trainer | 1993 | 1994 | 5 | For civil company for training of UK Navy pilots |
| USA | 3 | CH-47D Chinook | Helicopter | 1993 | | | |
| | 2 | Phalanx | CIWS | 1994 | | | Deal worth \$25 m incl spares and support; for support ships |
| | 210 | AIM-120A AMRAAM | Air-to-air missile | 1992 | | | Deal worth \$228 m incl support; for Navy Sea Harrier FRS-2 fighters |
| L: Switzerland | (1 000) | Piranha 8x8 | APC | 1991 | 1992-94 | 159 | Production for export |
| USA | 88 | WS-70 Blackhawk | Helicopter | 1987 | | | For export to Saudi Arabia |
| | 57 | MLRS 227mm | MRL | 1985 | 1989-94 | 57 | In addition to 4 delivered direct |
| | .. | BGM-71A TOW | Anti-tank missile | 1980 | 1982-94 | 31 198 | |
| United Arab Emirates | | | | | | | |
| S: France | 390 | Leclerc | Main battle tank | 1993 | 1994 | (5) | Deal worth \$4.6 b incl 46 ARV version (offsets 60%) |
| | 46 | Leclerc | ARV | 1993 | | | |
| | 500 | Mistral | Portable SAM | 1988 | 1993-94 | (500) | |
| Indonesia | 7 | CN-235 | Transport | 1992 | 1993-94 | (4) | Deal worth \$108 m |
| Italy | (6) | Bell 412SP Griffon | Helicopter | 1991 | 1992-94 | (3) | Deal worth \$30 m incl spares and support; for Dubai |
| Romania | 10 | SA-330 Puma | Helicopter | 1993 | 1993-94 | 10 | Ex-Romanian Air Force; for Abu Dhabi |
| | 10 | SA-330 Puma | Helicopter | 1994 | | | Deal worth \$37 m; for Abu Dhabi |
| Russia | 250 | BMP-3 | AIFV | 1992 | 1992-94 | (250) | For Abu Dhabi |
| UK | 18 | Hawk 100 | Fighter/trainer | 1989 | 1993-94 | 18 | Part of deal worth \$340 m; for Abu Dhabi |
| USA | 20 | AH-64A Apache | Combat helicopter | 1991 | 1993-94 | 20 | Deal worth \$680 m incl AGM-114A missiles |
| | 10 | AH-64A Apache | Combat helicopter | 1994 | | | Deal worth \$150 m; for Abu Dhabi |
| | 2 | C-130H-30 Hercules | Transport | 1991 | | | Deal worth \$54.9 m |
| | 1 | AN/TPS-70 | Surveillance radar | 1993 | | | Part of deal worth \$300 m |
| | 620 | AGM-114A Hellfire | Anti-tank missile | 1991 | 1993-94 | (620) | For 20 AH-64A helicopters |

| Recipient/ supplier (S) or licensor (L) | No. ordered | Weapon designation | Weapon description | Year of order/ licence | Year(s) of deliveries | No. delivered/ produced | Comments |
|---|----------------|-----------------------|-----------------------|------------------------------|-----------------------------|-------------------------------|---|
| | 360 | AGM-114A Hellfire | Anti-tank missile | 1994 | | | For 10 AH-64A helicopters |
| USA | | | | | | | |
| S: Australia | 7 | CH-47C Chinook | Helicopter | 1991 | | | Ex-Australian Air Force; for Army |
| Canada | 137 | Bell 206B JetRanger 3 | Helicopter | 1993 | 1993-94 | (75) | For Army; for training; US designation TH-67 Creek; option on 20 more |
| | (100) | Piranha 8x8 | APC | (1994) | | | Fitted for air defence with Blazer turret in USA; US designation LAV-AD; for Marines |
| Israel | 30 | Have Nap | ASM | (1994) | | | For B-52H bombers |
| Norway | 101 | Penguin Mk-2-7 | Anti-ship missile | 1992 | 1993-94 | (80) | For 86 Navy S-70B/SH-60B helicopters |
| UK | 38 | Firefly 160 | Trainer | 1992 | 1993-94 | (20) | Deal worth \$12 m; option on 75 more; US designation T- 3A Firefly |
| | 20 | Shorts 330UTT | Transport | 1993 | | | Ex-civilian; deal worth \$100 m; refurbished to C-23B+ Sherpa before delivery |
| L: Germany, FR | | | | | | | |
| Italy | 210 | Tpz-1 Fuchs | APC | 1990 | 1993-94 | 58 | NBC reconnaissance version; US designation M-93 Fox |
| Japan | 12 | Osprey Class | MCM ship | 1986 | 1993-94 | 4 | US designation Osprey Class |
| | (148) | Beechjet 400T | Transport | 1990 | 1992-94 | 86 | Deal worth \$628 m; for training; US designation T-1A Jayhawk |
| Netherlands | .. | WM-28 | Fire control radar | (1973) | 1977-94 | 110 | For several US Navy ships; incl 31 for export; US designation Mk-92 |
| UK | 270 | Hawk | Jet trainer | 1986 | 1988-94 | 46 | Deal worth \$512 m incl 24 simulators; for Navy; US designation T-45A Goshawk |
| | 436 | L-119 105mm | Towed gun | 1987 | 1990-94 | 181 | US designation M-119 |
| | 13 | Ramadan Class | Patrol craft | 1990 | 1992-94 | 11 | US designation Cyclone Class |
| Venezuela | | | | | | | |
| S: France | (50) | AM-39 Exocet | Anti-ship missile | (1988) | 1993-94 | (20) | For Mirage 50 fighters |
| USA | 2 | AN/SPS-10 | Surveillance radar | 1994 | 1994 | (2) | On 2 ex-US Navy Newport Class landing ships |
| | 2 | Phalanx | CIWS | 1994 | 1994 | (2) | On 2 ex-US Navy Newport Class landing ships |

| | | | | | | | |
|--------------|----|-----------------|------------------|------|------|------|--|
| | 2 | Newport Class | Landing ship | 1994 | 1994 | (2) | Ex-US Navy; lease |
| Yemen | | | | | | | |
| S: Bulgaria | 60 | T-62 | Main battle tank | 1994 | 1994 | (56) | Ex-Bulgarian Army; deal worth \$20 m incl spares; for South Yemeni rebels; status of last 4 uncertain |
| Moldova | 30 | MiG-29 Fulcrum | Fighter | 1994 | 1994 | 12 | Ex-Moldovan Air Force; financed by Saudi Arabia; delivery of last 18 stopped after end of rebellion; for South Yemeni rebels |
| | 7 | BM-9P140 Uragan | MRL | 1994 | 1994 | 7 | Ex-Moldovan Army; for South Yemeni rebels |

Abbreviations and acronyms

| | | | |
|----------|--|---------------------|--------------------------------------|
| AA | Anti-aircraft | MCM | Mine countermeasures (ship) |
| AAA | Anti-aircraft artillery | MRL | Multiple rocket launcher |
| AALS | Amphibious assault landing ship | OPV | Offshore patrol vessel |
| AAV(G) | Anti-aircraft vehicle (gun-armed) | SAM | Surface-to-air missile |
| AAV(M) | Anti-aircraft vehicle (missile-armed) | SAMS | Surface-to-air missile system |
| AAV(G/M) | Anti-aircraft vehicle (gun- and missile-armed) | SAR | Search and rescue |
| AEV | Armoured engineer vehicle | ShAM | Ship-to-air missile |
| AEW | Airborne early-warning | ShShM | Ship-to-ship missile |
| AEW&C | Airborne early-warning and control | SuShM | Submarine-to-ship missile |
| AIFV | Armoured infantry fighting vehicle | VIP | Very important person |
| APC | Armoured personnel carrier | VLS | Vertical launch system |
| ARV | Armoured recovery vehicle | | |
| ASM | Air-to-surface missile | Conventions: | |
| ASW | Anti-submarine warfare | .. | Data not available or not applicable |
| CDS | Coast defence system | - | Negligible figure (<0.5) or none |
| CIWS | Close-in weapon system | () | Uncertain data or SIPRI estimate |
| ELINT | Electronic intelligence | | |
| EW | Electronic warfare | | |
| incl | Including/includes | | |

Appendix 14C. Sources and methods

I. The SIPRI sources

The sources of the data presented in the arms trade registers are of five general types: newspapers; periodicals and journals; books, monographs and annual reference works; official national documents; and documents issued by international and inter-governmental organizations. The registers are largely compiled from information contained in around 200 publications searched regularly.

Published information cannot provide a comprehensive picture because the arms trade is not fully reported in the open literature. Published reports provide partial information, and substantial disagreement among reports is common. Therefore, the exercise of judgement and the making of estimates are important elements in compiling the SIPRI arms trade data base. Order dates and the delivery dates for arms transactions are continuously revised in the light of new information, but where they are not disclosed the dates are estimated. Exact numbers of weapons ordered and delivered may not always be known and are sometimes estimated—particularly with respect to missiles. It is common for reports of arms deals involving large platforms—ships, aircraft and armoured vehicles—to ignore missile armaments classified as major weapons by SIPRI. Unless there is explicit evidence that platforms were disarmed or altered before delivery, it is assumed that a weapons fit specified in one of the major reference works such as the *Jane's* or *Interavia* series is carried.

II. Selection criteria

SIPRI arms trade data cover five categories of major weapons or systems: aircraft, armour and artillery, guidance and radar systems, missiles, and warships. Statistics presented refer to the value of the trade in these five categories only. The registers and statistics do not include trade in small arms, artillery under 100-mm calibre, ammunition, support items, services and components or component technology, except for specific items. Publicly available information is inadequate to track these items satisfactorily.

There are two criteria for the selection of major weapon transfers for the registers. The first is that of military application. The aircraft category excludes aerobatic aeroplanes and gliders. Transport aircraft and VIP transports are included only if they bear military insignia or are otherwise confirmed as military registered. Micro-light aircraft, remotely piloted vehicles and drones are not included although these systems are increasingly finding military applications.

The armour and artillery category includes all types of tanks, tank destroyers, armoured cars, armoured personnel carriers, armoured support vehicles, infantry combat vehicles as well as multiple rocket launchers, self-propelled and towed guns and howitzers with a calibre equal to or above 100 mm. Military lorries, jeeps and other unarmoured support vehicles are not included.

The category of guidance and radar systems is a residual category for electronic-tracking, target-acquisition, fire-control, launch and guidance systems that are either (a) deployed independently of a weapon system listed under another weapon category (e.g., certain ground-based SAM launch systems) or (b) shipborne missile-launch or point-defence (CIWS) systems. The values of acquisition, fire-control, launch and

guidance systems on aircraft and armoured vehicles are included in the value of the respective aircraft or armoured vehicle. The reason for treating shipborne systems separately is that a given type of ship is often equipped with numerous combinations of different surveillance, acquisition, launch and guidance systems.

The missile category includes only guided missiles. Unguided artillery rockets, man-portable anti-armour rockets and free-fall aerial munitions (e.g., 'iron bombs') are excluded. In the naval sphere, anti-submarine rockets and torpedoes are excluded.

The ship category excludes small patrol craft (with a displacement of less than 100 t), unless they carry cannon with a calibre equal to or above 100 mm; missiles or torpedoes; research vessels; tugs and ice-breakers. Combat support vessels such as fleet replenishment ships are included.

The second criterion for selection of items is the identity of the buyer. Items must be destined for the armed forces, paramilitary forces, intelligence agencies or police of another country. Arms supplied to guerrilla forces pose a problem. For example, if weapons are delivered to the Contra rebels they are listed as imports to Nicaragua with a comment in the arms trade register indicating the local recipient. The entry of any arms transfer is made corresponding to the five weapon categories listed above. This means that missiles and their guidance/launch vehicles are often entered separately under their respective category in the arms trade register.

III. The value of the arms trade

The SIPRI system for arms trade evaluation is designed as a *trend-measuring device*, to permit measurement of changes in the total flow of major weapons and its geographic pattern.¹ Expressing the evaluation in monetary terms reflects both the quantity and quality of the weapons transferred. Aggregate values and shares are based only on *actual deliveries* during the year/years covered in the relevant tables and figures.

The SIPRI valuation system is not comparable to official economic statistics such as gross domestic product, public expenditure and export/import figures. The monetary values chosen do not correspond to the actual prices paid, which vary considerably depending on different pricing methods, the length of production runs and the terms involved in individual transactions. For instance, a deal may or may not cover spare parts, training, support equipment, compensation, offset arrangements for the local industries in the buying country, and so on. Furthermore, to use only actual sales prices—even assuming that the information were available for all deals, which it is not—military aid and grants would be excluded, and the total flow of arms would therefore not be measured.

Production under licence is included in the arms trade statistics in such a way as to reflect the import share embodied in the weapon. In reality, this share is normally high in the beginning, gradually decreasing over time. However, as SIPRI makes a single estimate of the import share for each weapon produced under licence, the value of arms produced under licence agreements may be slightly overstated.

¹ Additional information is contained in Brzoska, M., 'The SIPRI price system', *SIPRI Yearbook 1987: World Armaments and Disarmament* (Oxford University Press: Oxford 1987), appendix 7D; Sköns, E., 'Sources and methods, *SIPRI Yearbook 1992: World Armaments and Disarmament* (Oxford University Press: Oxford, 1992), appendix 8D; and SIPRI, *Sources and Methods for SIPRI Research on Military Expenditure, Arms Transfers and Arms Production*, SIPRI Fact Sheet, Stockholm, Jan. 1995.

Appendix 14D. The 1994 review of the UN Register of Conventional Arms

EDWARD J. LAURANCE and HERBERT WULF

I. Introduction

The United Nations Register of Conventional Arms is a voluntary, global transparency mechanism whose purpose is to provide warning of arms build-ups that may lead to negative consequences for international security. The UN Register was implemented in 1992 on the basis of operating procedures developed by a UN Panel of Experts appointed by the Secretary-General.¹

As foreseen in UN General Assembly Resolution 46/36 L of 9 December 1991, which established the Register, the first review of the Register was undertaken by a second panel, the UN Group of Experts, in 1994. The mandate of this Group, convened in 1994 for three sessions of five weeks in total and representing 23 governments,² was 'to prepare a report on the continuing operation of the Register and its further development . . . for submission to the General Assembly with a view to a decision at its forty-ninth session'.³ This Group had four basic tasks: (a) to review the returns of member states for 1992 and 1993; (b) to make adjustments to existing categories of weapons registered with the UN, if required;⁴ (c) to add new categories of weapons registered with the UN, if required; and (d) to expand the scope of the Register to upgrade information on military holdings and procurement through national production from 'background information' to that which exists for arms transfers, that is, data submitted in a standard format on approved forms.

II. Review of the first two years of operation

The two most important items that concerned the Group of Experts during all three sessions of the 1994 review process related to the quantity (participation) and quality (precision) of reporting.

¹ For a history of the development of the UN Register, the weapons to be reported, and its purpose, merits and flaws, see UN, General and Complete Disarmament: Transparency in Armaments, Report on the Register of Conventional Arms, Report of the Secretary-General, UN document A/47/342, 14 Aug. 1992; Laurance, E. J., Wezeman, S. T. and Wulf, H., *Arms Watch: SIPRI Report on the First Year of the UN Register of Conventional Arms*, SIPRI Research Report No. 6 (Oxford University Press: Oxford, 1993); and Chalmers, M., Greene, O., Laurance, E. J. and Wulf, H. (eds), *Developing the UN Register of Conventional Arms* (Department of Peace Studies, University of Bradford: Bradford, 1994).

² Represented in the Group were experts from the following governments: Argentina,* Australia, Brazil,* Canada,* China,* Cuba, Egypt,* Finland, France,* Germany, Ghana,* India,* Israel,* Japan,* Jordan, Mexico,* the Netherlands (chair),* Pakistan, Russia,* Singapore, the UK,* the USA* and Zimbabwe. Countries marked with an asterisk were also represented in the 1992 Panel of Experts. The present authors served as consultants to both the 1992 UN Panel of Experts and the 1994 UN Group of Experts.

³ UN, Report on the Continuing Operation of the United Nations Register of Conventional Arms and its Further Development, Report of the Secretary-General, UN document A/49/316, 22 Sep. 1994, para. 1.

⁴ The 7 existing UN Register weapon categories are: battle tanks, armoured combat vehicles, large-calibre artillery systems, combat aircraft, attack helicopters, warships, and missiles and missile launchers.

Participation of UN member states

The 1994 Group of Experts consistently emphasized that 'universal participation by Member States is of paramount importance'.⁵ For 1993, the second year of operation of the Register, the UN had received replies from 88 countries by 1 March 1995. By the same date 91 returns had been submitted for calendar year 1992 (see table 14D.1). Thus approximately 50 per cent of the UN member states reported to the UN for both 1992 and 1993.

Some governments represented in the Group of Experts—Egypt, Ghana and Zimbabwe—failed to report for calendar year 1993. The countries which replied in some way to the Register in 1992 but not in 1993 were: Albania, Bolivia, Colombia, Egypt, Grenada, Kazakhstan, Lebanon, Lesotho, Libya, Lithuania, Namibia, Nicaragua, Nigeria, Oman, Panama, Papua New Guinea, Paraguay, Qatar, Senegal, Seychelles, the Solomon Islands, South Africa, Sri Lanka and Tunisia.

The regional distribution of the replies for 1992 and 1993 varied widely. The highest participation was achieved in Western Europe and North America. Participation was particularly low in Africa and the Middle East. According to the Group of Experts, future efforts 'on a regional or sub-regional' basis should be encouraged.⁶ However, there was no consensus on a specific recommendation although several proposals were made. Low participation in 'the Middle East' was frequently mentioned in the deliberations, but the Group could not agree on geographic or strategic regions beyond the standard UN groupings: Africa, Asia, Eastern Europe, Latin America and Caribbean, Western European and Other States (North America), Other States (not Members of any Group). The text of the report is very general, stating that 'various regional forums could address the possible regional security concerns relating to participation in the Register'.⁷

As of 1 March 1995, 24 governments had reported exports of weapons in the seven UN Register categories to the UN Secretariat for 1992. By the same date 24 governments had reported exports for 1993. Some of those which reported exports in 1992 filed nil reports for 1993; others—such as Egypt—chose not to report. On the basis of publicly available data it appears that almost all exporters of the weapons in the Register weapon categories—certainly almost all the major exporters—have reported their international transactions. In that case, most of the trade in the seven categories of weapons covered by the Register has now been made transparent in the form of official government reports to the UN.

As of 1 March 1995, the governments of 39 states reported imports for 1992, as compared to 30 for 1993. Important importer countries have not participated in the Register process—neither in 1992 nor in 1993. The following states which did not report to the Register for calendar year 1993 were listed as importers in the submissions from exporting states for that year: Angola, Azerbaijan, Bahrain, Bangladesh, Egypt, Estonia, Kuwait, Latvia, Lithuania, Mauritius, Morocco, Myanmar, Nigeria, Oman, Qatar, Saudi Arabia, Syria, the United Arab Emirates, Uzbekistan and Venezuela. Numerous countries submitted reports stating that they had neither exported nor imported arms of the UN categories (nil reports).

A key issue in the 1992 Panel was how much detailed information on weapons transferred was necessary in order to assess the military significance of a transfer.

⁵ UN (note 3), para. 22.

⁶ UN (note 3), para. 38.

⁷ UN (note 3), para. 39.

Table 14D.1. Government returns to the UN Register for calendar years 1992 and 1993, as of 1 March 1995

| State | Data on imports | | Data on exports | | Explanation in <i>note verbale</i> | | Background information | |
|--------------------|-----------------|------|-----------------|------|------------------------------------|------|------------------------|------|
| | 1992 | 1993 | 1992 | 1993 | 1992 | 1993 | 1992 | 1993 |
| Afghanistan | - | - | - | - | - | yes | - | no |
| Albania | nil | - | nil | - | - | - | yes | - |
| Antigua & Barbuda | nil | nil | nil | nil | - | - | no | no |
| Argentina | nil | yes | yes | nil | - | - | no | yes |
| Armenia | - | nil | - | nil | - | - | - | no |
| Australia | yes | yes | nil | nil | - | - | yes | yes |
| Austria | - | nil | yes | nil | - | - | yes | yes |
| Belarus | nil | nil | yes | yes | - | - | no | yes |
| Belgium | yes | yes | nil | - | yes | - | yes | yes |
| Bhutan | nil | nil | nil | nil | - | - | no | no |
| Bolivia | yes | - | - | - | - | - | no | - |
| Brazil | yes | yes | yes | nil | - | - | yes | yes |
| Bulgaria | yes | nil | yes | yes | - | - | yes | yes |
| Burkina Faso | - | nil | - | nil | - | - | - | no |
| Canada | yes | yes | yes | yes | - | - | yes | yes |
| Chad | - | - | - | yes | - | - | - | no |
| Chile | yes | nil | nil | nil | - | - | yes | yes |
| China | yes | nil | yes | yes | - | - | no | no |
| Colombia | yes | - | nil | - | yes | - | no | - |
| Comoros | - | nil | - | nil | - | - | - | yes |
| Croatia | nil | nil | nil | nil | yes | yes | no | no |
| Cuba | nil | nil | nil | nil | yes | - | no | no |
| Cyprus | - | nil | - | nil | - | - | - | no |
| Czech Republic | nil | yes | yes | yes | - | - | yes | yes |
| Côte d'Ivoire | - | nil | - | nil | - | - | - | yes |
| Denmark | yes | nil | nil | yes | - | - | yes | yes |
| Dominica | nil | nil | nil | nil | - | - | no | no |
| Dominican Republic | - | nil | - | nil | - | - | - | no |
| Egypt | yes | - | yes | - | yes | - | no | - |
| Fiji | nil | nil | nil | nil | yes | - | no | no |
| Finland | yes | yes | yes | yes | - | - | yes | yes |
| France | nil | nil | yes | yes | - | - | yes | yes |
| Georgia | nil | nil | nil | nil | yes | - | no | no |
| Germany | yes | nil | yes | yes | - | - | yes | yes |
| Greece | yes | yes | yes | - | yes | - | yes | yes |
| Grenada | nil | nil | blank | nil | - | - | no | no |
| Hungary | nil | yes | nil | nil | - | - | yes | yes |
| Iceland | nil | nil | nil | nil | yes | - | no | no |
| India | yes | nil | yes | yes | - | - | no | no |
| Indonesia | nil | yes | - | - | - | - | no | no |
| Iran | yes | yes | nil | nil | - | yes | no | no |
| Ireland | nil | nil | nil | nil | - | - | no | no |
| Israel | yes | yes | yes | yes | - | - | yes | yes |
| Italy | yes | yes | yes | yes | - | - | yes | yes |
| Jamaica | - | - | - | - | yes | yes | no | no |

| State | Data on imports | | Data on exports | | Explanation in <i>note verbale</i> | | Background information | |
|--------------------------------|-----------------|------|-----------------|------|------------------------------------|------|------------------------|------|
| | 1992 | 1993 | 1992 | 1993 | 1992 | 1993 | 1992 | 1993 |
| Japan | yes | yes | nil | nil | - | - | yes | yes |
| Jordan | - | nil | - | nil | - | - | - | no |
| Kazakhstan | nil | - | nil | - | yes | - | no | - |
| Kenya | - | nil | - | nil | - | - | - | no |
| Lebanon | nil | - | nil | - | yes | - | no | - |
| Lesotho | nil | - | nil | - | yes | - | no | - |
| Libya | nil | - | nil | - | yes | - | no | - |
| Liechtenstein | nil | nil | nil | nil | yes | - | no | no |
| Lithuania | yes | - | - | - | - | - | no | - |
| Luxembourg | nil | nil | nil | nil | - | - | no | no |
| Madagascar | - | nil | - | nil | - | - | - | no |
| Malawi | - | nil | - | nil | - | - | - | no |
| Malaysia | nil | yes | nil | nil | yes | - | no | no |
| Maldives | nil | nil | nil | nil | - | - | no | no |
| Malta | yes | nil | nil | nil | - | - | no | no |
| Marshall Islands | - | nil | - | nil | - | - | - | no |
| Mauritania | - | nil | - | nil | - | - | - | no |
| Mauritius | - | nil | nil | nil | yes | - | no | no |
| Mexico | - | nil | - | nil | yes | - | no | yes |
| Mongolia | nil | nil | nil | nil | yes | - | no | no |
| Nambia | nil | - | nil | - | - | - | no | - |
| Nepal | yes | nil | - | nil | - | - | no | no |
| Netherlands | yes | yes | yes | yes | yes | yes | yes | yes |
| New Zealand | yes | yes | nil | nil | - | - | yes | yes |
| Nicaragua | - | - | - | - | yes | - | yes | - |
| Niger | - | nil | nil | nil | yes | - | no | yes |
| Nigeria | - | - | - | - | yes | - | no | - |
| Norway | yes | yes | nil | nil | - | - | yes | no |
| Oman | - | - | - | - | yes | - | no | - |
| Pakistan | yes | yes | nil | nil | - | - | no | no |
| Panama | - | - | - | - | yes | - | yes | - |
| Papua New Guinea | nil | - | nil | - | - | - | no | - |
| Paraguay | - | - | - | - | yes | - | no | yes |
| Peru | yes | yes | blank | nil | - | - | no | no |
| Philippines | yes | yes | nil | - | yes | - | no | no |
| Poland | yes | nil | yes | yes | - | - | yes | yes |
| Portugal | yes | yes | nil | nil | - | - | yes | yes |
| Qatar | - | - | - | - | - | - | yes | - |
| Korea, South | yes | yes | nil | yes | - | - | yes | yes |
| Romania | yes | nil | yes | yes | - | - | no | no |
| Russian Federation | nil | nil | yes | yes | - | - | no | no |
| St Vincent & the Grenadines | - | nil | - | nil | - | - | - | no |
| Samoa | - | nil | - | nil | - | - | - | no |
| Senegal | nil | - | nil | - | yes | - | no | - |

Table 14D.1 *contd*

| State | Data on imports | | Data on exports | | Explanation in <i>note verbale</i> | | Background information | |
|------------------------------------|-----------------|------|-----------------|------|------------------------------------|------|------------------------|------|
| | 1992 | 1993 | 1992 | 1993 | 1992 | 1993 | 1992 | 1993 |
| Seychelles | nil | – | nil | – | – | – | no | – |
| Sierra Leone | – | – | – | – | – | – | – | yes |
| Singapore | yes | yes | nil | nil | – | – | no | no |
| Slovakia | nil | yes | yes | yes | yes | – | no | no |
| Slovenia | nil | nil | nil | nil | yes | yes | no | no |
| Solomon Islands | nil | – | nil | – | yes | – | no | – |
| South Africa | – | – | – | – | yes | – | no | – |
| Spain | yes | yes | nil | nil | – | – | yes | yes |
| Sri Lanka | yes | – | – | – | yes | – | no | – |
| Sweden | yes | yes | yes | yes | – | – | yes | yes |
| Switzerland | nil | nil | nil | yes | – | – | yes | yes |
| Tanzania | nil | nil | nil | nil | – | – | no | no |
| Thailand | – | yes | – | – | – | – | – | no |
| Trinidad & Tobago | – | nil | – | nil | – | – | – | no |
| Tunisia | – | – | – | – | yes | – | no | – |
| Turkey | yes | yes | nil | nil | – | – | yes | no |
| UK | yes | nil | yes | yes | – | – | yes | yes |
| Ukraine | nil | nil | nil | yes | – | – | no | no |
| USA | yes | yes | yes | yes | yes | yes | yes | yes |
| Vanuatu | nil | nil | nil | nil | yes | – | no | no |
| Yugoslavia (Serbia and Montenegro) | nil | nil | nil | nil | yes | yes | yes | no |

Source: The composite table of replies of governments to the UN Register, supplied by the United Nations Centre for Disarmament Affairs, 6 Mar. 1995.

At least some knowledge about the type of weapon, its complexity and its capability would be needed for such a judgement since systems of very different kinds fall under the seven broad categories used in the Register. From the beginning some of the major exporters (France, the UK and the USA) objected to the inclusion of such data. The 1992 Panel agreed on a column to include information on the type or model of weapons. Many of the member states made use of the optional weapons description column. Three-quarters of the countries that reported in 1993—although none of the above-mentioned exporters—made use of the column.

The total number of *transfers* reported was lower in 1993. Exporters reported 149 transfers (a single-line entry on the form). This compares to 157 transfers in 1992. Importers reported 86 imports (120 in 1992).

The number of weapon systems (*items*) reported to the UN Register has increased substantially in several of the seven categories, when comparing the results of 1992 and 1993. However, the Group of Experts 'recognized that two years represent limited experience, and may be insufficient for confident conclusions regarding trends'.⁸

⁸ UN (note 3), para. 19. Within the Group of Experts there were differences of opinion about how far the data submitted to the UN should be aggregated and elaborated in their Report. The US representative, emphasizing the political and confidence-building nature of the exercise, argued against aggregation. The Chinese expert stressed that no political conclusion could be drawn without analysing the data.

Table 14D.2. Transfers of weapons (items) in the seven UN Register categories,^a 1992 and 1993

| | Exports | | Imports | |
|--------------------------------|---------|--------|---------|-------|
| | 1993 | 1992 | 1993 | 1992 |
| Battle tanks | 2 493 | 1 719 | 1 522 | 1 091 |
| Armoured combat vehicles | 2 254 | 1 529 | 1 199 | 516 |
| Large-calibre artillery | 342 | 1 538 | 66 | 869 |
| Combat aircraft | 383 | 253 | 333 | 170 |
| Attack helicopters | 116 | 18 | 88 | 17 |
| Warships | 33 | 19 | 42 | 23 |
| Missiles and missile launchers | 3 363 | 67 833 | 2 492 | 8 749 |

^a Data are as of 1 Mar. 1995. Data for exports are as reported by exporters; data for imports are as reported by importers.

Sources: United Nations Register of Conventional Arms: Report of the Secretary-General, UN document A/49/352, 1 Sep. 1994; United Nations Register of Conventional Arms: Report of the Secretary-General, Corrigendum, UN document A/49/352/Corr.1, 8 Nov. 1994; and United Nations Register of Conventional Arms: Report of the Secretary-General, UN document A/49/352/Add.2, 17 Nov. 1994, updated on the basis of the United Nations Centre for Disarmament Affairs databank.

Quality of reporting

As in 1992, the import figures for 1993 were lower than the export figures in most of the seven categories, partly reflecting the lower rate of reporting on the importer side. The data in table 14D.2 are taken directly from UN member state submissions. Numbers reported for exports and imports do not match in any category and, for the case of large-calibre artillery, even the trend is different.

The Register allows for cross-checking, as it asks member states to report both exports and imports. In many cases where both governments submitted a report and where both reported the same transfer, the specific number of items reported was significantly different. The cross-checking mechanism does not explain which number is correct.

In three transfers in the main battle tank category which permit cross-checking, the number of tanks was reported as 1338 by exporters and as 992 by importers in 1993. In five transfers in the missile and missile launcher category, the numbers reported were 1558 by exporters and 202 by importers.⁹

Such data conflict with the goal of increasing transparency and enhancing confidence. The need to improve the quality of reporting is underlined by assessing individual country reports. As in 1992, some governments submitted data which did not correspond to the Register definitions. For example, some of the imports reported by Malaysia are orders of equipment to be delivered in later years, not deliveries in calendar year 1993. Governments also on occasion report procurement through national

⁹ These cases refer to the revised submission by the United States. In the original US submission the discrepancies were even greater.

production on the forms provided for imports. For example, Greece reported the production under licence of the Leonidas armoured combat vehicle.

The 1994 Group of Experts discussed flaws in reporting and the following possible reasons for discrepancies in reporting were mentioned: (a) lack of participation due to (i) national security considerations, (ii) lack of political will, (iii) difficulties in compiling national statistics and (iv) legal obstacles; (b) conflicting interpretations of category definitions; (c) conflicting interpretations of whether or not a transfer has occurred; (d) conflicting interpretations as to when a transfer has occurred; and (e) a poorly defined category (missiles and missile launchers).

The Group of Experts 'expressed the hope that greater familiarity by member states, with reporting to, and operation of, the Register will over time reduce these sources of mismatched data'.¹⁰ Considering the magnitude of the differences in reporting, what is really required to avoid mismatches are clearer definitions of what and how to report. However, as the chairman of the Group pointed out in a recent article, there was no consensus on improved definitions or procedures: 'A lengthy, inconclusive debate arose over a precise definition of the elements constituting an international arms transfer. Some thought the existing description was insufficient and was the reason that differences existed in register reports. Differing legal and administrative practices in various states made a commonly acceptable definition impossible to achieve at this stage'.¹¹

Another approach to reducing discrepancies discussed in the Group of Experts was the concept of consultation among states during the process of submitting data to the UN. In its report the Group noted that some contacts among states had taken place for the purpose of reducing mismatches and data discrepancies. 'The group believed that such contacts, *a posteriori*, could improve the clarity and understanding of reports to the Register'.¹² While they could not agree on whether such contacts should be encouraged, it is clear that this would help.

After the Secretary-General submitted his report containing the reports from member states on 1 September 1994, the United States was approached by several states whose report differed from that submitted by the USA. After consultations the USA submitted a revised report, as indicated below in table 14D.3. The original data submitted by the USA and Turkey did not match in six of the seven categories.

The Netherlands had reported importing four Harpoon missiles from the USA while the original US report showed 477 missiles and missile launchers. The corrected US report now indicates four missiles and missile launchers exported, presumably Harpoons, since the USA gives no details on weapon type or description. Germany also succeeded in having the USA change its report to match the German figures.

The revised data still did not match for all categories, even after consultations, indicating that some discrepancies that arise from the definitions will remain even as states gain more experience in reporting. Although the 1994 Group of Experts knew that the definitions were insufficient, it failed to agree on revisions. The description of what constitutes a transfer remains as it was agreed in 1992. States were encouraged to submit information on their national procedures and practices (and the

¹⁰ UN (note 3), para. 25.

¹¹ Wagenmakers, H., 'The UN Register of Conventional Arms: the debate on the future issues', *Arms Control Today*, Oct. 1994, p. 11.

¹² UN (note 3), para. 44.

Table 14D.3. Return by Turkey and revisions to the US return for exports to Turkey for calendar year 1993

| | Turkish submission for imports | Original US submission for exports to Turkey | Changed US submission for exports to Turkey |
|--------------------------------|--------------------------------|--|---|
| Battle tanks | 454 | 932 | 356 |
| Armoured combat vehicles | 131 | 269 | 61 |
| Large calibre artillery | 3 | 72 | 3 |
| Combat aircraft | 0 | 25 | 25 |
| Attack helicopters | 22 | 22 | 22 |
| Warships | 4 | 1 | 1 |
| Missiles and missile launchers | 10 | 680 | 10 |

Sources: United Nations Register of Conventional Arms: Report of the Secretary-General, UN document A/49/352, 1 Sep. 1994; United Nations Register of Conventional Arms: Report of the Secretary-General, Corrigendum, UN document A/49/352/Corr.1, 8 Nov. 1994.

standard form was amended to encourage this submission) in the hope that such documents could help to clarify discrepancies.

III. Adjustments to existing weapon categories

A number of suggestions have been made both outside and in the Group of Experts for adjustment to existing UN Register weapon categories.¹³ The 1994 Group of Experts considered among others inclusion of tanks with lower velocity guns, lowering the ship tonnage, lowering or removing the missile range and, most importantly, changing or subdividing the missile and missile launcher category.

The 1992 Panel of Experts had decided to limit the level of transparency in the category of missiles and missile launchers, aggregating missiles and missile launchers into one generic category. This was accomplished by not subdividing the category into type of missiles (e.g., surface-to-surface, air-to-surface, etc.), nor requiring that states differentiate missiles and missile launchers. The United Kingdom was particularly insistent in making this category—which could say a lot about the capabilities of the armed forces—not too transparent. Several corrective proposals were considered by the 1994 Group of Experts and some were acceptable to a majority. However, there was no consensus and the conclusion in the report was limited to the observation that the definitions ‘could be reviewed again at a later date’.¹⁴

IV. The addition of new weapon categories

The 1994 Group of Experts also considered the addition of new categories, notably anti-personnel land-mines, ground-to-air missiles and weapons of mass destruction.

Including anti-personnel land-mines as a new category in the Register had been suggested by the UN Under-Secretary General for Humanitarian Affairs. The Group

¹³ For a comprehensive list, see Chalmers, M. and Greene, O., ‘Further development of the Register reporting system’, in Chalmers, Greene, Laurance and Wulf (note 1), pp. 64–82.

¹⁴ UN (note 3), para. 31.

'recognized the terrible suffering, injuries and deaths caused by the misuse of anti-personnel mines, but felt that the Register was not the appropriate mechanism to deal with this problem'.¹⁵

China insisted on the exclusion of ground-to-air missiles from the missile category in the deliberations of the 1992 Panel. China's primary argument was that this category of missile was inherently defensive in nature, and therefore its accumulation by a state, however large, could never be 'excessive and destabilizing'.

In a last-minute compromise—reflecting the desire for a consensus report during the 1992 deliberations—China dropped its insistence that additional categories such as airborne early-warning systems and air refuelling aircraft be included in the Register in exchange for the exclusion of ground-to-air missiles. Other Panel members also had specific requirements for coverage—for example, insisting on a high tonnage threshold for warships.

Ground-to-air missiles were suggested for inclusion again in 1994 and the same arguments for and against adding these weapons were exchanged with the same result. In the end all agreed, mainly in the interest of consistency in these early years of reporting, that there would be no changes.¹⁶

Since the first debate on the establishment of a Register in the UN General Assembly of 1991, Egypt has insisted on the eventual inclusion of weapons of mass destruction and the transfer of high technology with military applications in the Register. According to the Egyptian Government's view there should be no conceptual boundary between conventional weapons and weapons of mass destruction. This proposal has been opposed most strongly by the nuclear weapon powers France, the UK and the USA, and by Israel, the target of the Egyptian approach.

The issue was addressed in the introduction to the report as follows: 'The Group, taking account of certain aspects of the work of the Conference on Disarmament, as well as views expressed by Member States and within the Group, observed that— notwithstanding that the Register deals with conventional weapons—the principle of transparency could also apply in conjunction with other measures to weapons of mass destruction and to transfers of high technology with military applications, as reflected in the provisions of various relevant international legal instruments and as indicated in General Assembly resolution 46/36 L'. It is left to each government to interpret whether or not weapons of mass destruction are to be considered part of the UN Register.

V. Expanding the scope of the Register

Inclusion of military holdings and procurement through national production was envisaged in Resolution 46/36 L of 1991 as a condition for initiating the first phase of the UN Register. A number of developing countries rejected an exclusive transfer register on the basis that non-weapon-producing countries would have to report all their procurements while major weapon producers would have to give away little or no information about their acquisitions or inventories.

During the first two years of the operation of the Register, member states were asked to provide information on their military holdings and procurement through national production on a voluntary basis together with relevant policy statements as

¹⁵ UN (note 3), para. 33.

¹⁶ Wagenmakers (note 11), p. 10

background information. The number of member states submitting information on procurement through national production was 14 for 1992 and 15 for 1993. The number of member states submitting information on military holdings was 22 in both years. Most of the states doing so were states who report such information irrespective of Register procedures. As a result, while important in clarifying the procurement and holdings of these states, little new information was made public.

In the first session of the 1994 Group of Experts, several mutually exclusive options emerged and remained as the focus of debate and negotiation. First, one group of government representatives wanted a full upgrading to the same level of commitment to report as transfers. Accordingly, member states would be requested to submit data on a newly devised set of standardized forms on both military holdings and procurement through national production. Most Western countries, Argentina, Brazil, Egypt and Jordan favoured this approach.

A second group wanted no change to the 1992 and 1993 format, leaving it entirely to individual governments whether and how to report procurement through national production and military holdings. The most outspoken proponents of the no-change position were China, Cuba, India and Israel. Other countries, like Russia and Singapore also leaned in that direction. The arguments put forward against a change of format in 1994 varied. Some felt that more experience with the Register was needed. It was also argued that in some regions the security situation does not allow the government or the armed forces to reveal the capabilities of the armed forces.

A third option proposed was an intermediate step, offering UN member states a new set of standardized forms on which to report data on military holdings and procurement through national production but without changing the status of this information. Japan (which put forward the compromise), Germany, the Netherlands, Pakistan and several others that had originally opted for option one, along with Russia and Singapore, which originally favoured option two, felt that the compromise would be a step forward to keep the momentum of a developing Register. Some proponents of the first option (Canada, France, the UK and the USA) were not prepared to consider the compromise formula since they considered it a step backward. At the last minute the states pushing for no change in reporting procedures agreed to accept option three as long as the report language made clear that reporting would be voluntary and reflect national and regional security concerns.

It is not surprising that countries in different security environments differed on the issue of declaring military holdings. Many countries living in or perceiving a hostile neighbourhood found the openness regarding military holdings practised among, for example, member states in the Organization for Security and Co-operation in Europe (OSCE) premature for international adoption.

Canada, France, the UK and the USA insisted on a commitment to report data on military holdings and procurement through national production, lest the Register develop into a two-tier system where the some states reported all data while the others report only arms transfers. This prevented a compromise which would have further developed the Register at least a small step. After long discussions, the 1994 Group of Experts concluded: 'The Group reaffirmed the goal of early expansion of the Register . . . but at this juncture could achieve no agreement for such inclusion on the same basis as for transfers. The Group had before it several other proposals relating to the expansion of the scope of the Register, none of which commanded complete support'.¹⁷

¹⁷ UN (note 3), para. 35.

The final issue for the 1994 Group was whether or not a further review of the operation of the Register was needed and, if so, when. Given the failure to agree on all substantive issues related to expanding the Register, another review of the Register seemed imperative. However, some insisted that the review should be put off until more experience has been gained with the Register while others argued that the international security situation did not allow any steps beyond an arms transfer Register. Therefore, the Group agreed that further consideration of this issue was required but set no timetable for review.¹⁸

There was a consensus report from the 1994 Group of Experts but no progress in the further development of the Register. However, before the Chairman submitted the report to the Secretary-General, the expert of Egypt reserved his position on the report—rare in the UN—ensuring that the discussion of the report in the First Committee of the General Assembly would be contentious.

VI. Action by the UN General Assembly

In the United Nations General Assembly, the First Committee, made up of all 185 UN member states, serves as the focal point for debate on disarmament matters. The Committee was required to draft and adopt a resolution related to the Register in the light of the report of the 1994 Group of Experts and the Secretary-General's report containing the actual data submitted by states for 1993. In 1992 the General Assembly adopted by consensus (no vote) a resolution on the report of the 1992 Panel of Experts. In 1993 a resolution commenting on the first year of operation and encouraging more states to participate in the Register was again adopted by consensus.

In October 1994 the First Committee faced a different situation, namely, the 1994 Group of Experts charged with further developing the Register had failed to reach a consensus recommendation on one of its mandated tasks: the expansion of the scope of the Register.

In his opening address to the First Committee, UN Secretary-General Boutros Boutros-Ghali asked the member states to 'give the Register the impetus it deserves'. Ambassador Hendrik Wagenmakers of the Netherlands chaired both the 1992 Panel and the 1994 Group of Experts. Although he was assigned to a different post after the report of the 1994 Group was completed, the Netherlands initiated a draft resolution and a search for co-sponsors while states had the opportunity to make a public statement on disarmament matters in the period assigned for general debate. Thirty nine states supported the Register in their statements, 30 states specifically mentioned that the Register should be expanded to include procurement through national production and military holdings.

A brief assessment of these statements reveals how little consensus there was among the 23 members of the 1994 Group of Experts. Of the 30 states supporting expansion of the Register, only 6—Argentina, Canada, Germany, Japan, Jordan and the Netherlands—had been represented in the Group. Russia and Zimbabwe made statements of general support. Three members of the Group—Egypt, India and Israel—made statements arguing against expansion. Nine members of the Group made statements that did not mention the Register while three—France, the United Kingdom and Ghana—did not make any statement.

¹⁸ UN (note 3), para. 35.

The first draft resolution made no mention of expansion, simply welcoming the report, renewing the mandate for the work of the Conference on Disarmament on transparency to continue and setting an early date for a review of the operation of the Register and its further expansion. A group of states led by China did not want a further review of the Register. In the end a group of 71 states co-sponsored a resolution in support of the Register including 40 CSCE countries, New Zealand, Australia and Japan. While 28 developing countries—including Argentina, Brazil, Singapore, Cambodia, Malaysia, Peru, the Republic of Korea and four Central American states—chose to co-sponsor the resolution, many others did not. The list of co-sponsors underlined the split among the 1994 Group of Experts, of whom 13 co-sponsored the resolution while 10 did not.

A vote was taken on the final version of the draft resolution on 18 November. Since a consensus had not emerged it was decided to vote on specific paragraphs at issue before voting on the entire resolution. Paragraph 4b, calling for a new experts group to report on the operation of the Register and its further development in 1997, was adopted by a vote of 144 states in favour, one against (Iran) and 22 abstentions. Abstentions were interpreted as a vote of no confidence in the Register. All 22 abstentions were developing countries including seven 1994 Group members: China, Pakistan, India, Ghana, Jordan, Cuba and Mexico. Egypt did not vote.

Finally, the resolution was voted on as a whole, with the vote 126 for (including China), none against and 17 states (including India and Indonesia) abstaining. Nine of the abstentions were from the Middle East (although Israel voted yes). In its statement explaining its abstention, Egypt underlined that although there had been agreement on expansion in the fall of 1991, the 1994 Group of Experts:

was unable to reach agreement on *any*, and I repeat *any* related aspect of the Register's further development. Though various worthy proposals were presented to enable the Register to emerge as a truly effective confidence building measure they all fell prey to the obstinance to maintain the unchanged status quo. . . . It is abundantly clear that all we are left with is not even a register of conventional arms but merely a register of selective and limited *conventional arms transfers*. . . . The main objective of this whole exercise is simply to consolidate this clearly deficient discriminatory mechanism as what it truly is, merely a register of limited conventional arms transfers. . . . Egypt is neither willing nor able to continue to associate itself with this ineffective mechanism.¹⁹

On 15 December the General Assembly adopted Resolution 49/75C, the identical text voted on in the First Committee. The vote followed the same pattern as the First Committee votes with only one change of substance—Iran now voted for the 1997 review, coinciding with the decision by Iran on 17 December to submit data to the Register for the first time, covering its imports for calendar years 1992 and 1993.

VII. Conclusions

Having reached agreement to review the Register in 1997, it remains to be seen how participation in the Register will be affected by the actions of the Group of Experts and the General Assembly. Despite the breakdown of the consensus behind the Register, the general aim should not be lost sight of. The Register is the only inter-

¹⁹ Statement of the representative of Egypt before United Nations General Assembly, First Committee, 18 Nov. 1994.

governmental instrument that addresses the issue of conventional armaments on a global, non-discriminatory basis. It is still open for modification and improvement and could still, in time, emerge as an instrument able to address over-armament or the destabilizing accumulation of arms. In the words of the Chairman of the 1994 Group of Experts: 'as a confidence building measure, in the family of efforts to enhance global and regional security, the UN Register of Conventional Arms continues to hold great promise as an important element in the evolution of genuine cooperative security arrangements'.²⁰

²⁰ Wagenmakers (note 11), p. 13.

Appendix 14E. South Africa's arms production and exports

RAVINDER PAL SINGH and PIETER D. WEZEMAN

I. Introduction

The momentous changes that swept across South Africa over the past few years culminated in the formation of a government by the African National Congress (ANC) in May 1994.¹ As policy makers have experienced worldwide, coming to power is one thing, but bringing about change in keeping with popular expectations is quite another.

As South Africa implements its affirmative action plans, a need for broad-based and comprehensive input to the national security decision-making processes is perhaps felt more acutely than ever before. This appendix focuses on South African arms procurement, arms industry and arms exports in the face of competing defence priorities, budgetary demands and military manpower integration problems.

II. Defence priorities

Security concerns and threat assessments

The South African Defence Force (SADF: renamed the South African National Defence Force, SANDF, in 1994) acknowledges that external conventional military threats are unlikely to develop over the medium and long term.² The immediate threats to South African security are considered to be:

1. *Threats to domestic security.* Given the history of racial hatred and violence in South Africa, there is sufficient residual suspicion to create prolonged instability in the country. SANDF Chief General George Meiring is sceptical of the possibility of domestic stability being established within a decade. There are elements in the police force that are not reconciled to the new political situation. The morale of the 120 000-strong South African Police Service (SAPS) is reported to be low and loyalties are divided.³ As political violence and criminal violence frequently overlap, law enforcement could fail to combat crime, small arms proliferation and smuggling, despite a police budget that now stands at 85 per cent of the defence budget.⁴ Sporadic violence

¹ See also chapter 3 in this volume.

² Meiring, G., 'Taking the South African Army into the future', *African Defence Review*, Institute for Defence Policy, Pretoria, no. 14 (Jan. 1994), p. 3. Meiring recommended designing a force independent of an identifiable external military threat in the foreseeable future.

³ Meiring (note 2), p. 2; Birch, C., *The New South Africa: Prospects for Security and Stability* (Centre for Defence Studies, King's College: London, May 1994), p. 22. While most of the white police are believed to support right-wing groups, growing numbers of black police—who make up more than 60% of the force—support the militant pro-ANC Police and Prisons Civil Rights Union (POPCRU). See Cawthra, G., 'From a force to a service: the police in the new South Africa', *Jane's Intelligence Review*, Special Report no. 3 (July 1994), pp. 19–21.

⁴ Gann, L. H., 'Beyond apartheid: South Africa's hazy future', *Orbis*, Fall 1994, p. 683. The armed struggle led to the spread of firearms among the black as well as the white population. Local political figures have turned to private crime and many became 'shack lords' with private urban fiefdoms. In South Africa an AK-47 assault rifle sells for around 1000 Rand (Gann, p. 684). The strength of the

emanating from the contest for political power between the ANC and Inkatha Freedom Party (IFP) is among the major domestic security concerns in Natal.

2. *Non-military threats to security.* Southern Africa as a region (Angola, Mozambique, South Africa, Zambia, Zimbabwe) is beset by a variety of critical problems with no immediate solutions. It faces chronic underdevelopment, poverty, unemployment, illiteracy, poorly developed skills, malnutrition and inadequate social services.⁵ Income disparity could lead to violence—a World Bank report estimated that the per capita incomes of whites in South Africa are 9.5 times higher than those of blacks and 4.5 times those of people classed as coloureds by the apartheid system.⁶ In addition, the region is wracked by the Acquired Immune Deficiency Syndrome (AIDS) pandemic, rampant disease, large-scale influx of refugees, arms trafficking and environmental degradation. Southern African countries risk long-term internal instability but no country is threatened by external aggression. Regional and national stability is undermined by internal political and tribal conflict. All of these would severely strain the security apparatus of the states.⁷

3. *Regional security.* Over the past four years the political environment in Southern Africa has improved substantially. South Africa has no border conflicts nor any apparent military threats from its neighbours, but the SANDF believes it should retain an overwhelming military capability and an offensive defence posture. Military and industrial procurement or production plans are based on acquiring equipment that enables offensive pre-emptive steps.⁸

In terms of combat potential and size the SANDF is far better off than the armed forces of its neighbours. It also enjoys high standards of morale, discipline and training.⁹ Table 14E.1 shows deployments of major weapon systems in the major armed forces in Southern Africa. That South Africa manufactures most of its own military equipment gives it a significant advantage in terms of serviceability and 'restorability'.¹⁰ The SANDF's numerical and technological superiority is enhanced by the quality of its equipment—optimized for operations in the region.

Perhaps retaining large numbers of offensive weapon systems would deter threats, but in turn such capabilities would make South Africa's neighbours apprehensive.

SAPS, 120 000, is still considered inadequate for a heterogeneous population of 45 million people. Baynham, S., 'Regional security in the Third World with specific reference to South Africa', *Strategic Review for Southern Africa*, vol. 16, no. 1 (Mar. 1994), p. 192; and Cawthra (note 3), p. 21. The police budget for 1994-95 is 8.5 billion Rand as compared to the defence budget of 10 billion Rand.

⁵ 'Regional security- and confidence-building processes: the case of Southern Africa in the 1990's', UNIDIR Research Paper No. 16 (United Nations: New York, 1993), p. 5; and 'Fifty per cent of the South African work force is estimated to be unemployed and the population is expected to double in 50 years', *Jane's Intelligence Review*, Special Report No 3 (July 1994), p. 9. Nelson Mandela's assessment of unemployment is over 40% while 'these problems are compounded by the fact that inequalities remain entrenched along racial lines'. Mandela, M., 'South Africa's future foreign policy', *Foreign Affairs*, vol. 72, no. 5 (Nov.-Dec. 1993), p. 93.

⁶ Mandela (note 5), p. 93.

⁷ Nathan, L., 'Towards a post-apartheid threat analysis', Paper presented at the workshop on Arms Conversion and the Arms Trade in a Democratic South Africa, Military Research Group, Johannesburg, June 1993, pp. 54-55.

⁸ Kruijs, G. P. H., 'The defence posture of SADF in the nineties: some geostrategic determining factors', *ISSUP Bulletin*, no. 4 (Institute for Strategic Studies: University of Pretoria, 1992), pp. 1-4.

⁹ Nathan (note 7), p. 60.

¹⁰ Equipment restorability is an indication of the technical capability of a military organization to repair and redeploy a weapon system within a time-frame to influence the military operation in which the equipment was damaged.

Table 14E.1. Major weapon systems deployed in Southern Africa

| | Angola | Mozambique | S. Africa | Zambia | Zimbabwe |
|-----------------------------|--------|------------|-----------|--------|----------|
| Main battle tanks | 210 | 80 | 250 | 60 | 40 |
| Infantry fighting vehicles | 50 | 40 | 1 500 | — | — |
| Armoured personnel carriers | 100 | 250 | 1 660 | 13 | 123 |
| Reconnaissance vehicles | 40 | 30 | 1 700 | 88 | 90 |
| Artillery (all types) | 350 | 348 | 550 | 146 | 68 |
| Combat aircraft | 79 | 43 | 244 | 60 | 46 |
| Helicopters | 40 | 9 | 136 | 21 | 36 |

Source: International Institute for Strategic Studies, *The Military Balance 1994–1995* (Brassey's: London, 1995).

Not surprisingly, neighbouring states have been reluctant to undertake large-scale unilateral demobilization as long as the SANDF retains its present force levels.¹¹

As peace and security issues were among the seven areas of cooperation of the Southern African Development Community (SADC), formed in 1992,¹² South Africa's accession in 1994 brought it effectively into a joint security arrangement. A SADC workshop attended by ministers for foreign affairs, defence, security and policing formulated proposals on a wide range of security issues and confidence- and security-building measures (CSBMs). The SADC proposals included: (a) a bill of rights setting out human rights standards; (b) a protocol on peace, security and conflict resolution; (c) establishment of a security sector under SADC, responsibility for which would be allocated to a member state (South Africa was suggested); (d) establishment of a ministerial security and defence forum and a conflict resolution forum for preventive diplomacy; and (e) a non-aggression pact and possibly a mutual defence pact. Although at the workshop Deputy President Thabo Mbeki of South Africa called for his country to demonstrate that it was non-threatening, reaction from South Africa's defence establishment has been muted.¹³

South African defence organizations

The new SANDF comprises the South African Army, the South African Air Force (SAAF), which is the second oldest air force in the world, the South African Navy (SAN) and the South African Medical Services. The basic structure of the SANDF will remain that of the erstwhile SADF but for the formation of a new civilian defence department. Since 1967, the South African Defence Ministry had consisted of a minister and few assistants. Most ministry of defence work, including defence policy formulation, budgeting, promotions of senior officers and other functions that contribute to civilian oversight of the military, was carried out by uniformed officers in the South African military Defence Headquarters. The military have not been used to civilian control nor are there many civilians trained in or used to exercising it. The

¹¹ Nathan (note 7), p. 57; and comments of President Chissano at the Kampala Forum Conference on Security, Stability, Development and Co-operation in Southern Africa, 1991, pp. 6–7.

¹² Members of the SADC are Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, South Africa, Tanzania, Zambia and Zimbabwe.

¹³ Communication of Gavin Cawthra, 18 Apr. 1995; and Report of Officials, Workshop on Democracy, Peace and Security, Windhoek, 11–16 July 1994.

new ministry includes SANDF Headquarters, and a civilian Defence Secretary working at the same level started work in February 1995.¹⁴

The military has played a leading role in national intelligence functions which were outside any effective political control. Although the National Intelligence Service is expected to coordinate strategic intelligence, it does not have the resources to control the SAP or the SANDF or to conduct operations on its own.¹⁵ To redress a situation that is not healthy for military professionalism or decision making in a democratic state, at the end of the 1994 parliamentary session three bills were passed to consolidate the intelligence structure, subjecting the intelligence services to parliamentary oversight and the rule of law, and making them accountable to the elected government. The 1994 Intelligence Services Bill provided for the amalgamation of existing civilian intelligence services (including the ANC, Transkei, Venda and Bophuthatswana intelligence services) and their subsequent sub-division into two national organizations: the National Intelligence Agency (NIA) for domestic intelligence and the South African Secret Service (SASS) for external intelligence.

The 1994 National Strategic Intelligence Bill defined the functions of the NIA and SASS and established a National Intelligence Co-ordinating Committee under the chairmanship of an intelligence coordinator to be appointed by the President. Its definition of military intelligence indicated a compromise with the earlier ANC position on the role of military intelligence. In addition to strategic military intelligence, the SANDF was made responsible for domestic military intelligence and counter-intelligence within the SANDF. It was, however, prohibited from gathering non-military intelligence, except when employed in support of the police to maintain law and order. As a further check, the President would appoint an Inspector-General for each of the intelligence services who would have access to any intelligence, information and premises under the control of the service.¹⁶

The organization of the South African Army is unlikely to change drastically. With conscription ended the force will consist of both full-time and part-time volunteers. The standing force will remain small, with one mechanized and two parachutist brigades serving primarily as a contingency force. It will be backed up by three mobilizable mechanized divisions, and in addition there will be a territorial force organized into regional commands for each of the nine provinces.

By the end of 1995, the SAAF is expected to be operating around 400 aircraft. Its forces will include two supersonic squadrons with Cheetah and Mirage F-1AZ fighters; a subsonic Impala fighter squadron; a Cessna light reconnaissance squadron; and four squadrons with Oryx 7 and Alouette III helicopters. There will also be three transport squadrons, one VIP squadron and a tanker/electronic warfare squadron.

The South African Navy currently comprises a submarine flotilla with three Daphne Class submarines; a surface-strike flotilla with nine Minister Class 450-tonne missile craft; and a Mine Counter Measure flotilla with four River Class mine hunters and four Ton Class minesweepers.¹⁷ The Navy performs coastguard functions, fish-

¹⁴'Secretariat opens', *Jane's Defence Weekly*, 21 Jan. 1995, p. 3.

¹⁵ For a description of South African military organizations, see Birch, C., 'The new South Africa: prospects for security and stability', Centre for Defence Studies, King's College, London, May 1994, pp. 24-25; Heitman, H-R., 'Reshaping South Africa's defence policy', *Jane's Intelligence Review*, Special Report no. 3 (July 1994), p. 11; and Heitman, H-R., 'Post-embargo SAAF rebuilds', *Jane's Defence Weekly*, 18 Feb 1995, p. 49.

¹⁶ Communication of Gavin Cawthra, 18 Apr. 1995; Intelligence Services Bill, 1994; National Strategic Intelligence Bill, 1994; Inspector-General of Intelligence Bill, 1994.

¹⁷ Heitman (note 15), p. 18.

eries protection, search and rescue, and so on, along the 2800-km coast of South Africa and throughout the large exclusive economic zone.

Defence priorities and challenges

The twin challenges facing defence policy makers in South Africa are the integration of guerrilla forces and the homeland armies into a revamped SANDF and managing the competing budgetary demands of the defence and national socio-economic priorities. While delays in managing the integration problems could have immediate detrimental effects, cut-backs could also have lasting effects on the arms industry.

Integration of forces into the SANDF

ANC policy guidelines call for the formation of a new all-volunteer defence force committed to affirmative action and involved only in external operations.¹⁸ Integration of forces is hindered by the different languages, various racial or ethnic loyalties and diverse standards of professionalism and technical skills, compounded by the variety of independent military forces currently operating in South Africa. It is perhaps the only country that is integrating eight separate armies;¹⁹ in addition to the former SADF, the following elements will be integrated:

1. *TBVC homeland armies*. The core of the four homeland armies of the Transkei, Bophuthatswana, Venda and Ciskei states consists of motorized infantry battalions.

2. *Umkhonto we Sizwe (MK) or Spear of the Nation*. Estimates of the ANC's armed wing vary from 10 000–12 000 to 21 000–25 000.²⁰ Trained in guerrilla operations, these units are reported to possess small arms. Integration of MK units is likely to be the most problematic in terms of discipline and morale.²¹

3. *Azanian and Inkatha military elements*. Armed personnel from the Azanian People's Liberation Army and the Inkatha have had strong links and loyalties with the Pan-Africanist Congress and the Zulu-based Inkatha Freedom Party, respectively.

Heterogeneous forces are to be amalgamated into the SANDF in a three-stage process, at an estimated cost of 2036 million Rand. The first step will see the integration and absorption of the MK and homeland armies, swelling the SANDF numbers to about 120 000; the second will involve retraining and demobilization over the next three years, reducing the strength to 91 000;²² and the third will stabilize the SANDF strength at a level appropriate to South Africa's long-term security requirements.

¹⁸ Mills, G., 'Armed forces in post-apartheid South Africa', *Survival*, vol. 35, no. 3 (autumn 1993), p. 84.

¹⁹ Mills (note 18), p. 79. According to Gavin Cawthra (communication of 13 Mar. 1995), the IFP does not have any formal military structure and their military elements are not being integrated.

²⁰ Mills (note 18), p. 82; and *Financial Times*, 8 Nov. 1994, p. 7.

²¹ On two occasions thousands of MK members went absent without leave from an army base north of Pretoria. Nelson Mandela was forced to intervene personally to prevent the problem spreading. *Newsweek*, 14 Nov. 1994, p. 17.

²² In the short term demobilization costs for retraining and retrenchment packages are estimated at 1200 million Rand. Budgetary savings through demobilization will not be realized until FY 1998/99. Willett, S. and Batchelor, P., unpublished report, Military Research Group, Braamfontein, South Africa, p. 5; and *Financial Mail* (Johannesburg), 1 July 1994, p. 41.

Arms procurement plans

Procurement programmes for the Army include the Mamba light armoured personnel carrier; the Rooikat armoured car; and the 127-mm Bataleur multiple-rocket launcher and Zumlac self-propelled anti-aircraft gun which are in production. The SANDF production programme for the G-6 self-propelled gun has been stopped.²³ The priorities given by the Army to air defence are indicated by the continued development of the self-propelled twin 35-mm anti-aircraft gun system and a 12-km range surface-to-air missile system.²⁴

A SAAF programme to upgrade 38 Cheetah fighters is in its last stages.²⁵ Four Rooivalk combat helicopters were ordered for evaluation, while further orders to meet a requirement for 16 will depend on availability of funds.²⁶ Programmes are under way to develop short- and medium-range air-to-air missiles.²⁷ Deliveries of 60 Swiss Pilatus PC-7 basic trainers, chosen over the indigenous ACE (or Ovid) design, commenced in 1994. A major priority is the procurement of jet trainers, for which tenders from foreign suppliers will be invited in early 1996.²⁸

The South African Navy will purchase four corvette hulls abroad which will be fitted with a combat system in South Africa with first commissioning expected by 1999.²⁹ The medium-term acquisition plans indicate de-commissioning the nine Minister Class craft and acquiring six 800- to 1200-tonne strike craft by 2003 and four submarines by 2005.³⁰

Lifting the arms embargoes led to a larger import element in procurement plans, especially for aircraft and ships. It also made it possible to buy spares at more normal prices than on the clandestine market and thus keep in service equipment which had been or was soon going to be retired.³¹

Experience in normal procurement is still limited as illustrated by a row about the procurement procedure for the four corvettes in which several of the bidders were told to be out of the competition without being given a chance to negotiate properly.³²

Effects of the defence budget on defence procurement and industry

Reductions in the South African defence budget are not new. From 1989 to 1993 defence budgets fell by 44 per cent, the defence share of the state budget fell from 15.7 per cent to 8.2 per cent and its share of GDP decreased from 4.3 per cent to 2.6 per cent.³³ In the Special Defence Account for 1994, the Air Force procurement budget is reported as the highest among the three services at two-thirds of the total procurement budget.³⁴

²³ *Defence Budget and its Implications*, South African National Defence Force, June 1994, p. 2.

²⁴ Heitman (note 15), p. 15.

²⁵ 'SAAF poised to rule on multi-role Cheetahs', *Jane's Defence Weekly*, 10 Dec. 1994, p. 6.

²⁶ 'South Africa set for 16 Rooivalks', *Jane's Defence Weekly*, 5 Mar. 1994, p. 18.

²⁷ 'SAAF procurement plans get public airing', *Jane's Defence Weekly*, 19 Nov. 1994, p. 5.

²⁸ 'African nations talk on collective security', *Jane's Defence Weekly*, 3 Dec. 1994, p. 3.

²⁹ 'SA narrows corvette shortlist', *Jane's Defence Weekly*, 14 Jan. 1995, p. 12.

³⁰ *International Defence Review*, Aug. 1994, p. 36.

³¹ Heitman, H. R., 'Post-embargo SAAF rebuilds', *Jane's Defence Weekly*, 18 Feb. 1995, p. 49.

³² 'South African corvette deal causes international row', *NAVINT*, 29 Jan. 1995, p. 8.

³³ *Defence Budget and its Implications* (note 23), p. 2.

³⁴ Willett and Batchelor (note 22), p. 7. Special Defence Account covers acquisition of equipment and munitions, with 70% going to capital costs and 30% to ammunition, spares and other consumables. The defence procurement budget is divided as follows (in million Rand): Army, 595; Navy 183; Air Force 1600; communications and electronic warfare 18; the project total is 2356. See also *Jane's Defence Weekly*, 9 July 1994, p. 12.

The June 1994 SANDF report on the Defence Budget and its Implications first recommends that to maintain combat advantage over a potential enemy the SANDF needs to improve its combat abilities continuously by investing in research and development (R&D), operational research and force multipliers such as electronic warfare capabilities; second, it estimates the lead time for the acquisition and operational readiness of conventional weapon systems at 10–15 years, while that for significant changes in the regional political scenario is considerably shorter than the time required to detect and react to them from a 'cold start'.³⁵

The national debate on the future role of the arms industry and arms exports

Given the priorities of the new South African Government and the demands on the national budget, a new debate has opened on the future of the arms industry and exports.³⁶ In mid-1995 the government plans to publish a White Paper on defence policy, including the policy on arms industry and exports, which should be discussed in parliament during 1996.³⁷ Both President Mandela and Minister of Defence Joe Modise have stated their support for a responsible arms industry and exports under strict regulations.³⁸ However, within the ANC many are opposed to the arms industry and there is not yet a national consensus.

III. South Africa's arms industry and arms exports

On 25 May 1994, shortly after the democratic elections in South Africa, the UN Security Council lifted all the arms embargoes.³⁹ Until then arms imports, exports, weapon development and production by South Africa, including clandestine involvement of foreign companies, had been characterized by the secrecy needed for circumventing the UN embargoes.⁴⁰ Lifting the embargoes has made South Africa an accessible arms market and its arms industry can now trade openly on the international market.

³⁵ *Defence Budget and its Implications* (note 23), p. 3.

³⁶ See, e.g., Batchelor, P. and Willett, S., 'To trade or not to trade? The costs and benefits of South Africa's arms trade', Military Research Group Working Paper Series, Paper IX, undated; *The Armaments Industry Debate—A Cost Benefit Approach*, discussion document of the ANC department of economic planning, 29 June 1994. Paper issued by the Department of Economic Planning, Marshall town; *Draft National Policy for the Defence Industry*, Defence Industry Working Group, Transitional Executive Council, Sub-council on Defence, Pretoria, 18 Apr. 1994; Cilliers, J. K., 'To sell or die: the future of the South African defence industry', *ISSUP Bulletin*, no. 1 (1994); and *South African Defence Review*, no. 7 (1992).

³⁷ 'S. Africa nears record exports', *Defense News*, 28 Nov.–4 Dec. 1994, p. 4.

³⁸ Note 37, p. 4. Modise is interviewed in 'We need to be properly defended', *International Defense Review*, Aug. 1994, pp. 39–40; and *Salvo* (Armcor's corporate journal), Feb. 1994, pp. 1–3. Arguments for retaining a domestic industry are summarized in Navias, M., 'Towards a new South African arms trade policy', *South African Defence Review*, no. 13 (Nov. 1993), pp. 40–41.

³⁹ A 1963 voluntary UN embargo on military exports to South Africa was replaced by a mandatory embargo in 1977. UN Security Council Resolution 418, UN document S/RES/418, 4 Nov. 1977; and UN Resolution 421, UN document S/RES/421, 11 Dec. 1977. In 1984 a voluntary embargo was imposed on imports of military equipment from South Africa. UN Resolution 558, UN document S/RES/558, 13 Dec. 1984. The embargoes were lifted by UN Resolution 919, UN document S/RES/919, 25 May 1994.

⁴⁰ Descriptions of these activities can be found in Landgren, S., SIPRI, *Embargo Disimplemented: South Africa's Military Industry* (Oxford University Press: Oxford, 1989); Brzoska, M., 'Arming South Africa in the shadow of the UN arms embargo', *Defense Analysis*, vol. 7, no. 1 (1991), pp. 22–38; and McWilliams, J. P., *Armcor, South Africa's Arms Merchant* (Brassey's: London, 1989).

The structure of the South African arms industry

As clandestine weapon acquisitions were insufficient to equip armed forces fighting internal and external conflicts it was necessary to expand the indigenous arms industry. Primarily motivated by the embargo, South Africa built up a substantial arms production base over the past 30 years with both state-owned and private companies. Arms acquisition and to a large extent production and development were under government supervision through Armscor (the Armament Corporation of South Africa Limited).⁴¹

In 1992 Armscor was split into two separate organizations: Armscor retained responsibility for arms acquisition under the Ministry of Defence and Denel became responsible for arms production under the Ministry for Public Enterprises. According to Armscor this reorganization was to give its industrial branch—faced with declining sales—the flexibility to diversify and undertake civil production.⁴² It employed about 1000 persons in 1994. In addition to its task of acquiring armaments for the SANDF, it is responsible for marketing and promoting arms sales as well as granting export permits for controlled goods.⁴³ After the reorganization Armscor became more open and transparent and published its first annual report in 1993.

Denel, composed of the production branch of the old Armscor, operates in a manner similar to companies in the private sector.⁴⁴ It has approximately 14 000 employees and produces a broad range of arms and military equipment. With 1993 arms sales of approximately \$640 million it appears in the SIPRI list of the 100 largest arms-producing companies in the OECD and developing world, ranking 59th.⁴⁵

There are several other major arms-producing companies in South Africa and many smaller sub-contractors. Total employment in the industrial base as a consequence of defence spending was estimated to be of the order of 70 000 in early 1994—a sharp decline from an estimated figure of 160 000 in 1989.⁴⁶

As shown in table 14E.2 most of the emphasis is on land systems and aerospace; the naval sector is minor with no military ships built since 1987.⁴⁷ The South African industry produces a wide range of military products as shown in table 14E.3, which summarizes some systems currently in production. Although relatively simple products are often said to be a strength of the arms industry, many of the weapons listed in table 14E.3 are relatively advanced. South Africa had developed six nuclear devices (all of which had been dismantled by 1991) and has tested ballistic missile technology.⁴⁸ Development of a military satellite has been abandoned.⁴⁹

⁴¹ Armscor was formed in 1977 as a merger between the Armaments Board (established in 1964 as the Munitions Production Board) and the Armaments Development and Production Board (established 1968). *Draft National Policy for the Defence Industry* (note 36), p. 32.

⁴² *Armscor Annual Report 1992–93*, 18 May 1993, p. 2.

⁴³ *Armscor Annual Report 1993–94*, 24 May 1994, p. 17.

⁴⁴ *Draft National Policy for the Defence Industry* (note 36), p. 25.

⁴⁵ See appendix 13A in this volume.

⁴⁶ *Draft National Policy for the Defence Industry* (note 36), p. 40; and Denel Annual Report 1993/94, Hennopsmeer (South Africa), 24 May 1994.

⁴⁷ *Jane's Fighting Ships 1994–95* (Jane's Information Group: Coulsdon, 1994).

⁴⁸ Buys, A., 'The conversion of South Africa's nuclear weapons facilities', *CDS Bulletin of Arms Control*, no. 12 (Nov. 1993), pp. 9–13; and 'Armscor missile', *Jane's Defence Weekly*, 8 Dec. 1990, p. 1131.

⁴⁹ 'Südafrikas Satelliten am Ende', *Handelsblatt*, 28–29 Oct. 1994, p. 19.

Table 14E.2. The five major defence industrial groups in South Africa, 1994

| Holding company | Subsidiary company engaged in arms production | Activity |
|--|---|---|
| Denel | Denel | R&D facilities, test ranges |
| | Atlas | Aircraft |
| | Eloptro | Optronics |
| | Kentron | Anti-aircraft systems, missiles, RPVs, avionics |
| | Liw | Artillery, turrets, infantry weapons |
| | Mechem | Mine-protected vehicles, special equipment |
| | Naschem | Ammunition |
| | PMP | .. |
| | Somchem | .. |
| Grinaker Electronics (Grinaker Technologies) | Grinel | Tactical communications |
| | Grinaker Avitronics | Airborne electronic countermeasures, avionics computers |
| | Grinaker Electronic Systems | Communication systems |
| | Grinaker Systems Technologies | Communications intelligence systems |
| Altech Systems | ISIS Information Systems | Command systems |
| | Teklogic | Artillery target acquisition, tactical computers |
| | Synertech | Naval and aircraft simulators |
| | UEC Projects | Anti-aircraft systems and simulators |
| Reunert Mechanical Systems (Reumech) | Ermetek | Naval command systems, armoured-vehicle simulators |
| | OMC | Combat-vehicle design |
| | Sandock | Tanks, heavy armoured vehicles |
| | Gear Ratio Engineering | Light armoured vehicles |
| Reunert Technology Systems (Reutech) | Aserma | .. |
| | Barcom Electronics | Bombs, fuses, retarders |
| | ESD | Radios, mine detectors |
| | Fuchs Electronics | Avionics, IFF |
| | Reutech Radar Systems | Artillery fuses |
| | | Air-defence radars |

Source: *International Defence Review*, Aug. 1994, p. 39.

Although it is often unclear how far South African weapons depend on foreign inputs, there is evidence of the industry's capacities for designing and developing relatively advanced equipment. Some foreign designs have been upgraded to the extent that they are virtually new weapons. South African weapon technology seems to be comparable in some areas with systems being produced in Europe.

Technical services of different kinds are also seen as a viable source of foreign sales. Armscor has also offered its expertise in the efficient management of arms procurement to some neighbouring countries.⁵⁰

International collaboration

The South African arms industry is now openly pursuing cooperation with foreign partners. This includes two-way transfer of technology to improve South African and foreign systems as well as co-development of new systems. See table 14E.4 for a list of contracts between South African and foreign producers.

⁵⁰ 'S. Africa nears record exports', *Defense News*, 28 Nov.-4 Dec. 1994, p. 36.

Table 14E.3. A summary of current South African military products, 1994

| Product | Comments |
|--------------------|--|
| Armoured vehicles | <p>Olifant Mk-1B: completely rebuilt and modernized Centurion main battle tank, in production</p> <p>TTD Tank Technology Demonstrator: main battle tank with 105-mm gun, advanced 120-mm and 140-mm guns under development, demonstration model only</p> <p>Rooikat: heavy armoured 8-wheeled reconnaissance vehicle with 76-mm gun, in production; tank-destroyer (with 105-mm gun) and anti-aircraft (with ZA-35 twin 35-mm gun turret, also for mounting on other vehicles) versions under development</p> <p>Mamba: light 4-wheeled armoured personnel carrier, special emphasis on mine-protection, also in Sabre scout car version, in production and exported</p> <p>MC-90: light armoured 4-wheeled reconnaissance vehicle with 90-mm gun, under development</p> <p>Zumlac: armoured truck with 23-mm anti-aircraft gun, in production</p> |
| Artillery | <p>G-5: 155-mm towed gun, derived from foreign design, in production, exported</p> <p>G-6: Wheeled armoured vehicle with G-5 gun in turret, in production, exported</p> <p>T-6: G-5 in turret for mounting on tank chassis, under development</p> <p>Valkiri Mk II (Bataleur): 40-round multiple artillery rocket system on armoured truck, in production</p> <p>RO 107-mm: towed 107-mm 12-round rocket launcher, in production</p> <p>eGlas-35: 35-mm anti-aircraft gun, towed and naval versions, under development</p> |
| Aircraft | <p>CSH-2 Rooivalk: two-seat combat helicopter, based on French SA-330 Puma components, under development</p> <p>ACE: two-seat turboprop trainer, marketed for export</p> <p>Seeker: Remote Piloted Vehicle (RPV) for reconnaissance, in production</p> <p>Cheetah C: rebuilt and modernized French Mirage III fighter, in production with Israeli cooperation</p> |
| Missiles | <p>V-3B Kukri: 4-km range air-to-air missile with helmet-mounted sight in production, 10-km range version V-3C Darter under development</p> <p>SAHV-3: 12-km range surface-to-air missile integrated with French Crotale fire-control system; ZA-HVM and SAHV-IR are high velocity and infrared guided versions, respectively, under development</p> <p>ZT-3/ZT-35: 5-km range laser-guided anti-tank missile, in production; 8-km range ZT-4 under development</p> |
| Electronic systems | <p>AS-2000 C2: artillery fire-control system, including TV acquisition and laser range finder, mounted on armoured vehicles and linked with RPV, under development</p> <p>EDR-110: 12-km range surveillance and target designation radar, in production</p> <p>ESR220: 80-km range local warning radar, in production</p> |
| Other | <p>Range of small arms (rifles, pistols); ammunition; land- and sea-mines; aircraft bombs, cannon, rocket pods; torpedoes; advanced frequency-hopping radios and other communications equipment; upgrades for aircraft, armoured vehicles, SAM-systems, naval systems; mine-clearing vehicles and equipment (naval systems including electronic warfare, sonar, command and control software)</p> |

Sources: Heitmann, H-R., 'South Africa's arsenal', *Military Technology*, Nov. 1994, pp. 10-32; *Jane's Radar and Electronic Warfare Systems 1994-95*; *Jane's All the World Aircraft 1994-95*; *Jane's Armour and Artillery 1994-95* (all Jane's Information Group: Coulsdon, 1994); and 'Mechem develops armoured car', *Jane's Defence Weekly*, 10 Dec. 1994, p. 11.

Table 14E.4. Some contracts between South African and foreign producers, 1994

| South African partner | Foreign partner | Country | Project |
|-----------------------|--------------------|-------------|--|
| Aerosud | Marvol Group | Russia | Russian SMR95 engines for South African Mirage F-1 and Cheetah fighters, prototypes flying |
| Atlas | (IAI/Elta) | Israel | Aircraft upgrade for the Cheetah fighter aircraft, in production |
| Denel | Sextant Avionique | France | New avionics suite for the Rooivalk |
| Kentron | Oerlikon-Contraves | Switzerland | SAHV-IR missile integrated with Skyguard 35-mm gun, under development |
| LIW | GEC-Marconi | UK | Marksman AA-turret on G-6 chassis, under development |
| | GEC-Marconi | | Nemesis, the eGlas 35-mm gun with Apache fire control radar, under devt. |
| LIW/Kentron | Bumar Labedy | Poland | T-72 tank with South African fire-control system, under development |
| Reumech (Sandock) | Alvis Vehicles Ltd | UK | Production and marketing by Alvis of Mamba armoured cars |

Sources: *Jane's Defence Weekly*, 17 Sep. 1994, p. 15; *Signal*, Nov. 1994, p. 7; *Jane's Defence Weekly*, 15 Oct. 1994, p. 14; *Defense News*, 3 Oct. 1994, p. 16; de Villiers, K., 'The South African crossing of the Iron Curtain', *Military Technology*, Nov. 1994; 'South Africa confirms Israeli connections', *Jane's Defence Weekly*, 30 July 1994, p. 8; and 'SA air defence missile launcher on show', *Jane's Defence Weekly*, 3 Dec. 1994, p. 11.

Arms exports

Despite the voluntary UN embargo on arms imports from South Africa, Armscor has marketed military products since the early 1980s.⁵¹ Recently official figures were published on South African exports of defence equipment for the first time. In 1993 arms exports accounted for around 1 per cent of total South African exports,⁵² and in 1994 it was estimated that 15 000 jobs depended on arms exports.⁵³

Recent transfers of major conventional weapons include an estimated 200 G-5 guns sold to Iraq in the late 1980s; 12 G-5s sold to Qatar around 1991, and 78 G-6 self-propelled guns sold to the United Arab Emirates in 1990. Recent orders include an estimated 20–25 G-6s for Oman and reportedly for refurbished ex-SANDF Eland armoured cars, probably from Congo.⁵⁴

Although Armscor has become more open and transparent some recent arms deals led to continuing suspicion about its practices and its functioning as arms export regulator. A commission of inquiry (widely known in South Africa as the Cameron Commission) was set up in October 1994 to investigate all Armscor transactions after 1991; it may also propose revisions to South Africa's arms export policy.⁵⁵

⁵¹ Armscor has openly advertised in, e.g., *Jane's* military publications and as early as 1982 had participated in the Defendory international defence exhibition in Greece. Landgren (note 40), p. 175

⁵² Total export of the Southern African Customs Union (including South Africa, Namibia and Botswana) in 1993 was 79.2 billion Rand; *Europa Yearbook 1994* (Europa: London, 1994), p. 2688.

⁵³ *Draft National Policy for the Defence Industry* (note 36), p. 10.

⁵⁴ *Military Technology*, Sep. 1994, p. 91; and 'Reumech secures first order for Eland MK 7 DT', *Jane's Defence Weekly*, 10 Dec. 1994, p. 10.

⁵⁵ In 1994 a Lebanese arms merchant arranged a deal for Armscor for a shipment of weapons for the Lebanese Government. However, the documents presented to Armscor were forged and the weapons

Table 14E.5. Value of South African exports of military equipment, 1982–93

| | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Current Rand (m.) | 22 | 27 | 48 | 282 | 331 | 454 | 269 | 205 | 163 | 752 | 463 | 798 |
| Rand (m.) constant 1993 | 94 | 103 | 164 | 828 | 820 | 968 | 508 | 332 | 235 | 940 | 508 | 798 |
| Current US\$ (m.) | 20 | 24 | 32 | 126 | 144 | 223 | 118 | 78 | 62 | 272 | 162 | 244 |

Source: Appendix to the *Draft National Policy for the Defence Industry*, Defence Industry Working Group, Transitional Executive Council, Sub-council on Defence, Pretoria, 18 Apr. 1994. Constant Rand are calculated with consumer price indices from *International Financial Statistics Yearbook 1994* (International Monetary Fund: Washington, DC, 1994).

Table 14E.6. South African military equipment exports by recipient region, 1992–93

Figures in italics are percentages of annual value.

| Region | 1992 | 1993 |
|---------------------|------|------|
| Middle East | 11 | 61 |
| Asia | 33 | 16 |
| Far East | 25 | 7 |
| Africa | 18 | 5 |
| South America | 8 | 6 |
| North America | 0 | 2 |
| Europe | 5 | 3 |
| Number of countries | 35 | 52 |

Source: *Draft National Policy for the Defence Industry*, Defence Industry Working Group, Transitional Executive Council, Sub-council on Defence, Pretoria, 18 Apr. 1994, p. 41.

Armcor does not disclose individual contracts but more than 50 countries bought South African weapons in 1993. The Foreign and Defence Ministries asked the Cameron Commission to discuss a list classifying countries for the purpose of export licensing in closed session to avoid 'serious implications on the current Government's bilateral and trade relations.'⁵⁶

Marketing assumptions on future arms exports

South Africa's first international defence exhibition in 1992 and the opening of several Armcor offices abroad illustrate the stepping up of South African international arms marketing efforts.⁵⁷

were intercepted and detained in Yemen. The real destination was unknown, but allegedly they were intended for the National Union for the Total Independence of Angola (UNITA). In May 1994 Armcor admitted that it had sold small arms worth 100 million Rand to the Rwandan Government in the 5 years to 1993, but suspended further sales in Sep. 1993. Particularly the first deal led to the installation of the Cameron Commission. 'Irrfahrt eines Schiff mit Waffen' [Ship with weapons going astray], *Frankfurter Allgemeine Zeitung*, 6 Oct. 1994, p. 6; 'Uitvoer van SA krygstuig nie op Afrika Toegespits' [Exports of SA arms not focused on Africa], *Beeld*, 5 May 1994, p. 2; and *Terms of Reference of the President of the Republic of South Africa to the Commission of inquiry into the alleged arms transactions between Armcor and one Eli Wazan and other related matters*, Office of the President, Pretoria, 12 Oct. 1994.

⁵⁶ 'Armcor a monster, says aide to Tutu', *The Star*, 23 Nov. 1994.

⁵⁷ *Jane's Defence Weekly*, 24 Sep. 1994, p. 4; 'Armcor opens Abu Dhabi office' *Jane's Defence Weekly*, 11 Dec. 1993, p. 15; and 'South African business, back in the arms bazaar', *Jane's Defence Weekly*, 14 Nov. 1992, p. 33.

Armcor spokesmen forecast that South African arms exports would double in 1994–95 to approximately 1.5 billion Rand and could grow to 2–3 billion Rand in 1996 or 1997.⁵⁸ Estimates of export-related increases in employment range from 20 000 to 40 000.⁵⁹ However, the basis for these estimates is not clear. In late 1994 it was reported that arms exports were expected to reach 1 billion Rand in 1994.⁶⁰ A record high, this is nevertheless less than expected. Denel reported a 34 per cent rise in export sales in 1993–94, while the share of domestic defence sales declined.⁶¹

Forecasts of increased arms exports assume that South African defence products appeal to less-developed countries because they are combat-proven, rugged, simple to use and maintain, and relatively cheap.⁶² Claims have been made that systems such as the G-6 self-propelled guns and Rooivalk combat helicopter fill market-niches and are virtually without competitors.⁶³ It is hoped that the African market will be attracted by the offer of SANDF assistance for transferred equipment.⁶⁴ From a political viewpoint it has been suggested that South Africa should become the arms supplier to Africa.⁶⁵ South African arms producers hope to appeal to developed countries with more specialized equipment—for example, equipment for counter-mine and mine-clearing operations.⁶⁶

Nevertheless, South African weapons do not lack competitors. For every South African system there is a reasonable alternative—in many developed states relatively simple and cheap weapons have been developed for export. Concerning the African market, it is arguable that suppliers such as France have better access in Africa supported by a tradition of offering military assistance.

The South African arms industry faces stiff competition from other producers trying to survive a period of sharply reduced domestic procurement expenditure.⁶⁷ It is unlikely that substantial direct or indirect subsidies or credits can be expected from the South African Government. As part of past revenues came from exports to 'pariah states', such customers are likely to be denied by the new government. Availability of large quantities of second-hand weapons adds to the competitive international arms market.

South African arms procurement programmes might give an opportunity to arrange counter-trade agreements. Attempts to arrange a deal trading British corvettes for

⁵⁸ 'South Africa aims to double exports', *Financial Times*, 27 May 1994, p. 4; and *Draft National Policy for the Defence Industry* (note 36), p. 10.

⁵⁹ Navias, M., 'The future of South Africa's arms trade and defence industries', *Jane's Intelligence Review*, Nov. 1994, p. 522; and Armcor promotion video.

⁶⁰ Note 37, p. 4.

⁶¹ Denel (note 46). Denel hopes to double its export earnings to 1300 million Rand over the next 3 years, *Jane's Defence Weekly*, 30 July 1994, p. 13.

⁶² Howard, P., 'Armcor making it work', *Jane's Defence Weekly*, 25 Sep. 1993, p. 26.

⁶³ 'In search of new markets', Portfolio of Black Business, WR Publications, Johannesburg, 1994, p. 236.

⁶⁴ Note 37, p. 4.

⁶⁵ 'Assured future for industry—Armcor', *Jane's Defence Weekly*, 10 July 1993, p. 5. Suggestion by Prof. Alaba Ogunsawo, Nigerian High Commissioner to Botswana.

⁶⁶ Ogorkiewicz, R., 'Plague of landmines', *International Defense Review*, Jan 1995, p. 5.

⁶⁷ In early 1995 some South African defence companies were still barred from trade with US companies because of their illegal acquisition of weapon technology in the USA and arms deals to Iraq. As this makes integration of US technology in certain South African products impossible this is seen by some in South Africa as an attempt to hinder the development of the South African defence industry into an international competitor. Erlich, J., 'Legal snags prolong ban on Armcor', *Defense News*, 12–18 Dec. 1994, p. 4; and Cook, N., 'Riding the winds of change', *Interavia*, Mar. 1995, p. 20.

South African Rooivalk attack helicopters provide one example.⁶⁸ Armscor policy is to require a counter-trade component of at least 50 per cent for contracts of more than 5 million Rand, which should be as beneficial to the South African arms industry as possible.⁶⁹

Export guidelines and regulations

The new South African Government has stated that national export policies and regulations will be formulated in line with international norms. Minister of Defence Joe Modise has pointed out that sales 'can and should be utilised in both the defence of the country and for its positive impact on the economy' but that 'the emphasis should be on regional security co-operation rather than on extensive arms trade.'⁷⁰

South Africa is a member of the Nuclear Suppliers Group and is expected to join the Missile Technology Control Regime in 1995.⁷¹ Early in 1994 the South African Government announced a ban on the export of land-mines.⁷²

IV. Conclusions

A change in government may not necessarily mean a change in methods of governance or attitudes. A disappointment in this regard is reflected in a media report noting that in the various South African ministries the old regime of bureaucracy is still in control and that there seems to be a tendency to run things as in the past.⁷³ It remains to be seen to what extent the government can control and change an industry in which clandestine activities were a norm. Lack of experience in open and more normal procurement policy and arms exports has to be overcome. The double role of Armscor as arms export supporter and regulator is one of the legacies of the old regime which must be reviewed. Transparency and openness have already been improved and the setting up of the Cameron Commission has shown the willingness of the government to pursue a more responsible arms industry and arms trade.

The outcome of the debate on the extent to which the arms industry should be restructured and supported is still awaited. Inexperience and lack of knowledge owing to the absence of any previous debate on these matters in South Africa must also be overcome. The claimed economic benefits must be reviewed carefully and weighed against the need to use resources for national development. However, it seems likely that the South African arms industry will survive in a reorganized and down-sized form with arms exports, necessary to keep the industry going, continuing in a more responsible and controlled way.

⁶⁸ 'Britain to trade corvettes for attack helicopters?' *World Aerospace & Defense Intelligence*, 16 Sep. 1994, pp. 13-14.

⁶⁹ Armscor (note 43), p. 23

⁷⁰ Note 37, p. 36.

⁷¹ For a discussion of these regimes, see chapter 16 in this volume.

⁷² *Africa Research Bulletin*, 16 July 1994, p. 11804. See also chapter 21 in this volume.

⁷³ *City Press*, 17 July 1994.

Appendix 14F. The impact of light weapons on security: a case study of South Asia

CHRIS SMITH

I. Introduction

A recent study has claimed that in most armed conflicts under way in 1994 light weapons are 'the overwhelming cause of both civilian and combat deaths'.¹ This appendix focuses on Pakistan and the north-western part of India as a case study of the impact of the proliferation of light weapons on security. Over the past decade India and Pakistan have continued to experience sub-national crises and conflicts, communal violence, and varying degrees of threat to internal security and national unity. A noteworthy parallel development has been the growing availability of modern light weapons throughout the same countries. Increased supply stems largely but not exclusively from the quantity of weapons which became available in Pakistan during and after the 1979–88 Soviet intervention in Afghanistan.

'Light weapons' refers to crew-portable land-based armaments. This definition includes small arms such as pistols, rifles, assault rifles and sub-machine-guns; light and medium machine-guns; heavy machine-guns (HMG) with a calibre not exceeding 14.5 mm; anti-aircraft and anti-tank missiles; light mortars; mines and grenades.²

The increase in the supply of light weapons is of interest for two main reasons.

1. *Modern light weapons can change the balance of power between the state and sub-state groups, such as insurgents and drug traffickers and other criminals.* In some instances, security forces might even find themselves facing weapons that are more sophisticated than those to which they themselves have access. Light weapons can move from one sub-state group to another with considerable speed because of their small size and relatively low cost. If they are available within the region or if a supply line can be established, particularly if funded by outside interests, sub-state groups can rapidly change the balance of power between themselves and the security forces. The Afghan Mujahideen opposition managed to change the course of the war once outside interests had established an arms pipeline. In India, the Jammu and Kashmir Liberation Front engaged in separatist militancy against Indian security forces in Kashmir and the Sikh separatists also managed to gain in strength after they began to acquire and use relatively sophisticated weapons.

Even where these sub-state groups are unsuccessful in achieving their political goals, they extract a high price in terms of the measures that the state is forced to adopt to counter their activities. Between 1985 and 1995 Indian paramilitary forces increased their manpower from around 260 000 to over 450 000.³ In the period 1985–94 the manpower strength of paramilitary forces in Pakistan increased from 155 000 personnel to over 275 000. Meanwhile, to provide round-the-clock security for senior

¹ Boutwell, J., Klare, M. T. and Reed, L. W. (eds), *Lethal Commerce: The Global Trade in Small Arms and Light Weapons* (American Academy of Arts and Sciences: Cambridge, Mass., 1995), p. 5.

² There is no standard definition of small arms and light weapons. The issue of definition is discussed in Swadesh Rana, *Small Arms and Intra-State Conflicts* (UN Centre for Disarmament Affairs: New York, Jan. 1995).

³ Dasgupta, S., 'A new line of defence', *India Today*, 15 Apr. 1995.

political figures, individuals from the security services (active or retired) along with their families and other potential targets of terrorist attack require approximately a platoon-sized contingent for each person to be protected. Added to this are the costs of providing, for example, additional security at the residence and place of work of potential targets, and it is clear that the costs are very significant.

The ramifications for security cut across national, regional and international lines. The social and humanitarian impact of setting up an arms pipeline may stretch far beyond the duration of the conflict which an arms supply programme was originally intended to influence. Even where the flow of arms through a region may be the work of sub-state actors, it can lead to tensions between governments. A failure to disarm under national, regional or international supervision once a conflict has ended might lead to the political empowerment of sub-state groups, including those whose motives are predominantly criminal.

2. *The availability of modern light weapons may raise the level of violence.* The introduction of modern light weapons into a conflict does not necessarily increase the level of violence and might even reduce the immediate threat of indiscriminate violence against civilians. On the other hand, if those under attack feel insecure, possession of modern light weapons—such as assault rifles—could allow an individual or a small group to inflict considerable damage upon a numerically larger group, the majority of whom may be either poorly armed or unarmed.

However, even if the short-term effect of the use of light weapons could be self-defence, the long-term effect might be to limit if not negate other ways of addressing conflict resolution by peaceful means and to start an arms race. It is possible to imagine a sub-national arms race with both sides seeking types of weapon which they believe the other side has already acquired. This has already occurred to some extent in Pakistan.

II. The origins and types of light weapons in South Asia

The motives for which suppliers and recipients engage in transfers may be mixed. Suppliers may have political or commercial motives or a mix of the two. Local wars have released government stockpiles into wider circulation. Recipients might be either state security forces or sub-state groups.

Detailed data for the volume and origins of the light weapons to be found in South Asia are not available. However, it is known that South Asia contains a very large number of light weapons acquired both through transfer or trade and through local production.

Several countries in South Asia produce light weapons, of which India and Pakistan have the most developed capacities. India produces the 5.56-mm INSAS assault rifle, while the Pakistan Ordnance Factory produces the Heckler & Koch G3 rifle.⁴ Bangladesh produces the Type-56 assault rifle under licence from China.⁵ India and Pakistan also both produce lightweight mortars. India produces two types of anti-personnel land-mine while Pakistan produces four types.⁶

⁴ Hogg, I., *Jane's Infantry Weapons 1994-95* (Jane's Information Group: Coulsdon, 1994), pp. 131, 139.

⁵ Ezell, E. C., *Small Arms Today* (Arms and Armour Press: London, 1988), p. 52.

⁶ *Landmines: A Deadly Legacy* (Human Rights Watch/Physicians for Human Rights: New York, 1993), p. 102, table 1.

The predominant form of acquisition of light weapons by security forces continues to be through imports or foreign technology transfers. However, establishing the origins of the weapons deployed in the region by government security forces is not straightforward. For most light weapons there are multiple potential suppliers. For example, the Soviet-origin AK-47 rifle or very close copies have been produced in China, Finland, the German Democratic Republic, Hungary, North Korea, Poland, Romania and the former Yugoslavia. The Heckler & Koch G3 rifle has been produced under licence in 12 countries in the world, including Pakistan; the Fabrique Nationale FAL rifle has also been produced in 12 countries, including India.⁷

Apart from the many manufacturers, weapons might be acquired from the stock-piles of other countries or from private dealers.

Acquisition by non-state forces

The major demand for light weapons in South Asia has been the war in Afghanistan. Initially, Egypt agreed to provide stocks left over from its alliance with the Soviet Union, a policy admitted by President Anwar Sadat in an NBC television interview in September 1981.⁸ In addition, massive amounts of arms were purchased by the US Central Intelligence Agency (CIA) from China, primarily the Type-56 assault rifle, which is a direct copy of the Soviet/Russian AK-47, and the stick hand grenade. This was accompanied by light weapons and artillery from an array of sources. For example, 60 000 rifles, 8000 light machine-guns, mortars and over 100 million rounds of ammunition were purchased from Turkey, albeit in appalling condition, and Soviet-origin weapons were purchased from Israel.⁹

The availability of light weapons in other parts of South Asia partly reflects the onward shipment of weapons originally intended for use in Afghanistan.

The North West Frontier Province

Light weapons have always been available in the arms bazaars in small towns within the North West Frontier Province (NWFP) of Pakistan, such as Dara and Landi Kotal. However, the availability of modern light weapons has increased considerably during the conflict in Afghanistan. During visits made by the author in April 1993 and June 1994, it was possible to identify the following four categories of arms available in the NWFP.

1. There are weapons which leaked from the arms pipeline—the Chinese Type-56 assault rifle, Kalashnikov rifles from East Germany and Romania, and an assortment of other weapons from sources such as Israel and Egypt. As Soviet forces withdrew from Afghanistan, arms supplies increased, both to the government forces and to the Mujahideen. Among the weapons received were Chinese Type-83 mine-clearing rockets and Egyptian and Chinese 122-mm artillery rockets.¹⁰

2. Considerable stocks of Soviet weapons were captured by Mujahideen forces during the war. These include Soviet and Eastern bloc rifles such as the AK-74—virtu-

⁷ Hogg (note 4), pp. 109, 119, 131.

⁸ Adams, J., *Trading in Death: Weapons, Warfare and the Modern Arms Race* (Century Hutchinson: London, 1990), p. 54.

⁹ Mohammad Yousaf and Adkin, M., *The Bear Trap: Afghanistan's Untold Story* (Leo Cooper: London, 1992), pp. 83–87.

¹⁰ Urban M., *War in Afghanistan* (Macmillan: Basingstoke, 1990), p. 244.

ally unknown outside the Soviet bloc until examples began to turn up in this region in the late 1980s. Other Soviet weaponry on offer in the arms bazaars include rocket-propelled grenades, recoilless anti-tank rifles and sniper rifles.¹¹ It is widely rumoured that the arms bazaars along the Pakistan–Afghanistan border deal in more sophisticated weapons—such as surface-to-air missiles.

3. The third category of weapons are those manufactured by small-scale producers within the region. Copies of the Soviet AK-47 assault rifle have, for many years, been produced by back-street factories in Dara using simple machine tools. Even the serial numbers are faithfully reproduced. The numbers available are not large and the quality is inferior. In addition, government-approved establishments produce firearms modelled on standard rifles and revolvers such as the Kalashnikov variants and the .38-calibre Webley pistol.¹²

4. Finally, the arms bazaars of the NWFP are full of miscellaneous weapons which must have arrived in the region through extremely circuitous and unpredictable routes. These include unused M-16A2 rifles, the 9-mm Calico carbine (banned by the USA for sale to Pakistan), the Winchester pump action shotgun, the long-barrelled Uzi carbine (usually found only on the US market) and the German MP5 sub-machine-gun. G3 rifles from Iran have also appeared since the control of the border between Iran and Pakistan was relaxed after the Iranian revolution, and one G3 offered bore the markings of the Kingdom of Saudi Arabia.

Sind

Modern light weapons began to appear throughout the Sind province of Pakistan in the mid-1980s. Previously, only a few major landlords employed well-armed bodyguards. However, in Karachi, the largest city in Sind, it has become possible to order an AK-47 assault rifle from the NWFP. Ammunition has been freely available in rural and urban areas and is sold by the kilogram.

Kashmir

The majority of the weapons in the possession of militants in the part of Kashmir controlled by India point to the Afghan pipeline—either from the arms bazaars of the NWFP or from the stocks controlled by the Pakistani intelligence service. These include Soviet Kalashnikov assault rifles, but the vast majority are Chinese Type-56 assault rifles, pistols, stick grenades and Type 69 rocket-propelled grenades.¹³ In May 1993, Rajesh Pilot (the Indian Minister of State for Home) provided the Rajya Sabha (the Upper House) with the following figures for arms recovered on the Jammu and Kashmir border between 1990 and mid-1993: 150 rocket launchers, 1926 AK-type assault rifles, 710 pistols, 34 guns, 366 rockets, 5248 grenades and bombs, and 643 land-mines.¹⁴

¹¹ Malik, I. K., 'Small arms and the police in Pakistan', *Small Arms World Report*, vol. 2, no. 3 (May 1991), p. 15.

¹² 'Pakistani production', *American Rifleman*, no. 4 (1991), pp. 66–67.

¹³ Davis, R. A., 'Kashmir in the balance', *International Defence Review*, vol. 24, no. 4 (Apr. 1991), p. 301.

¹⁴ 'ISI training Kashmiri militants in Pak', *Times of India*, 6 May 1993.

Punjab (India)

In addition to small arms and ammunition, Chinese stick grenades as well as unmarked Claymore mines have been recovered from militants in the Indian state of Punjab. Other weapons seized in the Punjab include Uzi submachine-guns, G3 rifles, Dragunov sniper rifles and RPG-7 rocket-propelled grenades.¹⁵

The first use of an AK-47 assault rifle was recorded in the Punjab in 1987. Since that time over 2000 Kalashnikovs and copies have been seized. Of the assault rifles seized in the Punjab, fewer than 10 have been found to be of Russian origin and the overwhelming majority have been of Chinese origin. A very small number of AK-74 rifles, produced only in the former Soviet Union, have been seized together with about 160 AK-47s without markings. In late 1992 a government intelligence report suggested that militants were in possession of 1543 AK-47s, 106 rocket launchers and 112 general-purpose and light machine-guns. The report also stated that 150 AK-47s, 60 revolvers and explosives had been smuggled across the Punjab border in May alone.¹⁶ In May 1994 police recovered the largest ever cache of arms, which included 43 assault rifles, 15 000 rounds of ammunition, 50 kg of RDX explosive and two rockets.¹⁷

III. The impact of light weapon proliferation in South Asia

The Afghan pipeline legacy

The Soviet invasion of Afghanistan began in December 1979. However, before this date China and several Islamic countries had begun to align themselves with forces opposed to the leftist regime led by Nour Mohammed Taraki (which had seized power on 27 April 1978). The Taraki government was more closely aligned to Moscow than its predecessor. The 1978 Soviet–Afghan Treaty of Friendship, Good-neighbourliness and Cooperation¹⁸ included military dimensions in Article 4 (which opened the way for military–technical co-operation) and Article 8 (which referred to the establishment of an ‘effective security system’ in Asia). By late 1979 both China and several Islamic countries had begun to supply arms and finance respectively to the Afghan opposition forces, the Mujahideen.¹⁹ As part of a range of measures taken in direct response to the Soviet invasion of Afghanistan, the US State Department liberalized 30 types of defence support equipment which could be exported to China.²⁰ In mid-1981 President Ronald Reagan waived the provisions of the Symington Amendment to the Foreign Assistance Act, easing legal restrictions on military assistance to Pakistan. From this point it was possible for the Reagan Administration to supply US military aid more directly.²¹

¹⁵ Confidential information made available to the author, Delhi, Apr. 1993.

¹⁶ Kumar, D., ‘Punjab terrorists regroup on the quiet’, *Times of India*, 24 Nov. 1992.

¹⁷ ‘Biggest arms haul in Punjab’, *Asian Age*, 1 June 1994.

¹⁸ For the text of the Treaty, signed on 5 Dec. 1978, see SIPRI, *World Armaments and Disarmament: SIPRI Yearbook 1985* (Taylor & Francis: London, 1985), appendix 17A, pp. 611–12.

¹⁹ Gargi Dutt, ‘China and the developments in Afghanistan’ in ed. K. P. Misra, *Afghanistan in Crisis* (Vikas: New Delhi, 1981).

²⁰ Brzezinski, Z., *Power and Principle: Memoirs of the National Security Adviser 1977–1981* (Weidenfeld & Nicholson: London, 1983), p. 424.

²¹ *Changing Perspectives on US Arms Transfer Policy*, Report prepared for the Subcommittee on International Security and Scientific Affairs, Committee on Foreign Affairs, House of Representatives, 25 Sep. 1981, pp. 67–85.

Prior to the mid-1980s the full scale of US involvement in the Afghan pipeline is difficult to determine. For both international and domestic reasons, the CIA (responsible for the organization and co-ordination of the Afghan pipeline) sought to increase the efficiency of supplies without direct involvement in the distribution of weapons. Consequently, only Soviet-made/-designed weapons initially flowed through the pipeline.²² Once these arms reached Pakistan they were handed over to the intelligence service, the Inter-Service Intelligence (ISI), and stored in depots at Ojhiri (near Rawalpindi) or Quetta in the Pakistan province of Baluchistan, near the Afghan border.²³ It was the ISI that decided which of the Mujahideen groups would receive which weapons. The need for secrecy contributed to extremely poor records of how many weapons were transferred, where and to whom.²⁴ Moreover, the military regime in Pakistan suspended any requirement for normal trade accounts and, at the points of entry to Pakistan, customs officials were not involved in handling the shipments.

The arms were moved as rapidly as possible into Afghanistan, both to maximize their impact against Soviet forces and to avoid bottlenecks and capacity overload. By the time the weapons reached Mujahideen commanders in the field, they had been loaded and off-loaded at least 15 times over a distance of several thousand kilometres by truck, ship, train and pack animal.

In all likelihood, arms were siphoned off at every connection. The ISI leadership, Afghan party leaders and field commanders may all have diverted weapons for some reason.²⁵ The quantity of weaponry imported during the 1980s is unknown and it is therefore impossible to estimate the extent of the leakage, but one source has estimated that only 30 per cent of the supplies sent through the pipeline reached the front-line.²⁶ One estimate speculates that the US covert programme provided more than 400 000 Kalashnikov rifles up until mid-1991.²⁷ However, a former head of ISI told a US journalist in 1993 that the ISI still had access to 3 million Kalashnikovs, packed and greased.²⁸

Given the limited nature of central government authority in the NWFP, it was inevitable that a dynamic black market for arms and ammunition would emerge unless rigorous checks were introduced on the arms traffic. The frontier regions of Pakistan through which the arms were transferred to the Mujahideen are notorious for smuggling and corruption. In addition, the gun culture is as pronounced here as anywhere in the world. The laissez-faire policy maintained throughout the early 1980s fed a ready market.

Light weapons of various kinds from Soviet-supplied stocks also became more widely available during the 1980s, either through capture on the battlefield or through defections by Soviet-trained Afghan troops to one or another Mujahideen group. One

²² Roy, O., *The Lessons of the Soviet/Afghan War*, Adelphi Paper no. 259 (International Institute for Strategic Studies: London, 1991), p. 35.

²³ Ohijri was the ammunition dump which caught fire in Apr. 1988, killing over 100 people.

²⁴ Gelb, L., 'US aides put '85 arms supplies to Afghan rebels at \$280m', *New York Times*, 28 Nov. 1994, p. 1.

²⁵ For a more comprehensive account of the Afghan pipeline, see Yousaf and Adkin (note 9), chapter 6.

²⁶ Yardley, M., 'Afghanistan: a first hand view', *International Defense Review*, vol. 20, no. 3 (Mar. 1987), p. 276.

²⁷ Isby, D. C., 'Afghanistan: low-intensity conflict with major power intervention', in eds E. G. Corr and S. Sloan, *Low Intensity Conflict: Old Threats in a New World* (Westview Press: Boulder, Colo., 1992), p. 206.

²⁸ Ed Gargen of the *New York Times* provided this information based on an interview in Islamabad in Apr. 1993.

author has estimated that up to 40 per cent of the arms used by the Mujahideen came via this route.²⁹

Although Afghanistan has been a location of continuous major armed conflict for over 15 years, arms stockpiles remain considerable and the opportunity for moving surplus weapons across the border into Pakistan is ever present.

In the NWFP, jurisdiction of the central government barely extends further than the roadways—which are patrolled by the Frontier Corps, who report to the Minister of the Interior. The main authority in the tribal areas stems from the Jirgas—councils comprised of elders, known as Maliks. Traditionally, they have cared little for laws and regulations from Islamabad, although more recently they have applied pressure to ensure that fewer guns and less drugs and alcohol are visibly available for sale.³⁰

The NWFP region and Pakistan in general are gaining in importance as a centre of drug production and smuggling. The central government has consistently failed to make serious progress on either issue. Allegations of corruption persist against both senior law enforcement personnel and national politicians.³¹

The impact of the Afghan pipeline will be considerable within and even beyond the region. For example, there are persistent reports that the FIM-92 Stinger portable surface-to-air missile is available from the region. The array of weaponry on sale makes the NWFP unique in South and South-western Asia. In these open bazaars virtually any type of light weapon can be acquired, and delivery can be made anywhere in Pakistan and possibly further.

The proliferation of light weapons in India and Pakistan

The trade and availability of light weapons in the NWFP are by no means a recent phenomenon; acquisition and ownership of personal weapons were observable from the late 19th and early 20th centuries, when the region became saturated with modern rifles and ammunition from Europe via the Persian Gulf and from sources within India.³² On the surface, the contemporary situation conforms to the history of the region and its entrenched gun culture. However, there are differences between the past and the present.

The political configuration of the Indian subcontinent is different compared with the period of British rule. A distant metropolitan power has been replaced by several independent local states, each of which is experiencing major internal security problems.

The region is now saturated with qualitatively different weapons. An assault rifle such as an AK-47 will expend 30 rounds in a few seconds. It is this type of weapon which is replacing much simpler weapons. The fact that surface-to-air missiles and automatic and semi-automatic rifles and machine-guns are available is a major concern for this region, as it would be for any other.

These weapons are moving slowly beyond the NWFP area. This is in part because of the excess stocks and better mobility. It is also because some of the sub-state

²⁹ Dikshit, P., 'Afghanistan policy', *Strategic Analysis*, vol. 16, no. 8 (Nov. 1993), p. 1072.

³⁰ Interviews in Dara, June 1994.

³¹ Brauchli, M.W., 'Drug trade blooms in lawless reaches of Pakistani frontier', *Wall Street Journal Europe*, 9 June 1993.

³² Moreman, T., 'The arms trade and the North-West Frontier Pathan tribes 1890–1914' (Department of War Studies, King's College: London, 1994), mimeo, 23 pp.

actors which have access to the weapons are facilitating their transfer to other parts of the region where there are either financial or political gains to be made.

Impact in Pakistan

Light weapons are not at the root of the current violence in Pakistan.³³ Karachi's history of ethnic tension and competition stems from the arrival of large numbers of Muslims from elsewhere in South Asia—mohajirs—primarily Indian Muslims who migrated to Pakistan at partition and, thereafter, over 1 million former residents of East Pakistan, now Bangladesh. The conflicts revolve around the power struggle between mohajirs, Pakistani Punjabis, Pathans from the NWFP and the Sindis. However, weapons from the NWFP have provided fuel for the conflict, which has made Karachi virtually ungovernable. An additional dimension has been added by clashes between Shia Muslim and Sunni Muslim extremists, the incidence of which increased sharply after December 1994.³⁴

The current crisis in Sind began in earnest during the mid-1980s when ethnic groups began to emerge as strong political forces, in part because of their increasing power but also because of the declining control of the state government. Throughout the past 10 years, levels of violence across Karachi reached unprecedented levels prior to the intervention by the Army in 1992. Modern weapons, such as assault rifles, have been and still are carried openly by party activists from all quarters, especially during political demonstrations, and large stockpiles were accumulated by the warring factions in open defiance of state authority.

Although Sind has always been a violent province, the dramatic increase in violence and polarization dates from 1985–86 and coincides with the time when weapons from the Afghan pipeline began to find their way into commercial channels.

In 1992, on the formal invitation of the provincial government of Sind, the Army was called upon to reintroduce law and order into the region. After the withdrawal of the Army in 1994, levels of violence increased again, including the assassination of outspoken journalists and more random violence. Over the course of 1994 there were 878 murders in the city—90 occurred during the first two weeks of December.³⁵

Other areas of Pakistan are showing signs of more widespread ownership of light weapons.³⁶ In the capital city, Islamabad, some MPs have been known to enter Parliament with bodyguards armed with automatic weapons even through the government has declared the city a weapon-free zone in a bid to curb violent crime.³⁷

Impact in India

Since independence, the Indian state has experienced its most pressing internal security problems in the northern states of the Punjab and Jammu and Kashmir, both as a result of separatist movements. During the first four decades of independence India has experienced problems associated with separatist movements, in places such as Assam/Mizoram, Punjab and Nagaland, and the terrorist activities of the Naxalites.

³³ See also the table of major armed conflicts in chapter 1 in this volume and in previous *Yearbooks*. For 1994, Pakistan is not registered as a location of a major armed conflict (see chapter 1 and appendix 1A for the definitions and criteria), while India and Afghanistan are.

³⁴ Ahmed Rashid, 'The Great Divide', *Far Eastern Economic Review*, 9 Mar. 1995, p. 24.

³⁵ Mirza, M., 'Government displays non-serious attitude to talks', *Friday Times* (Lahore), 22–28 Dec. 1994, p. 6.

³⁶ 'Boom time for bullets', *Indiamail*, 17–23 Mar. 1994.

³⁷ 'Islamabad declared a zone free of weapons', *Asian Age*, 10 Aug. 1994.

Nevertheless, the most serious threat to the integrity of the Indian state has been the issue of Kashmir. As in the case of Pakistan, the roots of these problems have been political. However, the growing availability of light weapons has played a role.

The Indian state of Punjab was a major internal security problem for India from 1984 until 1993. In June 1984, Prime Minister Indira Gandhi ordered the Army to attack the Golden Temple in Amritsar in Operation Bluestar in an effort to break the back of the Kalistan movement. The complex of temples include some of the holiest Sikh shrines but had also become the base for Sikh terrorists. After Operation Bluestar, Sikh militancy increased.

The Sikh terrorists were relatively few in number and never commanded full support, even from the Sikh population. Nevertheless, the problems they created for the police and paramilitary forces in Punjab were considerable. In part this was due to a single-minded commitment to their cause. However, problems were also exacerbated by the combination of training, ruthless tactics and access to advanced weaponry, much of it received from across the Indo-Pakistani border.

The level of terrorist activity against civilians leading to loss of life seems to correlate with the number of weapons seized by the police and paramilitary forces. In 1989, for example, the Punjab police seized 314 assault rifles and during the same year 1168 civilians were killed; in 1990 the police seized 553 assault rifles and 2591 civilians were killed.³⁸ Although it is not clear exactly how seizures relate to acquisitions, the intelligence forces use seizures as a guide to how many weapons are entering the region on a ratio of 1:10.³⁹

Indian officials maintain that all the weapons found in Punjab come in from Pakistan, the majority facilitated or even shipped directly by the ISI. Weapons which have been in the possession of the terrorists bear a close resemblance to those which are available in the NWFP arms bazaars, especially the Chinese Type-56 assault rifle which was such a central feature of the Afghan arms pipeline.

In 1988 work began on the Indian side to build a double fence across the Punjab border, which includes lighting and electrification. The fence did have some effect upon the flow of arms, so much so that new supply lines have opened up, across the Thar Desert and across the international border between the Pakistan province of Punjab and Jammu and Kashmir.⁴⁰

The influx of advanced light weapons into Punjab had an indisputable impact upon the security equation. During the early 1980s the militants possessed little more than country-made weapons, 12-bore shotguns, .303-inch calibre rifles and, at best, a small number of Sten guns. As such, their ability to threaten the security forces was limited. The legacy of Operation Bluestar overturned the previous security equation by increasing the resolve of Sikh militants, and the intelligence forces in Pakistan were keen to exploit this energy.

Since 1993 Punjab has not been the location of a major armed conflict. However, some 25 000 deaths occurred during the 10-year crisis. The high death rate can be linked to the tactics adopted by the militants, such as random attacks and the widespread use of terror. The conflict became increasingly violent once the militants began to acquire a full range of rapid-fire weapons and employed tactics such as raking crowded bazaars and bus queues—a favourite Kalistani method of attack.

³⁸ Data provided by K. P. S. Gill, Chief of Police, Punjab, Chandigarh, Apr. 1993.

³⁹ Interview, K. P. S. Gill, Chief of Police, Punjab, Chandigarh, Apr. 1993.

⁴⁰ 'Over the counter trade in illegal weapons', *Times of India*, 10 Apr. 1993; and 'Pak likely to smuggle in more arms', *Indian Express*, 19 Apr. 1993.

While the demand for weapons in Punjab has diminished, the situation in Kashmir is very different. The conflict in Punjab was an internal Indian matter, while the status of Kashmir represents the sharpest point of contention between India and Pakistan. The problem has taken on a new dimension since late 1989, when some Kashmiri Muslims demanded independence—a position rejected by both India and Pakistan. By April 1990 India had committed 200 000 troops in an attempt to seal off the area. By 1992 militants were responsible for 1902 deaths—almost equal to the aggregate toll over the previous four years.⁴¹ However, up to 5000 militants had crossed the border into Azad Kashmir in search of arms, and tension between India and Pakistan rose significantly.⁴²

Continuing militancy in Kashmir is the fundamental reason for strained relations between India and Pakistan. The Indian Government has consistently accused Pakistan of providing political and material support to the Jammu and Kashmir Liberation Front (JKLF). Pakistan accuses India of gross violations of human rights.

Because of religious links, geographical proximity, strategic importance and history, Pakistan has a far more active interest in Kashmir than anywhere else in India. It is generally assumed that the ISI is the main body which facilitates the movement of weapons across the border.

It is widely accepted that the JKLF has in the past received a good deal of assistance from Pakistan, especially in the period when Nawaz Sharif was Prime Minister. Towards the end of his tenure as Director General of the ISI, Javed Nasir acknowledged that three camps had been set up in Pakistan to train Kashmiri separatists. After Nawaz Sharif lost the general election in 1993 there has been an effort to curtail the activities of ISI, and the present Director General has replaced on the order of 40 senior and middle-ranking officers previously involved with operations in Kashmir.⁴³ Nevertheless, there is still a great deal of support within Pakistan for the Kashmiri cause. Recently, it was widely rumoured that Pakistan is facilitating the movement of Afghan Mujahideen veterans into Kashmir.⁴⁴

It has been alleged, but not confirmed, that members of the Indian security forces have been involved in supplying Kashmiri militants with light weapons.⁴⁵ However, the major sources of arms for the Muslim militants in Kashmir are in Pakistan.

If these arms pipelines into Kashmir were to run dry, the militants would be quickly deprived of the resources they require to take on Indian security forces. However, over 400 000 troops are now stationed in Kashmir, making the valley of Kashmir one of the most heavily militarized areas in the world.

As was the case in Pakistan, the proliferation of light weapons, the drug trade and other forms of criminal activity appear to proceed in parallel. They take advantage of the same covert channels for distribution while the proceeds from one activity are used to finance the other. One source of weapons in India is the Bombay-based underworld—which is primarily Muslim. Criminals from Bombay have close links with their counterparts in Karachi and further afield to South-west Asia. Since the Bombay bombings in March 1993 there have been numerous arms seizures along the coast of the Indian states of Maharashtra and Goa.⁴⁶ In addition, the borders with

⁴¹ Gupta, S. and Pathak, R., 'Pan-Islamic fundamentalism: exporting terror', *India Today*, vol. 19, no. 9 (1994), pp. 28–29.

⁴² Azad (free) Kashmir is the territory controlled by Pakistan since 1947.

⁴³ Cloughley, B., 'A force to be reckoned with', *Jane's Defence Weekly*, 14 Jan. 1995.

⁴⁴ Gupta and Pathak (note 41), p. 26.

⁴⁵ Gupta and Pathak (note 41).

⁴⁶ Sardesai, R., 'Customs-smugglers link in serial blasts exposed', *Sunday Times*, 9 May 1993.

Nepal, China, Bangladesh and Myanmar are all porous—although at present there is little evidence that arms trafficking is widespread or systematic.

Increasing availability of assault rifles has been noticed in the caste wars in the Indian state of Bihar and in Hindu–Muslim clashes in the Indian cities of Bombay, Ahmadabad, Surat and Hyderabad.⁴⁷

IV. Conclusions

In formulating policies at a national, regional or global level to address the proliferation of light weapons, should the issue be seen as one of gun control—and therefore left to the criminal justice system—or one that is political in nature? Both types of approach are almost certainly required.

In both India and Pakistan the governments exercise power through a constitutional assembly which draws its authority from national elections. Moreover, each has national regulations licensing the possession of and trade in light weapons. However, the existence of regulations has not in itself solved the problem.

At the national level, the power of a representative constitutional government will be undermined if it ignores certain basic rules. As Ken Booth has observed, 'offend a group's dignity too much and we can expect a riot. Deprive ethnic or national groups of what they consider to be their rights and we can expect terrorism'.⁴⁸ Neither can regulations succeed if organs of the state—such as the intelligence services—operate outside the scrutiny and control of the central political authorities.

Finally, regulations cannot be enforced successfully if foreign governments are actively involved in helping sub-state actors to undermine or circumvent them. Thus the problem of proliferation of light weapons probably cannot be resolved in the absence of progress on the issues of political contention between India and Pakistan. Beyond the immediate region, light weapons were supplied to the Afghan Mujahideen in part as an element in the global superpower competition. To the extent that they worried about it at all, the longer-term impact on regional security of weapons which leaked from the Afghan pipeline was a secondary consideration for the suppliers. The end of the cold war has removed the ideological underpinning for confrontation between Russia and the United States. This is not to say that no new competitions will emerge between these countries or that new centres of global power—such as China—will not emerge in the course of time.

New policies may emerge from a better understanding of the nature and dynamics of the proliferation of light weapons. However, there are currently few credible policies with which to address the problem.

⁴⁷ Smith, C., *The Diffusion of Small Arms and Light Weapons in Pakistan and Northern India*, London Defence Studies no. 20 (Centre for Defence Studies: London, Sep. 1993).

⁴⁸ 'Liberal democracy, global order and the future of transatlantic relations', *Brassey's Defence Yearbook 1993* (Brassey's: London, 1993), p. 359.

Part IV. Arms control and disarmament, 1994

Chapter 15. Multilateral weapon-related export control measures

Chapter 16. Nuclear arms control

Chapter 17. The ABM Treaty and theatre ballistic missile defence

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Chapter 19. Chemical and biological arms control

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Chapter 21. Inhumane conventional weapons: efforts to strengthen the constraints

15. Multilateral weapon-related export control measures

IAN ANTHONY, ANNA DE GEER, RICHARD KOKOSKI and THOMAS STOCK*

I. Introduction

New developments in multilateral export control occurred in 1994. For example, in December the European Union (EU) approved the text of a regulation which establishes a regime for the control of exports of goods which may have military as well as civilian uses, and during the year more states joined the regimes. In February 1995 a different group of states continued discussions on a new forum to replace the Coordinating Committee on Multilateral Export Controls (COCOM), which was dissolved in March 1994.

This chapter summarizes the debate on multilateral export control. This section looks specifically at the recent evolution of multilateral export control organizations or regimes.¹ Sections II–VI examine each regime in turn, and section VII discusses the schools of opinion on the utility of the regimes.

Table 15.1 lists the members of six regimes and shows that participation in multilateral export control is a highly concentrated activity. In 1994 only 33 states participated actively in multilateral weapon-related export control regimes.² While the membership of the various regimes is not yet identical, it has gradually become more harmonized in recent years.

Each regime listed in the table has or had a different focus. The COCOM embargo sought to prevent exports that could contribute to the military potential of a list of target countries. The Zangger Committee and the Nuclear Suppliers Group (NSG) try to restrict exports that could contribute to the

¹ A form of export control frequently used in recent years has been the arms embargo or wider trade embargo. Controls of this type are excluded from consideration in this chapter as they are specific responses to a particular crisis rather than general features of foreign and security policy.

² The groups described in this chapter do not all call themselves regimes. However, they fall within the definition of a regime offered by Stephen Krasner: a set of 'implicit or explicit principles, norms, rules and decision-making procedures around which actors expectations converge in a given area of international relations'. Krasner, S. (ed.), *International Regimes* (Cornell University Press: Cornell, N.Y., 1983), p. 2. There may be states which share the principles and norms of one or more multilateral regime and which have national laws and regulations reflecting them without being members. Other countries may share the principles and norms without having national laws and regulations. For example, after the meeting between US President Bill Clinton and Indian Prime Minister P. V. Narasimha Rao in Washington, a US official commented: 'we agree on goals on nonproliferation. We do not entirely agree on means'. 'Rao proposes no-first-use N-accord', *Asian Recorder*, 11–17 June 1994, pp. 24017–20.

* I. Anthony (sections I and IV–VIII); R. Kokoski (section II); and A. De Geer and T. Stock (section III).

Table 15.1. Membership of multilateral weapon-related export control regimes, as of 1 January 1995

| State | COCOM ^a 1950 | Zangger Committee 1974 | NSG ^b 1978 | Australia Group ^c 1985 | MTCR ^d 1987 | EU dual-use regulation 1994 |
|----------------|----------------------------|------------------------------|--------------------------|---|---------------------------|-----------------------------------|
| Argentina | | | X | X | X | |
| Australia | X | X | X | X | X | |
| Austria | | X | X | X | X | X |
| Belgium | X | X | X | X | X | X |
| Bulgaria | | X | X | | | |
| Canada | X | X | X | X | X | |
| Czech Republic | | X | X | X | | |
| Denmark | X | X | X | X | X | X |
| Finland | | X | X | X | X | X |
| France | X | X | X | X | X | X |
| Germany | X | X | X | X | X | X |
| Greece | X | X | X | X | X | X |
| Hungary | | X | X | X | X | |
| Iceland | | | | X | X | |
| Ireland | | X | X | X | X | X |
| Italy | X | X | X | X | X | X |
| Japan | X | X | X | X | X | |
| Luxembourg | X | X | X | X | X | X |
| Netherlands | X | X | X | X | X | X |
| New Zealand | | | X | X | X | |
| Norway | X | X | X | X | X | |
| Poland | | X | X | X | | |
| Portugal | X | X | X | X | X | X |
| Romania | | X | X | | | |
| Russia | | X | X | | | |
| Slovakia | | X | X | X | | |
| South Africa | | X | X | | ^e | |
| Spain | X | X | X | X | X | X |
| Sweden | | X | X | X | X | X |
| Switzerland | | X | X | X | X | |
| Turkey | X | | | | | |
| UK | X | X | X | X | X | X |
| USA | X | X | X | X | X | |

Note: The years in the column headings indicate when the regime was created. Not all these regimes are open to global membership; see the sections on each regime below.

^a The Co-ordinating Committee on Multilateral Export Controls. Membership is as of Mar. 1994, when COCOM was dissolved, although the COCOM control lists will be valid for these states in their national regulations pending agreement on a follow-on forum.

^b The Nuclear Suppliers Group.

^c The EU Commission is represented as an observer.

^d The Missile Technology Control Regime.

^e South Africa will join the MTCR in 1995.

acquisition of nuclear weapons by non-nuclear weapon states (NNWS). The Australia Group aims to limit the transfer of chemical weapon precursors, equipment used in the production of chemical and biological weapons, and biological warfare agents and organisms. The Missile Technology Control Regime (MTCR) seeks to limit the spread of delivery systems other than manned aircraft with a range of 300 km or greater that are capable of delivering nuclear, biological and chemical (NBC) weapons.

The issue of export controls has occupied an important place in multilateral diplomacy for some time. However, the evolution of export controls has recently been affected by the new international environment. Several questions that are central to the export control debate have taken on new implications: What is the role of technology in international security after the cold war? What sort of political alignments will emerge to replace the antagonistic bipolar security system? How can arms control address current international security issues?

By joining multilateral regimes, governments agree that some national objectives can best be achieved through joint action. However, the regimes are multinational but not transnational; that is, states take independent action, collaborating only on specific measures to achieve certain objectives. The administrative arrangements of the multilateral groups reflect this by seeking consensus rather than taking decisions on collective action. There may be prior consultation on a given export, but the decision to approve it is taken and implemented by national authorities on a case-by-case basis. All the members of a regime must therefore have national legislation or regulations and administrative and enforcement agencies.

In the case of COCOM this generalization needs to be qualified in that the members agreed to a total embargo on the transfer of given items to given countries. Governments then asked their COCOM partners to grant case-by-case exceptions to the embargo. Exceptions were granted by consensus: a single member could block a given transfer by withholding consent to the request for exception. However, this blocking power had to be used carefully. Governments which took a request for an exception to COCOM had already made a national decision that the transfer was appropriate. If the COCOM decision was that they could not go ahead, there was inevitably resentment.³

None of the other regimes operates an embargo principle; they start from the premise that trade is legitimate under specific conditions. Here a qualification is required for the MTCR, which differentiates between the treatment given to items in different parts of the Equipment and Technology Annex to the Guidelines for Sensitive Missile-Relevant Transfers. For the complete systems and major sub-systems listed in category I of the Annex, there is a 'presumption to deny' transfer requests which has the effect of a national

³ See Hoekema, J., 'Netherlands policy on non-proliferation: general outlook and perspectives', eds S. Mataija and L. Bourque, *Proliferation and International Security: Converging Roles of Verification, Confidence-Building and Peacekeeping* (Centre for International and Strategic Studies, York University: Toronto, 1993). The informal nature of COCOM meant that any government could withdraw from it with immediate effect if an issue was seen as being of sufficient importance.

embargo.⁴ This is not true for items in the dual-use equipment part of the Annex.

Each of the regimes creates a forum for consultation and information exchange between partners. Governments may provide each other with information about cases of licence denial, individuals or companies of concern, or possible NBC or missile programmes of concern.

Regime behaviour applies to specific items. In the case of the NSG, equipment is defined in a list of nuclear-related dual-use equipment and materials and related technology. The Australia Group applies three lists of CW precursors, biological agents and dual-use equipment. The MTCR has agreed the Equipment and Technology Annex, while COCOM operated three lists—the International Atomic Energy List, the International Munitions List and the International Industrial List. Although COCOM was dissolved in 1994, its members agreed to maintain these lists and apply them on a global basis through their national regulations pending the formation of a follow-on forum. The follow-on forum will apply two separate product lists—one for conventional arms and one for dual-use technologies—developed from COCOM's International Industrial List and International Munitions List. The EU Regulation on the Control of Exports of Dual-Use Goods from the Community is a document issued by the European Council but containing a series of annexes developed under the Common Foreign and Security Policy as defined in the 1992 Maastricht Treaty.⁵

II. Nuclear export controls

Article III, paragraph 2 of the 1968 Non-Proliferation Treaty (NPT) obliges parties to undertake 'not to provide: (a) source or special fissionable material, or (b) equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State for peaceful purposes, unless the source or special fissionable material shall be subject to [IAEA] safeguards'.⁶ However, as the International Atomic Energy Agency (IAEA) is involved here only through administering safeguards in the importing state, it is up to the exporters themselves to interpret and implement Article III.⁷ In particular the ambiguity in the phrase 'equipment or material especially designed or prepared for the processing, use

⁴ The presumption to deny is not always applied to regime partners. The transfer of Trident missiles from the USA to the UK has not been affected by the MTCR Guidelines, and other exceptions have been made for transfers between regime members. See also section IV in this chapter.

⁵ For the Maastricht Treaty provisions on a Common Foreign and Security Policy, see *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), appendix 7A, pp. 251–57. See also section V and footnote 97 in this chapter.

⁶ For the text of the NPT, see Goldblat, J., *SIPRI, Agreements for Arms Control: A Critical Survey* (Taylor & Francis: London, 1982), pp. 172–74.

⁷ For more details on this and the following in this section, see SIPRI, *Safeguards Against Nuclear Proliferation* (Almqvist & Wiksell: Stockholm, 1975), pp. 17–23; Fischer, D. and Szasz, P., ed. J. Goldblat, *SIPRI, Safeguarding the Atom: A Critical Appraisal* (Taylor & Francis: London, 1985), pp. 101–103; and Nuclear Energy Agency (NEA), *The Regulation of Nuclear Trade: Non-Proliferation—Supply—Safety*, vol. 1, *International Aspects* (Nuclear Energy Agency, OECD: Paris, 1988).

or production of special fissionable material' needed clarification. Taking up this task as well as leading the international effort to implement export controls on technology and materials which may be useful for a nuclear weapon programme are in the main carried out by two groups—the Zangger Committee and the NSG.

The Zangger Committee

The first important multilateral instrument for control of nuclear technology was put in place by the Nuclear Exporters Committee, known as the Zangger Committee, which was formed in 1971 by concerned NPT states parties under the chairmanship of Claude Zangger. In 1974 the members of the Committee informed the IAEA Director General that they had agreed on a 'trigger list' of categories of equipment or material⁸ which would, if exported to a NNWS not a party to the NPT, trigger the application of IAEA safeguards on 'the source or special fissionable material produced, processed or used in the equipment or material in question'.⁹

As a condition of supply, the recipient state must agree not to divert such material to nuclear weapons or other explosive devices. In addition, it is required that the importing country provide satisfactory assurances, in the event of re-export to another NNWS not a party to the NPT, that safeguards would also be applied in the country receiving the re-export.¹⁰

Items on the original trigger list included nuclear reactors and specified equipment, including pressure vessels, fuel-charging and -discharging machines, control rods, pressure tubes, zirconium tubes and primary coolant pumps. Exports of deuterium and heavy water exceeding specific amounts, nuclear-grade graphite, reprocessing plants and equipment designed or prepared for them, fuel fabrication plants and equipment (not including analytical instruments) designed or prepared for uranium isotope separation were also included.¹¹ The latest clarification of the trigger list—concerning plants for the production of heavy water, deuterium and deuterium compounds and equipment especially designed and prepared therefor—was made in 1992.¹²

The Nuclear Suppliers Group

After initial consultations in 1974 between the UK, the USA and the USSR on the desirability of further coordinating export policy and with increased con-

⁸ The communications received from members regarding the export of nuclear material and of certain categories of equipment and other material, dated 22 Aug. 1974, together with attachments: Memorandum A, Memorandum B (containing the trigger list and a statement of the main principles for granting export and retransfer authorizations) and an Annex (clarifying items on the trigger list) were reproduced in IAEA document INFCIRC/209, 3 Sep. 1974.

⁹ INFCIRC/209 (note 8), Memorandum B, para. 1.

¹⁰ INFCIRC/209 (note 8), Memorandum B, para. 5.

¹¹ INFCIRC/209 (note 8), Memorandum B, para. 2.

¹² Periodic updates of the trigger list have been made since it was first drawn up, published in IAEA documents INFCIRC/209/Mods. 1, 2, 3 and 4 and consolidated in INFCIRC/209/Rev.1. The latest clarification appears in IAEA document INFCIRC/209/Rev.1/Mod.1., May 1992.

cern over the transfer of nuclear technology resulting from the explosion of a nuclear device by India that year, the NSG—also known as the London Club and now including all the members of the Zangger Committee plus New Zealand and Argentina—met from 1975 to 1978. In part at least, a major reason for creating the NSG was in order to include France, a major nuclear supplier and at the time not a party to the NPT and therefore not then a member of the Zangger Committee.¹³

In early 1978, using a procedure similar to that adopted by the Zangger Committee, all the countries involved communicated to the Director General of the IAEA that they would abide by principles which had been agreed in 1977—the Guidelines for the Export of Nuclear Material, Equipment or Technology (the so-called London Guidelines for Nuclear Transfers).¹⁴ The Guidelines placed more stringent requirements¹⁵ on nuclear exports than the Zangger Committee list and included requirements for assurances of non-explosive use on the part of recipients, safeguards as well as the control of retransfer. They also went beyond the boundaries of the NPT, covering transfers to all NNWS.

The three basic principles of the London Guidelines are: (a) that transfer of items on the trigger list should be authorized only after formal assurances from the government of the recipients which explicitly excludes uses which would result in a nuclear explosive device; (b) materials and facilities appearing on the trigger list should be 'placed under effective physical protection to prevent unauthorised use and handling'; and (c) trigger list items should only be transferred when covered by appropriate IAEA safeguards.¹⁶ The first and third of these are also part of the Zangger Committee list.

It is also stipulated that these three requirements should also apply to facilities for reprocessing, enrichment or heavy-water production which utilizes technology 'directly transferred from the supplier or derived from transferred facilities, or major critical components thereof'. In addition, the transfer of any such facilities, major critical components thereof, or related technology requires that IAEA safeguards also apply to any facilities of the same type which may be constructed and that a safeguards agreement allow the IAEA to apply safeguards to facilities identified as using transferred technology.¹⁷

Nuclear suppliers are urged to exercise restraint in transferring sensitive facilities, technology and weapon-usable materials.¹⁸ This has generally been interpreted to mean no transfer of such sensitive items, the single exception to this rule being the sale of a heavy water plant to Argentina by a Swiss firm in a controversial deal in 1980.¹⁹ A supplier nation must also be informed if an

¹³ Carnahan, B. M., 'Export law and policy of the emerging nuclear suppliers: a basis for cautious optimism', *Eye on Supply*, no. 5 (fall 1991), p. 67.

¹⁴ NEA (note 7), p. 79; and Timerbaev, R., 'A major milestone in controlling nuclear exports', *Eye on Supply*, no. 6 (spring 1992), p. 58. The original London Guidelines were published by the IAEA in 1978 and the most recent update can be found in INFCIRC/254/Rev.1/Part 1/Mod.3, Nov. 1994.

¹⁵ Strulak, T., 'The Nuclear Suppliers Group', *Nonproliferation Review*, vol. 1, no. 1 (fall 1993), p. 2.

¹⁶ The London Guidelines (note 14), paras. 2, 3 and 4.

¹⁷ The London Guidelines (note 14), para. 6.

¹⁸ The London Guidelines (note 14), para. 7.

¹⁹ Goldblat, J., *The Non-Proliferation Treaty: How to Remove the Residual Threats*, UNIDIR Research Paper no. 13 (United Nations: New York, 1992), p. 14; and Timerbaev (note 14), pp. 58–59.

enrichment facility or technology therefor is to be operated in such a manner as to produce uranium enriched to greater than 20 per cent uranium-235; this applies as well to facilities based on such supplied technology.²⁰

There is also a prior-consent clause calling on suppliers and recipients to agree to arrangements for reprocessing, storage, alteration, use, transfer or retransfer of weapon-usable material which has either been transferred or derived from transferred facilities. It should be noted, however, that this is not a firm commitment—it is only stated that suppliers ‘should endeavour to include such provisions whenever appropriate and practicable’.²¹ In addition, if transferred trigger list items or trigger list items derived from transferred facilities or derived with the help of such equipment or technology are retransferred, the same assurances must be given by the recipient as were required for the original transfer.²²

Also included were measures to improve both the effectiveness and adequacy of safeguards and agreement on consultations in the case of violations in order to give an appropriate response. Unanimous consent is required if any of the London Guidelines is to be changed. An important omission in the Guidelines was the absence of the stipulation of full-scope safeguards. It is also important to take note of the fact that the Guidelines are implemented through national mechanisms of legislation and enforcement, leaving open the possibility of differences in interpretation and application. Provision for consultations to minimize such effects was included in the Guidelines but, in fact, other than for isolated bilateral consultations, the NSG did not meet again until 1991, by which time the Zangger trigger list had been systematically updated so that it had become more detailed than the NSG list.²³

Cooperation between the Zangger Committee and the NSG has remained informal, but, given the nearly identical membership of the two organizations, questions as to the necessity of keeping two separate groups have been raised. While such issues have in fact been discussed, agreement has been reached that for some time to come the organizations will remain separate, largely because of the desirability of giving the option to those outside the control regimes to join either organization.²⁴

Recent initiatives

Increased concern with the trade in nuclear-related equipment—especially after the uncovering of the clandestine Iraqi nuclear programme and the realization that many of the NSG countries had exported much of the nuclear and technology and equipment which had been used²⁵—led the then 26 members

²⁰ The London Guidelines (note 14), para. 8.

²¹ The London Guidelines (note 14), para. 9.

²² The London Guidelines (note 14), para. 10.

²³ Strulak (note 15), p. 3; and Timerbaev (note 14), p. 59.

²⁴ Strulak (note 15), p. 8.

²⁵ Simpson, J. and Howlet, D., ‘The NPT renewal conference: stumbling toward 1995’, *International Security*, vol. 19, no. 1 (summer 1994), p. 48; and Strulak (note 15), pp. 4–5.

of the Nuclear Suppliers Group to meet for the first time since 1978 in the Netherlands on 5–7 March 1991.

It was decided that dual-use technology controls should be addressed because of 'steady revelations over the last two or three years of misuse of dual-use technology in nuclear weapons programs'.²⁶ At the follow-up NSG meeting in Warsaw in April 1992, the Group (then enlarged to 27 members with the joining of Austria in 1991 and with the Ukraine and the European Community present with observer status²⁷) agreed on three important initiatives. The first would make the acceptance of comprehensive safeguards mandatory for countries receiving any new significant nuclear exports.²⁸ The second involved the control of dual-use technology, and specific guidelines on the export of a wide variety of dual-use items were laid out in the 1992 Guidelines for Transfers of Nuclear Related Dual-Use Equipment, Material and Related Technology (the so-called Warsaw Guidelines).²⁹

The third outcome was the revision of the trigger list of controlled items which is much more specific in several areas.³⁰ These include fuel reprocessing plants and equipment especially designed or prepared for them and specific systems and components useful for isotope separation for uranium enrichment, including centrifuge and gaseous diffusion enrichment technologies.³¹ The list is also much more specific regarding plants or equipment designed for the production of heavy water. The most recently published update of the list includes a detailed list of systems and equipment related to laser, chemical, aerodynamic and electromagnetic separation methods.³²

Until the NSG Warsaw meeting, one of the important loopholes in the nuclear non-proliferation regime involved dual-use items. Problems in gaining cooperation among suppliers are exacerbated since the number of countries capable of supplying such equipment is large and suppliers of dual-use items are often not normally regarded as nuclear suppliers. With the easing of COCOM controls, new problems were added to the non-proliferation regime in the area of dual-use items in particular, as this list provided the legal basis for many countries to control many dual-use items, such as computers.³³ It was therefore a major turning-point in international control when the NSG agreed on the Warsaw Guidelines on Dual-Use Equipment.³⁴

²⁶ Hibbs, M., 'London Suppliers Club forms working group on dual-use', *Nucleonics Week*, vol. 32, no. 11 (14 Mar. 1991), p. 4.

²⁷ Timerbaev (note 14), pp. 60, 65.

²⁸ An amendment to the NSG Guidelines to this effect was adopted at the next meeting in Lucerne in Mar.–Apr. 1993. *PPNN Newsbrief*, no. 22 (2nd quarter 1993), p. 5.

²⁹ Guidelines for Transfers of Nuclear Related Dual-Use Equipment, Material and Related Technology (the Warsaw Guidelines), IAEA document INFCIRC/254/Rev.1/Part 2, July 1992.

³⁰ Originally published in IAEA document INFCIRC/254/Rev.1/Part 1, July 1992; the most recently amended trigger list appears in INFCIRC/254/Rev.1/Part 1/Mod.2 (Apr. 1994).

³¹ The amended trigger list (note 30), annex B, para. 3.

³² The amended trigger list (note 30), annex B, para. 3.

³³ 'Outlook on nuclear nonproliferation', Special report, in *Nuclear Fuel*, vol. 16, no. 2 (21 Jan. 1991) p. 3.

³⁴ The Warsaw Guidelines (note 29). Items subject to control are listed in the Annex to the Guidelines.

With the stated objective of averting the proliferation of nuclear weapons, the NSG committed itself to the basic principle of refraining from transferring equipment, material or related technology, as identified in the Annex to the Warsaw Guidelines, either

- for use in a non-nuclear weapon state in a nuclear explosive or an unsafeguarded nuclear fuel cycle activity, or
- in general, when there is an unacceptable risk of diversion to such an activity, or when the transfers are contrary to the objective of averting the proliferation of nuclear weapons.³⁵

While the Guidelines are to be implemented in accordance with national legislation and international commitments, for any prospective transfers of items listed in the Annex, procedures—including enforcement measures should violations occur—are to be established. Differences in the legal systems of the countries involved may in fact make it difficult to adopt standardized enforcement measures.³⁶

Although not strictly required, several factors are to be taken into account when considering whether to carry out such transfers.³⁷ They include: (a) whether the state is a party to the NPT, the 1967 Treaty of Tlatelolco or similar nuclear non-proliferation agreement with an agreement on IAEA safeguards on all peaceful nuclear activities; (b) if not a party to any such international agreement, whether facilities associated with nuclear fuel cycle activity are not or will not be subject to safeguards; (c) whether items are appropriate to the stated end-use and whether this stated end-use is considered appropriate for the end user; (d) whether the item is to be used in a reprocessing or enrichment facility; and (e) demonstrated support for nuclear non-proliferation by the recipient and compliance with existing obligations in this area. Also to be considered are the previous activities of the recipient, in particular: (f) whether illegal or clandestine procurement activities have been engaged in; and (g) whether a transfer has not been authorized or whether any authorized transfer has been diverted for purposes inconsistent with the Guidelines.

Transfers are also to be conditional on specifications from the recipient regarding the end uses and end-use locations as well as assurance that neither transferred items nor their replicas will be used in any nuclear explosive activity or unsafeguarded nuclear fuel-cycle activity. For transfers to states not adhering to the Warsaw Guidelines, assurances must also be given that supplier consent will be secured before any transferred items or replicas are retransferred. The list of dual-use equipment includes 65 goods, in eight main categories.³⁸

³⁵ The Warsaw Guidelines (note 29), para. 2.

³⁶ Müller, H., 'Reform of the system of nuclear export controls', eds H. Müller and L. A. Dunn, *Nuclear Export Controls and Supply Side Restraints: Options For Reform*, PPNN Study 4 (Mountbatten Centre for International Studies: Southampton, Oct. 1993), p. 12.

³⁷ The Warsaw Guidelines (note 29), para. 4.

³⁸ The 8 categories are: (a) industrial equipment (e.g., spin forming or flow forming equipment, vacuum induction furnaces); (b) materials (e.g., beryllium, high strength aluminium and maraging steel);

At the February 1993 meeting of the IAEA Board of Governors, a system of Universal Reporting was endorsed. IAEA member states were encouraged to provide 'relevant information relating to their exports and imports of nuclear material and exports of specified equipment and non-nuclear material' and were invited to 'provide information on their production of nuclear material and on their imports of specified equipment and non-nuclear material'.³⁹ Special forms were circulated for the purpose and, while participation in the Universal Reporting remains voluntary, it is hoped that all states will eventually subscribe.⁴⁰

This type of information could be coupled with other data, including open-source data such as that from press and scientific reports and other data bases, possibly revealing important correlations.⁴¹ A system of Universal Reporting, if utilized to its full potential, as well as increased inter-government exchange of sensitive information⁴² could help to increase transparency in the area of nuclear-related trade.

Attention is now increasingly focused on the emerging nuclear suppliers and those not yet members of the NSG. They could hamper the effectiveness of the export controls now in place as well as the nuclear non-proliferation regime as a whole. Although China has engaged in serious dialogue with the NSG, it is unlikely to join either the NSG or the Zangger Committee in the near term. China remains the major source of nuclear supplies still not requiring stringent safeguards, but it holds to the belief that the NSG is discriminatory and that controls act as impediments to the transfer of technology necessary for the energy programmes of the developing countries.⁴³ Other suppliers—including Brazil, India, South Korea and most of the new states of the former Soviet Union—should all be encouraged to join the NSG. Efforts have been made to attract the newly independent states, in particular, into the NSG, but problems such as differences in views on the NSG between the nuclear sector and politicians and the absence of adequate legislation or an effective system for controlling nuclear trade have stood in the way.⁴⁴

(c) uranium isotope separation equipment and components (e.g., rotor and bellows equipment, filament winding machines, super conducting solenoidal electromagnets, high-voltage direct current power supplies, electromagnetic isotope separators); (d) heavy water production plant related equipment (e.g., hydrogen-cryogenic distillation columns); (e) implosion systems development equipment (e.g., flash x-ray equipment, specialized instruments for hydrodynamic experiments); (f) explosives and related equipment (e.g., detonators and multipoint initiation systems); (g) nuclear testing equipment and components (e.g., high speed pulse generators); and (h) other (e.g., neutron generator systems, tritium, tritium compounds and mixtures).

³⁹ 'Strengthening the effectiveness and improving the efficiency of the safeguards system', IAEA document GC(XXXVII)/1073, 6 Sep. 1993, pp. 3–4.

⁴⁰ Seneviratne, G., 'IAEA Board OKs safeguards plan to record nuclear exports, imports', *Nucleonics Week*, 4 Mar. 1993, p. 18; 'Strengthening the effectiveness and improving the efficiency of the safeguards system' (note 39), p. 3; and *IAEA Bulletin*, no. 1 (1993), p. 40.

⁴¹ Fainberg, A., *Strengthening IAEA Safeguards: Lessons from Iraq* (Center for International Security and Arms Control, Stanford University: Stanford, Calif., Apr. 1993), pp. 44–45.

⁴² Strulak (note 15), pp. 9, 10.

⁴³ Weixing Hu, 'China's nuclear export controls: policy and regulations', *Nonproliferation Review*, vol. 1, no. 2 (winter 1994), pp. 5–6; and Hibbs, M., 'Moscow says it will now apply full-scope safeguards on exports', *Nuclear Fuel*, 12 Oct. 1992, p. 4.

⁴⁴ Strulak (note 15), p. 7.

Future success of nuclear export controls could be greatly enhanced if companies supplying items of possible concern were to exercise voluntary restraint in selling to countries suspected of attempting to develop nuclear weapons. The positive inducements for good behaviour being explored include streamlined export licensing and increased access to information from governments to firms which would be part of a 'certified exporters program'.⁴⁵

The possibility of bringing those states which frequently act as intermediaries in the shipment of nuclear or related equipment into the export control system should not be overlooked. Related to this, while verification of end use may not be feasible for all exports, an examination could be made of the possibilities of implementing some form of end-use controls, perhaps on a select list of goods.⁴⁶

In an important new development, annual plenary meetings of the NSG are now held to air concerns and make decisions. At the 1994 Madrid NSG meeting, lists of export licence denials were exchanged and discussions were held on rules for the transfer of nuclear materials and equipment to NPT parties which are none the less causes of proliferation concern—Iran, North Korea, Libya and Syria, as well as China, the only declared nuclear weapon state not an NSG member.⁴⁷

III. Chemical and biological export controls

Chemical export control

While it is difficult to detect and hinder illicit proliferation of weapons in any category, it is particularly difficult for chemical weapons (CW) owing to the nature of the chemicals, technology, equipment and know-how involved and because of their wide use in civilian industry. Detailed examples of production techniques for some of the major chemical weapons are readily available in the open literature, and many of them follow standard chemical engineering principles.⁴⁸ For example, mustard gas is fairly easy to produce and does not require very advanced chemical facilities, although production of nerve agents is more difficult since the materials used are highly corrosive and reactive. Nevertheless, 'multipurpose chemical plants capable of manufacturing organo-phosphorus pesticides or flame retardants could be converted in a matter of weeks or months to the production of nerve agents'.⁴⁹ Finally, many basic chemicals used in the production of CW are used extensively in commercial applications. A facility cannot be assumed to be engaged in illicit activities just because it has the capability to do so.

⁴⁵ Zimmerman, P. D., 'Proliferation: bronze medal technology is good enough', *Orbis*, vol. 38, no. 1 (winter 1994), p. 81; and Hart, K., 'Trade group urges more sharing of proliferation information', *Nuclear Fuel*, 5 July 1993, p. 15.

⁴⁶ Müller, in Müller and Dunn (note 36), pp. 11, 12.

⁴⁷ *Arms Control Today*, May 1994, p. 24; and Strulak (note 15), p. 8.

⁴⁸ US Congress, Office of Technology Assessment, *Proliferation of Weapons of Mass Destruction: Assessing the Risks*, OTA-ISC-559 (US Government Printing Office: Washington, DC, Aug. 1993), p. 36.

⁴⁹ US Congress, Office of Technology Assessment (note 48), p. 36.

The Australia Group

Since the beginning of this century there have been efforts to hinder the use of chemical weapons in war. However, measures to hinder the proliferation of chemicals, equipment and technologies used in the production of these weapons are more recent. The first real attempt to control the export of chemicals used in CW production was made in 1984, when confirmed CW use in the 1980–88 Iraq–Iran War was followed by the realization that Iraq’s CW capability had to a large extent been acquired from and aided by Western companies and industry.⁵⁰ In 1985 a group that came to be known as the Australia Group met for the first time with the intention of developing measures that would hinder further CW proliferation.⁵¹

The Australia Group originally consisted of 15 members, which developed a list of 40 chemicals to be placed under control. These were considered to be the most relevant precursors used in the production of sulphur mustard, tabun, sarin, soman, VX and psychochemicals.⁵² The list was divided into two parts. The first part was the ‘core list’ of five chemicals (considered to be key precursors in the production of chemical weapons) whose export was to be put under control in all the Australia Group member states. The second part, the ‘warning list’, consisted of 35 chemicals perceived as dangerous but not as key precursors. These chemicals did not necessarily have to be put under control, but the list was to be distributed to the chemical industry to highlight the fact that they could be used in CW production. Although the Australia Group was aware that control would not entirely prevent CW proliferation, it would force countries seeking to acquire a CW capability to go further back in the production process and delay acquisition.

In 1984, even before the Australia Group was formed, progress towards a ban on CW production had moved from exploratory discussions to negotiations on a convention, regarded as the most effective control mechanism. Today the members have expanded their chemical precursor list to include 54 chemicals. In addition they have developed lists for the control of dual-use chemical manufacturing facilities and equipment and related technology.⁵³

⁵⁰ See Robinson, J. P. P., ‘Chemical and biological warfare: developments in 1984’, SIPRI, *World Armaments and Disarmament: SIPRI Yearbook 1985* (Taylor & Francis: London, 1985), pp. 181–83; Robinson, J. P. P., ‘Chemical and biological warfare: developments in 1985’, SIPRI, *World Armaments and Disarmament: SIPRI Yearbook 1986* (Oxford University Press: Oxford, 1986), pp. 162–63; and Goose, S., ‘Armed conflicts in 1986, and the Iraq–Iran War’, *SIPRI Yearbook 1987: World Armaments and Disarmament* (Oxford University Press: Oxford, 1987), pp. 297–320.

⁵¹ For discussions of the Australia Group (first known as the Brussels Club), see Robinson, J. P. P., ‘Chemical and biological warfare: developments in 1986’, *SIPRI Yearbook 1987* (note 50), p. 104; and Robinson, J. P. P., *Chemical and Biological Warfare Developments: 1985*, SIPRI Chemical & Biological Warfare Studies no. 6 (Oxford University Press: Oxford, 1986), p. 52.

⁵² Mathews, R., ‘A comparison of the Australia Group List of chemical weapon precursors and the CWC schedules of chemicals’, *Chemical Weapons Convention Bulletin*, no. 21 (Sep. 1993), p. 1. The list was prepared at the Australia Group’s second meeting, in Sep. 1985 and was agreed upon at its May 1986 meeting.

⁵³ This list was developed on the initiative of the USA and finally agreed upon in 1990. For further information, see Robinson, J. P. P., ‘The Australia Group and the Chemical Weapons Convention’, Paper presented at Pugwash Meeting no. 186, 19th Workshop of the Pugwash Study Group on Chemical and Biological Warfare, 11–12 Jan. 1992, Geneva, Switzerland. The Australia Group lists have been developed from 1992. The BW lists are discussed below.

The Australia Group is an informal organization which cannot impose restrictions and export controls on its members. Any control maintained by a member country is voluntary and is implemented in accordance with its national legislation. The regime's effectiveness lies in its informality, which allows members to exchange information about their exports and export control experiences without having to declare their actions or the actions of others.

*The Chemical Weapons Convention*⁵⁴

The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction (CWC) was finalized in 1992 and opened for signature on 13 January 1993. By the end of 1994, 159 states had signed and 19 states had ratified the Convention.⁵⁵ The CWC will enter into force 180 days after the 65th ratification.

Several articles in the CWC deal with export control and restrictions on transfer. In Article I parties undertake never to 'develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone'.⁵⁶ Article II, paragraph 1, 'Definitions and Criteria', defines a chemical weapon as:

(a) Toxic chemicals and their precursors, except where intended for purposes not prohibited under this Convention, as long as the types and quantities are consistent with such purposes;

(b) Munitions and devices, specifically designed to cause death or other harm through the toxic properties of those toxic chemicals specified in subparagraph (a), which would be released as a result of the employment of such munitions and devices;

(c) Any equipment specifically designed for use directly in connection with the employment of munitions and devices specified in subparagraph (b).

However, only the transfer of chemicals is controlled and monitored under the CWC. Article VI states that each party has the right to transfer chemicals for purposes not prohibited under the Convention,⁵⁷ and Article XI obliges parties to 'undertake to review their existing national regulations in the field of trade in chemicals in order to render them consistent with the object and purpose of this Convention'.⁵⁸ Article VII requires parties to 'in accordance with its constitutional processes, adopt the necessary measures to implement its obligation under this Convention'.⁵⁹

The Annex on Chemicals contains lists of chemicals that are or will be placed under some kind of control or restrictions. These lists were negotiated

⁵⁴ The text of the Chemical Weapons Convention is reproduced in *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press: Oxford, 1993), appendix 14A, pp. 735-56.

⁵⁵ See also chapter 20 in this volume.

⁵⁶ CWC Article I, 'General obligations', para. 1(a).

⁵⁷ Purposes not prohibited under the Convention include, e.g., peaceful research, protective purposes, etc. For a full account of the purposes, see Article II, para. 9 of the Chemical Weapons Convention.

⁵⁸ CWC Article XI, para. 2(e).

⁵⁹ CWC Article VII, para. I.

and established primarily to 'trigger declaration obligations and verification measures with regard to those chemicals and facilities related to such chemicals'.⁶⁰ The Annex divides the chemicals into three schedules.

Schedule 1 chemicals are defined as posing a high risk to the 'object and purposes' of the Convention and have 'little or no use for purposes not prohibited under the Convention'.⁶¹ These chemicals are considered as actual CW agents and nerve agent precursors for binary CW. Schedule 1 chemicals may not under any circumstances be transferred to any non-party, and only an aggregate amount of 1 tonne or less intended for research, medical, pharmaceutical or protective purposes may be transferred to parties. Each transfer must be preceded by a notification to the Technical Secretariat of the CWC by both the transferring and receiving state. Annual declarations are required for all Schedule 1 transfers, including the chemical named and structural formulae, the quantity acquired or transferred, the recipient and the purpose.⁶²

Schedule 2 chemicals are considered to pose a significant risk to the 'object and purposes' of the Convention and are not 'produced in large commercial quantities for purposes not prohibited' under the Convention.⁶³ These chemicals are known to be used as key precursors in CW production and as toxic chemicals which can be used in the production of CW agents. The transfer of Schedule 2 chemicals is allowed to states not party to the CWC for the first three years after the CWC has entered into force. Thereafter, transfers will be allowed only to CWC parties. Transfers to non-parties require an end-use certificate stating that the chemical will only be used for purposes not prohibited under the Convention, that they are not to be retransferred and stating the end use. Further, the chemical type and quantity must be stated as well as the name and address of the end user.⁶⁴ Initial and annual declarations are required which include 'aggregate national data for the previous calendar year on the quantities produced, processed, consumed, imported and exported of each Schedule 2 chemical'.⁶⁵ Further, each facility producing Schedule 2 chemicals must make initial and annual declarations regarding each chemical above the declaration threshold, declaring the 'total amount produced, processed, consumed, imported and exported' by the facility for the previous calendar year.⁶⁶

Schedule 3 chemicals are classified as those 'produced, stockpiled or used as chemical weapons' and which pose a risk to the 'object and purpose' of the Convention. They might also have been 'produced in large commercial quan-

⁶⁰ Krutzsch, W. and Trapp, R., *A Commentary on the Chemical Weapons Convention* (Kluwer Academic Publishers: Dordrecht, 1994), p. 258.

⁶¹ CWC Annex on Chemicals, A, para. 1.

⁶² CWC Verification Annex, Part VI, 'Activities not Prohibited under this Convention in Accordance with Article VI', 'Regime for Schedule 1 Chemicals and Facilities Related to Such Chemicals', A. 'General Provisions', para. 1, 2, B. 'Transfers', paras 3-6.

⁶³ CWC Annex on Chemicals, A, para. 2.

⁶⁴ CWC Verification Annex, Part VII, C. 'Transfers to States not Party to this Convention', paras 31-32.

⁶⁵ CWC, Part VII, 'Activities not Prohibited under this Convention in Accordance with Article VI; Regime for Schedule 2 Chemical and Facilities Related to such Chemicals', A. 'Declarations', para. 1.

⁶⁶ CWC, Part VII (note 65), A. 'Declarations', para. 8. For the initial declaration the same applies, but it shall then be made for the previous 3 calendar years.

tities for purposes not prohibited' under the CWC.⁶⁷ Transfers of Schedule 2 chemicals are not prohibited but can only take place to non-parties with an end-use certificate stating that they will only be used for purposes not prohibited under the Convention, that they will not be retransferred and giving the end use. The chemical type and quantity must be stated as well as the name and address of the end user. Initial and annual declarations are required, stating the 'aggregate national data for the previous calendar year on the quantities produced, imported and exported . . . as well as a quantitative specification of import and export for each country involved for each chemical involved'.⁶⁸ Each plant producing a Schedule 3 chemical must also make initial and annual declarations as to the approximate production of each chemical in the previous calendar year, or, 'in case of anticipated activities, anticipated for the next calendar year'.⁶⁹

The CWC and the Australia Group

With the completion and future entry into force of the CWC, the need for the Australia Group to continue its work is under discussion. Opponents of the Group feel that export controls contradict one of the basic principles of the CWC—the guarantee of unhampered trade and transfers which shall further the 'economic or technological development of States Parties, and international cooperation in the field of chemical activities'.⁷⁰ They thus want to disband the Australia Group as soon as the Convention enters into force. However, the members feel that they cannot abolish the regime unless they have verified that the CWC is functioning and can effectively prevent the proliferation of chemicals used in the production of CW. Further, the CWC does not regulate equipment and technology used in CW production—which the Australia Group does. The Australia Group has stated that they 'undertake to review, in the light of the implementation of the Convention, the measures that they take to prevent the spread of chemical substances and equipment for purposes contrary to the objectives of the Convention, with the aim of removing such measures for the benefit of States Parties to the Convention acting in full compliance with their obligation under the Convention'.⁷¹ This statement facilitated conclusion of the CWC, and the Australia Group has begun its review of export control measures. This does not, however, mean that the Australia Group will be abolished. It has undertaken to review its measures only as regards CW chemicals and equipment, but, as mentioned above, the Australia Group has expanded its measures to encompass much more than that.

⁶⁷ CWC Annex on Chemicals, A, para. 3. These are known as dual-use chemicals.

⁶⁸ CWC, Part VIII, 'Activities not Prohibited under the Convention in Accordance with Article VI; Regime for Schedule 3 Chemical and Facilities Related to such Chemicals', A. 'Declarations', para. 1.

⁶⁹ CWC, Part VIII, (note 68) A. 'Declarations', para. 8.

⁷⁰ CWC Article XI, para. 1.

⁷¹ Statement made on behalf of the Australia Group by the Representative of Australia, Ambassador Paul O'Sullivan, at the 629th Plenary Meeting of the Conference on Disarmament, CD document CD/1164, 7 Aug. 1992.

Recent developments

At the May 1994 Australia Group meeting, the 'continuing need for national measures to prevent civilian industry and traders from becoming unwitting contributors to CBW programs' was stressed.⁷² It was also stated that export licensing is consistent with and 'actively supports' the obligations and requirements under CWC Article I. Finally, Australia Group members were 'keen to raise awareness about the importance of export licensing to support the global bans on chemical and biological weapons, and to encourage the adoption and implementation of appropriate national measures by all relevant countries'. It is clear that the Group will continue to declare the need for export controls to be an integral part of CW non-proliferation measures. The Group also emphasizes the link between export controls and the CWC.

Owing to the concerns of private industries about economic competitiveness, there has been a tendency to streamline CW export controls.⁷³ For example, although continuing to regulate dual-use goods used in the production of CW and other weapons of mass destruction, the USA has announced its intention to streamline US export controls to countries which abide by global CW non-proliferation norms.⁷⁴ The USA simultaneously urges countries to control their trade in dual-use goods with Iran⁷⁵ and has proposed granting \$2 260 000 to the new states of the former Soviet Union as aid for implementation of export controls.⁷⁶

The harmonization of EU dual-use export controls may also have an impact on export controls related to chemicals, equipment and technology that can be used in the production of CW. In introducing the new Council Regulation on the Control of Exports of Dual-Use Goods from the Community, the EU abolished Regulation (EEC) no. 428/89 (1989), which controlled a list of eight chemicals for export.⁷⁷ The purpose seems to be to harmonize all export controls in one body of legislation. Although the list of goods under control is not available to the public, it is assumed that the chemicals listed in Regulation 428/89 are listed in the new Regulation. It is hoped that the list has been expanded and also contains dual-use CW technology and equipment.

⁷² Australia Group, *Press Release*, Australia Group Meeting, Australian Embassy, Paris, 16–19 May 1994.

⁷³ See the discussion in Stock, T. and De Geer, A., 'Chemical weapon developments', *SIPRI Yearbook 1994* (note 5), pp. 321–22.

⁷⁴ *Wireless File*, 'White House explains reforms in export control program' (United States Information Service, US Embassy: Stockholm, 30 Mar. 1994), p. 23.

⁷⁵ Finnegan, P. and Hitchens, T., 'U.S. fights dual-use technology flow to Iran', *Defense News*, vol. 9, no. 8 (28 Feb.–6 Mar. 1994), p. 6.

⁷⁶ *Arms Control Today*, vol. 24, no. 1 (Jan./Feb. 1994), pp. 32–33.

⁷⁷ Article 22b of Regulation 428/89. See also section V in this chapter.

Biological export control

The 1991 Persian Gulf War passed without the expected use of chemical or biological weapons by Iraq.⁷⁸ However, the inspections carried out by the United Nations Special Commission on Iraq (UNSCOM) in the aftermath of the war revealed that Iraq had actively pursued a biological and toxin warfare (BTW) programme. This raised general public awareness about the reality of BW proliferation.

The proliferation of BW agents and the technology to produce biological weapons is perceived as one of the most serious threats of the 1990s. Approximately a dozen countries are 'currently believed to possess or to be seeking biological and toxin weapons'.⁷⁹ The general perception is that it will be much easier to produce BW agents than to develop the munitions to deliver these agents effectively from the military point of view.⁸⁰ 'Although BTW agents are generally considered to be poor battlefield weapons because they are slow-acting and difficult to control, they might have some tactical utility for a narrow range of military operations in which immediate results are not required and the risk of exposing friendly forces is minimal'.⁸¹

Efforts to halt BW proliferation must take into consideration the following limitations and realities.

1. The 1972 Biological and Toxin Weapons Convention (BWC), in force since 1975, bans the development, production, stockpiling and transfer of BTW agents. The Convention was weakened from the outset by the impossibility of banning research on BTW agents for defensive or peaceful purposes and the absence of an effective international verification regime to ensure compliance.

2. The enormous and rapid developments in biotechnology and genetic engineering over the past two decades have spread capabilities throughout the world.⁸² Biotechnology is regarded as a prerequisite for a 'third industrial revolution' from which many developing countries could benefit.

3. Much of the necessary know-how and technology in biotechnology are 'dual-use', with wide, legitimate application in the commercial fermentation and biotechnology industries.

4. Biotechnology and genetic engineering are information-intensive rather than capital-intensive, and much of this information is published in the open

⁷⁸ There are allegations of possible accidental releases of agents that might have caused the so-called Gulf War Syndrome, which affects some Persian Gulf War veterans, mainly from the USA. See also chapter 10 in this volume.

⁷⁹ Tucker, J. B., 'Lessons of Iraq's biological warfare programme', *Arms Control Today*, vol. 14, no. 3 (Dec. 1993), pp. 229-71; Stock, T., 'Chemical and biological weapons: developments and proliferation', *SIPRI Yearbook 1993* (note 54), p. 286; and Geissler, E., 'Biological weapon and arms control developments', *SIPRI Yearbook 1994* (note 5), pp. 713-38.

⁸⁰ US Congress, Office of Technology Assessment (note 48), p. 38.

⁸¹ Tucker (note 79), pp. 229-71

⁸² Bartfai, T., Lundin, S. J. and Rybeck, B., 'Benefits and threats of developments in biotechnology and genetic engineering', *SIPRI Yearbook 1993* (note 54), appendix 7A, pp. 293-305.

literature.⁸³ It is impossible to prevent the diffusion of weapon-relevant information and knowledge.

The dilemma today can be described as follows. In spite of the Convention, the importance of which is recognized, parties are confronted with a high degree of internationalization in the biotechnology and genetic engineering market. This market is characterized by an enormous flow of technology, know-how and material from North to South, and the industrialized countries realize that this flow carries with it the potential for BW proliferation. In addition, a growing opinion—led by some of the developing countries—opposes any further restrictions on technology and know-how transfer under the BWC. This strong opposition to future restrictions can be perceived as a lesson which these countries have learned from the CWC negotiations.

Bearing this in mind, a determined aggressor would certainly be able to achieve a BW capability within one to two years,⁸⁴ even if restrictions on transfers are individually applied by certain supplier countries.

The question is how concerned countries will be able to prevent BW proliferation given the nature of the problem. For the moment, export control initiatives must be regarded as the only tool to stop or to slow down BW proliferation. Supply-side measures are applied at the national level and through coordinated efforts such as those of the Australia Group. The number of countries that have incorporated specific BW control measures in their national legislation is increasing.⁸⁵

The Australia Group has also increasingly focused upon the issue of export control with respect to BW agents, technology and equipment. From 1990 the Group discussed ways to warn industry and concerned governments about the danger of aiding BW proliferation.⁸⁶ In 1992 these efforts resulted in an agreed list of biological agents subject to export control, composed of a core and a warning list and a list of dual-use biological equipment for export control.⁸⁷

In 1994 the core list contained 49 biological agents and the warning list 19 viruses, rickettsiae, bacteria, genetically modified micro-organisms and toxins. A second list, agreed in 1992, comprises 17 animal pathogens subject to export control; another list, agreed in 1993 and composed of a core and an awareness-raising list, contains 15 plant pathogens (bacteria, fungi, viruses and genetically modified micro-organisms). The three lists now cover human, animal and plant agents.

⁸³ US Congress, Office of Technology Assessment, *Technologies Underlying Weapons of Mass Destruction*, OTA-BP-115 (US Government Printing Office: Washington, DC, Dec. 1993), p. 85.

⁸⁴ Royal Society, *Scientific Aspects of Control of Biological Weapons*, Report of a Royal Society Group (Royal Society: London, July 1994), p. 50.

⁸⁵ *Worldwide Guide to Export Controls*, 1993/94 edn (Export Control Publications: Surrey, 1993). Examples of countries that improved existing legislation in 1994 are Russia, which in June introduced a new directive on control of BW-relevant material; Belgium; and the USA.

⁸⁶ de Briganti, G., 'West takes steps to curb biological weapon proliferation', *Defense News*, vol. 5, no. 26 (25 June 1990), p. 18.

⁸⁷ Stock, T., 'Chemical and biological weapons: developments and proliferation', *SIPRI Yearbook 1993* (note 54), p. 269.

The list of dual-use biological equipment contains items related to: (a) complete containment facilities at the P3 and P4 containment level,⁸⁸ (b) fermenters, (c) centrifugal separators, (d) cross-flow filtration equipment, (e) freeze-drying equipment, (f) equipment that incorporates or is contained in P3 or P4 (BL3, BL4, L3, L4) containment housing, and (g) aerosol inhalation chambers.⁸⁹

Some members of the Australia Group already control the listed items on a national basis, and others are in the process of incorporating such controls. As outlined above, members do not collectively undertake any legally binding obligations: the purpose of their participation is to demonstrate their commitment to chemical and biological warfare non-proliferation. The Group has also committed itself to exploring ways of making the national measures undertaken by member states more effective and to discuss new measures.

IV. The Missile Technology Control Regime

The Missile Technology Control Regime was established in 1987 as an instrument for nuclear non-proliferation policy. The seven founding members produced the Guidelines for Sensitive Missile-Relevant Transfers, which in 1992 were expanded to include all ballistic and cruise missiles capable of delivering NBC weapons. The most recent Equipment and Technology Annex dates from November 1993.⁹⁰ The primary issues of concern to the MTCR partner countries have related to regime membership and to the relationship between the MTCR and other initiatives aimed at preventing the acquisition of cruise and ballistic missiles by countries of concern.

New members joining the MTCR must be able to carry out their obligations under the regime. However, this is not sufficient since it does not explain the denial of membership to Israel—which has export regulations and enforcement practices at least as efficient as those of many regime members.⁹¹ There must also be an evaluation of the commitment of the joining state towards the wider goal of non-proliferation in specific areas. This includes an evaluation by regime members of the domestic acquisition programmes of the potential

⁸⁸ 'P' stands for 'physical containment'. Biosafety levels (BL, formerly P1–P4) apply to work with biological agents and/or for genetic engineering; the standards are developed by organizations and institutions such as the World Health Organization (WHO), the National Institutes of Health (NIH) and the US Centres for Disease Control (CDC). Level 4 (L4) refers to the maximum containment laboratories and facilities with highly specialized architectural, sterilization and ventilation features for work with dangerous and/or exotic biological agents, including recombinants that pose a high individual risk of life-threatening disease for the laboratory worker, the community and the environment. In addition, L4 laboratories are usually equipped with safety cabinets to minimize further the risk that the laboratory worker or the environment is contaminated by the biological agents studied.

⁸⁹ *Export Licensing Measures on Material Used in the Manufacture of Chemical and Biological Weapons*, AG/May94/Press/Chair/11, May 1994.

⁹⁰ Information supplied in communications from the Norwegian and the Swedish ministries for foreign affairs, Mar. 1994.

⁹¹ Statement of Richard A. Clarke, Assistant Secretary for Political-Military Affairs, US Department of State to the hearings on *Arms Trade and Nonproliferation in the Middle East* before the Subcommittee on Technology and International Security of the Joint Economic Conference, US Congress, 13 Mar. 1992 (US Government Printing Office: Washington, DC, 1993), p. 81.

regime member. Since Israel's ballistic missile programmes are targets of multilateral export controls, it cannot become an MTCR member. Moreover, if Israel were to renounce its ballistic missile programmes, its nuclear programme and its refusal to join the NPT as a non-nuclear weapon state would still prevent membership of the MTCR.⁹²

Efforts are under way to consider how the MTCR can reduce the extent to which it is identified with trade restriction and the perception that membership is confined to the states of the Organisation for Economic Cooperation and Development (OECD). Argentina and Hungary, neither of which are members of the OECD, are members of the MTCR. Speaking at the United Nations in late 1993, President Bill Clinton stressed the need for changes which would 'strengthen the principles of the [MTCR] by transforming it from an agreement among just 23 nations to a set of rules that can command universal adherence'.⁹³

At the October 1994 MTCR plenary meeting in Stockholm, the discussion reflected this goal. The decision in principle to admit South Africa to the MTCR underlined both the numerical expansion of membership and wider geographical representation. The meeting also stressed the need to intensify contact with countries and regional bodies that are not MTCR participants but which share the goal of missile non-proliferation.⁹⁴

V. The EU Regulation on dual-use exports

The European Union Regulation is different from the other multilateral regimes discussed in this chapter. First, the EU is able to make decisions which are binding on all of its members—although it is not obliged to do so. Second, the EU is not a regime dedicated to the goal of non-proliferation but an international organization whose members have chosen to add cooperation in this area to the very broad spectrum of issues with which the organization deals.

The issue of cooperation in export regulation is dealt with by more than one of the different EU bodies. The European Parliament, the Commission of the European Union and the member states (through the Council of Ministers) have all been involved in the discussion. For the purposes of this section, the activities of the European Parliament are excluded.

The EU member states and the Commission tend to have different interpretations of community law and competence where questions of defence, foreign and security policy are concerned. Ultimately, while these interpretations

⁹² During the visit of Egyptian Foreign Minister Amr Moussa to Israel in Sep. 1994, Israeli Prime Minister Yitzhak Rabin made clear that Israel would not sign the NPT until the entire Middle East (including Iran, Iraq and Libya) were parties to a comprehensive regional peace settlement. See Pinkas, A. 'Israel won't sign nuclear non-proliferation pact', *Jerusalem Post* (international edn), 10 Sep. 1994, p. 2.

⁹³ President W. J. Clinton, 'Confronting the challenges of a broader world', address to the UN General Assembly, *US Department of State Dispatch*, vol. 4, no. 39 (27 Sep. 1993).

⁹⁴ Swedish Ministry for Foreign Affairs, 'Missile Technology Control Regime meets in Sweden', *Press Release*, 6 Oct. 1994.

could be tested in the European Court of Justice, in practice they are decided by the political dynamics of the process of European integration.⁹⁵ In 1992 the question of whether and how the issue of arms exports should be brought into the competence of the EC (European Community) Commission was decided at the 1991 EC Maastricht summit meeting.⁹⁶

The proposal that Article 223 of the 1957 Treaty of Rome—which gives national governments jurisdiction over questions of arms and military equipment—should be deleted from the Treaty was discussed and rejected. Moreover, the need for a coordinated EC arms transfer policy—which was agreed in principle at the first meeting of the Intergovernmental Conference (IGC) on Political Union in 1990—was considerably diluted in the Treaty on European Union.⁹⁷ Article J.1.3 of the Maastricht Treaty calls on the EU gradually to implement joint action ‘in the areas in which the Member States have important interests in common’. The definition of important interests is decided by the Council of Ministers. Arms export policy was identified as an area of common action and an *ad hoc* working group of EU members was set up under the Political Committee of the European Political Co-operation (EPC) in 1991.⁹⁸ The working group has apparently taken useful steps such as harmonizing national lists of items subject to UN or EU embargoes.⁹⁹

The European Union is closely involved in the issue of trade in civilian goods with potential military applications. On 19 December 1994 an EU Regulation on the Control of Exports of Dual-Use Goods was accepted which took effect on 1 March 1995.¹⁰⁰ The Regulation was developed by the Directorate General of the Commission responsible for the Internal Market and Industrial Affairs, in close consultation with the competent authorities in the member states. The Commission stressed that the completion of the internal market depended to some extent on joint export controls at the perimeter of the Union.

Prior to full implementation of the Regulation, EU members retain national controls on both dual-use and military goods transferred to other EU states. In the Single Market, controls on dual-use goods could be justified only if there were a risk that items transferred to another EU member would be re-exported

⁹⁵ Öberg, U., *Om EG-rätten, medlemsstaternas försvarsindustri och nationella säkerhetsintressen* [EC law, defence industries of the member states and national security interests], FOA Report A 10046-1.3, July 1993, pp. 78–79 (in Swedish).

⁹⁶ The evolution of the debate on export control in the EC can be followed in Courades Allebeck, A., ‘The European Community and arms export regulations’, ed. I. Anthony, SIPRI, *Arms Export Regulations* (Oxford University Press: Oxford, 1991); Bauer, H., ‘Institutional frameworks for integration of arms production in Western Europe’, eds M. Brzoska and P. Lock, SIPRI, *Restructuring of Arms Production in Western Europe* (Oxford University Press: Oxford, 1992); and Courades Allebeck, A., ‘The European Community: from the EC to the European Union’, ed. H. Wulf, SIPRI, *Arms Industry Limited* (Oxford University Press: Oxford, 1993).

⁹⁷ The Treaty on European Union—known as the Maastricht Treaty—was agreed on 11 Dec. 1991, signed on 7 Feb. 1992 and entered into force on 1 Nov. 1993. It is reproduced in *Europe*, document no. 1759/60, 7 Feb. 1992.

⁹⁸ Eavis, P., ‘EC Regulations’, ed. J. Thurlow, *Worldwide Guide to Export Controls* (Export Control Publications: Chertsey, 1994).

⁹⁹ *Arms and Dual-use Export Controls: Priorities for the European Union* (Saferworld: Bristol, June 1994), p. 9.

¹⁰⁰ *Atlantic News*, 5 Jan. 1995, pp. 3–4.

to a third party that was unacceptable to the government of the country where the goods originated.

In May 1991 the Commission observed that unless strict extra-EC export controls were in place it would be difficult to eliminate intra-EC controls. The Commission instructed its staff 'to determine what measures should be adopted to enable the twelve Member States to apply effective rules on the control of exports to non-member countries' and to define 'the internal and external measures which must be taken to eliminate, by 31 December 1992, checks on intra-Community trade in double-use industrial products covered by the COCOM arrangements'.¹⁰¹

In January 1992 an *ad hoc* working group was established by the European Council to help prepare a final proposal for the Regulation. The proposal was completed on 31 August 1992.¹⁰² During the next two years member states 'examined in microscopic detail the content of the lists and the various legal, timetable and voting questions raised by the regulation'.¹⁰³ This close scrutiny reflected the concern that the Commission was pushing into areas beyond its competence—foreign and security policy. The main areas of contention were the lists of technology and destinations subject to the Regulation. It was agreed that drawing up and amending such lists was a matter for the member states. The issue subsequently became how to bridge those parts of the export control system which fall under EU competence (the Regulation) and those which do not (the equipment and destination lists).

On 14 June 1994 it was agreed that the Regulation would be accompanied by a joint action decision taken in the context of Article J.3 of the Maastricht Treaty.¹⁰⁴ The joint action decision includes the list of destinations and the list of dual-use goods to which the Regulation will apply.¹⁰⁵

Implementing the Regulation will take three years from March 1995, during which time EU states will modify national regulations and procedures and the Commission will develop the procedures needed to meet its commitments under the Regulation. The Commission will monitor the implementation of the Regulation as well as developing a system for information exchange between the members.

¹⁰¹ Commission of the European Communities, 'The Single Market of 1993 and strategic products and technologies which are not intended specifically for military purposes', *Press Release*, Brussels, 29 May 1991.

¹⁰² Commission of the European Communities, 'Proposal for a Council Regulation (EEC) on the control of exports of certain dual-use goods and technologies and of certain nuclear products and technologies', document no. COM(92) 317 final (Office for Official Publications of the European Communities: Luxembourg, 31 Aug. 1992).

¹⁰³ Taylor, T. and Cornish, P., 'The Single European Market and strategic export controls', Paper presented to the Economic and Scientific Research Council (ESRC) Conference on the Single European Market, Exeter University, 8–11 Sep. 1994, pp. 13–14.

¹⁰⁴ The Regulation draws its authority from Article 113 of the 1957 Treaty of Rome, which allows for amendment by a qualified majority of the member states. See Courades Allebeck, A., in Wulf (note 96), chapter 26, section II, pp. 214–17. By making the equipment and country lists subject to the common foreign and security policy, amendments will be impossible without the unanimous consent of the member states—giving each member a veto.

¹⁰⁵ Eavis, in Thurlow (note 98). Interestingly, the destination list contains 'friendly' countries which will be eligible for simplified licensing procedures rather than countries which will be subject to more rigorous controls.

During the negotiation of the Regulation several countries proposed follow-on discussions on measures which could in time lead to the further harmonization of national practices within the EU—in particular, a single set of export licences and a common set of administrative licensing procedures. The preamble to the Regulation refers to it as the first step in establishing a common system for export control. It therefore seems certain that the Regulation is not the final word on the issue of EU export controls.

VI. The follow-on to COCOM

The COCOM regime and embargo formally ended on 31 March 1994. However, when the decision to end COCOM was taken, the members of the regime announced their intention to develop a follow-on regime. While the decision to end COCOM was announced at the high-level meeting of 16 November 1993, informal discussions about the process were initiated by the USA in mid-1993.¹⁰⁶ This was an open-ended commitment to try to develop a new multilateral control regime, and when the decision was taken it was not known what the mandate, structure or terms of reference of the regime would be. The regime still has no title and was initially referred to simply as the 'new forum', but an early decision was made that it should not exercise overlapping jurisdiction with NBC export control regimes.¹⁰⁷ Its primary aim will be to integrate conventional weapons and certain high technologies into the multilateral non-proliferation agenda.

There is widespread agreement among governments that, unlike NBC weapons, conventional arms transfers can have positive or negative effects depending on the specific circumstances of the transfer.

In common with the other regimes, decision making in the new forum will be carried out on a national basis. The forum will aim at establishing a mechanism for regular exchange of information and consultation regarding conventional arms and certain high-technology products.¹⁰⁸

Development of the new regime was the responsibility of the states which were COCOM members at the time the decision was taken.¹⁰⁹ From the outset there were close consultations with the group of Fully Co-operating Countries which were not formal members of COCOM—Austria, Finland, Ireland, New Zealand, Sweden and Switzerland. Initially outside the *ad hoc* working

¹⁰⁶ Prepared Statement on *The Renewal of the Export Administration Act*, from Lynn Davis, Under Secretary for International Security Affairs, to the Subcommittee on International Finance and Monetary Policy, Senate Committee on Banking, Housing and Urban Affairs, 24 Feb. 1994.

¹⁰⁷ US Arms Control and Disarmament Agency, *Annual Report to Congress* (US Government Printing Office: Washington, DC, 28 Mar. 1994), p. 41.

¹⁰⁸ Royal Ministry of Foreign Affairs, Norway, *Fortsatt forhandlingar om nytt multilateralt regime for eksportkontroll* [Continued negotiations on a new multilateral regime for export control], Press Release nr. 246/94, 22 Dec. 1994 (in Norwegian).

¹⁰⁹ Three *ad hoc* working groups were established to examine: (a) whether guidelines for the new forum could be developed; and (b) the coverage of the forum in terms of equipment and technology; and (c) the administrative arrangements by which the forum would operate. *UK Policy on Weapons Proliferation and Control in the Post-Cold War Era*, Minutes of Evidence, House of Commons Foreign Affairs Committee, 7 July 1994, p. 23.

groups, these countries were invited to participate in the discussion of the new forum in March 1994. In addition, there was close consultation between several COCOM members and the Russian Foreign Ministry.

The initiative to end the COCOM embargo and establish a new forum came from the United States, with France in particular expressing doubts about the wisdom of such a step. Russia has moved to establish export regulations on the items of most concern to former COCOM members—NBC and ballistic missile-related technologies. However, it is not clear that Russia can implement these regulations in transfers between Russia and the other newly independent states of the former Soviet Union. These countries have not established effective systems for export regulation. Under these conditions, ending COCOM restrictions on Russia was, it was argued, premature.

In the USA the decision to press for the dissolution of COCOM and the perceived need for a follow-on regime reflect some of the cross-pressures operating on export control policy. The path set for the gradual removal of COCOM restrictions through a phased programme tailored to the different characteristics and pace of change in the former Warsaw Treaty Organization (WTO) was overwhelmed by ideological arguments in favour of modifying export regulations together with certain issues specific to US–Russian and US–Chinese relations.

The underpinning for the approach of the Clinton Administration to export control is the belief that the development of democracy and market economies are intimately entwined and mutually reinforcing. Furthermore, the existence of insecurity around the world is connected with the lack of democracy and capitalism. These ideas were at the centre of the strategy presented in September 1993 by National Security Adviser Anthony Lake as the organizing principle for US foreign policy during the Clinton Administration. According to Lake, ‘throughout the cold war we contained a global threat to market democracies. Now we should seek to enlarge their reach’.¹¹⁰ The strategy had four components, each related to democracy and market economies: (a) to strengthen existing market democracies; (b) to foster and consolidate new democracies and market economies especially in states of special significance; (c) to counter aggression by states hostile to democracy and free markets; and (d) to help democracy and market economics take root in areas of humanitarian concern.

COCOM was seen as an obstacle to the development of market economies in Russia and China—states of special significance—and the issue of US export regulations was raised by both countries in bilateral discussions.¹¹¹ The US Department of Defense (DOD) Planning Guidance for fiscal years

¹¹⁰ Lake, A., ‘From containment to enlargement’, Address at the School of Advanced International Studies, Johns Hopkins University, Washington, DC, 21 Sep. 1993. In one week in Sep. 1993, speeches referring to these 4 goals were made by: Secretary of State Warren Christopher, at Columbia University in New York; Anthony Lake, at Johns Hopkins University in Baltimore, Md.; and Madeleine K. Albright, at the National Defense University in Washington, DC.

¹¹¹ When they met in Vancouver, Canada, in Apr. 1993, President Yeltsin raised the issue of COCOM directly with President Clinton. US–Chinese relations are discussed in chapter 11 in this volume.

1994–99 named preventing the re-emergence of a new rival or coalition of rivals that pose a threat to the order of the former Soviet Union as the first priority for US policy, and it is likely that maintaining COCOM at least as far as the newly independent states of the former Soviet Union are concerned had its supporters within the DOD.¹¹² However, William Perry, Deputy Secretary of Defense in November 1993 and later elevated to Secretary of Defense, publicly advocated ending the COCOM embargo on those controlled items seen to obstruct conversion of the Russian defence industry to civilian production.¹¹³

The US objective was to replace COCOM with a regime that ‘promotes transparency and responsibility in arms and sensitive dual-use trade to countries and regions of instability’.¹¹⁴ However, when the decision to end COCOM was taken in 1993, no specific US proposal for a successor regime had been prepared. The preference for developing regime guidelines together with probable regime partners was a conscious decision of the US Administration and reflected the desire for a very broad participation of supplier states ideally going beyond the membership of existing multilateral regimes.

At a summit meeting in Washington in September 1994, President Boris Yeltsin and President Clinton were unable to reach agreement on whether or not Russia met the conditions required for entry. Yeltsin observed that agreement had been reached ‘in principle’ by which Russia would fulfil its existing obligations regarding supplies to Iran but would sign no new agreements. Clinton underlined that any agreement depended on further investigation of the scope and content of Russia’s existing obligations to Iran.¹¹⁵

At their meeting in the Hague on 21–22 December 1994, the countries discussing the new forum were unable to resolve the issue of whether or not Russia should be invited to join the regime as a founding member. Negotiations in the Working Group on Guidelines (under the chairmanship of Nor-

¹¹² Jervis, R., ‘International primacy: is the game worth the candle?’, *International Security*, vol. 17, no. 4 (spring 1993); and Layne, C., ‘The unipolar illusion: why new great powers will rise’, *International Security*, vol. 17, no. 4 (spring 1993). The changing position of the DOD is described in congressional testimony by Dr Mitchel Wallerstein, Deputy Assistant Secretary of Defense for Counter-proliferation Policy, *Export Control and High Technology*, Hearing before the Subcommittee on Technology, Environment and Aviation of the Committee on Science, Space and Technology, US House of Representatives (US Government Printing Office: Washington, DC, 24 May 1994).

¹¹³ Perry, W. J., *Soviet Defense Conversion: Problems and Opportunities* (Center for International Security and Arms Control, Stanford University: Stanford, Calif., 1992). Perry also co-authored a report proposing the integration of existing technology denial regimes into a single regime dealing with NBC technology, ballistic missiles and advanced conventional technologies of concern. Carter, A. B., Perry, W. J. and Steinbrunner, J. D., *A New Concept of Co-operative Security*, Brookings Occasional Papers (Brookings Institution: Washington, DC, 1992), p. 63. The practical obstacles to such a proposal are examined in Spector, L. and Foran, V., *Preventing Weapons Proliferation: Should the Regimes be Combined?* (Stanley Foundation: Muscatine, Iowa, Oct. 1992).

¹¹⁴ Testimony of Barry Carter, Acting Undersecretary for Export Administration, Bureau of Export Administration, Department of Commerce to the Senate Committee on Banking, Housing and Urban Affairs, Subcommittee on International Finance and Monetary Policy, 24 Feb. 1994. Moreover, transparency was considered to require advance notification of transfers rather than information about deliveries. Moodie, M., ‘Constraining conventional arms transfers’, *The Arms Trade: Problems and Prospects in the Post Cold-War World*, Special Issue of the *Annals of the American Academy of Political and Social Science*, vol. 535 (Sep. 1994), p. 139.

¹¹⁵ White House Press Conference, 29 Sep. 1994.

way) and the Working Group on Lists (under the chairmanship of Germany) were scheduled to continue in Canberra, Australia, in February 1995. At an informal meeting in Carcassonne, France, on 18–19 March 1995, EU foreign ministers suggested issuing an invitation to Russia to join the discussions of a follow-on forum.¹¹⁶

VII. Schools of opinion on export controls

The spectrum of opinion on the goals and utility of export control measures is very broad. At least the following nine strands can be identified in the literature on export control—although in many cases the boundaries between the arguments are not watertight and it is possible to accept several of them.

Export controls are acts of political discrimination

This argument suggests that multilateral export control regimes have become an element in the reordering of international political relationships after the cold war. At a minimum, the emergence of multilateral export control regimes symbolizes that order.¹¹⁷

Multilateral export controls belong to the group of arms control measures variously called ‘the coercive approach’,¹¹⁸ ‘the containment approach’¹¹⁹ and ‘the competitive approach’.¹²⁰ Regime membership is not universal, and both some advocates and some critics see export controls as acts of political discrimination.

Multilateral regimes rest on national laws and regulations whose implementation is discriminatory since some exports are approved and others are not. The abolition of multilateral regimes would thus not end discrimination.¹²¹ The issue is what should be the basis for discrimination.

An extreme position suggests that the basis for discrimination is race or culture. Brahma Chellaney has suggested that the Australia Group, the NSG, the MTCR and COCOM are or were ‘a surreptitious club of white countries, many former colonial powers that employed their superior military strength

¹¹⁶ *Atlantic News*, 22 Mar. 1995, P. 1.

¹¹⁷ Subrahmanyam, K., ‘Export controls and the North-South controversy’, *Washington Quarterly*, vol. 16 (spring 1993); and Leventhal, P., ‘Why bother plugging export leaks?’, *Orbis*, vol. 36, no. 2 (spring 1992), p. 168.

¹¹⁸ US Congress, Office of Technology Assessment (note 48), p. 31.

¹¹⁹ Butfoy, A., ‘The evolving framework for arms control’, *Australian Journal of International Affairs*, vol. 48, no. 1 (May 1994).

¹²⁰ Daalder, I., ‘The future of arms control’, *Survival*, vol. 34, no. 1 (spring 1992).

¹²¹ In fact, the process of bargaining and compromise between members during regime formation and amendment may blunt national control measures. For example, US national nuclear export controls are more detailed and restrictive than obligations under the NSG. *Nuclear Nonproliferation: Export Licensing Procedures for Dual-Use Items Need to be Strengthened*; GAO/NSIAD-94-119 (US General Accounting Office: Washington, DC, Apr. 1994). Equally, US national controls on missile-related technology transfers are more restrictive than the MTCR Guidelines.

derived from industrial and technological advantage to subdue the world's most ancient civilizations'.¹²²

Another extreme view is held by Lise Hartman, who sees the MTCR as an instrument of power politics in their most raw form. According to Hartman 'the point of the matter is for the US to say to potential proliferators "whether it's in your interest to do this or not is your problem, but it is not in the US interest, and the US is going to do absolutely everything within its power to punish you unless you come to agree with it"'.¹²³

Membership of the regimes is not closed. Moreover, few of the existing members share the characteristics described by Chellaney. The accession of new members—such as Argentina and South Africa—further invalidates his description. Hartman's position is not shared across the US Government, let alone across all regime members. However, the principles and norms underpinning multilateral regimes are a legitimate area of enquiry.

The Australia Group is backed by a statement from all its members that they will not develop, produce or deploy chemical or biological weapons;¹²⁴ the norm in this case is clearly against weapon possession. The nuclear weapon states defined in Article IX.3 of the NPT all intend to maintain their status, and members of the MTCR reserve the right to deploy missiles controlled under the regime. In the NSG and MTCR, therefore, outlawing possession of these capabilities is not a group norm, but only an opposition to their further spread. The defence of the state by conventional armed forces is, in most countries, seen as an obligation of government. Therefore, there is no normative or principled objection to the further spread of conventional arms. Rather, it is the nature of their deployment and use which is subject to regulation.

Export controls are a subordinate part of force planning

During the cold war COCOM was seen as useful in denying the Soviet Union and its allies given technologies until they were no longer critical to the military posture of the countries operating the controls. After the cold war this line of argument has been put forward in the United States in relation to the Middle East in the wake of the 1991 Gulf War against Iraq.¹²⁵

The purpose of the MTCR would be to delay the introduction of missiles by a potential adversary until after theatre or local area ballistic missile defences have been developed and deployed. The argument could also be applied to nuclear and chemical weapons in the context of efforts to develop effective counter-force options.

¹²² Chellaney, B., 'An Indian critique of US export controls', *Orbis*, vol. 38, no. 3 (summer 1994), p. 443.

¹²³ Hartman, J. L., 'Controlling the proliferation of missiles', eds S. Feldman and A. Levite, *Arms Control and the New Middle East Security Environment* (Jaffee Center for Strategic Studies: Tel Aviv, 1994), p. 221.

¹²⁴ Through participation in the CWC and the BWC, respectively.

¹²⁵ Statement of Janne Nolan to the Hearing on *Arms Trade and Nonproliferation in the Middle East*, Subcommittee on Technology and National Security of the Joint Economic Committee, Congress of the United States, 13 Mar. 1992 (US Government Printing Office: Washington, DC, 1992).

This approach has not been put officially to any of the current export control regimes. However, it has been discussed within NATO which, after the ministerial meeting in Istanbul on 9 June 1994, released the Alliance Policy Framework on Proliferation of Weapons of Mass Destruction.¹²⁶ Responding to the political dimension of non-proliferation could also include using the Partnership for Peace (PFP) framework to discuss issues related to export control.

Keith Krause has argued that, as military technologies age and are superseded by new capabilities in the inventories of the countries which developed them, their diffusion is inevitable.¹²⁷ Krause also makes a direct link between vertical and horizontal proliferation through the argument that controlling horizontal technology transfers would be easier if there was a cap on military technology development in the major centres of innovation—Russia, the USA and countries of Western Europe.¹²⁸

Export controls prevent economic development

None of the export control regimes has economic objectives according to its mandate. Nevertheless, in some cases this argument is blended together with that made above about political discrimination.¹²⁹ According to this argument, preventing economic development is a deliberate policy of countries operating export controls. The goal of the regimes is to preserve the relative economic advantages of regime members against challenges from the countries which are the targets of export controls.

Advocates of this position would underline that membership of the Australia Group, the MTCR and COCOM is virtually identical with membership of the OECD. Discussions within the OECD Development Assistance Committee (DAC) of possible linkages between overseas development assistance and the security policies of aid recipient countries add to the suspicion in a few countries about the use of multilateral economic measures as a lever to bring about political changes.

This argument has become less persuasive as the number of independent centres of technology development has multiplied. The list of technologies over which the current members of the export control groups have monopoly

¹²⁶ NATO Press Release M-NAC-1(94)45, 9 June 1994. See also the discussion of counter-proliferation in chapter 16 in this volume. Some have suggested that the UN take up the issue of force planning and export control as an element of peace enforcement. See, for example, Wallerstein, M. and Granger Morgan, M., 'Controlling the high-technology militarization of the developing world', eds W. T. Wander and E. H. Arnett, *The Proliferation of Advanced Weaponry: Technology, Motivations and Responses* (American Association for the Advancement of Science (AAAS): Washington, DC, 1992), pp. 285–99.

¹²⁷ Krause, K., *Arms and the State: Patterns of Military Production and Trade* (Cambridge University Press: Cambridge, 1992).

¹²⁸ Krause, K., 'Post-Helsinki conventional arms control: the qualitative dimension', *Arms Control*, vol. 12, no. 2 (Sep. 1991), pp. 211–30. Vertical proliferation here means the qualitative improvement of weapons in the inventory of a given state through its indigenous effort. Horizontal proliferation is the spread of weapons or capabilities from state to state. However, this definition is not absolute since no country is technologically self-sufficient: at some point almost all weapon programmes—including those of the USA and the former Soviet Union—involve foreign ideas, materials or components.

¹²⁹ For example, in Chellaney (note 122).

control is becoming shorter and shorter. Moreover, the further internationalization of industrial production taking place in various forms is likely to erode the validity of this argument. As indicated by table 15.1, of the countries of East and South-East Asia only Japan currently participates in multilateral export control regimes. In 1992 the Government of Japan founded a Security Export Control Committee within the Ministry of International Trade and Industry (MITI). One of the tasks of the Committee was to consider how Japan could contribute to strengthening international export control regimes. With this in mind, Japan sponsored regional discussions aimed at developing the consciousness of Asian countries about export controls.¹³⁰ These discussions have consisted of a series of workshops and visits by Japanese delegations to countries in East and South-East Asia as well as the Asian states which were formerly part of the USSR. Only officials in South Korea and, to a lesser extent, Singapore showed a detailed knowledge of export control administrative procedures. Moreover, the general reaction to the notion of restrictions on exports of dual-use technology was cool in countries which regard export promotion as an important aspect of national economic policy.¹³¹

Within multilateral export control regimes there is a tendency towards de-control of transfers between the regime members of those items that are the object of control when transferred to non-members. In the European Union this tendency is reflected in the elimination of formal licensing requirements between members and sometimes a presumption to approve licence applications to certain non-members. There is a broad trend towards removing barriers to free trade in an effort to stimulate economic growth, and trade promotion has become a more important foreign policy goal. As President Clinton has expressed it, efforts to achieve non-proliferation should not prevent the removal of 'outdated controls that unfairly burden legitimate commerce and unduly restrain growth and opportunity all over the world'.¹³²

In designing export controls, governments are keen to avoid any measures that would inhibit legitimate trade. Even for countries such as Iraq, end-use conditions, monitoring and transparency measures are being developed to operate parallel with export regulations in order to prepare for the lifting of general trade sanctions.¹³³

Some authors argue that closer ties between individuals involved in research and manufacturing not only promote economic development but also bring about political changes more effectively than export controls.¹³⁴ Stephen Flank

¹³⁰ Anthony, I. *et al.*, in *SIPRI Yearbook 1994* (note 5), chapter 13, p. 490.

¹³¹ Ministry of Foreign Affairs, Japan, *Asian Seminar on Export Controls for International Security*, 25–27 Oct. 1993; Ministry of Foreign Affairs, Japan, *Export Control Seminar for the NIS Countries*, 7–11 Mar. 1994.

¹³² Speech to the United Nations, 27 Sep. 1993, quoted in Davis, Z., 'Devolution of the nonproliferation regime? United States and European export control policies in the post cold war era', Paper presented to the seminar on the European Arms Trade and the EU, Centre for Defence Studies, London, 17–18 Jan. 1994.

¹³³ See also the section on UNSCOM in chapter 19 in this volume.

¹³⁴ This argument was accepted by the Clinton Administration during the debate about whether China should be subject to sanctions of various kinds as a result of its policies towards the export of nuclear materials, chemical agents and ballistic missiles.

has suggested that 'the United States should encourage technology transfer and development abroad (with exceptions for pariahs) in order to: reward reluctant regimes and domestic constituencies within those regimes; demonstrate the value of full membership of the international community; and wean potentially civilian technologies away from their dependence on allies like nuclear or military programmes'.¹³⁵

Export controls cannot compete with the pace and complexity of technology transfer

Much of the literature on export controls has underlined the formidable obstacles governments face in defining and implementing export control measures. According to these arguments, under prevailing conditions technology diffusion is inevitable and unstoppable.

Some argue that the lists which form the basis of technology denial regimes can never capture all of the materials, equipment or know-how which would need to be denied in order to ensure non-proliferation.¹³⁶ Industrial programmes consist of five stages: basic research, applied research, development, production and distribution. As each multilateral export control regime develops lists tailored to a given stage in this process of acquisition, countries which seek specific capabilities redirect their efforts to a point in the process where the materials, goods or know-how are available.

As a result, the more successful export controls are, the more they will encourage indigenous design and development programmes in countries targeted by such controls.¹³⁷ To succeed, export controls would have to cover the full acquisition cycle, including basic raw materials and human knowledge. Efforts to develop administrative mechanisms for preventing the Soviet Union from gaining access to scientific and technical information in the 1980s ran up against both practical and legal/constitutional barriers.¹³⁸

A variation on this argument is that the pace of technology change will always be faster than the pace of harmonization in export regulations. As the multilateral regimes all rest on national laws, implementation of regime guidelines involves harmonizing approaches to criminal justice—a major exercise in comparative law. Governments have different views on what rights the state possesses *vis-à-vis* its citizens and companies.¹³⁹

¹³⁵ Flank, S., 'Nonproliferation policy: a quintet for two violas?', *Nonproliferation Review*, vol. 1, no. 3 (spring/summer 1994), p. 77.

¹³⁶ Leventhal, P., 'Why bother plugging export leaks?', *Orbis*, vol. 36, no. 2 (spring 1992), p. 168.

¹³⁷ Stanley, R., 'Co-operation and control: the new approach to nuclear nonproliferation in Argentina and Brazil', *Arms Control*, vol. 13, no. 2 (Sep. 1992).

¹³⁸ Young, L., 'The control of government-sponsored technical information', *Science, Technology & Human Values*, vol. 10, no. 2 (spring 1985); and Ferguson, J. R., 'National security controls on technological knowledge: a constitutional perspective', *Science, Technology & Human Values*, vol. 10, no. 2 (spring 1985).

¹³⁹ Citizen participation laws or 'catch-all' laws provide a good example. The individual must demonstrate a good-faith effort to establish that he or she was engaged in a permitted activity. In some countries laws of this kind are considered to violate the principle that the prosecution must prove guilt. Nevertheless, some governments have taken this step or are examining it. Nederlof, K. A., 'Intangible technology transfers: towards a new policy in the Netherlands?', eds S. Mataija and L. Bourque, *Pro-*

Export controls cannot overcome political barriers

In the debate on export control there are two prevailing forms of political barriers to successful multilateral export control. First, it is argued that members of the regime lack the political will to make export controls succeed. Second, it is argued that none of the current export control regimes include all suppliers of the given technology whose proliferation they seek to control.

According to the first line of argument even the active proponents of multilateral export control have never made non-proliferation their central foreign and security policy goal. As a result, whenever there has been a clash between competing policy objectives, non-proliferation has been accorded a relatively low priority. This argument has most often been made in the United States in respect of its policy towards China, Israel and Pakistan.¹⁴⁰

According to the second line of argument, a regime which does not include all of the potential sources of supply will damage the political and economic interests of the members without achieving its objective of preventing proliferation. Under these conditions it has become difficult for governments to obtain support for national export controls without making at least a good-faith effort to achieve multilateral support.¹⁴¹

This argument is most often made in the case of China, which is not a member of any multilateral export control organization or regime and which exports nuclear and chemical technologies as well as ballistic missiles.¹⁴² In the future China, which has invested consistently if at a low level in defence research and development (R&D), will be able to offer many other military technologies for export. As noted above, none of the industrialized countries of East and South-East Asia other than Japan belongs to any of the current regimes. Other countries which have production capabilities in one or more related area also stand outside existing multilateral export control groups. However, some—such as Brazil and South Africa—are seeking to join one or more of the regimes.

With the dissolution of the former Soviet Union, Gary Bertsch and Igor Khripunov have observed that 'the successor states of the former Soviet Union have inherited vast stockpiles of conventional and non-conventional weapons and the industrial and technological capacity to build more. Growing economic hardship and political instability in these states makes the threat of weapons proliferation very real'.¹⁴³ However, it should be noted that the substantive evidence that these countries have engaged in transfers of non-conventional weapons or associated dual-use items is weak.¹⁴⁴

liferation and International Security: Converging Roles of Verification, Confidence-Building and Peacekeeping (Centre for International and Strategic Studies, York University: Toronto, 1993).

¹⁴⁰ US Congress, Office of Technology Assessment (note 48), pp. 26–27.

¹⁴¹ Statement of Ashton Carter to the National Security News Service, Apr. 1994.

¹⁴² Weixing Hu (note 43), pp. 3–10.

¹⁴³ Bertsch, G. K. and Khripunov, I., *The NIS and Weapon Proliferation: Promoting Export Controls in the Former Soviet Union* (Center for East-West Trade Policy, University of Georgia: Athens, Ga., May 1994).

¹⁴⁴ See also chapters 10 and 16 in this volume.

Of the newly independent states to have emerged on the territory of the former Soviet Union, only Russia is a member of any multilateral export control regime—although Ukraine has observer status within the NSG.

Cooperative arms control agreements will always be flawed

Here it is assumed that the discovery of covert nuclear weapon programmes in Iraq and North Korea—both parties to the NPT—made it impossible to rely solely on forms of arms control that depend on cooperation.¹⁴⁵ Moreover, even where international agreements can define very elaborate and intrusive verification measures to reduce the need for mutual trust—such as those of the Chemical Weapons Convention—it remains to be seen how effectively they can be implemented.

As a result, Robert Rudney has suggested that export controls should be seen as one part of a 'long-range co-operative strategy for retarding and even rolling back proliferation menaces'.¹⁴⁶ Under this strategy it would be necessary to integrate the following elements in pursuit of the objective of denying given capabilities to specified countries indefinitely: diplomacy, arms control and disarmament, export restrictions, sanctions, economic and military aid, coercive power projection forces, and passive and active defence measures.

Export controls are useful to buy time

This school of thought accepts that a country determined to develop a given military capability cannot be prevented by export controls alone but could be prevented through cooperative, multilateral arms control agreements.¹⁴⁷ These agreements could be global or regional in character.

At the global level this argument could apply to the activities of the Australia Group in the framework of the ratification and implementation of the CWC. All Australia Group members accept the CWC as the primary instrument to prevent the development and deployment of chemical weapons. However, it is likely to be some time before the Convention enters into force and is implemented. Moreover, a further period of operation may then be required to evaluate the effectiveness of the CWC. Therefore, some Australia Group members have argued that the regime will be needed for a long period.¹⁴⁸

At the regional level only Europe, through the Organization for Security and Co-operation in Europe (OSCE), and the Middle East, through the Middle East Multilateral Conference (MEMC) have intergovernmental conferences

¹⁴⁵ As Paul Leventhal has put it: 'Iraq laid to rest the long-standing belief that a state will not join the NPT for the purpose of cheating': Leventhal, P., 'Nuclear export controls', ed. J.-F. Rioux, *Limiting the Proliferation of Weapons: The Role of Supply-side Strategies* (Carleton University Press: Ottawa, 1992), p. 44. A similar point is made in Hofhansel, C., 'From containment of communism to Saddam: the evolution of export control regimes', *Arms Control*, vol. 14, no. 3 (Dec. 1993).

¹⁴⁶ Rudney, R., 'Introduction', eds R. Rudney and K. Bailey, *Proliferation and Export Controls* (National Institute for Public Policy, University of America: Lanham, 1993), p. xviii.

¹⁴⁷ Rioux (note 145), p. 173.

¹⁴⁸ See section III in this chapter.

with a mandate to conduct arms control. Intergovernmental processes emerging elsewhere, notably in Asia, are an important element in addressing the security concerns of states. However, none has a mandate to pursue arms control.

In May 1991 President George Bush launched his Arms Control in the Middle East (ACME) initiative under which the five permanent members of the UN Security Council met to discuss ways to halt the proliferation of NBC weapons and ballistic missiles and to restrain the transfer of conventional arms to the region.¹⁴⁹ In Washington in May 1992, interim guidelines related to weapons of mass destruction were agreed which could, it was argued, help create the conditions under which peace talks could succeed.¹⁵⁰

The Arms Control and Regional Security (ACRS) process was launched in January 1992 during the Moscow meeting of the MEMC.¹⁵¹ However, few observers expect rapid progress towards an arms control agreement.¹⁵² Export controls will have to be kept in place for a long time before the impact of co-operative agreements are felt.

Export controls impose political and economic costs which may deter certain programmes

Countries could be prevented from developing a given military capability by export controls alone if acquisition is determined by more than the availability of a given technology. Access to technology does not automatically translate into the acquisition of a given military capability—a process which requires a separate decision. In making that decision a country will consider a range of factors, including the the associated economic and political costs.¹⁵³

If the economic costs of acquiring a given capability can be made high enough and/or it is clear that going ahead with the programme will bring a widespread political condemnation, then the balance of decision may be tipped against proceeding.¹⁵⁴

The effectiveness of export controls in interrupting given programmes is then a function of the efficiency with which controls are implemented. Weaknesses identified in implementation include lack of sufficient knowledge about

¹⁴⁹ *Fact Sheet on the Middle East Arms Control Initiative* (White House, Office of the Press Secretary: Washington, DC, 29 May 1991).

¹⁵⁰ Bartholemew, R., 'Progress in Middle East arms control', *US Department of State Dispatch*, 30 Mar. 1992, pp. 241–43; the Interim Guidelines Related to Weapons of Mass Destruction are reproduced in *SIPRI Yearbook 1993* (note 54), pp. 545–46.

¹⁵¹ Feldman, S., 'Arresting weapons proliferation', *The Middle East Military Balance 1992–93* (Jaffee Center for Strategic Studies: Tel Aviv, 1993), pp. 93–119.

¹⁵² Levite, A., 'Concluding remarks', in Feldman and Levite (note 123). Of the countries participating in the peace process, Syria has not attended the meetings of the ACRS and refuses to do so until the status of the Golan Heights has been determined. Other countries which would be important factors in regional arms control—notably Iraq—are not part of the peace process at all. See also Eisendorf, R., in *SIPRI Yearbook 1994* (note 5), chapter 3; and chapter 5 in this volume on the Middle East peace process.

¹⁵³ These are by no means the only factors to be considered. The primary restraint on proliferation is the fact that most governments have no wish to acquire the weapon concerned.

¹⁵⁴ Karp, A., 'Controlling weapons proliferation: the role of export controls', *Journal of Strategic Studies*, vol. 16, no. 1 (Mar. 1993).

the industrial capacities of companies involved in export trade, lack of border controls adequate to monitor and inspect cargoes leaving national territory, lack of adequate national intelligence about potential programmes of concern, lack of legal sanctions for violation of export regulations or sanctions that are too mild to constitute a deterrent to potential criminals.¹⁵⁵ Through joint activities and domestic measures, regime members have made efforts to improve the efficiency of national regulations.

Export controls meet domestic political needs of regime members

Describing nuclear arms control negotiations between the former superpowers, Joseph Nye has written 'arms control reassures the publics in Western democracies'.¹⁵⁶ A similar point can be made about multilateral export controls.

Over the past few years both governments and non-government sources have published data to suggest that India, Iraq, Israel, North Korea and Pakistan have moved towards or, in one or two cases, over the threshold separating nuclear weapon states from non-nuclear weapon states. Approximately two dozen countries are mentioned as having or pursuing a CW capability.¹⁵⁷ The number periodically mentioned for states which may possess or be developing BW is only about a dozen, while approximately 25 countries are listed as possessing and, in some cases, developing and/or producing ballistic missiles.

In the face of these data, governments find it difficult to sit on their hands when asked what they are doing to address the possible negative consequences that might stem from these developments.

Some export controls have also been motivated by domestic political factors of a different kind. In the wake of revelations about the involvement of citizens, companies or even government agencies in specific programmes or countries of concern, powerful political constituencies may form behind export control initiatives. Alternatively, governments may engage in discussions of export controls to head off the formation or blunt the effectiveness of such constituencies.

In these arguments, whether or not measures adopted have an impact on proliferation is not the central point.

VIII. Conclusions

For observers, the evolution of multilateral export regimes looks slow and painful. This chapter underlines some of the similarities and differences in the

¹⁵⁵ Wolf, R., 'West European policy responses to future European security challenges', *Challenges and Responses to Future European Security: British, French and German Perspectives* (European Strategy Group: London, Mar. 1993), pp. 163–65.

¹⁵⁶ Nye, J., 'Arms control after the cold war', *Foreign Affairs*, vol. 68, no. 5 (winter 1989–90), p. 44.

¹⁵⁷ See chapter 10 in this volume.

current multilateral efforts to control exports which make it inevitable that it should be so.

In each regime, decision making and implementation are national and not transnational. The regimes carry only as much authority as their members are prepared to assign them. Even within the European Union, governments have stressed the intergovernmental nature of their activities. The submission of a degree of sovereignty is voluntary, and a partner may take back its sovereignty without penalty.

Developing national policies on export control is a complex process. Each state has to balance four different and sometimes competing areas of public policy: defence policy, economic policy, foreign and security policy, and techno-industrial policy. At the national level those responsible for each area of public policy are likely to have a different view of what is appropriate in a national export control system. One would expect national positions on export control to be highly differentiated when compared. Moreover, since each national position is the product of compromise, when it is brought into a multilateral regime the flexibility of national representatives in discussing changes with one another is further limited. Changes need to be explained to constituencies at home. At the same time, institutional actors—such as Ministries of Defence or Ministries of Commerce—may form alliances across national boundaries.

Creating organizations to which governments would cede sovereignty would involve a long discussion of form and procedure, if it could be achieved at all. During that time the substantive issue—which created a demand for the regime in the first place—would be neglected. However, the current approach institutionalizes the influence of governments which are responsible to domestic constituencies that are not constant factors. In the absence of detailed regime rules and operating procedures, national elections or shifts in power within regime member states can disrupt or even defeat the regime.

In developing guidelines, the regimes concentrate on harmonization and consensus building. Once they have reached consensus, governments have a degree of responsibility not only to domestic constituencies but also to each other.¹⁵⁸ Governments must trust the regime partners to make a good-faith effort to implement regime guidelines. As a result, regime membership does not reflect economic, constitutional or geographical factors as much as whether the governments have a common formulation of the problem to be addressed. Some countries continue to be suspicious of the true purpose of export controls. Russia, for example, has expressed the fear that by entering export control regimes it will be subject to pressure from the USA to 'curtail its cooperation with "third countries" in areas where it can offer strong competition to American exporters'.¹⁵⁹

This question of trust and common formulation has created special problems in adapting to recent international changes. The end of the cold war offers the

¹⁵⁸ An early discussion of this feature of regimes is contained in Ruggie, J. G., 'International responses to technology', *International Organization*, vol. 29 (summer 1975).

¹⁵⁹ Strokan, S., 'Arms exports will be more difficult', *Moscow News*, 18–24 Mar. 1994, p. 11.

chance to cooperate with new states and enlarge the group of partners in non-proliferation efforts. However, under present political circumstances, can potential new partners be trusted to act in good faith? If so, do they have the technical and administrative capacity to be effective regime participants?

Some of the administrative arrangements associated with regimes are converging. Annual or regular plenary meetings of officials have emerged as useful means of pursuing a general dialogue and information exchange. Similarly, the use of a rotating chairman for each of the regimes has offered an efficient and low-cost administrative device. The chairman can also coordinate *ad hoc* groups to perform useful fact-finding missions on behalf of the regime. However, the pattern of evolution of the regimes is unlikely to be the same, as there are important differences between them.

Differences between the regimes

There are some fundamental differences between the approaches taken by the multilateral export control regimes. Some stem from the historical circumstances under which the regimes were created. When the NSG was formed the NPT was already in existence and in force. When the Australia Group was formed the CWC was not open for signature, while there is still no global convention dealing with conventional arms or ballistic missiles. Moreover, the fact that the implications of proliferation are different for the various military technologies also has an impact on the regimes.

These differences are reflected in the fact that decisions are made according to different criteria within the different military technology groups. Decisions about permitting an export can be weapon-based, recipient-based or capability-based.

Weapon-based controls apply to NBC weapons. There are no circumstances under which the transfer of a complete weapon could be consistent with the relevant export control regimes. However, as noted above, there are problems in applying the precise definition of a chemical weapon in the CWC for the purposes of export controls because the definition includes systems for the delivery of chemical agent. The link between the Australia Group and the MTCR is therefore important. This is equally true with regard to the BWC: the international concern regarding the spread of BW capabilities in the 1990s supports the view that current export controls in isolation are unlikely to be a strong barrier to the acquisition of biological weapons.¹⁶⁰

Recipient-based controls using an embargo and a country list are used when export controls are part of a strategy of confrontation—as was the case during the cold war. COCOM was one of a range of policies and practices intended to weaken the military capability of ideologically defined enemies. With the end of COCOM there is currently no such regime.

¹⁶⁰ US Congress, Office of Technology Assessment (OTA), *Export Controls and Nonproliferation Policy*, OTA-ISS-596 (US Government Printing Office: Washington, DC, May 1994), p. 23.

Capability-based controls are linked to the activity undertaken rather than the countries in which those activities occur. As a result regimes rarely target countries *per se* but seek to prevent or interrupt specific programmes of concern. Regulations may permit exports of a controlled item if the recipient is a non-military user or if the supplier is satisfied that the item will be put to a non-military use. Such regulations are needed for dual-use goods to prevent their use in military programmes while permitting the export of the same item for use in civilian programmes. Capability-based regulations may also permit the transfer of controlled military items where the military posture and conduct of the recipient is considered reasonable and sufficient.

The theoretical distinction between recipient-based and capability-based controls is clear. However, making this distinction in practice is a problem since the proliferation events to which regime members object are the responsibilities of governments whose legitimacy is usually not in question.¹⁶¹

In the absence of mechanisms to verify end use for dual-use items the distinction also breaks down unless the supplier assumes that the documentation associated with exports is always accurate. Moreover, while verification through national technical means (NTM) may demonstrate that a dual-use item *is* being misapplied, government cooperation of some form is probably needed to determine that a dual-use item *is not* being misapplied. This is one of the factors underpinning the current interest among governments in transparency in armaments. Government willingness to put information about military activities into the public domain is increasingly being seen as an objective demonstration of a commitment to avoid undesirable forms of proliferation. As such it has a confidence-building effect.

Transparency measures are most advanced in the area of conventional weapons. However, drawing distinctions between recipient-based and capability-based controls is impossible for conventional weapons in the absence of an accepted code of military conduct. As noted above, the right of possession of conventional arms for the purpose of national defence is undisputed, and most governments therefore see no need to abstain from arms transfers. The issue is to determine the circumstances under which such transfers have negative effects. Without any agreed standard against which to measure behaviour it is difficult to determine when a state goes beyond maintaining an inventory of equipment which is reasonable and sufficient for defence.

¹⁶¹ In 1994 this problem was underlined by the decision of the USA to recognize the Government of North Korea as a direct consequence of an objectionable proliferation event.

16. Nuclear arms control

JAMES E. GOODBY, SHANNON KILE and HARALD MÜLLER*

I. Introduction

In 1994 several important developments advanced the nuclear arms control and non-proliferation agenda. The year was highlighted by Ukraine's accession to the 1968 Non-Proliferation Treaty (NPT) as a non-nuclear weapon state and the subsequent entry into force of the 1991 Treaty on the Reduction and Limitation of Strategic Offensive Arms (START I). The entry into force of the START I Treaty concluded one of the key pieces of 'unfinished business' left over from the cold war and paved the way for further reductions in Russian and US strategic nuclear arsenals. It also marked an important milestone in settling the contentious legacy of the former Soviet nuclear arsenal.

The resolution of the diplomatic impasse over START I was facilitated by the intensified bilateral denuclearization cooperation between the USA and Belarus, Kazakhstan, Russia and Ukraine. During the course of 1994, US-funded Cooperative Threat Reduction programmes shifted decisively from the negotiation to the implementation phase, as large-scale financial and material assistance began to be delivered to the former Soviet republics. The bulk of this assistance was earmarked for strengthening central control over former Soviet nuclear weapons, improving their physical security and safety, dismantling warheads and disposing of the fissile materials they contain.

In 1994 international efforts to halt the spread of nuclear weapons continued to occupy a prominent place on the arms control agenda. Seven states acceded to the NPT as non-nuclear weapon states, and regional non-proliferation efforts made some headway. In October a framework agreement was reached between North Korea and the USA that held out the prospect of resolving a serious crisis over North Korea's nuclear programme. Despite these hopeful developments, the future of the NPT remained clouded in the run-up to the 1995 NPT Review and Extension Conference.

This chapter reviews the principal nuclear arms control and non-proliferation developments in 1994. Section II describes the high-level diplomatic bargaining that overcame the obstacles blocking the entry into force of the START I Treaty, examines the changes under way in the strategic nuclear forces of the treaty signatory states and assesses the prospects for further cuts in the US and Russian nuclear arsenals. Section III reviews the scope of Cooperative Threat Reduction programmes and the progress made in imple-

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menting them in 1994. Section IV describes recent initiatives to curb the spread of nuclear weapons and briefly examines the preparations for the 1995 NPT Review and Extension Conference.

II. The START treaties

The year 1994 began with the future of the START I and START II treaties in doubt.¹ A diplomatic impasse in settling the fate of the former Soviet strategic nuclear arsenal based in Ukraine had stymied progress in implementing the accords, and the possibility loomed that the only legally binding international arms control treaties shaping the post-cold war strategic nuclear balance would never come into force. By the end of the year, however, several developments contributed to breaking the denuclearization stalemate that was blocking both the entry into force of the START I Treaty and the ratification proceedings for the follow-on START II Treaty. The presidents of Russia, Ukraine and the USA signed a Trilateral Statement² on nuclear weapon-related issues at a Moscow summit meeting in January 1994, and the Ukrainian Rada (Parliament) voted in November to accede to the NPT as a non-nuclear weapon state. In addition, at a summit meeting held in Washington in September, US President Bill Clinton and Russian President Boris Yeltsin agreed upon measures to enhance US–Russian nuclear cooperation and affirmed the commitment of their governments to prompt ratification of START II and early deactivation of the weapons covered by its provisions.

Obstacles to START implementation

On 18 November 1993 Ukraine became the last of the states parties to decide to ratify the START I Treaty.³ However, citing insufficient compensation for nuclear warheads withdrawn from its territory and a lack of international security guarantees, the Ukrainian Rada attached 13 conditions to its endorsement of the Treaty that were tantamount to an official repudiation of Ukraine's previous commitments to eliminate all nuclear weapons from its territory.

¹ For a description of the provisions of the START I Treaty, see Cowen Karp, R., 'The START Treaty and nuclear arms control', SIPRI, *SIPRI Yearbook 1992: World Armaments and Disarmament* (Oxford University Press: Oxford, 1992), pp. 13–26; excerpts from the treaty and related documents appear in appendix 1A, pp. 38–63. For a description of the provisions of the START II Treaty, see Lockwood, D., 'Nuclear arms control', SIPRI, *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press: Oxford, 1993), pp. 554–59; for the START II Treaty, see appendix 11A, pp. 576–89.

² The Trilateral Statement is reproduced in *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), appendix 16A, pp. 677–78.

³ *SIPRI Yearbook 1994* (note 2), pp. 675–77; and Lockwood (note 1), pp. 549–54. The START I Treaty was signed by the USA and the USSR on 31 July 1991. At a 23 May 1992 meeting of foreign ministers in Lisbon, Portugal, the 3 non-Russian former Soviet republics with strategic nuclear weapons based on their territories—Belarus, Kazakhstan and Ukraine—and the USA and Russia signed a protocol to the START I Treaty (the Lisbon Protocol) making them parties to the START I Treaty. Excerpts from the text of the Lisbon Protocol are reproduced in *SIPRI Yearbook 1993* (note 1), appendix 11A, pp. 574–75.

Chief among these conditions was the Rada's declaration that it did not consider as binding Article V of the Lisbon Protocol, which obligated Ukraine (as well as Belarus and Kazakhstan) to join the NPT as a non-nuclear weapon state 'in the shortest possible time'.⁴ The Rada also stated that it would not consider accession to the NPT until the START I Treaty had been fully implemented. In doing so, it effectively prevented START I from entering into force, since both the USA and Russia had made their ratification of the Treaty conditional on Ukraine's accession to the NPT as a non-nuclear weapon state.⁵

The Rada's action precipitated a burst of intense high-level diplomatic activity which culminated with the signing in Moscow on 14 January 1994 of the Trilateral Statement by Yeltsin, Clinton and Ukrainian President Leonid Kravchuk. The Statement sought to meet the conditions set by the Rada that were blocking denuclearization progress in Ukraine and jeopardizing the START regime. In return for US and Russian security assurances, pledges of financial assistance and compensation arrangements for withdrawn nuclear warheads, Kravchuk agreed to a timetable for the deactivation and transfer to Russia of a portion of the strategic forces based on Ukrainian territory. He also reiterated his commitment that Ukraine would accede to the NPT as a non-nuclear weapon state and pledged that: 'All nuclear warheads will be transferred from the territory of Ukraine to Russia for the purpose of their subsequent dismantling in the shortest possible time'.⁶ Kravchuk promised in a confidential side-agreement that this process would be completed within three years.⁷

On 3 February 1994 the Rada voted on a new instrument of accession to the START I Treaty submitted by President Kravchuk, who argued that the terms of the Trilateral Statement fulfilled the conditions set by the Rada in its 18 November ratification resolution. It approved a two-part resolution removing its reservation regarding Article V of the Lisbon Protocol and authorizing Kravchuk to exchange the START I instruments of ratification. The Rada's vote failed to break the impasse blocking START implementation, however, since it did not approve accession to the NPT.⁸

⁴ The Rada also interpreted the START I Treaty as permitting Ukraine to retain a portion of the strategic nuclear weapons deployed on its territory rather than requiring their complete elimination, as argued by Russia and the USA. For the text of the 18 Nov. 1993 Rada ratification resolution, see *SIPRI Yearbook 1994* (note 2), appendix 16A, pp. 677-78.

⁵ The US Senate ratified the START I Treaty on 1 Oct. 1992 with the understanding that the Lisbon Protocol carried the same legal obligation as the Treaty. The Russian Parliament ratified the START I Treaty on 4 Nov. 1992 with the stipulation that Russia would not deposit the instruments of ratification until the other 3 former Soviet republics had acceded to the NPT as non-nuclear weapon states and agreed to fully implement the START Treaty's provisions. See Lockwood (note 1), pp. 549-51.

⁶ See the Trilateral Statement Annex, reproduced in *SIPRI Yearbook 1994* (note 2), p. 678.

⁷ Yeltsin also reportedly agreed to compensate Ukraine for the former Soviet tactical nuclear weapons transferred from its territory to Russia by writing off some of Ukraine's debt for past deliveries of Russian oil and natural gas. For a summary of the contents of the Trilateral Statement, see Lockwood, D., 'Nuclear arms control', *SIPRI Yearbook 1994* (note 4), pp. 641-44.

⁸ According to one account, the Rada voted by a wide majority in favour of immediate accession to the NPT but not enough legislators were present for the vote to be valid. Lockwood, D., 'Ukrainian Rada clears way for START I, NPT accession', *Arms Control Today*, vol. 24, no. 2 (Mar. 1994), p. 32.

Ukrainian accession to the NPT

Against the background of Ukraine's growing international isolation, on 16 November 1994 the Rada approved another resolution by a vote of 301–8 to accede to the NPT as a non-nuclear weapon state.⁹ Ukrainian President Leonid Kuchma deposited the NPT instruments of ratification at a ceremony on 5 December held at the Conference on Security and Co-operation in Europe (CSCE) summit meeting in Budapest, Hungary. This paved the way for the holding of a second ceremony on the same day at the Budapest summit meeting in which the leaders of the five Lisbon Protocol signatory states—Belarus, Kazakhstan, Russia, Ukraine and the USA—signed a protocol exchanging the START I Treaty instruments of ratification.¹⁰

The Rada attached two conditions to its 16 November resolution ratifying the NPT. The first stated that 'Ukraine is the state-owner of the nuclear weapons inherited from the former USSR' and can use the nuclear materials withdrawn from them for peaceful purposes. The second condition made accession to the NPT subject to written receipt of 'guarantees of the national security of Ukraine' from the 'nuclear powers'.¹¹ Prior to the ratification vote, Russia, the UK and the USA had signalled their willingness to extend security assurances in connection with the NPT, as later did France.¹² While conceding that these assurances added little to those already given to Ukraine in the Tri-lateral Statement and elsewhere, Defence Minister Valery Shmarov described them as being 'a very strong catalyst for certain forces in the Ukraine' to decide in favour of ratification.¹³

The security assurances were formalized at the 5 December ceremony in Budapest. The leaders of Ukraine, Russia, the UK and the USA signed a Memorandum in which the latter three pledged to respect Ukraine's borders in accordance with the principles of the 1975 CSCE Final Act, to refrain from using or threatening force against Ukraine and to seek help from the UN Security Council if Ukraine is threatened with aggression from a nuclear weapon state. In addition, Ukraine received pledges of support in the case of attempts to infringe upon its sovereignty through economic coercion.¹⁴

⁹ 'Ukraine ratifies nuclear treaty, with conditions', *International Herald Tribune*, 17 Nov. 1994, p. 4.

¹⁰ Clark, B., 'Ukraine signs up to treaty on nuclear non-proliferation', *Financial Times*, 6 Dec. 1994, p. 4; and Reuter, 'START 1: day 1, and powers plan new talks', *International Herald Tribune*, 6 Dec. 1994, p. 8.

¹¹ Conference on Disarmament document CD/1283, 25 Nov. 1994, 'Act of Ukraine on the Accession of Ukraine to the Treaty on the Non-Proliferation of Nuclear Weapons of 1 July 1968'.

¹² Embassy of Ukraine in Finland, press release, 16 Nov. 1994. A US official characterized these assurances as being essentially a restatement of the USA's long-standing policy of offering so-called 'positive' and 'negative' security guarantees to non-nuclear weapon states parties to the NPT. Pitts, D., 'US welcomes Ukrainian vote to ratify NPT', *Wireless File* (United States Information Service, US Embassy: Stockholm, 17 Nov. 1994), p. 3.

¹³ Quoted in Rupert, J., 'Ukraine joins pact on A-arms', *Washington Post* news service, 17 Nov. 1994.

¹⁴ UN General Assembly document A/49/765, 19 Dec. 1994, 'Memorandum on Security Assurances in Connection with Ukraine's Accession to the Treaty on the Non-Proliferation of Nuclear Weapons'.

The Rada's decision to ratify the NPT marked a sharp turn away from its pattern of ambiguous and dilatory behaviour on nuclear weapon issues that had raised doubts in the West about Ukraine's oft-repeated denuclearization pledges. Their rhetorical commitment to acceding to the Treaty notwithstanding, parliamentary leaders had previously shown little interest in pushing for a speedy accession to the NPT. Speaker of the Parliament Oleksandr Moroz had stated in October that the NPT would have to be revised so as to make its provisions universally binding before he would bring it up for a vote.¹⁵ Kuchma himself had played down the issue of NPT accession during the campaign leading up to Ukraine's July 1994 presidential elections.¹⁶

However, with his letter of 5 October to the Rada asking it to begin deliberations on NPT ratification, Kuchma launched an aggressive lobbying campaign for approval of the Treaty.¹⁷ He portrayed the 176 nuclear-armed ballistic missiles inherited from the former Soviet Union as serious political liabilities that were bringing the country into international disrepute rather than as symbols of national independence or as security-enhancing military assets.¹⁸ One of his principal arguments in favour of ratifying the Treaty was that Ukraine—by fulfilling its denuclearization commitments—would receive considerable political and economic benefits, including significant amounts of Western financial aid.¹⁹ This assistance was urgently needed to facilitate the market-oriented reforms that lay at the centre of Kuchma's economic programme. Kuchma also argued that developing and maintaining the infrastructure to support an independent strategic nuclear arsenal would be prohibitively expensive for Ukraine.²⁰ In addition, anti-nuclear weapon sentiment was fuelled by lingering safety concerns and popular fear in the wake of the 1986 Chernobyl nuclear accident.

Reductions in strategic nuclear forces

Although the START I Treaty-mandated seven-year reduction period did not begin until December 1994, throughout the year Russia and the USA proceeded with reducing their strategic forces in compliance with the Treaty's provisions. The process of deactivating and removing strategic nuclear weapon systems was also well under way in Belarus, Kazakhstan and Ukraine

¹⁵ 'Moroz on terms for joining NPT', Moscow ITAR-TASS in English, in Foreign Broadcast Information Service (FBIS), *Daily Report—Central Eurasia*, FBIS-SOV-94-201, 18 Oct. 1994, p. 27; and 'Fate of nuclear pact unclear', *Balkan News and East European Report*, no. 73 (16–22 Oct. 1994), p. 43.

¹⁶ Lockwood, D., 'Kuchma reverses field on NPT, ready to seek vote in parliament', *Arms Control Today*, vol. 24, no. 7 (Sep. 1994), pp. 25, 32.

¹⁷ 'Kuchma urges support of nonproliferation treaty', Moscow ITAR-TASS in English, FBIS-SOV-94-194, 6 Oct. 1994, p. 34.

¹⁸ 'Ukraine Parliament backs antinuclear treaty', *Boston Globe*, 17 Nov. 1994, p. 16.

¹⁹ 'President wants ratification of the NPT', *Balkan News and East European Report*, no. 76 (6–12 Nov. 1994), p. 43.

²⁰ Rupert (note 13); and Lockwood, D., 'Ukraine accedes (finally) to NPT; opens way to START reductions', *Arms Control Today*, vol. 24, no. 10 (Dec. 1994), p. 17.

in accordance with their denuclearization commitments, thereby facilitating smooth implementation of the Treaty.²¹

As the year drew to a close, Ukraine was ahead of the partial withdrawal schedule set out in the January Trilateral Statement. By early October, it had removed from deployment 610 of the 1734 strategic nuclear warheads on its territory and had sent 360 warheads to Russia for dismantlement.²² By mid-November it had also deactivated all 46 SS-24 intercontinental ballistic missiles (ICBMs) based on its territory by removing the warheads from the launch vehicles, as required by the Trilateral Statement. With these withdrawals, Ukraine had 940 ICBM warheads and 434 air-launched cruise missiles remaining on its territory.²³ A confidential protocol signed by Ukraine and Russia on 16 May 1994 obliges Ukraine to transfer all the remaining warheads to Russia by the end of 1996.²⁴

Belarus and Kazakhstan also proceeded with their commitments to eliminate all former Soviet nuclear warheads and associated delivery systems from their territories. By late 1994, Belarus had withdrawn to Russia 45 SS-25 ICBMs, with the transfer of the remaining 36 missiles to be completed by the end of 1995.²⁵ Kazakhstan had deactivated 44 of the 104 silo-based SS-18 'heavy' ICBMs on its territory and transferred 12 of the missiles to Russia for dismantlement.²⁶ Kazakh President Nursultan Nazarbayev and Yeltsin reportedly reached an agreement on 28 March under the terms of which all the nuclear warheads in Kazakhstan would be withdrawn to Russia within 14 months and all the SS-18 silos dismantled within three years.²⁷

The USA made considerable progress in retiring strategic nuclear weapons in anticipation of the START I Treaty's entry into force. By the end of the year it had deactivated or begun to dismantle all the nuclear warheads from the missiles slated to be eliminated under START I (192 C-3 submarine-launched ballistic missiles, SLBMs; 192 C-4 SLBMs and 450 Minuteman II ICBMs), with the missiles to be removed from their launchers by the end of

²¹ Letter from Secretary of Defense William Perry to Vice-President Albert Gore, 30 Oct. 1994 (accompanying the Second FY 1994 Semi-annual Report on Program Activities to Facilitate Weapons Destruction and Nonproliferation in the Former Soviet Union).

²² Ashton Carter, Assistant Secretary of Defense for Nuclear Security and Counterproliferation, Testimony before the Senate Foreign Relations Committee, 4 Oct. 1994, p. 5. The figure 1734 refers to the number of warheads in Ukraine as of 1 Sep. 1990 as listed in the START I Memorandum of Understanding.

²³ Lockwood (note 20).

²⁴ Carnegie Endowment for International Peace and Monterey Institute of International Studies, *The Nuclear Successor States of the Soviet Union: Nuclear Weapon and Sensitive Export Status Report*, no. 2 (Dec. 1994), p. 4.

²⁵ 'Nuclear weapon deactivation continue in FSU', *Arms Control Today*, vol. 24, no. 9 (Nov. 1994), p. 33; and Litovkin, V., 'Belarus gives up strategic nuclear systems forever', *Izvestia*, 17 Mar. 1994, FBIS-SOV-94-053, 18 Mar. 1994, p. 14.

²⁶ *The Nuclear Successor States of the Soviet Union* (note 24), p. 8. The 40 Bear-H strategic bombers and their associated AS-15 cruise missile warheads previously based in Kazakhstan have all been transferred to Russia.

²⁷ 'Denuclearization in the FSU proceeding', *Arms Control Today*, vol. 24, no. 5 (June 1994), p. 31.

1995.²⁸ The dismantlement of B-52 bombers retired from service also continued throughout the year.

Russia also proceeded with the deactivation of the strategic systems slated for dismantlement under the provisions of START I, removing approximately one-third of the nuclear warheads from the ballistic missiles to be retired.²⁹ According to a US Department of Defense (DOD) spokesman, by mid-year Russia had removed 614 warheads from 389 ICBMs since September 1990 (when the START I Memorandum of Understanding was signed).³⁰ Russia has made less progress than the USA in deactivating strategic forces since it—in contrast to US practice—does not remove warheads from ICBMs to be dismantled until the entire silo complex has been readied for destruction.³¹

The START II Treaty

The landmark START II Treaty was signed by the USA and the Russian Federation on 3 January 1993. Under START II all land-based multiple-warhead (MIRVed) strategic ballistic missiles will be eliminated and the strategic nuclear forces of each party will be limited to no more than 3000–3500 deployed warheads. This ceiling represents approximately one-third the size of the US and Soviet nuclear arsenals before the signing of START I.

The entry into force of the START I Treaty was a precondition for the START II Treaty to be able to come into force, since all the START I provisions—including the verification regime—apply to START II (except for specific modifications, such as for the bomber counting rules³²). However, the START II Treaty has yet to be ratified by either the US or Russian legislatures. Although approval of the accord by the US Senate is expected, serious opposition to START II has emerged within the Russian Parliament.³³ The principal objection raised by critics of the treaty is that it places Russia at a strategic disadvantage *vis-à-vis* the USA by depriving Russia of the most powerful and important component of its strategic forces—multiple-warhead

²⁸ US Department of Defense, *Report of the Secretary of Defense Les Aspin to the President and the Congress* (US Government Printing Office: Washington, DC, 1994), pp. 45, 60.

²⁹ Ashton Carter, Assistant Secretary of Defense for Nuclear Security and Counterproliferation, Testimony before the Senate Armed Services Committee, 28 Apr. 1994, pp. 10, 17.

³⁰ Cited in 'Update on Russian denuclearization', *Arms Control Today*, vol. 24, no. 6 (July/Aug. 1994), p. 26; and *The Nuclear Successor States of the Soviet Union* (note 24), p. 6.

³¹ Starr, B., 'Perry wants speedier Russian disarmament', *Jane's Defence Weekly*, vol. 22, no. 13 (1 Oct. 1994), p. 6; and Obolenskiy, G., 'START-I: should Russia "keep up" with the United States?', *Krasnaya Zvezda*, 14 Dec. 1994, FBIS-SOV-94-249, 28 Dec. 1994, pp. 13–14. At the end of 1994, however, only about one-third of the deactivated US ballistic missile launchers had been formally removed from accountability under the START I elimination rules.

³² Lockwood (note 1), pp. 556–59.

³³ In the wake of the Sep. 1994 summit meeting between Yeltsin and Clinton, Sergei Karaganov, a senior adviser to Yeltsin, was quoted as estimating the chances of START II not being ratified as greater than 50%. White House background briefing, 21 Sep. 1994, transcript in 'Security, nuclear, economic issues top Clinton, Yeltsin agenda', *Wireless File* (United States Information Service, US Embassy: Stockholm, 22 Sep. 1994), p. 10.

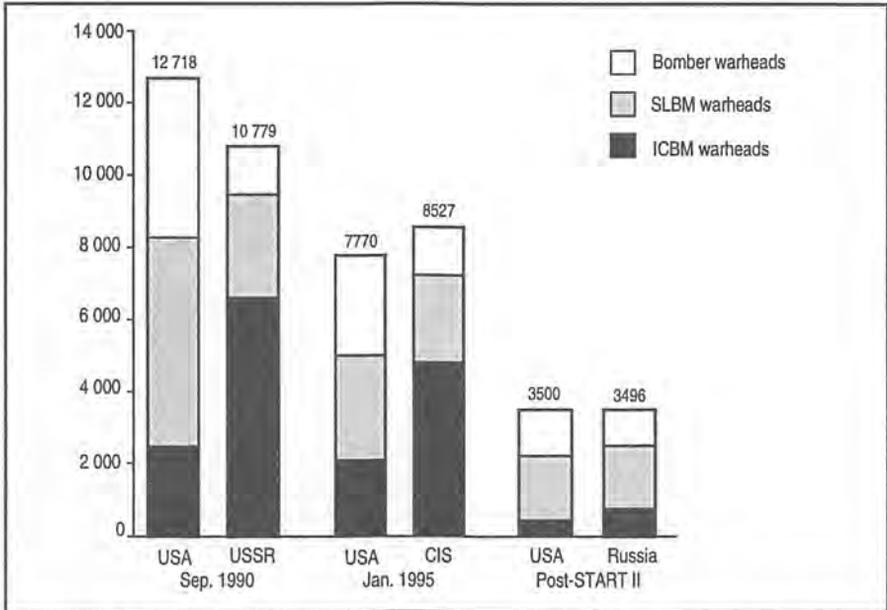


Figure 16.1. US and former Soviet strategic nuclear forces: 1990, 1995 and after implementation of the START II Treaty

Note: ICBM and SLBM warhead attributions are based on the START I Treaty Memorandum of Understanding. Bomber loadings are based on the START II Treaty Memorandum of Understanding. Actual loadings may vary. Figures for Jan. 1995 do not include strategic nuclear delivery systems which have been deactivated or retired although they remain treaty-accountable according to the START counting rules.

Strategic nuclear forces, September 1990

US delivery vehicles

ICBMs: 450 Minuteman IIs; 500 Minuteman IIIs; 50 Peacekeepers (MX).

SLBMs: 192 Poseidon (C-3); 384 Trident Is (C-4); 96 Trident IIs (D-5).

Bombers: 66 B-52Gs; 95 B-52Hs; 97 B-1Bs.

Soviet delivery vehicles

ICBMs: 326 SS-11s; 40 SS-13s; 188 SS-17s; 308 SS-18s; 300 SS-19s; 56 SS-24s (silo-based); 33 SS-24s (rail-mobile); 288 SS-25s (road-mobile).

SLBMs: 192 SS-N-6s; 280 SS-N-8s; 12 SS-N-17s; 224 SS-N-18s; 120 SS-N-20s; 112 SS-N-23s.

Bombers: 17 Tu-95 Bear A/Bs; 46 Tu-95 Bear Gs; 57 Tu-95 Bear-Hs (equipped to carry 16 nuclear-armed cruise missiles each); 27 Tu-95 Bear-Hs (equipped to carry 6 nuclear-armed cruise missiles each); 15 Tu-160 Blackjacks.

Current strategic nuclear forces, January 1995

US delivery vehicles

ICBMs: 530 Minuteman IIIs; 50 Peacekeepers (MX).

SLBMs: 192 Trident Is (C-4); 168 Trident IIs (D-5).

Bombers: 94 B-52Hs; 95 B-1Bs; 5 B-2s.

CIS delivery vehicles

ICBMs: 248 SS-18s; 260 SS-19s; 10 SS-24s (silo-based); 36 SS-24s (rail-mobile); 333 SS-25s (road-mobile).

SLBMs: 224 SS-N-18s; 120 SS-N-20s; 112 SS-N-23s.

Bombers: 57 Tu-95 Bear-Hs (equipped to carry 16 nuclear-armed cruise missiles each); 27 Tu-95 Bear-Hs (equipped to carry 6 nuclear-armed cruise missiles each); 25 Tu-160 Blackjacks.

Post-START II strategic nuclear forces, projected**US delivery vehicles*

ICBMs: 450/500 Minuteman IIIs downloaded to 1 warhead each.

SLBMs: 336 Trident IIs (D-5) downloaded to 5 warheads each.

Bombers: 32 B-52Hs (equipped to carry 20 ALCMs/ACMs each); 30 B-52Hs (equipped to carry 12 ALCMs/ACMs each); 20 B-2s.

Russian delivery vehicles

ICBMs: 605 SS-25s (road-mobile); 90 SS-25s (based in converted SS-18 silos); 105 SS-19s downloaded to 1 warhead each.

SLBMs: 176 SS-N-18s; 120 SS-N-20s downloaded to 6 warheads each; 112 SS-N-23s.

Bombers: 40 Tu-95 Bear-Hs (equipped to carry 16 nuclear-armed cruise missiles each); 10 Tu-95 Bear-Hs (equipped to carry 6 nuclear-armed cruise missiles each); 25 Tu-160 Blackjacks.

* Assumptions for Russian strategic forces under START II:

ICBMs: It is assumed that Russia will give its Strategic Rocket Forces enough priority to find sufficient economic resources eventually to build and deploy 700 SS-25s (road-mobile and silo-based) and/or a road-mobile follow-on. If fewer ICBMs are deployed more SSBNs could be retained to still reach the 3500-warhead ceiling, if that figure remains a goal. If more ICBMs are deployed, fewer SSBNs could be retained.

SLBMs: Admiral Felix Gromov, Commander-in-Chief of the Russian Navy, indicated in 1993 that Russia plans to retain 176 SS-N-18 SLBMs on 11 Delta III submarines. The US Director of Naval Intelligence stated that the future SSBN force will consist of 24 submarines.

Bombers: It is assumed that the 19 Tu-160 Blackjack bombers in Ukraine are eventually returned to Russia, perhaps in exchange for some other types of aircraft.

Sources: For US forces: START I Treaty Memorandum of Understanding, Sep. 1990; William J. Perry, Secretary of Defense, *Annual Report to the President and the Congress*, Feb. 1995, pp. 87–88; Les Aspin, Secretary of Defense, *Annual Report to the President and the Congress*, Jan. 1994, p. 7; Department of Defense, News Release No. 535–94, Remarks Prepared for Delivery by Secretary of Defense William J. Perry to the Henry L. Stimson Center, 20 Sep. 1994; Department of Defense, News Release No. 541–94, DOD Review Recommends Reduction in Nuclear Force, 22 Sep. 1994; DOD, Nuclear Posture Review, Viewgraphs, 22 Sep. 1994; US Air Force Office of Public Affairs, personal communications; and author's estimates.

For Russian forces: Arbatov, A. (ed.), *Implications of the START II Treaty for US–Russian Relations* (Henry L. Stimson Center: Washington, DC, 1993), p. 6; Sorokin, K. E., 'The nuclear strategy debate', *Orbis*, vol. 38, no. 1 (winter 1994), pp. 19–40; Statement of Ted Warner, Senior Defense Analyst, RAND Corporation, before the Senate Foreign Relations Committee, 3 Mar. 1992, as cited in *The START Treaty*, Senate Hearing 102–607, Part 1 (US Government Printing Office: Washington, DC, 1992), pp. 228–29; START I Treaty Memorandum of Understanding, Sep. 1990; Gromov, F., 'Reforming the Russian Navy', *Naval Forces*, vol. 14, no. 4 (1993), p. 10; Office of Naval Intelligence, Director of Naval Intelligence Posture Statement (June 1994), p. 13; and author's estimates.

land-based ballistic missiles—while leaving the USA with a significant advantage in sea-based and aircraft-delivered nuclear weapons. In addition, the fate of the START II Treaty has to some extent become hostage to the vicissitudes of Russian domestic politics.³⁴

On 28 September 1994, at the end of a two-day state visit to Washington by President Yeltsin, President Clinton and the Russian leader issued a Joint Statement on Strategic Stability and Nuclear Security in which they affirmed their commitment to seek prompt ratification of the START II Treaty once the START I Treaty entered into force. The two presidents also agreed that Russia and the USA would 'proceed to deactivate all strategic delivery systems to be reduced under START II by removing their warheads or taking other steps to remove them from combat status'.³⁵ As provided for under the terms of the START II Treaty, the USA will help to finance the deactivation of the Russian systems. The Clinton–Yeltsin statement strengthened cooperation between the USA and Russia in promoting confidence and transparency on nuclear issues. The two leaders also pledged to cooperate in preventing illegal trade in nuclear materials and strengthening the control and protection of such materials.³⁶

Beyond START II?

Yeltsin's visit to Washington was preceded by a 26 September 1994 speech that he delivered before the UN General Assembly in New York. Yeltsin broached the idea of taking further steps to limit strategic nuclear weapons and proposed a 'treaty on nuclear security and strategic stability' among the nuclear weapon states aimed at reducing the number of warheads and delivery vehicles in their arsenals.³⁷

Yeltsin's proposal for further cuts in strategic nuclear forces was greeted cautiously by US officials.³⁸ In part, this reticence reflected the fact that the Clinton Administration had been preoccupied with preserving and implementing an imperilled START Treaty regime rather than with moving beyond it. However, according to US Secretary of Defense William Perry, the USA

³⁴ Lockwood (note 7), pp. 645–46. For a discussion of the Russian debate about START II, see Sorokin, K., 'Russia after the crisis: the nuclear strategy debate', *Orbis*, vol. 38, no. 1 (winter 1994), pp. 19–40; see also Arbatov, A. (ed.), *Implications of the START II Treaty for US–Russian Relations*, Report no. 9 (Henry L. Stimson Center: Washington, DC, 1993).

³⁵ 'Joint Statement on Strategic Stability and Nuclear Security by the Presidents of the United States and Russia', *Wireless File* (United States Information Service, US Embassy: Stockholm, 30 Sep. 1994), pp. 13–14. Earlier in the year, a senior DOD official had told Congress that the USA 'will not begin implementation of START II reductions until Russia undertakes comparable reductions'. Carter (note 29), p. 10.

³⁶ 'Joint Statement . . .' (note 35), pp. 13–14.

³⁷ 'At UN, Yeltsin calls for new reductions in nuclear arsenals', *International Herald Tribune*, 27 Sep. 1994, pp. 1, 6; and UN General Assembly document A/48/PV.5, 26 Sep. 1994.

³⁸ Hitchens, T., 'US–Russian summit offers little drama', *Defense News*, vol. 9, no. 38 (26 Sep.–2 Oct. 1994), p. 6.

would consider making further reductions in its strategic forces 'assuming START I and START II are implemented fully'.³⁹

The pursuit of deeper nuclear arms cuts is complicated by the conclusions of the Pentagon's Nuclear Posture Review (NPR), a comprehensive 10-month review, released on 22 September 1994, of the US strategic and tactical nuclear force posture which establishes force levels through the year 2003.⁴⁰ Although the NPR sets out lower US warhead requirements, it concludes that maintaining the START II ceiling is the optimal US strategic posture. In announcing the results of the review, Secretary Perry stressed that the USA needed to maintain sufficient strategic forces as a 'hedge against reversal of reform in Russia'.⁴¹ He argued that the nuclear forces called for by the NPR would give the USA the flexibility to 'reconstitute' its strategic forces by rapidly 'uploading' warheads onto its land- and sea-based ballistic missiles.⁴²

However, the Clinton Administration has not ruled out negotiating still deeper cuts in nuclear arms. US DOD planners are actively considering a possible 'START III' treaty. According to one senior official at the US Arms Control and Disarmament Agency, the START II force posture embraced by the NPR represents the 'baseline, not the bottom line'.⁴³

III. Cooperative threat reduction

As it became apparent in 1991 that the Soviet Union had entered a period of internal turmoil and instability, the fate of the tens of thousands of nuclear warheads stored or deployed in several of the Soviet republics became a source of serious concern to both the executive and legislative branches of the US Government. In November 1991 US Senators Richard Lugar and Sam Nunn sponsored legislation, the Soviet Nuclear Threat Reduction Act (Public Law 102-228), to provide up to \$400 million in assistance to the Soviet Government to facilitate the transportation, storage, safeguarding and dismantlement of nuclear and other weapons, including the safe and secure storage of fissile materials, elimination of missiles and launchers, and destruction of chemical and biological weapon capabilities.⁴⁴ All these activities were required by arms control obligations which the USSR and the USA had previously agreed to or were about to conclude. In adopting the Nunn-Lugar legislation, the US Congress recognized that economic stress in the Soviet Union

³⁹ 'Remarks prepared for delivery by Secretary of Defense William J. Perry to the Henry L. Stimson Center, 20 September 1994', Office of Assistant Secretary of Defense for Public Affairs, News release no. 535-94, 20 Sep. 1994, p. 4.

⁴⁰ See Hitchens (note 38); and Carey, B., 'US adopting new nuclear weapons policy', *Wireless File* (United States Information Service, US Embassy: Stockholm, 23 Sep. 1994), pp. 8-9.

⁴¹ Transcript of press conference remarks, Office of Assistant Secretary of Defense for Public Affairs, News release no. 546-94, 22 Sep. 1994, p. 2.

⁴² Lockwood, D., 'New nuclear posture review shows little change in policies', *Arms Control Today*, vol. 24, no. 9 (Nov. 1994), p. 27.

⁴³ Quoted in Hitchens (note 38).

⁴⁴ *Congressional Record*, 27 Nov. 1991, p. S18798.

would complicate and perhaps delay the task of carrying out the arms reductions to which the Soviet Government was committed. In addition, Congress determined that it would be in the national security interest of the USA to assist in preventing the proliferation of weapons of mass destruction and destabilizing conventional weapons and the diversion of weapon-related scientific and technical expertise to terrorist groups or third countries.⁴⁵

To finance the arrangement, Senators Lugar and Nunn proposed, and Congress adopted, the procedure of authorizing the transfer of US DOD funds originally earmarked for other purposes. This procedure was used again for fiscal year (FY) 1993 when in October 1992 Congress passed the Former Soviet Union Demilitarization Act, which provided for the transfer of an additional \$400 million.⁴⁶

As a result of these initiatives, a new cooperative forum, the Safe and Secure Dismantlement (SSD) Talks, emerged to facilitate US technical and material assistance to the former Soviet republics in their nuclear disarmament activities. Upon taking office in 1993, the Clinton Administration decided to ask Congress for \$400 million specifically earmarked for a Cooperative Threat Reduction (CTR) programme, along lines that Senators Nunn and Lugar had initiated. Congress approved the Administration's funding request for the CTR programme for FY 1994 and again for FY 1995.

The negotiating process

By the time the Bush Administration was ready to begin discussions with prospective recipients of Nunn–Lugar assistance, the Soviet Union had collapsed, leaving nuclear weapons deployed on the territories of four newly independent states: Belarus, Kazakhstan, Russia and Ukraine. Thus, the SSD Talks began with the USA negotiating with the four new governments on a bilateral basis to determine what specific assistance was desired and how the provision of assistance would be arranged. Within the constraints of US legislation, funding and contracting procedures, the prospective partners were asked what kinds of cooperative programmes would best suit their needs. The US representatives put forward ideas and exercised their own judgement based on their experience and understanding of the problem. The resulting dialogue led to analysis and conclusions and to a series of agreements, some of which dealt with highly sensitive issues. It is most unlikely that this joint problem-solving style would have evolved without the resources provided by the Nunn–Lugar legislation.

Joint problem-solving initially occurred while developing the political–legal framework for cooperation, and it continued in a more detailed manner

⁴⁵ For more details concerning the Nunn–Lugar programme, see Lockwood (note 1), pp. 566–67; and Lockwood (note 7), pp. 666–68.

⁴⁶ The scope of the activities authorized by the 1991 Nunn–Lugar legislation was also expanded to include programmes to facilitate military conversion in the former USSR and to promote the 'stable transition to civilian economies'. *Congressional Record*, 1 Oct. 1992, p. H10281.

throughout the implementation phase. Arms control agreements were not the model for the political–legal framework. The intent was to provide the basic legal foundations and a general outline of the areas of cooperation, while leaving open for subsequent development most of the specific description of goods and services to be provided.

For each country an umbrella agreement was negotiated that addressed the scope of the cooperation, tied the cooperation to the objectives defined by US legislation, and defined the general rights and obligations of the two parties. Implementing agreements were then negotiated that identified specific areas for cooperation and the maximum amount of Nunn–Lugar money that could be made available for each implementing agreement. As of December 1994, 34 implementing agreements and other arrangements of a more informal character were in effect (see table 16.2 below).

Not surprisingly for such an unprecedented new approach to cooperative security, the Nunn–Lugar programme has been criticized by legislators and others in each of the five cooperating countries. In the USA, critics have said that US defence funds could better be spent on readiness and other more traditional defence purposes.⁴⁷ In the recipient countries, some critics have voiced concerns about alleged infringements on sovereignty, and regrets have been expressed about the length of time it requires to move from the agreement stage to the actual delivery of equipment.⁴⁸

Some of the complaints stemmed from specific issues that were sometimes difficult to resolve in these negotiations. These issues included the auditing and examination provisions needed to assure the US Government that the assistance provided was being used for its intended purpose, the rights and privileges to be accorded to US citizens working on projects in each of the partner countries, and relief from customs duties for US equipment being furnished in accordance with the agreements. These concepts were largely foreign to the conduct of business in the former Soviet Union and, as a result, took time to explain and negotiate. Concerns about delays are being met as contracts begin to be implemented and the pace of assistance delivery accelerates, and as institutions and mechanisms are developed in the recipient countries to manage these programmes.

The status of cooperative programmes

As shown in table 16.1, cooperation can be categorized under three principal headings: weapon destruction and dismantlement, chain of custody and demilitarization.

Destruction and dismantlement includes assistance for heavy equipment for use in destroying nuclear delivery vehicles and missile silos, government-to-

⁴⁷ Hiatt, F., 'Progress slight in program to destroy Soviet nuclear arms', *International Herald Tribune*, 13 Feb. 1995, p. 5; and Erlich, J., 'Nunn–Lugar may survive scrutiny from GOP', *Defense News*, vol. 10, no. 1 (9–15 Jan. 1995), p. 6.

⁴⁸ Reuter, 'Aid is lacking, Kiev tells West', *International Herald Tribune*, 22 Nov. 1994, p. 1.

Table 16.1. US Cooperative Threat Reduction Programme: summary of assistance, as of 31 December 1994

Figures are in US\$ m.

| Programme area name | Assistance | |
|-------------------------------|--------------|--------------|
| | Agreed | Provided |
| Chain of custody | 260.9 | 156.6 |
| Demilitarization | 150.0 | 84.8 |
| Destruction and dismantlement | 472.0 | 193.0 |
| Other programme support | 15.0 | 7.7 |
| Total^a | 897.9 | 442.1 |

^a Does not include funds obligated for non-agreement assistance, e.g. Arctic Nuclear Waste, Other Assessments and Defense Enterprise Fund. When non-agreement assistance is included, total obligations equal \$479.5 million.

Source: US Department of Defense.

government communication links for transmitting data related to START I elimination progress, chemical weapon destruction assistance and base elimination. By the end of 1994, \$472 million had been included in agreements for this category.

Chain of custody includes assistance in the safe and secure transport and storage of fissile material, fissile material control and accounting, export controls, weapon security and nuclear reactor safety. The amount of \$260.9 million for this type of assistance was included in agreements negotiated up to 31 December 1994.

Demilitarization includes cooperation in the transition from defence production to civilian production, housing for demobilized military officers and centres for scientific cooperation. As of 31 December 1994, agreements valued at \$150 million had been reached in this category.

By the end of the year nearly \$900 million had been committed to the support of cooperative programmes between the USA on the one hand and Belarus, Kazakhstan, Russia and Ukraine, on the other. Table 16.2 summarizes the status of these programmes.

By the end of 1994 the USA and Belarus had agreed upon Nunn-Lugar assistance programmes valued at \$70.1 million. The bulk of this money, \$45 million, was earmarked for defence conversion/industrial partnerships, housing for demobilized strategic rocket forces officers and missile base restoration; programme activities were focused on removing from military usage the facilities in the area around the former SS-25 base at Lida. A major effort also was under way to strengthen export control systems in Belarus, with the USA providing \$16.3 million in Nunn-Lugar funds for this purpose.

Agreed Nunn-Lugar programmes of cooperation with Kazakhstan totalled \$100 million at the end of 1994. Of this amount, \$70 million was earmarked

Table 16.2. US Cooperative Threat Reduction Programme assistance agreed and provided to Belarus, Kazakhstan, Russia and Ukraine, as of 31 December 1994
 Figures are in US\$ m.

| Agreement | Agreed | Provided |
|--|--------------|--------------|
| <i>Belarus</i> | | |
| Continuous Communications Links | 2.3 | 0.7 |
| Defence and Military Contacts | 1.5 | 0.2 |
| Emergency Response Training/Equipment | 5.0 | 4.3 |
| Environmental Restoration (Project Peace) | 25.0 | 6.8 |
| Export Control Assistance | 16.3 | 1.6 |
| Industrial Partnerships | 20.0 | 10.0 |
| Total | 70.1 | 23.6 |
| <i>Kazakhstan</i> | | |
| Defence and Military Contacts | 0.4 | 0.1 |
| Emergency Response Training/Equipment | 5.0 | 2.0 |
| Export Control Assistance | 2.3 | 0.3 |
| Government to Government Communications Link | 2.3 | 0.3 |
| Industrial Partnerships | 15.0 | 0.1 |
| Material Control and Accountability | 5.0 | 1.4 |
| Strategic Offensive Arms Elimination | 70.0 | 0.1 |
| Total | 100.0 | 4.3 |
| <i>Russia</i> | | |
| Armoured Blankets | 5.0 | 3.2 |
| Chemical Weapons Destruction Assistance | 55.0 | 20.3 |
| Defence and Military Contacts | 9.2 | 6.9 |
| Emergency Response Training/Equipment | 15.0 | 11.9 |
| Fissile Material Containers | 50.0 | 49.4 |
| Fissile Material Storage Facility Design | 15.0 | 15.0 |
| Fissile Material Storage Facility Equipment | 75.0 | 26.5 |
| Industrial Partnerships | 40.0 | 17.1 |
| International Science and Technology Centre | 25.0 | 22.5 |
| Material Control and Accountability | 10.0 | 1.7 |
| Security Enhancements for Russian Railcars | 21.5 | 21.5 |
| Strategic Offensive Arms Elimination | 130.0 | 84.2 |
| Total | 450.7 | 280.2 |
| <i>Ukraine</i> | | |
| Defence and Military Contacts | 3.9 | 0.5 |
| Emergency Response Training/Equipment | 5.0 | 2.0 |
| Export Control Assistance | 7.3 | 2.7 |
| Government to Government Communications Link | 2.4 | 0.3 |
| Industrial Partnerships | 40.0 | 35.0 |
| Material Control and Accountability | 12.5 | 2.1 |
| Multilateral Nuclear Safety Initiative | 11.0 | 11.0 |
| Science and Technology Centre | 10.0 | 0.1 |
| Strategic Nuclear Arms Elimination | 185.0 | 80.3 |
| Total | 277.1 | 134.0 |

Source: US Department of Defense.

for the elimination of all 104 SS-18 ICBM silos on Kazakh territory. However, the implementation of this project has been delayed by Russian concerns over responsibilities for silo destruction, and very little of the \$70 million had been spent at the end of 1994. In addition, defence conversion/industrial partnerships accounted for \$15 million.

The largest of the Nunn–Lugar programmes as of 31 December 1994 was established with Russia. It totalled \$450.7 million, which represented slightly over 50 per cent of the total value of Nunn–Lugar programmes agreed upon with the four former Soviet republics. Activities connected with US assistance to accelerate the dismantlement of Russian strategic offensive arms slated for elimination under START I accounted for the largest amount of the total, with \$130 million set aside for assistance in eliminating these systems. Improving the safety and security of nuclear warheads while in transport and storage accounted for \$166.5 million: \$90 million for the design of, and the equipment to build and operate, a fissile material storage facility; \$21.5 million for security enhancements for railcars; \$50 million for fissile material containers; and \$5 million for armoured blankets. In Nunn–Lugar assistance for the elimination of other weapons of mass destruction, \$55 million was set aside in the agreement with Russia for destruction of chemical weapons. Supporting the transition to a civilian economy, \$40 million was agreed for defence conversion/industrial partnerships and \$25 million for an International Science and Technology Centre, a grant-giving programme open to all Nunn–Lugar recipient states that is aimed at preventing a ‘brain drain’ of scientists from the former Soviet nuclear weapon production complex.⁴⁹ On 20 January 1995, Russia and the USA signed an agreement expanding cooperation in material and physical control and accountability (MPCA) by \$20 million. The assistance will be directed to specific facilities identified by Russia.

In 1994 the USA and Ukraine put into effect agreements valued at \$185 million to assist Ukraine with dismantling the former Soviet strategic nuclear arms deployed on its territory. Another \$40 million agreement to support defence conversion/industrial partnerships and to provide housing for demobilized strategic rocket forces officers was put into effect. A Science and Technology Centre in Kiev was allocated \$10 million to provide grants to scientists. Other agreements were aimed at strengthening safety and security at places where fissile materials are located: an agreement to strengthen material control and accountability (\$12.5 million); provision of emergency response training and equipment (\$5 million); and US participation in a multilateral nuclear reactor safety initiative (\$11 million).

Nunn–Lugar funds played a vital role in gaining Ukraine’s adherence to START I and the Lisbon Protocol as well as the NPT. To facilitate implementation of the Lisbon Protocol, President Bush committed \$175 million in

⁴⁹ For a discussion of the International Science and Technology Centre programme, see ‘Ambassador Robert L. Gallucci: redirecting the Soviet weapons establishment’, *Arms Control Today*, vol. 22, no. 5 (June 1992), pp. 3–6.

Nunn–Lugar assistance to Ukraine in 1992. After lengthy discussions and debate, Ukraine signed its umbrella agreement on 25 October 1993, during Secretary of State Warren Christopher’s visit to Kiev. In December 1993, Ukraine and the USA concluded an implementing agreement for dismantlement of the strategic offensive nuclear weapons deployed in Ukraine, initially envisaging the expenditure of up to \$135 million. Assistance to help Ukraine dismantle nuclear weapons was one of the conditions set by the Ukrainian Parliament for approving ratification of START I and the Lisbon Protocol (see section II above).

A shift to implementation

The Nunn–Lugar programme shifted decisively from negotiations and programme definition to implementation in 1994. Most of the negotiations were completed by March 1994. Although the assistance provided by the USA as of 31 December 1994 had not caught up with the amount the US Government had agreed to provide, substantial progress was made in translating agreements into real goods and services. From not much over \$100 million in January 1994, US obligations including non-agreement assistance rose to \$479.5 million by the end of December 1994. (In US budgetary practice, ‘obligations’ refers to funds that have been placed under contract for goods and services.)

These obligations resulted in shipments to the 658 countries through calendar year 1994 that included cranes, bulldozers, cable shredders, communications equipment, computer equipment, armoured blankets, protective suits, plasma cutters, fissile material containers, excavators and assorted other types of equipment.

Transparency and irreversibility in nuclear weapon reduction

If the provisions of START II are fulfilled by Russia and the USA, by the year 2003 their deployed strategic forces will be reduced to the levels of 3000–3500 nuclear warheads. Although the launchers and nuclear delivery vehicles carrying warheads in excess of these levels must be eliminated by prescribed and verified procedures, there is no obligation on either party to eliminate the nuclear warheads removed from active deployment status. Warheads are being dismantled in Russia as they are in the USA, but there are no procedures to enable either side to verify that the other side is dismantling these warheads or that the dismantlement process is irreversible (see also appendix 16A).

In the light of this gap in the arms control process, on 28 September 1994 Presidents Clinton and Yeltsin decided to ‘direct their joint working group on nuclear safeguards, transparency and irreversibility to pursue by March 1995 further measures to improve confidence in and increase the transparency and irreversibility of the process of reducing nuclear weapons’.⁵⁰ Their joint

⁵⁰ See ‘Joint Statement . . .’ (note 35).

working group will consider various methods of accomplishing these goals, including an exchange of data on inventories of fissile materials removed from dismantled warheads and reciprocal inspections of storage facilities containing plutonium and highly enriched uranium (HEU) removed from weapons. The working group is to report its progress at the next US–Russian summit meeting. These talks, a vital link in the process of eliminating nuclear weapons and safeguarding fissile material, will need the sustained commitment of the most senior policy makers in both nations to succeed.

Confronting new problems

The effort to eliminate a large part of the cold war nuclear weapon legacy has raised several practical problems: finding and focusing resources for dismantling nuclear weapon systems rapidly; managing rapid dismantlement while maintaining absolute control over the fissile materials being withdrawn from military uses; protecting fissile materials in a deteriorating security environment; addressing the technical and environmental difficulties related to the long-term disposition of fissile materials including, particularly, plutonium; accommodating the economic and intellectual needs of displaced scientific and technical personnel; coming to terms with economic problems in the former Soviet Union that make it more difficult to dismantle nuclear weapon systems in a sustained and vigorous manner; and dealing with the perceived security and political needs of the newly independent countries where Soviet nuclear weapons were deployed.

Evidence to date supports the thesis that the products of disarmament are safeguarded with great care by responsible agencies in the former Soviet Union. So far, the smuggling of fissile material from the former Soviet Union appears to have come from civilian research centres and not from materials released by the process of dismantling nuclear weapon systems. Improvements in controlling fissile materials, wherever located, would greatly reduce the potential for smuggling.⁵¹ Cooperative programmes can develop and strengthen safeguards on fissile materials to prevent sub-state threats to effective government control. This is especially important in Russia, where the dismantling and storage of warheads and components are taking place in a difficult environment.

The dismantlement of nuclear warheads does not automatically deal with the threat posed by sub-state elements so long as the nuclear components remain in the form of direct-use materials (HEU and plutonium). The transparency and irreversibility process should therefore be accompanied by a series of measures to develop and enhance the chain of custody. Put another way, the safety and security of the nuclear materials must include: the availability of state-of-the-art storage facilities (two are planned in Russia) into which fissile material derived from dismantled nuclear weapons could be

⁵¹ See section IV in this chapter.

placed; the safe and secure transport of nuclear warheads; a broadened programme of cooperation in material and physical control and accountability of fissile materials; the establishment of modern customs control posts on the borders of Belarus, Kazakhstan, Russia and Ukraine; and laboratory-to-laboratory cooperation to tighten safeguards on fissile materials and develop advanced techniques for eliminating nuclear weapons under conditions of transparency and irreversibility.

IV. Regional proliferation and efforts to curb it

East Asia

In 1994 East Asia proved to be the region of the most acute nuclear proliferation crisis. This crisis had its roots in the mid-1980s, when North Korea, on the insistence of the Soviet Union, acceded to the NPT in 1985 while simultaneously completing at Yongbyon a graphite-moderated, 25-Megawatt thermal (MWth) research reactor, capable of producing 10–15 kg of plutonium per reactor load. North Korea failed to conclude a safeguards agreement with the International Atomic Energy Agency until early 1992. In its initial inventory, North Korea accounted for 90 grams of separated plutonium gained during a single campaign in 1990. Re-analysis of the samples by the IAEA, however, proved that the plutonium must have been extracted over a period of several years, indicating that North Korea may have stored more plutonium than it had admitted; estimates ranged from a few grams to as much as 15 kg.⁵² The IAEA request for special inspections at two non-declared sites where US satellite intelligence had indicated that nuclear waste might be stored antagonized the North Korean Government. On 12 March 1993 North Korea announced its intention to withdraw from the NPT but suspended the decision on 11 June, only one day before the withdrawal was to become effective.⁵³

In suspending its withdrawal, North Korea claimed a 'special status of suspension' that would prevent the IAEA from applying the full-scope safeguards that are applied in other non-nuclear weapon parties to the NPT.⁵⁴ On 15 February 1994, just before a meeting of the IAEA Board of Governors, North Korea did give in to the IAEA's request that it be permitted to resume its routine (although not special) inspections.⁵⁵ Upon arriving in North Korea, however, the IAEA inspectors were prevented from carrying out procedures to confirm that no plutonium diversion had occurred, namely, gamma-radiation

⁵² Albright, D., 'How much plutonium does North Korea have?', *Bulletin of the Atomic Scientists*, vol. 50, no. 5 (Sep./Oct. 1994), pp. 46–53.

⁵³ *SIPRI Yearbook 1994* (note 2), appendix 15A, p. 630; and Institute for Defense and Disarmament Studies, *Arms Control Reporter* (IDDS: Brookline, Mass.), sheet 457.D.7, June 1993.

⁵⁴ Documented in NPT/CONF.1995/12, 28 Mar. 1995, Letter dated 21 March 1995 from the Permanent Representative of the DPRK addressed to the Provisional Secretary-General of the 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, p. 4/5.

⁵⁵ IAEA Press Release PR 94/4, 15 Feb. 1994.

mapping and the taking of smear samples in the reprocessing facility at Yongbyon. A special meeting of the Board of Governors on 21 March 1994 concluded that the IAEA was unable to verify that no diversion had occurred. It reported to the UN Security Council that North Korea was in non-compliance with its NPT obligations.⁵⁶ After lengthy negotiations, on 31 March 1994 the Security Council issued a declaration requesting North Korea to honour its obligations and to allow IAEA inspectors to complete their activities. This formulation was the strongest the USA could persuade China to accept.⁵⁷

In May 1994 North Korea started to unload the reactor's spent fuel in the absence of IAEA personnel, making it impossible for the Agency to reconstruct the reactor's recent history by taking systematic samples from the fuel. The IAEA had previously tried unsuccessfully to obtain North Korea's consent to conduct all the necessary inspection activities, in particular the taking of smear samples.⁵⁸ Despite another urgent Security Council appeal on 30 May not to do so, North Korean engineers proceeded to complete the unloading of the spent fuel. When inspectors were re-admitted to the country shortly afterwards, they could only confirm that no spent fuel had been diverted. However, with the fuel unloaded, the spectre of a new reprocessing campaign loomed large. Again, the Board of Governors reported to the Security Council that North Korea was in non-compliance with its safeguards obligations, an action that prompted Pyongyang to renounce its IAEA membership on 13 June 1994.⁵⁹

The USA then embarked on a two-track diplomatic effort. The first track involved trying to persuade the five permanent members of the UN Security Council (the P5), in particular Russia and the even more reluctant China, that without a prompt solution of the crisis the imposition of sanctions on North Korea would be inevitable in order to prevent it from causing permanent damage to the global nuclear non-proliferation regime and divisions within the Security Council itself. When it became obvious that the Council was not likely to vote for sanctions, the USA tried to extract agreement from Japan, South Korea and other major allies that sanctions could be imposed unilaterally, without explicit UN authorization.⁶⁰ Patriot air-defence missiles were sent to South Korea, and a naval group led by the aircraft-carrier *Kitty Hawk*, cruising off Korean shores, bolstered the second track pursued by the USA—direct, intense negotiations with North Korea, following a mediation visit by former US President Jimmy Carter to Pyongyang. These talks finally resulted in the signing of a framework agreement on 21 October 1994.⁶¹

⁵⁶ Programme for Promoting Nuclear Non-Proliferation (PPNN), *PPNN Newsbrief*, no. 25 (1st quarter 1994), pp. 2–4; and *IAEA Newsbrief*, vol. 9, no. 1 (Feb./Mar. 1994), p. 1.

⁵⁷ *PPNN Newsbrief*, no. 26 (2nd quarter 1994), p. 2; and IAEA Press Release PR 94/4, 15 Feb. 1994.

⁵⁸ *PPNN Newsbrief*, no. 26 (2nd quarter 1994), p. 3.

⁵⁹ *IAEA Newsbrief*, vol. 9, no. 3 (July/Aug. 1994), pp. 1–3.

⁶⁰ *IAEA Newsbrief*, vol. 9, no. 3 (July/Aug. 1994), pp. 4–5.

⁶¹ Agreed Framework of 21 October 1994 between the United States of America and the Democratic People's Republic of Korea, IAEA document INFCIRC/457, 2 Nov. 1994.

Under the terms of this agreement with the USA, North Korea will halt the operation of its research reactor and all reprocessing facilities and will stop construction work on two larger reactors and a reprocessing plant. The spent fuel will be stored according to arrangements to be worked out jointly between North Korean and US experts. For its part, the USA will immediately begin supplying heavy fuel oil to help North Korea meet its energy needs, will drop barriers to economic and political relations, and will organize an international consortium to aid the civilian nuclear energy sector in North Korea. This consortium will finance (up to \$4 billion) and supply two 1000-Megawatt (MW) light water reactors. When the construction of these reactors reaches the stage requiring the transfer of crucial components contained in the 'Trigger List' of the Nuclear Suppliers Group (NSG),⁶² North Korea will permit 'special inspections' requested by the IAEA and will implement all measures the Agency deems necessary to bring the country to full compliance with its obligations. It will also ship out to Russia the stored spent fuel from the research reactors. Both steps are to be completed by North Korea before the Trigger List items are actually transferred, but this is not expected to happen before the year 2000. After the first light water reactor is completed, but before completion of the second reactor, North Korea will dismantle all three graphite-moderated reactors as well as the reprocessing plant; this will occur in the year 2003 at the earliest. Thus, the agreement is to be implemented in a phased manner according to a precise timetable set out in a confidential US–North Korean note; each party has the right to make the initiation of a new step conditional on proof of the other party's compliance with the previous step.⁶³

The agreement between North Korea and the USA has been the subject of considerable criticism. One of the most widely aired complaints about the 'nuclear deal' is that by delaying IAEA special inspections it compromises both the Agency and the NPT. Another oft-repeated criticism is that it essentially 'rewards' a rule-breaker with an enormous subsidy. Although these objections are not without merit, it is important to realize that by scrapping its domestic reactor line North Korea is writing off a massive capital investment; moreover, by doing so and by renouncing the reprocessing and ownership of the spent fuel, it considerably exceeds its NPT obligations. If duly implemented, the agreement will resolve the most burning issue for the global non-proliferation regime and will serve to reconfirm the legitimacy of that regime in a region where there is a serious risk that neighbouring states—South Korea and Japan—might otherwise have been compelled to reconsider their own status as non-nuclear weapon states. In any event, given the clearly non-compliant status of North Korea's nuclear programme, the unwillingness of

⁶² For a discussion of the NSG and the Trigger List, see chapter 15 in this volume.

⁶³ Harrison, S., 'The North Korean nuclear crisis: from stalemate to breakthrough', *Arms Control Today*, vol. 24, no. 9 (Nov. 1994), pp. 18–20; and Wolfsthal, J., 'US, Pyongyang reach accord on North's nuclear program', *Arms Control Today*, vol. 24, no. 9 (Nov. 1994), pp. 25–32.

China to agree to sanctions and the unviability of military options, it is unclear what alternatives existed to the agreement that was achieved.⁶⁴

While the crisis over North Korea's nuclear programme moved to centre stage, subdued anxiety persisted in East Asia about Japan's nuclear programme, which involves large-scale plans to use plutonium in light water and breeder reactors requiring the significant stockpiling of plutonium on Japanese soil. This concern had been heightened by the discovery in the spring of 1994 that 68 kg of plutonium was unaccounted for in the Tokai plutonium fuel production facility (the discrepancy was later explained as the result of a higher than expected accumulation of dust within the plant's processing area).⁶⁵ Japan had a year earlier become aware of the damaging international impact of its plutonium policy following the highly controversial shipment by sea of approximately 1 tonne of plutonium from France; it now took active steps to dispel these concerns. This was a driving force in talks among eight countries, cooperating with the IAEA, on establishing a new transparency regime for plutonium. In December, agreement was reached among seven of these states to publish annually the precise amount, isotopic content and location of civilian plutonium in their possession.⁶⁶ One month earlier, Japan had issued a model publication that provided detailed data on all Japanese-owned plutonium.⁶⁷

South Asia

In 1994 India and Pakistan continued to cause some concern about nuclear weapon proliferation in this region. Both countries are regarded as nuclear threshold states or undeclared nuclear weapon states. India, in addition to possessing sufficient quantities of nuclear material to make weapons, tested a 'peaceful nuclear device' in 1974 and is believed to have improved its war-head design since then.⁶⁸ Pakistan is reported to have all the components necessary for producing nuclear weapons, although it is not certain whether war-heads have been assembled and stockpiled.⁶⁹

The annual plutonium production potential of India's non-safeguarded fuel cycle is estimated to be up to 150 kg of plutonium;⁷⁰ it is unknown how much of this is weapon-grade plutonium (with a plutonium-239 content exceeding

⁶⁴ Matthews, J., 'Critics of deal with North Korea impugn a diplomatic success', *International Herald Tribune* (1 Oct. 1994), p. 4.

⁶⁵ 'Japan's plutonium shortfall discrepancy explained', *Arms Control Today*, vol. 24, no. 6 (July/Aug. 1994), p. 27.

⁶⁶ The 7 countries are: Belgium, France, Germany, Japan, Switzerland, the UK and the USA. Russia also participated in the talks but has not committed itself to the agreement. Naoki, U., 'Western countries will make plutonium inventories public', *Nucleonics Week*, vol. 35, no. 51 (22 Dec. 1994), pp. 4-5.

⁶⁷ *Atoms in Japan*, vol. 38, no. 11 (Nov. 1994), pp. 4-7.

⁶⁸ Smith, C., SIPRI, *India's Ad Hoc Arsenal: Direction or Drift in Defence Policy?* (Oxford University Press: Oxford, 1994), pp. 186-202.

⁶⁹ See, e.g., Spector, L. and Smith, J., *Nuclear Ambitions* (Westview: Boulder, Colo., 1990), p. 95.

⁷⁰ Albright, D., Berkhout, F. and Walker, W., SIPRI, *World Inventory of Plutonium and Highly Enriched Uranium 1992* (Oxford University Press: Oxford, 1993), p. 159.

90 per cent) or the extent to which the material is dedicated to civilian purposes, that is, to fuelling breeder reactors. Pakistan's annual HEU production potential is estimated to be sufficient to produce two or three warheads per year, although the production history of the Kahuta ultracentrifuge enrichment plant is not known precisely. Recently, two prominent Pakistanis, former Prime Minister Nawaz Sharif and former Chief of the Army Staff General Mirza Aslam Beg, made statements confirming earlier reports about their country's alleged military nuclear weapon capability. These statements were promptly denied by the Pakistani Government.⁷¹ In summary, estimates of potential nuclear weapon holdings at the end of 1994 range from 60 to 120 warheads for India and from 5 to 10 warheads for Pakistan. Procurement and research activities in both countries related to tritium production seem to indicate they are interested in advanced (boosted) weapon design.⁷²

The respective positions of India and Pakistan *vis-à-vis* the nuclear non-proliferation regime remain unchanged. Pakistan continues to declare its readiness to enter non-proliferation commitments—bilateral, regional and global—provided India does the same. India opposes all initiatives that would lead to what it perceives to be unequal treatment compared with China and the other major powers. Indian officials maintain their biting criticism of the NPT and, in the tradition of Rajiv Ghandi's proposal during the 1988 UN General Assembly Third Special Session on Disarmament, plead for a global nuclear disarmament treaty to substitute for the NPT.⁷³ Pakistan and India—both parties to the 1963 Partial Test Ban Treaty (PTBT)—are participating in the Conference on Disarmament (CD) negotiations on a comprehensive test ban treaty (CTBT).

On the disputed mandate for negotiations on a cut-off of the production of fissile materials for military purposes,⁷⁴ however, the two countries have different positions. The global fissile material production cut-off proposal was put forward by the Clinton Administration in September 1993 with the South Asian threshold countries in mind. Rather than repeating what was seen as a futile attempt to roll back the region's fissile material stockpiles all at once, this proposal is aimed at halting the further growth of these stockpiles at an early stage, with further production placed under international safeguards. In making the proposal, the Clinton Administration hoped that this would permit a non-discriminatory treaty to be drafted that would be acceptable to the non-

⁷¹ *PPNN Newsbrief*, no. 26 (2nd quarter 1994), p. 18; and *PPNN Newsbrief*, no. 27 (3rd quarter 1994), p. 19.

⁷² Albright, D. and Hibbs, M., 'India's silent bomb', *Bulletin of the Atomic Scientists*, vol. 48, no. 7 (Sep. 1992), pp. 27–31; Albright, D. and Hibbs, M., 'Pakistan's bomb: out of the closet', *Bulletin of the Atomic Scientists*, vol. 48, no. 6 (July/Aug. 1992), pp. 38–43; and Davis, Z., *Nuclear Nonproliferation Strategies for South Asia* (Congressional Research Service/Library of Congress: Washington, DC, May 1994).

⁷³ UN document A/S-15/PV 12, Annex I.

⁷⁴ For a discussion of the ban on fissile material production, see Lockwood (note 7), pp. 659–65.

nuclear weapon states. Such a treaty might be acceptable to the current nuclear weapon states as well.⁷⁵

Pakistan initially insisted on including existing stockpiles in the negotiating mandate for a global, non-discriminatory cut-off agreement, a proposal that was strongly opposed by the nuclear weapon states and, among others, India. In February 1995 Pakistan changed its position and agreed to support the mandate based on the language of a December 1993 UN General Assembly resolution⁷⁶ urging a fissile material production cut-off. However, the proposal was stalled in the CD, whose members—in particular Algeria, Egypt and Iran—could not reach a consensus on a negotiating mandate in 1994.⁷⁷

In parallel with the multilateral track in South Asia, the Clinton Administration, led by Deputy Secretary of State Strobe Talbot, has renewed US efforts to establish a regional arms control regime. As with its fissile material production cut-off proposal, the main US aim has been to cap, rather than to roll back to zero, South Asian nuclear weapon programmes. The Clinton Administration considered making a one-time exemption to the 1985 Pressler Amendment.⁷⁸ Under this exemption, 38 F-16 fighters would have been supplied to Pakistan in return for the introduction of 'non-intrusive' verification procedures at the Kahuta plant designed to guarantee that the facility was not being used to produce HEU. Pakistan, however, was unwilling to accept this arrangement as long as India was not subject to similar verification procedures. India, while anxious to improve relations with the USA, rebuffed suggestions to convene a forum on the region that would include itself and Pakistan, Japan, Germany and the P5. Preliminary negotiations yielded a joint communiqué emphasizing support for non-proliferation, a CTBT and a cut-off of fissile material production, but no substantive progress on regional issues was achieved.⁷⁹

In 1994 both the Indian and Pakistani nuclear programmes continued to be restricted by the new full-scope safeguards policy agreed to by all the nuclear suppliers except China. The Indian nuclear programme suffered two setbacks: first, the shutdown of the Rajasthan power plant following a chronic heavy water leak; and then the complete cessation of construction work at four plant sites (Kaiga 1 and 2 and Rapp 1 and 2), because of an accident at the Kaiga 1

⁷⁵ Gallucci, R., 'Non-proliferation and national security', *Arms Control Today*, vol. 24, no. 3 (Apr. 1994), pp. 13–16.

⁷⁶ UN General Assembly Resolution 48/75L, 16 Dec. 1993.

⁷⁷ *Disarmament Times*, vol. 17, no. 3 (Sep. 1994), p. 4; and *Disarmament Times*, vol. 17, no. 6 (22 Nov. 1994), p. 1. It has been accepted that the CD is the appropriate forum for the fissile material cut-off negotiations; for the mandate for the negotiations, see Conference on Disarmament document CD/1299, 24 Mar. 1995.

⁷⁸ The Pressler Amendment to the 1961 Foreign Assistance Act stipulates that the USA may provide no military or economic assistance under any legislation unless during each fiscal year the president certifies that: Pakistan does not have a nuclear explosive device; and provision of US aid would significantly reduce the likelihood that Pakistan would acquire one. IDDS, *Arms Control Reporter*, sheet 454.A, 4 Jan. 1993.

⁷⁹ Wolfsthal, J., 'US bid to "cap" Indian-Pakistani programs faces opposition', *Arms Control Today*, vol. 24, no. 4 (May 1994), p. 18; *PPNN Newsbrief*, no. 26 (2nd quarter 1994), p. 18; and *PPNN Newsbrief*, no. 27 (3rd quarter 1994), p. 18.

plant that revealed design weaknesses.⁸⁰ Nuclear self-sufficiency, once the ambition of India, has now given way to a desire to receive selected Western technology for the nuclear sector. In addition, Indian industry was affected by the extension of Western export controls to dual-use technologies, which has intensified India's criticism of these policies.⁸¹ The only positive development for the Indian nuclear industry was the successful bid for a contract to supply South Korea with 100 tonnes of Indian-produced heavy water.⁸²

Pakistan, in turn, has long desired to acquire a new reactor. However, the NSG full-scope safeguards policy has left it with no choice but to turn to China. Work on the construction of a 300-MW Chinese-supplied nuclear power plant is progressing. Nevertheless, doubts remain concerning whether China can supply all the reactor parts without Western licences for retransfer. These licences would not be granted under the full-scope safeguards policy.⁸³

The Middle East

In contrast to Iraq's behaviour with respect to the dismantlement of its biological weapon and ballistic missile programmes, it has cooperated satisfactorily with the UN Special Commission on Iraq (UNSCOM) and the IAEA in the dismantlement and monitoring of its nuclear capabilities. In February 1994 the last consignment of Iraqi HEU was shipped to Russia; the cooperation of the Iraqi authorities permitted the further identification of Iraq's foreign suppliers and technical advisers.⁸⁴ During the year the long-term monitoring programme developed by the IAEA and approved by the UN Security Council was phased in. This programme involves the establishment of unlimited inspection rights, the extensive use of environmental sampling and analysis, and the application of end-use controls of certain dual-use equipment that could be employed for nuclear purposes.⁸⁵

With the dismantlement of Iraq's nuclear weapon programme, Iran is now the non-nuclear weapon state most often charged with harbouring nuclear ambitions in the region. The US and Israeli intelligence communities have strongly expressed their convictions that Iran is conducting a clandestine nuclear weapon programme, an assessment that is partly behind the USA's 'double containment strategy' against Iraq and Iran. This strategy has resulted in Iran, a party to the NPT, being subjected to a virtual embargo of all nuclear hardware and technology from the West. The intention of the US policy is to establish an even broader technology embargo and halt external lending to Iran—goals which are not shared by the West European countries and

⁸⁰ *Nucleonics Week*, vol. 35, no. 21 (26 May 1994), p. 7.

⁸¹ Chellaney, B., 'Non-proliferation: an Indian critique of US export controls', *Orbis*, vol. 38, no. 3 (summer 1994), pp. 439–56. See also chapter 15 in this volume.

⁸² *PPNN Newsbrief*, no. 26 (2nd quarter 1994), p. 11.

⁸³ *PPNN Newsbrief*, no. 26 (2nd quarter 1994), p. 11.

⁸⁴ *IAEA Newsbrief*, vol. 9, no. 1 (Feb./Mar. 1994), pp. 2–3.

⁸⁵ *IAEA Newsbrief*, vol. 9, no. 2 (Apr./May 1994), p. 2.

Russia.⁸⁶ Russia is considering nuclear supply to Iran. In recent years, China has emerged as Iran's leading nuclear hardware and technology supplier, and it has offered to provide nuclear power reactors. There is some talk about Iranian–Pakistani nuclear collaboration,⁸⁷ but no detailed evidence of such cooperation has emerged.

With regard to Iran's alleged nuclear weapon programme, there is no concrete evidence that it exists. Iran operates at the University of Tehran a 5-MW research reactor of US origin which is fuelled by Argentinian fuel rods. At the University of Isfahan it also operates for research purposes several mini-reactors supplied by China which are under IAEA safeguards. The initial concern about the supply of a Chinese calutron (used for isotope separation) has subsided, since the parameters of the machine do not permit any meaningful enrichment. Rumours about centrifuge enrichment research at the Sharif Institute of Technology in Tehran resurfaced in 1994. Iran, however, has offered the IAEA the opportunity to conduct inspection visits to the country; a visit to the Sharif Institute in November 1993 did not turn up any evidence of a clandestine weapon programme there.

The then Director of the US Central Intelligence Agency (CIA), R. James Woolsey, speculated that Iran would need 8–10 years to achieve a nuclear weapon capability.⁸⁸ This estimate represented something of a retreat from previous estimates that Tehran would have a nuclear capability by the end of the 1990s. However, Iran has reportedly been seeking in the former Soviet Union direct access to nuclear weapons and to weapon-usable nuclear material, such as the uranium of various enrichment levels that was recently shipped from Kazakhstan to the USA. If these reports are true, Iran's road to acquiring nuclear weapons could be considerably shorter than now imagined. At any rate, it appears that much of the concern about Iran's nuclear programme stems from the almost ideal 'fit' of traditional motivations for proliferation with Iran's geostrategic situation, world image and style of foreign policy.⁸⁹ In addition, US and Israeli sources claim that senior Iranian officials have expressed the desire to acquire a nuclear weapon capability and that procurement patterns also point in this direction.⁹⁰

Iran has become a major stumbling-block for the extension of the NPT (see below), mainly in reaction to the Western nuclear technology embargo,⁹¹ which has prevented Germany from completing the two large power reactors at Bushehr that were damaged by air attacks during the Iran–Iraq War. Iran is

⁸⁶ Kemp, G., *Forever Enemies? American Policy and the Islamic Republic of Iran* (Carnegie Endowment for Peace, Washington, DC, 1994), pp. 103–109.

⁸⁷ See, for example, Timmerman, K., 'Iran's nuclear menace', *New Republic*, vol. 212, no. 17 (24 Apr. 1995), pp. 17–19.

⁸⁸ *Proliferation Threats of the 1990's*, Hearing before the Committee on Governmental Affairs, US Senate, 103rd Congress, 1st session, 24 February 1993 (US Government Printing Office: Washington, DC, 1993), p. 13.

⁸⁹ See Chubin, S., *Iran's National Security Policy: Capabilities, Intentions and Impact* (Carnegie Endowment for International Peace, Washington, DC, 1994), pp. 50–55.

⁹⁰ Chubin (note 89); and *PPNN Newsbrief*, no. 28 (4th quarter 1994), p. 16.

⁹¹ Chubin (note 89), p. 51.

also said to be considering withdrawal from the NPT, but Iranian diplomats have denied these reports.⁹²

The issue of Israel's alleged possession of a national nuclear arsenal did not lose its salience, despite progress made in the Middle East peace process; it still remains a highly contentious issue in the region and casts a dark shadow over the global nuclear non-proliferation regime. The declared intention of several Arab states not to vote for an indefinite extension of the NPT is directly linked to the absence of progress on establishing a Middle East nuclear weapon-free zone. While regional arms control talks are part of the multilateral peace process, the nuclear issue so far has been excluded from these negotiations. The Egyptian–Israeli discussions on arms control that began in August 1994 could provide another route for addressing the issue in the future. The statement in late 1994 by Israeli Foreign Minister Shimon Peres that Israel might consider accession to the NPT as a non-nuclear weapon state once peace in the region had proved to be stable and secure is the most far-reaching statement of this kind by any Israeli official, but it falls short of the tangible step that the Arab states are requesting.⁹³ In September 1994 the IAEA General Conference decided to resume peaceful nuclear cooperation with Israel. All IAEA assistance had been suspended since 1981.⁹⁴

Under a mandate from the IAEA General Conference, Director General Hans Blix has been exploring the possibilities for establishing a nuclear weapon-free zone in the Middle East; he has been examining in particular the requirements and opportunities for verifying such a zone. In the course of his work, Blix has visited various Middle Eastern capitals, including Tehran, to hear the views of the respective governments.⁹⁵ However, at the end of the year this low-key activity had failed to overcome reservations by several Arab states and Iran about an indefinite extension of the NPT.

Africa

South Africa is the first nuclear weapon state ever to have renounced and dismantled its weapon-making capability.⁹⁶ In order to reassure its African neighbours and the world at large that this process had been completed fully, the South African authorities went beyond their obligations as a non-nuclear weapon state party to the NPT and opened to IAEA inspectors not only their civilian fuel cycles but also their nuclear weapon facilities. After a series of

⁹² Hibbs, M., 'Iran may withdraw from the NPT over Western trade barriers', *Nucleonics Week*, vol. 35, no. 38 (22 Sep. 1994), pp. 1, 8–9; and Hibbs, M., 'It's too early for Teheran to leave NPT, delegates say', *Nuclear Fuel*, vol. 19, no. 20 (26 Sep. 1994), p. 9.

⁹³ On Israel's nuclear policy, see Evron, Y., *Israel's Nuclear Dilemma* (Routledge: London, 1994); and Inbar, E. and Sandler, S., 'Israel's deterrent strategy revisited', *Security Studies*, vol. 3, no. 2 (winter 1992–93), pp. 330–58.

⁹⁴ *IAEA Newsbrief*, vol. 9, no. 4 (Oct. 1994), p. 7.

⁹⁵ *IAEA Newsbrief*, vol. 9, no. 2 (Apr./May 1994), p. 9.

⁹⁶ On 24 Mar. 1993, President de Klerk, in a speech in the South African Parliament, admitted that South Africa had had nuclear weapons but said that they had been destroyed. See Albright, D., 'South Africa's secret nuclear weapons' *ISIS Report*, vol. 1, no. 4 (May 1994).

inspections at both the civilian and military nuclear facilities, the IAEA was satisfied that the history of South African fissile material production had been established and that all such material had been put under safeguards.⁹⁷ The Agency was also able to gain insight into advanced South African weapon research projects, such as those for the production of tritium and lithium-6, that had raised questions.⁹⁸

South Africa has gone from playing a negative and obstructionist role in the non-proliferation regime to playing a positive and cooperative one. At its request, in the autumn of 1994 the IAEA General Conference moved to restore South Africa's permanent seat on the Board of Governors.⁹⁹ South Africa has become a member of the Nuclear Suppliers Group, an important step for a country which has a large nuclear and dual-use technology infrastructure and is a leading supplier of natural uranium.

South Africa is also actively involved in the negotiations to establish an African nuclear weapon-free zone (ANWFZ). These negotiations, conducted by an Organization for African Unity (OAU) group of experts, have proceeded apace; a full meeting of the OAU may formally adopt a treaty, which is now nearing completion, soon after the conclusion of the NPT Review and Extension Conference. The draft treaty prohibits the production, acquisition or stationing of nuclear weapons on African soil as well as the dumping of nuclear waste. It also provides for IAEA safeguards and seeks to promote civilian nuclear cooperation. A proposal to renounce all use of weapon-usable fissile material in the civilian fuel cycle was dropped from the draft.

A major current obstacle to the completion of the treaty is its geographical scope; Mauritius has used the occasion to renew its claim on Diego Garcia, an island in the Indian Ocean that is a British possession and leased by the UK to the USA for use as a military base. Under these circumstances, France, the UK and the USA would probably not sign the protocols to the treaty, making the zone void. However, efforts are under way to find a compromise formula that would eliminate this obstacle.

As for the North African states, governments there are willing to sign the treaty but not to ratify it so long as there is no corresponding zone covering the Middle East. Since the ANWFZ will be of unlimited duration, Arab countries are concerned that its establishment would undermine their perceived leverage in opposing an indefinite extension of the NPT because of Israel's unwillingness to join the treaty.¹⁰⁰

⁹⁷ Dillon, G. and Perricos, D., 'Verification and correctness of inventory: experience gained in the verification of the completeness of the inventory of South Africa's nuclear installations and material', IAEA, *International Nuclear Safeguards 1994: Vision for the Future* (IAEA: Vienna, 1994), pp. 231–42.

⁹⁸ Albright (note 96); and Dillon and Perricos (note 97), pp. 238–39.

⁹⁹ IAEA *Newsbrief*, vol. 9, no. 4 (Oct. 1994), p. 6.

¹⁰⁰ Interviews with African diplomats conducted by the author in 1994 and 1995.

Latin America

Latin America no longer presents a nuclear proliferation concern following several important initiatives taken in 1994.¹⁰¹ In February the Brazilian Senate ratified the 1991 quadripartite Agreement on the Exclusively Peaceful Utilization of Nuclear Energy between Argentina, Brazil, the IAEA and the Brazilian–Argentine Agency for Accounting and Control of Nuclear Materials (ABACC). The quadripartite agreement entered into force on 4 March 1994.¹⁰²

The 1967 Treaty of Tlatelolco gained new parties during the year. In January 1994 Argentina, which was one of the original signatories, deposited its instruments of ratification to the amended treaty. Brazil and Chile became full parties to the amended treaty in January and May 1994, respectively.¹⁰³ The treaty is thus in force for these three countries, all of which have significant nuclear activities on their territories. Of the Latin American countries, only Cuba held out during 1994, although President Fidel Castro stated that Cuba would not remain outside the treaty once all the other Latin American countries had become parties¹⁰⁴ (Cuba signed the treaty in February 1995). An immediate consequence of this development, and a benefit to Argentina and Brazil, has been the revival of cooperation with their principal nuclear suppliers, Canada and Germany. This cooperation had been stalled as a consequence of these suppliers' adoption of a full-scope safeguards policy.¹⁰⁵

Argentina and Brazil, two of the major critics of the Non-Proliferation Treaty, have now assumed NPT-equivalent undertakings, and their objections to the treaty have become far less outspoken, if not completely muted. Argentina acceded to the NPT in February 1995.¹⁰⁶ Its emerging role as a leading proponent of the non-proliferation regime has been further underscored in the field of nuclear trade. The plenary meeting of the NSG, held in Madrid on 11–16 April 1994, extended an invitation to Argentina to join as the first member state from the developing world. This step was in reaction to the exemplary effort by Argentinian authorities to set up a reliable nuclear export control system.¹⁰⁷

¹⁰¹ Redick, J. R., 'Latin America's emerging non-proliferation consensus', *Arms Control Today*, vol. 24, no. 2 (Mar. 1994), pp. 3–9.

¹⁰² For the text of the quadripartite agreement, which established a Common System of Accounting and Control of Nuclear Materials, see Conference on Disarmament document CD/1118, 22 Jan. 1992; for entry into force, see IAEA document INFCIRC/435, Mar. 1994. See also Coll, J. A., 'The role of a regional organization in the application of safeguards: the example of ABACC', *IAEA, International Nuclear Safeguards 1994: Vision for the Future* (IAEA: Vienna, 1994), pp. 71–80; and *PPNN Newsbrief*, no. 25 (1st quarter 1994), p. 7.

¹⁰³ See annexe A in this volume (section II, notes to the table regarding the Treaty of Tlatelolco) for states' reservations and declarations.

¹⁰⁴ *PPNN Newsbrief*, no. 26 (2nd quarter 1994), p. 8.

¹⁰⁵ *PPNN Newsbrief*, no. 27 (3rd quarter 1994), p. 10.

¹⁰⁶ *PPNN Newsbrief*, no. 26 (2nd quarter 1994), p. 8.

¹⁰⁷ 'Argentina joins Nuclear Suppliers Group', *Arms Control Today*, vol. 24, no. 4 (May 1994), p. 24.

The former Soviet Union

After the completion in May 1992 of the transfer of all former Soviet tactical nuclear weapons to Russia, the fate of the strategic nuclear weapons deployed on the territories of Belarus, Kazakhstan and Ukraine remained uncertain. Belarus renounced the nuclear weapon option in 1993. Kazakhstan, after some hesitation, followed suit by depositing its instruments of accession to the NPT on 14 February 1994 and by signing a safeguards agreement with the IAEA in July.¹⁰⁸ Ukraine, after a lengthy and sometimes acrimonious debate over the country's future nuclear weapon status, acceded to the NPT as a non-nuclear weapon state on 5 December 1994. In doing so, Ukraine broke the diplomatic impasse in settling the fate of the former Soviet strategic nuclear arsenal and permitted the long-delayed entry into force of the START I Treaty.¹⁰⁹

With the 'nuclear inheritance' problem slowly receding, the security of weapon-usable fissile material gained increasing attention. While most of this fissile material is in Russia, it is also found in other former Soviet republics, particularly Belarus, Kazakhstan and Ukraine.¹¹⁰ Between 1990 and the first half of 1994, the number of cases in which radioactive and nuclear material was in fact or allegedly traded illegally in Germany—the country where most such cases were reported—rose from 4 in 1990, to 241 in 1993; 90 cases were reported in the first six months of 1994.¹¹¹ About 40 per cent of these reported cases were later proven to have been fraudulent. In 250 cases during this period, authorities found no evidence to indicate whether the offers were fraudulent or real. In 46 cases the material was seized. Fifteen cases involved fissile material (low-enriched uranium, LEU) and three cases weapon-usable material, in addition to half a dozen other instances where very small quantities of plutonium were seized that had been removed from smoke and chemical weapon detectors. These three cases—all in 1994 and all in Germany—involved the seizure of 0.8 g of HEU (87.8 per cent ²³⁵U) in Landshut; 5.6 g of plutonium with a ²³⁹Pu purity of 99.75 per cent in Tengen; and a probe (240 mg of plutonium) and ensuing delivery of mixed oxide fuel (MOX) (408 g of plutonium oxide) in Munich, each with a ²³⁹Pu content of about 87 per cent. The total amount of material seized was 11.4 kg of natural uranium, 3.3 kg of LEU, 0.8 g of HEU and 0.356 g of plutonium.¹¹¹

Finally, just before Christmas 1994, Czech authorities seized a consignment of about 3 kg of uranium enriched to 87.7 per cent, an enrichment degree similar to that of the smaller amount seized in Landshut. The material was in

¹⁰⁸ *PPNN Newsbrief*, no. 25 (1st quarter 1994), p. 7; and *PPNN Newsbrief*, no. 27 (3rd quarter 1994), p. 8.

¹⁰⁹ For a detailed discussion, see section II.

¹¹⁰ *Nuclear Successor States of the Soviet Union, Nuclear Weapons and Sensitive Export Status* (note 24).

¹¹¹ A few cases where weapon-usable material was seized have been reported from Russia, including 3 seizures of HEU.

the possession of two citizens of the former Soviet Union and a Czech physicist.¹¹²

It is difficult to track the origin of this material without thorough international cooperation. However, indications point to several countries, including Russia, Kazakhstan (enriched uranium fuel pellets) and Romania (Candu reactor-type natural uranium fuel pellets). The difficulty in identifying the origin of LEU fuel pellets is particularly significant: while in some cases authorities are certain that the material came directly from the fuel fabrication plant, most of the seized material could as well have come from a single fresh-fuel element stored at a reactor site which thieves had dismantled for easier concealment and transport.

There is suspicion that some of the purified ²³⁹Pu might have been produced at Arzamas-16 in Russia; however, it is likely that samples were distributed from there to different research institutes, and the sample seized in Germany could as well have come from one of these institutes.¹¹³ The MOX fuel samples could have been diverted from a fuel fabrication plant or from research institutes experimenting with such fuel. As for the small amount of HEU seized in Landshut, this might also have been experimental reactor fuel or, alternatively, have come from submarine reactor fuel production.

What is clear, however, is that serious problems do exist in the successor states of the Soviet Union with regard to the physical security of fissile material. Such problems have been reported, by Russian authorities and by close observers, for submarine reactor fuel administered by the Russian Navy, research institutes handling weapon-usable material, plutonium storage sites and fuel fabrication plants. The weaknesses in security result from the transition from a system largely built on guarding the material to one relying more on material accountancy and technical devices. Accountancy in the Soviet Union was a secondary tool and used more for production planning than for control purposes. Technical instruments such as automatic portal monitoring are lacking in many facilities. Control of staff must be organized in a situation where salaries are often paid with delay, if at all. In addition, bureaucratic infighting between MINATOM (the Ministry of Atomic Energy) and Gosatomnadzor (the Nuclear Control Committee) blocks rapid improvements in the efficiency of security measures.¹¹⁴

¹¹² *International Herald Tribune*, 20 Dec. 1994, pp. 1, 8.

¹¹³ Hibbs, M., 'Russian data suggests seized Pu was enriched by Arzamas-16 calutron', *Nuclear Fuel*, vol. 19, no. 17 (15 Aug. 1994), pp. 9–10. The material could even emerge from a research centre in East Germany that was also given some samples and where material accountancy appears not precise enough for complete certainty that every gram of highly enriched plutonium can be accounted for. Hibbs, M., 'Some "vagabonding" Russian plutonium could be from East German inventories', *Nuclear Fuel*, vol. 19, no. 26 (19 Dec. 1994), p. 9.

¹¹⁴ Marshall, P., 'Russian weapons plutonium storage termed unsafe by Minatom official', *Nucleonics Week*, vol. 35, no. 17 (28 Apr. 1994), pp. 1, 7–8; Marshall, P., 'Russian fuel cycle industry near "crisis level", Nikipelov warns', *Nucleonics Week*, vol. 35, no. 19 (12 May 1994), pp. 6–7; Bukharin, O., 'Nuclear safeguards and security in the former Soviet Union', *Survival*, vol. 36, no. 4 (winter 1994–95), pp. 53–72; and Potter, W., 'Nuclear insecurity in the post-Soviet states', *Nonproliferation Review*, vol. 1, no. 3 (spring–summer 1994), pp. 61–65.

The cases in 1994 led to renewed efforts to help Russia and other former Soviet republics improve their internal safeguards and physical security systems (see also section III above).

On 22 August 1994, Russia and Germany agreed on a set of 'urgent measures' to perfect the system of fissile material accountancy and control. These measures include confirmation of the obligation to provide for physical security, a 'hotline' between authorities that deal with nuclear smuggling cases, close consultations among intelligence services, a commitment to inform each other promptly about such cases, exchange of analyses of material, the possibility of mutual participation in the re-analysis of the material and a joint effort to promote an international agreement on prompt notification of cases of illegal transfers of radioactive materials.¹¹⁵

In September and October 1994, three European Union (EU) Council of Ministers meetings—ministers of foreign affairs and the interior—agreed to strengthen cooperation to prevent nuclear smuggling and took note of a report by the European Commission that called for enhanced aid to, and cooperation with, the nuclear sector in the East European countries and the former Soviet Union. Several working groups were given the task of elaborating more specific proposals for adoption by the December European Council meeting in Essen.¹¹⁶

On 15 September 1994, President Yeltsin issued a decree aimed at improving the 'system of registration, conservation, and control of nuclear materials'. It called for a prompt review of the accountancy and physical security situation; established Gosatomnadzor as the supreme agency for material accountancy and physical security, reporting directly to the President; called for additional funds for urgent measures and for priority budgeting under the FY 1995 budget; ordered the Foreign Ministry to work for agreements with neighbouring states; and requested improvements in customs control.¹¹⁷

In the joint Clinton–Yeltsin statement of 28 September 1994, the two presidents agreed to cooperate in combating illegal nuclear trade, enhancing mutual information about stockpiles of weapons and materials, creating more transparency and safeguards over these materials, and facilitating cooperative programmes towards this objective.¹¹⁸

In October, an expert meeting convened by the IAEA looked into a panoply of measures: programmes to support safeguards application in the former Soviet Union; training seminars, assistance programme coordination and expert missions to advise about on-site on physical security, hardware requirements and supply; analysis of seized material; extension of the scope of the 1980 Convention on the Physical Protection of Nuclear Material from

¹¹⁵ Press Release no. 301/94 (Presse- und Informationsamt der Bundesregierung: 22 Aug. 1994).

¹¹⁶ *EUROPE*, no. 6310 (8 Sep. 1993), p. 5; *EUROPE*, no. 6312 (10 Sep. 1994), p. 10; and *EUROPE*, no. 6331 (7 Oct. 1994), p. 7.

¹¹⁷ Decree of the President of the Russian Federation on Urgent Measures to Perfect the System of Registration and Conservation of Nuclear Materials, Moscow, 15 Sep. 1994.

¹¹⁸ 'Joint Statement . . .' (note 35).

international transport to domestic storage and operations; and establishment of an obligation to notify the IAEA of cases of nuclear smuggling.¹¹⁹

Changes in the IAEA safeguards system and practice

As a consequence of the experiences in Iraq, the IAEA has implemented a series of changes in its safeguards system and practice. These changes include: the full debriefing of returning inspectors; installation of country desk officers charged with collecting and assessing all available information about a safeguarded country; provision of early design information, even before construction of a nuclear facility has begun; establishment of a system of universal reporting of transfers of nuclear material, equipment and technology in which most suppliers participate; and the use of all information, including intelligence data submitted voluntarily by member states, to identify possible undeclared sites to which the Agency could then request access by a 'special inspection', as practised in North Korea.¹²⁰

However, the use of intelligence information provided by individual countries remains a contentious issue. Some developing countries are worried about the possibilities for manipulation and see special inspections, such as those required in North Korea, in the same light.¹²¹

In order to continue improving its safeguards system, the Agency is conducting a comprehensive review of the technical, legal and financial implications of various options in the context of its '93 plus 2' programme.¹²² A report was expected in early 1995. The programme includes, *inter alia*, the following aspects: (a) information management, that is, the ability, to acquire, review, store, analyse, validate and retrieve large volumes of information on global nuclear activities; (b) tamper-proof remote monitoring at nuclear facilities, with real-time transmittal of measurements to IAEA headquarters; (c) environmental monitoring, that is, the sampling and analysis of probes from water, air and soil at and near nuclear facilities in order to detect releases of radionuclides that could signify the existence of undeclared activities; and (d) the use of commercial satellite data.¹²³

The IAEA budget for 1995 stands at \$211.6 million, which is zero growth in real terms for yet another year. The target for voluntary contributions to the Technical Assistance and Cooperation fund is \$61.5 million for 1995.¹²⁴ This budgetary constraint is all the more deplorable since the IAEA is acquiring

¹¹⁹ Hibbs, M., 'IAEA meeting on smuggling problem avoids sensitive data sharing issue', *Nuclear Fuel*, vol. 19, no. 23 (7 Nov. 1994), p. 13.

¹²⁰ Pellaud, B., 'IAEA safeguards: status, challenges and opportunities', *IAEA 1994*, pp. 3-12; and Fischer, D., *Towards 1995: The Prospects for Ending the Proliferation of Nuclear Weapons* (Dartmouth: Aldershot, 1993), pp. 71-79.

¹²¹ See the position of the Indian delegate to the IAEA in *IAEA Bulletin*, vol. 36, no. 3 (1994), p. 18.

¹²² The '93 plus 2' programme was started in 1993 and is planned to be completed within 2 years.

¹²³ Wedekind, L. and Larrymore, J. A., 'International symposium on safeguards: mirror of the times', *IAEA Bulletin*, vol. 36, no. 3 (1994), pp. 9-12.

¹²⁴ *IAEA Newsbrief*, vol. 9, no. 3 (July/Aug. 1994), p. 4.

new tasks almost by the month. Safeguards agreements are entering into force with the successor states of the former Soviet Union, all of which have some nuclear activities on their territories; some, such as Ukraine, also have a large number of facilities. The Agency co-verifies the commitments of Argentina and Brazil in cooperation with their verification organization, ABACC. It safeguards South Africa's various nuclear activities. The USA has dedicated 7 tonnes of plutonium to safeguards; inspections of about 10 tonnes of HEU at Oak Ridge, Tennessee, took place in September 1994.¹²⁵ The HEU transferred from Russia to the USA will also be under IAEA supervision, and more monitoring of the disarmament process can be expected in the future. The IAEA is also expected to play a role in verification of the CTBT, even though it is unclear whether it will be given all the verification tasks for that Treaty or whether it will take over some of the tasks on contract with a new organization. Finally, it is highly probable that the Agency will be asked to verify an agreement to ban the production of fissile material. The Agency cannot deal with a growing number of tasks with a restricted budget, at least not efficiently.¹²⁶

The preparatory process for the NPT Conference

Pursuant to Article X, paragraph 2 of the Non-Proliferation Treaty, 25 years after entry into force of the treaty a conference of the parties is to decide whether to extend the duration of the treaty indefinitely or for a fixed period or periods. The 1995 NPT Review and Extension Conference will both review the operation of the NPT and take a decision on its extension. As review and extension are clearly linked, the extension decision will depend on how the parties evaluate the effectiveness of the NPT so far.

The industrialized countries have opted for indefinite extension, as expressed in statements by the Group of Seven leading industrialized nations (the G7), the EU, NATO, the North Atlantic Cooperation Council (NACC) and the Organization for Security and Co-operation in Europe (OSCE). The South Pacific Forum and the UN Secretary-General have also supported that option. However, a number of developing countries have expressed reservations about an indefinite or even a long-term extension. In their view, Article VI of the NPT, which contains the disarmament obligation, has not been properly implemented by the nuclear weapon states; they have become more vocal in advocating a time-limited extension and a target date for nuclear disarmament.¹²⁷ The stagnation in 1994 in the CD negotiations on a CTBT and

¹²⁵ Hibbs, M., 'Pu separation by India, Japan to hike IAEA safeguards by 20%', *Nucleonics Week*, vol. 35, no. 5 (3 Feb. 1994), p. 14; 'US technology transfer to Japan called illegal', *Arms Control Today*, vol. 24, no. 8 (Oct. 1994), p. 24; and *PPNN Newsbrief*, no. 26 (2nd quarter 1994), p. 9.

¹²⁶ Timerbaev, R. and Welsh, S., 'The IAEA's role in nuclear arms control: its evolution and future prospects', *Nonproliferation Review*, vol. 1, no. 3 (spring-summer 1994), pp. 18-30.

¹²⁷ A group of non-aligned countries submitted such a proposal to the First Committee in the General Assembly. The Western nuclear weapon states objected. See *Disarmament Times*, vol. 17, no. 6 (1994), p. 1.

lack of progress in achieving a cut-off of the production of fissile material for weapon purposes substantiate criticism put forward by the non-aligned states: in their view, civilian cooperation has been hampered by excessive export controls and insufficient assistance to the developing countries. An indefinite extension, they argue, would forever legitimize the division into nuclear weapon and non-nuclear weapon states, thus making permanent a discriminatory situation. Moreover, the unsatisfactory state of negative security assurances, to exclude nuclear threat or attack against non-nuclear weapon states, and positive security guarantees, to come to their assistance should such threat or attack occur, make this inequality all the more unacceptable.¹²⁸ In addition, a few of the Arab countries reject the option of an indefinite extension, citing Israel's nuclear weapon capability.¹²⁹

These divisions were clearly reflected in the 1994 meetings of the Preparatory Committee for the conference. The second meeting brought together 114 parties in New York in January 1994, with Ambassador André Erdős (Hungary) presiding. It reached agreement on a crucial issue—the presidency for the conference—by nominating Ambassador Jayantha Dhanapala of Sri Lanka, an experienced diplomat and non-proliferation expert. It also resolved the following three procedural issues concerning its own work: (a) the Committee would work under a consensus rule, but if sincere attempts fail, decisions would be postponed for 48 hours, after which a vote would be taken; (b) observers from non-governmental organizations (NGOs) would be admitted to the meetings that are not closed; and (c) non-parties would also be permitted to attend the open meetings of the Committee. All other procedural issues concerning the conference itself, including its agenda, had to be postponed.¹³⁰

At the third meeting, held in September in Geneva under the chairmanship of Ambassador Isaac Ayewah of Nigeria and attended by 89 parties, the preparatory process was stymied. The meeting opened with two sessions on substantive issues that revealed the divisions elaborated above, mainly along a North–South fault line. These controversies affected discussion of all the crucial procedural issues. Iran, which was deeply frustrated over its futile attempts to receive Western nuclear assistance, pursued a conscious and largely successful strategy of wrecking consensus, rallying considerable support behind its positions.

Iran requested an additional report on Article IV of the NPT, since an IAEA draft paper presented to the Preparatory Committee dealt only with the Agency's own assistance programmes. Iran wanted to have a detailed descrip-

¹²⁸ The non-aligned position is well expressed in a document submitted to the Third Prepcom, reprinted in *PPNN Newsbrief*, no. 27 (3rd quarter 1994), pp. 28–29.

¹²⁹ For the Arab stance, see *Süddeutsche Zeitung* (22 Dec. 1994), p. 7; for careful analyses of the conference's prospects, see Lennon, A. T., 'The 1995 NPT Extension Conference', *Washington Quarterly*, vol. 17, no. 4 (autumn 1994), pp. 205–227; and Simpson, J. and Howlett, D., 'The NPT renewal conference: stumbling toward 1995', *International Security*, vol. 19, no. 1 (summer 1994), pp. 41–71.

¹³⁰ *PPNN Newsbrief*, no. 25 (1st quarter 1994), p. 6.

tion of the nuclear export controls applied by the supplier countries and requested that this assessment be based purely on NPT Article IV—the obligation to cooperate—without regard to the articles dealing with non-proliferation and safeguards.

Another Iranian objection held up agreement on the agenda. The crucial issue before the committee was the order of business between the review and the extension decision. A compromise proposal was to hold the review in the main committees before the extension decision, but with the final document containing the assessment resulting from the review to be issued only after the conference had reached a decision about NPT extension. Iran wanted the review to be completed before a decision on extension was taken.

Finally, on the most difficult question—which extension options would be put to the vote—Iran proposed that individual options would be put to the vote only if all the parties agreed to a vote. This would have given each party a *de facto* veto on each option. Indefinite extension, the preferred outcome for most industrialized countries, would stand no chance of even reaching the conference floor.

Another important controversy concerned the request by the non-aligned nations to seek legal advice from the UN Secretariat on the precise meaning of NPT Article X, paragraph 2—the options for extension. This was meant to counter arguments by the industrialized nations that a fixed-term (or -terms) extension would sound the death knell for the NPT. The industrialized countries objected to this request on the grounds that interpreting the Treaty was a matter for the parties and not the business of the UN Secretariat. The same proposal was put forward later in the UN General Assembly First Committee, leading to the most divided vote (77:39:32) of the 1994 session.¹³¹

Thus, when 1994 came to a close, the parties had not reached agreement on the agenda, major procedural issues or even the main officers of the most crucial multilateral nuclear arms control conference for many years.¹³² The fate of the conference was thus far from clear at the end of the year.

V. Conclusions

The year 1994 witnessed several important developments in nuclear arms control and non-proliferation efforts. Ukraine acceded to the NPT as a non-nuclear weapon state, a move which bolstered global non-proliferation efforts and marked a major milestone in settling the fate of the former Soviet nuclear arsenal. The imperilled START I Treaty entered into force, thereby putting into place the cornerstone of a START treaty regime which—when fully implemented—will remove approximately 14 000 strategic nuclear weapons from the active inventories of Russia and the USA. In addition, a framework

¹³¹ *Disarmament Times*, vol. 17, no. 6 (1994), p. 1.

¹³² *PPNN Newsbrief*, no. 27 (3rd quarter 1994), pp. 7–8.

agreement was reached between the USA and North Korea that held out the prospect of resolving a serious crisis over North Korea's nuclear programme.

Despite these accomplishments, the nuclear arms control agenda is by no means completed. The ratification of the START II Treaty is in jeopardy as opposition to the accord mounts in the Russian Parliament. International efforts to negotiate a legally binding global ban on the production of fissile material for weapons were in 1994 stalled in the Conference on Disarmament. The fate of the NPT remained uncertain in the run-up to the 1995 NPT Review and Extension Conference.

Furthermore, the encouraging progress already made in eliminating nuclear weapons has added a new set of issues to the arms control agenda. The disposal of fissile materials, especially plutonium, extracted from dismantled nuclear warheads poses a serious technical and financial challenge for both Russia and the USA. The two countries have also been unable to reach agreement on a nuclear warhead dismantlement regime with reciprocal inspection arrangements and on cooperative measures to increase the transparency of national stockpiles of fissile materials.

In addition, problems have arisen in implementing US–Russian denuclearization agreements: the jointly funded fissile material storage facility to be built at Mayak has been delayed by disagreements over design; the implementation of the June 1994 reactor shutdown agreement remains stymied over disputes about compensation and verification arrangements; and the HEU purchase agreement concluded between the USA and Russia has run into a series of delays.

Finally, the major post-cold war trend in nuclear arms control continued in 1994: the emergence of 'deals' in which nuclear weapons or nuclear weapon capabilities are exchanged for financial and other forms of assistance. Although this approach proved to be fruitful, especially in consolidating the former Soviet nuclear arsenal, concerns have been expressed in the international arms control community that it could gradually become a counter-productive 'reward' system for would-be proliferator states.

Appendix 16A. Nuclear weapon destruction

RICHARD KOKOSKI

I. Introduction

The fissile isotopes plutonium-239 and uranium-235 (^{239}Pu and ^{235}U) decay extremely slowly and can therefore be recycled from existing or retired weapons for more modern weapons if deemed necessary.¹ Such recycling has been common practice. However, with the implementation of the 1987 US–Soviet Intermediate-range Nuclear Forces (INF) Treaty and with the 1991 and 1993 agreements on strategic nuclear arms reductions (START I and II) the dismantlement of nuclear weapons is creating a substantial and rapidly growing surplus of weapon-usable fissile material.²

Warhead dismantlement has been proceeding in both the USA and Russia at a rate of about 2000 warheads per year. Since each warhead contains some 3 kilograms (kg) of plutonium and 15 kg of highly enriched uranium (HEU), this process is releasing about 6 tonnes (t) of plutonium and 30 t of HEU per year in each country. Such large inventories of fissile materials and the proliferation danger associated with diversion represent a serious strain on physical security arrangements when the material is stockpiled.³ The implications for nuclear weapon proliferation, should even a small percentage of this material fall into the wrong hands, are staggering.

Several methods for disposal of this material have been investigated. An important study was released by the US National Academy of Sciences in 1994, pointing to the optimal methods for the elimination of plutonium and ensuring stable arms reductions and improved prospects for nuclear non-proliferation. It is particularly important to make the elimination of these weapons as irreversible as possible, and especially to avoid the proliferation dangers associated with the fissile material removed.

In September 1994 Presidents Bill Clinton and Boris Yeltsin affirmed that ‘making warhead reductions irreversible is as important to future arms control as the START Treaties were in the past’.⁴ HEU can be dealt with by blending it down to a form which presents a low proliferation risk, and using it as reactor fuel. There is no such procedure for plutonium, however, and effectively dealing with the potential proliferation danger inherent in plutonium stockpiles will require substantially more effort. As noted in chapter 9 in this volume, the plutonium currently in nuclear weapons, while substantial, represents less than one-quarter of the total world stockpile. Most of the remainder is in the form of unprocessed spent fuel from civilian nuclear reactors which can also, with readily available reprocessing technology, be

¹ For ^{239}Pu the half-life is over 24 000 years and for ^{235}U much longer still. In contrast, half of a sample of tritium will have decayed after c. 12 years.

² See, for example, Cowen Karp, R., ‘US–Soviet arms control’, SIPRI, *SIPRI Yearbook 1991: World Armaments and Disarmament* (Oxford University Press: Oxford, 1991), pp. 383–402; Cowen Karp, R., ‘The START Treaty and the future of nuclear arms control’, SIPRI, *SIPRI Yearbook 1992: World Armaments and Disarmament* (Oxford University Press: Oxford, 1992), pp. 13–37; Lockwood, D., ‘Nuclear arms control’, SIPRI, *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press: Oxford, 1993), pp. 549–73; and Lockwood, D., ‘Nuclear arms control’, SIPRI, *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 639–72.

³ Berkhout, F. *et al.*, ‘Disposition of separated plutonium’, *Science & Global Security*, vol. 3, nos 3–4 (1993), pp. 162, 164–65.

⁴ Statement released by the Office of the Spokesman, Washington, DC, Sep. 1994, in *US Department of State Dispatch*, vol. 5, no. 41 (10 Oct. 1994), p. 677.

used for nuclear weapon purposes. Ways must be found to deal with the large quantities of plutonium from both sources.

II. Dismantling nuclear weapons

Aside from the problem of the disposal of fissile material, the actual physical task of nuclear warhead dismantlement is relatively straightforward. Facilities for such dismantlement already exist in the five declared nuclear weapon states and have been used in recycling the nuclear material from old warheads into new warheads.⁵

The steps in warhead dismantlement include (a) disabling the warhead by removing arming, fusing and firing mechanisms; (b) transportation from deployment sites to destruction sites (or first to intermediate storage sites); (c) removing the tritium reservoir and separating the fission 'primary' explosive from the fission-fusion 'secondary' explosive component and separating the pit—a metal container holding the plutonium in the primary—from the high explosives used to detonate it (Subsequent burning of the high explosives from the warheads results mostly in gas, which can be vented into the atmosphere after removal of unacceptable environmental pollutants.⁶); and (d) separating the HEU and plutonium from the pit.⁷

In the USA disassembly is carried out at the Department of Energy (DOE) Pantex Plant in Texas, which is also the site for storage of plutonium pits. Current storage facilities at the site are sufficient to handle all pits still to be removed from the US stockpile. Additional facilities, at the DOE Y-12 Plant in Tennessee, are subsequently used to reduce parts further to ingots or other forms—HEU is recovered and stored here in the form of metal disks or 'buttons'.⁸ The combined dismantlement capacity in Russia at Sverdlovsk-45, Zlatoust-36, Penza-19 and Arzamas-16 is reported to approach 6000 warheads per year (although the number actually being dismantled is much lower), and the dismantlement facility sites are now being used to store warhead components containing fissile material.⁹ Under an agreement signed in April 1992, nuclear weapon components removed from Ukraine and being stored in Russia are monitored by both countries.¹⁰

The real difficulty in destroying nuclear weapons lies in eliminating fissile material, the acquisition of which is the most difficult step in weapon construction. As mentioned above, for uranium the problems posed are not nearly as severe as those posed for plutonium, and the problem of how to deal with the current huge stockpiles

⁵ Taylor, T. B., 'Dismantlement and fissile-material disposal', eds F. von Hippel and R. Z. Sagdeev, *Reversing the Arms Race: How to Achieve and Verify Deep Reductions in the Nuclear Arsenal* (Gordon and Breach: New York, 1990), p. 101.

⁶ Taylor (note 5), p. 104.

⁷ De Andreis, M. and Calogero, F., *The Soviet Nuclear Weapon Legacy*, SIPRI Research Report No. 10 (Oxford University Press: Oxford, forthcoming 1995); and von Hippel, F. and Diakov, A., 'Eliminating nuclear warheads', eds E. Kirk, W. T. Wander and B. D. Smith, *1993 Science and International Security Anthology* (American Association for the Advancement of Science: Washington, DC, 1993), p. 430.

⁸ Sutcliffe, W. G., *Warheads and Fissile Materials: Declarations and Counting* (Center for Technical Studies on Security, Energy, and Arms Control, Lawrence Livermore National Laboratory: Livermore, Calif., 5 Nov. 1991), p. 3; von Hippel and Diakov (note 7), pp. 429–32; and von Hippel *et al.*, 'Eliminating nuclear warheads', *Scientific American*, vol. 269, no. 2 (Aug. 1993), p. 34.

⁹ De Andreis and Calogero (note 7); and von Hippel and Diakov (note 7), pp. 429, 432.

¹⁰ Berkhout *et al.* (note 3), p. 165.

of plutonium is the subject of much current research. Potential solutions have been discussed in many forums,¹¹ and several crucial issues and facts merit attention.

The scale of the problem can be appreciated when it is realized that while the current world inventory of plutonium produced by civilian and military reactors is estimated at 1100 t (± 10 per cent), only a few kilograms are needed to produce a nuclear device. Only about 250 t of this amount is contained in the military inventory, the vast majority of which is weapon-grade. This is in contrast to the plutonium from civilian nuclear programmes: of the estimated 845 t, about 17 per cent has been separated from spent fuel. Current estimates are that there are about 1700 t (± 25 per cent) of HEU in existence but, as discussed below, disposal is less problematic.¹²

Part of the separated plutonium resulting from the growing reprocessing capability will be used in fast-neutron reactors and some will be used as mixed oxide (MOX) fuel (containing plutonium oxide and uranium oxide) in light-water reactors (LWRs)—the latter being the only large-scale use of separated plutonium currently planned. None the less, given the current stockpiles and delays in licensing reactors which can accept the MOX fuel, it is estimated that almost 200 t of separated plutonium will be in existence by early in the next century.¹³ Given in addition the wide availability of the technology¹⁴ for separating plutonium from spent fuel and the fact that civilian plutonium can also in principle be used in a nuclear weapon, the security of all plutonium stockpiles is of prime importance.

On 13 July 1992 President George Bush formally made it US Government policy to stop producing plutonium or HEU for nuclear weapons.¹⁵ This was announced as a step towards halting the spread of nuclear weapons; in fact it only codified a policy already effectively in place since the USA has not produced plutonium for weapons since 1988 and halted the production of HEU for weapons in 1964.

The production of HEU in Russia ended in 1987 and since then it has shut down 10 of its 13 military plutonium production reactors.¹⁶ In early 1994 Russia agreed to shut down the remaining three reactors as soon as replacement energy sources have been constructed (since the reactors also supply heat and electricity) with the aid of the USA. Russia will thus be the last of the five declared nuclear weapon states to stop producing fissile material for weapons when the reactors are finally shut down in a

¹¹ For thorough discussions, see especially Swahn, J., *The Long Term Nuclear Explosives Predicament: The Final Disposal of Militarily Usable Fissile Material in Nuclear Waste from Nuclear Power and from the Elimination of Nuclear Weapons* (Technical Peace Research Group, Institute of Physical Resource Theory: Gothenburg, 1992); US Congress, Office of Technology Assessment (OTA), 'Dis-mantling the bomb and managing the nuclear materials' (OTA: Washington, DC, 1993); Chow, B. G. and Solomon, K. A., 'Limiting the spread of weapon-usable fissile materials', National Defense Research Institute (RAND: Santa Monica, Calif., 1993); von Hippel, F., Berkhout, F. and Feiveson, H., Report on the International Workshop on Nuclear Disarmament and Non-Proliferation: Issues for International Action, Tokyo, 15–16 Mar. 1993, Report prepared by Frank von Hippel, Frans Berkhout and Harold Feiveson; Berkhout, *et al.* (note 3), pp. 161–213; and Allison, G., *et al.* (eds), *Cooperative Denuclearization: From Pledges to Deeds*, CSIA Studies in International Security No. 2 (Center for Science and International Affairs, John F. Kennedy School of Government, Harvard University: Cambridge, Mass., Jan. 1993).

¹² See chapter 9 in this volume. The HEU estimate is expressed in WGU (weapon-grade uranium)-equivalent and does not include some 100–200 t dedicated to naval reactors.

¹³ See chapter 9 in this volume.

¹⁴ Kokoski, R., SIPRI, *Technology and the Proliferation of Nuclear Weapons* (Oxford University Press: Oxford, 1995), chapter 3.

¹⁵ *US Department of State Dispatch*, vol. 3, no. 29 (20 July 1992).

¹⁶ Gordon, M. R., 'It's official: US stops making material for nuclear warheads', *New York Times*, 14 July 1992, p. A16; and von Hippel, F., 'Nuclear disarmament: progress and problems: a US perspective', eds von Hippel, Berkhout and Feiveson (note 11), p. 4.

few years' time.¹⁷ In June 1994 the formal agreement was signed which also stipulated that verification arrangements be worked out, including on-site inspections of the currently operating Russian reactors as well as of Russian and US reactors which have been used to produce weapon-grade plutonium.¹⁸

Disposition of highly enriched uranium

Although stocks are estimated at approximately 1700 t, the problem of dealing with HEU from weapon dismantlement is much less acute than that of dealing with plutonium. While a small percentage of the HEU could be used in naval propulsion and in research and isotope production reactors, the most straightforward method of disposal is to blend it with either natural or depleted uranium to produce low-enriched uranium (LEU) to fuel nuclear reactors.¹⁹

Several considerations are important in the process of blending HEU down to LEU. First, at no time during the process should there be a possibility of a critical mass forming and creating a spontaneous chain reaction. It must also be ensured that the mixing is sufficiently complete that the isotopic content of the blended material does not vary to any significant degree throughout the final product. In addition, current industry safety standards limit the amount of the radioactive ²³⁴U isotope which may be contained in commercial nuclear reactor fuel. HEU contains a higher proportion of ²³⁴U, and blending with depleted uranium would result in reactor fuel with a ²³⁴U content which exceeds this standard. Therefore, blending of HEU will probably have to be restricted to blending with natural or slightly enriched uranium.²⁰

Russia signed an agreement in February 1993 to sell 500 t of HEU from its dismantled nuclear weapons to the USA over the next 20 years. It is to be blended down to LEU and used as reactor fuel. Implementation of the agreement has been delayed because of disagreement on several issues, including HEU prices and profit-sharing arrangements between Russia and Belarus, Kazakhstan and Ukraine.²¹ However, the USA has already paid \$60 million in advance to help cover transportation and dismantlement costs for the former Soviet nuclear warheads transferred from Ukraine to Russia and fabrication of the reactor fuel assemblies which will be given to Ukraine in return.²²

¹⁷ China has not announced that it has ceased production of plutonium for weapons, but it is believed to have done so. See chapter 9 in this volume.

¹⁸ Lippman, T., 'Russia to stop producing weapons-grade plutonium', *International Herald Tribune*, 18 Mar. 1994, p. 1; 'Russia pledges to close reactors', *Jane's Defence Weekly*, vol. 21, no. 12 (26 Mar. 1994), p. 6; and Lockwood, D., 'U.S., Russia agree to phase-out of nuclear weapons reactors', *Arms Control Today*, vol. 24, no. 6 (July/Aug. 1994), p. 24. The agreement had not entered into force as of the end of 1994, but the Russians have stated that as of 1 Oct. 1994 they stopped using plutonium from the 3 reactors in nuclear warheads. Lockwood, D., 'US-Russian talks on nuclear issues find progress slow at Moscow round', *Arms Control Today*, vol. 25, no. 1 (Jan./Feb. 1995), p. 22.

¹⁹ von Hippel, F., 'Nuclear disarmament: Progress and problems: A US perspective', eds von Hippel, Berkhout and Feiveson (note 11), pp. 1-2.

²⁰ Davis, Z. et al., 'Swords into energy: nuclear weapons materials after the cold war', US Library of Congress, Congressional Research Service, *CRS Report for Congress*, 92-739 ENR, 29 Sep. 1992 (revised 9 Oct. 1992), pp. 7-8. For the technical aspects of making optimum use of HEU to produce low enrichment fuel, see Neff, T. L., 'Integrating uranium from weapons into the civil fuel cycle', *Science & Global Security*, vol. 3, nos 3-4 (1993), pp. 215-22.

²¹ See Lockwood, 'US-Russian talks on nuclear issues . . .' (note 18); and 'Mikhailov considers uranium agreements', *Nuclear Engineering International*, Nov. 1993, p. 8.

²² Statement released by the Office of the Spokesman, Washington, DC, Sep. 1994, in *US Department of State Dispatch*, vol. 5, no. 41 (10 Oct. 1994), p. 677; and Annex to the Trilateral Statement by the

Disposition of plutonium

The problem of plutonium disposal is much more acute. Isotopically denaturing it to preclude its use for weapons is not feasible²³ and, as discussed below, it is not economical as a fuel at present. Measures to eliminate plutonium totally have included proposals to launch it into the sun or to transmute it by fissioning it completely, either using fast neutron reactors or high-energy accelerators. These options are not only rather daunting from a technological standpoint but also probably only justifiable if most of the spent fuel in existence were to be reprocessed so that it could be eliminated in this manner—current projections indicate that most of the spent fuel will remain unprocessed well past the year 2000.²⁴

Another proposal is to explode a nuclear warhead in a cavity containing 100–1000 plutonium pits from nuclear weapons, thus diluting the plutonium in the resulting molten rock to about 1 part in 1000. Such a scheme would require adequate safeguarding of the sites after such explosions since ‘plutonium mines’ would be created—unlikely to be acceptable to the public at large. The same problem with public acceptance would undoubtedly greet proposals to dilute the plutonium in the ocean (especially given the difficulty in performing adequate dilution).²⁵

Other, more likely, alternatives include the recycling of plutonium in MOX fuel for LWRs,²⁶ a route being pursued or proposed in Belgium, France, Germany, Japan and Switzerland. This type of recycling reduces by approximately 40 per cent the amount of fissile plutonium in the fuel and mixes it with highly radioactive fission products—making the end-product more proliferation-resistant. However, given the current cost of uranium and even excluding reprocessing costs, MOX fuel—costing \$1300–1600 per kilogram—is less economical than standard LEU reactor fuel—at approximately \$1100 per kilogram.

Other problems with this option include the ‘quantum leap’ in the safeguards and physical security judged necessary for large-scale reprocessing and MOX fuel fabrication facilities to ensure against diversion. In any case, projected capacity will only be able to handle about 50 per cent of the civilian plutonium which will be produced during the next 10 years, not to mention the plutonium which will become available as a result of disarmament efforts.²⁷ This is largely because the properties of the plu-

Presidents of the United States, Russia and Ukraine, 14 Jan. 1994, reprinted in *SIPRI Yearbook 1994* (note 2), p. 678.

²³ It has been suggested that plutonium be denatured by increasing the relative amount of even isotopes, the characteristics of which cause difficulties for weapon design and material handling. For this purpose only ²³⁸Pu can be produced in relatively large quantities (through irradiation of neptunium-237) but the process would be difficult and costly. It would not solve the long-term disposal problem since the half-life of ²³⁸Pu is relatively short, at 86.4 years. Swahn (note 11), pp. 163–64.

²⁴ von Hippel, F., ‘Nuclear disarmament: progress and problems: a US perspective’, eds von Hippel, Berkhout and Feiveson (note 11), p. 2; Berkhout *et al.* (note 3), pp. 188–89; and chapter 9 in this volume.

²⁵ Panofsky, W. K. H., ‘Options for the long-term disposition of nuclear materials’, Center for Security and Technology Studies, CSTS-35-93 (Lawrence Livermore National Laboratory: Livermore, Calif., 16 Mar. 1993), pp. 2–3.

²⁶ Berkhout *et al.* (note 3), pp. 173–80, 192.

²⁷ Some proposals are geared especially towards dealing with the plutonium becoming available through deep cuts in nuclear arsenals. A relatively recent Russian–US proposal, for example, would involve the use of a specially constructed modular high-temperature, gas-cooled reactor, estimated to cost \$1.5 billion, which would be fuelled with plutonium from dismantled nuclear warheads. A high percentage of the plutonium would be burned in the reactor and the remaining plutonium would become part of the radioactive spent fuel, which would be less attractive from a weapon standpoint. Broad, W. J., ‘U.S. team to work with Russians on joint reactor’, *International Herald Tribune*, 7 Apr. 1993, p. 1.

onium contained in MOX fuel mean it can only be used in about one-third of the reactor core in an unmodified LWR.²⁸ There is a proposal to modify some reactors to enable them to accept a full load of MOX fuel and thus not only accelerate the recycling process but also ameliorate the difficulties associated with safeguarding the plutonium since fewer facilities would presumably be involved.

Another option for recycling plutonium is to use fast reactors, but the fast reactor capacity is at present quite small. In addition, fast reactors do not change the isotopic mix of the plutonium as much as LWRs at the same burnup, and the MOX fuel for a fast reactor is more dangerous from a proliferation standpoint, containing 15–20 per cent plutonium as opposed to 5–7 per cent for LWR MOX. The construction of new fast reactors has been considered, but considerable modifications to current designs would be necessary in converting plutonium breeders into plutonium burners.

Perhaps the most promising option is to dispose of plutonium by mixing it with high-level radioactive waste (HLW) before it is incorporated into a suitable solid waste form (glass is preferred) and placing it in permanent storage in geological depositories. HLW is currently being vitrified for final disposal in France, Russia and the UK and is scheduled to be undertaken in Japan and the USA during the 1990s. This 'anti-reprocessing' approach has several advantages,²⁹ including its simplicity, small incremental cost (less than MOX fuel fabrication), relative inaccessibility of the plutonium compared with that in spent reactor fuel and, if carried out at a few sites, the need for relatively less burdensome safeguard measures. A major disadvantage to this approach for weapon-grade plutonium is that it would remain weapon-grade after glassification, while if it were first used as MOX fuel it would have been converted to reactor-grade plutonium. On the other hand, while weapon-grade plutonium is more suitable, any grade can in principle be used for nuclear weapons.

It is also possible and probably less costly to imbed plutonium in special materials such as silicate glass without the addition of high-level waste. While the recovery process would none the less be hazardous and costly, it would be less so than for plutonium which had first been blended with HLW. This route is therefore less desirable from the non-proliferation point of view.

National Academy of Sciences Study

In 1994 the US National Academy of Sciences, under the sponsorship of the DOE Office of Nuclear Energy, released a detailed report on the *Management and Disposition of Excess Weapons Plutonium*.³⁰ Following an OTA study³¹ released in September 1993, which pointed to the need for national coherent policy direction in this area, the NAS study was able to narrow the options significantly. Stating the 'clear and present danger' which surplus material from nuclear weapons represents, this

²⁸ The CANDU reactor design makes it capable of handling a full MOX core, and its use for plutonium disposal is being discussed. Silver, R., 'Canadian, U.S. officials discuss use of CANDU s for Pu disposition', *Nucleonics Week*, 14 July 1994, p. 5.

²⁹ Berkhout *et al.* (note 3), pp. 181–87, 190.

³⁰ *Management and Disposition of Excess Weapons Plutonium*, Committee on International Security and Arms Control, National Academy of Sciences (National Academy Press: Washington, DC, 1994).

³¹ Airozo, D., 'OTA report says Pu disposition plans suffer from lack of policy direction', *Nuclear Fuel*, 27 Sep. 1993, p. 6.

study nevertheless notes that 'none of the options yet identified for managing this material can eliminate this danger; all they can do is reduce the risks'.³²

Intermediate storage

The NAS report notes that secure intermediate storage for the surplus weapon plutonium will be necessary for decades, while the method of long-term disposal is decided upon and implemented. While debate continues over the optimal physical form in which plutonium should be stored, for the immediate future it is recommended that intact weapon components be stored. Storage as deformed pits or in ingots should be considered for the future, but it is judged that these forms will not provide a substantial barrier to proliferation.

Sites which are or will be used to store fissile material should be monitored until the material leaves for long-term disposal. As an extension of the existing safeguards system, the International Atomic Energy Agency (IAEA) could monitor the material in storage sites and safeguard it should it be withdrawn to ensure that it is used for peaceful purposes. Russia could be offered financial or other incentives for placing fissile materials into storage. However, from a proliferation and arms control perspective, long-term plutonium storage in weapon-usable form is not desirable.³³

Long-term disposition

Of the options for the long-term disposition of plutonium, two are particularly promising when the risks of storage, handling and recovery are taken into account. These are first, the use of the plutonium in existing or modified reactors as fuel, which would make the plutonium intensively radioactive and of the same basic form as spent reactor fuel now produced. As outlined above, this could be accomplished by using the plutonium in MOX fuel in LWRs, Russian VVER-1000 reactors or CANDU reactors or by building special reactors for the purpose.

The second option is to vitrify (mix with molten glass) the plutonium once it has been mixed with the radioactive high-level waste such as that left over from separating plutonium. The glass logs produced would then be placed in a geological repository. While technical issues remain to be worked out and are more substantial than those associated with the previous option, the process appears feasible at the present time. Another option, to dispose of plutonium by burial in deep boreholes, has been less thoroughly studied but could also be attractive from several standpoints.³⁴

While consideration of the proliferation risks resulting from the civilian nuclear fuel cycle was beyond the mandate of the NAS study group, it was noted that 'the risks posed by plutonium in all forms must be addressed'.³⁵ The fact that from a proliferation point of view the danger from civilian plutonium presents at least as great a danger as that from nuclear weapons was also an important conclusion of a 1993 RAND study.³⁶

³² *Management and Disposition of Excess Weapons Plutonium*, Committee on International Security and Arms Control, National Academy of Sciences (National Academy Press: Washington, DC, 1994), Executive Summary, p. 1.

³³ Note 32, pp. 10–12.

³⁴ Note 32, pp. 2, 12–17.

³⁵ Note 32, p. 26.

³⁶ Chow and Solomon (note 11).

Current status

The DOE completed the first phase of its study on long-term plutonium disposition in mid-1993 without making any policy recommendations but noting that the least expensive option would be to burn it in advanced light water reactors (ALWRs).³⁷ Phase II of the study examines in detail the various options for both the USA and the former Soviet Union,³⁸ and it was estimated in late 1994 that a final plan for disposal in the USA will not be approved until 1995.³⁹

III. IAEA safeguarding

Elimination of fissile materials will take some time and the problem remains of how to ensure that stocks are adequately safeguarded in the meantime. While there are abundant arguments in favour of some form of permanent disposal of plutonium—vitrification with radioactive waste is one of the most promising proposals—in Russia, where the proliferation risk is perhaps the most acute, the only option that the Ministry of Atomic Energy (MINATOM) is willing to consider is relatively long-term storage so that the plutonium would be available for use in fast breeder reactors sometime in the future.⁴⁰ This may be at least in part the result of the offer of US assistance for the construction of a long-term storage facility, but it must also be borne in mind that many in Russia view Russia's plutonium as a 'national heritage', obtained as it was at great human and economic cost.⁴¹

International confidence that plutonium is securely and safely stored will probably be forthcoming only if the materials are under strict international safeguards.⁴² The IAEA statute provides that 'Members may make available to the Agency such quantities of special fissionable materials as they deem advisable and on such terms as shall be agreed with the Agency. The materials made available to the Agency may, at the discretion of the member making them available, be stored either by the member concerned or, with the agreement of the Agency, in the Agency's depots.'⁴³

The International Plutonium Stores (IPS) considered in the 1980s were not set up, particularly because of issues related to withdrawal procedures and geographical distribution of sites. In the new international climate, however, efforts to apply IAEA provisions for storage of fissile materials to plutonium and/or HEU from both nuclear

³⁷ Airozo, D., 'DOE study finds Pu burning in ALWRs is most economic option', *Nucleonics Week*, 29 July 1993, p. 1.

³⁸ 'DOE says reprocessing cheapest for old warheads', *Nuclear Engineering International*, Sep. 1993, p. 14.

³⁹ Cooper, P. and Hitchens, T., 'DoE wrestles with fissile material disposal', *Defense News*, vol. 9, no. 46 (21–27 Nov. 1994), p. 6; and Lippman, T., 'Plutonium surplus: bury or burn up?', *International Herald Tribune*, 21 Dec. 1995, p. 6.

⁴⁰ The fast breeder reactor programme is currently stalled. See Perabo, B., 'The disposition of fissile materials: an extended interview with Oleg Bukharin, Thomas Cochran and Wolfgang Panofsky', *Nonproliferation Review*, vol. 1, no. 2 (winter 1994), pp. 45, 47.

⁴¹ von Hippel, F., Federation of American Scientists' Fund, *Cooperative Research Project on Arms Reductions*, Sixth Annual Report, 22 Aug. 1993, pp. 2, 3.

⁴² Oxford Research Group, *The Plutonium Legacy: Nuclear Proliferation Out of Control*, Current Decisions Report (1 July 1992–30 June 1993), no. 12 (Apr. 1993), p. 22. For arguments against the applications of international safeguards, see, e.g., Bailey, K. C., 'International safeguards on special materials from weapons: why not?', ed. K. C. Bailey, *The Director's Series on Proliferation I*, Lawrence Livermore National Laboratory, 7 June 1993, pp. 39–42: 'The high cost of international safeguards on US and Russian SNM [special nuclear materials] is not worth the relatively low benefit'.

⁴³ International Atomic Energy Agency, *IAEA Statute as amended up to 28 Dec. 1989* (IAEA: Vienna, 1990), Article IX (A).

weapon and non-nuclear weapon states could be more successful. In particular, a ban on production of fissile material for weapon use could be supervised by the IAEA through the application of safeguards on all nuclear materials except those that would remain in military use.⁴⁴

As part of a comprehensive approach to the problem of the accumulation of fissile materials, which included the initiation of the comprehensive review of the long-term options for plutonium disposition now under way, the USA pledged in 1993 to 'submit US fissile material no longer needed for our deterrent to inspection by the International Atomic Energy Agency'.⁴⁵ In September 1994 approximately 10 t of HEU were inspected at the DOE Y-12 plant near Oak Ridge, Tennessee. A second inspection occurred in December at the DOE Hanford facility in Washington State and a third was scheduled for April 1995.⁴⁶

In what could be viewed as an important first step towards an international control regime for plutonium, the USA and Russia agreed in March 1994 to allow one another to inspect each other's sites for storage of plutonium from nuclear weapons. Talks aimed at implementing the agreement were held in Moscow in May and October 1994. Sites under consideration included the Rocky Flats plant in Colorado in the USA and Russian facilities at Toms-7.⁴⁷

IV. Conclusions

In the destruction of nuclear weapons dealing with HEU is relatively straightforward, but the difficulties involved in plutonium disposal, especially in the long-term, are increasingly apparent and much more work is needed. The options explored to date are outlined above and the pros and cons of the various techniques examined. In terms of cost and proliferation-resistance one of the most promising methods for plutonium appears to be vitrification with high-level radioactive waste. IAEA supervised storage seems a promising near-term solution, and priority should be given to finding the quickest way to begin implementing a plan of action involving either this agency or a consortium of concerned international parties.

Connected with disposal of plutonium from nuclear weapons is the fate of that produced in commercial reactors and several studies have recommended that commercial reprocessing of plutonium should be discontinued as soon as is practicable.⁴⁸ Early decisions on how to deal with the problem of disposition of all forms of plutonium are essential to begin reducing the large quantity of plutonium currently stockpiled.

⁴⁴ Shea, T. E., 'On the application of IAEA safeguards to plutonium and highly enriched uranium from military inventories', *Science & Global Security*, vol. 3, nos. 3-4 (1993), pp. 227-28.

⁴⁵ Fact Sheet: Non-Proliferation and Export Control Policy, as reprinted in *US Department of State Dispatch*, vol. 4, no. 40 (4 Oct. 1993), pp. 676-77.

⁴⁶ *PPNN Newsbriefs*, no. 28 (fourth quarter 1994), p. 11; and 'IAEA inspects US nuclear facilities', *Arms Control Today*, vol. 24, no. 8 (Oct. 1994), p. 24.

⁴⁷ 'U.S. and Russia reach accord on inspecting plutonium sites', *International Herald Tribune*, 17 Mar. 1994, p. 4; Lockwood, D., 'US, Russia begin detailed talks on fissile materials', *Arms Control Today*, vol. 24, no. 6 (June 1994), p. 25; and Lockwood, D., 'US, Russian fissile material talks still face several hurdles', *Arms Control Today*, vol. 24, no. 6 (Dec. 1994), p. 21. During further US-Russian talks in Dec. 1994 in Moscow, new US proposals included an exchange of information on nuclear warhead stockpiles broken down by warhead type, reciprocal declaration of stockpiles of excess fissile materials and their locations, a proposal that all fissile material be subject to monitoring except that in weapons or used in naval propulsion programmes, and a ban on the use of excess fissile material, including that from civilian sources in weapons. See Lockwood, 'US-Russian talks on nuclear issues. . . .' (note 18).

⁴⁸ Oxford Research Group (note 43), pp. 21, 41; and Berkhout *et al.* (note 3), p. 189.

17. The ABM Treaty and theatre ballistic missile defence

ALEXEI ARBATOV*

I. Introduction

For more than two decades the Anti-Ballistic Missile (ABM) Treaty has been an important diplomatic tool for managing the strategic nuclear arms competition. The ABM Treaty was signed by the United States and the Soviet Union on 26 May 1972 and entered into force in October of that year. Amended in a Protocol in 1974, it is now in force for the USA and for Russia as the legal successor to the USSR.¹ The treaty obligates both countries not to undertake to build a nation-wide defence system against strategic ballistic missile attack and severely limits the development and deployment of permitted missile defences.² Among other provisions, it prohibits the two parties from giving air-defence missiles, radars or launchers the technical capability to counter strategic ballistic missiles or from testing them in a strategic ABM mode.

During the 1980s, the ABM Treaty became the subject of heated debate, both within the USA and between the USA and the USSR, as a result of the Reagan Administration's controversial Strategic Defense Initiative (SDI) programme. With the end of the cold war and the dwindling of US interest in SDI, the subject of ballistic missile defence (BMD) receded in the early 1990s, only to reappear on the arms control agenda in late 1993 in a new form: this time the issue was the testing and deployment of a new family of advanced-capability theatre missile defence (TMD), or anti-tactical ballistic missile (ATBM), systems.³ Critics have claimed that these new systems would have significant capabilities to intercept strategic ballistic missiles and that

¹ For the text of the ABM Treaty; the Agreed Statements, Common Understandings and Unilateral Statements; and the 1974 Protocol, see Stützel, W., Jasani, B. and Cowen, R., SIPRI, *The ABM Treaty: To Defend or Not to Defend?* (Oxford University Press: Oxford, 1987), appendix, pp. 207–13.

² The permitted ABM deployments, after the 1974 Protocol amendment, are limited to 1 site in each country (rather than 2, as originally stipulated in the Treaty). No more than 100 ABM fixed launchers and 100 ABM single-warhead interceptor missiles may be deployed in a deployment area. ABM radars are not to exceed specified numbers and are subject to qualitative restrictions. The Treaty permits early-warning radars but limits future deployments to locations along the periphery of the national territory, where they must be oriented outward.

³ TMD systems are designed for protection against non-strategic (i.e., theatre or tactical) missiles, which have considerably shorter ranges than strategic ballistic missiles.

* The author is grateful to Ambassador Jonathan Dean, adviser on international security of the Union of Concerned Scientists of the USA, for valuable advice and help with acquiring the data for this chapter. His thanks also go to Shannon Kile at SIPRI, who was very helpful in providing additional references and updating the material.

allowing their deployment would create a loophole in the ABM Treaty that would effectively render it a dead letter.⁴

TMD systems are not formally subject to the provisions of the ABM Treaty, which limits only strategic ABM systems, that is, those designed to defend against strategic ballistic missile attacks. However, the threshold between strategic and theatre ballistic missiles is not technically clear-cut and the characteristics of strategic and non-strategic defences overlap. In November 1993 the USA initiated discussions with Russia at the Standing Consultative Commission (SCC) in Geneva seeking to establish a clear demarcation between theatre and strategic missile defence systems based upon technical performance parameters.⁵ These discussions were held over the course of 1994 but had stalled by the end of the year, with US and Russian negotiators unable to agree on the demarcation criteria. The Clinton Administration announced in early January 1995 that the USA would proceed with the testing of a sophisticated new long-range TMD system, despite objections that doing so would violate key provisions of the ABM Treaty.

This chapter proceeds from the assumption that the ABM Treaty still has a vitally important role to play in the post-cold war world. It addresses the controversy over the testing and deploying of advanced-capability TMD systems, primarily with a view to their implications for the continued effectiveness of the treaty regime. Although the technical aspects of the controversy are not the focus here, some technical data are provided. Section II briefly reviews current US and Russian TMD programmes. Section III examines US and Russian proposals at the SCC for accommodating new TMD systems and attempts to assess how their acceptance would alter the spirit and letter of the ABM Treaty. Finally, Section IV examines the implications of undermining the ABM Treaty for post-cold war strategic nuclear stability and further progress in reducing global nuclear arsenals.

II. Theatre missile defence in US and Russian defence planning

US threat assessments and TMD programmes

Since the end of the cold war US threat perceptions have shifted to concern over regional conflicts and ballistic missile proliferation. As the fiscal year (FY) 1994 Department of Defense (DOD) Annual Report emphasized, 'Today, more than 15 nations have ballistic missiles. By the year 2000, perhaps 20 nations may have them'. In parallel, as the report put it, 'more than 25

⁴ See, e.g., Mendelsohn, J. and Rhinelander, J., 'Shooting down the ABM Treaty', *Arms Control Today*, vol. 24, no. 7 (Sep. 1994), pp. 8-10; and Ponomarev, M., 'Maneuvers verge on foul play: attempts to undermine the ABM Treaty being made in the United States', *Krasnaya Zvezda*, 31 Jan. 1995, pp. 3-4.

⁵ The SCC is the body specified in the ABM Treaty (Article XIII) to promote the objectives of the Treaty and to deal with questions of implementation.

countries, many of them adversaries of the United States, possess or may be developing nuclear, chemical or biological weapons'.⁶

In the context of nuclear proliferation, among the perceived potential US adversaries that possess ballistic missiles are Iran, Iraq, North Korea, Libya, Syria and Yemen. Under worst-case scenarios, this list may also include Afghanistan, Argentina, Egypt, India, Pakistan and Saudi Arabia if domestic and regional instability brings anti-Western regimes to power there.⁷ In the context of proliferation of weapons of mass destruction, some of these states are suspected of either having developed or being in the process of developing nuclear weapons, most of them have stockpiles of or production capacity for chemical weapons, and several are believed to be working on biological weapons.⁸

Although these countries do not have missiles of intercontinental range and therefore do not pose a direct threat to the continental United States, they could present a threat to US allies in Europe and the Far East as well as to US forces operating overseas. The present US strategy postulates as its first priority the capability to sustain forces for simultaneous involvement in two regional wars on the scale of Operation Desert Storm—for example, in the Persian Gulf and the Korean Peninsula. During the 1991 Persian Gulf War, Iraq launched about 100 conventionally armed, modified theatre-range Scud missiles (of 1950s Soviet design) against UN Coalition forces and against cities in Israel and Saudi Arabia. Some of these missiles were intercepted by Patriot PAC-2 tactical air-defence missiles, although their effectiveness remains a subject of controversy in the USA.

Against this background, the Clinton Administration has initiated a major effort to provide the US armed forces and allies overseas with an effective TMD capability. It is also pursuing a 'technology-readiness programme' for a national missile defence system which could be deployed within three years of a decision to do so. According to Secretary of Defense William J. Perry, this system is a 'hedge against unexpected developments', such as the transfer of advanced technology or weapons to a rogue state. It differs from the SDI programme in that it is intended to defend the continental United States against a limited rather than a large-scale ballistic missile attack.⁹

Accordingly, the US Administration has sharply raised appropriations for BMD programmes: from less than \$200 million in FY 1991, to about \$2.7 billion in FY 1995, to \$2.9 billion in the FY 1996 request for BMD and related technology development. The Pentagon now plans to invest approxi-

⁶ US Department of Defense, *Report of the Secretary of Defense Les Aspin to the President and the Congress* (US Government Printing Office: Washington, DC, 1994), p. 51. See also Keeny, S., 'The theater missile defense threat to US security', *Arms Control Today*, vol. 24, no. 7 (Sep. 1994), p. 4.

⁷ Nagler R. G., *Ballistic Missile Proliferation: An Emerging Threat* (System Planning Corporation: Arlington, Va., 1992).

⁸ Fetter, S., 'Ballistic missiles and weapons of mass destruction: What is the threat? What should be done?', *International Security*, vol. 16, no. 1 (summer 1991), p. 14.

⁹ Transcript of remarks of Secretary of State Warren Christopher and Secretary of Defense William Perry, US Department of Defense news briefing, 14 Feb. 1995.

mately \$22 billion in missile defence through the year 2001.¹⁰ The bulk of these funding increases is earmarked for procurement rather than laboratory work, reflecting the heightened priority being given by the DOD to readying new anti-ballistic missile systems for deployment with the armed forces. The technology-readiness programme for the defence of the continental United States is a lower priority, with \$371.4 million (of \$2.9 billion) requested for national missile defence funding in FY 1996 and \$400 million in FY 1997.¹¹

US missile defence programmes are supervised and coordinated by the Ballistic Missile Defense Organization (BMDO, the successor to the Strategic Defense Initiative Organization, SDIO), which reports to a Deputy Secretary of Defense; the Army, the Air Force and the Navy collaborate with the BMDO on individual projects. Although the bureaucratic rank of the BMDO and its budget are lower than that of the SDIO in the 1980s, many of the weapon and support systems under development have evolved directly from SDI programmes.

The DOD's 1993 Bottom-Up Review (BUR) identified three programmes as constituting the core of US TMD procurement efforts.¹² The first is the US Army's Patriot Advanced Capability Level-3 (PAC-3) missile system. A significantly improved version of the Patriot missile deployed in the Gulf War, the PAC-3 is a 'lower-tier' system (i.e., one which intercepts incoming targets in the lower atmosphere) designed to defend important sites in a limited area. After a competitive 'fly-off' the Army chose the Extended Range Interceptor (ERINT) as the missile for the PAC-3. Plans call for the procurement of 1500 missiles and the modification of 180 launchers and 74 radars, with the first deployments scheduled for 1998.¹³

The second programme is the Aegis/Standard Missile II Block IVA (also known as the Navy Area Defense programme), which is a lower-tier system being developed jointly by the US Navy and the BMDO. It involves upgrading existing Aegis radars and Standard SM-2 air-defence missiles to give ships a sea-based anti-ballistic missile defence capability, thereby allowing them to defend ports and coastal areas. Up to 50 ship-borne launchers and radars will to be modified to accommodate 1820 interceptor missiles; the first of these are scheduled to be deployed in 1999.¹⁴

An upper-tier defence system, the Theatre High Altitude Area Defense (THAAD) interceptor, is being developed by Lockheed Corporation for the Army. Drawing on concepts developed for SDI, THAAD uses a heat-seeking

¹⁰ 'Perry defends '96 military budget', *International Herald Tribune*, 8 Feb. 1995, p. 3; and Opall, B., 'BMDO windfall benefits missile defense', *Defense News*, vol. 10, no. 4 (23-29 Jan. 1995), p. 4.

¹¹ Opall, B., 'BMDO switches focus from lab to field', *Defense News*, vol. 10, no. 6 (13-19 Feb. 1995), p. 6.

¹² US Department of Defense, *The Bottom-Up Review: Forces for a New Era* (DOD: Washington, DC, 1 Sep. 1993), pp. 45-49; and Pike, J., 'Theater missile defense programs: status and prospects', *Arms Control Today*, vol. 24, no. 7 (Sep. 1994), pp. 11-14.

¹³ Statement by Lt-Gen. Malcolm R. O'Neill, Director, BMDO, to the Committee on Appropriations, Subcommittee on Defense, US House of Representatives, 15 Mar. 1994, p. 8; and Moshe, D. and Hall, R., 'The Clinton plan for theatre missile defenses: costs and alternatives', *Arms Control Today*, vol. 24, no. 7 (Sep. 1994), pp. 15-16.

¹⁴ O'Neill (note 13); and Moshe and Hall (note 13), p. 16.

homing system and fragmentation warhead to hit ballistic missile targets at ranges of up to 150 km at altitudes in excess of 100 km. Current plans call for the procurement of approximately 1400 missiles, 80 mobile launchers and 14 associated mobile ground-based radars.¹⁵ The Clinton Administration has informed Russia that THAAD will begin the two-year demonstration/validation (dem/val) phase in the spring of 1995. According to the Administration, the dem/val flight-tests are ABM Treaty-compliant because they involve only flight-tests of the missile itself and not any external sensor cueing.¹⁶

In addition to these three core procurement programmes, a number of longer-term projects are also under way: the Navy's sea-based Theatre-wide Defense Programme, a high-altitude, long-range interceptor designed to provide significant area protection;¹⁷ the Army's Corps SAM air-defence system, which would have some capability to defend against short-range (less than 600 km) ballistic missiles;¹⁸ and the Air Force's Boost Phase Interceptor, which is designed to destroy Scud-type missiles shortly after their launch.¹⁹ The USA also continues to cooperate closely with Israel in developing the Arrow, a problem-plagued Israeli programme for a medium-range anti-ballistic missile interceptor.²⁰

The USA is developing a number of space-based tracking and early-warning systems which could be used as components in a TMD system. In conjunction with the BMDO, the US Air Force (USAF) is developing the 'Brilliant Eyes' system (now known as the Space and Missile Tracking System, SMTS), which originated in the SDI programme. This is a satellite equipped with infra-red and other sensors, designed primarily to perform post-boost phase acquisition and to track ballistic missile warheads and decoys in the mid-course phase of the trajectory against the cold background of outer space.²¹ This tracking information (called cueing data) can greatly enhance the range and effectiveness of interceptors such as THAAD and the Lightweight Exoatmospheric Projectile (LEAP). Brilliant Eyes is now the low-earth-orbit component of the USAF Space-Based Infrared (SBIR) system, which is enter-

¹⁵ Moshe and Hall (note 13), p. 16; and Pike (note 12), pp. 12–13.

¹⁶ *Jane's Defence Weekly*, 'THAAD dem/val set to take off', 21 Jan. 1995, p. 9; and Lovece, J., 'Pentagon expected to call THAAD flight tests treaty-compliant', *Defense Week*, 3 Jan. 1995, p. 3.

¹⁷ The favoured option for this system consists of equipping a modified Standard SM-2 missile with the LEAP kinetic-kill vehicle, which was initially developed for SDI 'Brilliant Pebbles' space interceptors. The principal alternative to LEAP is a naval version of THAAD. Testimony of Lt-Gen. Malcolm R. O'Neill, Director, BMDO, Hearings before the Committee on Appropriations, Subcommittee on Defense, US House of Representatives, 103rd Congress, 15 Mar. 1994, Part IV, pp. 192–94.

¹⁸ Corps SAM will be integrated in a 4-nation US–European programme called Medium Extended Air Defence System (MEAD). See Opall (note 11), pp. 4, 34; and 'Statement of intent signed for air defense system', DOD News Release No. 079-95, 21 Feb. 1995.

¹⁹ The Airborne Laser project has reportedly emerged as the US Air Force's preferred choice for the boost-phase interception mission. Sperling, M., 'Laser becomes intercept favorite', *Defense News*, vol. 10, no. 5 (30 Jan.–5 Feb. 1995), p. 14.

²⁰ Pike (note 12), p. 12.

²¹ O'Neill (note 17), pp. 200–201.

ing the engineering and manufacturing development phase. This programme is expected to produce an early-warning satellite system in the next decade.²²

Russian threat assessments and TMD programmes

In Russia, the threat of regional conflicts, primarily across the volatile area of the former Soviet Union, was elevated to the highest priority in contingency planning in the revised Russian military doctrine approved by the Russian Security Council in November 1993.²³ Regional conflicts are perceived as potentially involving Russia and neighbouring countries. Many of the states in the Middle East, South Asia and the Far East which have deployed missiles—including the countries listed above as potential US adversaries, plus Israel, South Korea and Taiwan, however unlikely these scenarios may now seem—could hypothetically become Russian military adversaries with the ability to launch missile strikes on countries of the Commonwealth of Independent States (CIS) or on Russian troops abroad, including those in the post-Soviet area or in other areas when operating as part of multinational forces. Moreover, in contrast to the USA, various parts of Russian territory are already within the range of the missiles of Iran, Israel, North Korea and Saudi Arabia. In contrast to the USA, Russia has never officially excluded the possibility of developing nuclear-armed ATBM systems.

As during the Soviet period, much less is known about Russian TMD programmes than about US programmes. This is a result of the long tradition of secrecy as well as the current inconsistent process of democratization, including limited parliamentary control over defence spending and only sporadic public access to military information. Another serious reason is the current Russian economic and budgetary crisis, which has both limited development and defence procurement and introduced great uncertainties in the planning, programming and budgeting process, including that for TMD systems.

From publicly available information it is known that there are two competing Russian TMD systems, designated the S-300 VM (called the SA-12 in US sources) and the S-300 PMU (known as the SA-10 in the West). The S-300 VM is a mobile system designed for the protection of troops, developed by the Antei research and production corporation. The S-300 PMU is a transportable system designed for site defence, developed by the Almaz corporation. The former is deployed in limited numbers, while about 1000 launchers of the latter type are operated by the Russian Air Defence. The 1st Air Defence Army, which covers the Moscow area, employs the S-300 PMU as its principal system, as do the air-defence armies in the Kiev and Minsk regions.

According to Russian military sources, the two systems are similar, and in some respects superior, to the US Patriot PAC-2 system, in particular because

²² 'US cancels ALARM in favour of broader programme', *International Defense Review*, no. 1 (1995), p. 12; and Scott, W., 'Russian pitches common early warning network', *Aviation Week & Space Technology*, 9 Jan. 1995, p. 47.

²³ 'The main provisions of the military doctrine of the Russian Federation', *Izvestia*, no. 221 (18 Nov. 1993), pp. 1-4.

they can track and intercept aircraft, theatre missiles and cruise missiles.²⁴ The mobile S-300 VM system has effective electronic countermeasures protection, and one unit can simultaneously intercept up to 24 targets and guide up to 48 interceptor missiles. Fully automated, it is capable of switching to combat readiness and can start operation within five minutes of launch. Each unit operates two types of detection and tracking radar (simultaneously detecting up to 200 and tracking up to 70 targets) and consists of four complexes, each composed of one guidance radar and six launchers for two different types of missile interceptor carrying fragmentation munitions. The two types of missile are nearly identical (differing in the booster stage) and have maximum speeds of 2.4 kilometres per second and 1.7 km/sec. The maximum interception range is 100 km for aircraft and 40 km for missiles; the maximum/minimum intercept altitude is 30/0.025 km for aircraft and 25/2 km for ballistic targets with a maximum re-entry speed of 3 km/sec.²⁵

A follow-on system to the S-300 PMU is in the development and testing stage. It has been claimed not to be inferior to the US THAAD system, and in some respects to be superior to it, although in Russia this estimation is a matter of controversy.²⁶ Future plans for modernization of the existing system, development of a follow-on to the S-300 PMU or of other TMD weapons and support systems, including space-based sensors, are not only unavailable from public sources but are probably also unknown even to defence planners and designers, because of the bleak prospects for the Russian economy.

US and Russian domestic pressures

President Bill Clinton has often stressed the importance of preserving the validity of the ABM Treaty, noting that the '[BMDO] program should be geared to the real threats we face today and are likely to face in the future, not the fevered rationalizations of a weapons program in search of a mission'.²⁷ However, this is not a view shared by a growing number of Republicans in the Congress, who believe that with the dissolution of the Soviet Union and the proliferation of ballistic missile technology the ABM Treaty has outlived its usefulness. As part of their much publicized 'Contract with America', in January 1995 the new Republican majority in the House of Representatives introduced the National Security Restoration Act (HR 872) which, among other provisions, directed the Pentagon to speed up the acquisition of theatre defence systems and to develop and deploy 'at the earliest possible date' a 'highly effective' national BMD defence system capable of protecting the continental United States from missile attack.²⁸ In a similar vein, a group of

²⁴ Gornostaev, D. and Korotchenko, I., 'What was secret has become open', *Nezavisimaya Gazeta*, 23 Dec. 1994, p. 1.

²⁵ Antei, *S-300 V: Multichannel Mobile Surface-to-Air System* (Antei: Moscow, n.d.), pp. 2, 6–8.

²⁶ Kravtsev, A., 'A global myth', *Air Defense Digest*, no. 9 (1992), p. 25.

²⁷ Quoted in 'The Democrats and arms control: the questions in 1992', *Arms Control Today*, vol. 22, no. 2 (Mar. 1992), pp. 5–6, before Clinton was elected president.

²⁸ This provision was later replaced in the final version of the House bill with a less ambitious one calling for a national missile defence programme 'as soon as practicable, subject to the availability of

Republicans in the Senate sent a letter to the White House urging it to temporarily suspend negotiations with Russia on modifying the ABM Treaty, arguing that the USA should not accept any re-interpretation of the treaty that would prevent it from deploying new advanced-capability ballistic missile defence systems.²⁹

The US military establishment has also expressed a different view from that of Clinton about the importance of preserving the original intent of the ABM Treaty. For instance, BMDO Director Lieutenant-General Malcolm R. O'Neill has repeatedly stated that missile defence requirements should be determined by cost and operational effectiveness rather than ABM Treaty requirements: 'if they say this is a strategic system, and we don't think it is, we can pull out of the treaty'.³⁰

In Russia, discrepancies between the declarations of political leaders and the statements and activities of the military are much greater because of the lack of civilian control over the defence establishment and military policy. Given the continuing economic crisis and severe budget cuts, open and often desperate lobbying for new weapon systems is vital to protect the vested interests of the military-industrial complex. This is all the more true in the case of tactical and strategic anti-missile systems, since among the Russian armed services, the Air Defence of the Country (PVO Strany), Missile Space Defence (Raketno-Kosmicheskaya Oborona) and Military Space Forces (Voyenno-Kosmicheskije Sily) have been hardest hit by the economic crisis and are in danger of being radically reduced, deprived of their main assets and merged with the other armed services. Huge affiliated research-industrial corporations (such as Almaz, Antei, Astrofizika, Kometa, Energia, Geofizika, Vympel, and so on) are on the verge of collapse for lack of defence contracts.

III. Challenges to ABM Treaty constraints on TMD

Renewed US and Russian interest in anti-missile systems, this time at the theatre level, has once again raised the question of interpretation of the ABM Treaty. The fundamental logic of the ABM Treaty was to curtail the missile defences of both sides in order to leave them vulnerable to retaliatory nuclear strikes and thus to ensure and codify the strategic mutual assured destruction (MAD) capability. This type of strategic relationship was believed to preclude a strategic nuclear first (pre-emptive) strike to disarm the opponent and to avoid or reduce one's own damage from retaliation. In the early 1970s large-scale ABM systems were thought to be unable to defend effectively against a massive first strike but could provide significant protection against a weakened retaliatory strike, thus tipping the balance in favour of a pre-

funding'. Priest D. and Lippman, T., 'Republicans take aim at anti-missile pact', *International Herald Tribune*, 14 Mar. 1995, pp. 1, 11.

²⁹ Priest, D., 'GOP urges harder line on Russia: senators want suspension of ABM talks, revival of "Star Wars"', *Washington Post* news service, LEGISLATE article no. 221385 (25 Jan. 1995); and 'Republicans seek to revive SDI', *International Herald Tribune*, 8 Feb. 1995, p. 3.

³⁰ *Inside the Pentagon*, 29 Sep. 1994, p. 5.

emptive strike. Missile defences were also believed to encourage a destabilizing offensive–defensive arms race and jeopardize nuclear arms reduction agreements.

With respect to the ABM Treaty, the demarcation between strategic and theatre defences has become the focal point of current controversies. During the 1972 ratification hearings in the US Senate, John Foster, Director of DOD Defense Research and Engineering, stated that ‘capabilities to counter strategic ballistic missiles’ and ‘testing in an ABM mode’, which were prohibited by the treaty, meant testing against a target with a re-entry speed greater than 2 km/sec or at an altitude exceeding 40 km.³¹ This so-called ‘Foster box’ has since been widely accepted in the USA as a practical criterion for distinguishing between tests against strategic and non-strategic missile targets: tests of BMD systems are permitted against targets travelling at an altitude below 40 km with re-entry speeds of less than 2 km/sec. It was presented to the Senate by Nixon Administration officials during the ratification hearings as an ‘authoritative representation’ of the US position, but it is neither a provision of the ABM Treaty nor a formally adopted US policy. In the FY 1994 US Defense Authorization Bill, Congress explicitly required that any changes in the US interpretation of the ABM Treaty be considered by the Senate.³²

In the mid-1980s, Soviet tests of the S-300 VM (SA-12) air-defence system against ballistic targets with re-entry speeds of 2.7 km/sec were challenged by the USA in the SCC as not being in compliance with the treaty. The USA pointed out that such defence systems ‘could have many of the features one would expect to see designed into an ABM system, possibly giving it capabilities to intercept some types of strategic ballistic missile RVs’.³³ The USA, which was at the time planning tests with the Patriot missile, never formally charged the Soviet tests as being a violation of the treaty, however.

In contrast to the stance of Republican administrations in the 1980s, the Clinton Administration’s policy has been to regard the ABM Treaty as a cornerstone of strategic stability and US–Russian nuclear arms reductions. According to the Director of the Arms Control and Disarmament Agency (ACDA), John Holum, the Clinton Administration’s position consists of seven principles: (a) reaffirmation of the US commitment to the ABM Treaty; (b) repudiation of unilateral reinterpretations of the treaty; (c) withdrawal from the Standing Consultative Commission of previously proposed broad revisions to the treaty; (d) recognition of the need to specify the dividing-line between ABM systems limited by the treaty and non-ABM systems (e.g., TMD) not limited by it; (e) clarification concerning this dividing-line should be accomplished in the SCC and not unilaterally; (f) negotiation of the status of the agreed clarification to be carried out in the SCC; and (g) affirmation that the

³¹ *Congressional Record*, Senate, 8 Aug. 1972, p. S27231.

³² Keeny (note 6), p. 7.

³³ Arms Control and Disarmament Agency, *Soviet Noncompliance* (ACDA: Washington, DC, 1 Feb. 1986), p. 5.

US Congress would not be bypassed by the Administration and would be consulted for approval of the agreement.³⁴

Russia's only publicly documented position on these issues, apart from general support of the treaty, is its opposition to unilateral interpretations and insistence on negotiating all matters of relevance to treaty compliance.³⁵ The Yeltsin Administration's view of the role of the Russian Parliament has never been formulated, nor have its proposals at the SCC been made public. In this regard, the process of foreign policy making under President Yeltsin and Foreign Minister Andrey Kozyrev has become more secretive and much less organized or predictable than under the former Soviet regimes.

In line with US official policy, in October 1993 the Clinton Administration made a proposal to Russia in the SCC that a demarcation between strategic and theatre ballistic missile defence systems be based solely on the demonstrated (i.e., the actual tested) capability of the systems.³⁶ This proposal would effectively eliminate the 'inherent capability' criterion which the USA insisted on during the treaty negotiations, subsequently incorporated in Article VI. The USA proposed that an ABM system would be defined as a theatre rather than as a strategic defence according to a technical performance criterion—specifically, if it were not tested against a target vehicle with a re-entry speed greater than 5 km/sec.³⁷ Accordingly, an anti-ballistic missile system that had a demonstrated capability to intercept a target travelling faster than that speed would be considered to be a strategic ABM system limited by the treaty.³⁸

According to public information, Russia did not accept this proposal, but neither did it reject it outright. Russian experts reportedly believed that the 5 km/sec demarcation criterion between theatre and strategic anti-missile defences proposed by the USA would in effect open the way for the testing and deployment of US TMD systems with significant capabilities to intercept strategic missiles.

In the spring of 1994 Russia responded in the SCC with a proposal to limit the maximum demonstrated speed of the interceptor (not the re-entry speed of the test target) to 3 km/sec.³⁹ In July the USA accepted this speed limit on sea-

³⁴ Address of the Honorable John D. Holum, Director, Arms Control and Disarmament Agency, at the National Security Breakfast Seminars, co-sponsored by the American Defense Preparedness Association and the National Defense University Foundation, ACDA, Washington, DC, 16 Mar. 1994, Official Text, p. 9.

³⁵ Statement of A. V. Kozyrev, Foreign Minister of the Russian Federation at the Conference on Disarmament, Geneva, 12 Feb. 1992, in *Diplomaticeskii Vestnik*, no. 4-5 (29 Feb.–15 Mar. 1992), pp. 56–58.

³⁶ Negotiations on permitted TMD parameters started with the participation of the USA, Russia, Ukraine, Belarus and Kazakhstan, while Latvia took part as an observer.

³⁷ The payload range of a ballistic missile is closely related to its speed as it re-enters the atmosphere. The speed of 5 km/sec for a TMD test target corresponds to a ballistic missile of about 3000-km range. Such a missile would qualify as intermediate-range (1000–5500 km). Non-strategic missiles usually have a range below 1000 km which corresponds to a re-entry speed of less than 2.9 km/sec, and most of them have ranges of less than 300 km (1.5 km/sec speed). US and Russian strategic missiles have ranges of 8000–10 000 km and re-entry speeds of 6–7 km/sec. Congressional Budget Office, *The Future of Theater Missile Defense*, CBO Papers (CBO: Washington, DC, June 1994), pp. 6–9.

³⁸ Congressional Budget Office (note 37), p. 49.

³⁹ Podvig, P. L., *Contemporary Anti-missile Defense Systems and the ABM Treaty* (Moscow Physico-Technical Institute, Allegro Press: Dolgoprudnyi, 1994), pp. 1–2 (in Russian).

and land-based TMD to be deployed (the THAAD anti-missile system is projected to have a speed of 2.4–2.7 km/sec) but sought to conduct six flight-tests per year of faster, upper-tier interceptors (the LEAP/SM-2 missile scheduled for dem/val flight-testing beginning in the spring of 1995 has a speed of approximately 4.5 km/sec.) The USA also proposed to permit the deployment of air-based interceptor missiles with speeds of up to 5.5 km/sec.

In August 1994 Russia modified its proposal in the SCC to allow up to six tests per year at higher interceptor speeds: up to 5.5 km/sec for land- and air-based defences and up to 4 km/sec for sea-based defences. However, Russia continued to refuse to agree to the deployment of any TMD system with a demonstrated interceptor speed greater than 3 km/sec.⁴⁰ According to unofficial information, geographical and numerical constraints on deployed land-based and home-water sea-based TMD systems were also discussed in Moscow, although they were not introduced as an official proposal in the SCC. In particular, a level of 3000 interceptors and a limited number of launch sites on the territory of the USA and Russia were mentioned. The US reaction to this proposal was negative since allegedly this would go beyond the ABM Treaty, which was intended to limit strategic, not theatre, defences.

By November 1994 the parties agreed in the SCC on the 5 km/sec re-entry speed limit for test ballistic targets. They also agreed that anti-missile systems with a maximum interception speed of 3 km/sec were permitted for testing or deployment and that space-based interceptors were to be banned. However, negotiations stalled in the SCC, with no agreement reached on the system types and target speed limits for the testing and deployment of interceptors with speeds greater than 3 km/sec (in August Russia had proposed allowing the testing of faster interceptors against target missiles in the ascent phase of their trajectory). Numerical and geographic limits on advanced TMD deployment were not set either.

A number of US and Russian experts claim that the advanced US TMD systems and components, together with the proposed 5 km/sec demarcation criterion, would provide them with a substantial *strategic* ABM capability. A number of critics have also argued that, even with the proposed limit of 3 km/sec on interceptor speeds, the defended 'footprints' of permitted TMD systems used in conjunction with radars the size of those being discussed for THAAD would still be very significant against strategic ballistic missiles.⁴¹ In particular, it is pointed out that a TMD system such as THAAD which is capable of protecting an area of tens of thousands of square kilometres against a 3000-km range missile would also be able to defend an area of thousands of square kilometres against a strategic missile of 10 000-km range.⁴²

If provided with warning and tracking data from satellites, TMD systems such THAAD could be made even more effective against strategic targets. The

⁴⁰ Lockwood, D., 'Russia backs away from high-speed TMD test proposals', *Arms Control Today*, vol. 24, no. 10 (Dec. 1994), p. 20.

⁴¹ Gronlund, L., Lewis, G., Postol, T. and Wright, D., 'Highly capable theater defense and the ABM Treaty', *Arm Control Today*, vol. 24, no. 3 (Apr. 1994), pp. 3–8; and Podvig (note 39).

⁴² Keeny (note 6), p. 5.

ability of space-based sensors to 'see' over the horizon provides interceptors with much greater warning time than that provided by ground-based radars; thus their cueing data can considerably expand the area of an interceptor's defended 'footprint'—theoretically, even to the extent of covering large regions of national territories. If THAAD were provided with direct mid-course tracking and cueing data, for example, the area it could defend would be extended to 1 million square kilometres.⁴³

In addition, critics have claimed that space-based systems such as Brilliant Eyes are excessive for theatre-range missiles of less than 1000-km range, since such missiles spend little time in space and are within radar range of ground-based area defences during most of their flight.⁴⁴ These satellites, which possess the tracking capabilities of ABM radars, would also contravene the accepted 'narrow interpretation' of Agreed Statement D of the ABM Treaty,⁴⁵ if their development, testing and deployment were not based on an agreement between the two parties.

Advanced naval SM-2 anti-missile systems, especially if equipped with LEAP and if stationed near shores, might also provide deep inland area defence coverage for the continental United States and Canada with an inherent capability against strategic missiles. It is of particular concern to Russia, and not reflected in Western discussions, that naval- and air-based systems, if properly deployed in advance, might intercept intercontinental ballistic missiles (ICBMs) and submarine-launched ballistic missiles (SLBMs) after launch in the ascent phase of their trajectories.

If TMD systems acquire a collateral capability to counter strategic missiles, while no formal clarification of the ABM Treaty provisions is agreed in the SCC, a number of crucial limitations of the treaty would be undermined. In particular, deployment of large numbers of launchers and missiles would contravene Article I (prohibiting nation-wide ABM systems) and Article III (limiting permitted deployment to one area with no more than 100 launchers and 100 interceptors). Another potential circumvention relates to Article V, paragraph 1, which prohibits the development, testing and deployment of mobile ground-based, sea-based, air-based and space-based (such as Brilliant Eyes) ABM systems and components. The same applies to Article V, paragraph 2, which bans multiple launchers and automatic rapid-reload ABM launchers. Finally, Article IX, which prohibits the transfer of ABM systems to other states or their deployment outside the national territory, would be contravened as well.

In response to criticism, proponents of the new advanced-capability TMD systems argue that the 5 km/sec threshold is a minimal one to guard against

⁴³ Keeny (note 6), p. 5.

⁴⁴ Moshe and Hall (note 13), p. 20.

⁴⁵ Agreed Statement D reads: 'In order to insure fulfillment of the obligation not to deploy ABM systems and their components except as provided in Article III of the Treaty, the Parties agree that in the event ABM systems based on other physical principles and including components capable of substituting for ABM interceptor missiles, ABM launchers, or ABM radars are created in the future, specific limitations on such systems and their components would be subject to discussion in accordance with Article XIII and agreement in accordance with Article XIV of the Treaty'.

the longer-range missiles that may appear in the developing world in the next 10–15 years. They also claim that demonstrated performance is the only parameter that can be verified by national technical means, as envisaged by the ABM Treaty. While conceding that advanced TMD would have some inherent technical interception capability against US and Russian strategic missiles, they argue that the number of warheads and ABM penetration aids and countermeasures will preserve a MAD capability during the next 10–15 years, even after the START II Treaty and further arms reduction agreements are implemented. TMD advocates argue that, after the cold war, the strategic balance and MAD capability are in any event less precarious and important for US–Russian relations.⁴⁶

IV. Implications of reinterpreting the ABM Treaty

For proliferation and regional power projection

The development of TMD systems has consequences for the proliferation of weapons of mass destruction and their delivery vehicles, for US–Soviet strategic nuclear arms reductions, and for the prospects for other nuclear weapon states to join this process in some way.

It is generally accepted that 13 states in the developing world possess missiles with ranges of up to 300 km, some of which are actual or potential US adversaries (Iran, Iraq, North Korea, Libya, Syria and Yemen). Of these countries, eight have acquired or are developing missiles with ranges of up to 1000 km (Egypt, Iran, Iraq, Israel, North Korea, Libya, Pakistan and Syria). Only two states possess missiles with ranges greater than 1000 km, both US allies (Israel and Saudi Arabia). In addition, India, Iran and North Korea are developing missiles with ranges greater than 1000 km (India and North Korea are believed to be working on missiles with ranges of 2500–3500 km).

None the less, 97 per cent of the ballistic missiles of the developing countries have ranges that are shorter than 1000 km and re-entry speeds of less than 2.9 km/sec.⁴⁷ Hence, some US TMD programmes (and proposals in the SCC on TMD delineation) would provide capabilities that greatly exceed the avowed threat: namely, theatre ballistic missiles of hostile regimes employed against US armed forces and allies overseas.

The concern expressed by senior Clinton Administration officials that these states are capable of increasing the range of their missiles and that other countries could acquire longer-range ballistic vehicles in the next 10–15 years is not unfounded.⁴⁸ Still, ballistic missiles with ranges greater than 300 km are extremely inefficient delivery vehicles for conventional ordnance, even clustered submunitions. Their comparatively low accuracy makes them inadequate and cost-ineffective weapons against troop concentrations, command centres,

⁴⁶ See, e.g., Jastrow, R. and Iklè, F., *Can We Live with the ABM Treaty?* (George C. Marshall Institute: Washington, DC, 1994), pp. 1–5.

⁴⁷ Congressional Budget Office (note 37), pp. 7–9.

⁴⁸ See remarks of Perry (note 9).

airfields, and storage and other military sites. They can score only an accidental success, as when an Iraqi Scud-B derivative missile struck a US Army barracks in the Persian Gulf War.⁴⁹ Combat aircraft, long-range artillery and cruise missiles are much more attractive delivery systems for such purposes.

Ballistic missiles armed with weapons of mass destruction are a different matter. They do not need high accuracy to be able to cause great damage from long distances. Moreover, it is not at all clear whether high-performance TMD systems can effectively counter such a threat. Even achieving the 70–80 per cent kill probability envisaged for advanced multi-tier missile defences, which would be satisfactory against conventionally armed ballistic missiles, would not be sufficiently effective against nuclear-armed missiles, whether aimed at armed forces or civilian populations. If a hostile regime has nuclear weapons, a few more ballistic missiles would not make a difference.

Furthermore, conventional interception does not eliminate the destructive potential of nuclear warheads primed for impact explosion. Even if the incoming warheads are intercepted before they explode, they would contaminate large areas with radioactive debris. To ensure effectiveness, defences might need interceptors armed with low-yield nuclear charges.

For nuclear arms reduction

Development and deployment of advanced TMD systems (especially if a nuclear intercept capability is envisaged) may raise serious concerns about the validity of the ABM Treaty and create additional problems with the US and Russian commitments to radical reductions of strategic and tactical (defensive and offensive) nuclear weapons.

The TMD systems now under development in the USA and Russia, as well as permitting testing at 5 km/sec, would erode the barrier between strategic and non-strategic BMD and create a 'grey area' between anti-tactical ballistic missile defence and strategic ABM defences. Russian experts consider that any TMD system designed to intercept missiles with a range great than 1000 km has an inherent strategic ABM capability. Uncontrolled development and acquisition of such systems might jeopardize implementation of the START II Treaty reductions, primarily on the Russian side. Russia's commitment to switch from MIRVed (equipped with multiple independently targetable re-entry vehicles) land-based to light single-warhead ICBMs would greatly reduce its ABM penetration capability and make its limited second-strike forces much more dependent on the validity of the ABM Treaty.⁵⁰ The attitude of the Russian State Duma towards START II ratification, by no means enthusiastic today, would become flatly negative if it perceives the ABM Treaty to be undermined by proposals tabled in the SCC or by unilateral US TMD programmes or interpretations.

⁴⁹ Lewis, G. N. and Postol, T. A., 'Video evidence on the effectiveness of Patriot during the 1991 Gulf War', *Science and Global Security*, vol. 4 (1993), pp. 1–63.

⁵⁰ Arbatov, A. (ed.), *Russian Arms Control Compliance and Implementation*, Report no. 14 (Stimson Center and Center for Geopolitical and Military Forecasts: Washington, DC, Jan. 1995), pp. 1–28.

On the other hand, it seems unlikely that the currently contemplated TMD systems could themselves provide the basis for a robust national territorial ABM defence against the strategic nuclear forces of the USA and Russia. This conclusion is predicated on at least three conditions. The first is that TMD systems are not deployed massively in the USA and that other SDI-type systems and components (for example, Brilliant Eyes, LEAP or air-based lasers) are not deployed to supplement TMD systems. The second is that corresponding clarifications of the ABM Treaty should be elaborated at the SCC. The third condition is that, after the START II Treaty is fully implemented, US and Russian strategic missile forces are not further reduced 10–15 years from now to much lower levels (for example, to as low as 500–1000 warheads).

For the other nuclear weapon powers

Even if the USA and Russia reach an agreement clarifying the provisions of the ABM Treaty, the policies of the other nuclear weapon states would be tangibly affected by TMD if the system parameters are defined as liberally as currently proposed at the SCC. The envisaged anti-missile systems would be able to counter French S-3 intermediate-range ballistic missiles (IRBMs) and M-20 SLBMs (and to some extent even the newest M-4 SLBMs); British Polaris A-3TK SLBMs; and Chinese Dongfeng-2 and Dongfeng-3 land-based ballistic missiles as well as Julang-1 and Julang-2 SLBMs. The introduction of advanced TMD systems by Russia, or even the possibility of their introduction, would make Britain and France more reluctant to contemplate limits on their strategic missile deployments, as it would to an even greater degree for China, facing both Russian and US TMD systems.

The position of the other nuclear weapon states on the comprehensive test ban treaty is another issue related to the TMD–ABM discussion, since the requirement to modernize MIRVed warheads and penetration aids might provide added incentives to conduct further nuclear tests.

V. Conclusions

Both US and Russian advanced TMD development programmes and proposed allowances in the ABM Treaty seem excessive in comparison to the avowed current threat or the unclear, hypothetical future threat. Apart from the pressure of vested interests in both countries, one possible explanation is that the two nations have somewhat asymmetric purposes in mind for their TMD programmes, which are again advocated by some defence proponents, although not publicly emphasized today at the official level.⁵¹

It is conceivable that the USA, by continuing development of high-performance TMD systems, is intent on preserving most of its SDI technology base so as to keep open the option of deploying strategic ABM systems in the

⁵¹ Goldmuntz, L., 'Multilateral madness', *National Review*, 29 Aug. 1994, pp. 32–35.

next decade. The Republican majority in both houses of the US Congress has publicly called for the deployment of a national ballistic missile defence system capable of defending the territory of the continental United States.

In Russia, the major concern apparently is not a threat to its forces by tactical ballistic missiles. Russian defence planners are much more worried by IRBMs directly threatening Russia's territory from locations in the Middle East, South Asia and the Far East. High-performance land-based mobile missile defences (possibly with a nuclear intercept capability) could be assigned to protection of key urban-industrial centres as soon as they are endangered, depending on the geographical origin of the threat and the range of the missile. At the same time, Russia obviously has a greater stake in preserving the role of the ABM Treaty in the US-Russian strategic relationship, since it would face severe economic problems in either upgrading its strategic ABM system or enhancing its offensive strategic forces to penetrate a US territorial missile defence system.

If future developments in nuclear weapon and ballistic missile proliferation are believed to require more advanced US and Russian TMD systems than those currently deployed or being modernized, agreements on ABM Treaty clarification would be warranted. Unilateral decisions on testing and deploying advanced TMD systems would be detrimental to the validity of the ABM Treaty, the prospects for further nuclear disarmament by the USA and Russia, and eventually to non-proliferation restraints among the non-nuclear weapon states. New provisions for more intrusive verification methods and transparency could be helpful and feasible to ensure treaty compliance—in line with the post-cold war logic of TMD advocates. Moreover, the ability of the USA and Russia to cooperate in the development of theatre anti-missile technologies would be a good test of the validity of their 'strategic partnership'.

TMD systems, however permissively their parameters are formulated, would not provide a complete defence of the territories of Russia, the USA and US allies against a limited strike by nuclear-armed missiles. Because of the asymmetric threat perceptions and defence requirements of the USA and Russia, it would be extremely difficult to incorporate such systems in the ABM Treaty. Hence, it may have to be fundamentally revised. Moreover, strategic ABM system development and deployment, if considered desirable by the parties to the treaty, would greatly benefit from technical cooperation. For this revision and cooperation not to contradict strategic stability in the US-Russian strategic relationship and their security interactions with the other nuclear weapon powers, nuclear deterrence would have to be replaced by some new foundation of strategic relations among the NATO powers, Russia and China. Such a new concept has not yet emerged, in spite of all the declarations and agreements made in recent years.⁵²

⁵² Arbatov, A. (ed.), *Implications of Strategic Defense Deployments for US-Russian Relations* (Stimson Center: Washington, DC, June 1992), pp. 18–24, 25–30, 44–49.

18. The comprehensive nuclear test ban

ERIC ARNETT

I. Introduction

The comprehensive test ban (CTB) treaty was the only major arms control measure under negotiation in 1994, the first year of serious negotiations on a CTB treaty in more than a decade and the first year ever of purposeful CTB negotiations in the Conference on Disarmament (CD).¹ Substantial progress was made on organization and verification issues, and a working draft of the treaty emerged as the 1994 session closed in September,² effectively superseding the informal drafts that had been submitted by the Australian and Swedish delegations.³ Nevertheless, progress in the negotiations was slower than some had hoped it would be. Russia and the Group of 21 (G-21)⁴ had called for the treaty to be completed by the end of 1994, a goal that was not achieved despite inter-session negotiations in the autumn.

Two general approaches to the treaty emerged during the year. The first or minimalist approach, promoted most vigorously and consistently by Russia, sees the CTB as having primarily political value. From this perspective, the treaty should be concluded quickly, with a simple scope, without an unnecessarily complex organization or verification system and with little or no role for on-site inspections. A second or maximalist school seeks to brake the nuclear arms race as convincingly as possible through strict and intrusively verified

¹ The most important part of the mandate, given in CD document CD/1238, 25 Jan. 1994, reads as follows: 'The Conference directs the Ad Hoc Committee to negotiate intensively a universal and multilaterally and effectively verifiable comprehensive nuclear-test-ban treaty, which would contribute effectively to the prevention of the proliferation of nuclear weapons in all its aspects, to the process of nuclear disarmament and therefore to the enhancement of international peace and security'. The CD member and observer states are listed in the glossary at the front of this volume. Negotiations on a CTB treaty were held by the UK, the USA and the USSR in 1958–63 (at the Conference on the Discontinuance of Nuclear Weapon Tests and in the Eighteen-Nation Committee on Disarmament) and in trilateral talks in 1977–80.

² CD document CD/1273, 7 Sep. 1994.

³ These drafts were meant as the bases for discussion and do not necessarily bear any resemblance to the CTB treaty that will emerge from the CD. The Australian and Swedish drafts (CD/NTB/WP.49, 30 Mar. 1994, and CD/1232, 6 Dec. 1993, respectively) are reproduced in Arnett, E. (ed.), *Implementing the Comprehensive Test Ban: New Aspects of Definition, Organization and Verification*, SIPRI Research Report no. 8 (Oxford University Press: Oxford, 1994), pp. 103–22. Earlier Swedish drafts (CD documents CD/381, 14 June 1983; CD/1089, 31 July 1991; and CD/1202, 3 June 1993) are discussed in Lewis, P., 'Organizing for effective implementation', ed. Arnett (note 3), pp. 86–102; Lockwood, D., 'Nuclear arms control', *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 653–59; Mallin, M. A., *The June 1993 Swedish Draft Comprehensive Nuclear Test Ban Treaty: Implications and Issues for Negotiation* (Science Applications International Corporation: McLean, Va., 1994); Goldblat, J., 'Nuclear explosions and the talks on test limitations', *SIPRI Yearbook 1992: World Armaments and Disarmament* (Oxford University Press: Oxford, 1992), pp. 111–16; and Goldblat, J., 'Multilateral arms control efforts', *World Armaments and Disarmament: SIPRI Yearbook 1984* (Taylor & Francis: London, 1984), pp. 594–601.

⁴ Formerly 21 non-aligned states. For membership, see Glossary.

regulation of nuclear weapon-related activities. From this perspective, the scope of the treaty should encompass as many as possible of the ambiguous activities that might contribute to horizontal or vertical nuclear weapon proliferation and should empower an independent organization to build up, maintain and operate an elaborate verification system and conduct a variety of routine and challenge inspections. No state openly took a consistently maximalist position on all the CTB issues in 1994, in part because most non-nuclear weapon states hoped to see the treaty completed quickly, but several took maximalist positions on specific issues, particularly on the scope.

1994 ended with the issue of scope largely unresolved, so that the goal of completion of the treaty before the 1995 Non-Proliferation Treaty (NPT) Review and Extension Conference (held 17 April–12 May 1995) was effectively removed. Nevertheless, the prospect of presidential elections in Russia and the USA in 1996 suggests that progress on, if not conclusion of (as called for early in the 1995 session by Russia and the G-21), a treaty in 1995 will be important. An often repeated view that the CTB should be cost-effective also acts to keep treaty provisions simple and perhaps more straightforward to negotiate. Nevertheless, the feeling emerged among some non-nuclear weapon states at the end of 1994 that the inability to conclude the treaty in 1994 had so changed the context of the negotiations that the maximalist school of thought should now prevail.

Sections II and III discuss the scope, verification system and organization of a CTB regime, as positions on these issues crystallized during 1994. The issue of entry into force of a CTB treaty, reviewed in section IV, became significant during the year. The positions of the nuclear weapon states and the 'threshold states'⁵ are outlined in section V.

II. Scope

All the states participating in the negotiations agree that the CTB should ban all nuclear tests without a yield threshold. Bans or exemptions for the following five related activities have also been suggested (national positions on these and other issues are discussed in more detail in section V).

1. Sweden has suggested that preparing to test should be banned, a position supported by Egypt, Germany, Japan and a number of other non-nuclear weapon states.⁶ Since many of the activities associated with preparing to test are similar or identical to those for manufacturing nuclear weapons, even supporters of this provision agree that it can only cover preparations for an imminent test, for example, emplacement of a nuclear explosive device in a test rig.

2. China has proposed that the non-military uses of nuclear explosions—so-called peaceful nuclear explosions (PNEs), carried out primarily for resource

⁵ The threshold states are those which have advanced weapon capabilities but which may not yet have produced nuclear weapons—India and Pakistan.

⁶ Arnett, E., 'The proscription on preparing to test: consequences for verification', ed. Arnett (note 3), pp. 48–64, CD documents CD/PV.675, 17 Mar. 1994; and CD/PV.676, 24 Mar. 1994.

extraction—be studied before they are banned, and suggests that more information from US and Soviet experiments be shared.⁷

3. China has also suggested that the CTB include a no-first-use provision.

4. Indonesia has proposed that all testing of nuclear weapons, whether explosive or otherwise, and computer simulations of nuclear explosions be banned.

5. Pakistan has proposed that the CTB effectively ban new types of nuclear weapon.

None of these proposals enjoys much support or prospect for inclusion in the final treaty. In contrast to these fairly straightforward issues, the debate over hydronuclear experiments (HNEs) appears to be much further from resolution.

Hydronuclear experiments

Negotiators struggled with a number of problems related to HNEs in 1994, for the most part in confidential discussions. One of the most fundamental is simply defining what constitutes a hydronuclear experiment. HNEs involve the detonation of nuclear explosive devices, sometimes modified nuclear weapons, in which the fission yield (as opposed to the high-explosive yield) is much less than that of a full nuclear weapon test.⁸

'Hydronuclear experiment' is an imprecise term, in that there is no generally agreed yield at which an explosion ceases to be an HNE and becomes a nuclear weapon test explosion. Most known US HNEs—safety tests conducted in the late 1950s and early 1960s—had fission yields of the order of 1 gram.⁹ Explosions with yields of less than 45 grams (0.1 lb) TNT equivalent are insufficient to melt 5 kilograms of plutonium and therefore are generally agreed not to be nuclear explosions.¹⁰ The US Department of Energy (DOE) defines a nuclear explosion as having a fission yield greater than 4 lb (about 2 kg) TNT equivalent. By this standard, an HNE would be any explosion with

⁷ Algeria and Russia have withdrawn their earlier support for this exemption. Schaper, A., 'The problem of definition: Just what is a nuclear weapon test?', ed. Arnett (note 3), p. 30. Chinese scientists have been briefed about the applications of peaceful nuclear explosions explored under the Soviet and US programmes, and their interest has been sharpened by a range of activities from geology and resource extraction to earth moving and protection from comets and meteors. For an historical assessment of these programmes, see Findlay, T., *Nuclear Dynamite: The Peaceful Nuclear Explosions Fiasco* (Brassey's Australia: Sydney, 1990).

⁸ A more detailed treatment is available in Kidder, R. E., 'Comments and background information', eds R. L. Garwin, R. E. Kidder and C. E. Paine, *A Report on Discussions Regarding the Need for Nuclear Test Explosions to Maintain French Nuclear Weapons under a Comprehensive Test Ban* (Federation of American Scientists and Natural Resources Defense Council: Washington, DC, 1995); and Schaper (note 7), from which much of this discussion is derived. Taylor compares an explosion involving 20 generations of fission and producing a fission yield of 1 gram TNT equivalent and 45 generations producing a fission yield of the order of tonnes. Taylor, T., 'Nuclear tests and nuclear weapons', *Journal of Strategic Studies*, vol. 13, no. 3 (Sep. 1990), p. 176. The prefix 'hydro' refers to the flowing of the fissile material during implosion rather than the use of water.

⁹ Thorn, R. N. and Westervelt, D. R., *Hydronuclear Experiments*, LA-10902-MS (Los Alamos National Laboratory: Los Alamos, N. Mex., 1987).

¹⁰ Kidder (note 8), p. C-8.

a fission yield less than about 2 kg.¹¹ US weapon designers have suggested that HNEs might be defined as explosions in which the fission yield is equal to or less than the high-explosive yield,¹² but such a standard would allow explosions with fission yields of the order of tonnes, at least in theory.¹³ Even explosions with fission yields of the order of 10 kg—similar to the yield of terrorist bombs and warheads for conventional anti-aircraft and -tank missiles—would probably be regarded as nuclear explosions by most observers.

There are two types of HNE. The first can be used for one-point safety tests of nuclear warheads, to ensure that they will not release a dangerous fission yield if detonated accidentally by, for example, a stray bullet.¹⁴ If a weapon fails a one-point safety test, its yield could be quite large, of the order of tonnes or kilotons of TNT equivalent. If the weapon passes the safety test, the fission yield would be of the order of kilograms or less. The second type of HNE is used to study the first moments of nuclear ignition or 'criticality', before the chain reaction 'runs away'. These HNEs can help (albeit only slightly) weapon designers to reduce the size and weight of nuclear weapons but are not necessary for first-generation weapons and do not help much (if at all) with second- and third-generation weapons. Such explosive criticality experiments could be of any fission yield between nearly zero and the full yield of a nuclear weapon and would be more useful at higher yields.¹⁵

Three states—the former Soviet Union, the UK and the USA—are known to have conducted HNEs.¹⁶ All US HNEs were conducted underground because of the risks associated with conducting them above ground and because it would be difficult for a country such as the USA to gain the waivers of environmental regulations that would be required for above-ground HNEs.

¹¹ Paine, C. E., 'CTBT negotiating issues with implications for nuclear non-proliferation', ed. S. Matajja, *Non-Proliferation and Multilateral Verification: The Comprehensive Test Ban Treaty* (York University, Centre for International and Strategic Studies: Toronto, 1994), p. 18. In Kidder's judgement, experiments below this yield would not produce data of interest to nuclear weapon designers in either the nuclear weapon states or the threshold states. Kidder (note 8), p. C-8.

¹² Thorn and Westervelt (note 9).

¹³ US nuclear weapons typically use 20- to 40-kg high explosive primaries to initiate fission, but high explosive warheads on conventional weapons can be of the order of tonnes.

¹⁴ In an intentional nuclear explosion, the high explosive trigger is detonated simultaneously over its spherical surface, creating a compression wave that converges on the fissile material within from all directions. In a one-point safety test or accident, the high explosive is detonated at a single point only and the resulting fission yield is measured.

¹⁵ This is because the variables to be measured vary dramatically with yield. Wallace, R. K., *Hydronuclear Experiments as Related to the Comprehensive Test Ban Treaty* (US Department of Energy: Washington, DC, 1994).

¹⁶ Thorn and Westervelt (note 9); Arnold, L., *A Very Special Relationship: British Atomic Weapon Trials in Australia* (Her Majesty's Stationery Office: London, 1987); and Cochran, T. B. and Paine, C. E., *The Role of Hydronuclear Tests and Other Low-Yield Nuclear Explosions and Their Status Under a Comprehensive Test Ban* (Natural Resources Defense Council: Washington, DC, 1995), p. 16. The other nuclear weapon states may also have conducted HNEs, although Chinese officials assert that they do not have the technology. While it is likely that China could conduct HNEs, Chinese weapons may not be one-point safe and Chinese designers may have trouble instrumenting an HNE in order to retrieve appropriate data. Wallace (note 15), pp. 2, 9. In principle, HNEs are not so difficult that a threshold nuclear state such as India could not conduct them, but threshold states with small amounts of fissile material (e.g., North Korea, Pakistan or Iraq if it had not had its programme dismantled) might be reluctant to use it in HNEs instead of weapons.

In principle, however, HNEs could be conducted in reinforced buildings of the type used for other experiments with high explosives. Such reinforced buildings are used by manufacturers of conventional weapons and by nuclear weapon designers for experiments not involving fissile material. HNEs that involved some risk of yielding more than of the order of 10 kg of TNT equivalent would be dangerous in such an above-ground facility, whether they were one-point safety tests or explosive criticality experiments, if they were conducted by states without much testing experience. In addition to the risk to personnel health and the environment, a breach of the explosion chamber would release fissile materials that might be detected by nearby atmospheric monitors.¹⁷

Verification

Permitting HNEs to be conducted underground would pose difficulties for verification, since the testing procedure would be almost identical to that used for full nuclear weapon tests.¹⁸ A series of HNEs might also be difficult to distinguish from tests meant to develop new types of very-low-yield nuclear weapons, so-called 'mini-nukes' or 'micro-nukes', without other transparency measures. Cooperative methods or human intelligence would be necessary.¹⁹ Seismic methods of verification are furthermore not always sensitive enough to detect and identify explosions at yields below 1 kt.

Although permitting underground HNEs would create problems in verifying compliance with the CTB treaty, banning above-ground HNEs would also create verification problems. Reusable reinforced containment buildings designed for other purposes could be used for HNEs with yields of less than 10 kg. These facilities are sensitive on commercial or security grounds but might have to be inspected often to prove that HNEs had not deposited fission products on the walls. States such as the USA that are open enough for HNEs to be detected by monitoring public sources are unlikely to allow HNEs above ground anyway, because of safety and environmental concerns. Less open states could build covert facilities, are difficult intelligence targets and are less likely to accept a CTB treaty with intrusive inspection requirements targeted specifically on sensitive facilities associated with nuclear or military programmes.²⁰

¹⁷ Paine (note 11).

¹⁸ The USA sees HNEs as useful in part for maintaining the ability to resume testing, should that become necessary, through rehearsal and maintenance of expertise. All US HNEs are expected to be conducted underground at the Nevada Test Site. Schaper (note 7), p. 35. Some non-nuclear weapon states have suggested that the known test sites be closed.

¹⁹ Cooperative methods include on-site instrumentation and inspection. Human intelligence includes open-source analysis and espionage. Measures discussed under the rubric of 'societal verification' comprise cooperative methods and enhanced open-source human intelligence. Arnett, E., 'The complementary roles of national, private and multinational means of verification', ed. Arnett (note 3), pp. 65–85.

²⁰ Arnett, E. and Schaper, A., 'No hydronuclear ban', *Bulletin of the Atomic Scientists*, vol. 50, no. 6 (Nov.–Dec. 1994), pp. 22–23; Arnett, E., 'Introduction and executive summary', ed. Arnett (note 3), p. 15; and Khan, S. A., 'Pakistan', ed. E. Arnett, *Nuclear Weapons after the Comprehensive Test Ban: Implications for Modernization and Proliferation* (Oxford University Press: Oxford, forthcoming 1995).

Motivations

Suspicious about nuclear weapon modernization, whether associated with horizontal or vertical proliferation, motivate many of those proposing to ban HNEs. For some the concern is that states not party to the NPT²¹ could refine first-generation weapon designs so that the weapons would be more easily delivered to target. Because HNEs might help threshold states to design smaller and lighter warheads under a narrow range of circumstances, some see an HNE ban as being crucial to the negotiating mandate's goal of preventing nuclear weapon proliferation. HNEs are already forbidden to all non-nuclear weapon states party to the NPT (because they involve the manufacture of a nuclear explosive device, banned under Article II), so an HNE ban would be egalitarian in the sense that it would subject the nuclear weapon states and states not party to the NPT that sign the CTB to the same treatment as non-nuclear weapon states party to the NPT.

For other observers, the greater concern is that the nuclear weapon states will continue to modernize weapon systems through the HNE loophole. Currently, only the USA has forsworn further modernization after its B-2 bomber and Trident II submarine and missile procurement programmes were completed. Officials and commentators in France, Russia, the UK and the USA have argued that new types of nuclear weapon are necessary for new roles, most of them related to regional intervention.²² HNEs would contribute little to validating the designs of such weapons, but a programme of underground HNEs could include or mask tests used to develop very-low-yield weapons in the absence of intrusive transparency measures. The necessity of transparency measures is another motivation for some proponents of banning HNEs, at least those conducted underground. For them, verifying that underground HNEs are not low-yield nuclear weapon tests is simply too difficult.

Opponents of banning HNEs in the CTB treaty see little reason for such a ban given the slight contribution that HNEs—at least those with yields of the order of kilograms—make to nuclear weapon design.²³ They would prefer to allow states the option of conducting one-point safety tests²⁴ and to rehearse some aspects of testing expertise through underground HNEs. Further, they would prefer to avoid the intrusive verification regime that would have to be associated with banning above-ground HNEs.²⁵

²¹ The most important non-NPT states are Brazil, India, Israel and Pakistan.

²² These include microwave or electromagnetic pulse weapons to burn out electronics; very-low-yield warheads for attacks on massed armour, biological warfare facilities or deeply buried targets; and air and anti-missile defence. Interest in very-low-yield nuclear weapons was articulated by moderate US commentators for the first time in 1994. Cohen, E., 'Three comments', *National Interest*, winter 1993/1994, p. 38. (Cohen is the military affairs editor of the US Council on Foreign Relations' quarterly *Foreign Affairs*.) The USA has already developed but not deployed very-low-yield warheads. Wallace (note 15), p. 5.

²³ Wallace (note 15). See also an unpublished paper by Kathleen C. Bailey, 'Hydroneuclear experiments: why they are not a proliferation danger', Oct. 1994 (this paper is available on the CompuServe Nuclear Non-proliferation Network).

²⁴ US officials acknowledge that one-point safety tests are no longer needed for US warheads but say that they would like other states to have the option of conducting safety tests.

²⁵ Arnett and Schaper (note 20).

The state of negotiations

The rolling text of the CTB treaty contains a bracketed (contested) phrase that would ban any 'explosion which releases nuclear energy', a formulation that encompasses HNEs. Several non-nuclear weapon states have made statements against 'laboratory experiments' in public plenary meetings, and India supports including the nuclear-energy clause. The five permanent members of the UN Security Council (the P5—China, France, Russia, the UK and the USA) have been attempting to reconcile their views to present a common position to the rest of the CD, but their meetings have reportedly been rancorous. China is said to favour banning HNEs, but 'its leaders have not yet decided' whether China would conduct "'small" nuclear tests' for safety and reliability of the existing arsenal under the CTB.²⁶ The other nuclear weapon states would allow them²⁷ but disagree about the yield of HNEs that would be allowed. The USA does not officially consider HNEs yielding less than 2 kg to be nuclear explosions or tests at all, an understanding that allows US negotiators to advocate a CTB treaty with 'no thresholds, no exceptions'²⁸ while seeking to preserve the right to conduct HNEs, which others see as an exception that entails setting a threshold.²⁹ The USA is promoting the US DOE standard of 2 kg, but the UK is said to favour yields of up to the order of 100 kg on the principle of the fission yield not exceeding high-explosive yield.³⁰ Russia reportedly favours allowing explosions yielding of the order of 10 tonnes, apparently on the grounds that they are no less defensible than 100-kg explosions and just as difficult to detect or distinguish from lower-yield tests by means of the international monitoring system. France has pushed the issue further, apparently as a matter of necessity. French officials hope to conduct as many as 20 tests with yields of less than 200 tonnes before stopping their test programme. If these tests are not conducted before the treaty enters into force, they would have to be permitted by the treaty's scope or France would not be prepared to sign the treaty.³¹

These disagreements make it difficult to craft treaty text. A popular suggestion would leave the CTB treaty vague, with binding interpretations

²⁶ Paraphrase of 'a senior foreign ministry official'. Tyler, P. E., 'China warns US against developing Asian missile shield', *International Herald Tribune*, 18–19 Feb. 1995, p. 4.

²⁷ President Clinton has committed the USA to a programme that might include HNEs under the rubric of 'stockpile stewardship'.

²⁸ Remarks of the Honorable John D. Holum, Director, US Arms Control and Disarmament Agency, 4 Aug. 1994 (ACDA Office of Public Information: Washington, DC, 1994).

²⁹ Schaper (note 7), pp. 43–44.

³⁰ The US position may change in favour of a higher threshold under pressure from the DOD. Smith, R. J., 'Administration split on nuclear treaty', *Washington Post*, 28 Jan. 1995, p. 18; Smith, R. J., 'Total nuclear test ban favored', *Washington Post*, 31 Jan. 1995, p. 18; and Lake, A., *A Year of Decision: Arms Control and Non-Proliferation 1995* (Carnegie Endowment for International Peace: Washington, DC, 1995). Two kg and 100 kg correspond to about 40 and 44 generations of fission, respectively. Kidder (note 8), p. C-9.

³¹ French officials say that the tests could be done by the end of 1996, after which France would be prepared to accept a lower threshold. Garwin *et al.* (note 8), pp. 13–15. R. Baléras, the former director of the Commissariat à l'Énergie Atomique's Direction des Applications Militaires, refers to these 100- to 200-tonne tests as hydronuclear (p. 13), a designation that would not be accepted by most US nuclear weapon scientists. Ten tonnes and 100 tonnes yield correspond to about 49 and 51 fission generations, respectively.

appearing only in the negotiating history. In fact, the goal of the P5 consultations is just such a joint declaration of interpretation. Some proponents of banning HNEs under the CTB treaty argue that such a ban could be implicit in the treaty unless a declaration were made to the contrary and that verification of a ban need not be systematized if it is implicit. While this assertion is questionable, it is likely to be irrelevant after the declaration of the P5 (or whatever subset of the P5 can come to a consensus). Open and stubborn opposition to HNEs is likely to deadlock the negotiations, as noted by the CTB chairman in 1994, Miguel Marin Bosch of Mexico.³² At the same time, insistence that explosions yielding tonnes or more be permitted is also likely to stymie efforts for consensus. It remains to be seen where the compromise between these extremes will be found.

III. Verification and organization

Although verification of the CTB is one of the most researched topics in the arms control literature, consensus on specific measures was not apparent by the end of 1994. Remaining disagreements over the scope of the treaty may have to be resolved before further progress is made, despite important areas of agreement on the design of a verification system for detecting full nuclear tests. Banning HNEs or preparations to test might entail shifts of emphasis in verification provisions, especially with regard to inspections.

The CTB verification system

There is broad but not universal consensus that the verification system should include a tiered network of seismic stations and a network of atmospheric radionuclide monitoring, hydro-acoustic and infrasound stations.³³ Support for including hydro-acoustic and infrasound monitoring grew during the autumn inter-session negotiations, and both are now likely to be included in the monitoring system.³⁴ Other technologies that have been suggested include

³² Marin is paraphrased to this effect in 'Ending our reliance on nuclear and conventional arms', *Disarmament Times*, 22 Nov. 1994, p. 4. See also Marin Bosch, M., *Comprehensive Nuclear Test Ban Treaty* (Carnegie Endowment for International Peace: Washington, DC, 1995), pp. 6, 12: 'If one seeks to prohibit a given activity, it would be logical to prohibit also all activities related to it . . . But in the case of nuclear tests, that is not the guiding logic'.

³³ A preliminary list of the seismic stations in the alpha tier, which would be in continuous communication with the international data centres, is reproduced in Arnett (note 19), pp. 80–81. These are the nominated participants in the Group of Scientific Experts Technical Test (GSETT) III, due to be fully operational in Jan. 1995, and are not necessarily the alpha tier of 40–53 stations that will emerge from the negotiations. By the end of 1994, 38 of 59 GSETT III stations were committed, but only 12 operationally reporting data in real time to the prototype International Data Center in Arlington, Virginia. The cost of continuous, real-time data reporting is a deterrent to participation for some states, and the actual IDC may be located elsewhere. Those requested to host stations but not yet fully or nearly committed are Bolivia, Botswana, Côte d'Ivoire, Indonesia, Kazakhstan, Kenya, South Korea, Papua New Guinea, Paraguay, Thailand and Turkey. CD document CD/1270, 19 Aug. 1994, pp. 7, 9.

³⁴ Johnson, R., 'CTBT negotiations Geneva update no. 14', *Nuclear Proliferation News*, vol. 94, no. 17 (20 Dec. 1994), p. 3. The most popular proposals for the verification system would include 43 or 50 seismic stations in the alpha tier, 100 seismic stations in the auxiliary beta tier and 1 of 2 combinations of other stations: 95 atmospheric and 15 hydro-acoustic; or 75 atmospheric, 5 hydro-acoustic and

electromagnetic and optical monitoring and universal access to high-quality satellite intelligence.³⁵ Inclusion of all these in the monitoring system provided for in the treaty does not command much support because of their cost and complexity, but it is likely that they will be among the national technical means (NTM) deployed by some states parties. Data from the monitoring stations will be relayed to an International Data Centre (IDC), to be operated by the implementing authority. Personnel at the IDC will probably be asked to do some initial analysis of the data received to make them more useful to states parties, but will not be given the task of drawing formal conclusions. The IDC might also house files of activities and sites declared for the purposes of confidence building.

Administration

CTB treaty negotiators also made a great deal of progress on administrative matters in 1994, but dissenting voices remained. Sweden's suggestion that the implementing authority own and operate the verification system and the IDC lost support but still enjoys the commitment of a few states. The Australian alternative, which envisages the authority coordinating ownership and operation on a case-by-case basis, is more popular. Similarly, Sweden's proposal that the International Atomic Energy Agency (IAEA) should be the implementing authority has a small core of firm support but is less popular than the Australian compromise, which envisages the authority being collocated with the IAEA in Vienna and taking advantage of the agency's proven capabilities while remaining independent. As with ownership and operation of the verification system, the modalities of this cooperation remain to be worked out.

The largest body of the implementing authority would comprise the member states. Some negotiators favour a smaller Executive Council to make decisions more quickly. Difficulties in selecting members for the Executive Council fairly have led others to oppose such a special deliberative body, following a proposal by Japan. The main reason for full participation is the difficulty in providing for fair and equitable rotation of positions in a smaller body. The five nuclear weapon states party to the NPT would like to be permanent members of the Executive Council, which is objectionable to others on a number of grounds: it gives the nuclear weapon states a special status, it indirectly maintains the fiction that Israel does not have nuclear weapons (or alternatively would confirm that Israel has nuclear weapons and give it a special status, neither of which is desirable from this point of view), and it would require some states that would rather not do so to accept the legitimacy of the NPT. The creation of a Technical Secretariat is less controversial, but there remains disagreement over the extent to which requirements for competence might distort geographic and political distribution in staffing it. Procedu-

50 infrasound. Either of these would enable the system to detect an explosion reliably that is as small as 1 kt.

³⁵ China and Pakistan have suggested that all states parties have guaranteed access to satellite data.

ral matters also remain to be decided, particularly with regard to the modalities of voting.

In contrast, there is broad agreement about how the funds necessary to finance the treaty will be raised. Preliminary estimates of the costs, based on judgements of necessary expenses and the willingness of most states to pay, emerged as follows: start-up costs might amount to \$100 million, and annual costs after that might be \$60–80 million.³⁶ These costs will be distributed according to a procedure based on the UN scale of assessments, roughly proportionate to states' gross national product (GNP).³⁷ In cases of frivolous or abusive accusations, the cost of a challenge inspection might be borne by the state requesting the inspection. Challenge inspections might each cost as much as \$12 million.³⁸

Consultation, clarification and inspections

The consultation and clarification regime under discussion in the negotiations might include both routine and challenge inspections. Routine inspections have been suggested to reduce ambiguities about commercial explosions, continuing activities at known test sites (including underground HNEs) and the nature of existing cavities that hypothetically might be used for conducting decoupled explosions.³⁹ Alternatively, some of these inspections might be supplanted by data notifications that would be verified only informally. Even limited routine inspections and notifications are resisted by some negotiators on grounds of cost and complexity.

Challenge inspections in other treaty regimes are generally mandatory unless compelling evidence can be produced in some other way. In the 1993 Chemical Weapons Convention (CWC), for example, any state party can accuse any other of non-compliance, triggering a mandatory inspection that can only be blocked by a three-quarters majority of the Executive Council of the Organisation for the Prohibition of Chemical Weapons. In 1994, Israeli and Russian proposals suggested that the CTB concept move decisively away from this strict concept of challenge inspections in favour of a consultation and clarification process that might include international inspections offered by a state party suspected of non-compliance on an invitational or voluntary basis. Nevertheless, at the end of 1994 the Australian draft's adaptation of CWC inspection procedures still enjoyed healthy support, and it appears that challenge inspections will be mandatory.

³⁶ Arnett, E., 'Introduction and executive summary', ed. Arnett (note 3), p. 23. This compares with \$174 million for the start up of GSETT III and \$26–30 million annually for operations and maintenance. CD document CD/1254, 25 Mar. 1994.

³⁷ Other proposals and problems are discussed in Arnett (note 3), p. 23.

³⁸ CD document CD/NTB/WP.90, 8 June 1994, p. 19 (submitted by the USA). The figure is a worst-case estimate for inspections conducted under extraordinary circumstances.

³⁹ Any attempt to monitor compliance with a ban on above-ground HNEs would have to involve some method to assure other parties that HNEs were not being conducted at government or privately owned facilities with similar capabilities. Arnett (note 19), pp. 82–83. Similarly, China's proposal to allow PNEs includes provisions for inspections to distinguish between PNEs and tests.

In either approach, the consultation and clarification process would begin with a triggering event. If the scope of the treaty is kept simple, the process would be triggered only by a seismic signal consistent with a full nuclear weapon test or similar data from other sensors. If the scope is defined more broadly, evidence of preparations to test or activity similar to an HNE could also trigger the process. The process would not begin automatically, however, but only after one state party had decided that the available data suggested that another had undertaken a non-compliant act and officially brought it to the attention of the director-general of the implementing authority.⁴⁰ Parties would be encouraged to share the data acquired through national means, including public information, with the deliberative body.

A key issue with respect to inspections is the permissible delay between the detection of a suspect event and the beginning of the inspection. Although it would be preferable to have inspectors on the ground as soon as possible, inspections are still useful two to four weeks after the event, when there are aftershocks and radioactive gases might be leaking from even deeply buried explosions.⁴¹ Australia's draft treaty proposed that an inspection should begin without delay and within seven days of a request from the deliberative body, which in turn might be several days after the event. A US proposal during the autumn inter-sessional negotiations that some on-site monitoring capabilities be installed immediately upon receipt of a request from a state party has garnered some support.

The result of the consultation, clarification and inspection process would take one of three forms: clear evidence of a violation, a lack of evidence strongly suggesting no violation or ambiguous evidence, or attendant uncertainty. In the first case, punitive measures might be taken by the Executive Council or other deliberative body, including loss of rights and privileges under the treaty, and other collective measures including sanctions. In the case of no apparent violation, the party making the allegation might be held liable for attendant costs, as is the case under the CWC. Ambiguous cases might be referred to another body, either the International Court of Justice or the UN Security Council, which would have to decide how to handle the allegations, even if they were made by a single state acting alone.

Sub-kiloton tests and HNEs

Although tests yielding less than 1 kt can be detected by seismic and other technical means, they cannot reliably be detected and distinguished from other sources of seismic signals, particularly commercial activity such as mining explosions. As a result, the CTB will depend on other means to ensure the compliance of the five to seven states that might be able to conduct sub-

⁴⁰ Earlier suggestions that the implementing authority itself should be able to initiate an inspection had no support at the CD in 1994. Lewis (note 3), pp. 98–99.

⁴¹ Lewis (note 3), p. 88.

kiloton tests,⁴² especially human intelligence and confidence-building measures (CBMs).

Human intelligence refers to the entire range of data-gathering activities that do not rely on technical means. They include public legislative hearings, open source analysis (newspapers and magazines) and, on the part of some states, espionage. As a result, the states that are more open to the collection of human intelligence (the USA stands out among the nuclear weapon states) will be easier to monitor for compliance with the CTB's ban on low-yield nuclear tests. Others, China and Russia, for example, are more difficult to monitor and, in the absence of routine inspections, might improve confidence in the treaty through CBMs, including invited inspections of mining sites and declarations of existing cavities that might be used for decoupled explosions. Support for making such CBMs mandatory waned in 1994, largely in the interests of reducing the cost of implementation and because of a recognition that they need not be universally applied. Human intelligence and CBMs would also have a role in detecting HNEs if they were banned and in distinguishing them from nuclear tests if they were not.

IV. Entry into force

The seemingly mundane issue of entry into force garnered as much or more public interest than did the issue of verification in 1994, in part because of the foreseen delays in the entry into force of the CWC,⁴³ and in part because of speculation about France testing before entry into force of the CTB treaty. Several formulas were proposed in a search for the proper balance between universality—a goal from the negotiating mandate reiterated in the preamble to the draft treaty—and timely entry into force, without providing a veto for any single state or group of states. The six proposed formulations in the rolling text (of which one will be chosen) refer to requirements that the treaty be ratified by various combinations of member states and others, including some of the CD observer states, and the 60 states operating nuclear reactors. These groups include all the nuclear weapon states and those states of proliferation concern.

If the CTB treaty is opened for signature at the end of 1995, it will not enter into force until at least the end of 1997. Delays in the negotiations or insistence that the verification system be completed before opening for signature would push this date back another year or more. If the criteria for entry into force are not met within two years, the treaty will enter into force 180 days after they are met.

⁴² France, Israel, Russia, the UK and the USA would certainly be able to test below 1 kt. China and India might also be able to do so, if only after a series of hydrodynamic and hydronuclear experiments to gradually approach the desired yield. Other threshold states do not have sufficient stocks of fissile material to undertake such a series of tests.

⁴³ Stock, T., 'The Chemical Weapons Convention: institutionalization and preparation for entry into force', *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 685–711. See also Marin (note 32), p. 8; and chapter 19 in this volume.

The significance of the period preceding entry into force is not clear. Before signing, China is expected to conduct one or two more nuclear tests in 1995, and France is also likely to test in 1995 and 1996. However, once the treaty has been opened for signature, testing is unlikely to continue. States can be expected to observe the ban on testing before entry into force but will not enjoy the benefits of the treaty's verification and dispute-settlement systems until afterwards.

V. Positions of the nuclear weapon and threshold states

Since the CD works on the basis of consensus, any member can block the completion of the CTB treaty. The nuclear weapon and threshold states do not have a special status, and their positions do not carry more weight than those of the other members. Indeed, Australia, Brazil, Egypt, Germany, Indonesia, Iran, Mexico, Poland, Sweden and several other non-nuclear weapon states have made important contributions to the negotiations. All the substantial negotiating text materials that preceded the rolling text were submitted by non-nuclear weapon states and China. Nevertheless, the positions of the nuclear weapon and threshold states do have a special significance and illustrate the range of concerns and views that must be reconciled if the CTB is to be concluded. The negotiations are unlikely to move much further until the P5 resolve their discussions of scope.

When the full list of CD members and observers is taken into account, the range of views becomes even broader,⁴⁴ in part because non-nuclear weapon states do not have nuclear programmes or the secrecy surrounding them to protect. For comparison, the positions articulated in the Australian draft and the December 1993 Swedish draft are worth summarizing. The Swedish draft would ban preparations explicitly and HNEs implicitly. The Australian draft would ban imminent preparations implicitly and allow HNEs implicitly. The Swedish draft treaty would have an ambitious international verification system of seismic, atmospheric and hydro-acoustic monitoring stations (perhaps at least one of each in every state party) owned and operated by the implementing authority, which Sweden suggested might be the IAEA. The Australian draft treaty suggests that the system should be more economically sized and should simply be coordinated by the implementing authority, which would alert states parties to anomalous events and might cooperate with the IAEA in areas where the IAEA has existing advantages. The Swedish draft envisages a broad range of routine and challenge inspections, whereas the Australian draft, while refining the inspection procedure in important ways, places less emphasis on the frequency of either routine or challenge inspections.

⁴⁴ These are summarized for 13 countries in Arnett, E., 'Implications of the comprehensive test ban for nuclear weapon programmes and decision making' and 'Nuclear weapon programmes under the comprehensive test ban: implications for the treaty and the non-proliferation regime', ed. Arnett (note 20). For current reports from the CD, see regular articles by Rebecca Johnson in *Acronym Reports* (London), also available on-line at the Internet address: acronym@gn.apc.org.

China

China's Commission on Science, Technology and Industry for National Defence (COSTIND), the ministry-level agency for military research and development (R&D), testing and procurement, is working to complete a series of nuclear weapon tests. China tested twice in 1994. COSTIND officials say that only one or two more tests will be conducted.⁴⁵ These will certify a new warhead, lighter in weight and lower in yield than those in the stockpile, for the Dongfeng (East Wind) DF-31 and DF-41 intercontinental ballistic missiles (ICBMs) and the Julang (Great Wave) JL-2 submarine-launched ballistic missile (SLBM).

China's position is that the CTB is a step towards the elimination of nuclear weapons and towards reducing the probability of their use before that goal is achieved.⁴⁶ In a draft preamble to the CTB treaty, China calls for additional reductions in strategic weapons and conventions banning nuclear weapons and first use.⁴⁷ Other Chinese-drafted language provides for the CTB 'to put these security assurances [to nuclear weapon states and non-nuclear weapon states alike that they will not come under nuclear attack] into practice': 'Nuclear-weapon states parties undertake not to be the first to use nuclear weapons against each other [or] to use or threaten to use nuclear weapons against other states parties'.⁴⁸ Chinese officials have said that they will not block consensus on the CTB treaty over this issue,⁴⁹ and the P5 are consulting on a joint declaration on nuclear security assurances that takes into account China's position. The Chinese draft provides for the implementing authority's Executive Council to 'consider applications to conduct' peaceful nuclear explosions. Approval would require a two-thirds majority of those present and voting, and the PNE would be observed by international inspectors. Chinese officials acknowledge that the test of a PNE device would be difficult to distinguish from a nuclear weapon test and indicate that they probably will not insist on more than a study of the potential contribution of PNEs to development.⁵⁰ Finally, China favours banning any 'nuclear weapon test explosion . . . which releases nuclear energy', including HNEs.⁵¹ Western observers suggest that

⁴⁵ Arnett, E., 'Introduction and executive summary', ed. Arnett (note 3), p. 24. An unnamed Foreign Ministry official suggested to Western journalists that there would be more than 2 more tests but misrepresented other Chinese policies: see Mufson, S., 'Ignoring Perry, China plans more A-tests', *International Herald Tribune*, 21 Oct. 1994, p. 5. US visitors to the Chinese test site report that there were four unused tunnels at the beginning of 1994, before the year's 2 tests.

⁴⁶ CD document CD/NTB/WP.121, 16 June 1994.

⁴⁷ CD document CD/NTB/WP.124, 20 June 1994. This document is excerpted in Arnett (note 3), p. 22. The preamble also stipulates that the treaty should be 'universal'. China proposes that the progress of the nuclear weapon states towards these goals be reviewed every 10 years or whenever two-thirds of the states parties agree to a review conference. CD document CD/NTB/WP.127, 20 June 1994.

⁴⁸ CD document CD/NTB/WP.122, 20 June 1994. In Mar. 1994, China renewed its Dec. 1993 invitation to the other nuclear weapon states to negotiate a no-first-use convention. In Nov. 1994, China and Russia signed a bilateral no-first-use treaty.

⁴⁹ Mufson (note 45); and Arnett (note 44).

⁵⁰ Arnett (note 3), p. 4; and Arnett (note 44). Nevertheless, delegates from other CD member states say that China has been firm on this issue in confidential negotiations.

⁵¹ Statement of Chinese Ambassador to the CD Hou Zhitong in CD document CD/PV.676 (note 6), 24 Mar. 1994.

China's reservations with respect to intrusive inspection provisions will temper this stand, at least with respect to above-ground experiments.⁵²

France

France continued its nuclear test moratorium in 1994, despite a postponed series of tests that was held in abeyance by a disagreement between President François Mitterrand and the government of Prime Minister Edouard Balladur. The tests are intended to certify warheads for current and foreseen systems that can be maintained without testing under the CTB as part of the PALEN (Préparation à la Limitation des Essais Nucléaires) programme.⁵³ The French military and nuclear establishments are wary of the CTB not only because of their anticipated development of a long-range air-launched missile but also because of concerns that the nuclear weapon test site at Mururoa, a Pacific atoll, may not be maintained once testing ceases unless an ambitious programme of HNEs is involved. France is said to support a definition of permitted HNEs that would allow yields as high as the order of 100 tonnes.⁵⁴ France is publicly committed to retaining the ability to modernize under the CTB.

In seeking to preserve its option to test at least until the presidential election on 7 May 1995, France has staked out a maximalist position. During the 1994 session, France advocated: (a) universal acceptance; (b) delaying entry into force until all the members of the CD had ratified the treaty and the verification system was fully operational; and (c) delaying the negotiations until the CD had been expanded to include all the states that had applied for membership, a process that is in political limbo. Cynics suggested early in the 1994 session that substantial negotiations might simply have been adjourned until after the French election. For their part, French officials are impatient with what they see as arbitrarily imposed deadlines and some suspect the US motive for seeking early conclusion of the CTB.⁵⁵

⁵² Arnett and Schaper (note 20).

⁵³ This explanation of PALEN and the testing programme is attributed to L. Barthélémy, the French Defence Ministry's Ingénieur en chef de l'armement. Garwin *et al.* (note 8), p. 19. A 1993 report from anti-CTB members of the Assemblée Nationale had claimed that the 10–20 tests also included development tests for a new variable-yield (including very-low-yield) warhead for an air-launched missile. Galy-Dejean, R. *et al.*, *La Simulation des Essais Nucléaires*, Rapport d'Information 847 (Commission de la Défense, Assemblée Nationale: Paris, 1993); Yost, D. S., 'Nuclear debates in France', *Survival*, winter 1994–95; and Labbé, M.-H., 'France', ed. Arnett (note 20). J. Bouchard, the current director of CEA/DAM, agreed that France did not seek a variable- or low-yield warhead. Garwin *et al.* (note 7), p. 20.

⁵⁴ Garwin *et al.* (note 8).

⁵⁵ This suspicion arises in part from US statements about the desirability of maintaining supremacy through conventional weaponry and seeking to deter the emergence of other great powers, friendly or hostile. Yost (note 53), p. 124. For a discussion of the US effort to maintain military supremacy, see Arnett, E. and Kokoski, R., 'Military technology and international security: the case of the USA', *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press: Oxford, 1993), pp. 307–29.

India

India has not tested a nuclear explosive device since 1974. India's long-standing support for the CTB is in keeping with its position that arms control measures should be universal and non-discriminatory rather than regional and selective. As a result, India is concerned that the implementing authority should have the impartiality and wherewithal necessary to collect data and address apparent non-compliance without relying too heavily on the capabilities or political will of particular members. India, serving as friend of the chair for seismic verification and coordinator of the G-21, voiced support for the CTB verification system to be bought, owned and operated by the implementing authority, which would have as little as possible in common with the IAEA. India's preliminary finding that atmospheric radionuclide, hydro-acoustic, infrasonic and optical monitoring was 'essential'⁵⁶ for effective verification meant that its conception of the CTB was among the most expensive. Near the end of the session, however, India revised its position, finding that 'a cost-effective combination of seismic, radionuclide, hydro-acoustic and infrasonic monitoring techniques would be adequate'.⁵⁷

India's concern with equal treatment and opposition to the NPT also led it to oppose special positions in the implementing authority for the P5, which are also the nuclear weapon states parties to the NPT. On inspections, India is a minimalist, preferring them to be 'rare'.⁵⁸ This position and the nuclear establishment's preference for more 'scientific experiments'⁵⁹ are likely to lead India to avoid a ban on HNEs, but India's position in 1994 supported the formulation that would ban 'any nuclear weapon test explosion, which releases nuclear energy'.⁶⁰ India opposes any reference to preparations to test under the article on scope.⁶¹

Israel

Israel has not conducted a nuclear test since at the latest 1979.⁶² Israel shares Russia's preference for a symbolic CTB and in 1994 issued an influential paper on the topic of consultation and clarification, an important prelude, if not alternative, to inspection.⁶³ Its important passages are as follows:

⁵⁶ CD document CD/NTB/WP.107, 14 June 1994.

⁵⁷ Statement by H. E. Satish Chandra, Ambassador/Permanent Representative of India to UN offices at Geneva in CD document CD/PV.690, 1 Sep. 1994.

⁵⁸ Chandra (note 57).

⁵⁹ Deshingkar, G., 'CTBT: the state of the debate in India', *International Security Digest*, Dec. 1994.

⁶⁰ Kumar, A., 'Towards the elusive goal of a comprehensive nuclear test ban treaty: CD negotiations in 1994', *Disarmament* (forthcoming issue 1995). The passage's comma, which does not appear in the corresponding draft treaty text or a similar Chinese statement, creates an ambiguity that is less apparent in context. It is apparently a typographical error.

⁶¹ Chandra (note 57); and Kumar (note 60).

⁶² Despite continuing debate and the denials of the South African Government that it was complicit, most observers now believe that the 1979 event in the South Atlantic was indeed an Israeli nuclear weapon test. Miller, M., 'Israel', ed. Arnett (note 20).

⁶³ CD document CD/NTB/WP.102, 7 June 1994. Of the 8 states discussed in this section, only Israel is not a member of the CD. Its inclusion is blocked by Iran, ironically, a response to US opposition to

The CTBT will ban discrete events that occur rarely, if ever. Such an event is not likely to be conducted in [an] inhabited place, has relatively long lasting effects, is usually difficult to conceal, and can be detected with [a] high degree of confidence by appropriate remote global monitoring system[s]

...

An effective verification regime should comprise three elements:

A. A world-wide system of remote monitoring devices, operated continuously and covering all environments.

B. An obligatory consultation and clarification process (CCP), triggered by a clear identification of a significant (suspected) event by the global monitoring system, and conducted with the state party involved.

C. On-site inspection (OSI), addressing those rare cases where the global monitoring system has detected a significant event and the [CCP] has failed to resolve it.

In a later paper, Israel explicitly stated that only testing, and not preparations ('so-called "before the event" activities'), should be banned and routine inspections should be seen as voluntary CBMs.⁶⁴

Pakistan

Pakistan's special situation has led it to a difficult position in the negotiations. Pakistan is the threshold state with the least fissile material, and therefore the least to spare for experiments and tests,⁶⁵ and subject to what it sees as unparalleled international pressure while being confronted by a regional competitor with insuperable advantages. Awareness of India's advantages and, to a lesser extent, Israel's nuclear weapon programme, as well as its membership in the G-21 have led Pakistan to a maximalist position on the issues of treaty scope (banning laboratory experiments) and the establishment of an ambitious international verification system. At the same time, Pakistan's feeling of regional disadvantage and especially harsh treatment by a US-led international non-proliferation establishment make it reluctant to accept provisions for intrusive inspection while remaining suspicious of a powerful implementing authority, particularly if it appeared to privilege the P5. Pakistan has also expressed a preference for the CTB to be concluded quickly, with a simple definition and no ban on pre-test activity. In order to reconcile these concerns, Pakistan has made an innovative but unpopular proposal: rather than creating special verification measures to detect activities other than full nuclear tests, Pakistan

Iraq's membership. Israeli accession to the CTB will be important in ensuring that the other states of the region also join, a point made explicitly by Iran. Arnett (note 3), pp. 20–21.

⁶⁴ CD document CD/NTB/WP.114, 17 June 1994, p. 1. Israel has also suggested that all auxiliary seismic stations be certified by the implementing authority, allowing their data to be used more effectively in rejecting false alarms and therefore unneeded inspections. Personal communication, 30 Mar. 1995.

⁶⁵ Pakistan has enough fissile material for at most 5 nuclear weapons, and probably no more than 2. All the other nuclear weapon and threshold states have at least enough for 50 weapons. See chapter 9 in this volume. Pakistan has not conducted a nuclear test, but there was press speculation that it had carried out hydrodynamic experiments in 1994 after comments were made by former Chief of Army Staff Mirza Aslam Beg in a paper entitled 'Who will push the button?', reproduced as Beg, A., 'Benazir part of troika decision on capping', *Strategic Digest* (New Delhi), Mar. 1994, p. 412. See also Hasnain, G., 'We can have bomb within 15 days: Beg', *Dawn* (Karachi), 3 Apr. 1994.

favours monitoring the potential results of testing. Thus, any new nuclear weapon deployed under the CTB would be after-the-fact evidence of prohibited activities. Pakistan's preferred CTB would be in effect a convention 'to ensure that no new nuclear weapons are introduced after the entry into force of the treaty', in the words of Ambassador Ahmad Kamal.⁶⁶

Russia

Russia continued its nuclear weapon test moratorium in 1994. Russia has been the most prominent proponent of an early minimalist or political CTB. Acting as friend of the chair for inspections, Russia has also been influential. Its position is that the scope of the treaty should be as narrow as possible so that verification will be simple and potential parties will not be deterred from signing because of more ambitious provisions but should be sufficient to 'freeze development' of new weapons.⁶⁷ Russia's express preference is that the verification system created for the treaty be kept small and simple, with the implementation authority coordinating existing activities and modest improvements. Inspections would be conducted only in the event of a seismic event detected by the treaty's international verification system, equivalent to a full nuclear test, and therefore would not be common. Such an inspection provision would not only exclude a ban on preparations to test and laboratory experiments but would also leave the onus for distinguishing between suspected low-yield tests and other explosions to national and technical means.⁶⁸ According to some reports, Russia would permit HNEs yielding up to the order of 10 tonnes TNT equivalent⁶⁹ and permit testing in above-ground laboratories, a provision which would inherently allow countries with lax environmental laws to conduct HNEs that could be contained in reinforced vessels (about 10 kg of combined fissile and high-explosive yield).

The UK

US legislation banning nuclear testing at the Nevada Test Site ensured that the UK could not test in 1994, even though the UK was not itself formally observing a nuclear test moratorium and reportedly would like to test the warhead for its Trident SLBM programme three more times. The UK has no immediate plans for additional modernization after the Trident, but seeks to maintain the ability to modernize, seeing the CTB as valuable primarily for its contribution to non-proliferation.⁷⁰

⁶⁶ CD document CD/PV.681, 9 June 1994.

⁶⁷ Slipchenko, V., *NPT Article VI: How Will NPT Extension be Affected by Progress to Date Towards a Comprehensive Nuclear Test Ban Treaty?* Remarks at the Conference on Nuclear Non-Proliferation in 1995: Renewal, Transition or Decline? (Carnegie Endowment for International Peace: Washington, DC, 1995).

⁶⁸ National means include national technical means and human intelligence. Technical means include NTM, international and private technical means and the CTB verification system.

⁶⁹ Garwin *et al.* (note 8).

⁷⁰ Lewis, P. M., 'The United Kingdom', ed. Arnett (note 20).

Acting as the friend of the chair for non-seismic verification, the UK promoted an international system encompassing not only seismic and atmospheric monitoring but also hydro-acoustic and infrasound monitoring. The UK supports allowing HNEs of up to 100 kg for safety. The UK's considerable experience with designing nuclear weapons without testing during the tripartite moratorium (observed by the UK, the USA and the USSR during the period November 1958–September 1961) and a unilateral moratorium under the Labour governments of 1965–74 gives it advantages under the CTB. Nevertheless, maintaining an experienced weapon design staff may be more difficult for the UK than for other countries.⁷¹

The USA

Nuclear testing and the design of new nuclear weapons were prohibited by law in the USA during 1994,⁷² and many observers thought that the USA had conducted its last nuclear weapon test. The initiative for the unilateral cessation of US testing came from the Congress, which is also responsible for legislation limiting nuclear weapon R&D. The results of the 1994 congressional elections, which removed the Democratic Party from its leadership role in both houses of Congress, are likely to change dramatically the context within which US policy is made. Continuing efforts in the US Department of Defense (DOD) to create formal requirements for new nuclear weapons through promotion of doctrines for regional deterrence and war-fighting are likely to be more successful in the Republican-controlled Congress, to say nothing of a possible Republican presidency beginning in January 1997.⁷³ The Nuclear Posture Review that was concluded in 1994 identified no requirement for a 'new design nuclear warhead'⁷⁴ but did not bar introducing warhead designs that were already on the shelf in new systems.⁷⁵

US policy on the CTB is that the treaty should be completed as quickly as possible, but should not be seen as formally linked to the NPT Review and

⁷¹ Lewis (note 70). Lewis bases this conclusion mainly on the deep administrative separation between the nuclear weapon and civilian scientific establishments.

⁷² The nuclear testing legislation, the Fiscal Year 1993 Energy and Water Development Appropriations Act, is discussed in Lockwood, D., 'Nuclear arms control', *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press: Oxford, 1993), p. 562. On 15 Mar. 1994 the US testing moratorium was extended until 30 Sep. 1995. (In early 1995 the moratorium was again extended until Sep. 1996, when the Clinton Administration presumes the CTB will be open for signature.) 'Research and development which could lead to the production by the United States of a low-yield [with a yield of less than 5 kt] nuclear weapon' is forbidden by the National Defense Authorization Act for Fiscal Year 1994, Section 3136 (US Government Printing Office: Washington, DC, 1994). Magraw, K., 'The United States of America', ed. Arnett (note 20).

⁷³ The relationship between the legislation banning testing and R&D and the Pentagon's process of developing new nuclear doctrine is reviewed in Arkin, W. M., 'Agnosticism when real values are needed: nuclear policy in the Clinton Administration', *Federation of American Scientists Public Interest Report*, Sep.–Oct. 1994. A contrasting but by no means sanguine assessment is given in Magraw (note 72).

⁷⁴ Office of the Assistant Secretary of Defense, Public Affairs, *DOD Recommends Reduction in Nuclear Force* (Department of Defense: Washington, DC, 1994).

⁷⁵ The USA developed very-low-yield warheads for use in Central Europe during the cold war, but they are not in the stockpile at present. Wallace (note 15).

Extension Conference. According to John Holum, Director of the US Arms Control and Disarmament Agency (ACDA), the CTB would end the development of new types of nuclear weapons and would serve as an important component of the obligation of the NPT nuclear weapon states parties to end 'the nuclear arms race at an early date'.⁷⁶ The USA is both 'out front pulling' (as Holum put it)⁷⁷ to complete the CTB treaty 'at the earliest possible time'⁷⁸ and committed to friendly persuasion rather than power politics in solving disputes in the P5, the Western group at the CD and the CD as a whole. This is due in part to differences within the US Government on several issues, particularly HNEs and verification.

HNEs

US policy on HNEs was set in November 1993, when President Bill Clinton signed Presidential Decision Directive 15, a secret memorandum committing the US nuclear weapon laboratories to a programme of 'stockpile stewardship' intended to ensure the maintenance of the nuclear arsenal without testing.⁷⁹ This programme, which includes funds for a new facility for hydrodynamic experiments, will cost more than the nuclear weapon test programme during some years of the cold war if it is fully funded.⁸⁰ The policy was the subject of domestic and international debate. The domestic debate revolved around a proposal within the US DOD to conduct HNEs during the CTB negotiations to establish a baseline of weapon behaviour that could serve as a basis for comparison during the post-testing era and to set the precedent that HNEs should be seen as different from nuclear tests.⁸¹ Critics within the government and in non-governmental organizations argued that the moratorium legislation defines testing in a way that encompasses HNEs, so they are illegal under US law regardless of what the CTB treaty eventually stipulates.⁸² No US nuclear tests were conducted in 1994.⁸³ The international debate concerns the efforts of the P5 to come to a common understanding on whether HNEs will be allowed and how they should be defined. The US position that only explosions

⁷⁶ Holum (note 28).

⁷⁷ Speech by the Honorable John D. Holum, Director, Arms Control and Disarmament Agency, 25 Jan. 1994 (ACDA Office of Public Information, Washington, DC, 1994), p. 4.

⁷⁸ Assistant Secretary of State Lynn Davis has said that the US goal was to have all the 'elements in place' by Apr. 1995. Davis, L. E., 'Proliferation and international stability in the 1990s', Remarks to a conference sponsored by Women In International Security, Washington, DC, 7 Feb. 1994, cited in Mallin (note 3), p. 22.

⁷⁹ Paine, C. E., *Maintaining Nuclear Weapons Expertise under a Comprehensive Test Ban: How Much is Enough?* (Natural Resources Defense Council: Washington, DC, 1994), p. 4; Paine (note 11).

⁸⁰ Magraw (note 72). See also Medalia, J. E., *Nuclear Weapons Stockpile Stewardship: The Role of Livermore and Los Alamos National Laboratories 94-418F* (Congressional Research Service, Library of Congress: Washington, DC, 1994); and Zamora Collina, T. and Kidder, R. E., 'Shopping spree softens test-ban sorrows', *Bulletin of the Atomic Scientists*, July/Aug. 1994.

⁸¹ Smith, R. J. and Graham, B., 'US officials clash over science experiments that create tiny nuclear blasts', *Washington Post*, 3 Aug. 1994.

⁸² Cochran, T. B. and Paine, C. E., *Hydroneuclear Testing and the Comprehensive Test Ban: Memorandum to Participants* [in the] *JASON 1994 Summer Study* (Natural Resources Defense Council: Washington, DC, 1994).

⁸³ Smith, R. J., 'US considers tiny nuclear explosion tests to be deferred until after talks', *Washington Post*, 3 Aug. 1994.

less than of the order of kilograms of TNT equivalent should be considered HNEs and that these should be permitted has not been accepted by the other P5 states.

Verification

The US position on verification is rooted in the role the country has long played in nuclear weapon test monitoring. The USA and its NATO allies own and operate, either unilaterally or cooperatively, most of the seismic stations that will be used for the CTB verification system, and will likely continue to pay for at least one-third of the treaty's implementation costs.⁸⁴ US officials who hope to minimize the expense of the treaty's monitoring system and its intrusiveness see merit in an emphasis on NTM, where the USA is technologically dominant, and would prefer that the treaty provide for only a few new stations and for coordination of existing and modestly improved facilities, as outlined in the Australian draft treaty, rather than an organization that takes over ownership and operation of the entire (mostly US-owned) system, as proposed by the Swedish draft treaty. In general, the US position is close to that of the Australian draft⁸⁵ and supports the emerging consensus that the system should include seismic, atmospheric, hydro-acoustic and infrasound monitoring stations.

VI. Conclusions

Over the course of the first year of serious negotiations on the CTB in more than a decade, the international community was reminded that some democracies (those with power shared between political parties, as France and the USA, or with weak party discipline, as Russia and the USA) find it difficult to conclude treaties during the period before elections. In 1994 the democratic state concerned was France, which went to the polls on 7 May 1995 to elect the successor to President François Mitterrand. France's domestic turmoil and incomplete nuclear modernization made it impossible for its delegation to allow movement in the negotiations on key issues before its presidential election, held during the last week of the NPT Review and Extension Conference. In 1996 there will probably be similar dynamics in Russia and the USA, which will both hold closely contested presidential elections.⁸⁶ The period in 1995 between the French election and the height of the US campaign will be crucial if the CTB is to be completed at the CD during the current historic opportunity.

⁸⁴ If the UN scale of assessments is used, as is likely, the USA will pay for 25% of the treaty-mandated system. In addition, the USA will continue to maintain its NTM, which will play an important role in monitoring compliance with the treaty.

⁸⁵ Personal communication, Feb. 1994.

⁸⁶ The Russian Constitution requires presidential elections every 5 years, so the next one must be held by June 1996. President Boris Yeltsin had promised they would be held sooner, but there has not been any sign of preparations. See also chapter 7 in this volume. The US election will be held on 5 Nov. 1996.

Finally, in 1994 the argument that the CTB would not prevent the nuclear weapon states from modernizing their nuclear weapon arsenals was resurrected. While it is true that some states are seeking to assure themselves that some types of modernization will still be possible under the CTB, it is important to recognize that options will be foreclosed. The most advanced nuclear powers, Russia and the USA, will not be able to develop third-generation nuclear weapons with special radiation effects.⁸⁷ The states that have not developed very-low-yield nuclear weapons will now not be able to do so. Those that have developed some type of low-yield nuclear weapon, as the USA has, will not be able to certify any new weapons using the old designs, a step that would undercut the military's confidence in such weapons and might prevent them from being developed, deployed or used.⁸⁸

China will be constrained to use the warhead it is now certifying for all three of its new strategic missiles and may not be able to certify the warhead for its multiple independently targetable re-entry vehicle (MIRV). France will have to modify its requirement for the new air-launched missile even if the certification tests for the M-45 missile and simulation calibration tests proceed as expected, which would restrict its options on doctrine and its ability to modernize further.

India and Pakistan will be inhibited in any efforts they might make to develop small, lightweight warheads for missiles or other delivery systems, as will any state aspiring to develop nuclear weapons. India is unlikely to test in any case, but a treaty commitment not to do so will put the final nail in the coffin of its alleged programme to develop a thermonuclear weapon.⁸⁹

The states least affected are those least interested in nuclear weapon modernization: Israel and Russia.⁹⁰ In some cases, the CTB could make it difficult to retain a cadre of professionals with nuclear weapon design and testing expertise, a concern expressed most clearly on behalf of France, India and the UK.⁹¹

Clearly, the CTB treaty will still have an effect on nuclear weapon programmes. In fact, that effect explains the difficulty in concluding the treaty.

⁸⁷ Fenstermacher, D. L., 'The effects of nuclear test-ban regimes on third-generation-weapon innovation', *Science and Global Security*, vol. 1, nos 3-4 (1990), pp. 187-223; and Taylor, T., 'Third generation nuclear weapons', *Scientific American*, vol. 256, no. 4 (Apr. 1987).

⁸⁸ Magraw (note 72). Further, weapons developed during the cold war would not necessarily meet the new requirements developed for hypothetical regional contingencies.

⁸⁹ This allegation comes from the US Central Intelligence Agency. US Congress, Senate Committee on Governmental Affairs, *Proliferation Threats of the 1990's* (US Government Printing Office: Washington, DC, 1993), p. 31.

⁹⁰ Miller (note 62); and Kortunov, S., 'Russia', ed. Arnett (note 19). Although Russia is understood to be developing replacements for its SS-25 and SS-N-20 missiles, these will have to use existing warheads.

⁹¹ Labbé (note 53); Deshingkar, G., 'India', ed. Arnett (note 20); and Lewis (note 70).

Appendix 18A. Nuclear explosions, 1945–94

RAGNHILD FERM

I. Introduction

SIPRI has since 1969 published tables of data on nuclear explosions in the *SIPRI Yearbook*. Because the tables list all nuclear explosions—that is, including the explosions that have been conducted for peaceful purposes (so-called peaceful nuclear explosions, PNEs) as well as the atomic bombs dropped on Hiroshima and Nagasaki in 1945—SIPRI uses the term nuclear ‘explosion’. The term nuclear ‘test’ denotes only those explosions conducted in nuclear weapon testing programmes. However, the tables do also include the known US nuclear weapon safety tests, even though they have not produced nuclear yields.

Because the publicly available official information on nuclear explosions and tests is incomplete, SIPRI bases its data on a number of different sources. The data include information received from the seismic observatories which gather and share data on seismic shocks from nuclear explosions and from private research institutions (primarily the Natural Resources Defense Council in Washington) as well as information from journal and newspaper articles. One of the main sources of the SIPRI data, especially for the early years of the data collection, is the Swedish National Defence Research Establishment (FOA). (It should be noted that FOA measurements from its Hagfors Observatory in Sweden have from mid-1994 been integrated with data from other seismic stations in the Norwegian Seismic Array, NORSAR, located in southern Norway.¹) With access to all these sources of data, SIPRI is able to provide a fair picture of the nuclear testing activities of the five declared nuclear weapon states (China, France, Russia, the UK and the USA). Information is from time to time also released about previously ‘concealed’ nuclear tests. As new and better statistics are made available, the SIPRI database is revised and updated.

II. The United States and the United Kingdom

The US Administration has had a policy of not announcing its smallest nuclear tests. In 1988 seismologists who had studied historical data and seismic records on explosions from 1963 onwards reported that over 100 US tests had been kept secret.² In December 1993 the US Department of Energy (DOE), as part of its Openness Initiative, officially released classified information on previously unannounced tests. It was disclosed that 204 more nuclear weapon tests had been conducted than had previously been officially reported.³ (One of these tests was a joint US–British test. It should be noted that the UK has since 1962 conducted all of its 24 underground nuclear tests in cooperation with the USA, at the Nevada Test Site.) Over half of the

¹ NORSAR was developed and is run jointly by Norway and the USA.

² Norris, R. S., Cochran, T. B. and Arkin, W. M., ‘Known US tests July 1945 to 31 December 1987’, *Nuclear Weapons Databook*, Working Paper no. 86-2 (Rev. 2A), (Natural Resources Defense Council: Washington, DC, Jan. 1988).

³ *Openness Press Conference, Fact Sheets* (US Department of Energy: Washington, DC, 7 Dec. 1993). See also *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), appendix 8A.

204 US tests were known by seismologists and had already been included in the SIPRI statistics.

In June 1994 the DOE released further information on US tests, disclosing that on 63 occasions more than one device had been detonated simultaneously. On 21 occasions more than one device was detonated in the same drilling hole, and on 42 occasions the devices were detonated simultaneously in separate holes. (None of these tests was conducted in cooperation with the UK.)⁴ According to the 1990 Protocol to the 1974 Threshold Test Ban Treaty (TTBT) (which limits the permitted yield of nuclear tests to 150 kt), the term 'underground weapon test' applies to 'either a single underground nuclear explosion conducted at a test site, or two or more underground nuclear explosions conducted at a test site within an area delineated by a circle having a diameter of two kilometres and conducted within a total period of time of 0.1 second'. According to this definition, these multiple tests should be counted as one explosion; consequently, this new information did not affect the statistics. Three tests originally regarded as part of an announced test with multiple detonations were defined as additional tests according to the TTBT definition and were included in the SIPRI tables.⁵

While the USA has shown openness concerning the nuclear tests it has carried out in recent years, the other nuclear states have not provided similar information, which should be taken into account when comparing the figures for annual totals.

III. The USSR/Russia

Before its test moratorium of the 1980s (August 1985–February 1987) the USSR did not announce any of its tests. The SIPRI statistics were based mainly on information supplied by FOA (see section I). The FOA network of seismic stations has since the 1980s been able to record and locate with a high degree of accuracy the seismic events that have occurred throughout northern Asia. After the resumption of Soviet explosions in February 1987, all the recorded Soviet explosions were announced by the authorities.

In September 1990 the Soviet Ministry of Energy and Industry revealed that since 1949, when the Soviet Union started its testing activities, as many as 714 Soviet nuclear explosions had been carried out (the SIPRI tables then listed 648 Soviet explosions).⁶ It was mainly the number of atmospheric tests conducted before the 1963 Partial Test Ban Treaty, which prohibits testing in the atmosphere, that was considerably higher than was known before. The figure for the number of Soviet underground tests conducted in this period was also somewhat higher.

IV. France

Until 1988, France did not release any information about its nuclear tests—neither about the first 17 tests carried out in the Sahara Desert, in Algeria (then a French possession), nor about the tests conducted in the Tuamotu archipelago in French

⁴ *Nuclear Tests with Unannounced Simultaneous Detonations* (US Department of Energy: Washington, DC, 20 June 1994).

⁵ *Nuclear Detonations Redefined as Nuclear Tests* (US Department of Energy: Washington, DC, 20 June 1994).

⁶ *Krasnaya Zvezda*, 13 Sep. 1990; and *Pravda*, 24 Oct. 1990. See also SIPRI, *World Armaments and Disarmament: SIPRI Yearbook 1991* (Oxford University Press: Oxford, 1991), chapter 2.

Polynesia after 1966. SIPRI statistics on French tests have been based on reports from the New Zealand seismological observatory on Rarotonga, Cook Islands, and the Australian Seismological Centre, Canberra.

The first step towards more openness was taken by France in 1988 when, at the UN Third Special Session on Disarmament, it announced that it had decided to issue an annual statement of the number of tests conducted in the preceding 12 months.⁷ Furthermore, in 1990 President François Mitterrand stated that the French authorities would show greater transparency regarding French testing⁸ and would from then on announce all French tests. Accordingly, subsequent French tests have been reported officially. However, the French nuclear weapon safety tests that have not produced a nuclear yield have not been officially announced (see also section I).

V. China

China has consistently withheld information about its nuclear programme. In June 1994, however, Chinese authorities did make an official announcement that a test had been conducted but did not provide any detailed information such as the yield or location of the test. The 41 nuclear explosions which China has carried out since 1964 have been recorded by various seismic stations in the northern hemisphere.

VI. Nuclear explosions in 1994

Two nuclear tests were conducted in 1994, both by China—on 10 June and 7 October, at the Chinese test site in the Lop Nor area in the north-west of the country. The first explosion was a test of a hydrogen bomb and was estimated by FOA to have a yield in the range of 30–120 kt. The Australian Seismological Centre has suggested that the yield was 40–50 kt. According to FOA, the second Chinese test was about the same size as the first; the Australian estimate of the yield was 40–150 kt.

Experts and the general public had for some time been aware of the preparations in China for both these tests from satellites observations. Neighbouring countries as well as other states issued statements expressing their regret that China had tested in 1994—a year in which all the other nuclear weapon states abided by their unilateral testing moratoria. These moratoria have been in effect for France since April 1992, for Russia since October 1991 and for the USA (and *de facto* therefore also for the UK) since October 1992. The last tests conducted by these states were carried out by France on 15 July 1991, the UK on 26 November 1991, the USA on 23 September 1992 and the USSR on 24 October 1990 (the Russian Federation has not conducted a nuclear test).

⁷ UN document A/S-15/PV.4, 3 June 1988.

⁸ *Le Monde*, 20–21 May 1990.

Table 18A.1. Registered nuclear explosions in 1994

| Date | Origin time (GMT) | Latitude (deg) | Longitude (deg) | Region | Body wave magnitude ^a |
|--------------|----------------------|-------------------|--------------------|---------|-------------------------------------|
| China | | | | | |
| 10 June | 0626.00 | 41. N | 89. E | Lop Nor | 6.3 |
| 7 Oct. | 0326.00 | 41. E | 89. E | Lop Nor | 6.3 |

^a Body wave magnitude (m_b) indicates the size of the event. In order to be able to give a reasonably correct estimate of the yield it is necessary to have detailed information, for example, on the geological conditions of the area where the test is conducted. Giving the m_b figure is therefore an unambiguous way of listing the size of an explosion. m_b data were provided by the Swedish National Defence Research Establishment (FOA).

Table 18A.2. Estimated number of nuclear explosions 16 July 1945–5 August 1963 (the signing of the Partial Test Ban Treaty)

a = atmospheric; u = underground

| Year | USA | | USSR | | UK | | France | | Total |
|------------------------|-----------------|------------|-----------------|----------------------|-----------|----------------|----------|----------|-----------------|
| | a | u | a | u | a | u | a | u | |
| 1945 | 3 | 0 | | | | | | | 3 |
| 1946 | 2 ^a | 0 | | | | | | | 2 |
| 1947 | 0 | 0 | | | | | | | 0 |
| 1948 | 3 | 0 | | | | | | | 3 |
| 1949 | 0 | 0 | 1 | 0 | | | | | 1 |
| 1950 | 0 | 0 | 0 | 0 | | | | | 0 |
| 1951 | 15 | 1 | 2 | 0 | | | | | 18 |
| 1952 | 10 | 0 | 0 | 0 | 1 | 0 | | | 11 |
| 1953 | 11 | 0 | 5 | 0 | 2 | 0 | | | 18 |
| 1954 | 6 | 0 | 9 | 0 | 0 | 0 | | | 15 |
| 1955 | 17 ^a | 1 | 6 ^a | 0 | 0 | 0 | | | 24 |
| 1956 | 18 | 0 | 8 | 0 | 6 | 0 | | | 32 |
| 1957 | 27 | 5 | 18 ^a | 0 | 7 | 0 | | | 57 |
| 1958 | 62 ^b | 15 | 35 | 0 | 5 | 0 | | | 117 |
| 1959 | 0 | 0 | 0 | 0 | 0 | 0 | | | 0 ^c |
| 1960 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 ^c |
| 1961 | 0 | 10 | 52 ^a | 1 | 0 | 0 | 1 | 1 | 65 ^c |
| 1962 | 39 ^a | 57 | 71 | 1 | 0 | 2 ^d | 0 | 1 | 171 |
| 1 Jan.– 5 Aug. 1963 | 4 | 25 | 0 | 0 | 0 | 0 | 0 | 2 | 31 |
| Total | 217 | 114 | 207 | 2^c | 21 | 2 | 4 | 4 | 571 |

^a One of these tests was carried out under water.

^b Two of these tests were carried out under water.

^c The UK, the USA and the USSR observed a moratorium on testing in the period Nov. 1958–Sep. 1961.

^d These two tests were conducted jointly with the USA at the Nevada Test Site. They are not included in the column for the USA.

^e The Soviet information released in 1990 did not confirm whether these were underground or atmospheric tests.

Table 18A.3. Estimated number of nuclear explosions 6 August 1963–31 December 1994

a = atmospheric; u = underground

| Year | USA ^a | | USSR/Russia | | UK ^a | | France | | China | | India | | Total |
|----------------|------------------|-----------------|-------------|-----------------|-----------------|-----------|-----------|------------|-----------|-----------|----------|----------|-------------|
| | a | u | a | u | a | u | a | u | a | u | a | u | |
| 6 Aug.–31 Dec. | | | | | | | | | | | | | |
| 1963 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 1 | | | | | 19 |
| 1964 | 0 | 45 | 0 | 10 | 0 | 2 | 0 | 3 | 1 | 0 | | | 61 |
| 1965 | 0 | 38 | 0 | 14 | 0 | 1 | 0 | 4 | 1 | 0 | | | 58 |
| 1966 | 0 | 48 | 0 | 18 | 0 | 0 | 5 | 1 | 3 | 0 | | | 75 |
| 1967 | 0 | 42 | 0 | 17 | 0 | 0 | 3 | 0 | 2 | 0 | | | 64 |
| 1968 | 0 | 56 ^b | 0 | 18 | 0 | 0 | 5 | 0 | 1 | 0 | | | 80 |
| 1969 | 0 | 46 | 0 | 18 | 0 | 0 | 0 | 0 | 1 | 1 | | | 66 |
| 1970 | 0 | 39 | 0 | 14 | 0 | 0 | 8 | 0 | 1 | 0 | | | 62 |
| 1971 | 0 | 24 | 0 | 23 | 0 | 0 | 5 | 0 | 1 | 0 | | | 53 |
| 1972 | 0 | 27 | 0 | 25 | 0 | 0 | 3 | 0 | 2 | 0 | | | 57 |
| 1973 | 0 | 24 ^c | 0 | 17 | 0 | 0 | 5 | 0 | 1 | 0 | | | 47 |
| 1974 | 0 | 22 | 0 | 21 | 0 | 1 | 8 | 0 | 1 | 0 | 0 | 1 | 54 |
| 1975 | 0 | 22 | 0 | 19 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 44 |
| 1976 | 0 | 20 | 0 | 21 | 0 | 1 | 0 | 4 | 3 | 1 | 0 | 0 | 50 |
| 1977 | 0 | 20 | 0 | 23 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 52 |
| 1978 | 0 | 19 | 0 | 29 | 0 | 2 | 0 | 8 | 2 | 1 | 0 | 0 | 61 |
| 1979 | 0 | 15 | 0 | 32 | 0 | 1 | 0 | 9 | 1 | 0 | 0 | 0 | 58 |
| 1980 | 0 | 14 | 0 | 25 | 0 | 3 | 0 | 11 | 1 | 0 | 0 | 0 | 54 |
| 1981 | 0 | 16 | 0 | 21 | 0 | 1 | 0 | 12 | 0 | 0 | 0 | 0 | 50 |
| 1982 | 0 | 18 | 0 | 21 | 0 | 1 | 0 | 9 | 0 | 1 | 0 | 0 | 50 |
| 1983 | 0 | 18 | 0 | 28 | 0 | 1 | 0 | 9 | 0 | 2 | 0 | 0 | 58 |
| 1984 | 0 | 18 | 0 | 29 | 0 | 2 | 0 | 8 | 0 | 2 | 0 | 0 | 59 |
| 1985 | 0 | 17 | 0 | 12 ^d | 0 | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 38 |
| 1986 | 0 | 14 | 0 | 0 ^d | 0 | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 23 |
| 1987 | 0 | 14 | 0 | 26 | 0 | 1 | 0 | 8 | 0 | 1 | 0 | 0 | 50 |
| 1988 | 0 | 15 | 0 | 16 | 0 | 0 | 0 | 8 | 0 | 1 | 0 | 0 | 40 |
| 1989 | 0 | 11 | 0 | 8 | 0 | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 28 |
| 1990 | 0 | 8 | 0 | 1 | 0 | 1 | 0 | 6 | 0 | 2 | 0 | 0 | 18 |
| 1991 | 0 | 7 | 0 | 0 | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 0 | 14 |
| 1992 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 8 |
| 1993 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 1994 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| Total | 0 | 701 | 0 | 506 | 0 | 22 | 42 | 141 | 23 | 18 | 0 | 1 | 1454 |

^a All British tests from 1962 have been conducted jointly with the USA at the Nevada Test Site. Therefore, the number of US tests is actually higher than indicated here.

^b Five devices used simultaneously in the same explosion (a peaceful nuclear explosion, PNE, to develop peaceful uses for atomic energy) are counted here as one explosion.

^c Three devices used simultaneously in the same explosion (a peaceful nuclear explosion, PNE, to develop peaceful uses for atomic energy) are counted here as one explosion.

^d The USSR observed a unilateral moratorium on testing in the period Aug. 1985–Feb. 1987.

Table 18A.4. Estimated number of nuclear explosions 16 July 1945–31 December 1994

| USA ^a | USSR/Russia | UK ^a | France ^b | China | India | Total ^c |
|------------------|-------------|-----------------|---------------------|-------|-------|--------------------|
| 1 032 | 715 | 45 | 191 | 41 | 1 | 2 025 |

^a All British tests from 1962 have been conducted jointly with the United States at the Nevada Test Site. Therefore, the number of US tests is actually higher than indicated here.

^b This total, unlike that for the USA, does not include tests for safety purposes (of which there were 12, not yet identified by date).

^c This total includes tests for safety purposes, irrespective of the yields and irrespective of whether they have caused a nuclear explosion or not.

Sources for tables 18A.1–18A.4

Swedish National Defence Research Establishment (FOA), various estimates; Reports from the Australian Seismological Centre, Bureau of Mineral Resources, Geology and Geophysics, Canberra; New Zealand Department of Scientific and Industrial Research (DSIR), Geology and Geophysics, Wellington; *Krasnaya Zvezda*, 13 Sep. 1990; *Pravda*, 24 Oct. 1990; US Department of Energy (DOE), *Summary List of Previously Unannounced Tests* (DOE: Washington, DC, 1993); US Department of Energy (DOE), *Nuclear Detonations Redefined as Nuclear Tests* (DOE: Washington, DC, 1994); Norris, R. S., Burrows, A. S. and Fieldhouse, R. W., 'British, French and Chinese nuclear weapons', *Nuclear Weapons Databook*, Vol. V (Natural Resources Defense Council (NRDC): Washington, DC, 1994); Assemblée Nationale, *Rapport d'information*, 15 Dec. 1993; and Norris, R. S. and Cochran, T. B., 'United States nuclear tests July 1945 to 31 December 1992', *Nuclear Weapons Databook*, Working Paper NWD 94-1 (Natural Resources Defense Council (NRDC): Washington, DC, 1 Feb. 1994).

19. Chemical and biological arms control

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I. Introduction

In 1994 the attention of the concerned community focused on the progress made in national and international implementation of the Chemical Weapons Convention (CWC). The CWC will enter into force 180 days after the deposit of the 65th instrument of ratification, but not earlier than two years after the Convention opened for signature (i.e., not before 13 January 1995). By the end of 1994 only 19 states parties had ratified the CWC.

This chapter analyses developments in chemical and biological arms control and disarmament in 1994. It focuses on the aspects of implementation of the Convention, new developments with respect to strengthening the Biological Weapons Convention (BWC) and the activities of the United Nations Special Commission on Iraq (UNSCOM).

Section II assesses the achievements of the Preparatory Commission (PrepCom) for the future Organisation for the Prohibition of Chemical Weapons (OPCW), discusses issues that remain to be resolved, and reviews the national implementation process which places on states the responsibility to take administrative and legal measures to ensure national readiness for implementation.

Section III addresses developments in biological weapon (BW) arms control in 1994 which were much influenced by the Special Conference convened in September 1994 on the request of the majority of states parties to the BWC. The process of evaluating new verification measures to strengthen the BW Convention is now institutionalized in an *Ad Hoc* Group, which met for the first time in January 1995.

Section IV outlines the most significant aspect of UNSCOM activities in 1994—the completion of the chemical weapon (CW) destruction programme and the installation of the monitoring and verification regime in Iraq. Information must still be provided by Iraq about its CW and BW programme prior to the 1991 Persian Gulf War.

II. Implementation of the Chemical Weapons Convention

At the January 1993 signing ceremony in Paris there was hope that the CWC would enter into force at the earliest possible date, 13 January 1995. For this to have occurred, 65 states would have had to ratify the CWC and to deposit their instruments of ratification with the Secretary-General of the United

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Nations by July 1994¹ (180 days before the earliest possible date for entry into force²). This did not occur.

There are various reasons for the slow pace of the ratification process. Signatory states are currently in the process of establishing national implementation mechanisms, a process involving legal and administrative measures and often new mechanisms for industry reporting. The CWC is a complex, technically detailed document which may present difficulties for legislators who are not CW experts. It may not have had first priority on the disarmament agendas of some countries, which also may lack the resources for implementation. Russia and the USA, the two largest CW possessors, did not ratify the CWC in 1994; that may also have negatively affected the ratification process for other countries.

Many problems were encountered in setting up the OPCW, the monitoring and verification organization for the Convention. The developing of detailed verification regulations and procedures is complicated by the fact that some of the agreements under the Convention reflect political compromises made during the final stages of the negotiations on the CWC. The PrepCom, however, made steady progress in 1994, and the Provisional Technical Secretariat (PTS), the nucleus of the future Technical Secretariat (TS), was almost completely staffed by the end of 1994.

The 19 states which had ratified the CWC by the end of 1994 possess valuable information about the national implementation process (as required under Article VII), the precondition for ratification. There is evidence that many other signatory states are far advanced in the national implementation process.

The signature and ratification process

By December 1994, 159 states had signed the CWC (only 5 in 1994). The new signatories are: the Bahamas, Chad, Lesotho, Saint Kitts and Nevis, and Tanzania.³ Some countries remain reluctant to sign the Convention, among them some members of the Arab League (including Egypt, Iraq, Libya and Syria)⁴ and North Korea, which is alleged to have a CW programme.⁵ The long-term effectiveness and credibility of the CWC will be questioned if countries about which there is CW proliferation concern do not join the Convention.

In addition to the 19 states which had ratified the CWC by the end of 1994, others were close to finalizing ratification preparations.⁶ The assumption that

¹ As of July 1994 only 9 states had ratified the Convention.

² See Article XXI of the CWC. The text of the CWC is reproduced in SIPRI, *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press: Oxford, 1993), appendix 14A, pp. 735–56.

³ 'List of signatures to and ratifications of the CWC as of 29 August 1994', Preparatory Commission (hereafter PrepCom) document PC/CWC-S.R./1, 30 Aug. 1994; 'List of signatures to and ratifications of the CWC as of 31 October 1994', PrepCom document PC/CWC-S.R./2, 1 Nov. 1994; and 'Report of the Commission', PrepCom document PC-IX/11, 9 Dec. 1994.

⁴ See Stock, T., 'The Chemical Weapons Convention: institutionalization and preparation for entry into force', SIPRI, *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), chapter 17, p. 686.

⁵ See chapter 10 in this volume.

⁶ In his retrospective on 1994 (see 'Report of the Executive Secretary', PrepCom document PC-IX/6, 1 Dec. 1994, p. 1) the Executive Secretary noted: 'It appears that around one third of the required num-

it would be possible to obtain 65 ratifications within 18 months after the CWC was opened for signature was unrealistic; states have needed more time to prepare for national implementation. For example, although Australia's preparations for ratification were well advanced before it signed the CWC, it took approximately 16 months for Australia to ratify the Convention.⁷

The following states, listed according to the regional grouping of the CWC Executive Council,⁸ had ratified the Convention by the end of 1994: Western Europe—Australia, Germany, Greece, Norway, Spain and Sweden; Latin America and the Caribbean—Mexico, Paraguay and Uruguay; Eastern Europe—Albania, Bulgaria and Turkmenistan; Asia—the Cook Islands, Fiji, the Maldives and Sri Lanka; and Africa—Lesotho, Mauritius and the Seychelles. Germany has the most highly developed chemical industry of these states.

At regional seminars and PrepCom meetings other states reported that they are far advanced in their ratification preparations.⁹ It has been estimated that by late spring or early summer 1995 as many as 40 ratifications can be expected.¹⁰ Delays in ratification have been variously attributed to: (a) the fact that the national preparation process was more complicated than originally expected, (b) scepticism about the value of ratification on the part of some states with small chemical industries and little to declare, (c) competition with other domestic legislative priorities, and (d) decisions to wait to ratify until the USA and Russia do so.¹¹

The progress in ratification is also influenced by the behaviour of Russia and the USA. There was hope in mid-1994 that the USA would soon finalize its implementation preparations. In March–June 1994 the Foreign Relations Committee of the US Senate held seven sessions of its ratification hearings on the CWC.¹² By the end of May 1994 the US Arms Control and Disarmament Agency had transmitted the draft legislation for implementing the CWC to Congress,¹³ and hearings were later held in the House of Representatives and the Senate Armed Services Committee. Deputy Secretary of Defense John Deutch testified in August before the Armed Services Committee and perhaps

ber of ratifications will have been deposited by the early New Year [1995]. However, delays in parliamentary action in some of the States having the most significant declarable facilities, make it difficult to predict when the full 65 will be achieved'.

⁷ Mathews, R. J. and McCormack, T. L. H., 'Entry into force of the Chemical Weapons Convention: activities and prospective timetable', *Chemical Weapons Convention Bulletin*, no. 25 (Sep. 1994), pp. 1–6.

⁸ See Chemical Weapons Convention, Article VIII, The Organization: C. The Executive Council.

⁹ Romania announced that it has ratified the CWC and is in the process of arranging for deposit of the instrument of ratification, as is Mongolia. Switzerland has completed the parliamentary ratification process. France expected to finish its parliamentary process by the end of 1994.

¹⁰ Smith, R. J., 'Progress in The Hague: building the Organisation for the Prohibition of Chemical Weapons: quarterly review, no. 8', *Chemical Weapons Convention Bulletin*, no. 26 (Dec. 1994), p. 8; and Mathews, R. J. and McCormack, T. L. H., 'Entry into force of the Chemical Weapons Convention: national requirements and prospective timetable', *Security Dialogue*, vol. 26, no. 1 (1995), pp. 93–107.

¹¹ Smith (note 10).

¹² See '22 March' and '13 April', *Chemical Weapons Convention Bulletin*, no. 24 (June 1994), pp. 20, 23; and '13 May', '17 May', '9 June', '16 June' and '23 June', *Chemical Weapons Convention Bulletin*, no. 25 (Sep. 1994), pp. 15, 16, 20, 22, 23.

¹³ '27 May', *Chemical Weapons Convention Bulletin*, no. 25 (Sep. 1994), p. 17.

summarized the US mood when he noted: 'We are better off with [the CWC] than without it'.¹⁴ He pointed out that: (a) the USA would retain a capacity to retaliate with non-CW against any chemical weapon attack; (b) destruction of the US CW stockpile would be no more complex or costly with the CWC than without it; (c) the CWC is effectively verifiable; (d) important benefits could be gained by controlling chemical weapons with the Convention; and (e) the USA would maintain a robust CW defence capability supported by aggressive intelligence-collection efforts.¹⁵ However, a small group of active US opponents to the Convention questions the verifiability of the CWC and argue that: (a) the CWC 'does not actually ban all CW or production capabilities'; (b) it 'does not require all nations, or even all nations suspected of having dangerous chemical arsenals, to subscribe before it goes into effect'; and (c) under the CWC covert CW production or stockpiling 'cannot be confidently detected or proven'.¹⁶

In October 1994 the 103rd Congress adjourned without a decision by the Senate on ratification of the CWC. Legislation to implement the CWC¹⁷ was not passed and had to be reintroduced in the next Congress. Several developments may have contributed to slowing down the US ratification process, such as growing concern about Russia's compliance with the 1990 Russian-US Bilateral Destruction Agreement¹⁸ and reports alleging that Russia is developing binary CW.¹⁹ In addition, as a result of the US congressional elections in November 1994, Republicans took control of both houses of Congress, and both the Armed Services and Foreign Relations committees have new chairmen, which may lead to a decision to hold new hearings before voting on the CWC,²⁰ thus causing further delay. Political analysts have noted that a more active approach by President Bill Clinton could probably have driven the CWC through the Senate more quickly.²¹

The Committee on International Affairs of the Russian State Duma held hearings on the CWC in March 1994,²² and the head of the Foreign Ministry's

¹⁴ '11 August', *Chemical Weapons Convention Bulletin*, no. 25 (Sep. 1994), p. 30.

¹⁵ 'CW pact seen in "best interests" of world', *Wireless File* (United States Information Service, US Embassy: Stockholm, 15 Aug. 1994), pp. 4-5.

¹⁶ 'Experts vie on Chemical Weapons Convention', *Wireless File* (United States Information Service, US Embassy: Stockholm, 22 Aug. 1994), p. 4.

¹⁷ 'A bill to implement the obligations of the United States under the Convention on the Prohibition of the Development, Production, Stockpiling an Use of Chemical Weapons and on Their Destruction, known as the "Chemical Weapons Convention" and opened for signature and signed by the United States on January 13, 1993', Bill H.R. 4849, 103rd Congress, 2nd session (date of introduction 28 July 1994).

¹⁸ For the text of the Agreement between the United States of America and the Union of Soviet Socialist Republics on Destruction and Non-Production of Chemical Weapons and on Measures to Facilitate the Multilateral Convention on Banning Chemical Weapons, see SIPRI, *SIPRI Yearbook 1991: World Armaments and Disarmament* (Oxford University Press: Oxford, 1991), appendix 14A, pp. 536-39.

¹⁹ 'U.S. approval key to chemical weapons ban', *Wireless File* (United States Information Service, US Embassy: Stockholm, 8 Aug. 1994), pp. 2-3; see also chapter 10 in this volume.

²⁰ Lippman, T. W., 'U.S. reveals "concerns" on chemical arms: White House wary of Russian ability to comply with pacts', *International Herald Tribune*, 12 Dec. 1994, p. 6.

²¹ Krepon, M., 'Bureaucracy, inertia threaten two arms control treaties', *Defense News*, vol. 9, no. 48 (5-11 Dec. 1994), pp. 23-24.

²² See chapter 10 in this volume.

arms control department noted that Russia could be adversely affected if it is not among the first 65 countries to ratify. It was reported that the General Staff expressed support for the CWC at an October 1994 Duma Defence Committee meeting. The main problem for Russia appears to be its CW destruction programme, which lacks funding and has not yet begun to be implemented.²³

A number of benefits accrue to those states which ratify the Convention before entry into force, including the opportunity for nationals from these states to be employed later in the Technical Secretariat.²⁴

Progress in preparation for the OPCW

Work of the Preparatory Commission

The PrepCom was set up in February 1993 to establish the OPCW infrastructure and develop procedures for international implementation of the Convention.²⁵ It will continue its work until after the first conference of the states parties, to be held 30 days after entry into force of the CWC.

In 1994 the PrepCom held plenary meetings in April, June, September and December. It was difficult to achieve the 50 per cent attendance required for a quorum (table 19.1 shows the participation at these meetings), although in December 1994, 90 states attended the plenary meeting. Many smaller states which are politically committed to the CWC and which have either ratified or are close to ratification find it impossible to take part in the work of the PrepCom owing to financial limitations and a lack of specialized expertise and diplomatic resources. They monitor progress in a general way and instead devote their resources to national preparation for implementation.

In the period between the fifth and sixth plenary meeting, December 1993–April 1994, 18 PrepCom Expert Groups continued their work.²⁶ Following discussion in 1993 and as a result of the April 1994 plenary meeting, the number of Expert Groups was reduced²⁷ to simplify work on particular topics, reduce overlapping and improve coordination of activities.

²³ See chapter 10 in this volume.

²⁴ Kurzidem, T., Stock, T. and Sutherland, R. G., 'Perspectives for entry into force of the Chemical Weapons Convention: benefits of early ratification', Paper presented to the Seminar on National Implementation in The Hague, 30 Sep. 1994.

²⁵ See *SIPRI Yearbook 1994* (note 4).

²⁶ Six in Working Group A and 12 in Working Group B. Working Group A includes Administrative and Organizational Matters and Working Group B includes Verification and Technical Cooperation and Assistance. In Working Group A the following Expert Groups conducted work: Staff and Financial Regulations, Transitional Arrangements, OPCW Building OPCW Headquarters Agreement, Data System and Program of Work and Budget; and under Working Group B: Confidentiality, Technical Cooperation and Assistance, Challenge Inspections, Chemical Industry Facilities, Declarations and Model Facility Agreements, Chemical Weapons Production Facilities, Chemical Weapons Storage Facilities, Chemical Weapons Destruction Facilities, Old and Abandoned Chemical Weapons, Equipment, Training, and Safety Procedures. In addition, the Committee on Relations with the Host Country continued its work, meeting 4 times in the intersessional period. See Committee on Relations with the Host Country, 'Report on meetings during the sixth intersessional period', PrepCom document PC-VI/HC/4, 11 Mar. 1994; and Committee on Relations with the Host Country, 'Summary of an additional meeting held 13 Apr. 1994', PrepCom document PC-VI/HC/4.Add.1, 13 Apr. 1994.

²⁷ On 18 Apr. 1994 a new structure with only 10 Expert Groups was introduced. Working Group A has Expert Groups on: (a) Administration, Finance and Personnel, (b) Data Systems, (c) Headquarters

Table 19.1. Attendance at PrepCom plenary sessions of the OPCW in 1994

| Plenary session number and date held | No. of signatory states in attendance | No. of signatory states | Per cent attendance | No. of ratifications |
|--------------------------------------|---------------------------------------|-------------------------|---------------------|----------------------|
| 6, 11–25 Apr. | 79 | 157 | 50.3 | 5 |
| 7, 27–30 June | 79 | 157 | 50.3 | 8 |
| 8, 27 Sep.–1 Oct. | 79 | 157 | 50.3 | 14 |
| 9, 5–9 Dec. | 90 | 159 | 56.6 | 18 |

Source: 'Report of the Commission', PrepCom document PC-VI/22, 15 Apr. 1994; 'Report of the Commission', PrepCom document PC-VII/8, 1 July 1994; 'Report of the Commission', PrepCom document PC-VIII/18, 29 Sep. 1994; and 'Report of the Commission', PrepCom document PC-IX/11, 9 Dec. 1994.

A major development in 1994 was the convening of Specialist Task Forces to undertake detailed technical work such as the development of specifications for inspection equipment and chemical analysis databases.

The efficiency, effectiveness and flexibility of the PrepCom continued to be an issue,²⁸ and the Chairman of the PrepCom and the Executive Secretary were asked to report on PrepCom working methods to the December 1994 plenary meeting.²⁹ Their report analysed the work of the PrepCom and the tasks remaining and proposed changes in methodology and organization to improve its work.³⁰ The report suggested that Working Group A become the Committee of the Whole for Political, Legal and Administrative Issues, that Working Group B become the Committee of the Whole for Technical Cooperation and Assistance and Verification Issues and that both be given greater authority, but these suggestions were not adopted. The report also listed 22 categories of remaining tasks for the PrepCom.³¹ Improving procedures

Agreement, and (d) Program of Work and Budget; Working Group B has Expert Groups on: (a) Challenge Inspections and Alleged CW Use, (b) Chemical Industry Issues, (c) CW and Associated Issues, (d) Confidentiality, (e) Inspection Procedures and (f) Technical Co-operation and Assistance. However, the group on CW and Associated Issues was later divided into CW Issues and Old and Abandoned CW. The Group on Challenge Inspections and Alleged CW Use dealt only with challenge inspection issues. In addition, there is a Group on Training.

²⁸ Some PrepCom delegations tend to block the resolution of issues then later note the lack of resolution of those same issues. Other delegations are lobbying for a kind of 'end-game trading session' for the unresolved PrepCom issues, opening the possibility of weakening certain provisions of the CWC.

²⁹ 'Report by the Chairman of the Commission and the Executive Secretary on improved methods of work of the Commission', PrepCom document PC-IX/8, 2 Dec. 1994.

³⁰ 'Report by the Chairman of the Commission and the Executive Secretary on improved methods of work of the Commission' (note 29), pp. 3–6.

³¹ The topics, selected on the basis of the Paris Resolution, the CWC, the reports of the Expert Groups and consultations with delegations, are: old and abandoned CW, CW, CWPFS, inspection procedures, challenge inspections, health and safety, sampling and analytical procedures, training, chemical industry issues, assistance and protection issues, economic and technological development, confidentiality, approved equipment, model facility agreements and other agreements, information management system, staff policy of the OPCW, financial and budgetary matters, headquarters agreement and accommodation of the organization, elections to the Executive Council, transitional mechanisms, media and public affairs policy, and visa issues, and first conference of the States Parties. See 'Report by the Chairman of the Commission and the Executive Secretary on improved methods of work of the Commission' (note 29), appendix, pp. 7–14.

would be beneficial but what is needed most is political willingness on the part of states parties to reach agreement on the remaining areas of dispute.³²

The 1995 Programme of Work and Budget was adopted at the eighth plenary meeting, in September 1994.³³ The total budget for 1995 is 56.82 million Dutch florins (\$32.5 million).³⁴

The December meeting of the PrepCom set the next meeting for 3–7 April 1995, and a new chairman³⁵ and vice-chairmen were elected for the six-month period starting February 1995.³⁶ The appointment of the Executive Secretary was renewed for 12 months, until 10 February 1996.³⁷

At each 1994 plenary meeting a report on interim work was delivered by the Executive Secretary,³⁸ and progress reports were presented by the Chairman of the PrepCom³⁹ and the chairmen of Working Groups A and B.⁴⁰ In 1994 the PrepCom solved many problems but, as in 1993, progress on verification-related aspects was not as successful as expected. The following discussion presents the major achievements and the issues which remain to be addressed.

The sixth plenary meeting, in April 1994, took decisions on a variety of issues including adopting: (a) criteria for the designation of laboratories by the OPCW;⁴¹ (b) guidelines for the certification of training courses offered by states as part of the General Training Scheme (GTS);⁴² (c) guidelines with respect to the applicability of bilateral/multilateral verification procedures at CW storage facilities;⁴³ (d) the OPCW Health and Safety Policy and Safety

³² 'Report of the Executive Secretary', PrepCom document PC-IX/6, 1 Dec. 1994, p. 2.

³³ Expert Group on Programme of Work and Budget, 'Seventh report', PrepCom document PC-VIII/A/WP. 7.

³⁴ As for fiscal year (FY) 1994 the budget is in 2 parts. Part I budgets Dfl. 27.25 million (\$15.6 million) and Part II budgets Dfl. 29.56 million (\$16.9 million). Part II will be activated when the 65th instrument of ratification has been deposited. This budget is supplemented by \$4.3 million of a special account for the purchase of inspection equipment. The division of the budget into two parts reflects the need for a flexible approach with respect to the unpredictability of entry into force.

³⁵ The new chairman of the PrepCom will be Finn K. Fostervoll of Norway.

³⁶ The vice-chairmen are the representatives of the Czech Republic, Ecuador, Pakistan, South Africa and the USA.

³⁷ 'Report of the Commission', PrepCom document PC-IX/11, 9 Dec. 1994, p. 8.

³⁸ Report of Executive Secretary, 'The intersessional period 17 December 1993 to 10 April 1994', PrepCom document PC-VI/16, 11 Apr. 1994; Report of the Executive Secretary, 'The intersessional period 16 April to 26 June 1994', PrepCom document PC-VII/5, 27 June 1994; Report of the Executive Secretary, 'The intersessional period 4 July to 24 September 1994', PrepCom document PC-VIII/10, 26 Sep. 1994; and Report of the Executive Secretary, 'The intersessional period 3 October to 2 December 1994', PrepCom document PC-IX/6, 1 Dec. 1994, pp. 7–29.

³⁹ 'Report of the Commission', PrepCom document PC-VI/22, 15 Apr. 1994; 'Report of the Commission', PrepCom document PC-VII/8, 1 July 1994; 'Report of the Commission', PrepCom document PC-VIII/18, 29 Sep. 1994; and 'Report of the Commission', PrepCom document PC-IX/11, 9 Dec. 1994.

⁴⁰ 'Report of Working Group A', PrepCom document PC-VI/A/5, 15 Apr. 1994; 'Report of Working Group B', PrepCom document PC-VI/B/8, 15 Apr. 1994; 'Report of Working Group A', PrepCom document PC-VII/A/2, 28 June 1994; 'Report of Working Group B', PrepCom document PC-VII/B/2, 1 July 1994; 'Report of Working Group A', PrepCom document PC-VIII/A/8, 28 Sep. 1994; 'Report of Working Group B', PrepCom document PC-VIII/B/5, 28 Sep. 1994; 'Report of Working Group A', PrepCom document PC-IX/A/3, 7 Dec. 1994; and 'Report of Working Group B', PrepCom document PC-IX/B/4, 7 Dec. 1994.

⁴¹ 'Report of Working Group B', PrepCom document PC-VI/B/8, 15 Apr. 1994, p. 4.

⁴² Expert Group on Training, 'Fourth interim report', PrepCom document PC-VI/B/WP.7, 11 Feb. 1994.

⁴³ Expert Group on Chemical Weapons Storage Facilities, 'Second interim report', PrepCom document PC-VI/B/WP.9, 23 Feb. 1994.

Policy of the Preparatory Commission;⁴⁴ (e) a request to the UN Secretary-General, as the depositary of the CWC, to correct clerical errors in the authentic text of the Convention in the various languages;⁴⁵ (f) a programme of requirements for the future permanent OPCW building;⁴⁶ (g) a security policy for the OPCW Data System,⁴⁷ including a confidentiality classification system and provisions for applying the confidentiality system to PrepCom data; (h) Financial and Staff Rules and Regulations;⁴⁸ (i) guidelines for verification activities at CW destruction facilities;⁴⁹ and (j) an understanding on matters related to chemical industry facilities ('risk assessment of a Schedule 2 plant site', 'frequency, duration, and intensity of inspections' and 'verification of mixed plant sites').⁵⁰

By mid-1994 progress was achieved on the following: (a) adopting general and specific operational requirements for inspection equipment,⁵¹ (b) acquiring a small standard laboratory designed for receiving and handling small quantities or diluted solutions of Schedule 1 chemicals,⁵² (c) creating a draft model of bilateral agreements concerning the procurement of assistance⁵³ and a list of categories of information on assistance that could be made available by states parties,⁵⁴ (d) setting up an understanding on several chemical industry-related issues,⁵⁵ (e) outlining criteria for inspection frequency and

⁴⁴ Expert Group on Safety Procedures, 'Third report', PrepCom document PC-VI/B/WP. 10, 25 Feb. 1994.

⁴⁵ Report of the Executive Secretary, 'Clerical errors in the certified copy of the Convention', PrepCom document PC-VI/7* and Corr.1, 18 Mar. and 22 Mar. 1994.

⁴⁶ Expert Group on the OPCW Building, 'Final report', PrepCom document PC-VI/A/WP.8, 25 Feb. 1994.

⁴⁷ Expert Group on Data Systems, 'Fourth report', PrepCom document PC-VI/A/WP.10, 11 Mar. 1994, annex I and II.

⁴⁸ Note by the Executive Secretary, 'Financial rules of the Provisional Technical Secretariat for the Preparatory Commission for the Organisation for the Prohibition of Chemical Weapons', PrepCom document PC-VI/A/3, 25 Mar. 1994; and Note by the Executive Secretary, 'Staff rules of the Provisional Technical Secretariat for the PrepCom for the Organisation for the Prohibition of Chemical Weapons', PrepCom document PC-VI/A/2, 18 Mar. 1994.

⁴⁹ Expert Group on Chemical Weapons Destruction Facilities, 'Third report', PrepCom document PC-VI/B/WP.14, 11 Mar. 1994.

⁵⁰ 'Report of the Commission', PrepCom document PC-VI/22, 15 Apr. 1994, p. 5.

⁵¹ Expert Group on Inspection Procedures, 'Report', PrepCom document PC-VII/B/WP.5, 6 May 1994, appendices 1 and 2; and Expert Group on Inspection Procedures, 'Second report', PrepCom document PC-VII/B/WP.10, 22 June 1994.

⁵² See 'Report of the Commission', PrepCom document PC-VII/8, 1 July 1994, p. 3. The laboratory is to be equipped with items identified by the Expert Group on Equipment (Expert Group on Equipment, 'Second interim report', PrepCom document PC-V/B/WP.7, 26 Oct. 1993).

⁵³ Expert Group on Technical Cooperation and Assistance, 'Fourth report', annex A, 'Draft model bilateral agreement concerning the procurement of assistance', PrepCom document PC-VII/B/WP.6, 20 May 1994.

⁵⁴ The lists are: (a) indicative list of categories of information on assistance that could be made available by states parties; (b) list of some categories of information for the data bank on protection; and (c) content of the basic course for National Authorities personnel. See Expert Group on Technical Cooperation and Assistance, 'Fourth Report', PrepCom document PC-VII/B/WP.6, 20 May 1994, annexes B, C and D.

⁵⁵ 'Report of the Commission', PrepCom document PC-VII/8, 1 July 1994, p. 4; the understanding included: (a) the restrictive reading of the scope of the term 'alkyl', (b) treatment of activities of sub-distribution, packing and waste disposal, (c) procedures for reporting changes to annual declarations, (d) an understanding in relation to Part IX of the Verification Annex, (e) the treatment of mixed plants, and (f) the transfer of Schedule 1 chemicals. See Expert Group on Chemical Industry Issues, 'Fourth Report', PrepCom document PC-VII/B/WP.7, 25 May 1994.

duration at CW storage facilities,⁵⁶ and (f) establishing general understandings on temporary conversion of CW production facilities (CWPF) to CW destruction facilities.⁵⁷ Additionally, the PrepCom provisionally approved the OPCW Procedures for Breaches and Alleged Breaches of Confidentiality⁵⁸ and Procedures for the Release of Information by the OPCW.⁵⁹

Limited or no progress was made on issues related to verification, such as: (a) old and abandoned CW; (b) certain chemical industry issues including the interpretation of 'production by synthesis'; (c) confidentiality issues (e.g., those related to former TS staff) and the related matter of how to implement the obligation on states parties to prosecute breaches of confidentiality; (d) permanent conversion of CWPF; (e) CW destruction issues; (f) costs of verification under Article IV (on CW); and (g) Article V (on CW destruction facilities); and (h) challenge inspection.⁶⁰

At the September 1994 plenary meeting only a few decisions were taken. The Finnish offer of computer hardware, software and the Verify⁶¹ analytical database was accepted.⁶² A special account for procurement of inspection and laboratory equipment was opened.⁶³ Agreement was reached on procedures for inspection of approved equipment by the inspected state party⁶⁴ and the use of such equipment in on-site inspections.⁶⁵ Few decisions related to Working Group B (Verification and Technical Cooperation and Assistance) were made at the plenary meeting in December 1994.⁶⁶

⁵⁶ As outlined in paragraph 9 of Expert Group on Chemical Weapons Storage Facilities, 'First interim report', annex, PrepCom document PC-V/B/WP.13, 26 Nov. 1993, pp. 56; and Expert Group on Chemical Weapons Storage Facilities, 'First interim report', PrepCom document PC-V/B/WP.13, appendix B, 26 Nov. 1993, pp. 24–25.

⁵⁷ Expert Group on Chemical Weapons and Associated Issues, 'Report', PrepCom document PC-VII/B/WP.9, 3 June 1994. The Expert Group developed guidelines for information submitted to the OPCW on the temporary conversion and subsequent verification of CWPFs. The Verification Annex of the CWC contains the provision that converted CWPFs shall be destroyed not later than 10 years after entry into force of the CWC.

⁵⁸ Expert Group on Confidentiality, 'Third Report', annex II, 'OPCW procedures for breaches and alleged breaches of confidentiality', PrepCom document PC-VII/B/WP.8, 8 June 1994, pp. 10–17.

⁵⁹ Expert Group on Confidentiality, 'Third report', annex I, 'Procedures for the Release of Information by the OPCW', PrepCom document PC-VII/B/WP.8, 8 June 1994, pp. 6–9.

⁶⁰ However, some delegations consider that there is already sufficient detail in Part X of the Verification Annex (on challenge inspections) to enable the conducting of challenge inspections. The PrepCom should therefore not further develop more detailed provisions. Other delegations are keen on developing detailed inspection procedures to make challenge inspections more routine and predictable.

⁶¹ 'Perspectives for the construction of an information system for the OPCW', PrepCom document PC-III/A/WP.1, 28 Apr. 1993.

⁶² Expert Group on Data Systems, 'Eighth report', PrepCom document PC-VIII/A/WP.6, 24 Aug. 1994.

⁶³ The meeting decided to transfer Dfl. 7.59 million (\$4.34 million) from the 1994 General Fund into this account. See 'Report of the Commission', PrepCom document PC-VIII/18, 29 Sep. 1994, p. 8.

⁶⁴ Expert Group on Inspection Procedures, 'Third report', attachment 2, 'Procedures for the inspection by the inspected state party at the point of entry/point of exit (POE) of approved equipment carried by the inspection team', PrepCom document PC-VIII/B/WP.2, 15 July 1994, pp. 62–64.

⁶⁵ Expert Group on Inspection Procedures, 'Third report', attachment 3, 'The use of approved equipment during on-site inspections', PrepCom document PC-VIII/B/WP.2, 15 July 1994, pp. 65–66.

⁶⁶ The PrepCom adopted: (a) the understanding concerning recycled Schedule 2 chemicals and the meaning of 'production' in the context of Schedule 1 production facilities covered under Article VI (see Expert Group on Chemical Industry Issues, 'Sixth report', PrepCom document PC-VIII/B/WP.10, 14 Sep. 1994, pp. 1–2); (b) the document 'Proficiency testing leading to certification of "designated laboratories"' (see 'Expert Group on Inspection Procedures, 'Fifth report', attachment, Preparatory Commission document PC-IX/B/WP.3, pp. 10–13, 25 Oct. 1994); and (c) the revised curriculum for courses

In 1994 debate continued on CWC Article XI (Economic and Technological Development); the article specifies that parties shall 'undertake to facilitate, and have the right to participate in, the fullest exchange of chemicals, equipment and scientific and technical information relating to the development and application of chemistry for purposes not prohibited under this Convention'. Controversy on this issue is related both to the position of some states, such as Iran, that Article XI should ensure the 'free and unhampered transfer of chemicals' for peaceful purposes and to the position that future CWC parties are bound under Article I not to 'assist . . . anyone to engage in any activity prohibited to a State Party' and that states have the right to determine their own national export policies (the position of the Australia Group).⁶⁷ At the sixth plenary meeting a statement was made by the Asian Group (except Japan) on Article XI, expressing the view that the continuation of many Australia Group export controls is inconsistent with Article XI and that the obligation to eliminate export controls must be 'implemented in its entirety from the moment of [CWC] entry into force'.⁶⁸ This position was endorsed in later plenary meetings by states in Africa, Asia and Latin America. Japan⁶⁹ stated that it was 'not in the position to fully associate itself with this statement of the Asian Group', as did South Korea.⁷⁰ Disagreement on Article XI is likely to continue. However, in the latter part of 1994 debate focused instead on development of an Article XI database to facilitate the exchange of information related to economic and technological development.⁷¹

The issue of challenge inspections remained controversial, with the Asian Group stating that this inspection tool should be used 'cautiously' and that 'only by exercising complete objectivity and prudence' can the CWC be 'implemented without placing an unbearable financial burden upon states parties that could jeopardize its universality'.⁷² The Asia Group and other regional groups⁷³ expressed concern about the efficiency of work in The Hague and requested greater transparency in the PTS recruitment process.

for personnel of National Authorities (see Expert Group on Technical Cooperation and Assistance, 'Sixth report', annex, 'Guidelines for the development of revised content of a basic course for personnel of national authorities', PrepCom document PC-IX/B/WP.4, 9 Nov. 1994, pp. 3-8).

⁶⁷ Herby, P., 'Progress in The Hague: building the Organisation for the Prohibition of Chemical Weapons, quarterly review no. 6', *Chemical Weapons Convention Bulletin*, no. 24 (June 1994), pp. 8-9. The work of the Australia Group is outlined in chapter 15 in this volume.

⁶⁸ 'Report of the Commission', PrepCom document PC-VII/8, 1 July 1994, pp. 7-8.

⁶⁹ Japan is a member of the Australia Group and during the Geneva negotiations belonged to the Western Group.

⁷⁰ 'Report of the Commission' (note 68), p. 8.

⁷¹ This was based on the PrepCom's request for a PTS study on that issue (see Note by the Executive Secretary, 'Request for data on types of information to be contained in a possible database to be established under Article XI', PrepCom document PC-IX/B/1, 13 Oct. 1994) and a paper submitted by Australia (see 'Non-paper: information for Article XI database', 6 Nov. 1994).

⁷² 'Report of the Commission' (note 68), p. 8.

⁷³ See for example: 'Statement made by Poland on behalf of the Eastern European Group, Report of the Commission', PrepCom document PC-VII/8, 1 July 1994, p. 9.

Achievements in 1994

The Executive Secretary presented a retrospective report on 1994 to the ninth plenary meeting,⁷⁴ noting areas where progress had been made and highlighting the unresolved issues. Working Group B was evaluated as follows: 'In the area of work related to defining the procedures for verification and technical co-operation the year has been a less successful story'.⁷⁵ However, progress was made on training, equipment for inspections, analytical issues, confidentiality, industry declarations and verification procedures. Limited progress was made on areas related to chemical weapons: old and abandoned CW,⁷⁶ CWPfFs, CW development facilities and model facility agreements.⁷⁷ Most unresolved chemical weapon-related issues will have to be dealt with by balancing practicality against effective verification. A comprehensive approach will be costly and require a significant investment of personnel by the OPCW. In some cases resolution of issues, such as the conversion of former CWPfFs, will depend on processes unrelated to the PrepCom, which is highly dependent on the US–Russian Bilateral Destruction Agreement.⁷⁸ Realistic compromises are the only way to solve the remaining issues.

The major achievement of 1994 were the following:

1. The General Training Scheme (GTS) for inspectors and inspection assistants was elaborated with the development of modules and sub-modules. The offers from states parties to contribute to the GTS now meet most requirements.
2. Agreement was reached on most of the approved inspection equipment (operational requirements and technical specifications).
3. The PrepCom provided funding for procuring laboratory and inspection equipment in 1995.
4. Most of the preparatory work for establishing the OPCW Laboratory and Equipment Store was completed and initial personnel were recruited.
5. The PrepCom approved criteria and developed methodology for the network of designated laboratories and the first inter-laboratory comparison test,⁷⁹ coordinated by the Secretariat, was conducted in 1994.⁸⁰
6. The draft OPCW Health and Safety Policy was adopted by the PrepCom, and draft Health and Safety Regulations were compiled.

⁷⁴ 'Report of the Executive Secretary' (note 32).

⁷⁵ 'Report of the Executive Secretary' (note 32), p. 2.

⁷⁶ The debate centres on the 'usability' concept and the required level of verification for old CW. The option to apply a more stringent verification approach would drastically increase the costs for verification by the OPCW and add to the number of inspectors required.

⁷⁷ 'Report of the Executive Secretary' (note 32), p. 2.

⁷⁸ See note 18; and chapter 10 in this volume.

⁷⁹ Note by the Executive Secretary, 'First inter-laboratory comparison test co-ordinated by the Secretariat', PrepCom document PC-IX/B/2, 1 Nov. 1994.

⁸⁰ The second inter-laboratory comparison test was planned for Jan.–Feb. 1995; 25 states were to take part, among them 9 for the first time. Evaluation of the results were to be made by the Finnish Institute for the CWC.

7. The draft OPCW Policy on Confidentiality was finalized and is pending adoption by the PrepCom.⁸¹

8. Procedures for inspections at chemical industry facilities and related declaration requirements and declaration forms under Article VI were given final consideration and await approval by the PrepCom.

In 1994 the Verification Division of the PTS provided background documentation and initial drafts on verification-related issues. Planning for future inspections after entry into force of the Convention continued, and the initial estimate of the number of Schedule 2 and 3 facilities to be declared, and which will later be subject to inspection, will have to be adjusted upwards.⁸²

The Headquarters Agreement of the Preparatory Commission⁸³ and the Model Bilateral Agreement Concerning the Procurement of Assistance entered into force in 1994.⁸⁴ Work continued on the actions to be taken in the event of breaches or alleged breaches of confidentiality,⁸⁵ on models for facility agreements, the OPCW Headquarters Agreement, the scope of the host country bid, OPCW Staff Policy and the OPCW Staff Regulations and Rules.⁸⁶

Despite acceptance of the Finnish offer for the OPCW's Information Management System (IMS) as an independent installation in the OPCW Laboratory, disagreement among several states on the level of security for the future IMS delayed a final decision on the system.⁸⁷

The Committee on Relations with the Host Country conducted negotiations with the Netherlands on the permanent OPCW building⁸⁸ and a draft decision⁸⁹ on long-term accommodation for the OPCW was tabled at the ninth plenary meeting.⁹⁰ A tailor-made building will be constructed for the OPCW since

⁸¹ The draft OPCW Classification System, part of the OPCW Policy on Confidentiality, was approved by the PrepCom at the Eighth Plenary Meeting and is now the classification system for confidential information. See Expert Group on Confidentiality (note 59).

⁸² The basic assumption for Schedule 2 facilities was greater than 300 and for Schedule 3 facilities 400. See 'Budget and programme of work 1995', PrepCom document PC-VIII/A/WP.1 (1), attachment 2, 15 July 1994, p. 34.

⁸³ 'Agreement between the Preparatory Commission for the Organisation for the Prohibition of Chemical Weapons and the Kingdom of the Netherlands concerning the Headquarters of the Commission', PrepCom document PC-VI/6, 23 Feb. 1994.

⁸⁴ See note 53.

⁸⁵ 'Discussion paper by the Executive Secretary: breaches of confidentiality: liability for damages and prosecution through penal action', PrepCom document PC-X/B/WP.3, 21 Dec. 1994.

⁸⁶ 'Report of the Executive Secretary' (note 32), annex 2, 1 Dec. 1994, p. 4.

⁸⁷ However, the ninth Plenary Meeting decided to 'unfreeze' all Information System Branch personnel appropriations and several related budget items to enable the Secretariat to perform its functions related to the IMS in 1995.

⁸⁸ Committee on Relations with the Host Country, 'Summary of meetings, 26–28 October 1994', PrepCom document PC-IX/HC/3, 28 Oct. 1994; Committee on Relations with the Host Country, 'Summary of meetings during the intersessional period 5 October–7 November 1994', PrepCom document PC-IX/HC/5, 7 Nov. 1994; and Committee on Relations with the Host Country, 'Summary of meetings 17 and 25 November 1994', PrepCom document PC-IX/HC/7, 25 Nov. 1994.

⁸⁹ Note by the Executive Secretary, 'Committee on Relations with the Host Country, Chairman's draft decision on long-term accommodation for the OPCW', PrepCom document PC-IX/HC/8, 25 Nov. 1994.

⁹⁰ In 1992 the Netherlands agreed to provide a permanent OPCW building. However, it took the PrepCom special expert group until autumn 1994 to negotiate this issue with the host country and reach agreement.

available buildings are not suitable;⁹¹ the design of the building and the site, Catsheuvel in The Hague, were chosen.

In 1994 the PTS regularly revised the draft Declaration Handbook for industrial declarations⁹² based on comments from states. The section related to Schedule 1 chemicals and facilities⁹³ was amended; drafts of the sections on CW-related declarations, except for the CWPF section, were ready by the end of 1994.

Financial matters

As in 1993 payment of contributions to the PrepCom, which is financed based on a scale set by the Expert Group on the Programme of Work and Budget, remained an area of contention. As of 15 November 1994, 60 states (42 per cent of the total number, responsible for 3.4 per cent of the assessed total) had not made their 1993 payments; 82 states had made full or partial payment.⁹⁴ For Part I of the 1994 budget 60 states had made full or partial payment (corresponding to 83.1 per cent of the total for Part I).⁹⁵ Many of the same states did not meet their financial responsibilities in 1993.⁹⁶ However, as of 15 November 1994 the overall financial situation of the PrepCom was positive owing to savings and because inspection hardware had not been procured.⁹⁷

The Provisional Technical Secretariat

The institution-building process for the first phase of establishing the PTS was essentially concluded by the end of 1994. Under the 1994 budget and adjustments to the 1995 budget, 118 posts will be filled by the end of the first quarter of 1995; 110 posts were filled as of 1 November 1994⁹⁸ with staff from 44 nations. The number of staff needed for the first year after entry into force of the CWC was set and the agreed budget for Phase II allows for recruitment of two-thirds of the inspectors and most of the support staff in the 180 days prior to entry into force, resulting in a total of approximately 450 staff members six months later.⁹⁹ In mid-1994 Financial and Staff Rules were estab-

⁹¹ The PrepCom meeting decided that a decision on the draft proposal should be a 'silent procedure'; states must deposit formal objections by 13 Jan. 1995. See 'Report of the Commission' (note 37), p. 6.

⁹² Schedule 2 and 3 chemicals and facilities and other chemical production facilities corresponding to Parts VII, VIII and IX of the Verification Annex.

⁹³ Corresponds to Part VI of the Verification Annex of the CWC.

⁹⁴ 'Report of the Executive Secretary' (note 32), annex 2, 1 Dec. 1994, p. 24.

⁹⁵ 'Report of the Executive Secretary' (note 32), p. 25.

⁹⁶ The Executive Secretary sent formal letters to states whose financial contribution remain unpaid.

⁹⁷ 'Report of the Executive Secretary' (note 32), annex 1, 1 Dec. 1994, p. 21.

⁹⁸ *OPCW Synthesis*, no. 10 (15 Nov. 1994).

⁹⁹ See note 32.

lished.¹⁰⁰ The PTS had received more than 1100 applications for inspector and inspection assistant training by the end of 1994.¹⁰¹

PTS outreach activities

In 1994 the PTS continued to organize regional seminars with host governments as part of its outreach strategy and to increase the political momentum for implementation and ratification. Five seminars were held¹⁰² in Bangkok, Thailand, on 8–10 May;¹⁰³ in Brno, the Czech Republic, on 1–2 June;¹⁰⁴ in Lima, Peru, on 1–3 September;¹⁰⁵ in Pretoria, South Africa, on 12–14 September¹⁰⁶ and in Jakarta, Indonesia, on 28–30 November.¹⁰⁷ The seminars functioned as forums for countries in five regions (Asia, Eastern European, Latin America and the Caribbean, and Africa), enabled the exchange of views and experience in national implementation undertakings, provided information on the latest developments in the work of the PrepCom and the PTS, and involved Chemical Manufacturers Associations (CMAs) and the chemical industry in CWC-related issues.

At the seminars a few non-governmental organizations (NGOs) and research institutes, such as the Harvard–Sussex Program on CBW Armament and Arms Limitation and SIPRI, presented their views on particular aspects of CWC implementation and related industry questions. The next phase of regional seminars might usefully devote time to tailor-made and problem-oriented exercises and to problems related to the chemical industry and trade in chemicals that are specific to a region. This would require a new approach to the seminars by the PTS and the more active involvement of NGOs and CMAs.

¹⁰⁰ See Note by the Executive Secretary, 'Financial rules of the Provisional Technical Secretariat for the Preparatory Commission for the Organisation for the Prohibition of Chemical Weapons', PrepCom document PC-VI/A/3, 25 Mar. 1994; and Note by the Executive Secretary, 'Staff rules of the Provisional Technical Secretariat for the Preparatory Commission for the Organisation for the Prohibition of Chemical Weapons', PrepCom document PC-VI/A/2, 18 Mar. 1994.

¹⁰¹ 'Report of the Executive Secretary' (note 32), p. 10. The Secretariat had reviewed approximately 75% of the applications by mid-Nov. 1994; of these, approximately half are from individuals who lack requisite qualifications. Applicants are needed with experience primarily in chemical industry issues (e.g., familiar with all aspects of production, processing and consumption of chemicals; with operational accounting, materials management, purchasing and shipping operations, procurement, warehousing and distribution or with process measurement and unit operation control). In addition, inspectors with an analytical chemistry background and CW and/or munitions background were needed. Owing to a shortage of qualified applicants for a number of key specialities, the deadline for applications was extended to 31 Jan. 1995.

¹⁰² In addition, another seminar on national implementation was conducted in Sep. 1994 in The Hague under the auspices of the PTS and the PrepCom.

¹⁰³ Thailand, 'Regional seminar on national implementation of the Chemical Weapons Convention, Bangkok, Thailand, 9–10 May 1994', PrepCom document PC-VII/B/WP.14, 29 June 1994.

¹⁰⁴ Czech Republic, 'Regional seminar on an exchange of practical experience with the process of national implementation of the Chemical Weapons Convention, Brno, Czech Republic, 1–2 June 1994', PrepCom document PC-VII/B/WP.13, 28 June 1994.

¹⁰⁵ 'Regional seminar on the national implementation of the Chemical Weapons Convention (CWC) government and industrial issues, Lima, Peru, 1–3 Sep. 1994', PrepCom document PC-VIII/8, 22 Sep. 1994.

¹⁰⁶ South Africa, 'African regional seminar on national implementation of the Chemical Weapons Convention', PrepCom document PC-VIII/B/WP.13, 27 Sep. 1994.

¹⁰⁷ Indonesia, 'Asia Pacific seminar on the national implementation of the Chemical Weapons Convention, Jakarta, 29–30 Nov. 1994', PrepCom document PC-IX/B/WP.13, 8 Dec. 1994.

There is no longer a need to inform signatory states of their basic obligations under the CWC. Instead, states need support to identify declarable activities under Article VI and to set up their National Authority and implementation legislation. In November 1994 the PrepCom established the Trust Fund for Regional Seminars to assist in funding future regional seminars.¹⁰⁸

In 1994 the PTS public outreach strategy focused on basics. In addition to *OPCW Synthesis and Press Releases*, the new *Occasional Papers* compiled information and background material from regional seminars.¹⁰⁹ The PrepCom worked on an OPCW Media and Public Affairs Policy document which will serve as the basis for OPCW contacts with the media and general public.¹¹⁰

In order to meet the concerns of the chemical industry and more closely involve it in activities in The Hague a second combined meeting of the PrepCom expert group on chemical industry facilities was held with industry representatives on 27–28 April 1994.¹¹¹

In July and August 1994 two courses were held for the personnel of National Authorities.¹¹² Revised guidelines were later set up for such courses.¹¹³ In November 1994 India announced that it will hold a pilot training course for Module 1 of the GTS in 1995.¹¹⁴ Other countries, including China, the Czech Republic, Germany, Japan, Romania, Russia, the Slovak Republic, Switzerland and the USA, will also offer training courses for inspectors.¹¹⁵

¹⁰⁸ Contributions to this trust fund were received from the governments of Norway and Sweden, from the Harvard–Sussex Program and the International Support Centre. See Note by the Executive Secretary, ‘Trust fund for regional seminars’, PrepCom document PC-IX/2, 18 Nov. 1994.

¹⁰⁹ In addition, the PTS began producing *Information Series B*, which is a series of papers on chemical industry-related issues.

¹¹⁰ ‘Report on consultations on OPCW media policy’, PrepCom document PC-VIII/A/WP.5, 26 Aug. 1994; and ‘Report on consultations on OPCW media and public affairs policy’, PrepCom document PC-IX/A/WP.7, 18 Nov. 1994.

¹¹¹ Note by the Executive Secretary, ‘Second combined meeting of the Expert Group on Chemical Industry Facilities and industry representatives’, PrepCom document PC-VI/B/7, 7 Apr. 1994. In preparation for this meeting a number of fact sheets on specific industry verification topics were prepared by the PTS. They contained proposals for possible solutions to disputed verification aspects under the schedules and discrete organic chemical (DOC) verification.

¹¹² The two courses, organized by the Netherlands in cooperation with the PTS, were held on 18 July–12 Aug. and 25 July–5 Aug. at the Instituut Defensie Leergangen in Rijswijk, the Netherlands. The courses were attended by 74 participants from 43 states. See Report of the Executive Secretary, ‘The intersessional period 4 July to 24 September 1994’, PrepCom document PC-VIII/10, 26 Sep. 1994, p. 8.

¹¹³ Expert Group on Technical Cooperation and Assistance, ‘Sixth report’, annex, ‘Guidelines for the development of revised content of a basic course for personnel of National Authorities’, PrepCom document PC-IX/B/WP.4, 9 Nov. 1994, pp. 3–8.

¹¹⁴ This training course for a total of 20 participants was scheduled for 23 Jan.–3 Mar. 1995 and open to all states. See India, ‘Offer of pilot module one training course, 23 January–3 March 1995’, PrepCom document PC-IX/B/WP.8, 24 Nov. 1994.

¹¹⁵ Switzerland has offered to train 60 inspectors in industry verification for the future OPCW. See Switzerland, ‘Swiss training programme for OPCW inspectors (industrial verification) SWISSPRO’, PrepCom document PC-VII/B/WP.12, 27 June 1994. For detailed information on the offered training courses see Expert Group on Training, ‘Fifth report’, annex, ‘Tabular summaries of information about national offers for OPCW programme’, PrepCom document PC-VIII/B/WP.7, 31 Aug. 1994, pp. 4–7.

National implementation of the CWC

Of the states which have ratified the CWC only a few have made public their national implementation legislation.¹¹⁶ However, the 1994 regional seminars provided information about the national implementation preparations which are under way in several signatory states.

The approaches of states to implementation are highly individual. In addition to the organizational set-up of a state's National Authority, other obligations must be met in implementing the CWC. A state without chemical weapons, the 'normal case', must: (a) make sure that its domestic legislation ensures the discharge of its responsibilities, (b) fulfil declaration obligations under Articles III and VI, (c) be prepared to receive inspections (routine and challenge inspections), (d) contribute to Article X obligations with respect to assistance and protection, (e) make sure that requirements are observed regarding confidential information received by it, and (f) ensure that its National Authority personnel are well trained as regards their rights and obligations.¹¹⁷

Two basic models for the National Authority are generally accepted: (a) designating an existing agency as the National Authority; or (b) establish-

¹¹⁶ By the end of 1994 national implementation legislation was available from the following states which had ratified the Convention: Australia, Chemical Weapons (Prohibition) Act 1994, no. 26 of 1994; Germany, Ausführungsgesetz zu dem Übereinkommen vom 13. Januar 1993 über das Verbot der Entwicklung, Herstellung, Lagerung und des Einsatzes chemischer Waffen und über die Vernichtung solcher Waffen (Ausführungsgesetz zum Chemiewaffenübereinkommen-CWÜAG) [Act Implementing the Convention of 13 January 1993 on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (Act Implementing the Chemical Weapons Convention-CWIA)], *Bundesgesetzblatt [Federal Law Gazette]*, Teil I [part 1], Z5702 A, 1994, Ausgegeben zu Bonn am [Issued at Bonn on] 9 Aug. 1994, Nr. 52, pp. 1954-60; and Norway, Lov om gjennomføring av Konvensjonen om forbud mot utvikling, produksjon, lagring og bruk av kjemiske våpen samt oydelegging av dei [Act No. 10 of May 1994 relating to the implementation of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction], Utenriksdepartementet, Avd. I 1994, Nr. 7. Sweden also introduced a set of amendments to laws addressing its obligations with respect to inspections, declarations, penal legislation and immunities and privileges: Lag om inspektioner enligt Förenta nationernas konvention om förbud mot kemiska vapen [Act concerning Inspections in accordance with the United Nations Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction], utfärdad den 24 mars 1994, SFS 1994:118; Lag om ändring i brottsbalken [Act on Changes in the Penal Code], utfärdad den 24 mars 1994, SFS 1994:119; Lag om ändring i lagen (1976:661) om immunitet och privilegier i vissa fall [Act on Changes in the Law on Immunities and Privileges in Certain Cases], utfärdad den 24 mars 1994, SFS 1994:120; Lag om ändring i lagen (1991:341) om förbud mot utförsel av vissa produkter som kan användas i massförstörelsesyfte, m. m. [Act on Changes in the Law Banning the Export of Certain Items which could be used for Mass Destruction], utfärdad den 24 mars 1994, SFS 1994:121; Lag om ändring i lagen (1992:1300) om krigsmateriel [Act on Changes in the Law on War Material], utfärdad den 24 mars 1994, SFS 1994:122; Förordning om ändring i förordningen (1992:1303) om krigsmateriel [Ordinance on Changes in the Ordinance on War Material], utfärdad den 26 maj 1994, SFS 1994:534; and Förordning om ändring i förordningen (1991:343) om förbud mot utförsel av vissa produkter som kan användas i massförstörelsesyfte, m. m. [Ordinance on Changes in the Ordinance Banning the Export of Certain Items which could be used for Mass Destruction], utfärdad den 26 maj 1994, SFS 1994:535.

¹¹⁷ 'Structure and functions of the National Authority as well as important initial aspects', Paper by PTS presented to the Regional Seminar on the National Implementation of the Chemical Weapons Convention, Jakarta, Indonesia, 28-30 Nov. 1994; and Sutherland, R., Kurzidem, T. and Stock, T., 'The role and function of a national inspector in the National Authority under the CWC', Paper presented to the Regional Seminar on National Implementation of the Chemical Weapons Convention, Pretoria, South Africa, 12-14 Sep. 1994.

ing a new agency to serve as the National Authority. In light of the responsibilities of the National Authority two options appear preferable: (a) a centralized National Authority with responsibility for all CWC-related issues, and (b) a decentralized approach in which a National Authority serves only as the point of liaison.¹¹⁸

Varying approaches have been taken to the establishment of National Authorities. Australia established a CWC Office.¹¹⁹ Sweden designated its Ministry of Foreign Affairs, in the role of coordinator, as its National Authority. The various compliance tasks will be performed by existing governmental agencies. Germany chose a similar approach;¹²⁰ its National Authority is in the Ministry of Foreign Affairs and serves as a focal point for communication and cooperation between the National Authority and the OPCW and represents the National Authority externally. Declarations will be submitted to the OPCW by the Head of the National Authority, who will also be responsible for the transfer of information from the OPCW. The Minister of Defence will be responsible for the so-called 'military' component (some Schedule 1 activities, escorting international inspectors at military facilities and old and abandoned CW), while the 'civilian' component (all activities related to Article VI) will be the responsibility of the Minister of Economics and the Export Control Office (*Bundesaufsuhramt*) at Eschborn, a subsidiary agency.

A particular requirement for a National Authority under Article VI is related to preparing industrial declarations.¹²¹ Many states do not have a large chemical industry, but there is none the less a need for a comprehensive survey to identify declarable activities. This process must be well planned and the National Authority should work closely with the chemical industry and chemical industry associations. A legal mechanism is needed to ensure that all firms, including private ones, meet the obligation to report relevant information to the National Authority for declaration to the OPCW.¹²²

Article VII of the CWC requires states to provide penal legislation, and a state must specify whether its penal legislation will cover only activities prohibited by the CWC or also other actions that undermine the CWC but which are not explicitly prohibited by it (e.g., impeding the verification process).¹²³

¹¹⁸ Tanzman, E., Zeuli, A. R. and Kellman, B., 'Legal aspects of national implementation of the Chemical Weapons Convention', Paper presented to the Regional Seminar on the National Implementation of the Chemical Weapons Convention, Jakarta, Indonesia, 28-30 Nov. 1994.

¹¹⁹ McCormack, T., 'National implementing legislation for the Chemical Weapons Convention', Paper presented to the Regional Seminar on the National Implementation of the Chemical Weapons Convention, Jakarta, Indonesia, 28-30 Nov. 1994.

¹²⁰ Sutherland, Kurzidem and Stock (note 117).

¹²¹ A useful summary on the declaration requirements is presented in Clagett, D. C., 'Declarations and declarations formats', Paper presented to the Regional Seminar on the National Implementation of the Chemical Weapons Convention, Jakarta, Indonesia, 28-30 Nov. 1994.

¹²² Tanzman, Zeuli and Kellman (note 118).

¹²³ Tanzman, Zeuli and Kellman (note 118).

III. Biological arms control developments

Proliferation in the area of biological and toxin warfare¹²⁴ continues to be seen as a security problem.¹²⁵ Concern about Russian non-compliance continued in 1994 despite a presidential decree forbidding offensive BW activities.¹²⁶ The US Administration was said to be convinced that Russian scientists have not entirely discontinued work on an offensive BW programme.¹²⁷ Others have reached the same conclusion.¹²⁸ These allegations led to US and British inspections¹²⁹ of major BW research centres in Russia in 1992 and 1994 under a 1992 trilateral statement.¹³⁰ The trilateral statement also calls for inspections in the UK and the USA, and Russia conducted such inspections in March 1994 at three non-military biological R&D sites.¹³¹ The results of these visits may have been discussed at the April 1994 first Trilateral Working Group meeting in London, the details of which have not yet been released.¹³² One source cites talks which were held to establish procedures for exchanging visits to military biological facilities.¹³³ In addition, in 1994 the US Arms Control and Disarmament Agency concluded that 'Russia is taking a number of steps that appear to move it toward compliance [with the BWC], including President Yeltsin's April 1992 decree banning offensive activities contravening the BWC, its stated intention to convert some facility to purely commercial activities and permitting visits to suspected BW facilities'.¹³⁴

As a consequence of the perceived BW threat and of lessons from the 1991 Persian Gulf War several governments enhanced their efforts to prevent proliferation and to develop protection against BW attack. The US Department of Defense (DOD) divides counter-proliferation¹³⁵ measures into prevention measures (classic non-proliferation, such as verification of arms control agree-

¹²⁴ Bailey, K. C. (ed.), *Director's Series on [BW] Proliferation* (Lawrence Livermore National Laboratory: Livermore, Calif., 1994).

¹²⁵ Dando, M., *Biological Warfare in the 21st Century: Biotechnology and the Proliferation of Biological Weapons* (Brassey's: London, 1994).

¹²⁶ See chapter 10 in this volume.

¹²⁷ Smith, R. J., 'Russian germ war work seen possibly continuing', *Washington Post*, 8 Apr. 1994, pp. A1, A28.

¹²⁸ Adams, J., *The New Spies: Exploring the Frontiers of Espionage* (Hutchinson: London, 1994), excerpted in *Sunday Times*, 27 Mar. 1994, quoted in *Chemical Weapons Convention Bulletin*, no. 24 (June 1994), p. 21. See also *Chemical Weapons Convention Bulletin*, no. 24 (June 1994), p. 22.

¹²⁹ Between 1992 and Jan. 1994 there were at least 4 visits to non-military biological sites in Russia. See '1 March', *Chemical Weapons Convention Bulletin*, no. 24 (June 1994), p. 17.

¹³⁰ Joint Statement on Biological Weapons by the Governments of the United Kingdom, the United States, and the Russian Federation, 15 Sep. 1992.

¹³¹ '1 March', *Chemical Weapons Convention Bulletin*, no. 24 (June 1994), p. 17.

¹³² Lacey, E. J., 'Tackling the biological weapons threat: the next proliferation challenge', *Washington Quarterly*, vol. 17, no. 4 (autumn 1994), pp. 53-64. According to the British Government the trilateral agreement 'designed to address concerns about Russian non-compliance [with the BWC] only allows for information to be exchanged on a confidential basis. It is not therefore possible to reveal details of information gained through this process'. See 'BW trilateral agreement inspections', *Trust and Verify*, no. 46 (Apr. 1994), p. 1.

¹³³ '26-28 April', *Chemical Weapons Convention Bulletin*, no. 24 (June 1994), p. 26.

¹³⁴ US Arms Control and Disarmament Agency, *Adherence to and Compliance with Arms Control Agreements* (White House: Washington, DC, 23 June 1994).

¹³⁵ 'Non-proliferation' is another term for measures to prevent proliferation and the one favoured by the US State Department.

ments) and protection.¹³⁶ Protection against BW encompasses *inter alia* the development of several passive defence measures against BW including mobile diagnostic laboratories and laser-based detection systems mounted on helicopters, ships and other vehicles to detect the release of biological- and toxin weapon (TW)-bearing clouds by enemy troops.¹³⁷

BW defence activities are attracting more attention, at least in the USA, than a decade ago when the US Biological Defense Research Program was established in reaction to the perceived Soviet BW threat.

'Protection' includes 'military activity, not just self-protection'¹³⁸ and also encompasses forward-defence measures such as 'counter-terrorism' and 'neutralization of CW/BW facilities'.¹³⁹ Consideration of that type of action, even executed 'with minimum collateral damage', creates a new grey area between defensive and offensive activities and may complicate attempts to strengthen the BWC.

Status of the Biological Weapons Convention

Participation

Adherence to the BWC has continued to increase steadily. In 1994, two states acceded to the Convention: Armenia and Bosnia and Herzegovina;¹⁴⁰ 133 states are parties to the BWC as of 31 December 1994.

Confidence-building measures

Participation by states parties in BWC confidence-building measures (CBMs) is disappointing (see table 19.2 for a summary). Since the introduction of the CBMs in 1987, eight rounds of information exchange have taken place. Despite the option of states to submit a so-called 'nil declaration', introduced by the 1991 Third Review Conference of the BWC, participation in the CBMs has not significantly improved. The number of states which participated in the exchange at least once rose from 49 in 1991 to only 64 in 1994.¹⁴¹ In 1994, 6 additional states—Bolivia, Estonia, Fiji, Luxembourg, the Seychelles and Sri Lanka—participated for the first time. Only 9 states have provided information in all eight rounds—Denmark, Finland, Germany, the Nether-

¹³⁶ Pohling-Brown, P., 'Technologies for America's new course', *International Defense Review*, vol. 27, no. 10 (1994), pp. 30–38; see also *Report on Nonproliferation and Counterproliferation Activities and Programs* (Office of the Deputy Secretary of Defense: Washington, DC, May 1994).

¹³⁷ Hitchens, T., 'Biological weapon program leaps political, fund hurdles', *Defense News*, 5–11 Sep. 1994, pp. 26, 36.

¹³⁸ Pohling-Brown (note 136), p. 34.

¹³⁹ Pohling-Brown (note 136), p. 36.

¹⁴⁰ See annexe A in this volume.

¹⁴¹ This figure covers the reports of 40 states submitted as of 5 Aug. 1994 (CDA/16-94/BWIII, 15 May 1994; and CDA/16-94/BWIII/Add.1, 5 Aug. 1994). Additional reports from 1994 had not been distributed by the UN Centre for Disarmament Affairs as of 31 Dec. 1994.

Table 19.2. Participation by states parties in BWC confidence-building measures

| | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|---|------|------|------|------|------|------|------|------|
| States parties submitting reports | 19 | 23 | 21 | 31 | 41 | 37 | 39 | 40 |
| Total number of states submitting reports | 19 | 23 | 27 | 36 | 49 | 53 | 58 | 64 |

Source: SIPRI, *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), p. 725. The figures here cover the reports of 40 states submitted as of 5 Aug. 1994. See UN Centre for Disarmament Affairs document CDA/16-94/BWIII, 15 May 1994; and UN Centre for Disarmament Affairs document CDA/16-94/BWIII/Add.1, 5 Aug. 1994). Additional reports from 1994 had not been distributed by the UN Centre for Disarmament Affairs as of 31 Dec. 1994.

lands, Norway, Russia, Sweden, the UK and the USA.¹⁴² A number of states which participated in the Special Conference (discussed below) did not provide even one nil declaration or set of information; they were: Albania, Armenia, Bahrain, Bolivia, Colombia, Croatia, El Salvador, Ethiopia, Ghana, Honduras, India, Indonesia, Iran, Kenya, Kuwait, Lebanon, Malaysia, Mauritius, Nigeria, Oman, Pakistan, Saudi Arabia, Uruguay, Venezuela, Viet Nam and Zimbabwe. In the author's view participation in the information exchange must therefore be made mandatory as proposed by the Special Conference.

In addition, there has been little improvement in the quality of the reports submitted between 1987 and 1994. Some reports are still burdened with superfluous information; others are incomplete. For example, an emerging infectious disease caused by a highly virulent newly discovered virus, the pulmonary syndrome hantavirus (PSHV),¹⁴³ was mentioned in the 1993 report submitted by the USA in a table on one form but not on the form where it should have been reported. According to the US report, 53 cases of pulmonary syndrome hantavirus were reported to the Centers for Disease Control (CDC) from 1 May to 31 December 1993.¹⁴⁴ Failure to provide detailed information about the outbreak is regrettable not only because PSHV was identified by *inter alia* researchers at the US Army Medical Research Institute of Infectious Diseases (USAMRIID) at Fort Detrick, Maryland, but also because it is closely related to Hantaan virus, the cause of Korean haemorrhagic fever, and a dual-threat agent (DTA).¹⁴⁵ In fact there had been speculation, presumably

¹⁴² The number of states participating in all rounds may be slightly increased by the possible submission of delayed reports by Belarus, Canada and Ukraine.

¹⁴³ Geissler, E., 'Biological weapon and arms control developments', *SIPRI Yearbook 1994* (note 4), chapter 18, pp. 713-38.

¹⁴⁴ By May 1994 the CDC had logged 74 cases of the syndrome in 18 US states; 42 of the patients died. See Sternberg, S., 'Tracking a mysterious killer virus in the Southwest', *Washington Post*, 14 June 1994, pp. 10-13.

¹⁴⁵ DTAs are pathogens and toxins which are not only natural enemies of people, animals and plants but which can also be used for hostile purposes as BW and TW agents; see Geissler, E., 'Vaccines for Peace: an international program of development and use of vaccines against dual-threat agents', *Politics and the Life Sciences*, vol. 11, no. 2 (Aug. 1992), pp. 231-43.

unfounded, that PSHV might have escaped from USAMRIID or another army facility.¹⁴⁶

Russia did not report on BW activities involving *Bacillus anthracis* carried out in a military facility in the city of Sverdlovsk (now Ekaterinburg)¹⁴⁷ or on the outbreak of anthrax which occurred there in 1979,¹⁴⁸ although the connection between the outbreak and BW activities now seems proven. Conclusive evidence was obtained by a Russian–US expert group investigating the 1979 Sverdlovsk anthrax outbreak¹⁴⁹ that it was not caused by contaminated animals and meat, as originally claimed by former Soviet officials. The experts evaluated information on 77 patients who had suffered from anthrax, 66 of whom died, as well as data on infected animals in villages located in the area surrounding the high-risk zone. They concluded, in accordance with an earlier report,¹⁵⁰ that ‘the outbreak resulted from the windborne spread of an aerosol of anthrax pathogen, that the source was at the military microbiology facility [Compound 19], and that the escape of the pathogen occurred during the day on Monday, 2 April [1979]’. Owing to the lack of Russian information it is not known whether, under the BWC, the activities conducted at Compound 19 were permitted defensive activities or prohibited offensive activities or what caused the release of the spore-bearing aerosol.

One facility involved in the Soviet or Russian BW ‘defence’ programme has never been mentioned in any of the reports that the USSR and Russia provided between 1987 and 1994: the Institute of Immunology of the Association Biopreparat in Lyubuchany, Moscow Region.

The Special Conference

The Third Review Conference of the BWC decided to convene an *Ad Hoc* Group of Governmental Experts to identify and examine potential verification measures from a scientific and technical standpoint (VEREX).¹⁵¹ After the consensus report of the VEREX group¹⁵² was transmitted to the states parties, a Special Conference to examine it was held in Geneva on 19–30 September 1994 on the request of 71 states parties.¹⁵³

¹⁴⁶ ‘Were four corners victims biowar casualties?’, *Scientific American*, vol. 269, no. 5 (1993), p. 8; and Wakefield, J., ‘Federal researchers untangle web spun by newly emerged pathogens’, *US Medicine*, Mar. 1994, pp. 2, 16–17.

¹⁴⁷ Russia submitted a report (Declaration of past activities in offensive and/or defensive biological research and development program—form F) in 1992, but provided no revisions and/or additions in 1993 or 1994.

¹⁴⁸ Geissler (note 143), especially p. 720.

¹⁴⁹ Meselson, M. *et al.*, ‘The Sverdlovsk anthrax outbreak’, *Science*, vol. 266 (18 Nov. 1994), pp. 1202–8.

¹⁵⁰ Abramova, F. A. *et al.*, ‘Pathology of inhalational anthrax in 42 cases from the Sverdlovsk outbreak of 1979’, *Proceedings of the National Academy of Sciences (USA)*, vol. 90 (Mar. 1993), pp. 2291–94.

¹⁵¹ Geissler (note 143), especially pp. 728–34.

¹⁵² *Ad Hoc* Group of Governmental Experts to Identify and Examine Potential Verification Measures from a Scientific and Technical Standpoint, Report, BWC/CONF.III/VEREX/9, Geneva, 1993.

¹⁵³ Lacey (note 132), pp. 53–64.

Eighty states parties participated.¹⁵⁴ In addition, two signatories, Egypt and Morocco, attended without taking part in the adoption of decisions. Israel, a non-party, was an observer. After discussing the report of the *Ad Hoc* Group the conference 'recognized that the complex nature of the issues pertaining to the strengthening of the Biological Weapons Convention underlined the need for a gradual approach towards the establishment of a coherent regime to enhance the effectiveness of and improve compliance with the Convention' which 'would include *inter alia* potential verification measures, as well as agreed procedures and mechanisms for their efficient implementation and measures for the investigation of alleged use'.¹⁵⁵

As at past Review Conferences and VEREX meetings, widely differing views regarding the verifiability of the BWC were expressed. None the less, the Conference established an *Ad Hoc Group*, open to all states parties, 'to consider appropriate measures, including possible verification measures, and draft proposals to strengthen the Convention, to be included, as appropriate, in a legally binding instrument'.¹⁵⁶ The varying views on verifiability were also reflected in the inability of the participants to agree on a name for the *Ad Hoc* Group.¹⁵⁷ It was agreed that the group:

shall, *inter alia*, consider:

- Definitions of terms and objective criteria, such as lists of bacteriological (biological) agents and toxins, their threshold quantities, as well as equipment and types of activities, where relevant for specific measures designed to strengthen the Convention;
- The incorporation of existing and further enhanced confidence building and transparency measures, as appropriate, into the regime;
- A system of measures to promote compliance with the Convention, including, as appropriate, measures identified, examined and evaluated in the VEREX Report. Such measures should apply to all relevant facilities and activities, be reliable, cost effective, non-discriminatory and as non-intrusive as possible, consistent with the effective implementation of the system and should not lead to abuse;
- Specific measures designed to ensure effective and full implementation of Article X, which also avoid any restrictions incompatible with the obligations undertaken under the Convention, noting that the provisions of the Convention should not

¹⁵⁴ The following 80 states parties to the BWC participated in the Conference: Albania, Argentina, Armenia, Australia, Austria, Bahrain, Belarus, Belgium, Bolivia, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Cuba, the Czech Republic, Denmark, Ecuador, El Salvador, Ethiopia, Finland, France, Germany, Ghana, Greece, Honduras, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Italy, Japan, Jordan, Kenya, Kuwait, Lebanon, Luxembourg, Malaysia, Malta, Mauritius, Mexico, Mongolia, the Netherlands, New Zealand, Nicaragua, Nigeria, North Korea, Norway, Oman, Pakistan, Paraguay, Peru, the Philippines, Poland, Portugal, Qatar, Romania, Russia, Saudi Arabia, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Thailand, Turkey, Ukraine, the UK, the USA, Uruguay, Venezuela, Viet Nam and Zimbabwe.

¹⁵⁵ Special Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, Geneva, 19–30 Sep. 1994, *Final Report*, BWC/SPCONF/1, pp. 9–10.

¹⁵⁶ *Final Report* (note 155), pp. 10–11.

¹⁵⁷ Several participants proposed to designate the group 'Ad Hoc Working Group on Verification' (Germany on behalf of the European Union, Russia and South Africa), 'Ad Hoc Working Group on Compliance' (Brazil), 'Ad Hoc Working Group on Measures to Strengthen the BWC' (Japan), vs. 'Ad Hoc Group of Governmental Experts' (China, the USA).

be used to impose restrictions and/or limitations on the transfer for the purposes consistent with the objectives and the provisions of the Convention of scientific knowledge, technology, equipment and materials.¹⁵⁸

Measures considered by the *Ad Hoc* Group 'should be formulated and implemented in a manner designed to protect sensitive commercial proprietary information and legitimate national security needs' and 'to avoid any negative impact on scientific research, international cooperation and industrial development'.¹⁵⁹ The group met for the first time on 4–6 January 1995 with additional meetings scheduled for 10–21 July and 27 November–8 December 1995. It is to prepare a consensus report to be considered by the 1996 Fourth Review Conference or a later Special Conference. Whether there will be agreement on a consensus report before the Fourth Review Conference appeared doubtful at the 1994 Special Conference owing not only to persistent differences in the assessment of measures to verify compliance with the BWC but also to the heavy arms control agenda in 1995. In addition, whether or not consensus can be reached depends largely on the willingness of both developing and underdeveloped countries to agree on measures to strengthen the BWC which may, to some extent, depend on demonstration by the industrialized states parties of their commitment to the provisions of Article X on sharing of knowledge (see the following sub-section).

Implementation of Article X

Several delegations at the Special Conference expressed the view that there is an intrinsic correlation between strengthening the BWC and enhancement of peaceful international cooperation. Brazil pointed out that agreement on a verification regime will be possible only if progress is made towards implementation of Article X.¹⁶⁰ Article X of the BWC requests states parties to facilitate and participate 'in the fullest possible exchange of equipment, materials and . . . information for the use of bacteriological (biological) agents and toxins for peaceful purposes'. Article X also requests that the 'convention shall be implemented in a manner designed to avoid hampering the economic or technological development of the states parties . . . or international cooperation in the field of peaceful bacteriological (biological) activities'.

Accordingly, the Special Conference 'recognized that the process aiming at strengthening compliance with the (BWC) should facilitate the fullest possible exchange of equipment, materials and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes'.¹⁶¹ As noted above, the *Ad Hoc* Group was requested to consider *inter alia* 'specific measures designed to ensure effective and full implementation of Article X'.¹⁶²

¹⁵⁸ *Final Report* (note 155), p. 10.

¹⁵⁹ *Final Report* (note 155), p. 10.

¹⁶⁰ Rosenberg, B. H., 'Strengthening the BWC', *Disarmament Times*, vol. 17, no. 5 (24 Oct. 1994).

¹⁶¹ *Final Report* (note 155), p. 9.

¹⁶² *Final Report* (note 155), p. 10.

With respect to implementation of Article X, the following proposals by non-governmental groups are under discussion: the Vaccines for Peace programme (VFP) and its derivatives, the Biesenthal Vaccine Initiative (BVI), the Program for Controlling Emerging Infectious Diseases (ProCEID) and the Global Program for Monitoring Emerging Diseases (ProMED).¹⁶³

The Program for Monitoring Emerging Diseases

Strengthening the BWC by a global programme of epidemiological surveillance was proposed at the XII Kühlungsborn Colloquium.¹⁶⁴ In consequence, the Program for Monitoring Emerging Diseases was inaugurated in September 1993 at a conference in Geneva, co-sponsored by the World Health Organization (WHO) and the Federation of American Scientists (FAS).¹⁶⁵ ProMED is a coordinated global programme to identify and respond to emerging infectious diseases and to provide a forum for coordination activities in that field. Its central goal is to establish a direct partnership among scientists concerned with infectious diseases in all parts of the world.

At a June 1994 meeting the ProMED Steering Committee set priorities for action including *inter alia* establishment of criteria for including member centres, establishment of a central office linked to member centres and reference laboratories, identification of emergency response capabilities, listing of geographically important pathogens and establishment of an electronic bulletin board for information on human, animal and plant disease outbreaks.¹⁶⁶

*From VFP to the Program for Controlling Emerging Infectious Diseases*¹⁶⁷

ProMED focuses on emerging infectious diseases and intoxications and unusual outbreaks, while the Vaccines for Peace and the Biesenthal Vaccine Initiative¹⁶⁸ focus on dual-threat agents¹⁶⁹ and are directly related to the BW Convention. The VFP and the BVI were further evaluated at seminars and conferences in 1994.¹⁷⁰

Recognizing that changing political, economic, technical and military factors warranted further evolution of both the VFP and the BVI, it was recom-

¹⁶³ Geissler (note 143), see especially pp. 736–37.

¹⁶⁴ Wheelis, M. L., 'The role of epidemiology in strengthening the Biological Weapons Convention', eds. E. Geissler and R. H. Haynes, *Prevention of a Biological and Toxin Arms Race and the Responsibility of Scientists* (Akademie Verlag: Berlin, 1991), pp. 277–83.

¹⁶⁵ Morse, S. S. and Rosenberg, B. H., 'FAS responds to growing infectious disease problem with proposed global surveillance and response program', *F.A.S. Public Interest Report*, vol. 46, no. 6 (Nov./Dec. 1993), pp. 1–2; and Rosenberg, B., 'The contemporary problem of emerging diseases', *F.A.S. Public Interest Report*, vol. 46, no. 6 (Nov./Dec. 1993), pp. 3–5.

¹⁶⁶ Woodall, J., personal communication, 14 Dec. 1994.

¹⁶⁷ Geissler (note 143), especially pp. 735–36.

¹⁶⁸ Geissler, E. and Woodall, J. P. (eds.), *Control of Dual-Threat Agents: The Vaccines for Peace Programme*, SIPRI Chemical & Biological Warfare Studies, no. 15 (Oxford University Press: Oxford, 1994).

¹⁶⁹ Note 145.

¹⁷⁰ In Dec. 1994 an in-depth analysis was carried out at the XVI Kühlungsborn Colloquium on the Island of Vilm, near Rügen, Germany, by defence experts, epidemiologists, molecular biologists, and virologists from Germany and the USA.

mended that both proposals be modified, and the Program for Controlling Emerging Infectious Diseases¹⁷¹ was introduced as a supplement to ProMED. Its key objectives are to: (a) strengthen the BWC through implementation of Article X and increased mutual transparency in activities related to the BWC; (b) contribute to prevention of diseases, especially in developing countries, and preparedness to combat emerging diseases; (c) enhance peaceful international cooperation in molecular medicine and biotechnology and prevent their misuse; (d) increase world capacity to produce and make available vaccines and other biologicals; and (e) further preparedness to combat emerging diseases. ProCEID would cover not only vaccines against DTAs but also other biologicals, such as diagnostic reagents, immune sera and 'humanized' monoclonal antibodies that are able to provide protection from infectious diseases and intoxications on short notice.¹⁷²

In contrast to the VFP and the BVI, ProCEID would not involve the participation of military facilities in states that conduct permitted research under conditions of transparency but not full openness. In addition it would not request participation and thereby conversion of all former BW facilities, although it might contribute to such conversion at some point.

Implemented together, ProCEID and ProMED could contribute significantly to strengthening the norm against biological and toxin warfare not only by assisting in implementation of Article X of the BWC but also by providing more transparency, confidence building and biological security.

IV. UNSCOM: chemical and biological activities in 1994¹⁷³

The United Nations Special Commission on Iraq (UNSCOM) continued its activities in Iraq throughout 1994 at an increased tempo. These activities stem from the 1991 Persian Gulf War cease-fire resolution, UN Security Council Resolution 687¹⁷⁴ and subsequent Security Council resolutions.¹⁷⁵ UNSCOM is mandated to identify and eliminate Iraq's weapons of mass destruction and long-range ballistic missile capabilities (by the 'ongoing' monitoring and verification of Iraq's dual-purpose industry) and to monitor Iraq's compliance

¹⁷¹ Geissler, E. *et al.*, 'ProCEID, program for controlling emerging infectious diseases, mission statement', *ASA News*, no. 95-2 (Apr. 1995), p. 1; and 'Biologicals', *Politics and the Life Sciences*, vol. 14, no. 1 (1995).

¹⁷² Additional benefits of ProCEID may include contributing to conversion of former BW facilities to peaceful purposes under civilian control, reducing the danger of proliferation, deterring the use of BW and TW agents and encouraging more countries to join the BWC. The WHO would be responsible for implementing the proposal.

¹⁷³ The fullest publicly available account of UNSCOM's activities can be obtained from the biannual reports of the Secretary-General to the Security Council on these activities. These reports are contained in Security Council documents S/23165, 25 Oct. 1991; S/23268, 4 Dec. 1991; S/24108 and Corr.1, 16 June 1992; S/24984, 17 Dec. 1992; S/25977, 21 June 1993; S/26910, 21 Dec. 1993; S/1994/750, 24 June 1994; and S/1994/1422, 15 Dec. 1994.

¹⁷⁴ United Nations Security Council document S/RES/687 (1991), 3 Apr. 1991; for the text of the resolution, see SIPRI, *SIPRI Yearbook 1992: World Armaments and Disarmament* (Oxford University Press: Oxford, 1992), appendix 13A, pp. 525-30.

¹⁷⁵ United Nations Security Council document S/RES/707 (1991), 15 Aug. 1991; and S/RES/715 (1991), 11 Oct. 1991.

with its obligations not to reacquire such capabilities.¹⁷⁶ This section focuses on activities in the chemical and biological areas in 1994.¹⁷⁷

Past programmes

The principle underlying Resolution 687's provision on the identification and elimination of Iraq's past capabilities was that Iraq should accurately and fully declare these capabilities to UNSCOM. Thereafter UNSCOM would verify the declarations, inventory the items concerned, decide on appropriate means to dispose of them and proceed with their disposal. Confidence that UNSCOM has indeed accounted for all such banned capabilities is required for two reasons: first, to be able to report that it had fulfilled its mandate to eliminate all banned capabilities and, second, to ensure that UNSCOM's ongoing monitoring and verification operations proceed from a solid base, incorporating all items and materials that could be used in clandestine efforts to reacquire banned weapons.

The inadequacies of Iraq's initial declarations about its past programmes and its failure even now to account fully for these capabilities have been documented¹⁷⁸ and led to a change in the approach to this aspect of UNSCOM's mandate. In order to be able to perform its accounting function and to decide on and supervise disposal, UNSCOM had to develop independent means of eliciting information about Iraq's programmes.

The key means are no-notice inspection of sites designated by UNSCOM (see table 19.3 for a summary), aerial surveillance of any site in Iraq, information received from supporting governments and analysis of all the information available to UNSCOM.¹⁷⁹ Even so, in the face of Iraqi obstruction and lack of transparency, the process of obtaining the necessary information became a tedious process of piecing together jigsaw pieces from a multitude of sources in order to obtain a full picture of the procurement, research, development and production processes and the subsequent disposal of items and hence to establish a material balance for each programme.

This process has been made all the more difficult because of Iraq's still-maintained claim that it destroyed all documentation relating to past pro-

¹⁷⁶ In the nuclear area, UNSCOM assists and cooperates with the International Atomic Energy Agency (IAEA) in this endeavour.

¹⁷⁷ Previous chapters in *SIPRI Yearbooks* have reported on UNSCOM activities from 1991 to 1993. See Ekéus, R., 'The United Nations Special Commission on Iraq', *SIPRI Yearbook 1992* (note 174), chapter 13, pp. 509–30; Ekéus, R., 'The United Nations Special Commission on Iraq: activities in 1992', *SIPRI Yearbook 1993* (note 2), chapter 13, pp. 691–703; and Trevan, T., 'UNSCOM: activities in 1993', *SIPRI Yearbook 1994* (note 4), chapter 19, pp. 739–58.

¹⁷⁸ See earlier *SIPRI Yearbook* chapters (notes 174 and 177).

¹⁷⁹ UNSCOM's privileges and immunities arising from the mandate created in the cease-fire resolution are elaborated in the Status Arrangements with Iraq (contained in an unpublished series of letters between the United Nations and Iraq exchanged in May and June 1991 and having the status of an international treaty between the United Nations and Iraq), in Security Council Resolution 707 (1991), and in UNSCOM's plan for ongoing monitoring and verification.

grammes¹⁸⁰ which, in turn, renders full substantiation of Iraq's declarations nearly impossible. Clearly, given Iraq's past record UNSCOM cannot rely in its accounting to the Security Council purely on Iraq's unsubstantiated accounts. Consequently, UNSCOM has had to explore other means of verifying independently Iraq's account, either through indirect means (such as interviewing separately all the personnel involved in the past programmes) or through alternative sources (such as supplier governments investigating with supplier companies the details of exports of key items to Iraq). UNSCOM pursued both avenues energetically in 1994 in each of the areas within its competence.

Chemical weapons

Destruction activities

Once Iraq had declared its stocks of CW, chemical warfare agents, munitions, precursor chemicals and production equipment,¹⁸¹ UNSCOM had to decide on the means of their disposal. With the exception of some of the dual-purpose equipment, it was decided, on the advice of a panel of international experts, to destroy these items. Hydrolysis, incineration, explosive incineration and chemical neutralization were used for the disposal of the chemicals. The same techniques were also used as means of further treating the waste salts resulting from hydrolysis prior to their disposal. Production equipment and munitions were destroyed mechanically. Waste salts resulting from the destruction process and contaminated equipment (after decontamination to the extent possible) were entombed in two large concrete bunkers which were fully sealed and appropriately sign-posted.

The destruction of empty munitions began in September 1991 and of sarin-filled 122-mm rockets in February 1992. A resident team, the Chemical Destruction Group, began its operations in Iraq in June 1992 and started the destruction of chemical warfare agents in September 1992. Destruction of agents and precursors continued throughout 1993 and was completed in early April 1994.¹⁸² Destruction of production equipment associated with the past programme started in June 1993 and was completed in May 1994 with the dismantling and destruction of the hydrolysis plant upon completion of the destruction of chemicals. In May 1994, the team also destroyed missile solid-propellant component chemicals associated with Iraq's banned ballistic missile programmes.

In order to close down the Al Muthanna chemical destruction operation, UNSCOM conducted a sweep of the entire site to identify and dispose of any

¹⁸⁰ This claim has been made repeatedly by various Iraqi officials on numerous occasions, most formally by the Director of Iraq's Military Industrialization Corporation, General Amer Rasheed al 'Ubeidi, during the visit of the Executive Chairman of the Special Commission to Iraq in Feb. 1994.

¹⁸¹ Unpublished declarations submitted in writing by Iraq to UNSCOM in 1991 and 1992.

¹⁸² A full report of this is contained in UN Security Council document S/1994/750, 24 June 1994. For the full account of destroyed chemicals and items, see *SIPRI Yearbook 1994* (note 4), chapter 19, pp. 750-51.

item that might have escaped earlier notice. Two inspections were then conducted in May and June 1994 to undertake an environmental survey of the site and to document the operation and status of the site prior to its reverting to Iraqi control.

The Chemical Destruction Group disbanded on 16 June 1994, marking the successful conclusion of one of UNSCOM's largest, most dangerous and most important tasks under the cease-fire resolution.¹⁸³

Accounting for the past programme

The main focus of UNSCOM's chemical operations then shifted to establishing 'ongoing' monitoring and verification of Iraq's dual-purpose chemical industry. In parallel, UNSCOM has sought to obtain a full and verified account of Iraq's past CW programmes. Given Iraq's claim to have destroyed all relevant documentation and given that former staff at the relevant sites claimed not to remember details about the past programmes of the sort that could be verified through other sources, such as contract numbers for the import of production equipment and precursor chemicals, UNSCOM suggested that Iraq gather all the staff concerned in brainstorming or recollection sessions. The aim of such sessions was, by jogging each other's memories, for the staff concerned to recreate a full picture of the past programme by project and by month and so to establish a full material balance for the import of equipment and raw materials, through the production process and to the subsequent disposal or current disposition of all items. It was hoped that such sessions would also yield verifiable information.

Once Iraq had informed UNSCOM that such sessions had been held, UNSCOM sent an interrogation team to Iraq in April 1994 to receive the presentation and to conduct interviews with the personnel involved. In the course of these interviews it transpired that, despite the claim that all documentation had been destroyed, one of the interlocutors had copied and still possessed a list of the letters of credit issued by Iraqi banks for the procurement of items for the CW programmes. This list was obtained by UNSCOM and, while neither fully accurate nor complete, was extremely useful in opening up new avenues of investigation with other governments on the issue of exports to Iraq. In October 1994 another team sought to pursue with Iraq the results of UNSCOM's initial investigations emanating from the list. The process of following up these leads is still under way and is yielding much new information. Another aspect being investigated is the supply and production of munitions which could be used for chemical weapons.

¹⁸³ Reported in 'United Nations Special Commission completes destruction of declared chemical weapons stocks in Iraq', *United Nations Press Release*, no. IK/171, 22 June 1994.

Table 19.3. UNSCOM inspection schedule in Iraq, 1991–95

| Type of inspection/date | Team |
|---------------------------|----------------------|
| <i>Chemical</i> | |
| 9 June–15 June 1991 | CW1/UNSCOM 2 |
| 15 Aug.–22 Aug. 1991 | CW2/UNSCOM 9 |
| 31 Aug.–8 Sep. 1991 | CW3/UNSCOM 11 |
| 31 Aug.–5 Sep. 1991 | CW4/UNSCOM 12 |
| 6 Oct.–9 Nov. 1991 | CW5/UNSCOM 17 |
| 22 Oct.– 2 Nov. 1991 | CW6/UNSCOM 20 |
| 18 Nov.–1 Dec. 1991 | CBW1/UNSCOM 21 |
| 27 Jan.–5 Feb. 1992 | CW7/UNSCOM 26 |
| 21 Feb.–24 Mar. 1992 | CD1/UNSCOM 29 |
| 5 Apr.–13 Apr. 1992 | CD2/UNSCOM 32 |
| 15 Apr.–29 Apr. 1992 | CW8/UNSCOM 35 |
| 18 June 1992–14 June 1994 | CDG/UNSCOM 38 |
| 26 June–10 July 1992 | CBW2/UNSCOM 39 |
| 21 Sep.–29 Sep. 1992 | CW9/UNSCOM 44 |
| 6 Dec.–14 Dec. 1992 | CBW3/UNSCOM 47 |
| 6 Apr.–18 Apr. 1993 | CW10/UNSCOM 55 |
| 27 June–30 June 1993 | CW11/UNSCOM 59 |
| 19 Nov.–22 Nov. 1993 | CW12/UNSCOM 65 |
| 1 Feb.–14 Feb. 1994 | CW13/UNSCOM 67 |
| 20 Mar.–26 Mar. 1994 | CW14/UNSCOM 70 |
| 18 Apr.–22 Apr. 1994 | CW15/UNSCOM 74 |
| 25 May– 5 June 1994 | CW16/UNSCOM 75 |
| 31 May–12 June 1994 | CW17/UNSCOM 76 |
| 8 June–14 June 1994 | CW18/UNSCOM 77 |
| 10 Aug.–23 Aug. 1994 | CW19/UNSCOM 89 |
| 13 Sep.–24 Sep. 1994 | CW20/UNSCOM 91 |
| 2 Oct. 1994–15 Jan. 1995 | CG 1 |
| 23 Oct.–27 Oct. 1994 | CW21/UNSCOM 95 |
| <i>Biological</i> | |
| 2 Aug.–8 Aug. 1991 | BW1/UNSCOM 7 |
| 20 Sep.–3 Oct. 1991 | BW2/UNSCOM 15 |
| 11 Mar.–18 Mar. 1993 | BW3/UNSCOM 53 |
| 8 Apr.–26 Apr. 1994 | BW4/UNSCOM 72 |
| 28 May–7 June 1994 | BW5/UNSCOM 78 |
| 24 June–5 July 1994 | BW6/UNSCOM 84 |
| 5 June–8 June 1994 | BW7/UNSCOM 86 |
| 25 July–7 Sep. 1994 | BW8/UNSCOM 87 |
| 20 Aug.–25 Aug. 1994 | BW9/UNSCOM 88 |
| 29 Aug.–3 Sep. 1994 | BW10/UNSCOM 92 |
| 29 Sep.–14 Oct. 1994 | BW11/UNSCOM 94 |
| 23 Sep.–26 Sep. 1994 | BW12/UNSCOM 96 |
| 15 Nov.–22 Nov. 1994 | BW15/UNSCOM104 |
| 2 Dec.–10 Dec. 1994 | BW16/UNSCOM105 (IMT) |
| 2 Dec.–14 Dec. 1994 | BW13/UNSCOM 99 (IMT) |
| 9 Dec.–19 Dec. 1994 | BW17/UNSCOM106 (IMT) |
| 28 Dec. 1994–31 Jan. 1995 | IBG 1 |

Source: UN Security Council document S/1994/1422, 15 Dec. 1994.

Biological weapons

Iraq initially did not declare that it had a biological warfare programme.¹⁸⁴ During the visit of the first biological inspection team to the Salman Pak site,¹⁸⁵ Iraq declared that it had indeed conducted biological research for military purposes but maintained that this research was at a very early stage, comprising basic research, and would be defensively oriented.¹⁸⁶ This claim proved difficult to verify as the facility known to have been involved in the research was razed to the ground by the Iraqi authorities immediately prior to the visit of this team. In addition to claiming to have destroyed all relevant documentation about the programme, Iraq's declarations about the programme have been minimalist and contain no inherent logic. Clearly, in these circumstances a material balance in the biological area would be impossible to demonstrate. Indeed, UNSCOM cannot even be sure of the real purpose and extent of the programme although, in contrast to the Iraqi claims, all indications point to the programme being offensively oriented.

To address this fact, UNSCOM has again had to rely on indirect means of substantiation. However, with little tangible evidence left of the programme, there have been few leads to pursue. Consequently, UNSCOM's efforts to verify Iraq's account of the programme have concentrated on interviews of the personnel who worked at the various sites associated in one way or another with the Salman Pak site. Some 28 persons, including 9 of the 10 declared personnel of the Salman Pak site, were interviewed by an UNSCOM inspection team in November 1994. This process and the initiation of interim monitoring at key biological sites in Iraq provided additional information, particularly concerning the links between various organizations and personnel, which needs to be analysed and investigated further.

Ongoing monitoring and verification

The concept of ongoing monitoring and verification is simple. Iraq is to declare fully and accurately all its dual-purpose capabilities as defined in the plan for such monitoring and verification.¹⁸⁷ Upon analysis of the information contained in these declarations and available to UNSCOM from other sources, particularly from its own inspections, UNSCOM draws up lists of sites at which dual-purpose items or activities are present. Each such site is then subjected to baseline inspections, whereby all relevant information about the site is collated in a monitoring and verification protocol for that site. Items of concern are inventoried and tagged with unique, tamper-proof tags.¹⁸⁸ Thereafter,

¹⁸⁴ See note 181.

¹⁸⁵ UNSCOM 7/BW 1, 2-8 Aug. 1991.

¹⁸⁶ Oral statements made to the UNSCOM 7/BW1 inspection team, Aug. 1991.

¹⁸⁷ Contained in United Nations Security Council document S/22871/Rev.1, 2 Oct. 1991. A full explanation of the underlying concept of ongoing monitoring and verification is contained in document S/1994/489, 22 Apr. 1994.

¹⁸⁸ "Tamper-proof" means that it is non-replicable and that attempts to remove or tamper with it will be evident to subsequent inspection teams.

declared sites are monitored on a regular but unpredictable basis. Monitoring is conducted either through aerial surveillance (using the U-2 high-altitude surveillance aircraft or the helicopter-borne Aerial Inspection Team) or by no-notice ground inspection.

Naturally, UNSCOM is vigilant to look for undeclared sites or new sites as they are developed to ensure that they are incorporated into the ongoing monitoring and verification system as necessary. In addition to aerial surveillance, UNSCOM's ability to detect such sites will be bolstered by information received from supporting governments. Furthermore, the envisaged export/import monitoring mechanism (see below) will, by following imported dual-purpose items to their end-user sites, provide a further means of assuring that sites with dual-purpose capabilities become known to UNSCOM.

In this regard efficient data handling and analysis, combined with rapid reaction, are essential. UNSCOM's Information Assessment Unit is developing a site-based relational database as its prime analytical tool. This will be supported by a compatible customized export/import database specifically designed to handle the many export/import notifications that UNSCOM will receive under the mechanism.

In the field, the Baghdad Monitoring and Verification Centre was established on 1 August 1994 as the base for the monitoring groups and to house all the necessary facilities to support ongoing monitoring and verification and the operation of the export/import mechanism. In particular, it houses the communication equipment which links the remote-controlled cameras installed at sites throughout Iraq with television monitors in the Centre. This allows the resident experts access to images from the monitoring cameras in their Baghdad offices and so facilitates decision making on which sites to inspect while providing further deterrence to Iraq's conduct of banned activities at the monitored sites.

Chemical monitoring

Initial declarations concerning Iraq's current and recent dual-purpose capabilities in the chemical area were received by UNSCOM in mid-January 1994.¹⁸⁹ Earlier 'reports' had been submitted by Iraq but did not conform with the requirements of the plan for monitoring and verification. Even these new declarations were incomplete. This complicated the analysis phase referred to above and necessitated that Iraq provide, at UNSCOM insistence, revised declarations.

These difficulties notwithstanding, UNSCOM proceeded promptly with efforts to establish ongoing monitoring and verification. In February 1994 an inspection tagged and inventoried dual-purpose equipment. In March 1994 a team installed four chemical air samplers as part of a programme to evaluate their usefulness as an indicator of activities being undertaken at a monitored site. These samplers comprise a cartridge of vials coated with reagents and a motor to draw in a specified quantity of air at regular intervals into vials

¹⁸⁹ Unpublished declarations submitted in writing by Iraq to UNSCOM.

sequentially. The vials are subsequently retrieved for analysis off-site. Currently, analysis is conducted at laboratories outside Iraq, but it is intended to install a small chemical laboratory in the Baghdad Monitoring and Verification Centre in February 1995 and thereafter to conduct such analysis routinely in this laboratory. Samples will continue to be sent to the current supporting laboratories as controls and as a means of calibrating results.

UNSCOM conducted its first series of baseline inspections of chemical facilities in May and June 1994. These inspections concentrated on facilities known to have been associated with the past programme or capable of producing chemicals using processes similar to those used to produce chemical warfare agents. A second baseline inspection in August 1994 concentrated on oil and petrochemical facilities and the third, in September 1994, inspected fertilizer plants and other facilities of concern. From these baseline inspections monitoring and verification protocols were prepared for all of the sites inspected.

The chemical monitoring group (CG-1) arrived in Baghdad in early October 1994. In addition to monitoring the sites for which protocols have been prepared, the group will also visit other facilities, such as universities, of less direct concern to the procurement of a CW capability but at which dual-purpose items or activities are present, to assess whether they require monitoring on a regular basis and, if so, to prepare protocols for them.

In January 1995 UNSCOM intends to install some 50 remote-controlled cameras at four sites to be monitored. At the same time, some 20 additional air samplers will be installed at these sites and flow meters will be installed at key points in the production equipment at at least one site. During the first months of their operation, the air samplers will be tried out in different configurations to assess which combination of samplers at different indoor and outdoor locations gives the best coverage overall of emissions from the target equipment, given prevailing wind strength and direction. With the installation of the chemical laboratory in the Baghdad Monitoring and Verification Centre in February 1995, the chemical monitoring and verification regime should be fully in place.

Biological monitoring

As with chemical monitoring, Iraq delivered initial declarations concerning its dual-purpose biological capabilities to UNSCOM in mid-January 1994.¹⁹⁰ However, these declarations were largely incomplete and so UNSCOM demanded that Iraq provide revised declarations in accordance with the requirements of the plan for ongoing monitoring and verification.¹⁹¹ Subsequent declarations were often inconsistent with earlier declarations and with the findings of inspection teams seeking to collect the baseline data and to prepare the monitoring and verification protocols for the sites concerned. In the first 10 months of 1994, 10 inspections and numerous technical talks sought,

¹⁹⁰ Unpublished declarations submitted in writing by Iraq to UNSCOM.

¹⁹¹ See note 186.

with limited success, to resolve the shortcomings in Iraq's declarations and to tag all the dual-purpose items. UNSCOM's experts advised that, in the absence of a reliable set of baseline data, it would be unwise to commence biological monitoring.¹⁹² Consequently, in November 1994 a further team was sent to Baghdad, primarily to interview personnel involved in Iraq's past programme, but also to reiterate the requirements for revised and acceptable declarations.

Since that inspection improved declarations have been provided. In addition, UNSCOM has been forced to adapt its approach to obtaining the baseline data in this area. Three teams were sent to sites of principal concern in order to obtain, by conducting thorough and exhaustive audits of the sites, sufficient data from which to proceed with monitoring and to tag previously undeclared dual-purpose items. An interim monitoring team started its operations in Baghdad on 28 December 1994. This team, by its continuous presence at sites of key concern, will complete the monitoring and verification protocols for these sites and *de facto* monitor them in the process. This approach is clearly more intrusive and resource-consuming than would have been the case had Iraq fully disclosed its capabilities from the outset. Iraq's failure to cooperate fully in the biological area has delayed the initiation of biological monitoring.

In January 1995 cameras will be installed at several sites in order to monitor key items of equipment, activity levels at the site, and entry and egress from the site. In February 1995 a biological laboratory will be set up in the Baghdad Monitoring and Verification Centre at which basic analysis of samples might be undertaken. With the completion of the baseline process at all the principal sites, all the components of biological ongoing monitoring and verification will be in place.

Import and export monitoring mechanism

Paragraph 7 of Security Council Resolution 715 (1991)¹⁹³ 'requests the Committee established under Resolution 661 (1990),¹⁹⁴ the Special Commission and the Director General of the International Atomic Energy Agency (IAEA) to develop in cooperation a mechanism for monitoring any future sales or supplies by other countries to Iraq of items relevant to the implementation of section C of Resolution 687 (1991) and other relevant resolutions, including the present resolution and the plans approved hereunder'. As noted above, this will be an essential element of UNSCOM's overall efforts to monitor Iraq's compliance with its obligations not to reacquire banned weapon capabilities. If monitoring and verification represent the internal element of that effort, the export/import mechanism represents the external element.

UNSCOM and the IAEA presented a draft concept paper to the Committee in May 1994 containing a proposal for a system of notification by both Iraq and the exporting country of dual-purpose items to be exported to Iraq.¹⁹⁵ The

¹⁹² Internal UNSCOM discussions, 1994.

¹⁹³ UN Security Council document S/RES/715 (1991), 11 Oct. 1991.

¹⁹⁴ UN Security Council document S/RES/661 (1990), 2 Aug. 1990.

¹⁹⁵ Unpublished document, May 1994.

mechanism would not require licensing by the UN other than that required by the sanction regime applying to Iraq at the time.¹⁹⁶ Rather, Iraq would inform a joint unit to be set up by UNSCOM and the IAEA of its intention to import dual-purpose items as defined in the annexes to the UNSCOM and IAEA plans for monitoring and verification.¹⁹⁷ This unit would decide which of the two organizations should process the notification. Iraq would be free to proceed with import unless import were specifically objected to. The exporting country would be obliged *inter alia* to report on contracts to export such items and, once the details were known, on the contract number, the date of shipment, the point of entry into Iraq and the end user in Iraq. Upon arrival of the goods in Iraq, Iraq would notify the joint unit of receipt. Monitoring groups would then inspect the items at the site of end use to assess their purpose, to tag and inventory them as necessary, and to incorporate the items into the monitoring plan for that site. Any country which became aware of attempts by Iraq to acquire proscribed items would also be required to report such attempts. The process would be underpinned by ongoing monitoring and verification activities, the rights of UNSCOM and the IAEA of no-notice inspection anywhere in Iraq, aerial surveillance activities and information received from other sources. Proscribed items or dual-purpose items imported for proscribed activities would be subject to destruction under the terms of Resolution 687. The assumption would be that imports of dual-purpose items not declared by Iraq were for proscribed purposes.

This paper had been discussed by the Committee informally and consensus seems possible on the proposal for the mechanism contained in it. However, certain governments have requested a more detailed list of the items to be covered by the mechanism than currently available in the annexes to the plans for ongoing monitoring and verification. Revisions to the annexes were to be presented to the Security Council in early 1995 and it is hoped that this will provide those governments with sufficient details to allow the proposal to proceed to the Security Council for its consideration. It is expected that the proposal will then be adopted by Security Council resolution with the Council acting under Chapter VII of the United Nations Charter, thereby making the requirement to notify such exports an obligation on all states.

V. Conclusions

In 1994 steady progress was made towards implementation of the CWC, but the pace was slower than originally expected. The optimistic forecasts of 1993 were not realized; only 19 states had ratified the CWC by 31 December 1994,¹⁹⁸ making it impossible for the Convention to enter into force by 13 January 1995. There are a number of reasons for this situation: the OPCW

¹⁹⁶ Sanctions imposed on Iraq under Security Council Resolution 661 (1990) still applied at the time of writing.

¹⁹⁷ Contained in Security Council documents S/22871/Rev.1, 2 Oct. 1991; S/22872/rev.1; and Rev.1/Corr.1, 20 Sep. 1991, respectively.

¹⁹⁸ As of 1 Apr. 1995 the number of ratifications was 27. See annex A in this volume.

must be set up in the short period between signature and entry into force; the required level of national implementation under the CWC is not comparable to that of any other multilateral treaty; and the declaration and verification requirements under the CWC can involve a large percentage of a country's chemical production facilities.

States have realized that the establishment of the legal and organizational framework for ratification and national implementation is more time consuming and expensive than expected. In many countries the legislative action of implementing the CWC at the national level has to be taken by parliament, and parliamentary processes and bureaucratic preparation take time. Implementing the verification provisions is also influenced by a desire on the part of the chemical industry to minimize their impact on areas unrelated to compliance with the CWC. The chemical industry has expressed concern about some aspects of the future declaration requirements and about confidential business information issues, and there is a need to better inform industry about its rights as well as its obligations and requirements. The elaboration and agreement of procedures related to declaration requirements and verification activities in the PrepCom, particularly in the Expert Groups, have revealed problems which appear at first to be of a technical nature but which are actually often political. This is not surprising owing to the unprecedented scope of some of the verification procedures. The debates on Article XI and on the interpretation of the provisions for challenge inspections¹⁹⁹ are such cases. Much of the debate has its roots in the final stages of the CWC negotiations in Geneva, when some countries expressed concern about certain aspects of the final text.

In 1994 progress on CW-related issues in the PrepCom Expert Groups was slow, reflecting the impact which the failure to implement the 1990 Russian-US Bilateral Destruction Agreement has had.²⁰⁰ In addition, those states which do not possess CW have no desire to pay for verification and destruction of the CW stocks of the possessor states.

The two major possessors of CW stockpiles, Russia and the USA, should ratify the CWC as early as possible in 1995. If they fail to do so, other states may begin to doubt their often stated commitment to the Convention.

By the end of 1994, 19 states had ratified the CWC and more states are expected to do so. The average of one ratification per week was, however, too slow to ensure entry into force in the minimum time possible. The forecast for 1995 remains optimistic; the majority of signatory states continue to support the CWC and are in the process of preparing for national implementation.

The chemical industry supports the CWC, but major delays in its entry into force could have a negative impact on that support. However, the chemical industry is actively involved in implementation on the national level.

¹⁹⁹ In addition, challenge inspections are causing implementation problems, because some of the responsible negotiators from ministries of foreign affairs in Geneva had not properly consulted with other concerned ministries and departments in their home countries.

²⁰⁰ See chapter 10 in this volume.

The threat of BW and TW proliferation is of concern. Although the information exchange agreed upon by the Second and Third BWC Review Conferences serves as a CBM and provides some degree of transparency on activities and facilities directly related to the BWC, the norm against biological and toxin warfare has not been significantly strengthened, not least because the exchange is not mandatory. There is a growing interest among the parties to the BW Convention in strengthening it by legally binding measures. A relatively large number of states, including one state not a party to the BWC, participated in the September 1994 Special Conference, which was convened to evaluate the report submitted by the VEREX group and to decide on future measures. Opinions vary with respect to the feasibility of verification measures and their value as CBMs, but the participants at the Special Conference agreed to continue the process begun at the Third Review Conference and to convene another meeting of the *Ad Hoc* Group of Experts.

The task of the *Ad Hoc* Group of Experts is to consider a variety of measures to seal loopholes in the BWC; it addresses definitions of terms, lists of bacteriological (biological) agents and toxins, the incorporation of CBMs into a legally binding regime, a system of measures to promote compliance with the BWC, including measures discussed in the VEREX report, and measures designed to ensure effective and full implementation of Article X of the BWC. The conclusions of the *Ad Hoc* Group are to be presented in a consensus report for further action by the Fourth Review Conference or another Special Conference. Owing to the broad mandate of the *Ad Hoc* Group, the complex nature of many of the topics and the existence of differing views on the verifiability of the BWC, some experts doubt that a consensus report will be ready in time for the 1996 Review Conference.

In 1994 UNSCOM continued its activities in Iraq to fulfil its mandated obligations, and the destruction of all CW and chemical agents was completed. The emphasis of UNSCOM activities has shifted to installing the compliance monitoring system. UNSCOM does not expect that any single element of its system to monitor Iraq's compliance with its obligations not to reacquire proscribed weapons will, operated in isolation, provide sufficient assurance that a clandestine proscribed programme would be quickly detected. However, the system is designed, as a multi-layered whole, to provide such assurance. UNSCOM will continue to develop and evaluate the system in the early months of 1995. Depending on the level of Iraqi cooperation, UNSCOM should be able to judge the effectiveness of the system soon after all of its components are in place.

For CW and BW arms control and disarmament 1995 will be an important year. The CWC presents a unique opportunity to eliminate an entire class of weapons. Eighty years after the first use of CW the clear political commitment to chemical disarmament represented by the 159 signatories to the Convention must be transformed into reality by ratification by a sufficient number of states so that the CWC can enter into force.

20. Conventional arms control and security dialogue in Europe

ZDZISLAW LACHOWSKI

I. Introduction

Events in 1994 bore further witness to the changing role and position of classical arms control in Europe. In the 'arms control implementation era', its chief role is to ensure a common basis and touchstone for security, trust and confidence among states. Towards the end of the year the worsening situation in Russia and some of the other former Soviet republics put the future of the 1990 Treaty on Conventional Armed Forces in Europe (the CFE Treaty) in some doubt.

This chapter covers the major issues relating to European arms control and security cooperation in 1994—the second consecutive year of implementation of the CFE Treaty and the 1992 Concluding Act of the Negotiation on Personnel Strength of Conventional Armed Forces in Europe (the CFE-1A Agreement). Particular emphasis is placed on the flank zone controversy, progress in the process of foreign troop withdrawals from and changes in the foreign military presence in Central and Eastern Europe and the area of the Conference on Security and Co-operation in Europe (CSCE¹), as well as the work and accomplishments of the CSCE Forum for Security Co-operation (FSC) and the outcome of the 1994 Budapest CSCE Review Conference and Summit Meeting. Appendix 20A reviews the implementation of confidence- and security-building measures (CSBMs) as agreed in the Vienna Document 1992 and examines new provisions of the Vienna Document 1994 (appendix 20B). Appendix 20C reports on progress with regard to the Open Skies Treaty.

II. Implementation of the CFE Treaty

The CFE Treaty² set equal ceilings within its Atlantic-to-the-Urals (ATTU) application zone on the treaty-limited equipment (TLE) of the groups of states

¹ The *Conference on Security and Co-operation in Europe* was renamed the *Organization for Security and Co-operation in Europe* (OSCE) in the Budapest Summit Declaration of the CSCE Summit Meeting. See CSCE, Budapest Document 1994, Budapest Summit Declaration: Towards a Genuine Partnership in a New Era, Budapest, 5–6 Dec. 1994, para. 3. Excerpts from the text of the Document are reprinted in appendix 8A.

² The CFE Treaty and Protocols are reprinted in Koulik, S. and Kokoski, R., SIPRI, *Conventional Arms Control: Perspectives on Verification* (Oxford University Press: Oxford, 1994), pp. 211–76; the CFE-1A Agreement in *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press: Oxford, 1993), pp. 683–89; the Vienna Document 1990 in *SIPRI Yearbook 1991: World Armaments and Disarmament* (Oxford University Press: Oxford, 1991), pp. 475–88; and the Vienna Document 1992 in *SIPRI Yearbook 1993*, pp. 635–53.

Table 20.1. National CFE holdings after completion of phases I (end 1993^a) and II (end 1994^a) reductions and CFE limits

| State ^b | | Tanks | ACVs ^c | Artillery | Aircraft | Helicopters |
|--------------------|-----------|-------|-------------------|-----------|----------|-------------|
| Armenia | 1993 | 154 | 379 | 259 | 3 | 4 |
| | 1994 | 102 | 285 | 225 | 6 | 7 |
| | CFE limit | 220 | 220 | 285 | 100 | 50 |
| Azerbaijan | 1993 | 336 | 947 | 388 | 53 | 8 |
| | 1994 | 285 | 835 | 343 | 58 | 18 |
| | CFE limit | 220 | 220 | 285 | 100 | 50 |
| Belarus | 1993 | 3 108 | 3 414 | 1 584 | 378 | 78 |
| | 1994 | 2 348 | 3 046 | 1 579 | 348 | 78 |
| | CFE limit | 1 800 | 2 600 | 1 615 | 260 | 80 |
| Belgium | 1993 | 339 | 985 | 322 | 200 | 46 |
| | 1994 | 334 | 756 | 316 | 196 | 46 |
| | CFE limit | 334 | 1 099 | 320 | 232 | 46 |
| Bulgaria | 1993 | 2 070 | 2 133 | 2 057 | 296 | 44 |
| | 1994 | 1 786 | 2 077 | 1 917 | 273 | 44 |
| | CFE limit | 1 475 | 2 000 | 1 750 | 235 | 67 |
| Canada | 1993 | 0 | 14 | 6 | 0 | 0 |
| | 1994 | 0 | 0 | 6 | 0 | 0 |
| | CFE limit | 77 | 277 | 38 | 90 | 13 |
| Czech Rep. | 1993 | 1 433 | 1 841 | 1 418 | 251 | 36 |
| | 1994 | 1 011 | 1 451 | 893 | 215 | 36 |
| | CFE limit | 957 | 1 367 | 767 | 230 | 50 |
| Denmark | 1993 | 452 | 273 | 553 | 101 | 12 |
| | 1994 | 401 | 273 | 553 | 90 | 12 |
| | CFE limit | 353 | 316 | 553 | 106 | 12 |
| France | 1993 | 1 309 | 3 964 | 1 429 | 687 | 373 |
| | 1994 | 1 313 | 3 595 | 1 141 | 678 | 350 |
| | CFE limit | 1 306 | 3 820 | 1 292 | 800 | 352 |
| Georgia | 1993 | 41 | 51 | 7 | 2 | 1 |
| | 1994 | 39 | 49 | 27 | 2 | 1 |
| | CFE limit | 220 | 220 | 285 | 100 | 50 |
| Germany | 1993 | 5 498 | 7 155 | 3 504 | 754 | 250 |
| | 1994 | 4 116 | 4 042 | 2 488 | 592 | 250 |
| | CFE limit | 4 166 | 3 446 | 2 705 | 900 | 306 |
| Greece | 1993 | 2 458 | 1 453 | 2 063 | 495 | 0 |
| | 1994 | 2 139 | 2 283 | 2 079 | 511 | 0 |
| | CFE limit | 1 735 | 2 534 | 1 878 | 650 | 18 |
| Hungary | 1993 | 1 191 | 1 645 | 991 | 171 | 39 |
| | 1994 | 1 016 | 1 598 | 909 | 170 | 39 |
| | CFE limit | 835 | 1 700 | 840 | 180 | 108 |
| Italy | 1993 | 1 354 | 3 502 | 2 047 | 545 | 166 |
| | 1994 | 1 319 | 3 031 | 1 946 | 511 | 157 |
| | CFE limit | 1 348 | 3 339 | 1 955 | 650 | 142 |
| Moldova | 1993 | 0 | 133 | 138 | 31 | 0 |
| | 1994 | 0 | 190 | 129 | 27 | 0 |
| | CFE limit | 210 | 210 | 250 | 50 | 50 |
| Netherlands | 1993 | 740 | 1 195 | 612 | 173 | 31 |
| | 1994 | 736 | 955 | 563 | 174 | 0 |
| | CFE limit | 743 | 1 080 | 607 | 230 | 69 |

| State ^b | | Tanks | ACVs ^c | Artillery | Aircraft | Helicopters |
|-------------------------|-----------|---------------|-------------------|---------------|---------------|--------------|
| Norway | 1993 | 262 | 196 | 402 | 80 | 0 |
| | 1994 | 208 | 187 | 402 | 78 | 0 |
| | CFE limit | 170 | 225 | 527 | 100 | 0 |
| Poland | 1993 | 2 515 | 2 232 | 2 151 | 446 | 70 |
| | 1994 | 2 017 | 1 590 | 1 879 | 412 | 80 |
| | CFE limit | 1 730 | 2 150 | 1 610 | 460 | 130 |
| Portugal | 1993 | 198 | 419 | 354 | 136 | 0 |
| | 1994 | 198 | 419 | 354 | 146 | 0 |
| | CFE limit | 300 | 430 | 450 | 160 | 26 |
| Romania | 1993 | 2 568 | 2 889 | 3 314 | 452 | 15 |
| | 1994 | 2 011 | 2 505 | 2 449 | 400 | 16 |
| | CFE limit | 1 375 | 2 100 | 1 475 | 430 | 120 |
| Russia | 1993 | 7 493 | 13 466 | 6 069 | 3 921 | 954 |
| | 1994 | 6 696 | 11 806 | 6 240 | 3 283 | 872 |
| | CFE limit | 6 400 | 11 480 | 6 415 | 3 450 | 890 |
| Slovakia | 1993 | 745 | 944 | 813 | 122 | 19 |
| | 1994 | 644 | 749 | 632 | 116 | 19 |
| | CFE limit | 478 | 683 | 383 | 115 | 25 |
| Spain | 1993 | 993 | 1 144 | 1 291 | 174 | 28 |
| | 1994 | 766 | 1 199 | 1 207 | 177 | 28 |
| | CFE limit | 794 | 1 588 | 1 310 | 310 | 71 |
| Turkey | 1993 | 3 358 | 1 964 | 3 390 | 428 | 35 |
| | 1994 | 2 954 | 2 191 | 3 416 | 456 | 20 |
| | CFE limit | 2 795 | 3 120 | 3 523 | 750 | 43 |
| UK | 1993 | 958 | 2 901 | 520 | 710 | 361 |
| | 1994 | 905 | 3 005 | 537 | 661 | 355 |
| | CFE limit | 1 015 | 3 176 | 636 | 900 | 384 |
| Ukraine | 1993 | 5 394 | 5 803 | 3 725 | 1 452 | 270 |
| | 1994 | 4 768 | 5 187 | 3 407 | 1 276 | 270 |
| | CFE limit | 4 080 | 5 050 | 4 040 | 1 090 | 330 |
| USA | 1993 | 2 110 | 3 476 | 1 502 | 253 | 302 |
| | 1994 | 1 357 | 2 497 | 1 266 | 216 | 225 |
| | CFE limit | 4 006 | 5 372 | 2 492 | 784 | 518 |
| Total 1993 | | 47 077 | 64 518 | 40 909 | 12 314 | 3 142 |
| Total 1994 | | 39 469 | 55 801 | 36 903 | 11 072 | 2 923 |
| Total CFE limits | | 39 142 | 59 822 | 38 286 | 13 462 | 4 000 |

^a Effective 1 Jan. 1994 and 1 Jan. 1995, respectively.

^b Iceland, Kazakhstan and Luxembourg have no weapon limits in the application zone.

^c Armoured combat vehicles.

Sources: Estimates based on the 16th edition of the CFE Consolidated Matrix, 12 Dec. 1994; and Institute for Defense and Disarmament Studies, *Arms Control Reporter* (IDDS: Brookline, Mass.), sheets 407.B.501, 1994 and 407.B.515, 1995.

parties—originally the NATO and the former Warsaw Treaty Organization (WTO) states (now 30 states parties)—essential for launching surprise attack and initiating large-scale offensive operations. The reduction of excess TLE is

Table 20.2. Reduction liabilities of CFE states, December 1994

| State ^a | Tanks | | | ACVs | | | Artillery | | | Aircraft | | | Helicopters | | | Total reduction liability | | | |
|--------------------|---------------|---------------|-------------|---------------|---------------|-------------|--------------|--------------|-------------|--------------|--------------|--------------|-------------|------------|---------------|---------------------------|--------------|---------------|-------------|
| | Liab. | Red. | % | Liab. | Red. | % | Liab. | Red. | % | Liab. | Red. | % | Liab. | Red. | % | Liab. | % | Red. | % |
| Armenia | - | - | 0.0 | 159 | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | 159 | 0.32 | - | 0.0 |
| Azerbaijan | 216 | - | 0.0 | 727 | - | 0.0 | 103 | - | 0.0 | - | - | 0.0 | - | - | 0.0 | 1 046 | 2.13 | - | 0.0 |
| Belarus | 1 873 | 1 205 | 64.3 | 1 435 | 953 | 66.4 | - | - | 0.0 | 130 | 84 | 64.6 | - | - | 0.0 | 3 438 | 7.0 | 2 242 | 65.2 |
| Belgium | 28 | 28 | 100.0 | 284 | 284 | 100.0 | 58 | 58 | 100.0 | - | - | 0.0 | - | - | 0.0 | 370 | 0.8 | 370 | 100.0 |
| Bulgaria | 794 | 478 | 60.2 | 232 | 140 | 60.3 | 404 | 243 | 60.2 | 100 | 62 | 62.0 | - | - | 0.0 | 1 530 | 3.1 | 923 | 60.3 |
| Canada | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | 0 | - | 0.0 |
| Czech Rep. | 1 062 | 926 | 87.2 | 1 033 | 925 | 89.6 | 1 272 | 1 146 | 90.1 | 50 | 57 | 114.0 | - | - | 0.0 | 3 417 | 7.0 | 3 054 | 89.4 |
| Denmark | 146 | 88 | 60.3 | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | 146 | 0.3 | 88 | 60.3 |
| France | 39 | 39 | 100.0 | 570 | 399 | 70.0 | 149 | 163 | 109.4 | - | - | 0.0 | 66 | 50 | 75.8 | 824 | 1.7 | 651 | 79.0 |
| Georgia | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | 0.0 | - | 0.0 |
| Germany | 2 566 | 2 313 | 90.1 | 4 357 | 3 547 | 81.4 | 1 638 | 1 236 | 75.5 | 140 | 140 | 100.0 | - | - | 0.0 | 8 701 | 17.8 | 7 236 | 83.20 |
| Greece | 1 013 | 613 | 60.5 | - | 28 | 0.0 | 505 | 303 | 60.0 | - | - | 0.0 | - | - | 0.0 | 1 518 | 3.1 | 944 | 62.2 |
| Hungary | 510 | 318 | 62.4 | 65 | 146 | 224.6 | 207 | 138 | 66.7 | - | 2 | 0.0 | - | - | 0.0 | 782 | 1.6 | 604 | 77.2 |
| Italy | 211 | 158 | 74.9 | 552 | 332 | 60.1 | 205 | 123 | 60.0 | - | - | 0.0 | 50 | 32 | 64.0 | 1 018 | 2.1 | 645 | 63.4 |
| Moldova | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | 0.0 | - | 0.0 |
| Netherlands | - | - | 0.0 | 261 | 261 | 100.0 | 59 | 59 | 100.0 | - | - | 0.0 | 21 | 91 | 433.3 | 341 | 0.7 | 411 | 120.5 |
| Norway | 127 | 103 | 81.1 | 57 | 57 | 100.0 | 17 | 17 | 100.0 | - | - | 0.0 | - | - | 0.0 | 201 | 0.4 | 177 | 88.1 |
| Poland | 1 120 | 740 | 66.1 | 301 | 301 | 100.0 | 741 | 461 | 62.2 | 61 | 61 | 100.0 | - | - | 0.0 | 2 223 | 4.5 | 1 563 | 70.3 |
| Portugal | - | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | 1 | 0.0 | - | - | 0.0 | - | 0.0 | 1 | 0.0 |
| Romania | 1 591 | 955 | 60.0 | 1 053 | 632 | 60.0 | 2 453 | 1 472 | 60.0 | 78 | 47 | 60.3 | - | - | 0.0 | 5 157 | 10.6 | 3 106 | 60.0 |
| Russia | 3 189 | 1 953 | 61.2 | 5 516 | 4 328 | 78.5 | 660 | 397 | 60.2 | 1 021 | 726 | 71.1 | 99 | 60 | 60.6 | 10 485 | 21.4 | 7 464 | 71.2 |
| Slovakia | 423 | 257 | 60.8 | 442 | 376 | 85.1 | 629 | 378 | 60.1 | 8 | 7 | 87.5 | - | - | 0.0 | 1 502 | 3.1 | 1 018 | 67.8 |
| Spain | 371 | 345 | 93.0 | - | - | 0.0 | 87 | 63 | 72.4 | - | - | 0.0 | - | - | 0.0 | 458 | 0.9 | 408 | 89.1 |
| Turkey | 1 060 | 636 | 60.0 | - | 1 | 0.0 | 122 | 74 | 50.1 | - | 7 | 0.0 | - | - | 0.0 | 1 182 | 2.4 | 718 | 60.7 |
| UK | 183 | 121 | 66.1 | 30 | 20 | 66.7 | - | - | 0.0 | - | - | 0.0 | 4 | 5 | 125.0 | 217 | 0.4 | 146 | 67.3 |
| Ukraine | 1 974 | 1 186 | 60.1 | 1 545 | 927 | 60.0 | - | - | 0.0 | 550 | 380 | 69.1 | - | - | 0.0 | 4 069 | 8.3 | 2 493 | 61.3 |
| USA | 192 | 639 | 332.8 | - | - | 0.0 | - | 5 | 0.0 | - | - | 0.0 | - | - | 0.0 | 192 | 0.4 | 644 | 335.4 |
| Former WTO | 12 752 | 8 018 | 62.9 | 12 508 | 8 728 | 69.8 | 6 469 | 4 235 | 65.5 | 1 998 | 1 426 | 71.8 | 99 | 60 | 60.6 | 33 826 | 69.0 | 22 467 | 66.4 |
| NATO | 5 936 | 5 083 | 85.6 | 6 111 | 4 929 | 80.7 | 2 840 | 2 101 | 74.0 | 140 | 148 | 105.7 | 141 | 178 | 126.24 | 15 168 | 31.0 | 12 439 | 82.0 |
| Total | 18 688 | 13 101 | 70.1 | 18 619 | 13 657 | 73.3 | 9 309 | 6 336 | 68.1 | 2 138 | 1 574 | 73.6 | 240 | 238 | 99.2 | 48 994 | 100.0 | 34 906 | 71.2 |

^a Iceland, Kazakhstan and Luxembourg have no weapon limits in the application zone.

Source: Estimates based on the 16th edition of the CFE Consolidated matrix, 12 Dec. 1994.

to be completed in three one-year phases by 16 November 1995. The first phase was successfully completed in November 1993, with roughly one-third of the states' liabilities reduced. More than 70 per cent of the required reductions were carried out by the end of 1994.³ The relevant TLE holdings after phases I and II are listed in table 20.1.

The major questions on the agenda of or related to CFE Treaty implementation in 1994 discussed here are: (a) the conduct of verification in the second phase of the TLE reduction period; (b) the reduction process; (c) flank limits; (d) the force concentration in the Kaliningrad area; and (e) force cascading.

Verification cooperation

Under the provisions of the CFE Treaty, the states parties continued to inspect declared sites and objects of verification (OOV). The passive declared site inspection quotas are equal to 10 per cent of a state's notified OOV. No breaches or major differences between declared information and the findings of inspection teams were reported to the Joint Consultative Group (JCG), the principal CFE Treaty verification and compliance mechanism composed of representatives from all 30 states parties.

On 14–16 September 1994 the NATO Verification Co-ordinating Committee (VCC) of the 16 NATO member states hosted its fourth seminar in the Alliance's headquarters in Brussels for 14 of its North Atlantic Cooperation Council (NACC) partner countries. It was held under the Enhanced Cooperation Programme (launched in January 1993) and attended by representatives of the ministries of foreign affairs and defence and the heads of the national defence organizations of the NACC partners: newly independent states Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Moldova, Ukraine and the Russian Federation; the Visegrad states (the Czech Republic, Hungary, Poland and Slovakia); and Bulgaria and Romania. On the agenda was the assessment of cooperation in the verification and implementation of conventional arms control agreements, including the CFE Treaty and the Vienna Document 1992. The participants reviewed the results of the cooperation programme in four main areas: joint inspection of declared sites; joint inspection of major equipment reduction events; joint training courses; and sharing of information stored on NATO's VERITY verification database. This database contains reports from all Western-led inspections and information on both CFE and CSBM data exchanges and is constantly updated. It was made available to the NACC partners in mid-February 1994.⁴ Lessons learned during almost 200 CFE inspections carried out over the past 18 months by joint inspection teams were also discussed. These inspections related to forces and installations of the 30 CFE Treaty states parties in which about 34 000 TLE items had so far been destroyed.

³ According to the 16th edition of the CFE Consolidated Matrix, 12 Dec. 1994.

⁴ Not all partner states have responded to the NATO invitation. Institute for Defense and Disarmament Studies, *Arms Control Reporter* (IDDS: Brookline, Mass.), sheet 407.B.503, 1994.

Table 20.3. Declared sites and objects of verification, June 1994 and January 1995

| State | Sites | | OOV | | State | Sites | | OOV | |
|------------|-------|------|------|------|-------------|-------|------|------|------|
| | 1994 | 1995 | 1994 | 1995 | | 1994 | 1995 | 1994 | 1995 |
| Armenia | 9 | 19 | 26 | 20 | Moldova | 5 | 7 | 9 | 7 |
| Azerbaijan | 33 | 33 | 42 | 37 | Netherlands | 37 | 32 | 55 | 45 |
| Belarus | 47 | 46 | 56 | 54 | Norway | 18 | 16 | 27 | 19 |
| Belgium | 36 | 28 | 61 | 38 | Poland | 118 | 108 | 145 | 128 |
| Bulgaria | 94 | 96 | 114 | 112 | Portugal | 32 | 30 | 35 | 33 |
| Canada | 1 | 1 | 1 | 1 | Romania | 132 | 122 | 158 | 162 |
| Czech Rep. | 58 | 59 | 76 | 68 | Russia | 244 | 216 | 378 | 351 |
| Denmark | 31 | 32 | 56 | 59 | Slovakia | 25 | 19 | 33 | 29 |
| France | 155 | 146 | 193 | 180 | Spain | 90 | 87 | 94 | 92 |
| Georgia | 6 | 7 | 6 | 7 | Turkey | 107 | 109 | 120 | 122 |
| Germany | 207 | 189 | 211 | 191 | UK | 110 | 103 | 135 | 206 |
| Greece | 72 | 76 | 116 | 121 | Ukraine | 139 | 148 | 193 | 126 |
| Hungary | 32 | 32 | 44 | 47 | USA | 50 | 37 | 80 | 61 |
| Italy | 178 | 182 | 184 | 188 | | | | | |

Sources: ACDA, reported in *Arms Control Reporter*, sheets 407.B.502, 1994 and 407.B.516, 1995.

By May 1994 the Enhanced Co-operation Programme, chiefly initiated to include NACC states in 'West-on-East' inspections, had 31 joint teams for inspection of declared sites and 52 joint teams established to monitor reductions.⁵ As a rule, the nine-member joint teams include three inspectors from Central and East European (CEE) countries. However, some concern has already been voiced by the Eastern cooperation partners that the joint inspections are carried out at the cost of decreasing 'East-on-East' checking. In response to that criticism, NATO started to participate in Eastern-led inspections, aiming to increase its involvement in all inspections. It is claimed that the first results show that this type of cooperation has led to improved understanding, harmonization and standardization of the complex CFE Treaty provisions among the NACC states.⁶ About 80 students from NACC partner countries have attended three inspectors' courses at the NATO school in Oberammergau, Germany, and Belgium and Germany plan to launch further courses.

Preparation has also begun within the VCC for the intensive 120-day residual level validation period (November 1995–January 1996) when inspections will be conducted to ensure that the agreed ceilings are not exceeded.

Reduction of excess treaty-limited equipment

To comply with the CFE Treaty ceilings excess TLE items must be destroyed or eliminated in other ways (by conversion to non-military uses, reclassifica-

⁵ Nedimoglu, N., 'NATO and partner countries cooperate in implementing the CFE Treaty', *NATO Review*, no. 3 (June 1994), p. 19.

⁶ Nedimoglu (note 5), p. 20; and *Arms Control Reporter*, sheet 407.B.508, 1994.

tion as unarmed training equipment, recategorization, static display, ground instructional application, target use and decommissioning). Each state party was to have destroyed 60 per cent of its total reduction liability in each of the five categories of conventional armaments and equipment limited by the Treaty by the end of the second reduction phase.⁷ On 15 December 1993 all the states parties provided data about their CFE-limited arsenals in the annual information exchange.

In January 1994, the JCG resumed its weekly plenary meetings in Vienna (there have been suggestions that it should meet less frequently as a step to reduce administrative costs). In March, the JCG approved a revision of CFE Treaty artillery reduction procedures, the fifth addition to CFE reduction provisions agreed among the parties, following the adoption of tank and ACV destruction or conversion techniques in May, June and October 1993. The new method allows states to destroy artillery pieces in a less sophisticated (but more effective and cheaper) way than that provided in the Protocol on procedures governing the reductions under the Treaty.⁸ Russia has proposed additional procedures for the destruction of artillery pieces which are similar to the tank destruction procedures approved in 1993 (partial cuts in barrels and breech blocks of artillery pieces).⁹

The problem of the high costs of destruction persists although states parties continue to pursue the goal of destroying, decommissioning or transferring their heavy military equipment 'out of zone'. Some states have tried to solve the problem, for example, by turning TLE into static displays or museum pieces. The Czech Republic 'privatized' its destruction process to make it more cost-effective;¹⁰ and the Czech Army converted its T-55 tanks into fire-fighting vehicles which it has tried to sell on the international market. Other states could hardly meet the heavy cost burden. In spring 1994, Russia proposed that a treaty support fund be established.¹¹ Belarus also continued to complain about the lack of international assistance (such as an international fund to support the dismantling process) for its reduction efforts and reproached Western participants for the reduction liabilities and inspection quotas. A partial response to those complaints was the US commitment, under congressional Project Peace, of \$10 million for TLE destruction in Belarus and Ukraine, \$5 million each.¹² None the less, in February 1995 Belarussian

⁷ The CFE Treaty, reprinted in Koulik and Koski (note 2), Article VIII, para. 4(B).

⁸ Protocol on Procedures Governing the Reduction of Conventional Armaments and Equipment Limited by the Treaty on Conventional Armed Forces in Europe, Section V(8), reprinted in Koulik and Koski (note 2), pp. 237-38.

⁹ *Arms Control Reporter*, sheet 407.B.503, 1994. Several states have also informally suggested 'destruction by other means', e.g., that TLE could be eliminated by allowing it to rust, and then verifying its uselessness by inspections, or by counting the weapons lost in battle.

¹⁰ Such privatization was not without problems: the Prague daily *Telegraf* of 19 July (as reported in *Rzeczpospolita*, 20 July 1994) reported that some 100 tanks, many ACVs, artillery pieces and aircraft had 'disappeared' and that the Czech military authorities were unable to account for them.

¹¹ *Arms Control Reporter*, sheet 407.B.505, 1994.

¹² At the same time the Belarussian Defence Ministry quickly stated that destroying its TLE would cost \$33 million. *Arms Control Reporter*, sheet 407.B.507-8, 1994.

Table 20.4. Data on the distribution and reduction of Russian and Ukrainian naval infantry and coastal defence holdings, December 1994

| Unit | Tanks | % | ACVs | % | Artillery | % | Total | % |
|------------------------|------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| <i>Holdings:</i> | | | | | | | | |
| Russia | | | | | | | | |
| Outside ATTU zone | 331 | | 488 | | 436 | | 1 255 | |
| Inside ATTU zone | 331 | | 488 | | 436 | | 1 255 | |
| Ukraine | 271 | | 749 | | 208 | | 1 228 | |
| Sub-total in ATTU zone | 602 | | 1 237 | | 644 | | 2 483 | |
| Total | 933 | | 1 725 | | 1 080 | | 3 738 | |
| <i>Reductions by:</i> | | | | | | | | |
| Russia | | | | | | | | |
| Outside ATTU zone | 331 | 100.0 | 488 | 100.0 | 436 | 100.0 | 1 255 | 100.0 |
| Inside ATTU zone | 199 | 60.1 | 293 | 60.0 | 262 | 60.1 | 754 | 60.1 |
| Ukraine | 161 | 59.4 | 373 | 49.8 | 0 | 0.0 | 534 | 43.5 |
| Sub-total in ATTU zone | 360 | 59.8 | 666 | 53.8 | 262 | 40.7 | 1 288 | 51.9 |
| Total | 691 | 74.1 | 1 154 | 66.9 | 698 | 64.6 | 2 543 | 68.0 |

Source: 16th edition of the CFE Consolidated Matrix, 12 Dec. 1994.

President Alexander Lukashenko announced that his country would provisionally 'suspend' the implementation of the CFE Treaty, a step warranted both by Belarus' financial difficulties and by 'an evident violation of the established parity of forces in the world', that is, the possible expansion of NATO eastwards.¹³ The NATO VCC estimated that while destruction is both expensive and time-consuming, overall destruction or decommissioning is less costly than maintaining equipment in stockpiles or mothballs.¹⁴

Armenia and Azerbaijan had still not acknowledged their respective reduction liabilities and had not reduced any equipment. Their officials suggested that combat losses in the war between them be counted against their declarations of holdings, a step counter to the provisions of Article VIII.¹⁵

Russia, despite its diplomatic efforts and the public campaign to revise some CFE Treaty provisions, showed no sign of seeking to disrupt the reduction process and successfully reached its phase II goal. At the end of the year, Russia had reduced 7464 TLE items, or 71 per cent of its reduction liability. Ukraine declared in November that it had met the 60 per cent reduction target.¹⁶ In addition, under the terms of the 14 June 1991 Soviet pledge,¹⁷

¹³ See Interfax, *Prezidentskiy Vestnik* (Moscow), 'Deyatelnost' vysshikh struktur vlasti' [Reports on Presidential and Governmental Activities], 24 Feb. 1995, pp. 1-2; and Interfax, *Ekspress/Urgent* (Moscow), 25 Feb. 1995, p. 1.

¹⁴ *Atlantic News*, no. 2655 (21 Sep. 1994).

¹⁵ *Arms Control Reporter*, sheet 407.B.511-512, 1994.

¹⁶ UNIAN (Kiev), 'Inspectors approve of arms reduction compliance', 28 Oct. 1994, Foreign Broadcast Information Service, *Daily Report Central Eurasia (FBIS-SOV)*, FBIS-SOV-94-211, 1 Nov. 1994, p. 31.

¹⁷ Statement by the Government of the USSR, 14 June 1991, reprinted in *Arms Control Reporter*, sheets 407.D.80-82, 1991.

Table 20.5. Reductions by destruction or by conversion into civilian equipment outside the CFE application area, December 1994

| Area | Tanks | | ACVs | | Artillery | | Total red. | % |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|-------------|
| | Liab. | Red. | Liab. | Red. | Liab. | Red. | | |
| From beyond the Urals | 6 000 | 887 | 1 500 | 730 | 7 000 | 436 | 2 053 | 14.1 |
| Naval infantry/ coastal defence | 466 | 331 | 486 | 488 | 540 | 436 | 1 255 | 84.1 |
| Total | 6 466 | 1 218 | 1 986 | 1 218 | 7 540 | 872 | 3 308 | 20.7 |

Source: 16th edition of the CFE Consolidated Matrix, 12 Dec. 1994.

Russia had destroyed or converted 754 items, or 60 per cent of its TLE belonging to naval infantry and coastal defence forces in the ATTU zone, as well as 1255 naval and coastal defence holdings stationed outside the CFE zone of application, in Russian Asia (table 20.4).¹⁸ Ukraine had also scrapped 534 TLE items, or more than 43 per cent, of its naval and coastal defence liabilities. The process of reduction of TLE beyond the Urals under the terms of the 14 June 1991 agreement is making much less headway (table 20.5). Other CEE states declared that they had met their Treaty obligations, and some were even ahead of the reduction schedule.

The NATO states had achieved their goals for phase II, and some had completed their TLE reductions (the USA, Belgium and the Netherlands).

Altogether roughly 36 200 (including naval and coastal holdings) TLE items had been reduced: 23 800 by Russia and the CEE states and 12 400 by the NATO states. Overall 13 400 main battle tanks, 14 300 ACVs, 6600 artillery pieces, 1600 combat aircraft and 240 attack helicopters had been eliminated from the ATTU zone (see tables 20.2 and 20.4).

The flank issue

Russia

The flank issue is only one, although the most manifest, of a broad range of political and security concerns voiced by Russia about the changed geopolitical environment, stemming not only from the post-cold war heritage, but also from new perceived challenges, such as the prospect of NATO expanding eastwards.¹⁹ These concerns culminated in Russian Defence Minister Pavel Grachev's warning during US Defense Secretary William Perry's visit to

¹⁸ Interfax, 'General says Russia meets weapons treaty pledges', 5 Dec. 1994, FBIS-SOV-94-233, 5 Dec. 1994. *Arms Control Reporter*, sheet 407.B.511, 1994, however, reported that questions remained about the ability to verify the destruction of the equipment moved beyond the Urals.

¹⁹ Various steps are suggested in this regard, such as (a) a change in the CFE groups of states; (b) keeping the same NATO group collective CFE Treaty limit as new members are admitted; and (c) restricting foreign troop or nuclear weapon deployments in CEE states that could become NATO members, etc. For suggestions regarding the modification of the CFE Treaty to alleviate Russian security concerns, especially in the light of a possible eastward expansion of NATO, see Sharp, Jane M. O., 'Should the CFE Treaty be revised?', *Bulletin of Arms Control*, no. 15 (Aug. 1994), pp. 2-10.

Moscow on 3 April 1995 that, should NATO expand to the east, Russia might suspend the reduction of its conventional arms as required by the CFE Treaty and consider the creation of new groups of armed forces 'on the most threatened fronts' and closer security ties among the Commonwealth of Independent States (CIS) as other possible countermeasures.²⁰

In 1994, the renegotiation of CFE Treaty provisions (Article V) on the flank zones (especially the southern flank) continued to be at the centre of disagreements between Russia (and to some extent Ukraine) and the overwhelming majority of other states parties to the CFE Treaty.²¹ In Russia it was particularly the military authorities that insisted on revision of CFE limitations.²²

During the year, Russian officials made numerous proposals concerning the status of Russia's flank zones. In early 1994, the Russian representatives to the JCG submitted the numbers of TLE items and operational plans for the forces they wanted to deploy in the flank zones.²³ The argumentation presented to the JCG and in talks with their US counterparts reflected concerns over the tensions and fighting in Russia's own southern territory (Chechnya and North Ossetia), the recent civil war in Georgia and the protracted conflict between Armenia and Azerbaijan. The Russian arguments were repeatedly accompanied by warnings that Russia would be forced to unilateral action if not satisfied with appropriate concessions by the West. Various responses have been suggested in the West. However, the Western and Central European governments, and Turkey and Norway in particular, firmly oppose change, arguing that: (a) it would give Russia too much leeway in projecting power *vis-à-vis* its 'near abroad', that is, former non-Russian Soviet republics, and other neighbours; and (b) it would invite dismantlement of the whole Treaty as other states would start to seek revisions. It has been pointed out that Russia still has various options in terms of schedule, recategorization of weapons and provisional introduction of some of them into the zone.²⁴ One Russian observer stated that there is no credible reply to the question: 'what threat, present or future, are we preparing to encounter in the south which demands so hastily an organised line of defence?', when the risk of a surprise mass-attack is gone or at least substantially reduced.²⁵ Russia's southern neighbours neither pose a danger nor seem to violate the CFE Treaty gravely. Domestic fighting cannot threaten its vital security interests. The oft-voiced lack of 'armoured coverage' in the flanks can easily be compensated with deployment of armoured infantry fighting vehicles (AIFVs) under Article XII. However, the military do not seem eager to assign more AIFVs to the internal security forces,²⁶ and nothing

²⁰ Open Media Research Institute (OMRI), *Daily Digest*, I, no. 67 (5 Apr. 1995).

²¹ For discussion of the flank issue in 1993, see Lachowski, Z., 'Conventional arms control and security co-operation in Europe', *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 571-74.

²² For a discussion of the Russian military attitude see Oznobistchev, S., 'Renegotiating CFE: a Russian view', *Bulletin of Arms Control*, no. 16 (Nov. 1994), pp. 19-22.

²³ *Arms Control Reporter*, sheet 407.B.502, 1994.

²⁴ Lachowski (note 21).

²⁵ Oznobistchev (note 22), p. 22.

²⁶ *International Herald Tribune*, 4 Apr. 1994.

prevents Russia from increasing the military personnel strength or building fortifications on its southern border.

In the spring, the ongoing repositioning of Russia's forces (mainly those returning from Central Europe) along its northern and southern flanks prompted reaction from NATO and the USA. US intelligence projections indicated that, had Russia continued redeploying its troops, by 1995 it would have had about 400 tanks, 2000 ACVs and 500 artillery pieces in excess of the flank limit. US officials pointed out that since redeployment is a very costly process, it is hard to imagine that Russia would intend or be able to afford to pull out those forces by the 1995 deadline, and on 3 April US Secretary for Defence William Perry ruled out any alteration of the CFE Treaty provisions to allow Russia to increase its forces in the flank zone.²⁷

In the JCG Russia sought to reopen the issue of its 14 June 1991 pledge to exempt naval infantry and coastal defence forces from the flank zone limits.²⁸ On 21 March 1994 it proposed that the CFE flank limits not apply to those forces, which would enable Russia to increase relevant holdings in the zone. The Russian position that the 1991 statement by the Soviet Government was not legally binding was supported by the Ukrainian official to the JCG, although on different grounds.²⁹

Russia would also like to have the provisions on CFE Treaty equipment storage (Article X, paras 9 and 10) dropped with respect to the numbers of TLE items (550 tanks, 1000 ACVs and 300 artillery pieces) and the time period (42 days) for which equipment can be removed from designated permanent storage sites. It argued that having to coordinate changes in its military equipment with former WTO partners is discriminatory. Both demands were firmly rejected by the Western states.³⁰

Another option sought by Russia is to redraw the official maps that defined the Soviet military districts (MDs) on which the flank limits were based.

During the year, Russia suggested that its southern neighbours, Armenia, Azerbaijan and Georgia, lower their TLE ceilings to enable Russia to raise its own ceilings without violating the Treaty.³¹ The suggestion was rejected immediately by Azerbaijan, and Georgia later refused to allocate some of its Treaty-related holdings to Russia.³²

In May 1994 Russia attempted to link its participation in NATO's Partnership for Peace (PFP) programme to revisions to the CFE Treaty. Chief of the Russian General Staff General Mikhail Kolesnikov charged on 5 May that the Treaty restrictions were 'pushing Russia into a corner' and that pressure on Moscow to comply with it was making talks on the PFP programme 'particu-

²⁷ Note 26.

²⁸ Statement by the Government of the USSR (note 17).

²⁹ A Czech diplomat was reported to support the Ukrainian demand regarding the CFE flank revision, taking into account its security concerns. *Arms Control Reporter*, sheet 407.B.506, 1994. Poland's Defence Minister Piotr Kolodziejczyk, on the other hand, stated that his country opposes any revisions despite Ukrainian pressure. *Rzeczpospolita*, 14 June 1994.

³⁰ *Arms Control Reporter*, sheet 407.B.503-4, 1994.

³¹ Radio Free Europe/Radio Liberty, *RFE/RL Brief News*, vol. 3, no. 24 (6-10 June 1994), p. 7.

³² *Jane's Defence Weekly*, vol. 22, no. 21 (26 May 1994), p. 5.

larly difficult'.³³ Russian Defence Ministry officials indicated that among the conditions they were seeking for Russian PFP adherence was revision of CFE Treaty limits.³⁴ However, the NATO ministerial meeting in Istanbul in June 1994 rejected such a linkage, and US Secretary of State Warren Christopher confirmed the US commitment to maintain the CFE Treaty 'in its integrity "in the long term"'.³⁵

In June Defence Minister Grachev alluded to the idea of creating a 'huge' military district in the North Caucasus with forces capable of waging small or large conflicts.³⁶ In the autumn, Russia intensified its campaign over the CFE quota. Grachev, stressing that the CFE Treaty limits are 'harmful and unacceptable' and pose a 'threat to its national security', asserted that Russia should be allowed to keep 1100 main battle tanks, 3000 ACVs and 2100 artillery pieces in the flank areas of the Leningrad and North Caucasus MDs; thus the ceilings would be exceeded by 400 tanks, 2420 ACVs and 820 artillery systems. He went on to state that the lion's share of this would go to the North Caucasus MD in order to increase its potential to 600 tanks, 2200 ACVs and 1000 artillery pieces.³⁷ Slightly different figures were demanded a few weeks later by General Mikhail Kolesnikov, who postulated that 400 more tanks be dispatched to the flank zone. He also threatened that if a renegotiation of the CFE Treaty did not occur, Russia would exceed the levels 'by a bit' until the situation in the Caucasus has been completely stabilized.³⁸

The developing armed conflict in Chechnya in early December 1994 prompted Russian officials to intensify their demands for Russian exemption from Article V of the CFE Treaty. Deputy Chief of Staff Vladimir Zhurbenko stated that carrying troops and equipment from the Urals to Chechnya cost the army 2.5 million roubles for each rail car. Thus, he warned, Russia could no longer abide by the terms of the Treaty.³⁹ Later that month Russia officially called for 'immediate' revision and demanded an additional 1000 ACVs on top of the 580 it was allocated in the area.⁴⁰ In early January 1995 Russia threatened the West with an ultimatum: either they agree on revision or Russia withdraws from the Treaty.⁴¹

The problem of the flanks is a real one—at present, after the breakup of the Soviet Union, two states parties declare that they find the Treaty clearly dis-

³³ *RFE/RL News Briefs*, vol. 3, no. 19 (2–6 May 1994), p. 6; and 'Moscow hints at Partnership for Peace, CFE limit linkage', *Arms Control Today*, June 1994, p. 28.

³⁴ 'Russia links PFP with Treaty limits', *Defense News*, 9–15 May 1994, pp. 3, 44.

³⁵ *Atlantic News*, no. 2630 (10 June 1994).

³⁶ *RFE/RL News Briefs*, vol. 3, no. 27 (27 June–1 July 1994), p. 5.

³⁷ Grachev even suggested that Turkey has indirectly backed his ideas, allegedly expecting some concession for itself. Koretskiy, A. and Bulavinov, I., 'Grachev on conventional weapons cuts. Russia insists on amending Paragraph 5', *Kommersant-Daily*, 7 Sep. 1994, pp. 1 and 3, in FBIS-SOV-94-174, 8 Sep. 1994, p. 1. On Turkey's reaction to the Russian strivings in the region see, e.g., 'Turkey braces as Russians revive influence', *Defense News*, 25–31 July 1994, p. 8.

³⁸ *Atlantic News*, no. 2660 (7 Oct. 1994).

³⁹ *The Guardian*, 6 Dec. 1994.

⁴⁰ *Atlantic News*, no. 2682 (29 Dec. 1994), and no. 2683 (5 Jan. 1995). The Chechen conflict also gave rise to concern among the Caucasian states about the impact of the increased Russian military presence near their borders. TURAN (Baku), 'Russia accused of exceeding CFE troop limits in Caucasus', 4 Jan. 1995, FBIS-SOV-95-004, 6 Jan. 1995, p. 35.

⁴¹ *Atlantic News*, no. 2685 (13 Jan. 1995).

criminary. However, the issue is compounded by the changes taking place in Russia and Russia's attitude to the CFE Treaty is becoming a yardstick of its cooperative security and foreign policy. Authoritarian and nationalist shifts in the internal political spectrum, the increasing bearing of the military upon politics, the bloody war in Chechnya, as well as Russia's growing mistrust and assertiveness *vis-à-vis* NATO, the USA, Central Europe and the 'near abroad', all give rise to mounting concerns over Russia's conduct and intentions in the international arena. At the end of the year the USA and other CFE states parties continued to oppose any amendments affecting the essence of the CFE Treaty before the 1996 review of its implementation in accordance with the terms of Article XXI, paragraph 1, which stipulates that a review conference be conducted 46 months after entry into force of the Treaty. In the meantime, states parties declared their readiness to discuss all other aspects, such as reduction liabilities, peacekeeping under OSCE or UN supervision, redrawing the MD boundaries, and so on.

The Caucasus

Apart from its impact on the situation in the Caucasian region, the prolonged conflict between Armenia and Azerbaijan also has a CFE Treaty-related dimension. Since the signing of the Tashkent Agreement of 15 May 1992, both the Armenian and the Azerbaijani TLE holdings have risen to a point at which serious doubts arise about these countries' Treaty compliance at the end of the reduction period in the end of 1995.⁴² Moreover, both states have failed to conform with the CFE destruction requirements, as mentioned above. The holdings of TLE by Nagorno-Karabakh (an Armenian enclave which had declared its independence from Azerbaijan) reportedly total some 100 tanks, 100 ACVs and 200 artillery systems,⁴³ which compounds the compliance problem still further. Although insignificant in the broader CFE context, the amounts of weapons in Nagorno-Karabakh, while difficult to assign to either state party to the conflict, are disproportionately large in relation to the amount of major weaponry in the Caucasus region and the TLE allowed for the flank zone. All this adds to the otherwise urgent need to readjust the CFE Treaty in order to make it correspond to the evolving international situation.

Kaliningrad

The high concentration of military forces in the Kaliningrad oblast is not directly related to CFE implementation. It remained a concern for the neighbouring states in 1994. As a result of the dissolution of the USSR, Kaliningrad is the only remaining Russian portion (15 000 km²) of the former Baltic MD, and under the CFE Treaty Russia is formally allowed to deploy sizeable

⁴² For more on this see Masih, J., 'The CFE Treaty and conflict in the Caucasus', *Jane's Intelligence Review*, vol. 7, no. 2 (1995), pp. 61-63.

⁴³ Masih (note 42), p. 62.

Table 20.6. TLE holdings of Armenia and Azerbaijan

| State | Year | Tanks | ACVs | Artillery | Aircraft | Helicopters |
|------------|-----------|-------|-------|-----------|----------|-------------|
| Armenia | 1990 | 258 | 641 | 357 | — | 7 |
| | 1992 | 77 | 189 | 160 | 3 | 13 |
| | 1993 | 154 | 379 | 259 | 3 | 4 |
| | 1994 | 102 | 285 | 225 | 6 | 7 |
| | CFE limit | 220 | 220 | 285 | 100 | 50 |
| Azerbaijan | 1990 | 391 | 1 285 | 463 | 124 | 24 |
| | 1992 | 278 | 338 | 294 | 50 | 6 |
| | 1993 | 336 | 947 | 388 | 53 | 8 |
| | 1994 | 285 | 835 | 343 | 58 | 18 |
| | CFE limit | 220 | 220 | 285 | 100 | 50 |

Source: Estimates based on 'Factfile', *Arms Control Today*, June 1992; 'Factfile', *Arms Control Today*, Mar. 1993, p. 28; 16th edition of the CFE Consolidated Matrix, 12 Dec. 1994; and *Arms Control Reporter*, sheets 407.B.501, 1994 and 407.B.515, 1995.

armed forces there.⁴⁴ The quota is by no means used up, but cramming sizeable forces in this small exclave has created a unique phenomenon. In the Treaty context, the other CFE states parties cannot officially challenge Russia's right to keep its armed forces and armaments in the area unless they exceed the TLE entitlements for the zone. However, Russian military officials have admitted that the armed forces in Kaliningrad exceed the security needs of the area and suggested that some of the troops could be redeployed into mainland Russia, preferably the Leningrad and North Caucasus MDs.⁴⁵

Russian Defence Minister Pavel Grachev's announcement in March 1994 of the intention to create a 'special defence region' in the area,⁴⁶ to comprise large groupings of ground forces, military aviation, air defence forces and naval units, added to the anxiety about Russia's plans regarding the role and tasks of such a force. This plan and other statements prompted a series of reactions from the Baltic capitals,⁴⁷ as well as from Poland⁴⁸ and some Scandinavian states.⁴⁹ Estimates of the number of troops in the area vary; there has recently been talk of 100 000–200 000.⁵⁰ According to the data given by

⁴⁴ According to Russian Chief of Staff, Col. Gen. Vladimir Zhurbenko, Russia is entitled to station in the Kaliningrad oblast up to 4200 tanks, 8760 ACVs and 3235 artillery systems. "'Concern" over CFE flank restriction voiced', *Krasnaya Zvezda*, 7 Dec. 1994, FBIS-SOV-94-236, 8 Dec. 1994, p. 15.

⁴⁵ Pavel Grachev, interview for Interfax on 11 Sep. 1994. FBIS-SOV-94-176, 12 Sep. 1994, p. 11.

⁴⁶ *Komsomol'skaya Pravda*, 22 Mar. 1994.

⁴⁷ See, e.g., the 5th Baltic Assembly's demand to demilitarize the Kaliningrad region and convene an international round table to discuss the issue. 'Calls for Kaliningrad demilitarization', Interfax (Moscow), 14 Nov. 1994, FBIS-SOV-94-176, 15 Nov. 1994, p. 70.

⁴⁸ Polish President Lech Walesa's remarks during his visit to Riga. *Rzeczpospolita*, 24 Feb. 1994. One of the motives of Poland's proposal of 7 Sep. 1994 (CSCE document CSCE/FSC/SC.29, Vienna, 7 Sep. 1994) to launch a new agenda for arms control in Europe was to avoid excessive concentration of armaments in areas such as Kaliningrad. See comments by the Polish chief delegate to the CSCE, Ambassador J. M. Nowak, for *Rzeczpospolita*, 28 Nov. 1994.

⁴⁹ Statement by Sweden's Foreign Minister Margareta af Ugglas during her visit to Kaliningrad. Ministry for Foreign Affairs Press Release, Stockholm, 19 May 1994.

⁵⁰ Hoff, M. and Timmerman, H., 'Kaliningrad: Russia's future gateway to Europe?', *RFE/RL Research Report*, vol. 2, no. 36 (10 Sep. 1993), p. 40.

Russia to Lithuanian officials, the figure is about 40 000, and the target level for reductions is 26 000.⁵¹

Cascading

NATO's Equipment Transfer and Equipment Rationalization Programme, or cascading—transferring TLE, as permitted under the CFE Treaty, from several NATO countries (such as the USA, Germany and the Netherlands) to their allies (Greece, Norway, Portugal, Spain and Turkey)—continues to be a source of concern in the Balkans. Under this programme the weapon holdings of Greece and Turkey have increased so drastically, both in quantitative and in qualitative terms, that their Balkan neighbours, especially Romania and Bulgaria, have started to question the equity of the Treaty. While maintaining numerical parity they feel disadvantaged in qualitative terms, since Greece and Turkey have access to more advanced NATO technology.⁵² Given the economic problems with which the non-NATO Balkan nations are struggling, they watch with growing anxiety the distinctive edge the two NATO beneficiaries are gaining over them. In the broader regional context the issues of Greek non-recognition of Macedonia, Turkey's treatment of its Kurdish minority and their different political affinities in the war in the former Yugoslavia raise concern, while the Greek–Turkish acrimonies over Cyprus and recent Greek attempts to extend its territorial waters in the Aegean Sea at Turkey's expense threaten to turn the 'cascaded' arms on each other.

US military assistance to Turkey alone has totalled about \$2.4 billion between 1990 and 1994 and has accounted for a sizeable part of Turkey's military budget under the 'cascade' programme.⁵³ The UN Register of Conventional Arms revealed that in 1992–93 the USA, Germany and the Netherlands turned over many hundreds of tanks and ACVs as well as considerable amounts of artillery pieces, combat planes and attack helicopters to Greece and Turkey.⁵⁴ According to SIPRI estimates, in 1990–94 Greece and Turkey were among the top recipients of conventional arms.⁵⁵ These trends in cascading, however, seem to be changing, as the USA has decided to reduce Turkey's foreign assistance in 1995 (originally \$364.5 million) by one-quarter. In addition, Germany temporarily suspended delivery of its surplus

⁵¹ Petersen, Ph. A., 'Kaliningrad—transition from garrison state', *Jane's Intelligence Review*, Dec. 1994, p. 572.

⁵² Engelbrekt, K., 'Bulgaria's evolving defense policy', *RFE/RL Research Report*, vol. 3, no. 32 (19 Aug. 1994), pp. 47–48.

⁵³ *Defense News*, 25–31 July 1994, p. 8.

⁵⁴ UN Register of Conventional Arms, Report of the Secretary-General, UN document A/48/344, 11 Oct. 1993; A/49/352, 1 Sep. 1994. The USA alone claims to have sent, under cascading and bilateral aid programmes, 1163 tanks, 300 ACVs, 156 artillery pieces and 16 combat planes to Greece and 1509 tanks, 489 ACVs, 147 artillery pieces and 54 combat aircraft and 28 attack helicopters to Turkey. However, according to the Greek data, in 1992–93 it acquired from the USA only 671 tanks, 182 ACVs, 84 artillery systems and 24 aircraft. Turkey reported the acquisition of 870 tanks, 250 ACVs, 72 artillery systems, 34 aircraft and 31 helicopters during the same period.

⁵⁵ See table 14.2, chapter 14 in this volume; and Sislis, J. and Wezeman, S., *1994 Arms Transfers: A Register of Deliveries from Public Sources* (Monterey Institute of International Studies: Monterey, Calif., Mar. 1995).

F-4s because of its concern over Turkey's human rights record.⁵⁶ Deliveries of arms to Greece have already decreased substantially, in comparison with its rival neighbour.⁵⁷

III. Implementation of the CFE-1A Agreement

The 1992 CFE-1A Agreement sets ceilings on various categories of military personnel of the 30 states parties in the ATTU zone. The Agreement is politically binding and not subject to ratification by parliaments. In 1994 Armenia reported for the first time on its manpower of 32 682 army and air personnel.

Table 20.7 shows that for the most part the process of reducing the manpower of CFE states parties is progressing smoothly. Most NATO states have declared their personnel holdings to be lower than those notified in 1992 (except for Greece and Turkey) and some have forces well below the limit.

The reduction process in the former WTO states is slower, but levels are approaching the notified ceilings quite closely. The slower pace of reduction is often the result of the economic and social problems faced by the states concerned in cutting back and restructuring their armed forces. However, some of the states are striving to reduce their military personnel still further. Hungary's Defence Minister György Keleti affirmed that in 1995 the Hungarian Army will be cut back by 20–30 per cent,⁵⁸ and Poland is reportedly about to decide to trim its forces to 170 000–200 000.⁵⁹ Ukraine, with the second largest army in Europe, declared in autumn 1994 that it would have 455 000 personnel by the end of the year and would reach the 450 000 target during 1995.⁶⁰

Russia has had to balance (a) budget deficits, a declared political will to reduce military manpower to 1.5 million and considerable draft-dodging, on the one hand; and (b) the 'damage-limitation' manoeuvres of its military commanders seeking the lowest possible cuts, on the other. Thus, mixed signals were sent during the year, reflecting the in-fighting among the power centres in Russia. This was clearly seen in the struggle over budget appropriations for the Army in the first half of 1994. In early 1994, Defence Minister Grachev insisted on keeping an Army of not less than 1.9 million. At that time he put the strength of the Army at 2.3 million, which was to be reduced to 2.1 million at the end of the year.⁶¹ Later he announced that the Army would be reduced to 1.7 million by 1995.⁶² President Boris Yeltsin reaffirmed that the armed forces would be reduced to 1 917 400 by 1 January 1995, with the ultimate

⁵⁶ *Defense News* (note 53).

⁵⁷ See table 14.2, chapter 14 in this volume.

⁵⁸ *Magyar Honved*, 25 Nov. 1994, quoted in *Rzeczpospolita*, 26–27 Nov. 1994.

⁵⁹ *Rzeczpospolita*, 30 Dec. 1994.

⁶⁰ *Süddeutsche Zeitung*, 23 Sep. 1994.

⁶¹ Interfax, 'Warns against Army cutbacks', 16 Mar. 1994, FBIS-SOV-94-052, 17 Mar. 1994, p. 13.

⁶² *Segodnya's* military expert, P. Felgengauer, estimated that because of the difficulties in counting the personnel in the Russian Army the figures given are approximate. According to him, the Army's strength is already less than 1.7 million. *Segodnya*, 25 Oct. 1994.

Table 20.7. CFE-1A Agreement manpower holdings on 1 January 1994 and 1 January 1995 and CFE-1A ceilings

| State ^a | 1 Jan. 1994 | 1 Jan. 1995 | CFE-1A ceiling | State | 1 Jan. 1994 | 1 Jan. 1995 | CFE-1A ceiling |
|----------------------|----------------|----------------|-------------------|---------------------|----------------|----------------|-------------------|
| Armenia | 32 682 | 52 686 | 60 000 | Moldova | 11 123 | 11 899 | 20 000 |
| Azerbaijan | 56 000 | 86 849 | 70 000 | Netherlands | 66 540 | 44 250 | 80 000 |
| Belarus | 92 664 | 98 525 | 100 000 | Norway | 26 100 | 23 000 | 32 000 |
| Belgium | 68 688 | 50 479 | 70 000 | Poland | 269 670 | 262 770 | 234 000 |
| Bulgaria | 98 893 | 103 132 | 104 000 | Portugal | 42 534 | 48 274 | 75 000 |
| Canada | 1 408 | 681 | 10 660 | Romania | 230 000 | 198 728 | 230 248 |
| Czech Rep. | 92 893 | 67 702 | 93 333 | Russia ^c | 1 110 578 | 998 811 | 1 450 000 |
| Denmark | 29 893 | 30 158 | 39 000 | Slovakia | 54 223 | 52 015 | 46 667 |
| France | 332 591 | 323 433 | 325 000 | Spain | 168 346 | 175 830 | 300 000 |
| Germany | 314 688 | 291 340 | 345 000 | Turkey | 575 963 | 575 963 | 530 000 |
| Georgia ^b | — | — | 40 000 | UK | 192 547 | 179 707 | 260 000 |
| Greece | 163 705 | 161 332 | 158 621 | Ukraine | 495 156 | 475 822 | 450 000 |
| Hungary | 75 294 | 73 638 | 100 000 | USA | 137 271 | 116 472 | 250 000 |
| Italy | 290 224 | 280 674 | 315 000 | | | | |

^a Iceland and Kazakhstan have no military manpower in the application zone. Luxembourg has a ceiling of 900.

^b Georgia did not declare its manpower holdings on 15 Dec. 1993 and 15 Dec. 1994.

^c In the ATTU zone only.

Sources: *Arms Control Reporter*, sheets 407.B.501, 1994 and 407.B.515, 1995.

goal of some 1.5 million during the year.⁶³ There is no agreement among Western experts on estimates of Russian army personnel, which range from 1.1 to 1.7 million.⁶⁴

IV. Troop withdrawals

Withdrawal of Russian troops

1994 saw Russia fulfil its commitments regarding completion of the military pull-out from Central and Eastern Europe. All this represented an enormous transfer of men and equipment, unprecedented in history. The return of hundreds of thousands of servicemen and their equipment to Russia has certainly enhanced security perceptions in Central and Eastern Europe, but it also increased domestic social, economic and politico-military difficulties in Russia itself.

⁶³ *International Herald Tribune*, 15 Nov. 1994.

⁶⁴ The Frankfurt-am-Main-based Institute on the Former USSR has claimed that Russia has 4.8 million men 'under arms', with 2.3 million subordinated to the Defence Ministry, 490 000 to the Interior Ministry, 370 000 border troops, 186 000 counter-intelligence troops, 170 000 construction troops and 102 000 President's mobile subunits plus 740 000 personnel of other units, the numbers of which are being kept secret. See 'German paper cited on scale of Russian forces', *Izvestia*, 29 Oct. 1994, p. 1, FBIS-SOV-94-211, 1 Nov. 1994, p. 13.

The withdrawal of Russian troops from CEE states continued steadily during 1994, although, as in the previous year, its pace was sometimes exposed to the ups and downs of Russian politics and Russia's relations with its neighbours. On 31 August 1994, the last Russian soldiers left eastern Germany and the Baltic states and withdrew into the borders of the Russian Federation. More than 300 000 servicemen are said to have returned to Russia from CIS and other countries from January 1992 to August 1994 (700 000 personnel since 1989). Over this period 3500 tanks, 7400 armoured vehicles, 3300 artillery systems, 1600 planes, 1100 helicopters, 17 submarines and 227 surface ships were transferred to Russia.⁶⁵

Germany

At the beginning of 1994 there were still 31 400 Russian soldiers on German soil.⁶⁶ In the first half of the year, Russia completed withdrawal of its troops from Germany, ending the 49-year occupation.

Over almost four years, the USSR/Russia withdrew an estimated total of 546 200 personnel, including 338 800 servicemen, along with 4209 main battle tanks, 6208 armoured combat vehicles, 3682 artillery pieces, 691 combat aircraft, 683 combat helicopters and 2.7 million tonnes of other *matériel*, including 677 032 tonnes of ammunition, which constituted the Western Group of Forces in Germany, by far the largest cold-war Soviet contingent.⁶⁷

Poland

With completion of the Russian withdrawal from Germany, the Russian military mission and the joint Russian–Polish commission in Poland ceased their operations altogether. On 8 September 1994, it was announced that the last Russian serviceman had left Polish territory.⁶⁸

The Baltic states

Russian withdrawal from the remaining Baltic states (Lithuania being free of Russian troops since 31 August 1993) was not always smooth during 1994. In the first months of the year Russia continued to use delay tactics, pressure and

⁶⁵ Data according to the head of the information department of the Russian Defence Ministry, Gen. Vladimir Kosarev, as reported in Interfax on 27 Aug. 1994. FBIS-SOV-94-167, 29 Aug. 1994, p. 22.

⁶⁶ *Atlantic News*, no. 2590 (22 Jan. 1994), p. 3.

⁶⁷ *Le Monde*, 1 Sep. 1994. *Jane's Defence Weekly* provides different figures: 17 divisions with 363 690 military personnel, 5880 main battle tanks, 9790 ACVs, 4624 artillery pieces, 625 combat aircraft and 698 combat helicopters. *Jane's Defence Weekly*, vol. 22, no. 10 (10 Sep. 1994), p. 19. Germany has earmarked more than DM 14 billion for the implementation of the German–Russian agreements of 9 and 12 Oct. 1990 on the stationing and withdrawal of the Soviet troops from Germany and the financing thereof. For texts of the agreements see *Europa-Archiv*, vol. 46, no. 3 (1991), pp. D63–D85. See more on the political, military and other problems of the Russian pull-out in Duisberg, C. J., 'Der Abzug der russischen Truppen aus Deutschland. Eine politische und militärische Erfolgsbilanz' [The withdrawal of Russian troops from Germany: A resulting political and military balance], *Europa-Archiv*, vol. 49, no. 16 (25 Aug. 1994), pp. 461–69.

⁶⁸ ITAR-TASS (Moscow), 'Last Russian soldier leaves Poland 8 Sep.', 9 Sep. 1994, FBIS-SOV-94-176, 12 Sep. 1994, pp. 13–14.

other measures which linked withdrawal with the status of the Russian-speaking population (especially 22 000 and 10 500 retired servicemen in Latvia and Estonia, respectively) in the two states. Moreover, the humanitarian issues, such as the housing problem in Russia, were constantly raised as obstacles in completing the negotiations and withdrawal. Moscow also took advantage of some incidents to slow down the process.

From the end of April 1994, with the Russian–Latvian agreement on withdrawal signed (30 April), the withdrawal of Russian troops from Latvia proceeded on schedule, without major setbacks, despite occasional Russian hints and references to the possibility of hold-ups. It was even reported that the pull-out might be completed at the end of July. The adoption of the law on citizenship by the Latvian Parliament on 22 July prompted a sharp reaction by President Yeltsin and gave Russia a pretext to delay the withdrawal until August.⁶⁹

The concessions extracted from Latvia regarding retired Russian military personnel were regarded by Estonia as a political defeat. The Estonian Government would not accept a similar solution. In early May Russia sought concessions from Tallinn regarding the rights of ‘retired’ Russian officers (some, well below the age of 40–50, were dubbed by some right-wing groups in Estonia as the potential ‘fifth column’⁷⁰), with the threat of reinforcing the 2500-strong Russian troops stationed in the country.⁷¹ The issue of the Paldiski naval base remained unsettled,⁷² and Estonian border claims against Russia did not facilitate the negotiations. The firm Estonian position of defending its sovereignty and independence *vis-à-vis* the Russian determination to stave off discrimination against the Russian-speaking population amounted to deadlock. Subsequent talks were unsuccessful with new Russian proposals being rejected by the Estonian side. The political stalemate continued; however, the withdrawal of Russian troops was carried on at a slow rate. In finding a compromise, an instrumental role was played by the CSCE⁷³ as well as US diplomacy and President Clinton himself during his talks with Boris Yeltsin in summer 1994.⁷⁴ It was only on 26 July that, after ‘difficult talks’, Presidents Boris Yeltsin and Lennart Meri signed two agreements settling the issue of the pull-out of the remaining 2000 servicemen and that of more than 10 000 Russian military pensioners’ rights.⁷⁵ A third agreement was

⁶⁹ Interfax (Moscow), ‘Embassy in Moscow criticizes Yeltsin remarks’, 5 Aug. 1994, FBIS-SOV-94-153, 9 Aug. 1994, p. 58.

⁷⁰ BNS (Tallinn), ‘Retired Russian military said threat to security’, 5 Feb. 1994, FBIS-SOV-94-025, 7 Feb. 1994, p. 71; Girmius, S., ‘Relations between the Baltic States and Russia’, *RFE/RL Research Report*, vol. 3, no. 33 (26 Aug. 1994).

⁷¹ NTV (Moscow), ‘Grachev to reinforce Russian troops in Estonia’, 6 May 1994, FBIS-SOV-94-089, 9 May 1994, p. 11.

⁷² On the Russian officers see Tallinn Radio, ‘Increase in retired Russian servicemen reported’, 24 May 1994, FBIS-SOV-94-101, 25 May 1994, pp. 72–73; see also ‘Estonia protests at “invasion threat”’, *Financial Times*, 10 May 1994.

⁷³ See also chapter 8 in this volume.

⁷⁴ Tallinn Radio, ‘US pledges \$6 million to aid Russian troops withdrawal’, 4 July 1994, FBIS-SOV-94-145, 6 July 1994. The USA made \$160 million available for resettling the Russian military. ‘US cash brings happy ending to Baltic saga’, *The Guardian*, 1 Sep. 1994.

⁷⁵ *RFE/RL News Briefs*, vol. 3, no. 31 (23–29 July and 1–5 Aug. 1994), p. 13.

later signed which allowed Russian specialists to remain at the Paldiski submarine training centre to dismantle the two nuclear reactors at the base by 30 September 1995. As a result the pull-out was visibly speeded up and the dismantling of the nuclear reactors at Paldiski resumed.

On 31 August 1994 all the Russian military forces stationed on Estonian and Latvian territories were officially declared to have been withdrawn as well as most of their military bases and installations transferred to the respective Baltic authorities.⁷⁶ Only small units in Paldiski, Estonia (210 military personnel) and at Skrunda, Latvia (500–600 servicemen) have remained to run the facilities until 1996 and 2000, respectively. After a 54-year military occupation, 150 000 Russian troops finally left the Baltic states in 1991–94.

Withdrawal of Allied troops from Germany

On 8 September the last foreign soldiers—about 200 US, British and French troops—left Berlin, symbolically ending the cold war era. It is estimated that some 30 000 British and 18 000 French soldiers will remain in Germany.⁷⁷

As announced by the Pentagon at the end of 1994, the 74 000 US troops in Germany would be further reduced by about 10 000 over the next two years in the run-up to the end-1997 target of 100 000 US troops in Europe as a whole.⁷⁸ In October 1994, the US Defense Department identified 27 overseas military bases for closure, including 24 sites in Germany. The cuts bring to 871 the number of US installations in Europe where operations are being ended, reduced or placed on stand-by status.⁷⁹

V. Russian military presence in the 'near abroad'

While Russia was scrapping its heavy armaments under the CFE Treaty and its troops were completing their pull-out from Central Europe and the Baltic states, 1994 saw a reverse tendency in parts of the so-called 'near abroad' of Russia, namely, the further reasserting or increasing of its military presence on CIS territory. This accompanies and reinforces new directions in its foreign policy. While demanding the legitimization of CIS (actually Russian) peace-keeping operations in the 'near abroad' from the international community (the UN, NATO and the OSCE), Russia is embarking more and more aggressively on peace-enforcement activities in its direct neighbourhood. Russian 'peace-

⁷⁶ According to the Estonian Defence Minister, up to 1000 military personnel stayed illegally in Estonia after 31 Aug. Latvia, in turn, estimated the number of illegal Russian military personnel on its territory as 2000–4000. *Baltic Independent*, 14–20 Oct. 1994 and 13–19 Jan. 1995. On the chronology of the last days of Russian evacuation from Latvia and Estonia see *Baltic Independent*, 2–8 Sep. 1994, p. 3.

⁷⁷ *International Herald Tribune*, 9 Sep. 1994.

⁷⁸ *International Herald Tribune*, 10 Dec. 1994. Maintaining 100 000 US troops in Europe was reconfirmed by US Secretary of State Warren Christopher in early Jan. 1995. *Wireless File* (US Information Service, US Embassy: Stockholm, 20 Jan. 1995), p. 8.

⁷⁹ *Wireless File* (US Information Service, US Embassy: Stockholm 27 Oct. 1994), p. 3; and *International Herald Tribune*, 27 Oct. 1994. For more on US troop reductions in Europe see also 'US military in Europe: top combat force hunts new role', *International Herald Tribune*, 20 Jan. 1995.

Table 20.8. Russian troops in Central Asia, 1994

| State | No. of troops | Comments |
|--------------|---------------|---|
| Kazakhstan | 1 000 | Guarding nuclear missiles and Baikonur space facilities |
| Kyrgyzstan | 3 500 | |
| Tajikistan | 24 000 | Including 7000 troops as part of the CIS collective force |
| Turkmenistan | 15 000 | On the Afghan and Iranian borders |
| Uzbekistan | 5 000 | |
| Total | 48 500 | |

Source: Estimates based on 'Factfile: Russian troop presence and recent withdrawals', *Arms Control Today*, vol. 24, no. 8 (Oct. 1994), p. 25; and *The Economist*, 10 Dec. 1994, pp. 39–42.

Table 20.9. Russian troops in the Transcaucasus, 1992–94

| State | Mid-1992 | End 1993 | End 1994 |
|--------------|----------------|---------------|---------------|
| Armenia | 23 000 | 9 000 | 9 000 |
| Azerbaijan | 62 000 | – | 500 |
| Georgia | 20 000 | 14 000 | 23 000 |
| Total | 105 000 | 23 000 | 32 500 |

Source: Estimates based on Foreign Broadcast Information Service, *Daily Report—Central Eurasia*, 1993 and 1994; IISS, *Military Balance 1992–1993* and *1993–1994* (Brassey's: London, 1992 and 1993); 'Factfile: Russian troop presence and recent withdrawals', *Arms Control Today*, vol. 24, no. 8 (Oct. 1994), p. 25; and *The Economist*, 10 Dec. 1994, pp. 39–42.

makers' are swarming and military bases are springing up in the former Soviet republics from Tajikistan to Moldova. On 5 April 1994 President Yeltsin issued a decree to establish nearly 30 permanent military bases in the former Soviet republics.⁸⁰

Central Asia, the Transcaucasus and Moldova

In Central Asia, with the lack of regional or CIS collective security arrangements, on the one hand, and the poor defence capabilities of the five republics, on the other, the Russian military presence, sanctioned by bilateral agreements, is for the most part accepted if not welcomed by the governments concerned. Roughly 50 000 Russian troops deployed in the five former republics perform the function of the only border security force.⁸¹

The Caucasus has witnessed almost constant inter-ethnic fighting since the beginning of the 1990s. After the initial pull-out of Russian troops in the early 1990s the region is witnessing their return, either on the strength of basing

⁸⁰ 'Text of Yeltsin directive on bases', *Rossiyskiye Vesti*, 7 Apr. 1994, p. 1, FBIS-SOV-94-067, 7 Apr. 1994, pp. 2–3.

⁸¹ For more on this see Snyder, J. C., 'Russian security interests on the southern periphery', *Jane's Intelligence Review*, Dec. 1994, p. 548.

arrangements (chiefly to protect the borders of the new states) or as 'peace-making' (*mirotvorcheskiye*) contingents.

At the beginning of 1994, Russia declared that it would like to maintain bases in Armenia, Azerbaijan and Georgia with the agreement of the host states, in order to provide regional security in the area and protection along the former Soviet borders.⁸² In June 1994, during Defence Minister Grachev's visit to the Transcaucasian states, principles for the operation of five Russian bases in the Transcaucasus were agreed: three in Georgia (Vazani near Tbilisi; Batumi; and Akhalkalaki in south-eastern Georgia),⁸³ and two in Armenia (comprising not only infantry, but also air defence troops, air forces, except long-range aircraft and supply units).⁸⁴

After prolonged negotiations and numerous deadlocks in Russian–Moldovan relations during 1994 an agreement on the withdrawal of the Russian 14th Army from the Trans-Dniester area was signed in Moscow on 21 October, providing for a phased pull-out over three years. However, the implementation of the accord, the provisions of which were agreed as early as August 1994, has been challenged both by the Trans-Dniester authorities and by the 14th Army's commander, Lieutenant-General Alexander Lebed', who have expressed, although for different reasons, the hope and belief that Russian military personnel will remain in the area to play a 'peacekeeping' or 'national liberation' role within the unofficial Trans-Dniester armed forces.⁸⁵

It was reported that the withdrawal of Russian troops from Belarus, as decided in 1992, was proceeding according to the agreed seven-year schedule and the number of Russian troops stationed there (mainly protecting the nuclear facilities) was cut back from an estimated 40 000 to 25 000–30 000.⁸⁶ Newly elected President Alexander Lukashenko stated that he would not demand an earlier pull-out of the Russian troops and that the Belarussian Army would 'fulfil its duties' in consultation with the Russian Army.⁸⁷

⁸² *International Herald Tribune*, 3 Feb. 1994.

⁸³ The agreement was signed on 3 Feb. 1994. *Izvestia*, 4 Feb. 1994.

⁸⁴ In early Nov. it was announced that the signing of the prepared military base agreement is in the offing. SNARK (Yerevan), 'Russian envoy says military base agreement imminent', 8 Nov. 1994, FBIS-SOV-94-217, 9 Nov. 1994, p. 55; and Clark, S. L., 'The Russian military in the former Soviet Union—actions and motivations', *Jane's Intelligence Review*, Dec. 1994, pp. 538–43. In Azerbaijan, it has been agreed that the early-warning 'military facility' in Gebele, leased by Russia, will not qualify as an army base. *RFE/RL News Briefs*, vol. 3, no. 16 (11–15 Apr. 1994), p. 8.

⁸⁵ ITAR-TASS (Moscow), 'Timetable for troop withdrawal from Moldova agreed', 10 Aug. 1994, FBIS-SOV-94-155, 11 Aug. 1994, p. 2; Bucharest Radio, Romania Network, 'Accord on 14th Army withdrawal "finalized"', 10 Aug. 1994, FBIS-SOV-94-155, 11 Aug. 1994, p. 32; Bucharest Radio, Romania Network, 'Accord on 14th Army signed with Moldova', 21 Oct. 1994, FBIS-SOV-94-205, 24 Oct. 1994, p. 6; Interfax (Moscow), 'Smirnov rules out total Russian troop withdrawal, 25 Oct. 1994, FBIS-SOV-94-207, 26 Oct. 1994, p. 37; and *The Guardian*, 24 Oct. 1994. According to Moscow TV, the 14th Army has the biggest munition arsenal in Europe, totalling 400 000 tonnes of artillery shells, mines and missiles, one-fifth of it not falling under the agreement's terms. *Frankfurter Allgemeine Zeitung*, 27 Oct. 1994.

⁸⁶ Mayak Radio (Moscow), 'Withdrawal of Russian troops continues', 16 May 1994, FBIS-SOV-94-095, 17 May 1994, p. 47; and *The Economist*, 10 Dec. 1994, p. 42.

⁸⁷ *Krasnaya Zvezda*, 6 Aug. 1994. On 11 Mar. 1994 Belarus signed a 5-year agreement with Russia on coordinating military activities. *RFE/RL News Briefs*, vol. 3, no. 12 (14–18 Mar. 1994), p. 10. On 21 Feb. 1995, Belarus and Russia signed a treaty on friendship, good-neighbourliness and cooperation and an agreement on 'joint measures to protect Belarus' state frontier' which tightened even more the links between the two states.

Table 20.10. Numbers of Russian troops in Moldova and Belarus, 1992–94^a

| State | 1992 | 1994 |
|---------|--------|--------------------------|
| Moldova | 6 000 | 7 000–8 000 ^b |
| Belarus | 40 000 | 25 000–30 000 |

^a In 1994 there were 2000 Russian troops in Ukraine, guarding nuclear missile installations, and 15 000 seamen of the Black Sea Fleet.

^b The increase in Moldova is the result of recruitment from the Russian population in the Trans-Dniester region.

Source: *RFE/RL Brief News*, vol. 3, no. 24 (6–10 June 1994), p. 9; 'Factfile: Russian troop presence and recent withdrawals', *Arms Control Today*, vol. 24, no. 8 (Oct. 1994), p. 25; and *The Economist*, 10 Dec. 1994, pp. 39–42.

VI. The Forum for Security Co-operation

Work in the Forum, the only European multilateral arms control negotiating body now in operation, is guided by the Programme for Immediate Action (PIA) included in the Helsinki Decisions adopted by the CSCE Summit Meeting in 1992.⁸⁸

Developments on the European scene have affected the work of the FSC, which was to prepare a set of decisions concerning the arms control and security cooperation agenda for the 1994 Budapest Review Conference and Summit Meeting. Some headway was made, but the rate of progress has clearly slowed.

Having agreed four documents in late 1993—on stabilizing measures, conventional arms transfers, military contacts and defence planning (the last two are included in the Vienna Document 1994⁸⁹)—the participating states continued their work on elaborating and finalizing other PIA items for the Budapest meetings.⁹⁰ The Special Committee of the FSC focused and agreed on the following: (a) a code of conduct for security; (b) development of the Vienna Document 1992; and (c) global exchange of military information. Aside from the work on information exchange there was hardly any progress on the harmonization of arms control obligations in 1994. During the year a Document on Global Exchange of Military Information was adopted by the Special Committee. Principles Governing Non-Proliferation, to complement the Principles Governing Conventional Arms Transfers,⁹¹ were agreed upon and included in the Budapest Decisions, and a new agenda for CSCE arms control was proposed to the FSC. Overall, the December 1994 Budapest Sum-

⁸⁸ Published as CSCE, *Helsinki Document 1992: The Challenges of Change*, Helsinki summit meeting, Helsinki, 10 July 1992, Helsinki Decisions, chapter V, CSCE Forum for Security Co-operation, Annex on the Programme for Immediate Action, reprinted in SIPRI, *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press: Oxford, 1993), pp. 205–206.

⁸⁹ Vienna Document 1994 of the Negotiations on Confidence- and Security-Building Measures, CSCE document 1113/94, Vienna, 1994. The text is reprinted in appendix 20B.

⁹⁰ See more on the FSC record of activities in 1993 in Lachowski (note 21), pp. 583–94.

⁹¹ See Lachowski (note 21), pp. 589–90.

mit Meeting failed to add much substance in the field of security cooperation compared with the the 1992 Helsinki Summit Meeting.

A code of conduct

Establishing a code of conduct was intended to set norms for behaviour in the security field for all CSCE participating states. Despite numerous and elaborate proposals and suggestions by participating states with regard to a code, there was little progress for the most of the year. The main sticking-point was the scope: whether the code should cover only politico-military aspects of security or address a wider spectrum of security issues to embrace matters of national minorities, environment, economy, human rights, and so on. These divergent concepts led to a stalemate and it was suggested that two parallel negotiations be carried out, either within the same body or in another special body to treat the politico-military and broader issues separately.⁹² The idea of dealing with politico-military aspects won the day.

The Code of Conduct on Politico-Military Aspects of Security,⁹³ while reaffirming the validity of the principles and common values contained in the Helsinki Final Act, the Charter of Paris and the Helsinki Document 1992, affirms that security is indivisible and that the participating states will base their mutual security relations on a cooperative approach. The document formulates a sort of rule of solidarity with a state that has fallen victim of the threat or use of force by the obligation not to provide assistance to or support a violator of CSCE Helsinki Principle II. It is also stated that states have a right to change their status as members of international organizations or parties to a treaty, including a treaty of alliance. The participants pledge to maintain military capabilities commensurate with their individual and collective security needs. Participating states may station armed forces on the territory of another state only in accordance with a freely negotiated agreement and international law. The CSCE participants took it upon themselves to implement in good faith their commitments in the field of arms control, disarmament and CSBMs and pursue these goals. They undertook to seek to 'facilitate' the effective cessation of hostilities should they break out and to 'seek to create' conditions favourable for a political solution. The states also reaffirmed their commitment to democratic control of military, paramilitary and internal security forces, as well as intelligence services and the police, as an indispensable element of stability and security. The agreed measures include systems of control by constitutionally established authorities, legislative approval of defence expenditures, ensuring the political neutrality of armed forces and guarding against accidental unauthorized use of military means. Should a participating state be unable to exercise its authority, 'it may seek consultations within the CSCE to consider steps to be taken'.

⁹² 'Das KSZE-Forum für Sicherheitskooperation—Tätigkeitsbericht' [The CSCE Forum for Security Co-operation—Report of activities], *Österreichische Militärische Zeitschrift*, no. 5 (1994), pp. 533–36.

⁹³ CSCE (note 1), Budapest Decisions V, Code of Conduct on Politico-Military Aspects of Security.

The tasks, rights and duties of armed forces are also taken up in the code. Each state undertakes to ensure that its paramilitary forces do not acquire combat mission capabilities in excess of the needs of the goals for which they were established. Recruitment for military, paramilitary and security force service must not contravene human rights and fundamental freedoms. The individual accountability of armed forces personnel under national and international law for their actions is emphasized, as well as their ability to exercise their human rights. The applicability of international law in commanding, manning and training armed forces, defence policy and doctrine was confirmed.

Regarding the use of forces for domestic security the code emphasizes conformity with constitutional procedures, effective control by constitutionally established authorities and compatibility with the need for enforcement. Armed forces shall not be used to limit the peaceful and lawful exercise of human and civil rights by persons as individuals or as representatives of groups nor to deprive them of their national, religious, cultural or ethnic identity.

The code is a politically binding agreement. Appropriate OSCE bodies, mechanisms and procedures will be used for assessment, review and improvement where necessary; a participating state may be requested to provide appropriate clarification regarding its implementation of the code.

The Code's adequacy and effectiveness, and particularly its provisions regarding the use of force for internal security, were put to the test soon after its adoption. The conflict in Chechnya ruthlessly laid bare the vagueness of the Code commitments and the failure to enforce compliance.

Development of the Vienna Document

Developments in the implementation of CSBMs as agreed in the Vienna Document 1992, and the new provisions of the Vienna Document 1994, are discussed in detail in appendix 20A.

Global exchange of military information

Progress on worldwide military information exchange was slow. NATO states and Russia disagreed on the levels of disaggregation and on how to deal with naval forces, an issue being addressed for the first time in the CSCE framework and which encountered some conceptual problems.

On 28 November 1994, the participating states adopted a Document on Global Exchange of Military Information in which they agreed 'to exchange annually information on major weapon and equipment systems and personnel in their conventional armed forces, on their territory as well as worldwide'.⁹⁴ The information provided will be separate from other information exchange

⁹⁴ CSCE Forum for Security Co-operation, Vienna, Global Exchange of Military Information, Budapest, 28 Nov. 1994.

regimes and not subject to limitations, constraints or verification. It will be exchanged by 30 April each year and is to reflect the situation as of 1 January of that year. The accord is politically binding and entered into effect on 1 January 1995.

The Document contains provisions on: (a) information on command structure and personnel (general or equivalent staff, command organization of the forces, personnel strength); (b) information on holdings of major weapon and equipment systems (battle tanks; AVCs; armoured vehicle launched bridges; anti-tank guided missile launchers permanently/integrally mounted on armoured vehicles; self-propelled and towed artillery not less than 100 mm; combat, military transport and primary trainer aircraft; attack, combat support and military transport helicopters; surface warships greater than 400 tonnes fully loaded displacement; and submarines greater than 50 tonnes submerged); (c) levels of disaggregation (command organization: for land forces—division or equivalent or the next higher level of command; for other forces—army or equivalent or down to the next lower level of command; all land forces within the territory of the reporting state—from the highest level down to and including the level of army or equivalent or down to the next lower level of command; all other forces within the territory of the reporting state—down to the level of service; all forces stationed beyond the territory of the reporting state—down to the level of service, specifying the numbers for each respective region in which such forces are stationed); (d) technical data and photographs, including the type, name and general description of characteristics and capabilities, of each category listed under (b); and (e) information on major weapon and equipment systems as specified under (b) and which have newly entered into service.

Principles governing non-proliferation

Owing to Russian–Ukrainian disagreement on nuclear weapon issues, no document on non-proliferation was adopted in autumn 1993. When the difficult subsequent negotiations between the USA, Russia and Ukraine succeeded, and the latter eventually acceded to the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT), agreement was possible on the Principles Governing Non-Proliferation in the Budapest Decisions.⁹⁵

States affirmed their commitment: (a) to prevent proliferation of nuclear weapons; (b) to prevent the acquisition, development, production, stockpiling and use of chemical and biological weapons; and (c) to control transfer of missiles capable of delivering weapons of mass destruction and their components and technology. In the *nuclear* field, participating states pledged, *inter alia*, their full and universal adherence to the NPT, including agreement on its indefinite and unconditional extension; the bringing into force, strengthening and streamlining of International Atomic Energy Agency (IAEA) safeguards; improvement of their national nuclear export control policies and supporting

⁹⁵ CSCE (note 1), Budapest Decisions VII, Principles of non-proliferation.

efforts to negotiate a non-discriminatory, internationally and effectively verifiable multilateral treaty on banning the production of fissile material for nuclear weapons. Support was also expressed for a universal and effectively verifiable comprehensive test ban treaty. In the field of *chemical and biological weapons*, the states affirmed their willingness to join efforts to strengthen the 1972 Biological Weapons Convention, especially by considering appropriate possible verification measures; to pursue the goal of universal adherence to the 1993 Chemical Weapons Convention (CWC); and, particularly those which have not yet done so, to sign and ensure early ratification of the CWC. The states also undertook to support controls in the Australia Group⁹⁶ on effective licensing and enforcement procedures covering the chemical weapon precursor lists within the existing control regimes, chemical weapon-related dual-use equipment, biological weapon-related pathogens and dual-use equipment. Regarding *missile technology*, support for the guidelines of the Missile Technology Control Regime (MTCR) was expressed with an undertaking to control the export of missiles, technology and equipment. Moreover, participating states expressed their willingness to have their legislation, regulations and procedures governing non-proliferation reflect the above commitments; to promote cooperative efforts to redirect weapon scientists and engineers towards peaceful endeavours; to prevent their citizens from engaging in activities violating the principles of non-proliferation; and to exchange information on national laws, regulations and practical measures for ensuring the application and implementation of non-proliferation regimes.

A new agenda for CSCE arms control

In September 1994 Poland put forward the only comprehensive proposal for a new agenda for CSCE arms control,⁹⁷ including the following main areas: (a) monitoring the implementation of existing arms control commitments by establishing an all-European arms control/verification agency and a single implementation assessment body or mechanism and creating cost-effective verification procedures (a common pool of inspection equipment, sharing of certain data obtained by national technical means, etc.); (b) measures to make circumvention of existing arms control commitments (information exchange on paramilitary forces, transparency in force generation capabilities) impossible; (c) measures for conflict prevention, crisis management and conflict resolution; (d) providing for non-threatening and non-provocative postures of armed forces (dialogue on threat perceptions and their impact on force structures; development of the sufficiency rule on the European and possibly regional scale); (e) measures to allow for the common assessment of military doctrines of CSCE participating states; (f) a dialogue on cooperative measures relating to the development and modernization of weapon systems (e.g., military research and development, monitoring potentially destabilizing

⁹⁶ The Australia Group meets twice a year to monitor the proliferation of chemical and biological products for its activities in 1994; see chapter 19 in this volume.

⁹⁷ CSCE Forum for Security Co-operation, document CSCE/FSC/SC.29, Vienna, 7 Sep. 1994.

weapons and technologies); (g) prevention of a potentially threatening proliferation of weapons; and (h) developing norms of behaviour in the military field. There are also proposals for regional cooperative measures (development of stabilization concepts, regional CSBMs, reducing local concentrations of forces, etc.).

Poland suggested that a dual-track approach be adopted by the FSC in the run-up to completing CFE Treaty implementation: (a) continued security dialogue on certain items under the PIA (harmonization, regional arms control in south-eastern Europe) and (b) preparation of a new programme for arms control.

No specific agenda for arms control was agreed at the Budapest Review Conference. It was decided that as far as further FSC tasks are concerned, the Forum will develop a framework to 'serve as a basis' for an agenda for establishing new arms control measures, CSBMs in particular, for the military forces of all participants with a view to strengthening the security commitments undertaken. The promotion of regional and CSCE-wide measures and approaches to addressing the security needs of individual participants or regions was also stressed. The FSC will report on this work by the 1996 Lisbon OSCE summit meeting and make appropriate recommendations.

Other FSC items

The FSC's work on other topics has either almost ground to a halt or been postponed. In the field of harmonization of arms control, disarmament and the CSBM obligations of CSCE participating states there was little progress in the run-up to the Budapest Review Conference. Regarding information exchange, verification, institutional arrangements and new ceilings, only the Working Group on Information Exchange made progress, which helped to overcome the impasse in elaborating the Vienna Document 1994.⁹⁸ In September the French delegation submitted a 'food for thought' paper calling for a political declaration by the heads of state and government to be made in Budapest with regard to harmonization, which would promote continuation of the work and commit non-CFE states in the CSCE to declare their respective ceilings for weapons and personnel before the spring 1996 CFE Treaty Review Conference. In return the 30 CFE parties would inform all other OSCE participating states about their weapon and manpower holdings. This proposal was not accepted since many states are afraid of singling out the issue and undermining the CFE Treaty itself. Their preference is to handle these issues after the 1996 Review Conference in the pan-European arms control context. Moreover, the relations between harmonization and regional arms control arrangements are in need of clarification.⁹⁹

The FSC discussion of regional security which started in March 1994 soon ended in deadlock. On 24 November 1994, a US proposal was tabled calling

⁹⁸ *Österreichische Militärische Zeitschrift* (note 92), p. 535.

⁹⁹ Das KSZE-Forum für Sicherheitskooperation—Tätigkeitsbericht' [The CSCE Forum for Security Co-operation—Report of activities], *Österreichische Militärische Zeitschrift*, no. 6 (1994), p. 660.

for short-term measures on transparency, exchange of information on force size, structure and location, hotlines, CSCE civilian monitoring, withdrawal of forces from certain areas, limits on certain military activities and the disbanding of irregular forces as well as envisaging, at a later stage, further measures such as limitations on various categories of military equipment and manpower, reductions to stable, balanced force levels accompanied by appropriate verification and information procedures and cooperatives measures. The initiative is at present limited to the former Yugoslavia, with the aim of embracing other south-eastern European states, too.¹⁰⁰ The FSC was instructed by the Budapest Decisions to place special emphasis on tackling such regional issues (including crises) in ways appropriate to each case. This is connected, among other things, with CSBMs and the need to address the matter of light weapons which have wrought havoc in the present regional conflict situation.

VII. Conclusions

The character of the challenges and menaces to European security did not change in 1994—they intensified and became more serious. Flare-ups of local inter-ethnic conflicts within states or across borders, ‘ethnic cleansing’, plutonium smuggling, political terrorism, the rise of international organized crime and other threats are mounting, with little response or remedy from existing military and arms control arrangements. NATO and other European security-related organizations are for the most part helpless in grappling with the local armed conflicts across the continent.

The year saw both positive and negative developments in the field of enhancing the conventional arms control regime in Europe. In spite of political arguments over the shape of a security regime for Europe, the implementation of existing disarmament and arms control agreements proceeded without major delays, and CSCE states continued to abide by their provisions. This is largely because: (a) the attention of the international community was focused on other, more challenging problems and issues; and (b) the cold-war heritage handled by conventional arms control had lost its acuteness. Thus the second phase of eliminating major weapon holdings from the ATTU zone was successfully completed and the CFE states parties are on the final stretch of the road to Treaty implementation. Reductions of military personnel under the CFE-1A Agreement were also carried out smoothly. The unprecedented massive Russian troop pull-out from the Central European and Baltic states was successfully completed.

Alongside these positive developments, however, adverse tendencies and issues became more apparent. Disquieting signals are emerging of growing Russian political and military assertiveness in the former Soviet republics and even beyond. Developments such as the wars and conflicts in Chechnya and

¹⁰⁰ ‘The CSCE review conference and summit: decisions made and deferred’, BASIC Papers. Occasional Papers on International Security Issues, British American Security Information Council, no. 7 (4 Jan. 1995), p. 4.

the Transcaucasus, accompanied by increasing demands by Russia regarding various aspects of its European and global status, have made a dent in the European partnership relations. Arms control decision making, hitherto a political process, is increasingly influenced if not taken over by the military. The armed conflict in Chechnya not only contravenes the spirit of the code of conduct agreed in Budapest, but also infringes the Vienna CSBM provisions and threatens to undermine the CFE Treaty regime. There is concern about the motives behind Russia's mounting military projection to the south. Russia's world outlook and political approach to domestic and external problems are undergoing an accelerating transformation.

With events slipping out of control in southern Russia and neighbouring states, the flank issue has become a gauge of Russian cooperativeness. The Treaty will certainly be changed to address the *de facto* discrimination against Russia and Ukraine, most probably after it is fully implemented, and the possible eastward expansion of NATO will beg sweeping changes both inside and outside the Treaty framework. All this, however, is compounded by the developing controversy and suspicion between NATO and Russia.

These and other developments could not but affect the course of work at the FSC, which was to prepare a set of decisions concerning the arms control and security cooperation agenda for the 1994 Budapest Review Conference and Summit Meeting. Decisions were taken on the politico-military code of conduct, non-proliferation, worldwide information exchange and CSBMs. However, the participants failed to agree on other critical items on its agenda, such as a harmonized arms control regime for the CSCE area and the issues of regional security. A new comprehensive arms control agenda with some institutional solutions for verification has not yet been agreed. This failure illustrates the difficulty and complexity of the problems addressed by the multifaceted programme of the FSC and the helplessness of the international community in the face of local crises and conflicts springing up across the CSCE area. It also invites the legitimate question of whether working out new agreements is worthwhile as some states seem to care little for respecting the old ones.

Arms control or, more broadly, security cooperation is not a panacea for Europe's ills. However, together with political, conflict-prevention and crisis-management activities it may ease the difficult period of transition. It is imperative to seek a measure of stability in the somewhat turbulent environment of eastern and south-eastern Europe today. The process of building a cooperative security regime in the face of mounting obstacles is not yet seriously endangered, but the first signs of potentially disruptive tendencies and actions appeared in 1994, clearly signalling the need for greater efforts to complete a comprehensive agenda for arms control and security cooperation.

Appendix 20A. The Vienna confidence- and security-building measures

ZDZISLAW LACHOWSKI

I. Introduction

In 1994, the Forum for Security Co-operation (FSC) of the Conference on Security- and Co-operation in Europe (CSCE¹) continued its work on confidence- and security-building measures (CSBMs). The work built on the existing CSBMs, as agreed in Vienna documents 1990 and 1992, in accordance with the FSC mandate for the 'further development of the Vienna Document 1992'. A new CSBM document was adopted, the Vienna Document 1994,² an amended and expanded version of its forerunners. Further work on the new confidence- and security-building measures has been entrusted by the CSCE Budapest Summit Meeting to the Forum, with special emphasis on developing and complementing regional and CSCE-wide measures.

II. Implementation of CSBMs

Problems related to the present and future implementation of agreed CSBMs were discussed at the Fourth Annual Implementation Assessment Meeting (AIAM) in Vienna on 12–14 April 1994.

Annual Implementation Assessment Meeting

Not all participating states were represented at the meeting, and a number of states failed to submit their annual information as required by the Vienna Document both in 1993 and 1994. The states present at the Fourth AIAM declared their willingness to assist states not in compliance by providing support and having the Conflict Prevention Centre (CPC) play a role in this assistance. It was noted that only a limited number of CSCE participating states had exercised their right to take part in observations of military activities or visits to air bases, or to carry out inspections or evaluation visits.³ This is because of the improved international climate and the huge volume of data exchanged between the states, on the one hand, and insufficient understanding, lack of experience and resources or sheer disinterest on the part of some participating states, on the other.

The meeting discussed not only CSBMs of the Vienna Document 1992, but also new measures for defence planning, military cooperation and contacts. Numerous

¹ The *Conference* on Security and Co-operation in Europe (CSCE) was renamed the *Organization* for Security and Co-operation in Europe (OSCE) at the CSCE Budapest Summit Meeting. See CSCE, Budapest Document 1994, Budapest Declaration: Towards a Genuine Partnership in a New Era, Budapest, 5–6 Dec. 1994, para. 3. Excerpts from the Document are reprinted in this volume in appendix 8A.

² Vienna Document 1994 of the Negotiations on Confidence- and Security-building Measures, Vienna, 28 Nov. 1994 (reproduced as appendix 20B in this volume).

³ CSCE Forum for Security Co-operation, *Journal* (Vienna), no. 70 (11 May 1994), Annex.

proposals were presented on improvements to the Vienna Document 1992 and some were taken into account in the preparation of the new CSBM document.⁴

Annual exchange of information

Several issues were raised in this regard at the AIAM. One criticism was that the failure of states with no forces to indicate this fact affects the evaluation process. The relevant section of the Vienna Document 1994 was changed accordingly.⁵

In the context of improving evaluation several suggestions were made concerning the problem of reporting on changes in national forces during the year, the indication of evaluation quotas by states, the provision of information on the evaluation quota and notification of mixed/multinational formations and units.

Various suggestions were put forward on how to deal with states that failed to provide the required information (by drawing up a table of those that delivered information, those that provided incomplete data, and those that failed to do so at all; entrusting the CPC with enquiring about the failure to provide information or issuing reminders to states; having the CPC clearly recommend that states provide information, and so on).

Communication

The problem of communication is one of the most critical issues in the CSBM regime and related regimes. Not all (only 35) participating states were connected to the CSCE communication network; some complained that it was difficult to man the stations round the clock; technical and financial obstacles were cited by a number of participants; some were not interested in being connected; and others argued that the network was not necessarily the best means of communication. Nevertheless it was stressed by several delegations that the communication network was an integral part of the CSBM regime, and participating states could not simply declare that they do not want to be hooked up to it. The CSCE communication network now operates with 39 end-user stations (35 participating states plus 4 institutions). It is estimated that 12 additional participating states will be fully connected in the near future, leaving only six CSCE states not connected to the network.

Periodic, apart from weekly, surveys of messages sent were postulated. Problems of structuring the messages (to indicate country, year and subject), translating urgent messages (especially those in Cyrillic script) and deciding which messages qualify as urgent were taken up. It was also recommended that the CPC should receive copies of all messages in order to establish the data bank.

Notification and observation

With the number of large-scale manoeuvres declining in the 1990s, the notification and observation regime is playing an increasingly minor role. In 1994, six manoeuvres plus one amphibious training exercise subject to notification were carried out, and four of them were observed.

⁴ These were distributed by the CPC among the participating states as a 'Survey of proposals tabled at the Annual Implementation Assessment Meeting 1994' after the AIAM.

⁵ Vienna Document 1994 (note 2), Chapter I, para. 9.

Various suggestions have long been floated as to how to improve the situation: lowering the thresholds (challenged by many delegations), obliging states to notify their three largest exercises, inviting observation of one manoeuvre every five years, for example, or of the largest one over a certain period. The matter of inclusion of new parameters for notification/observation resurfaced. It was proposed that new types of exercise, such as command/post exercises or computer simulation exercises, be included.

It was indicated that the observation regime has to a certain extent been replaced by inspections, which are more and more relevant at levels below the observation threshold. It was suggested that the inspection/evaluation regime be expanded at the expense of observation, while retaining the observation procedure as it is, in case of future contingencies.

There is still strong resistance among the participating states to suggestions of imposing numerical limits on exercises (constraining provisions).

A blatant case of non-compliance with the notification provisions of the Vienna Document in 1994 was the failure of the Russian Federation to notify its military activities to other CSCE participants with respect to the conflict in Chechnya.

Compliance and verification

The main question discussed was whether inspections should still be conducted because of 'doubt' about compliance with CSBMs. This was solved in the Vienna Document 1994 by removing the relevant passage in paragraph 73. In 1994, there were 21 inspections, including 11 visits paid to Commonwealth of Independent States (CIS) countries and 3 to NATO states.

The requirement for a state to indicate when its evaluation quota was used up was changed (para. 107.1). Several delegations drew attention to the need for rethinking evaluation in the light of the existence of multinational forces. Questions also arose about the language used and the role of the interpreter in the evaluation team (as an evaluator or an additional member). The total number of evaluation visits in 1994 was 54.

Defence planning

Inclusion of this potentially very important confidence-strengthening measure was discussed at the AIAM. Some questions were raised about the annual updating, the way in which the documents should be presented and the status of providing information on paramilitary forces (voluntary or obligatory). The document on Defence Planning was eventually incorporated in the Vienna Document 1994.

Contacts

To gain insight into their current and potential tasks it was recommended that air bases be visited while they are engaged in their routine daily activities rather than during specially prepared air shows or static air displays. There were four air base visits in 1994.

On the whole, the participating states still see the CSBM regime as having a confidence-building effect, but stress the need for inspections and evaluation for early warning. It is felt that priority should be given to thorough implementation of and

compliance with existing measures, although expanding the present regime is also considered to be desirable. With the reduced scope of military activities it is felt that new instruments are needed to make up for the loss of early-warning possibilities and that more effective measures should be introduced.

The role of the AIAM should be to increase the efficiency of existing measures, to improve their application and to provide inspiration for the development of new measures in the FSC. There have been cases of non-compliance and 'over-implementing' agreed measures (e.g., by holding too many consultations before inspections), and some proposals were made as to how to deal with various cases of non-compliance (e.g., a coordinated approach for assuring compliance; submitting a survey to states asking them to submit missing information one month before the AIAM; and raising the issues of compliance at the FSC before the AIAM meeting of March 1995). Some of these suggestions were addressed in the Vienna Document 1994.⁶

III. Military activities

All manoeuvres notified for 1994 were conducted. In addition the Finnish 'Lion 94' exercise was carried out, aimed at training troops to defend the capital and employing more than 10 000 land, navy and air troops (see table 20A). This exercise was not forecast in the annual calendar for 1994.

As in recent years, notifiable manoeuvres are still not numerous, their character has changed and their geographical location is mostly confined to the western part of the continent. During the biggest manoeuvre, 'Dynamic Impact 94', which consisted of two notifiable exercises—an amphibious assault and a field training operation—seven NATO states combined to simulate a 'civil' crisis situation and a military response, testing for the first time the challenges involved in carrying out a non-combatant evacuation operation while executing amphibious operations.⁷ 'Dynamic Impact 94' was a major Mediterranean NATO manoeuvre involving 12 000 ground, maritime and air troops from 11 nations and specifically designed to provide crisis management training for NATO's conventional forces in both joint and combined operations. It took place throughout the central and western Mediterranean and included land and amphibious operations in Italy. Although not part of the Alliance's integrated military structure, France and Spain took part in the exercise. More than 70 surface and sub-surface vessels and 4250 amphibious troops participated in the amphibious part of the manoeuvre.

About 12 000 French, Italian and Spanish servicemen took part in the 'Tramontana 94' air-sea exercise in Spain (not reported in *SIPRI Yearbook 1994* because the states concerned did not provide information). The exercise was the third of its kind (following 'Farfadet 92' in France and 'Ardente 93' in Italy). The aim of the three states is to create an air-sea rapid intervention and rescue force to operate in the southern Mediterranean flank—a kind of 'southern Eurocorps'. A Eurocorps battalion participated in the exercise, and Greece, the Netherlands and Portugal were represented as WEU members.⁸

⁶ Vienna Document 1994 (note 2), Chapter X.

⁷ More on this see 'Die Manöver "Dynamic Impact 94"', *Österreichische Militärische Zeitschrift*, no. 5 (1994), pp. 553–54; and Allied Forces Southern Europe (AFSOUTH) Press Release: Dynamic Impact '94 (by Major Steve Headley), 16 May 1994.

⁸ *Atlantic News*, no. 2673 (25 Nov. 1994), p. 3; and *Süddeutsche Zeitung*, 7 Dec. 1994, p. 10.

SIPRI has been informed of six exercises subject to notification, planned for 1995, all to be conducted by the Western states.⁹ NATO's 'Strong Resolve' manœuvre will have two notifiable exercises—one amphibious (4700 servicemen) and one for field training (with c. 20 000 soldiers from all NATO states but Iceland)—and will operate in the North Atlantic and Norway. This will be the first manœuvre on such a scale aimed at testing the Alliance's new rapid-reaction forces. Emphasis is to be put on crisis management, testing the new NATO command structure for north-western Europe and training forces for operations in all climatic conditions.¹⁰ The 'Cold Grouse 95' manœuvre, involving 12 000 troops, will test the multinational reaction force for the defence of COMBALTAP (Baltic Approaches) area. The 'Mistral 95' exercise, the fourth of the rescue operations in the Mediterranean will also be conducted.

IV. The Vienna Document 1994

The Vienna Document 1994 of the Negotiations on Confidence- and Security-building Measures was agreed and adopted on 28 November 1994 by the Special Committee of the FSC (as the only body of the FSC the Special Committee is often regarded as synonymous with the Forum). Two new sub-chapters were incorporated: the document on 'Defence Planning' and the 'Programme of Military Contacts and Co-operation', which were adopted on 24 November 1993 by the Special Committee and became effective as from 1 January 1994.¹¹ Some changes were introduced to reflect the institutional and organizational restructuring that has taken place since the adoption of the Vienna Document 1992 (the creation of the FSC Special Committee and the CSCE Permanent Committee, and the establishment of the post of CSCE Secretary-General). Other major changes and additions are as follows:

1. Under the headings *prior notification of certain military activities and observation of certain military activities*, the states supplemented the list of parameters determining the notifiability of a military activity with provisions on the involvement of at least 500 armoured combat vehicles (ACVs) or at least 250 self-propelled and towed artillery pieces, mortars and multiple rocket launchers (100-mm calibre and above) (paras 38, 42 and 45). Engagement of military forces in a heliborne landing was added to the provision on amphibious landings and parachute assaults subject to notification.

2. Under *compliance and verification* states were encouraged to undertake, bilaterally, multilaterally or in a regional context, additional measures to increase transparency and confidence, such as notification of activities carried out below the thresholds or close to borders between them; observation of non-notifiable exercises; as well as provision of information on such measures to the Conflict Prevention Centre (CPC). Agreement was also reached on the language to be used and additional equipment for the team.

3. Under *communication* agreement was reached on language, Standard Operating Procedures and other ways to ensure the efficient use of the CSCE communication

⁹ Sweden planned to carry out a field training exercise 'FMOE 95', but cancelled it in early 1995.

¹⁰ *Atlantic News*, no. 2688 (25 Jan. 1995), p. 3.

¹¹ See Lachowski, Z., 'Conventional arms control and security co-operation in Europe', *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 590–92.

Table 20A. Calendar of planned notifiable military activities in 1995

| States/ Location | Dates/Start window | Type/Name of activity | Area | Level of command | No. of troops | Type of forces or equipment | No. and type of divisions | Comments |
|--|--|--|--|---------------------|---|---------------------------------------|--|--|
| 1. Denmark, Netherlands, UK and USA in Norway | 3 days between 20 Feb. and 10 Mar. | Amph. landing exercise as part of FTX 'Strong Resolve 95' | Todal, Leirvaag, Skipnesodden, Snillfjord | Brig. | 4 700 incl. 600 Dutch 2 200 British 1 900 US | Amph. forces | .. | Practice combined joint coordination procedures and exercise forces in amph. ops |
| 2. Belgium, Canada, Denmark, France, Germany, Greece, Italy, Netherlands, Norway, Portugal, Spain, Turkey, UK, and USA in Norway | 6 days between 20 Feb. and 10 Mar. | FTX 'Strong Resolve 95' | Leinstrand, along River Gaula to Stoeren, along E6 SW to Berkaak, Furusjoen, Follsjoen, Todal, Tingvoll, Edoy, Moholt, Snillfjord, Byneset | Div. | 19 517 incl. 4 Belgian 4 Canadian 40 Danish 1 466 German 1 039 Italian 998 Dutch 9 772 Norwegian 3 148 British 3046 US | .. | 1 light mech. div. 1 light mech brig. | Exercise forces in deployment ops, practice cooperation and interoperability between Norwegian and allied formations |
| 3. France, Italy, Spain | 13-23 Sep. | 'Mistral 95' | West Mediterranean Sea and south of France | .. | 12 000 | Air transport and amph. forces | .. | .. |
| 4. Belgium, Denmark, Germany, Netherlands, UK | 25 Sep.- 6 Oct. | CPX/CFX 'Cold Grouse 95' | The Zealand group of islands | .. | 12 000 | Land, air mobile and air forces | Corps Land Zealand (CLZ), MND(C) | The MND(C) 'Agile Impact 95' will be inte- grated and 'Cold Fire 95' will be linked with 'Cold Grouse 95'. Practise integration, incl. reception and deploy- ment, employment and support of a multinational reaction force with indigenous main defence force for defence of COMBALTAP area |

| | | | | | | | | |
|--|---|--|--|--|--|-----------------------------|---|--|
| 5. France, Germany, Greece, Italy, Netherlands, Portugal, Spain, Turkey, UK, USA | 7-12 Oct. (amph. phase); 30 Sep.-20 Oct. (land phase) | FTX 'Dynamic Mix 95' | Central/Eastern Mediterranean Sea: Sardinia (Capa Teulada Range—amph.); Cellinga Meduna Range—land | .. | 3 000 (amph. phase); 5 000 (land phase) | .. | .. | .. |
| 6. Belgium, Denmark, France, Luxembourg, Spain | 17 Nov.-2 Dec. | 'Baptise Pegasus' | Charleroi, Namur, Luxembourg, Dijon, Troyes | .. | 9 000 | .. | .. | .. |
| Finland ^a | 7-11 Nov. 1994 | Main joint exercise of Finnish defence forces; joint training to defend Finnish capital 'Lion-94' | 60°24N, 24°30E 60°23N, 25°08E 60°05N, 25°14E 60°04N, 24°43E | CO W Cmd supported by W Cmd HQ, naval HQ and Satakunta Wing HQ | 10 650, incl. army 9 500, navy 100, air forces 150 | Land, marine and air forces | 1st arm. brig. (-) and Uusimaa Jaeger Brig. (-) | At the AIAM in 1994, Finland stated that for cost-effectiveness several separate activities would be linked to the same cmd and logistic system, thus the no. of troops would exceed the notification threshold |
| France, Italy, Netherlands, Portugal, Spain ^a | 16-25 Nov. 1994 | Livex double action exercise 'Tramontana 94'; Evacuation exercise of residents from crisis countries | SE peninsular coastal zone (Murcia and Almeria) | .. | 11 309 incl. 284 Eurocorps 1 350 French 2 400 Italian 105 Dutch 150 Portuguese 7 020 Spanish | Air, amph. and land forces | .. | Phase I: preparatory activities; training and generation of forces Phase II: start of special forces ops, movement to ops area; Phase III: ops of airborne landing, helitransport and amph. landing; evacuation and withdrawal |

^a These last two exercises were held in 1994 but were not reported in *SIPRI Yearbook 1994*.

Note: (-) means that the division is below full strength or not comprised of all its component parts; abbreviations: amph. = amphibious; arm. = armoured; brig. = brigade; CFX = command field exercise; cmd = command; CO = Commanding Officer; COMBALTAP = Commander, Allied Forces, Baltic Approaches; CPX = command post exercise; def. = defence; div. = division; FTX = field training exercise; HQ = headquarters; mech. = mechanized; MND(C) = multinational div. (central); ops = operation(s); SE = south-east(ern); SW = south-west(ern); W = west(ern).

network. A Communications Group will be established to enhance its viability and effectiveness.

4. Provisions were adopted to make the *Annual Implementation Assessment Meeting* more effective and better integrated into the work of the FSC.

V. After Budapest

Designed for 'fair-weather' contingencies, the existing CSBMs, while effectively implemented and developed in most of Europe, are at the same time poorly effective in handling armed conflicts and wars raging on the southern and south-eastern fringes of the European continent. Most alarmingly, the Russian armed intervention in Chechnya, apart from its moral context, has proven that when a domestic conflict breaks out, the Vienna provisions can hardly be effective with a state choosing not to comply with them and going unpunished. The new version of the CSBM accords, the Vienna Document 1994, and the outcome of the implementation debate, as reported above, clearly demonstrate the gap between the state conflict-related early-warning and confidence-building measures and new requirements mainly related to local, below-state-level conflict or fighting. A telling illustration of this fact is the deadlock in the FSC discussion of regional security issues.

Awareness of this gap is evident in the chapter of the Budapest Decisions devoted to the further tasks of the FSC, emphasizing confidence- and security-building measures. The CSCE participating states declared that they would give more attention to improving the implementation and adoption of new CSBMs to meet new challenges and would place special emphasis on tackling regional security problems. Consequently, the FSC will seek to promote complementarity between regional and CSCE-wide approaches as well as coherence between CSCE arms control and confidence-building efforts and the overall goals of the CSCE. Accordingly, the Forum is to develop a framework for arms control which will serve as a basis for an agenda for the establishment of new measures, including CSBMs. Moreover, it was agreed that, while retaining its own autonomy and decision-making capacity, the Forum will be better integrated into CSCE political, conflict prevention and crisis management activities, especially cooperating with the Permanent Committee in the consideration of current military security issues.¹²

¹² CSCE (note 1), Budapest Decision VI, Further Tasks of the CSCE Forum for Security Co-operation.

Appendix 20B. The Vienna Document 1994

Vienna, 28 November 1994

(1) Representatives of the participating States of the Conference on Security and Co-operation in Europe (CSCE), Albania, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Canada, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, the Holy See, Hungary, Iceland, Ireland, Italy, Kazakhstan, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Monaco, the Netherlands, Norway, Poland, Portugal, Romania, the Russian Federation, San Marino, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, Turkmenistan, Ukraine, the United Kingdom, the United States of America, Uzbekistan and Yugoslavia,¹ met in Vienna in accordance with the provisions relating to the Conference on Confidence- and Security-Building Measures and Disarmament in Europe contained in the Concluding Documents of the Madrid, Vienna and Helsinki Follow-up Meetings of the CSCE. The delegation of the former Yugoslav Republic of Macedonia attended the meetings as an observer as from 1993.

(2) The Negotiations were conducted from 1989 to 1994.

(3) The participating States recalled that the aim of the Conference on Confidence- and Security-Building Measures and Disarmament in Europe is, as a substantial and integral part of the multilateral process initiated by the Conference on Security and Co-operation in Europe, to undertake, in stages, new, effective and concrete actions designed to make progress in strengthening confidence and security and in achieving disarmament, so as to give effect and expression to the duty of States to refrain from the threat or use of force in their mutual relations as well as in their international relations in general.

(4) The participating States recognized that the mutually complementary confidence- and security-building measures which are adopted in the present document and which are in

accordance with the mandates of the Madrid,² Vienna and Helsinki Follow-up Meetings of the CSCE serve by their scope and nature and by their implementation to strengthen confidence and security among the participating States.

(5) The participating States recalled the declaration on Refraining from the Threat or Use of Force contained in paragraphs (9) to (27) of the Document of the Stockholm Conference and stressed its continuing validity as seen in the light of the Charter of Paris for a New Europe.

(6) On 17 November 1990, the participating States adopted the Vienna Document 1990, which built upon and added to the confidence- and security-building measures contained in the Document of the Stockholm Conference 1986. On 4 March 1992, the participating States adopted the Vienna Document 1992, which built upon and added to the confidence- and security-building measures contained in the Vienna Document 1990.

(7) In fulfilment of the Charter of Paris for a New Europe of November 1990 and the Programme for Immediate Action, set out in the Helsinki Document 1992, they continued the CSBM negotiations under the same mandate, and have adopted the present document which integrates a set of new confidence- and security-building measures with measures previously adopted.

(8) The participating States have adopted the following:

I. ANNUAL EXCHANGE OF MILITARY INFORMATION

Information on Military Forces

(9) The participating States will exchange annually information on their military forces concerning the military organization, manpower and major weapon and equipment systems, as specified below, in the zone of application for confidence- and security-building measures (CSBMs). Participating States which have no military forces to be reported will so inform all other participating States.

(10) The information will be provided in

¹ On 13 December 1992 the CSCE Committee of Senior Officials agreed to maintain in force its decision of 8 July 1992 to suspend the participation of Yugoslavia in the CSCE and review it as appropriate.

² The zone of application for CSBMs under the terms of the Madrid mandate is set out in Annex 1.

an agreed format to all other participating States not later than 15 December of each year. It will be valid as of 1 January of the following year and will include:

(10.1) 1. Information on the command organization of those military forces referred to under points 2 and 3 specifying the designation and subordination of all formations³ and units⁴ at each level of command down to and including brigade/regiment or equivalent level. The information will be designed in such a way as to distinguish units from formations.

(10.1.1) Each participating State providing information on military forces will include a statement indicating the total number of units contained therein and the resultant annual evaluation quota as provided for in paragraph (10.7).

(10.2) 2. For each formation and combat unit⁵ of land forces down to and including brigade/regiment or equivalent level the information will indicate:

(10.2.1) – the designation and subordination;

(10.2.2) – whether it is active or non-active;⁶

(10.2.3) – the normal peacetime location of its headquarters indicated by exact geographic terms and/or co-ordinates;

(10.2.4) – the peacetime authorized personnel strength;

(10.2.5) – the major organic weapon and equipment systems, specifying the numbers of each type of:

(10.2.5.1) – battle tanks;

(10.2.5.2) – helicopters;

(10.2.5.3) – armoured combat vehicles (armoured personnel carriers, armoured infantry fighting vehicles, heavy armament combat vehicles);

(10.2.5.4) – armoured personnel carrier look-alikes and armoured infantry fighting vehicle look-alikes;

(10.2.5.5) – anti-tank guided missile

launchers permanently/integrally mounted on armoured vehicles;

(10.2.5.6) – self-propelled and towed artillery pieces, mortars and multiple rocket launchers (100 mm calibre and above);

(10.2.5.7) – armoured vehicle launched bridges.

(10.3.1) For planned increases in personnel strength above that reported under paragraph (10.2.4) for more than 21 days by more than 1,500 troops for each active combat unit and by more than 5,000 troops for each active formation, excluding personnel increases in the formation's subordinate formations and/or combat units subject to separate reporting under paragraph (10.2); as well as

(10.3.2) for each non-active formation and non-active combat unit which is planned to be temporarily activated for routine military activities or for any other purpose with more than 2,000 troops for more than 21 days

(10.3.3) the following additional information will be provided in the annual exchange of military information:

(10.3.3.1) – designation and subordination of the formation or combat unit;

(10.3.3.2) – purpose of the increase or activation;

(10.3.3.3) – for active formations and combat units the planned number of troops exceeding the personnel strength indicated under paragraph (10.2.4) or for non-active formations and combat units the number of troops involved during the period of activation;

(10.3.3.4) – start and end dates of the envisaged increase in personnel strength or activation;

(10.3.3.5) – planned location/area of activation;

(10.3.3.6) – the numbers of each type of the major weapon and equipment systems as listed in paragraphs (10.2.5.1) to (10.2.5.7) which are planned to be used during the period of the personnel increase or activation.

(10.3.4) In cases where the information required under paragraphs (10.3.1) to (10.3.3.6) cannot be provided in the annual exchange of military information, or in cases of changes in the information already provided, the required information will be communicated at least 42 days prior to such a personnel increase or temporary activation taking effect or, in cases when the personnel increase or temporary activation is carried out without advance notice to the troops involved, at the latest at the time the increase or the activation has taken effect.

³ In this context, formations are armies, corps and divisions and their equivalents.

⁴ In this context, units are brigades, regiments and their equivalents.

⁵ In this context, combat units are infantry, armoured, mechanized, motorized rifle, artillery, combat engineer and army aviation units. Those combat units which are airmobile or airborne will also be included.

⁶ In this context, non-active formations or combat units are those manned from zero to fifteen percent of their authorized combat strength. This term includes low strength formations and units.

(10.4) For each amphibious formation and amphibious combat unit⁷ permanently located in the zone of application down to and including brigade/regiment or equivalent level, the information will include the items as set out above.

(10.5) 3. For each air formation and air combat unit⁸ of the air forces, air defence aviation and of naval aviation permanently based on land down to and including wing/air regiment or equivalent level the information will include:

(10.5.1) – the designation and subordination;

(10.5.2) – the normal peacetime location of the headquarters indicated by exact geographic terms and/or co-ordinates;

(10.5.3) – the normal peacetime location of the unit indicated by the air base or military airfield on which the unit is based, specifying:

(10.5.3.1) – the designation or, if applicable, name of the air base or military airfield and

(10.5.3.2) – its location indicated by exact geographic terms and/or co-ordinates;

(10.5.4) – the peacetime authorized personnel strength;⁹

(10.5.5) – the numbers of each type of:

(10.5.5.1) – combat aircraft;

(10.5.5.2) – helicopters organic to the formation or unit.

Data Relating to Major Weapon and Equipment Systems

(11) The participating States will exchange data relating to their major weapon and equipment systems as specified in the provisions on Information on Military Forces within the zone of application for CSBMs.

(11.1) Data on existing weapon and equipment systems, if not already provided, will be provided once to all other participating States not later than 15 December 1995.

(11.2) Data on new types or versions of major weapon and equipment systems will be provided by each State when its deployment plans for the systems concerned are provided for the first time in accordance with paragraphs (13) and (14) below or, at the latest,

when it deploys the systems concerned for the first time in the zone of application for CSBMs. If a participating State has already provided data on the same new type or version, other participating States may, if appropriate, certify the validity of those data as far as their system is concerned.

(12) The following data will be provided for each type or version of major weapon and equipment systems:

(12.1) BATTLE TANKS

(12.1.1) Type

(12.1.2) National Nomenclature/Name

(12.1.3) Main Gun Calibre

(12.1.4) Unladen Weight

(12.1.5) Data on new types or versions

will, in addition, include:

(12.1.5.1) Night Vision Capability yes/no

(12.1.5.2) Additional Armour yes/no

(12.1.5.3) Track Width cm

(12.1.5.4) Floating Capability yes/no

(12.1.5.5) Snorkelling Equipment yes/no

(12.2) ARMOURED COMBAT

VEHICLES

(12.2.1) Armoured Personnel Carriers

(12.2.1.1) Type

(12.2.1.2) National Nomenclature/Name

(12.2.1.3) Type and Calibre of Armaments, if any

(12.2.1.4) Data on new types or versions

will, in addition, include:

(12.2.1.4.1) Night Vision Capability yes/no

(12.2.1.4.2) Seating Capacity

(12.2.1.4.3) Floating Capability yes/no

(12.2.1.4.4) Snorkelling Equipment yes/no

(12.2.2) Armoured Infantry Fighting

Vehicles

(12.2.2.1) Type

(12.2.2.2) National Nomenclature/Name

(12.2.2.3) Type and Calibre of Armaments

(12.2.2.4) Data on new types or versions

will, in addition, include:

(12.2.2.4.1) Night Vision Capability yes/no

(12.2.2.4.2) Additional Armour yes/no

(12.2.2.4.3) Floating Capability yes/no

(12.2.2.4.4) Snorkelling Equipment yes/no

(12.2.3) Heavy Armament Combat

Vehicles

(12.2.3.1) Type

(12.2.3.2) National Nomenclature/Name

(12.2.3.3) Main Gun Calibre

(12.2.3.4) Unladen Weight

(12.2.3.5) Data on new types or versions

will, in addition, include:

(12.2.3.5.1) Night Vision Capability yes/no

⁷ Combat units as defined above.

⁸ In this context, air combat units are units, the majority of whose organic aircraft are combat aircraft.

⁹ As an exception, this information need not be provided on air defence aviation units.

- (12.2.3.5.2) Additional Armour yes/no
- (12.2.3.5.3) Floating Capability yes/no
- (12.2.3.5.4) Snorkelling Equipment yes/no
- (12.3) ARMoured PERSONNEL

**CARRIER LOOK-ALIKES AND
ARMoured INFANTRY FIGHTING
VEHICLE LOOK-ALIKES**

- (12.3.1) Armoured Personnel Carrier
Look-Alikes
 - (12.3.1.1) Type
 - (12.3.1.2) National Nomenclature/Name
 - (12.3.1.3) Type and Calibre of Armaments,
if any

**(12.3.2) Armoured Infantry Fighting
Vehicle Look-Alikes**

- (12.3.2.1) Type
- (12.3.2.2) National Nomenclature/Name
- (12.3.2.3) Type and Calibre of Armaments,
if any

**(12.4) ANTI-TANK GUIDED MISSILE
LAUNCHERS PERMANENTLY/
INTEGRALLY MOUNTED ON
ARMoured VEHICLES**

- (12.4.1) Type
- (12.4.2) National Nomenclature/Name
- (12.5) SELF-PROPELLED AND TOWED
ARTILLERY PIECES, MORTARS AND
MULTIPLE ROCKET LAUNCHERS
(100 mm CALIBRE AND ABOVE)

- (12.5.1) Artillery pieces
 - (12.5.1.1) Type
 - (12.5.1.2) National Nomenclature/Name
 - (12.5.1.3) Calibre
- (12.5.2) Mortars
 - (12.5.2.1) Type
 - (12.5.2.2) National Nomenclature/Name
 - (12.5.2.3) Calibre
- (12.5.3) Multiple Launch Rocket Systems
 - (12.5.3.1) Type
 - (12.5.3.2) National Nomenclature/Name
 - (12.5.3.3) Calibre
 - (12.5.3.4) Data on new types or versions
will, in addition, include:

- (12.5.3.4.1) Number of Tubes
- (12.6) ARMoured VEHICLE

LAUNCHED BRIDGES

- (12.6.1) Type
- (12.6.2) National Nomenclature/Name
- (12.6.3) Data on new types or versions
will, in addition, include:
 - (12.6.3.1) Span of the Bridge — m
 - (12.6.3.2) Carrying Capacity/Load
Classification — metric tons

(12.7) COMBAT AIRCRAFT

- (12.7.1) Type
- (12.7.2) National Nomenclature/Name
- (12.7.3) Data on new types or versions
will, in addition, include:

- (12.7.3.1) Type of Integrally Mounted
Armaments, if any

(12.8) HELICOPTERS

- (12.8.1) Type
- (12.8.2) National Nomenclature/Name
- (12.8.3) Data on new types or versions
will, in addition, include:
 - (12.8.3.1) Primary Role (e.g. specialized
attack, multi-purpose attack, combat support,
transport)
 - (12.8.3.2) Type of Integrally Mounted
Armaments, if any.

(12.9) Each participating State will, at the time the data are presented, ensure that other participating States are provided with photographs presenting the right or left side, top and front views for each of the types of major weapon and equipment systems concerned.

(12.10) Photographs of armoured personnel carrier look-alikes and armoured infantry fighting vehicle look-alikes will include a view of such vehicles so as to show clearly their internal configuration illustrating the specific characteristic which distinguishes each particular vehicle as a look-alike.

(12.11) The photographs of each type will be accompanied by a note giving the type designation and national nomenclature for all models and versions of the type which the photographs represent. The photographs of a type will contain an annotation of the data for that type.

**Information on Plans for the Deployment
of Major Weapon and Equipment Systems**

(13) The participating States will exchange annually information on their plans for the deployment of major weapon and equipment systems as specified in the provisions on Information on Military Forces within the zone of application for CSBMs.

(14) The information will be provided in an agreed format to all other participating States not later than 15 December of each year. It will cover plans for the following year and will include:

- (14.1) – the type and name of the weapon/equipment systems to be deployed;
- (14.2) – the total number of each weapon/equipment system;
- (14.3) – whenever possible, the number of each weapon/equipment system planned to be allocated to each formation or unit;
- (14.4) – the extent to which the deployment will add to or replace existing weapon/equipment systems.

Defence Planning¹⁰**Exchange of Information****(15) General provisions**

The participating States will exchange annually information as specified below in paragraphs (15.1) to (15.4), to provide transparency about each CSCE participating State's intentions in the medium to long term as regards size, structure, training and equipment of its armed forces, as well as defence policy, doctrines and budgets related thereto, based on their national practice and providing the background for a dialogue among the participating States. The information will be provided to all other participating States not later than two months after the military budget, referred to in paragraph (15.4.1), has been approved by the competent national authorities.

(15.1) Defence policy and doctrine

In a written statement participating States will address:

(15.1.1) their defence policy, including military strategy/doctrine as well as changes occurring thereto;

(15.1.2) their national procedures for defence planning, including the stages of defence planning, the institutions involved in the decision-making process as well as changes occurring thereto;

(15.1.3) their current personnel policy and the most substantial changes in it.

If the information under this point has remained the same, participating States may refer to the previously exchanged information.

(15.2) Force planning

In a written statement participating States will address in the form of a general description:

(15.2.1) the size, structure, personnel, major weapon and equipment systems and deployment of their armed forces and the envisaged changes thereto. In view of the re-organization of the defence structure in a number of participating States, similar information will be provided on other forces, including paramilitary forces, on a voluntary basis and as appropriate. The scope and the status of the information on such forces will be reviewed after their status has been further defined, in the process of reorganization;

(15.2.2) the training programmes for their armed forces and planned changes thereto in the forthcoming years;

(15.2.3) the procurement of major equipment and major military construction programmes on the basis of the categories as set out in the United Nations Instrument mentioned in paragraph (15.3), either ongoing or starting in the forthcoming years, if planned, and the implications of such projects, accompanied by explanations, where appropriate;

(15.2.4) the realization of the intentions previously reported under this paragraph.

In order to facilitate the understanding of the information provided, the participating States are encouraged to use illustrative charts and maps, wherever applicable.

(15.3) Information on previous expenditures

Participating States will report their defence expenditures of the preceding fiscal year on the basis of the categories as set out in the United Nations 'Instrument for Standardized International Reporting of Military Expenditures' adopted on 12 December 1980.

They will provide, in addition, any appropriate clarification, if necessary, as to possible discrepancies between expenditures and previously reported budgets.

(15.4) Information on budgets

The written statement will be supplemented with the following information, where available:

(15.4.1) On the forthcoming fiscal year

(15.4.1.1) budget figures on the basis of the categories as set out in the United Nations Instrument mentioned in paragraph (15.3);

(15.4.1.2) status of budget figures.

The participating States will furthermore provide the following information in as far as available:

(15.4.2) On the two fiscal years following the forthcoming fiscal year

(15.4.2.1) the best estimates itemizing defence expenditures on the basis of the categories as set out in the United Nations Instrument mentioned in paragraph (15.3);

(15.4.2.2) status of these estimates.

(15.4.3) On the last two years of the forthcoming five fiscal years

(15.4.3.1) the best estimates specifying the total and figures for the following three main categories:

- operating costs,
- procurement and construction;
- research and development;

(15.4.3.2) status of these estimates.

(15.4.4) Explanatory data

(15.4.4.1) an indication of the year which has been used as the basis for any extrapolation;

¹⁰ The application of the measures relating to defence planning is not restricted by the zone of application for CSBMs as set out in Annex I.

(15.4.4.2) clarifications of the data as specified in paragraphs (15.3) and (15.4), especially with regard to inflation.

Clarification, Review and Dialogue

(15.5) Request for clarification

To increase transparency, each participating State may ask any other participating State for clarification of the information provided. Questions should be submitted within a period of two months following the receipt of a participating State's information. Participating States will make every effort to answer such questions fully and promptly. It should be understood that these exchanges are informational only. The questions and replies may be transmitted to all other participating States.

(15.6) Annual discussion meetings

Without prejudice to the possibility of having *ad hoc* discussions on the information and clarification provided, the participating States will hold each year a meeting for a focused and structured dialogue to discuss the issues relating to defence planning. The Annual Implementation Assessment Meeting as foreseen in Chapter X of the Vienna Document 1994 could be used for the purpose. Such discussions may extend to the methodology of defence planning and the implications originating from the information provided.

(15.7) Study visits

To increase knowledge of national defence planning procedures and promote dialogue, each participating State may arrange study visits for representatives of other CSCE participating States to meet with officials at the institutions involved in defence planning and appropriate bodies such as government agencies (planning, finance, economy), ministry of defence, general staff and relevant parliamentary committees.

Such exchanges could be organized within the framework of military contacts and co-operation.

Possible Additional Information

(15.8) Participating States are encouraged to provide any other factual and documentary information relating to their defence planning. This may include:

(15.8.1) the list and, if possible, the texts of major publicly available documents, in any of the CSCE working languages, reflecting their defence policy, military strategies and doctrines;

(15.8.2) any other publicly available documentary reference material on their plans

relating to paragraphs (15.1) and (15.2), e.g. military documents and/or 'white papers'.

(15.9) This documentary information may be provided to the CPC Secretariat, which will distribute lists of received information and make it available upon request.

II. RISK REDUCTION

Mechanism for Consultation and Co-operation as Regards Unusual Military Activities

(16) Participating States will, in accordance with the following provisions, consult and co-operate with each other about any unusual and unscheduled activities of their military forces outside their normal peacetime locations which are militarily significant, within the zone of application for CSBMs and about which a participating State expresses its security concern.

(16.1) The participating State which has concerns about such an activity may transmit a request for an explanation to another participating State where the activity is taking place.

(16.1.1) The request will state the cause, or causes, of the concern and, to the extent possible, the type and location, or area, of the activity.

(16.1.2) The reply will be transmitted within not more than 48 hours.

(16.1.3) The reply will give answers to questions raised, as well as any other relevant information which might help to clarify the activity giving rise to concern.

(16.1.4) The request and the reply will be transmitted to all other participating States without delay.

(16.2) The requesting State, after considering the reply provided, may then request a meeting to discuss the matter.

(16.2.1) The requesting State may ask for a meeting with the responding State.

(16.2.1.1) Such a meeting will be convened within not more than 48 hours.

(16.2.1.2) The request for such a meeting will be transmitted to all participating States without delay.

(16.2.1.3) The responding State is entitled to ask other interested participating States, in particular those which might be involved in the activity, to participate in the meeting.

(16.2.1.4) Such a meeting will be held at a venue to be mutually agreed upon by the requesting and the responding States. If there is no agreement, the meeting will be held at the Conflict Prevention Centre.

(16.2.1.5) The requesting and responding States will, jointly or separately, transmit a report of the meeting to all other participating States without delay.

(16.2.2) The requesting State may ask for a meeting of all participating States.

(16.2.2.1) Such a meeting will be convened within not more than 48 hours.

(16.2.2.2) The Permanent Committee will serve as the forum for such a meeting.

(16.2.2.3) Participating States involved in the matter to be discussed undertake to be represented at such a meeting.

(16.2.2.4) In the light of its assessment of the situation, the Permanent Committee will use all its competences to contribute to a solution.

Co-operation as Regards Hazardous Incidents of a Military Nature

(17) Participating States will co-operate by reporting and clarifying hazardous incidents of a military nature within the zone of application for CSBMs in order to prevent possible misunderstandings and mitigate the effects on another participating State.

(17.1) Each participating State will designate a point to contact in case of such hazardous incidents and will so inform all other participating States. A list of such points will be kept available at the Conflict Prevention Centre.

(17.2) In the event of such a hazardous incident the participating State whose military forces are involved in the incident should provide the information available to other participating States in an expeditious manner. Any participating State affected by such an incident may also request clarification as appropriate. Such requests will receive a prompt response.

(17.3) Matters relating to information about such hazardous incidents may be discussed by participating States at the Special Committee of the FSC, or at the annual implementation assessment meeting.

(17.4) These provisions will not affect the rights and obligations of participating States under any international agreement concerning hazardous incidents, nor will they preclude additional methods of reporting and clarifying hazardous incidents.

Voluntary Hosting of Visits to Dispel Concerns About Military Activities

(18) In order to help to dispel concerns about military activities in the zone of application for CSBMs, participating States are

encouraged to invite other participating States to take part in visits to areas on the territory of the host State in which there may be cause for such concerns. Such invitations will be without prejudice to any action taken under paragraphs (16) to (16.2).

(18.1) States invited to participate in such visits will include those which are understood to have concerns. At the time invitations are issued, the host State will communicate to all other participating States its intention to conduct the visit, indicating the reasons for the visit, the area to be visited, the States invited and the general arrangements to be adopted.

(18.2) Arrangements for such visits, including the number of the representatives from other participating States to be invited, will be at the discretion of the host State, which will bear the in-country costs. However, the host State should take appropriate account of the need to ensure the effectiveness of the visit, the maximum amount of openness and transparency and the safety and security of the invited representatives. It should also take account, as far as practicable, of the wishes of visiting representatives as regards the itinerary of the visit. The host State and the States which provide visiting personnel may circulate joint or individual comments on the visit to all other participating States.

III. CONTACTS

Visits to Air Bases

(19) Each participating State with air combat units reported under paragraph (10) will arrange visits for representatives of all other participating States to one of its normal peacetime air bases¹¹ on which such units are located in order to provide the visitors with the opportunity to view activity at the air base, including preparations to carry out the functions of the air base, and to gain an impression of the approximate number of air sorties and type of missions being flown.

(20) No participating State will be obliged to arrange more than one such visit in any five-year period. Prior indications given by participating States of forthcoming schedules for such visits for the subsequent year(s) may be discussed at the annual implementation assessment meetings.

¹¹ In this context, the term normal peacetime air base is understood to mean the normal peacetime location of the air combat unit indicated by the air base or military airfield on which the unit is based.

(21) As a rule, up to two visitors from each participating State will be invited.

(22) When the air base to be visited is located on the territory of another participating State, the invitations will be issued by the participating State on whose territory the air base is located (host State). In such cases, the responsibilities as host delegated by this State to the participating State arranging the visit will be specified in the invitation.

(23) The State arranging the visit will determine the programme for the visit in co-ordination with the host State, if appropriate. The visitors will follow the instructions issued by the State arranging the visit in accordance with the provisions set out in this document.

(24) The modalities regarding visits to air bases will conform to the provisions in Annex II.

(25) The invited State may decide whether to send military and/or civilian visitors, including personnel accredited to the host State. Military visitors will normally wear their uniforms and insignia during the visit.

(26) The visit to the air base will last for a minimum of 24 hours.

(27) In the course of the visit, the visitors will be given a briefing on the purpose and functions of the air base and on its current activities, including appropriate information on the air force structure and operations so as to explain the specific role and subordination of the air base. The State arranging the visit will provide the visitors with the opportunity to view routine activities at the air base during the visit.

(28) The visitors will have the opportunity to communicate with commanders and troops, including those of support/logistic units located at the air base. They will be provided with the opportunity to view all types of aircraft located at the air base.

(29) At the close of the visit, the State arranging the visit will provide an opportunity for the visitors to meet together and also with State officials and senior air base personnel to discuss the course of the visit.

(30) PROGRAMME OF MILITARY CONTACTS AND CO-OPERATION

Military Contacts

(30.1) To improve further their mutual relations in the interest of strengthening the process of confidence- and security-building, the participating States will, on a voluntary basis and as appropriate, promote and facilitate:

(30.1.1) – exchanges and visits between members of the armed forces at all levels, especially those between junior officers and commanders;

(30.1.2) – contacts between relevant military institutions, especially between military units;

(30.1.3) – exchanges of visits of naval vessels and air force units;

(30.1.4) – reservation of places in military academies and schools and on military training courses for members of the armed forces from the participating States;

(30.1.5) – use of the language facilities of military training institutions for the foreign-language instruction of members of the armed forces from the participating States and the organization of language courses in military training institutions for military foreign-language instructors from the participating States;

(30.1.6) – exchanges and contacts between academics and experts in military studies and related areas;

(30.1.7) – participation and contribution by members of the armed forces of the participating States, as well as civil experts in security matters and defence policy, to academic conferences, seminars and symposia;

(30.1.8) – issuing of joint academic publications on security and defence issues;

(30.1.9) – sporting and cultural events between members of their armed forces.

MILITARY CO-OPERATION

Joint military exercises and training

(30.2) The participating States will conduct, on a voluntary basis and as appropriate, joint military training and exercises to work on tasks of mutual interest.

Visits to military facilities, to military formations and observation of certain military activities

(30.3) In addition to the provisions of the Vienna Document 1994 regarding visits to air bases, each participating State will arrange for representatives of all other participating States to visit one of its military facilities or military formations, or to observe military activities below thresholds specified in Chapter V. These events will provide the visitors or observers with the opportunity to view activity of that military facility, observe the training of that military formation or observe the conduct of that military activity.

(30.4) Each participating State will make

every effort to arrange one such visit or observation in any five-year period.

(30.5) In order to ensure maximum efficiency and cost-effectiveness, the participating States may conduct such visits or observations in conjunction with, *inter alia*, other visits and contacts organized in accordance with provisions of the Vienna Document 1994.

(30.6) The modalities regarding visits to air bases specified in paragraphs (19)–(29) of the Vienna Document 1994 will, *mutatis mutandis*, be applied to the visits to military facilities and to military formations.

Observation visits

(30.7) Participating States conducting military activities subject to prior notification according to Chapter IV of the Vienna Document 1994, but at levels lower than those specified in Chapter V of the Vienna Document 1994, are encouraged to invite observers from other participating States, especially neighbouring States, to observe such military activities.

(30.8) Arrangements for such visits will be at the discretion of the host State.

Provision of experts

(30.9) The participating States express their willingness to provide to any other participating State available experts to be consulted on matters of defence and security.

(30.10) For that purpose participating States will designate a point of contact and will inform all other participating States accordingly. A list of such points will be kept available at the Conflict Prevention Centre.

(30.11) At the discretion of participating States, communications between them on this subject may be transmitted through the CSCE communications network.

(30.12) The modalities regarding provision of experts will be agreed directly between the participating States concerned.

Seminars on co-operation in the military field

(30.13) Subject to the approval of the appropriate CSCE bodies, the Conflict Prevention Centre will organize seminars on co-operation between the armed forces of the participating States.

(30.14) The agenda of the seminars will concentrate primarily on CSCE-oriented tasks, including the participation of the armed forces in peacekeeping operations, in disaster and emergency relief, in refugee crises and in

providing humanitarian assistance.

Exchange of information on agreements on military contacts and co-operation

(30.15) The participating States will exchange information on agreements on programmes of military contacts and cooperation concluded with other participating States within the scope of these provisions.

(30.16) The participating States have decided that the Programme of Military Contacts and Co-operation will be open to all CSCE participating States in respect of all their armed forces and territory. The implementation of this Programme will be assessed at annual implementation assessment meetings as foreseen in Chapter X.

Demonstration of New Types of Major Weapon and Equipment Systems

(31) The first participating State which deploys with its military forces in the zone of application a new type of major weapon and equipment system as specified in the provisions on Information on Military Forces will arrange at the earliest opportunity, but not later than one year after deployment has started, a demonstration for representatives of all other participating States,¹² which may coincide with other events stipulated in this document.

(32) When the demonstration is carried out on the territory of another participating State, the invitation will be issued by the participating State on whose territory the demonstration is carried out (host State). In such cases, the responsibilities as host delegated by this State to the participating State arranging the demonstration will be specified in the invitation.

(33) The State arranging the demonstration will determine the programme for the demonstration in co-ordination with the host State, if appropriate. The visitors will follow the instructions issued by the State arranging the demonstration in accordance with the provisions set out in this document.

(34) The modalities regarding demonstration of new types of major weapon and equipment systems will conform to the provisions in Annex II.

¹² This provision will not apply if another participating State has already arranged a demonstration of the same type of major weapon and equipment system.

(35) The invited State may decide whether to send military and/or civilian visitors, including personnel accredited to the host State. Military visitors will normally wear their uniforms and insignia during the visit.

IV. PRIOR NOTIFICATION OF CERTAIN MILITARY ACTIVITIES

(36) The participating States will give notification in writing in accordance with the provisions of Chapter IX to all other participating States 42 days or more in advance of the start of notifiable¹³ military activities in the zone of application for CSBMs.

(37) Notification will be given by the participating State on whose territory the activity in question is planned to take place (host State) even if the forces of that State are not engaged in the activity or their strength is below the notifiable level. This will not relieve other participating States of their obligation to give notification, if their involvement in the planned military activity reaches the notifiable level.

(38) Each of the following military activities in the field conducted as a single activity in the zone of application for CSBMs at or above the levels defined below will be notified:

(38.1) The engagement of formations of land forces¹⁴ of the participating States in the same exercise activity conducted under a single operational command independently or in combination with any possible air or naval components.

(38.1.1) This military activity will be subject to notification whenever it involves at any time during the activity:

- at least 9,000 troops, including support troops, or
- at least 250 battle tanks, or
- at least 500 ACVs, as defined in paragraph (12.2), or
- at least 250 self-propelled and towed artillery pieces, mortars and multiple rocket-launchers (100 mm calibre and above)

if organized into a divisional structure or at least two brigades/regiments, not necessarily subordinate to the same division.

(38.1.2) The participation of air forces of the participating States will be included in the notification if it is foreseen that in the course

of the activity 200 or more sorties by aircraft, excluding helicopters, will be flown.

(38.2) The engagement of military forces in an amphibious landing,¹⁵ heliborne landing or parachute assault in the zone of application for CSBMs.

(38.2.1) These military activities will be subject to notification whenever any of them involves at least 3,000 troops.

(38.3) The engagement of formations of land forces of the participating States in a transfer from outside the zone of application for CSBMs to arrival points in the zone, or from inside the zone of application for CSBMs to points of concentration in the zone, to participate in a notifiable exercise activity or to be concentrated.

(38.3.1) The arrival or concentration of these forces will be subject to notification whenever it involves, at any time during the activity:

- at least 9,000 troops, including support troops, or
- at least 250 battle tanks, or
- at least 500 ACVs, as defined in paragraph (12.2), or
- at least 250 self-propelled and towed artillery pieces, mortars and multiple rocket launchers (100 mm calibre and above) if organized into a divisional structure or at least two brigades/regiments, not necessarily subordinate to the same division.

(38.3.2) Forces which have been transferred into the zone will be subject to all provisions of agreed CSBMs when they depart their arrival points to participate in a notifiable exercise or to be concentrated within the zone of application for CSBMs.

(39) Notifiable military activities carried out without advance notice to the troops involved are exceptions to the requirement for prior notification to be made 42 days in advance.

(39.1) Notification of such activities, above the agreed thresholds, will be given at the time the troops involved commence such activities.

(40) Notification will be given in writing of each notifiable military activity in the following agreed form:

(41) **A. General information**

(41.1) The designation of the military activity;

¹³ In this document, the term notifiable means subject to notification.

¹⁴ In this context, the term land forces includes amphibious, airmobile or heliborne forces and air-borne forces.

¹⁵ In this document, amphibious landing includes total troops launched from the sea by naval and landing forces embarked in ships or craft involving a landing on shore.

(41.2) The general purpose of the military activity;

(41.3) The names of the States involved in the military activity;

(41.4) The level of command organizing and commanding the military activity;

(41.5) The start and end dates of the military activity.

(42) B. Information on different types of notifiable military activities

(42.1) The engagement of formations of land forces of the participating State in the same exercise activity conducted under a single operational command independently or in combination with any possible air or naval components:

(42.1.1) The total number of troops taking part in the military activity (i.e. ground troops, amphibious troops, airmobile or heli-borne and airborne troops) and the number of troops participating for each State involved, if applicable;

(42.1.2) The designation, subordination, number and type of formations and units participating for each State down to and including brigade/regiment or equivalent level;

(42.1.3) The total number of battle tanks for each State;

(42.1.4) The total number of armoured combat vehicles for each State and the total number of anti-tank guided missile launchers mounted on armoured vehicles;

(42.1.5) The total number of artillery pieces and multiple rocket launchers (100 mm calibre or above);

(42.1.6) The total number of helicopters, by category;

(42.1.7) Envisaged number of sorties by aircraft, excluding helicopters;

(42.1.8) Purpose of air missions;

(42.1.9) Categories of aircraft involved;

(42.1.10) The level of command organizing and commanding the air force participation;

(42.1.11) Naval ship-to-shore gunfire;

(42.1.12) Indication of other naval ship-to-shore support;

(42.1.13) The level of command organizing and commanding the naval force participation.

(42.2) The engagement of military forces in an amphibious landing, heliborne landing or parachute assault in the zone of application for CSBMs:

(42.2.1) The total number of amphibious troops involved in notifiable amphibious landings, and/or the total number of troops involved in notifiable parachute assaults or

heliborne landings;

(42.2.2) In the case of a notifiable landing, the point or points of embarkation, if in the zone of application for CSBMs.

(42.3) The engagement of formations of land forces of the participating States in a transfer from outside the zone of application for CSBMs to arrival points in the zone, or from inside the zone of application for CSBMs to points of concentration in the zone, to participate in a notifiable exercise activity or to be concentrated:

(42.3.1) The total number of troops transferred;

(42.3.2) Number and type of formations participating in the transfer;

(42.3.3) The total number of battle tanks participating in a notifiable arrival or concentration;

(42.3.4) The total number of armoured combat vehicles participating in a notifiable arrival or concentration;

(42.3.5) The total number of artillery pieces and multiple rocket launchers (100 mm calibre and above) participating in a notifiable arrival or concentration;

(42.3.6) Geographical co-ordinates for the points of arrival and for the points of concentration.

(43) C. The envisaged area in the zone of application for CSBMs and timeframe of the activity

(43.1) The area of the military activity delimited by geographic features together with geographic co-ordinates, as appropriate;

(43.2) Start and end dates of each phase of activity in the zone of application for CSBMs of participating formations (e.g., transfer, deployment, concentration of forces, active exercise, recovery);

(43.3) Tactical purpose of each phase and corresponding geographical area delimited by geographic co-ordinates; and

(43.4) Brief description of each phase.

(44) D. Other information

(44.1) Changes, if any, in relation to information provided in the annual calendar regarding the activity;

(44.2) Relationship of the activity to other notifiable activities.

V. OBSERVATION OF CERTAIN MILITARY ACTIVITIES

(45) The participating States will invite observers from all other participating States to the following notifiable military activities:

(45.1) -The engagement of formations of

land forces¹⁶ of the participating States in the same exercise activity conducted under a single operational command independently or in combination with any possible air or naval components.

(45.2) – The engagement of military forces in an amphibious landing, heliborne landing or parachute assault in the zone of application for CSBMs.

(45.3) – In the case of the engagement of formations of land forces of the participating States in a transfer from outside the zone of application for CSBMs to arrival points in the zone, or from inside the zone of application for CSBMs to points of concentration in the zone, to participate in a notifiable activity or to be concentrated, the concentration of these forces. Forces which have been transferred into the zone will be subject to all provisions of agreed confidence- and security-building measures when they depart their arrival points to participate in a notifiable exercise activity or to be concentrated within the zone of application for CSBMs.

(45.4) The above-mentioned activities will be subject to observation whenever the number of troops engaged equals or exceeds 13,000 or where the number of battle tanks engaged equals or exceeds 300, or where the number of armoured combat vehicles engaged as defined in paragraph (12.2) equals or exceeds 500, or where the number of self-propelled and towed artillery pieces, mortars and multiple rocket launchers (100 mm calibre and above) engaged equals or exceeds 250. In the case of an amphibious landing, heliborne landing or parachute assault, the activity will be subject to observation whenever the number of troops engaged equals or exceeds 3,500.

(46) The host State will be the participating State on whose territory the notified activity will take place.

(47) The host State may delegate responsibilities as host to another participating State or States engaged in the military activity on the territory of the host State, which will be the delegated State. In such cases, the host State will specify the allocation of responsibilities in its invitation to observe the activity.

(48) Each participating State may send up to two observers to the military activity to be observed. The invited State may decide whether to send military and/or civilian

observers, including personnel accredited to the host State. Military observers will normally wear their uniforms and insignia while performing their tasks.

(49) The modalities regarding observation of certain military activities will conform to the provisions in Annex II.

(50) The host or delegated State will determine a duration of observation which permits the observers to observe a notifiable military activity from the time that agreed thresholds for observation are met or exceeded until, for the last time during the activity, the thresholds for observation are no longer met.

(51) The observers may make requests with regard to the observation programme. The host or delegated State will, if possible, accede to them.

(52) The observers will be granted, during their mission, the privileges and immunities accorded to diplomatic agents in the Vienna Convention on Diplomatic Relations.

(53) The participating States will ensure that official personnel and troops taking part in an observed military activity, as well as other armed personnel located in the area of the military activity, are adequately informed regarding the presence, status and functions of observers.

(54) The host or delegated State will not be required to permit observation of restricted locations, installations or defence sites.

(55) In order to allow the observers to confirm that the notified activity is non-threatening in character and that it is carried out in conformity with the appropriate provisions of the notification, the host or delegated State will:

(55.1) – at the commencement of the observation programme give a briefing on the purpose, the basic situation, the phases of the activity and possible changes as compared with the notification, and provide the observers with an observation programme containing a daily schedule;

(55.2) – provide the observers with a map to a scale of one to not more than 250,000 depicting the area of the notified military activity and the initial tactical situation in this area. To depict the entire area of the notified military activity, smaller-scale maps may be additionally provided;

(55.3) – provide the observers with appropriate observation equipment; in addition, the observers will be permitted to use their own binoculars, maps, photo and video cameras, dictaphones and hand-held passive night-vision devices. The above-mentioned equip-

¹⁶ In this context, the term land forces includes amphibious, airmobile or heliborne forces and airborne forces.

ment will be subject to examination and approval by the host or delegated State. It is understood that the host or delegated State may limit the use of certain equipment in restricted locations, installations or defence sites;

(55.4) – be encouraged, whenever feasible and with due consideration for the security of the observers, to provide an aerial survey, preferably by helicopter, of the area of the military activity. If carried out, such a survey should provide the observers with the opportunity to observe from the air the disposition of forces engaged in the activity in order to help them gain a general impression of its scope and scale. At least one observer from each participating State represented at the observation should be given the opportunity to participate in the survey. Helicopters and/or aircraft may be provided by the host State or by another participating State at the request of and in agreement with the host State;

(55.5) – give the observers briefings, once daily at a minimum, with the help of maps on the various phases of the military activity and their development, and on the geographic location of the observers; in the case of a land force activity conducted in combination with air or naval components, briefings will be given by representatives of all forces involved;

(55.6) – provide opportunities to observe directly forces of the State(s) engaged in the military activity so that the observers get an impression of the flow of the entire activity; to this end, the observers will be given the opportunity to observe combat and support units of all participating formations of a divisional or equivalent level and, whenever possible, to visit units below divisional or equivalent level and communicate with commanders and troops. Commanders and other senior personnel of the participating formations as well as of the visited units will inform the observers of the mission and disposition of their respective units;

(55.7) – guide the observers in the area of the military activity; the observers will follow the instructions issued by the host or delegated State in accordance with the provisions set out in this document;

(55.8) – provide the observers with opportunities for timely communication with their embassies or other official missions and consular posts; the host or delegated State is not obligated to cover the communication expenses of the observers;

(55.9) – at the close of each observation,

provide an opportunity for the observers to meet together and also with host State officials to discuss the course of the observed activity. Where States other than the host State have been engaged in the activity, military representatives of those States will also be invited to take part in this discussion.

(56) The participating States need not invite observers to notifiable military activities which are carried out without advance notice to the troops involved unless these notifiable activities have a duration of more than 72 hours. The continuation of these activities beyond this time will be subject to observation while the agreed thresholds for observation are met or exceeded. The observation programme will follow as closely as practically possible all the provisions for observation set out in this document.

(57) The participating States are encouraged to permit media representatives from all participating States to attend observed military activities in accordance with accreditation procedures set down by the host State. In such instances, media representatives from all participating States will be treated without discrimination and given equal access to those facets of the activity open to media representatives.

(57.1) The presence of media representatives will not interfere with the observers carrying out their functions nor with the flow of the military activity.

(58) The host or delegated State will provide the observers with transportation from a suitable location announced in the invitation to the area of the notified activity so that the observers are in position before the start of the observation programme. It will also provide the observers with appropriate means of transportation in the area of the military activity, and return the observers to another suitable location announced in the invitation at the conclusion of the observation programme.

VI. ANNUAL CALENDARS

(59) Each participating State will exchange, with all other participating States, an annual calendar of its military activities subject to prior notification,¹⁷ within the zone of application for CSBMs, forecast for the subsequent calendar year. A participating State which is to host military activities subject to prior notification conducted by any other participating State(s) will include these activities in its annual calendar. It will be transmitted every year in writing, in accordance with the provisions of Chapter IX, not later than

15 November for the following year.

(60) If a participating State does not forecast any military activity subject to prior notification, it will so inform all other participating States in the same manner as prescribed for the exchange of annual calendars.

(61) Each participating State will list the above-mentioned activities chronologically and will provide information on each activity in accordance with the following model:

(61.1) – number of military activities to be reported;

(61.2) – activity number;

(61.2.1) – type of military activity and its designation;

(61.2.2) – general characteristics and purpose of the military activity;

(61.2.3) – States involved in the military activity;

(61.2.4) – area of the military activity, indicated by geographic features, where appropriate, and defined by geographic coordinates;

(61.2.5) – planned duration of the military activity, indicated by envisaged start and end dates;

(61.2.6) – envisaged total number of troops¹⁷ engaged in the military activity;

(61.2.7) – envisaged total number of troops for each State involved, if applicable.

For activities involving more than one State, the host State will provide such information;

(61.2.8) – types of armed forces involved in the military activity;

(61.2.9) – envisaged level of the military activity and designation of the direct operational command under which this military activity will take place;

(61.2.10) – number and type of divisions whose participation in the military activity is envisaged;

(61.2.11) – any additional information concerning, *inter alia*, components of armed forces which the participating State planning the military activity considers relevant.

(62) Should changes regarding the military activities in the annual calendar prove necessary, they will be communicated to all other participating States no later than in the appropriate notification.

(63) Should a participating State cancel a military activity included in its annual calendar or reduce it to a level below notification thresholds, that State will inform the other

participating States immediately.

(64) Information on military activities subject to prior notification not included in an annual calendar will be communicated to all participating States as soon as possible, in accordance with the model provided in the annual calendar.

VII. CONSTRAINING PROVISIONS

(65) The following provisions will apply to military activities subject to prior notification:¹⁷

(65.1) No participating State will carry out within two calendar years more than one military activity subject to prior notification involving more than 40,000 troops or 900 battle tanks.

(65.2) No participating State will carry out within a calendar year more than six military activities subject to prior notification each one involving more than 13,000 troops or 300 battle tanks, but not more than 40,000 troops or 900 battle tanks.

(65.2.1) Of these six military activities, no participating State will carry out within a calendar year more than three military activities subject to prior notification, each one involving more than 25,000 troops or 400 battle tanks.

(65.3) No participating State will carry out simultaneously more than three military activities subject to prior notification each one involving more than 13,000 troops or 300 battle tanks.

(66) Each participating State will communicate, in writing, in accordance with the provisions of Chapter IX, to all other participating States, by 15 November each year, information concerning military activities subject to prior notification involving more than 40,000 troops or 900 battle tanks, which it plans to carry out or host in the second subsequent calendar year. Such a communication will include preliminary information on the activity, as to its general purpose, timeframe and duration, area, size and States involved.

(67) If a participating State does not forecast any such military activity, it will so inform all other participating States in the same manner as prescribed for the exchange of annual calendars.

(68) No participating State will carry out a military activity subject to prior notification involving more than 40,000 troops or 900 battle tanks, unless it has been the object of a communication as defined above and unless it has been included in the annual calendar, not later than 15 November each year.

¹⁷ As defined in the provisions on Prior Notification of Certain Military Activities.

(69) If military activities subject to prior notification are carried out in addition to those contained in the annual calendar, they should be as few as possible.

VIII. COMPLIANCE AND VERIFICATION

(70) According to the Madrid mandate, the confidence- and security-building measures to be agreed upon 'will be provided with adequate forms of verification which correspond to their content'.

(71) The participating States recognize that national technical means can play a role in monitoring compliance with agreed confidence- and security-building measures.

Inspection

(72) In accordance with the provisions contained in this document each participating State has the right to conduct inspections on the territory of any other participating State within the zone of application for CSBMs. The inspecting State may invite other participating States to participate in an inspection.

(73) Any participating State will be allowed to address a request for inspection to another participating State within the zone of application for CSBMs.

(74) No participating State will be obliged to accept on its territory within the zone of application for CSBMs more than three inspections per calendar year.

(74.1) When a participating State has accepted three inspections in a calendar year, it will so inform all other participating States.

(75) No participating State will be obliged to accept more than one inspection per calendar year from the same participating State.

(76) An inspection will not be counted if, due to force majeure, it cannot be carried out.

(77) The participating State which has received such a request will reply in the affirmative to the request within the agreed period of time, subject to the provisions contained in paragraphs (74) and (75).

(78) The participating State which requests an inspection will be permitted to designate for inspection on the territory of another State within the zone of application for CSBMs, a specific area. Such an area will be referred to as the 'specified area'. The specified area will comprise terrain where notifiable military activities are conducted or where another participating State believes a notifiable military activity is taking place. The specified area will be defined and limited by the scope and scale of notifiable military activities but will

not exceed that required for an army level military activity.

(79) In the specified area the inspection team accompanied by the representatives of the receiving State will be permitted access, entry and unobstructed survey, except for areas or sensitive points to which access is normally denied or restricted, military and other defence installations, as well as naval vessels, military vehicles and aircraft. The number and extent of the restricted areas should be as limited as possible. Areas where notifiable military activities can take place will not be declared restricted areas, except for certain permanent or temporary military installations which, in territorial terms, should be as small as possible, and consequently those areas will not be used to prevent inspection of notifiable military activities. Restricted areas will not be employed in a way inconsistent with the agreed provisions on inspection.

(80) Within the specified area, the forces of participating States other than the receiving State will also be subject to the inspection.

(81) Inspection will be permitted on the ground, from the air, or both.

(82) The representatives of the receiving State will accompany the inspection team, including when it is in land vehicles and an aircraft from the time of their first employment until the time they are no longer in use for the purposes of inspection.

(83) In its request, the inspecting State will notify the receiving State of:

(83.1) – the location of the specified area defined by geographical co-ordinates;

(83.2) – the preferred point(s) of entry for the inspection team;

(83.3) – mode of transport to and from the point(s) of entry and, if applicable, to and from the specified area;

(83.4) – where in the specified area the inspection will begin;

(83.5) – whether the inspection will be conducted from the ground, from the air, or both simultaneously;

(83.6) – whether aerial inspection will be conducted using an airplane, a helicopter, or both;

(83.7) – whether the inspection team will use land vehicles provided by the receiving State or, if mutually agreed, its own vehicles;

(83.8) – other participating States participating in the inspection, if applicable;

(83.9) – information for the issuance of diplomatic visas to inspectors entering the receiving State;

(83.10) – the preferred CSCE working language(s) to be used during the inspection.

(84) The reply to the request will be given in the shortest possible period of time, but within not more than twenty-four hours. Within thirty-six hours after the issuance of the request, the inspection team will be permitted to enter the territory of the receiving State.

(85) Any request for inspection as well as the reply thereto will be communicated to all participating States without delay.

(86) The receiving State should designate the point(s) of entry as close as possible to the specified area. The receiving State will ensure that the inspection team will be able to reach the specified area without delay from the point(s) of entry. The receiving State will, in its reply, indicate which of the six official working languages will be used during the inspection.

(87) All participating States will facilitate the passage of the inspection teams through their territory.

(88) Within 48 hours after the arrival of the inspection team at the specified area, the inspection will be terminated.

(89) There will be no more than four inspectors in an inspection team. The inspecting State may invite other participating States to participate in an inspection. The inspection team will be headed by a national of the inspecting State, which will have at least as many inspectors in the team as any invited State. The inspection team will be under the responsibility of the inspecting State, against whose quota the inspection is counted. While conducting the inspection, the inspection team may divide into two subteams.

(90) The inspectors and, if applicable, auxiliary personnel will be granted during their mission the privileges and immunities in accordance with the Vienna Convention on Diplomatic Relations.

(91) The participating States will ensure that troops, other armed personnel and officials in the specified area are adequately informed regarding the presence, status and functions of inspectors and, if applicable, auxiliary personnel. The receiving State will ensure that no action is taken by its representatives which could endanger inspectors and, if applicable, auxiliary personnel. In carrying out their duties, inspectors and, if applicable, auxiliary personnel will take into account safety concerns expressed by representatives of the receiving State.

(92) The receiving State will provide the

inspection team with appropriate board and lodging in a location suitable for carrying out the inspection, and, when necessary, medical care; however this does not exclude the use by the inspection team of its own tents and rations.

(93) The inspection team will have use of its own maps and charts, photo and video cameras, binoculars, hand-held passive night vision devices and dictaphones. Upon arrival in the specified area the inspection team will show the equipment to the representatives of the receiving State. In addition, the receiving State may provide the inspection team with a map depicting the area specified for the inspection.

(94) The inspection team will have access to appropriate telecommunications equipment of the receiving State for the purpose of communicating with the embassy or other official missions and consular posts of the inspecting State accredited to the receiving State.

(95) The receiving State will provide the inspection team with access to appropriate telecommunications equipment for the purpose of continuous communication between the subteams.

(96) Inspectors will be entitled to request and to receive briefings at agreed times by military representatives of the receiving State. At the inspectors' request, such briefings will be given by commanders of formations or units in the specified area. Suggestions of the receiving State as to the briefings will be taken into consideration.

(97) The inspecting State will specify whether aerial inspection will be conducted using an airplane, a helicopter or both. Aircraft for inspection will be chosen by mutual agreement between the inspecting and receiving States. Aircraft will be chosen which provide the inspection team with a continuous view of the ground during the inspection.

(98) After the flight plan, specifying, *inter alia*, the inspection team's choice of flight path, speed and altitude in the specified area, has been filed with the competent air traffic control authority the inspection aircraft will be permitted to enter the specified area without delay. Within the specified area, the inspection team will, at its request, be permitted to deviate from the approved flight plan to make specific observations provided such deviation is consistent with paragraph (79) as well as flight safety and air traffic requirements. Directions to the crew will be given through a representative of the receiving State on board the aircraft involved in the inspec-

tion.

(99) One member of the inspection team will be permitted, if such a request is made, at any time to observe data on navigational equipment of the aircraft and to have access to maps and charts used by the flight crew for the purpose of determining the exact location of the aircraft during the inspection flight.

(100) Aerial and ground inspectors may return to the specified area as often as desired within the 48-hour inspection period.

(101) The receiving State will provide for inspection purposes land vehicles with cross-country capability. Whenever mutually agreed, taking into account the specific geography relating to the area to be inspected, the inspecting State will be permitted to use its own vehicles.

(102) If land vehicles or aircraft are provided by the inspecting State, there will be one accompanying driver for each land vehicle, or accompanying aircraft crew.

(103) The inspecting State will prepare a report of its inspection using a format to be agreed by the participating States and will provide a copy of that report to all participating States without delay.

(104) The inspection expenses will be incurred by the receiving State except when the inspecting State uses its own aircraft and/or land vehicles. The inspecting State will be responsible for travel expenses to and from the point(s) of entry.

Evaluation

(105) Information provided under the provisions on Information on Military Forces and on Information on Plans for the Deployment of Major Weapon and Equipment Systems will be subject to evaluation.

(106) Subject to the provisions below each participating State will provide the opportunity to visit active formations and units in their normal peacetime locations as specified in points 2 and 3 of the provisions on Information on Military Forces to allow the other participating States to evaluate the information provided.

(106.1) Non-active formations and combat units temporarily activated will be made available for evaluation during the period of temporary activation and in the area/location of activation indicated under paragraph (10.3.3). In such cases the provisions for the evaluation of active formations and units will be applicable, *mutatis mutandis*. Evaluation visits conducted under this provision will count against the quotas established under

paragraph (107).

(107) Each participating State will be obliged to accept a quota of one evaluation visit per calendar year for every sixty units, or portion thereof, reported under paragraph (10). However, no participating State will be obliged to accept more than fifteen visits per calendar year. No participating State will be obliged to accept more than one fifth of its quota of visits from the same participating State; a participating State with a quota of less than five visits will not be obliged to accept more than one visit from the same participating State during a calendar year. No formation or unit may be visited more than twice during a calendar year and more than once by the same participating State during a calendar year.

(107.1) A participating State will inform all other participating States when, if applicable, its quota is filled.

(108) No participating State will be obliged to accept more than one visit at any given time on its territory.

(109) If a participating State has formations or units stationed on the territory of other participating States (host States) in the zone of application for CSBMs, the maximum number of evaluation visits permitted to its forces in each of the States concerned will be proportional to the number of its units in each State. The application of this provision will not alter the number of visits this participating State (stationing State) will have to accept under paragraph (107).

(110) Requests for such visits will be submitted giving five days notice.

(111) The request will specify:

(111.1) – the formation or unit to be visited;

(111.2) – the proposed date of the visit;

(111.3) – the preferred point(s) of entry as well as the date and estimated time of arrival for the evaluation team;

(111.4) – the mode of transport to and from the point(s) of entry and, if applicable, to and from the formation or unit to be visited;

(111.5) – the names and ranks of the members of the team and, if applicable, information for the issue of diplomatic visas;

(111.6) – the preferred CSCE working language(s) to be used during the visit.

(112) If a formation or unit of a participating State is stationed on the territory of another participating State, the request will be addressed to the host State and sent simultaneously to the stationing State.

(113) The reply to the request will be given within 48 hours after the receipt of the

request.

(114) In the case of formations or units of a participating State stationed on the territory of another participating State, the reply will be given by the host State in consultation with the stationing State. After consultation between the host State and the stationing State, the host State will specify in its reply any of its responsibilities which it agrees to delegate to the stationing State.

(115) The reply will indicate whether the formation or unit will be available for evaluation at the proposed date at its normal peacetime location.

(116) Formations or units may be in their normal peacetime location but be unavailable for evaluation. Each participating State will be entitled in such cases not to accept a visit; the reasons for the non-acceptance and the number of days that the formation or unit will be unavailable for evaluation will be stated in the reply. Each participating State will be entitled to invoke this provision up to a total of five times for an aggregate of no more than 30 days per calendar year.

(117) If the formation or unit is absent from its normal peacetime location, the reply will indicate the reasons for and the duration of its absence. The requested State may offer the possibility of a visit to the formation or unit outside its normal peacetime location. If the requested State does not offer this possibility, the requesting State will be able to visit the normal peacetime location of the formation or unit. The requesting State may however refrain in either case from the visit.

(118) Visits will not be counted against the quotas of receiving States, if they are not carried out. Likewise, if visits are not carried out, due to force majeure, they will not be counted.

(119) The reply will designate the point(s) of entry and indicate, if applicable, the time and place of assembly of the team. The point(s) of entry and, if applicable, the place of assembly will be designated as close as possible to the formation or unit to be visited. The receiving State will ensure that the team will be able to reach the formation or unit without delay. The receiving State will, in its reply, indicate which of the six official working languages will be used during the evaluation visit.

(120) The request and the reply will be communicated to all participating States without delay.

(121) Participating States will facilitate the passage of teams through their territory.

(122) The team will have no more than two members. It may be accompanied by an interpreter as auxiliary personnel.

(123) The members of the team and, if applicable, auxiliary personnel will be granted during their mission the privileges and immunities in accordance with the Vienna Convention on Diplomatic Relations.

(124) The visit will take place in the course of a single working day and last up to 12 hours.

(125) The visit will begin with a briefing by the officer commanding the formation or unit, or his deputy, in the headquarters of the formation or unit, concerning the personnel as well as the major weapon and equipment systems reported under paragraph (10).

(125.1) In the case of a visit to a formation, the receiving State may provide the possibility to see personnel and major weapon and equipment systems reported under paragraph (10) for that formation, but not for any of its formations or units, in their normal locations.

(125.2) In the case of a visit to a unit, the receiving State will provide the possibility to see the personnel and the major weapon and equipment systems of the unit reported under paragraph (10) in their normal locations.

(126) Access will not have to be granted to sensitive points, facilities and equipment.

(127) The team will be accompanied at all times by representatives of the receiving State.

(128) The receiving State will provide the team with appropriate transportation during the visit to the formation or unit.

(129) The evaluation team will have use of its own maps and charts, photo and video cameras, personal binoculars and dictaphones. Upon arrival at the location of the formation or unit being visited the evaluation team will show the equipment to the representatives of the receiving State.

(130) The visit will not interfere with activities of the formation or unit.

(131) The participating States will ensure that troops, other armed personnel and officials in the formation or unit are adequately informed regarding the presence, status and functions of members of teams and, if applicable, auxiliary personnel. Participating States will also ensure that no action is taken by their representatives which could endanger the members of teams and, if applicable, auxiliary personnel. In carrying out their duties, members of teams and, if applicable, auxiliary personnel will take into account safety

concerns expressed by representatives of the receiving State.

(132) Travel expenses to and from the point(s) of entry, including expenses for refuelling, maintenance and parking of aircraft and/or land vehicles of the visiting State, will be borne by the visiting State according to existing practices established under the CSBM inspection provisions.

(132.1) Expenses for evaluation visits incurred beyond the point(s) of entry will be borne by the receiving State, except when the visiting State uses its own aircraft and/or land vehicles in accordance with paragraph (111.4).

(132.2) The receiving State will provide appropriate board and, when necessary, lodging in a location suitable for carrying out the evaluation as well as any urgent medical care which may be required.

(132.3) In the case of visits to formations or units of a participating State stationed on the territory of another participating State, the stationing State will bear the costs for the discharge of those responsibilities which have been delegated to it by the host State under the terms of paragraph (114).

(133) The visiting State will prepare a report of its visit using a format to be agreed by the participating States which will be communicated to all participating States expeditiously.

(134) The communications concerning compliance and verification will be transmitted preferably through the CSBM communications network.

(135) Each participating State will be entitled to request and obtain clarification from any other participating State concerning the application of agreed confidence- and security-building measures. The requested participating State will provide promptly relevant clarification to the requesting participating State unless otherwise specified in this document. Communications in this context will, if appropriate, be transmitted to all other participating States.

* * *

(136) The participating States are encouraged to undertake, including on the basis of separate agreements, in a bilateral, multilateral or regional context, measures to increase transparency and confidence. Illustrative examples could be as follows:

(136.1) – to provide their neighbouring participating States with information on certain military activities carried out below the thresholds for notification and close to bor-

ders between them;

(136.2) – to invite representatives from other, especially neighbouring participating States to observe exercises other than those subject to the provisions of this document.

(137) The participating States are encouraged to provide information on such measures to the CPC, which will distribute lists of received information and make it available upon request.

IX. COMMUNICATIONS

(138) The CSCE Communications Network

The participating States have established a network of direct communications between their capitals for the transmission of messages relating, *inter alia*, to agreed measures contained in this document. The network will complement the existing use of diplomatic channels. Participating States undertake to use the network flexibly, efficiently and in a cost-effective way in communications between States concerning agreed CSBMs and other CSCE-related matters.

(139) Financial Arrangements

The cost-sharing arrangements are set out in documents CSCE/WV/Dec. 2 and CSCE/WV/Dec. 4.

(140) Points of Contact

Each participating State will designate a point of contact capable of transmitting and receiving messages from other participating States on a 24-hour-a-day basis and will notify in advance any change in this designation.

(141) Six CSCE languages

Communications may be in any one of the six working languages of the CSCE. Without prejudicing the future continued use of all six working languages of the CSCE, according to established rules and practice as set out in the Final Recommendations of the Helsinki Consultations, the participating States will:

(141.1) – in order to facilitate an efficient use of the communications network, give due consideration to practical needs of rapid transmission of their messages and of immediate understandability. A translation into another CSCE working language will be added where needed to meet that principle;

(141.2) – indicate at least two CSCE working languages in which they would prefer to receive the message or its translation.

(142) Use of the Network

Participating States will, whenever possible, use the Standard Operating Procedures (S.O.P.) and enforce user discipline to maximize the efficiency and cost-effectiveness of

the network.

(142.1) Messages will always have headers as defined in the S.O.P.

(142.2) Messages will, whenever possible, be transmitted in formats with headings in all six CSCE working languages. Such formats, agreed among the participating States with a view to making transmitted messages immediately understandable by reducing the language element to a minimum, are annexed to document CSCE/WV/Dec. 4. The formats may be subject to agreed modifications as required.

(142.3) Messages will be considered official communications of the sending State. If the content of a message is not related to an agreed measure, the receiving State has the right to reject it by so informing the other participating States.

(142.4) Any narrative text, to the extent it is required in such formats, and messages that do not lend themselves to formatting will be transmitted in the CSCE working languages chosen by the transmitting State, in accordance with the provisions of paragraph (141).

(142.5) Each participating State has the right to ask for clarification of messages in case of doubt.

(143) Additional use of the Network

Participating States may agree among themselves to use the network for other purposes.

(144) The Communications Group

A Communications Group will be established, composed of representatives of the participating States and chaired, on behalf of the Chairman-in-Office, by a representative of the Secretary General of the CSCE.

(144.1) The group will address questions relating to rules of procedure, working methods, formats and any other measures to enhance the viability and effectiveness of the communications network, including issues relating to use of modern information technologies for data exchange.

(144.2) The group will meet two times per year for at least one day. Additional meetings may be convened as necessary.

(144.3) The Chairman of the Group will report to the appropriate CSCE committee about the proceedings of the Communications Group and, if appropriate, present drafts for decisions to be taken as prepared by the Group.

X. ANNUAL IMPLEMENTATION ASSESSMENT MEETING

(145) The participating States will hold

each year a meeting to discuss the present and future implementation of agreed CSBMs. Discussion may extend to:

(145.1) – clarification of questions arising from such implementation;

(145.2) – operation of agreed measures, including the use of additional equipment during inspections and evaluation visits;

(145.3) – implications of all information originating from the implementation of any agreed measures for the process of confidence- and security-building in the framework of the CSCE.

(146) Before the conclusion of each year's meeting the participating States will normally agree upon the agenda and dates for the subsequent year's meeting. Lack of agreement will not constitute sufficient reason to extend a meeting, unless otherwise agreed. Agenda and dates may, if necessary, be agreed between meetings.

(147) The Special Committee of the Forum for Security Co-operation will hold such meetings. It will consider, as required, suggestions made during the AIAM aiming at the improvement of the implementation of CSBMs.

Within one month after the AIAM, the Conflict Prevention Centre will circulate a survey of such suggestions.

(147.1) One month prior to the meeting, the Conflict Prevention Centre will circulate a survey of exchanged annual information and ask participating States to confirm or to correct applicable data.

(147.2) Any participating State may request assistance in implementing the provisions of this document from any other participating State.

(147.3) Participating States which, for whatever reason, have not exchanged annual information according to this document will during the meeting explain the reasons why and provide an expected date for their full compliance with this commitment.

* * *

(148) The participating States will implement this set of mutually complementary confidence- and security-building measures in order to promote security co-operation and to reduce the risk of military conflict.

(149) In order to strengthen compliance with agreed confidence- and security-building measures and in addition to other relevant provisions of this document, the participating States will, as necessary, consider in appropriate CSCE bodies how to ensure full

implementation of those measures.

(150) The measures adopted in this document are politically binding and will come into force on 1 January 1995, unless specified otherwise.

(151) The Secretary General of the CSCE is requested to transmit the present document to the Secretary-General of the United Nations and to the Governments of the non-participating Mediterranean States, observer State, Japan and the Republic of Korea.

(152) The text of this document will be published in each participating State, which will disseminate it and make it known as widely as possible.

(153) The representatives of the participating States express their profound gratitude to the Government and people of Austria for the excellent arrangements they have made for the negotiations within the framework of the FSC and the warm hospitality they have extended to the delegations which participated in the negotiations.

ANNEX I

Under the terms of the Madrid mandate, the zone of application for CSBMs is defined as follows:

'On the basis of equality of rights, balance and reciprocity, equal respect for the security interests of all CSCE participating States, and of their respective obligations concerning confidence- and security-building measures and disarmament in Europe, these confidence and security-building measures will cover the whole of Europe as well as the adjoining sea area* and air space. They will be of military significance and politically binding and will be provided with adequate forms of verification which correspond to their content.

As far as the adjoining sea area* and air space is concerned, the measures will be applicable to the military activities of all the participating States taking place there whenever these activities affect security in Europe as well as constitute a part of activities taking place within the whole of Europe as referred to above, which they will agree to notify. Necessary specifications will be made through the negotiations on the confidence- and security-building measures at the Conference.

Nothing in the definition of the zone given above will diminish obligations already undertaken under the Final Act. The confidence- and security-building measures to be agreed upon at the Conference will also be applicable in all areas covered by any of the

provisions in the Final Act relating to confidence-building measures and certain aspects of security and disarmament.

Wherever the term 'the zone of application for CSBMs' is used in this document, the above definition will apply. The following understanding will apply as well:

The commitments undertaken in letters to the Chairman-in-Office of the CSCE Council by Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Ukraine and Uzbekistan on 29 January 1992 have the effect of extending the application of CSBMs in the Vienna Document 1992 to the territories of the above-mentioned States insofar as their territories were not covered already by the above.

*In this context, the notion of adjoining sea area is understood to refer also to ocean areas adjoining Europe.

ANNEX II

The following provisions will apply in conformity with the events as set out in Chapters III and V:

(1) Invitations

Invitations will be extended in accordance with the provisions of Chapter IX to all participating States 42 days or more in advance of the event. The invitations will include the following information as applicable:

(1.1) the type of event, e.g. visits to air bases, military facilities or military formations, a demonstration of new types of major weapon and equipment systems or an observation of certain military activities;

(1.2) the location where the event will take place, including geographic co-ordinates in case of visits to air bases;

(1.3) State arranging the event and, if different, the host State;

(1.4) responsibilities delegated;

(1.5) whether the event is combined with other events;

(1.6) number of visitors or observers invited;

(1.7) date, time and place of assembly;

(1.8) planned duration of the event;

(1.9) anticipated date, time and place of departure at the end of the programme;

(1.10) arrangements for transportation;

(1.11) arrangements for board and lodging, including a point of contact for communications with visitors or observers;

(1.12) language(s) to be used during the programme;

(1.13) equipment to be issued by the State

arranging the event;

(1.14) possible authorization by the host State and, if different, the State arranging the event, of the use of special equipment that the visitors or observers may bring with them;

(1.15) arrangements for special clothing to be issued;

(1.16) any other information including, if applicable, the designation/name of the air base, military facility or formation to be visited, the designation of the military activity to be observed and/or the type(s) of major weapon and equipment system(s) to be viewed.

(2) Replies

Replies, indicating whether or not the invitation is accepted, will be given in writing, in accordance with the provisions of Chapter IX, not later than 21 days before the event and will include the following information:

(2.1) reference to invitation;

(2.2) name and rank of visitors or observers;

(2.3) date and place of birth;

(2.4) passport information (number, date and place of issue, expiration date);

(2.5) travel arrangements, including airline name and flight number, if applicable, and time and place of arrival.

If the invitation is not accepted in time, it will be assumed that no visitors or observers will be sent.

(3) Financial aspects

(3.1) The invited State will cover the travel expenses of its representative(s) to the place of assembly and from the place of departure, possibly the same as the place of assembly, as specified in the invitation;

(3.2) The State arranging the event will cover travel arrangements and expenses from the place of assembly and to the place of departure—possibly the same as the place of assembly—as well as appropriate civil or military board and lodging in a location suitable for carrying out the event.

(4) Other provisions

The participating State(s) will, in due cooperation with the visitors or observers, ensure that no action is taken which could be harmful to their safety.

Furthermore, the State arranging the event will:

(4.1) give equal treatment and offer equal opportunities to all visitors or observers to carry out their functions;

(4.2) restrict to the minimum necessary the time reserved for transfer and administrative activities during the event;

(4.3) provide any urgent medical care which may be required.

ANNEX III Chairman's Statement

It is understood that the implementation aspects of CSBMs in the case of contiguous areas of participating States specified in the understanding of Annex I which share frontiers with non-European non-participating States may be discussed at future Annual Implementation Assessment Meetings.

This statement will be an annex to the Vienna Document 1994 and will be published with it.

ANNEX IV Chairman's Statement

It is understood that the participating States will take into consideration practical problems which may arise at an initial stage in implementing CSBMs on the territories of newly independent States admitted to the CSE. Those States will promptly inform all the participating States about such practical problems.

This statement will not constitute a precedent and will be subject to review in the light of the discussion at the Annual Implementation Assessment Meeting.

This statement will be an annex to the Vienna Document 1994 and will be published with it.

ANNEX V Chairman's Statement

In view of the task of the Conflict Prevention Centre to support the implementation of CSBMs assigned to it in the Charter of Paris the CPC should prepare, on a regular basis, a factual presentation of the information exchanged in accordance with this document between all participating States. At least initially, this should be done on the basis of existing resources.

This factual presentation should facilitate the analysis of this information by participating States and will not entail conclusions by the CPC.

This Chairman's Statement will be subject to review and may be amended, as appropriate, by the Special Committee of the FSC.

This statement will be an annex to the Vienna Document 1994 and will be published with it.

Source: The Vienna Document 1994 of the Negotiations on Confidence- and Security-Building Measures, Vienna, 28 November 1994.

Appendix 20C. The Treaty on Open Skies

STEFANIE BAILER

I. Introduction

The 1992 Treaty on Open Skies is one of the most wide-ranging confidence-building measures agreed within the framework of the arms control negotiations that continued into the post-cold war era.¹ It will enhance military openness and transparency by allowing states parties to conduct observation flights over each other's territories; these flights are intended to provide warning of possible surprise attack, to reduce misperceptions and thereby to promote mutual confidence. The Treaty was signed in Helsinki on 24 March 1992 by 25 states. Kyrgyzstan signed the Treaty in December 1992 and with the split of Czechoslovakia on 1 January 1993 the total number of signatories became 27—the 16 NATO member states, the Visegrad states (the Czech Republic, Hungary, Poland and Slovakia), Bulgaria, Romania and five former Soviet republics—Belarus, Georgia, Kyrgyzstan, Russia and Ukraine.² The Treaty is important for states which lack other means of observation (such as the high-quality satellite reconnaissance capabilities of Russia and the USA).³ The egalitarian nature of the Treaty with the acquired data to be widely shared makes the potential Open Skies regime particularly valuable for smaller states. Special significance is attached to the Open Skies Treaty because it is one of the most intrusive confidence-building measures agreed upon and covers a remarkably extensive area from Vancouver to Vladivostok.⁴

II. Ratification

In 1994 ratification proceeded at the same rate as in 1993. Seven states ratified and deposited their instruments of ratification with the depositary states Canada and Hungary—Bulgaria, Germany, Iceland, Italy, Portugal, Romania and Turkey—bringing the number of ratifications to 19 (including the Netherlands, which intends to deposit its instrument of ratification when the other Benelux countries do so). Under Article XVII, paragraph 2 the Treaty will enter into force when 20 states have ratified, but this number must include all countries with a passive quota of eight or more

¹ For the text of the Open Skies Treaty, see SIPRI, *SIPRI Yearbook 1993: World Armaments and Disarmament* (Oxford University Press: Oxford, 1993), appendix 12C, pp. 653–71. See also Sharp, J. M. O., 'Conventional arms control: developments and prospects in 1991', SIPRI, *SIPRI Yearbook 1992: World Armaments and Disarmament* (Oxford University Press: Oxford, 1992), pp. 477–79; Kokoski, R., 'The Treaty on Open Skies', *SIPRI Yearbook 1993*, pp. 632–34; and Lachowski, Z., 'The Treaty on Open Skies', SIPRI, *SIPRI Yearbook 1994* (Oxford University Press: Oxford, 1994), pp. 601–603.

² For a list of signatories and states that have deposited their instruments of ratification see section III of annexe A in this volume.

³ Thomson, D. B., 'Briefing: The Treaty on Open Skies', *CNSS Briefings* (Center for National Security Studies, Los Alamos National Laboratory), vol. 5, no. 2 (25 July 1994), pp. 1–20; and 'Arms control and disarmament: Open Skies Treaty', *American Journal of International Law*, vol. 88, no. 1 (Jan. 1994), pp. 96–104.

⁴ Jones, P. L., 'Open Skies in other regional contexts', eds J. B. Poole and R. Guthrie, *Verification 1994: Arms Control, Peacekeeping and the Environment* (Brassey's: London, 1994), pp. 145–58.

overflights.⁵ Entry into force could occur in 1995 if Russia and Belarus, which form a group of states under the provisions of Article III, Section II, paragraph 3(A) and therefore have a common total passive quota, and Ukraine ratify the Treaty soon. The first hearing on the Open Skies Treaty in the Russian Duma took place in November 1994 and was to continue in March 1995. Russia has already completed the preparatory administrative work, including the commissioning of three aircraft for use in overflights and staff training, which gives grounds for hope that ratification might take place in the first half of 1995. Belarus has also made practical preparations for adherence to the provisions of the Treaty. In a special agreement with Russia, Belarus agreed on a package of concrete arrangements concerning the Treaty. Ratification was considered by the government and forwarded for decision by the Supreme Council (Parliament) in 1994. Preliminary hearings in the permanent commissions revealed considerable problems connected to the costs of implementation.⁶ Despite further objections by Ukraine concerning 'fly-over' quotas,⁷ a proposal for ratification has been directed to the President of Ukraine for submission to the Supreme Rada (Parliament). The discussion is expected to be held in the spring of 1995.⁸

III. Trial overflights in 1994

The signatories of the Open Skies Treaty conducted an increasing number of demonstration and trial overflights for training purposes in 1994, partly over their own territory and partly over the territories of other signatories.

On 7–11 February the USA conducted a trial overflight over German territory. An OS-135B aircraft equipped with three framing cameras and one panoramic camera was used and observers from Canada, the Czech Republic, France, the Netherlands, Poland, Russia and the United Kingdom took part. The Russian Federation conducted an overflight of France on 8–15 March 1994. The second overflight by the USA was carried out over the territory of Greece on 18–22 April. Two joint overflights were carried out by the United Kingdom and Ukraine, first over British territory on 25–29 April and then over Ukraine on 23–24 May 1994.

The first joint US–Ukrainian overflight ever to take place in the USA was carried out between 24 and 31 August 1994. Ukrainian observers used a USAF-OC 135N aircraft to conduct photo-reconnaissance over US territory.⁹ Slovakia carried out two overflights of Ukraine on 5–9 and 26–30 September. The second, a demonstration flight using an AFA-41/10 camera, obtained useful information regarding the minimum flight altitude permissible for photo-reconnaissance. The very first overflight of Slovakian territory was carried out by Ukraine, 10–15 October 1994. A Ukrainian AN-30 aircraft was used both for this mission and for another on 26–30 September. Romania carried out an aerial inspection of military sites in the Benelux countries using an AN-30 aircraft from the Romanian Air Force, flying from the Melsbroek Air Base in Belgium between 23 and 24 November 1994.¹⁰

⁵ An extract from Annex A of the Open Skies Treaty, showing the allocation of passive quotas under Section I, is reproduced in Goldblat, J., *Arms Control: A Guide to Negotiations and Agreements* (Sage: London, 1994), pp. 663–64.

⁶ Information provided by V. Fisenka, Head of the Belarussian OSCE mission.

⁷ *Arms Control Today*, vol. 25, no. 1 (Jan./Feb. 1995), p. 27.

⁸ Information provided by V. Pokotylo, Ukrainian OSCE mission.

⁹ *Military and Arms Transfer News*, vol. 94, no. 13 (18 Nov. 1994), p. 12.

¹⁰ *Defense News*, vol. 9, no. 46 (21–27 Nov. 1994), p. 2.

The test conducted at Shatolowo Air Base, Russia, on 2–10 June 1994 was especially successful. Eighty-five participants from a total of nine delegations¹¹ other than the Russian delegation were involved in this session in which five aircraft collected more than 800 images with different types of sensor over four days. This test session was regarded as important because it made a great deal of data available for decisions taken by the Open Skies Consultative Committee (see below).

The Western European Union, which forms a group of states parties,¹² developed its own standard operating procedures (SOPs) which were tested by two trial overflights initiated by the United Kingdom. During these demonstration flights, in which France, Germany, the Netherlands and the UK took part, several practical recommendations were collected for the SOPs and the trials were therefore regarded as very useful.¹³

IV. The Consultative Commission

The Open Skies Consultative Commission (OSCC) met seven times under the chairmanship of the United Kingdom in the first half of 1994 and four times under the chairmanship of Greece in the second half of the year. The Informal Working Groups (IWG) on Sensors, on Flight Rules and Procedures, on Procedures and on Formats and Notifications, which all act under the supervision of the OSCC, also met several times during the year in order to reach a consensus on controversial issues and facilitate the work of the OSCC.

As a result of these meetings several decisions were taken on 18 April and 12 October 1994¹⁴ concerning: (a) how to calculate the minimum permissible flight altitude when using optical and video cameras; (b) how to calculate the minimum height above ground level at which each video camera with real-time display and each infrared line-scanning device installed on an observation aircraft may be operated during an observation flight; (c) calibration activities; (d) the format in which data are to be recorded and exchanged on recording media other than photographic film; and (e) the mandatory time period for storing and sharing data recorded during an observation flight. These decisions were considered important milestones in the technical and procedural elaboration of the Treaty provisions.

To facilitate the implementation of the respective methodologies the IWG on Sensors was charged with the development of Guidance Documents to help the international experts describe what is to be accomplished during sensor certification or demonstration flights.¹⁵ The OSCC also stated its intention to use the OSCE communications network to transmit notifications, reports concerning the Open Skies regime and data from a possible future Open Skies data base in accordance with

¹¹ From France, Finland, Germany, Hungary, Norway, Spain, Ukraine, the UK and the USA.

¹² Under the provisions of Article III, Section II, para. 2(A) of the Treaty WEU states parties share their active overflight quotas and can redistribute them among themselves to a certain degree. Passive overflights of their territories can also be combined, and they have a common pool of aircraft from which member states can hire aircraft for overflights. See Buttler, W., 'Offener Himmel. Ein Beitrag für Offenheit und Transparenz' [Open Skies. A contribution for openness and transparency], *Europäische Sicherheit*, vol. 43, no. 9 (Sep. 1994), p. 451.

¹³ First part of the 40th Annual Report of the Council to the Assembly (1 Jan.–30 June 1994), Proceedings of the Assembly of the WEU, 40th Ordinary Session, Second Part, III, Assembly Documents, WEU, Paris, Nov.–Dec. 1994, p. 112

¹⁴ Open Skies document OSCC/V/Dec.13, Vienna, 18 Apr. 1994 and Open Skies documents OSCC/VI/Dec.14–18, Vienna, 12 Oct. 1994.

¹⁵ *Open Skies Consultative Commission Journal*, 12 Oct. 1994, 2nd Meeting of the 6th Session.

Article XI. It submitted a formal request on 7 February 1994, which was approved by the Permanent Committee of the OSCE and the Special Committee of the Forum for Security Co-operation. These measures are intended to facilitate the procedures for implementing the Open Skies Treaty but discussions will continue in 1995 on the most effective methods of certifying aircraft and sensors.¹⁶

Other activities in 1994 included an informal brainstorming meeting on the possible use of the Open Skies regime in the field of environmental monitoring in Vienna on 11–12 July. Opinions were collected about the extension of the Open Skies regime to additional fields such as the protection of the environment as mentioned in the preamble of the Treaty, and this will be the subject of further discussion in the course of 1995. Furthermore, a seminar on preparations for the implementation of the Treaty was held at the Cologne–Bonn Air Base, 29 November–1 December 1994.

In accordance with Article XVIII, Section I, paragraph 2 the period of provisional application of the Treaty was extended twice, first until 23 October 1994 and then until 23 February 1995. As it is hoped that the Treaty will enter into force in 1995, the next period of provisional application was designed to be shorter—until 23 May 1995.

V. Conclusions

Both the activities of the OSCC and the number and quality of trial overflights show that the Treaty on Open Skies is taken seriously and that certain routines have already been adopted by the signatories.¹⁷ The ratification process is slow, however, partly because much of the information which the Treaty will provide is already obtained by other means, for example under the provisions of arms control agreements such as the Vienna Document on confidence- and security-building measures¹⁸. In addition the high costs of the provisions of the Treaty are a burden to smaller states.

Nevertheless conditions are favourable for smooth entry into force and implementation of the Treaty in 1995, which is expected to be a decisive year in arms control.¹⁹ In the near future attention will be given to discussions on the use of the Open Skies Treaty as a means of conflict prevention, crisis management and environmental monitoring and as a complementary means for verification of arms control treaties such as the 1990 Treaty on Conventional Armed Forces in Europe (the CFE Treaty).²⁰ The possibility for any state to accede to the Open Skies Treaty in principle²¹ gives further impetus to considerations to expand the regime to other OSCE countries and other regions of the world.

¹⁶ Information provided by Jason Reiskind, Counsellor to the Canadian Embassy, Stockholm

¹⁷ The negotiations between Germany and Russia in 1994 are an example of cooperation among signatories. Germany and Russia will jointly develop and acquire radar sensors, and both countries have given up their right to insist that only their own observation aircraft be used over their territories. See Buttler (note 12), p. 452.

¹⁸ For details of the implementation of the Vienna Document in 1994 see appendix 20A in this volume.

¹⁹ See statement of John D. Holum, Director of the US Arms Control and Disarmament Agency, *Atlantic News*, no. 2689 (27 Jan. 1995).

²⁰ See Goldblat (note 5), p. 170.

²¹ See Article XVII, para. 5 of the Treaty: 'Following six months after entry into force of this Treaty, the Open Skies Consultative Commission may consider the accession of any State which, in the judgement of the Commission, is able and willing to contribute to the objectives of this Treaty.'

21. Inhumane conventional weapons: efforts to strengthen the constraints

JOZEF GOLDBLAT

I. Introduction

In the first decades following World War II the interest of the international community was focused on weapons of mass destruction. There was grave concern that these weapons might be used again and produce catastrophic consequences not only for the country attacked but for the entire world. This is why most arms control treaties concluded after 1945 concerned nuclear, biological and chemical (NBC) weapons. In recent years, however, especially since the threat of global nuclear war began to recede in parallel with the diminishing arms competition between the superpowers, and when armed conflicts—both international and internal—became rampant in several parts of the globe, ever more attention has been devoted to conventional means of warfare. Restrictions on the use of weapons which are particularly cruel and directly affect the civilian population were dealt with first. Among these weapons, land-mines pose a particularly acute problem.

There are as many as 100 million mines—mostly anti-personnel mines—planted in at least 60 countries.¹ They render whole regions unsuitable for human habitation and impede safe repatriation and reintegration of millions of refugees and displaced persons. In Zimbabwe, an estimated 405 000 hectares of farmland, bush and forest along the Zambian and Mozambican borders have been rendered useless by mines planted during the Rhodesian crisis, which ended in 1979. During the civil war in Mozambique, some 2 million mines were laid in the country, rendering all the major roads unusable. In Angola, between 10 and 20 million mines have been laid over one-third of the national territory, so far having caused over 70 000 amputations and making it necessary to use a large proportion of the World Food Programme aid budget to meet the nutritional needs of the population. Approximately 1 million mines are believed to have been planted or scattered in Somalia, denying the herdsmen access to grazing lands. In Afghanistan, where 5–15 million mines were strewn during the Soviet intervention in 1979–88, vast areas are expected to lie useless well into the next century. In Iraqi Kurdistan, several hundred thousand mines were laid every day during the four-month period just prior to the 1991 Persian Gulf War. In Cambodia, 8–10 million mines lie in

¹ Data in this paragraph are drawn from the following sources: *Report of the Symposium on Anti-Personnel Mines*, Montreux, International Committee of the Red Cross (ICRC), Geneva, 21–23 Apr. 1993; *Assistance in Mine Clearance*, Report of the UN Secretary-General, 6 Sep. 1994, United Nations document A/49/357; ICRC, *Landmines: Time For Action, International Humanitarian Law* (ICRC: Geneva, 1994); and *International Herald Tribune*, 15 Feb. 1995.

fields and jungles, particularly in the western part of the country, rendering large parts of arable land unusable. Estimates of the number of mines currently in place in the former Yugoslavia vary from 2 to 3 million. Countries where the numbers of planted mines are in the thousands or tens of thousands (rather than in the hundreds of thousands or millions) include El Salvador, Georgia (Abkhazia), Guatemala and Rwanda. Mines not only impair the economy of the affected country but also pose a threat to humanitarian organizations working in the areas beset by armed conflict.

Owing to their low production cost (in certain countries the cost is as low as \$3 per mine²), anti-personnel land-mines are easily available both to regular armies and to guerrilla forces, whereas the cost of mine-clearing operations is enormous (\$300–\$1000 per mine³). Every month land-mines kill about 800 people and maim thousands, most of the victims being civilians.⁴ It is also feared by many that new anti-personnel weapons, such as those that cause blindness, may be produced and employed on a large scale.

II. Existing constraints

It is universally recognized that weapons and methods of warfare must, in their application, be confined to military targets; that they must be proportional to their military objectives as well as reasonably necessary to the attainment of these objectives; and that they should not cause unnecessary suffering to the victims or harm human beings and property in neutral countries. These customary rules, which regulate in general terms the behaviour of belligerents, have been incorporated in multilateral treaties and form part of the international humanitarian law applicable in armed conflicts, often referred to simply as international humanitarian law. From the time of the 1899 and 1907 Hague Conventions and Declarations⁵ until the 1980s, no specific type of conventional weapon was formally prohibited or its use restricted. It was not until 1979 that a special UN conference was convened to discuss the problem of inhumane weapons.

No weapon can be considered as 'humane', but there are substantial differences in the effects different types of weapon produce on individual combatants or civilians—in particular as regards the magnitude and severity of the wounds and the duration of the injury caused—as well as in the extent of the area covered and the degree of control that can be exercised by the user. Uses of weapons which are particularly cruel and therefore more inhumane than others, in the sense given above, are seen to require a special legal regime. In

² US Department of State, *Hidden Killers: The Global Problem with Uncleared Landmines 1993*, Report on International Demining (US Department of State: Washington, DC, 1993).

³ Certain Conventional Weapons (CCW) Convention Review Conference document CCW/CONF.I/GE/6, May 1994.

⁴ *International Review of the Red Cross*, Mar./Apr. 1994.

⁵ For the texts of the Hague documents and an assessment, see Goldblat, J., *Arms Control: A Guide to Negotiations and Agreements* (Sage Publications: London, 1994).

1980, at the conclusion of its second session,⁶ the UN conference adopted the text of the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects.⁷ Opened for signature in 1981 and in force since 1983, this so-called Certain Conventional Weapons Convention (CCW Convention), often referred to as the 'Inhumane Weapons' Convention, is an 'umbrella treaty', under which specific agreements can be integrated in the form of protocols. Three protocols were agreed in the first instance. Each party must be bound by at least two of these protocols.

Protocol I prohibits the use of any weapon the 'primary' effect of which is to injure by fragments which in the human body escape detection by X-rays.

Protocol II restricts the use of mines, booby traps and 'other devices', and aims at preventing or at least reducing civilian casualties caused by these devices during and after hostilities. 'Mines' are defined as any munitions placed under, on or near the ground or other surface area and designed to be detonated or exploded by the presence, proximity or contact of a person or vehicle. 'Booby traps' are defined as any devices or materials designed, constructed or adapted to kill or injure and which function unexpectedly when a person disturbs or approaches an apparently harmless object or performs an apparently safe act. 'Other devices' covered by Protocol II are defined as manually emplaced munitions and devices designed to kill, injure or damage, actuated by remote control or automatically after a lapse of time.

The use of mines, booby traps and other devices against the civilian population as such, or against individual civilians, is prohibited in all circumstances, whether in offence or defence or by way of reprisal, and all feasible precautions must be taken to protect civilians from the effects of these weapons. Also prohibited is the indiscriminate use of such devices against military objectives in conditions which may be expected to cause incidental loss of civilian life, injury to civilians or damage to civilian objects that is excessive in relation to the concrete and direct military advantage anticipated. Booby traps designed to cause superfluous injury or unnecessary suffering are prohibited in all circumstances. In addition, the protocol bans the use of remotely delivered (scatterable) mines—that is, those delivered by artillery, rocket, mortar or similar means, or dropped from an aircraft—unless such mines are used only within an area which is itself a military objective or which contains military objectives, and unless the location of mines can be accurately recorded or a mechanism is used to render a mine harmless or cause it to destroy itself when it no longer serves the military purpose for which it was emplaced. (The United Kingdom has recently suggested that the term 'remotely delivered' should not cover mines delivered from a land-based system from a distance of less than 500 m.)

⁶ United Nations Conference on Prohibitions or Restrictions of Use of Certain Conventional Weapons Which May Be Deemed To Be Excessively Injurious or To Have Indiscriminate Effects, UN document A/CONF.95/WG/CRP.12, 9 Oct. 1980.

⁷ For the text of the CCW Convention and its analysis, see Goldblat (note 5).

Guidelines on recording the location of minefields (that is, areas in which mines have been emplaced), mines and booby traps are contained in an annex to the protocol. However, owing to the effects of weather and soil erosion, these devices, especially scatterable mines, tend to move, making successful clearance impossible to guarantee. International cooperation in the removal of minefields, mines and booby traps after the cessation of hostilities is envisaged in a separate article, but no specific obligation has been imposed on the parties to remove or otherwise render these devices ineffective.

Protocol II does not apply to the use of anti-ship mines at sea or in inland waterways. In this respect the rules adopted nearly 90 years ago are still valid: the 1907 Hague Convention VIII⁸ forbids the laying of unanchored automatic contact mines, except when so constructed as to become harmless one hour at most after the person who laid them ceases to control them. Also forbidden is the use of anchored automatic contact mines which do not become harmless as soon as they have broken loose from their moorings, as well as torpedoes which do not become harmless when they have missed their target. Upon the termination of hostilities, the parties to the conflict in which naval mines were used are obliged to remove the mines they have laid, each removing its own mines. With regard to mines laid by one of the belligerents off the coast of the other's territory, their position must be made known to the other party by the power which laid them.

Protocol III refers to the use of incendiary weapons. They are defined as weapons or munitions primarily designed to set fire to objects or to cause burn injury to persons through the action of flame, heat or a combination thereof, produced by a chemical reaction of a substance delivered to the target. Munitions which may have only incidental incendiary effects are excluded from the scope of the protocol, as are munitions designed to combine penetration, blast or fragmentation effects with an additional incendiary effect. In addition to prohibiting direct attacks on civilian populations, Protocol III prohibits making a military objective situated within a concentration of civilians the object of attack by air-delivered incendiary weapons. The protocol also prohibits attacks with incendiary weapons on forests or other kinds of plant cover, but only when these are not used to cover, conceal or camouflage combatants or other military objectives, or are not themselves military objectives.

III. Review of the CCW Convention

Despite certain obvious shortcomings and the lack of verification provisions, the CCW Convention was regarded as an achievement because it referred to specific weapons and because it appeared to strike a balance between humanitarian imperatives and military considerations. However, the restrictions introduced by the Convention, especially those regarding mines, have proved patently ineffective. Land-mines are being used on a very large scale, indis-

⁸ For the text, see Goldblat (note 5).

criminally and deliberately against civilians. In most cases no precautions whatsoever are taken to safeguard against harm to non-combatants.

The CCW Convention provides that conferences may be convened in order to review the operation of the Convention and of its annexed protocols, as well as to consider additional protocols. Following a request from France, supported by almost all other parties, such a Review Conference will take place in Vienna from 25 September to 13 October 1995. To carry out the preparatory work, the UN Secretary-General, the depositary of the CCW Convention, established a Group of Governmental Experts.⁹ A number of proposals were made at the meetings of these experts, as well as during a specialized non-governmental symposium.¹⁰ These are summarized below together with the recommendations put forward by the International Committee of the Red Cross (ICRC).¹¹

Proposals for reinforcing the existing constraints

Proposals for reinforcing the constraints under the CCW Convention mainly concern land-mines. Their realization would require amending Protocol II. The 16 most important proposals are:

1. *Prohibiting the use of all anti-personnel land-mines.* Anti-tank mines, which are larger and, unless altered, require heavy pressure (generally more than 100 kg) to set them off, would not be covered by this prohibition. However, the distinction between the two types of mine is becoming increasingly blurred.

2. *Regulating trade in anti-personnel land-mines.* A step in this direction was made in 1993, when the UN General Assembly appealed to all states to agree to a moratorium on the export of mines that pose grave dangers to civilian populations. The relevant UN resolution¹² was initiated by the United States, which had previously (in October 1992) unilaterally suspended all exports of anti-personnel land-mines. Another proposal envisages an undertaking not to transfer any land-mines to a country or countries the territory of which is the subject of armed conflict having humanitarian consequences of grave proportions. Yet another proposal would prohibit the transfer of land-mines exclusively to entities which are not states, or to states not bound by Protocol II.¹³

In response to the UN appeal (reiterated in 1994¹⁴), a number of countries suspended their exports of anti-personnel mines for a limited or indefinite period of time. The moratoria declared by Argentina, Belgium, Canada, the Czech Republic, France, Germany, Greece, Israel, Italy, Poland, Slovakia,

⁹ UN document A/RES/48/79, 16 Dec. 1993.

¹⁰ See note 1.

¹¹ CCW Convention Review Conference document CCW/CONF.I/GE/4.

¹² United Nations document A/RES/48/75 K, 16 Dec. 1993.

¹³ Some of these proposals are included in the British draft code of conduct for exports of anti-personnel land-mines: Conference on Disarmament document CD/1269, 15 Aug. 1994.

¹⁴ United Nations document A/RES/49/75/D, 15 Dec. 1994.

South Africa, Spain, Sweden and the United States contain no qualification. Those proclaimed by Russia and the United Kingdom concern only anti-personnel mines not equipped with self-destructing or self-neutralizing mechanisms, whereas the Netherlands and Switzerland have banned exports to states which have not joined Protocol II of the CCW Convention.¹⁵ Experts from China, Cuba, Iran and Pakistan have objected to limitations on the export of land-mines.

3. *Prohibiting the use of all anti-personnel mines that are not fitted with a self-destructing mechanism.* This mechanism must be incorporated in the mine in such a way as to cause its destruction automatically after a predetermined period of time.

4. *Requiring that hand-emplaced anti-personnel mines that are used for tactical purposes, and all scatterable mines, be equipped with a self-destructing mechanism.* They would thus present a hazard to civilians only for a limited period of time. The use of hand-emplaced mines without a self-destructing mechanism would be permitted for long-term purposes, such as guarding international borders or sensitive military sites.

5. *Banning the use of bounding fragmentation mines, unless they are equipped with a self-destructing or self-neutralizing (self-deactivating) mechanism.* Bounding mines, triggered by trip-wires, spring into the air before exploding and sending shrapnel around a circle several dozen meters in diameter. The mechanisms proposed would render the munitions automatically ineffective after a certain period of time.

6. *Requiring that all mines be manufactured in such a way as to make them detectable with widely available equipment, such as electromagnetic mine detectors.* The detectable elements (metallic rings or plates) would have to be irremovable. Production of mines with plastic, wooden or other non-metallic casings would be prohibited. This would help in mine clearance. There is some opposition to applying this requirement to anti-tank mines.

7. *Requiring that anti-tank mines be equipped with self-neutralizing rather than self-destructing mechanisms.* The use of the latter devices should be prohibited to avoid damage to the environment.

8. *Prohibiting the use of anti-handling devices which make mines explode when an attempt is made to remove, neutralize or destroy them.* Anti-handling devices were formerly found only in anti-tank mines, but they are now frequently incorporated also in anti-personnel mines. They render mine clearance very complicated and dangerous for 'de-miners'.

9. *Tightening the precautionary measures intended to protect civilians.* This could be done by marking all minefields, even if they contain only mines equipped with self-destructing or self-neutralizing mechanisms.

10. *Making each party responsible for the removal and destruction, at the end of active hostilities, of all mines laid by it.* This would be an improvement over the current CCW Convention, which provides only for an endeavour to

¹⁵ *Disarmament*, Newsletter of the UN Centre for Disarmament Affairs, May/Sep. 1994; and press reports.

reach agreement on how to render ineffective the mines and booby traps placed in position during conflict.

11. *Recognizing the right of each party to participate in the exchange of equipment, material, and scientific and technological information concerning the implementation of Protocol II and the means of mine clearance.* The information supplied to a data bank would have to be freely available. The coordinated mine-clearance programme,¹⁶ established within the UN Secretariat, would provide expert advice and assistance to the requesting states. A voluntary fund would help finance training programmes relating to mine clearance and support the clearance operations. (The United Nations is already conducting large-scale mine-clearance operations in Afghanistan and Cambodia, two of the countries most affected by mines.)

12. *Creating a verification commission, open to all parties, to conduct inquiries in order to clarify and resolve questions relating to non-compliance.* The commission could supplement the inquiries with evidence gathered on the spot and, to this end, dispatch a team of experts on a fact-finding mission. The experts would have the right of access to all areas and installations where evidence of a violation could be collected, and would submit to the depositary a report summarizing their findings for transmission to the parties. The proposal concerning verification is addressed to CCW Convention Protocol II, but it could apply to the Convention as a whole. Some states prefer voluntary reporting on implementation to a system of verification measures.

13. *Providing for collective action, in conformity with international law, against the state or states responsible for a violation.* Parties might decide to bring serious breaches to the attention of the UN Security Council, in accordance with the procedures specified in the UN Charter. The violating state should be liable to pay compensation and carry the responsibility for acts committed by persons forming part of its armed forces.

14. *Introducing obligatory training in the use of weapons in accordance with humanitarian law, and incorporating legal provisions in all weapon systems manuals.*

15. *Agreeing on special measures of protection for all humanitarian organizations working in regions affected by mines.*

16. *Extending the application of the CCW Convention to intra-state conflicts, which are now more frequent than international conflicts.* Given the problem of involving non-state entities in international treaties, this postulate may be difficult to meet. It may, moreover, delay the accession to the Convention by those states which are implicated in civil wars. (The Indian expert insisted on explicitly excluding internal disturbances, such as riots, isolated and sporadic acts of violence and other acts of similar nature, from the scope of application of Protocol II.)

¹⁶ UN General Assembly Resolution 48/7, 19 Oct. 1993.

Proposals for new constraints

The preamble to the CCW Convention expressed the wish of the signatories to prohibit or restrict further the use of certain conventional weapons. This would require negotiating additional protocols. The following four new rules have been proposed for consideration by the Review Conference.

1. *To restrict the employment of laser weapons, thousands of which are now deployed.* Modern battle tanks are equipped with laser range-finders; also attack aircraft and helicopters, as well as fire-control systems on land and at sea, use lasers. Portable laser range-finders and target designators are in widespread use, and many have a blinding capability. This capability has grown with the development of low-energy lasers which can attack both the human eye and electro-optical sensors.¹⁷ The damage done to the eye's retina from such lasers will almost always be permanent and incurable. Protection is virtually impossible without seriously hindering the ability to see and carry out activities requiring sight.¹⁸ Intentional blinding would violate the rule of international humanitarian law which prohibits causing unnecessary suffering.

In an informal working paper, which resulted from extensive consultations, the Chairman of the Group of Governmental Experts suggested that a protocol on blinding weapons be added to the CCW Convention as Protocol IV. It would prohibit the employment of laser beams causing permanent blindness (or serious damage) against the eyesight of persons as a method of warfare, and the employment of laser weapons primarily designed to blind. Blinding as an incidental or collateral effect of the legitimate employment of laser beams on the battlefield would not be covered by this prohibition. It may, of course, be difficult to tell whether a blind casualty was the result of an accidental hit by an anti-sensor weapon or a range-finder, or the result of deliberate action. Nevertheless, many members of the Group of Experts expressed support for a prohibition on the use of blinding laser weapons. (Some of them advocated a ban even on their production.) Only one expert (representing the United States) objected, whereas two others (representing France and the United Kingdom) supported a prohibition exclusively on the use of laser weapons 'primarily designed' to blind.

2. *To require that sub-munitions in the form of bomblets assembled in clusters and delivered by aircraft or by artillery, rockets or guided missiles, be equipped with devices making them harmless if they fail to explode.* These weapons are used in large quantities for purposes of area neutralization or denial, and may, as unexploded remnants of war, present the same threat to civilians as land-mines do.¹⁹

¹⁷ Fridling, B. E., 'Blinding lasers: the need for control', *Proceedings*, US Naval Institute, vol. 114/10/1028 (Oct. 1988).

¹⁸ Doswald-Beck, L. (ed.), *Blinding Weapons, Reports of the Meetings of Experts Convened by the International Committee of the Red Cross on Battlefield Laser Weapons, 1989-91* (International Committee of the Red Cross: Geneva, 1993).

¹⁹ Westing, A., 'Unexploded sub-munitions (bomblets) and the environment', Paper presented at an expert meeting on certain weapon systems, convened by the International Committee of the Red Cross,

3. *To prohibit the use of arms and ammunition with a calibre of less than 12.7 mm, which from a shooting distance of at least 25 m release more than 20 joules of energy per centimetre during the first 15 cm of their trajectory within the human body.* These weapon systems may produce injurious effects similar to those caused by so-called dum-dum bullets, which were banned by the 1899 Hague Declaration. An internationally recognized experimental method would have to be used to assess the effects of such small-calibre projectiles on the human body. The Swiss Government invited parties to the 1949 Geneva Conventions for the protection of war victims to test the weapons in question at the Ballistics Test Centre in Switzerland.

4. *To bring up to date the rules concerning naval mines.* The latest technical developments should be taken into account in order to cover mines relying on magnetic, acoustic or pressure effects, or a combination thereof. (The 1907 Hague Convention VIII deals only with automatic contact mines.) All such mines, without exception, should be equipped with a self-neutralizing mechanism.

IV. Prospects for the Review Conference

Many of the proposals discussed above were included in the so-called 'rolling text' of CCW Convention Protocol II, containing amendments and additions accepted by the Group of Governmental Experts as a basis for negotiations at the 1995 Review Conference.²⁰ (The final meeting of the Group, held in Geneva on 9–21 January 1995, was attended by experts from 31 parties to the CCW Convention, as well as by observers from 26 non-parties.²¹)

The rolling text has confirmed that there is a widely recognized need to ban the use of anti-personnel mines which are not equipped with detectable elements and self-destructing or self-deactivating mechanisms, unless these weapons are placed within a perimeter-marked area that is monitored by military personnel and protected by fencing or other means to ensure the effective exclusion of civilians from the area; and unless the weapons are cleared before the area is abandoned or turned over to the forces of another state that accept responsibility for the required protection and subsequent clearance. However, with such a provision the number of mines placed outside marked and guarded minefields may increase to compensate for their limited life-span. Moreover, continued use of mines lacking self-destructing mechanisms would make it difficult to enforce the proposed restrictions. In order to prevent circumvention it would be necessary to have self-destructing mechanisms fitted to all anti-personnel mines, irrespective of whether the mines were to be used for short-term or long-term purposes.

Geneva, 30 May–1 June 1994. For a detailed discussion of both technical and legal aspects of these and other explosive remnants of war, see Westing, A. (ed.), SIPRI, *Explosive Remnants of War: Mitigating the Environmental Effects* (Taylor & Francis: London, 1985).

²⁰ CCW Convention Review Conference document CCW/CONF.I/GE/23, 20 Jan. 1995.

²¹ For the parties to the CCW Convention, see annexe A in this volume.

Since the failure rate of the destructing mechanisms is currently rather high (up to 10 per cent), the devices used would have to be made highly reliable to ensure self-destruction within an agreed, relatively short period of time, and thereby to ensure the safety of mined areas after the termination of hostilities. However, as suggested by one expert and accepted by others, any party to an armed conflict would be relieved from compliance with its obligations in situations where direct military action makes it impossible to comply. This escape clause could bring to nothing even the agreed weak constraints.

The required modifications in the construction of mines would unavoidably increase their cost. They might prove unacceptable to a number of developing countries, unless technical and financial help were provided for the conversion or replacement of the stocks of mines not meeting the agreed criteria. In any event, it would take many years to implement the new restrictions. Recording, marking, mapping and publication of the location of mines and minefields would have to be improved. More resources would have to be devoted to the development of effective de-mining techniques and the training of de-miners.

It is likely that some restrictions on international transfers of mines will be adopted. Restrictions may be helpful in reducing proliferation, but they cannot be fully effective as long as 5–10 million anti-personnel mines of all types continue to be produced each year in nearly 50 (mainly industrialized) countries, and as long as certain exports are permitted. The known past and current exporters include: Belgium, Brazil, Bulgaria, Canada, Chile, China, the former Czechoslovakia, Egypt, France, Germany, Greece, Hungary, Israel, Italy, Pakistan, Poland, Portugal, Romania, Singapore, South Africa, Spain, Sweden, the former Soviet Union, the UK, the USA, Viet Nam and the former Yugoslavia.²²

Certain measures to ensure the implementation of, and to check compliance with, the parties' obligations may be agreed. It is doubtful, however, whether a special institution will be created for this purpose. It may well be that an existing, generally recognized international non-governmental organization will be entrusted with verification. It is also quite possible that the scope of application of Protocol II will be extended: the text recommended to the Review Conference applies to both internal and international conflicts.

From the point of view of humanitarian law, a total prohibition on the use of anti-personnel mines would be the most desirable solution. It would certainly be easier to monitor than mere restrictions on use. None the less it will be difficult to achieve, given the opinion of certain military that anti-personnel mines are the 'most cost-effective' means of achieving the objectives for which they are used,²³ that is, for holding non-defended ground against infantry or guerrilla forces. It is expected, however, that public concern about the devastation caused by mines will lead to the strengthening of the relevant norms of international law through amendments of the CCW Convention.

²² The Arms Project of Human Rights Watch & Physicians for Human Rights, *Landmines: A Deadly Legacy* (Human Rights Watch: New York, 1993).

²³ *Results of the Symposium of Military Experts on the Military Utility of Anti-personnel Mines* (International Committee of the Red Cross: Geneva, 1994).

Furthermore, it is expected that, in addition to restrictions on the use of mines, the use of laser weapons to blind persons will be proscribed in a separate protocol as a particularly abhorrent method of warfare.

It is essential that the amended CCW Convention attract more adherents than the Convention now in force and become eventually universally binding. As regards other proposed constraints, further studies and diplomatic efforts may be needed after the 1995 Review Conference.

V. Conclusions

In trying to develop the international humanitarian law of armed conflict, it should be borne in mind that rules of conduct set in time of peace for belligerents may not withstand the pressure of military expedience generated in the course of hostilities. The danger that, under certain circumstances, the weapons prohibited may be resorted to—as has happened many times in the past—will not disappear as long as these weapons remain in the arsenals of states.

There exists an intrinsic link between humanitarian law and disarmament. This link was recognized by the signatories to the CCW Convention when in the preamble they expressed the belief that positive results achieved in prohibiting or restricting the use of certain conventional weapons would facilitate talks on disarmament with a view to halting the production, stockpiling and proliferation of these weapons. This applies to all inhumane weapons which are now covered, or will be covered in the future, by the CCW Convention. However, disarmament involves elimination of the accumulated stocks of weapons as well as destruction (or conversion) of the relevant production facilities under international control. It must be negotiated in a specialized forum, such as the Conference on Disarmament. The CCW Convention Review Conference has no mandate to deal with such matters.

Annexes

Annexe A. Arms control and disarmament agreements

Annexe B. Chronology 1994

Annexe A. Arms control and disarmament agreements

RAGNHILD FERM

I. Summaries of the major multilateral agreements

The implementation of the major multilateral arms control and disarmament agreements that have entered into force has been presented annually in a table in this annexe to the Yearbooks. This Yearbook also lists, in sections III and IV of this annexe, the status of implementation of other agreements discussed or referred to in the chapters.

Protocol for the prohibition of the use in war of asphyxiating, poisonous or other gases, and of bacteriological methods of warfare (Geneva Protocol)

Signed at Geneva on 17 June 1925; entered into force on 8 February 1928.

Declares that the parties agree to be bound by the prohibition, which should be universally accepted as part of international law, binding alike the conscience and the practice of nations.

Antarctic Treaty

Signed at Washington, DC, on 1 December 1959; entered into force on 23 June 1961.

Declares the Antarctic an area to be used exclusively for peaceful purposes. Prohibits any measure of a military nature in the Antarctic, such as the establishment of military bases and fortifications, and the carrying out of military manoeuvres or the testing of any type of weapon. Bans any nuclear explosion as well as the disposal of radioactive waste material in Antarctica, subject to possible future international agreements on these subjects.

At regular intervals consultative meetings are convened to exchange information and hold consultations on matters pertaining to Antarctica, as well as to recommend to the governments measures in furtherance of the principles and objectives of the Treaty. A Protocol on the protection of the Antarctic environment was signed in 1991.

Treaty banning nuclear weapon tests in the atmosphere, in outer space and under water (Partial Test Ban Treaty, PTBT)

Signed at Moscow on 5 August 1963; entered into force on 10 October 1963.

Prohibits the carrying out of any nuclear weapon test explosion or any other nuclear explosion: (a) in the atmosphere, beyond its limits, including outer space, or under water, including territorial waters or high seas; (b) in any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the state under whose jurisdiction or control the explosion is conducted.

Treaty on principles governing the activities of states in the exploration and use of outer space, including the moon and other celestial bodies (Outer Space Treaty)

Signed at London, Moscow and Washington, DC, on 27 January 1967; entered into force on 10 October 1967.

Prohibits the placing into orbit around the earth of any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, the installation of such weapons on celestial bodies, or the stationing of them in outer space in any other manner. The establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military manœuvres on celestial bodies are also forbidden.

Treaty for the prohibition of nuclear weapons in Latin America and the Caribbean (Treaty of Tlatelolco)

Signed at Mexico, Distrito Federal, on 14 February 1967; entered into force on 22 April 1968. The Treaty was modified in 1991 and amended in 1992.

Prohibits the testing, use, manufacture, production or acquisition by any means, as well as the receipt, storage, installation, deployment and any form of possession of any nuclear weapons by Latin American countries.

The parties should conclude agreements with the IAEA for the application of safeguards to their nuclear activities.

Under *Additional Protocol I* the extra-continental or continental states which, *de jure* or *de facto*, are internationally responsible for territories lying within the limits of the geographical zone established by the Treaty (France, the Netherlands, the UK and the USA) undertake to apply the statute of military denuclearization, as defined in the Treaty, to such territories.

Under *Additional Protocol II* the nuclear weapon states—China, France, Russia (at the time of signing, the USSR), the UK and the USA—undertake to respect the statute of military denuclearization of Latin America, as defined and delimited in the Treaty, and not to contribute to acts involving a violation of the Treaty, nor to use or threaten to use nuclear weapons against the parties to the Treaty.

Treaty on the non-proliferation of nuclear weapons (NPT)

Signed at London, Moscow and Washington, DC, on 1 July 1968; entered into force on 5 March 1970.

Prohibits the transfer by nuclear weapon states, to any recipient whatsoever, of nuclear weapons or other nuclear explosive devices or of control over them, as well as the assistance, encouragement or inducement of any non-nuclear weapon state to manufacture or otherwise acquire such weapons or devices. Prohibits the receipt by non-nuclear weapon states from any transferor whatsoever, as well as the manufacture or other acquisition by those states of nuclear weapons or other nuclear explosive devices.

Non-nuclear weapon states undertake to conclude safeguard agreements with the International Atomic Energy Agency (IAEA) with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices.

The parties undertake to facilitate the exchange of equipment, materials and scientific and technological information for the peaceful uses of nuclear energy and to

ensure that potential benefits from peaceful applications of nuclear explosions will be made available to non-nuclear weapon parties to the Treaty. They also undertake to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament.

In 1995, 25 years after the entry into force of the Treaty, in accordance with Article X, a conference was convened to decide whether the Treaty would continue in force indefinitely or would be extended for an additional fixed period or periods. It was decided that the Treaty should remain in force indefinitely.

Treaty on the prohibition of the emplacement of nuclear weapons and other weapons of mass destruction on the seabed and the ocean floor and in the subsoil thereof (Seabed Treaty)

Signed at London, Moscow and Washington, DC, on 11 February 1971; entered into force on 18 May 1972.

Prohibits emplanting or emplacing on the seabed and the ocean floor and in the subsoil thereof beyond the outer limit of a 12-mile seabed zone any nuclear weapons or any other types of weapons of mass destruction as well as structures, launching installations or any other facilities specifically designed for storing, testing or using such weapons.

Convention on the prohibition of the development, production and stockpiling of bacteriological (biological) and toxin weapons and on their destruction (BW Convention)

Signed at London, Moscow and Washington, DC, on 10 April 1972; entered into force on 26 March 1975.

Prohibits the development, production, stockpiling or acquisition by other means or retention of microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification of prophylactic, protective or other peaceful purposes, as well as weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict. The destruction of the agents, toxins, weapons, equipment and means of delivery in the possession of the parties, or their diversion to peaceful purposes, should be effected not later than nine months after the entry into force of the Convention.

Convention on the prohibition of military or any other hostile use of environmental modification techniques (Enmod Convention)

Signed at Geneva on 18 May 1977; entered into force on 5 October 1978.

Prohibits military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to states party to the Convention. The term 'environmental modification techniques' refers to any technique for changing—through the deliberate manipulation of natural processes—the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space. The understandings reached during the negotiations, but not written into the Convention, define the terms 'widespread', 'long-lasting' and 'severe'.

Convention on prohibitions or restrictions on the use of certain conventional weapons which may be deemed to be excessively injurious or to have indiscriminate effects (CCW Convention, or 'Inhumane Weapons' Convention)

Signed at New York on 10 April 1981; entered into force on 2 December 1983.

The Convention is an 'umbrella treaty', under which specific agreements can be concluded in the form of protocols.

Protocol I prohibits the use of weapons intended to injure by fragments which are not detectable in the human body by X-rays.

Protocol II prohibits or restricts the use of mines, booby-traps and similar devices.

Protocol III restricts the use of incendiary weapons.

South Pacific Nuclear Free Zone Treaty (Treaty of Rarotonga)

Signed at Rarotonga, Cook Islands, on 6 August 1985; entered into force on 11 December 1986.

Prohibits the manufacture or acquisition by other means of any nuclear explosive device, as well as possession or control over such device by the parties anywhere inside or outside the zone area described in an annex. The parties also undertake not to supply nuclear material or equipment, unless subject to IAEA safeguards, and to prevent in their territories the stationing as well as the testing of any nuclear explosive device. Each party remains free to allow visits, as well as transit, by foreign ships and aircraft.

Under *Protocol 1*, France, the UK and the USA would undertake to apply the treaty prohibitions relating to the manufacture, stationing and testing of nuclear explosive devices in the territories situated within the zone, for which they are internationally responsible.

Under *Protocol 2*, China, France, Russia (at the time of signing, the USSR), the UK and the USA would undertake not to use or threaten to use a nuclear explosive device against the parties to the Treaty or against any territory within the zone for which a party to Protocol 1 is internationally responsible.

Under *Protocol 3*, China, France, the UK, the USA and Russia (at the time of signing, the USSR) would undertake not to test any nuclear explosive device anywhere within the zone.

II. Status of the implementation of the major multilateral agreements, as of 1 January 1995

Number of parties

| | | | |
|--|------------------|---------------------|-----|
| 1925 Geneva Protocol | 132 | Seabed Treaty | 92 |
| Antarctic Treaty | 42 | BW Convention | 133 |
| Partial Test Ban Treaty | 124 | Enmod Convention | 63 |
| Outer Space Treaty | 94 | CCW Convention | 41 |
| Treaty of Tlatelolco | 29 | Treaty of Rarotonga | 11 |
| Additional Protocol I | 4 | Protocol 1 | 0 |
| Additional Protocol II | 5 | Protocol 2 | 2 |
| Non-Proliferation Treaty | 170 ^a | Protocol 3 | 2 |
| NPT safeguards agreements (non-nuclear weapon states) | 100 | | |

^a From 1 Jan. to 15 Apr. 1995, the following states acceded to the NPT: Algeria, Argentina, Eritrea, Macedonia (Former Yugoslav Republic of), Marshall Islands, Micronesia, Monaco, Palau and Tajikistan.

Notes

1. The Russian Federation, constituted in 1991 as an independent sovereign state, confirmed the continuity of international obligations assumed by the Union of Soviet Socialist Republics (USSR). (See the communication from the Ministry of Foreign Affairs of the Russian Federation to the Conference on Disarmament, 27 December 1991.)

2. The Federal Republic of Germany and the German Democratic Republic merged into one state in 1990. The dates of entry into force of the treaties listed in the table for the united Germany are the dates previously given for FR Germany.

3. The Yemen Arab Republic and the People's Democratic Republic of Yemen merged into one state in 1990. According to a statement by the united Yemen state, all agreements which either state has entered into are in force for Yemen. The dates of entry into force of the treaties listed in the table for Yemen are the earliest dates previously given for either of the former Yemen states.

4. Czechoslovakia split into two states on 1 January 1993, the Czech Republic and Slovakia. Both states have succeeded to all agreements in this list to which Czechoslovakia was a party.

5. The table records year of ratification, accession or succession.

6. The Partial Test Ban Treaty, the Outer Space Treaty, the Non-Proliferation Treaty, the Seabed Treaty and the BW Convention provide for three depositaries—the governments of the UK, the USA and the USSR (succeeded by Russia). For these agreements, the dates indicated are the earliest dates on which countries deposited their instruments of ratification, accession or succession—whether with the UK, the USA or the USSR/Russia. The dates given for other agreements (for which there is only one depositary) are the dates of the deposit of the instruments of ratification, accession or succession with the relevant depositary, except in the case of the 1925 Geneva Protocol, where the dates refer to the date of notification by the depositary.

7. The 1925 Geneva Protocol, the Partial Test Ban Treaty, the Outer Space Treaty, the Non-Proliferation Treaty, the Seabed Treaty, the BW Convention, the Enmod Convention and the 'Inhumane Weapons' Convention are open to all states for signature.

The Antarctic Treaty is subject to ratification by the signatories and is open for accession by UN members or by other states invited to accede with the consent of all the contracting parties whose representatives are entitled to participate in the consultative meetings provided for in Article IX.

The Treaty of Tlatelolco is open for signature by all the Latin American republics; all other sovereign states situated in their entirety south of latitude 35° north in the western hemisphere; and (except for a political entity the territory of which is the subject of an international dispute) all such states which become sovereign, when they have been admitted by the General Conference; Additional Protocol I—by France, the Netherlands, the UK and the USA; Additional Protocol II—by China, France, Russia, the UK and the USA.

The Treaty of Rarotonga is open for signature by members of the South Pacific Forum; Protocol 1—by France, the UK and the USA; Protocol 2—by China, France, Russia, the UK and the USA; Protocol 3—by China, France, Russia, the UK and the USA.

8. Key to abbreviations used in the table:

| | |
|------------|--|
| S | Signature without further action |
| PI, PII | Additional Protocols to the Treaty of Tlatelolco |
| P1, P2, P3 | Protocols to the Treaty of Rarotonga |
| CP | Party entitled to participate in the consultative meetings provided for in Article IX of the Antarctic Treaty |
| SA | Nuclear safeguards agreement in force with the International Atomic Energy Agency (IAEA) as required by the Non-Proliferation Treaty or the Treaty of Tlatelolco, or concluded by a nuclear weapon state on a voluntary basis. |

9. Footnotes with summaries of the most important reservations/declarations given in connection with the signing, ratification, accession or succession of a treaty are listed at the end of the table and are grouped separately under the heading for the respective agreements. The texts of the statements contained in the footnotes have been abridged, but the wording is close to the original version.

10. A complete list of UN member states and year of membership appears in the Glossary at the front of this volume.

| State | Geneva Protocol | Antarctic Treaty | Partial Test Ban Treaty | Outer Space Treaty | Treaty of Tlatelolco | Non-Proliferation Treaty | Seabed Treaty | BW Convention | Enmod Convention | CCW Convention | Treaty of Rarotonga |
|---------------------|-------------------|------------------|-------------------------|--------------------|----------------------|--------------------------|-------------------|---------------|------------------|----------------|---------------------|
| Afghanistan | 1986 | | 1964 | 1988 | | 1970 SA | 1971 | 1975 | 1985 | S | |
| Albania | 1989 | | | | | 1990 | | 1992 | | | |
| Algeria | 1992 | | S | 1992 | | | 1992 | | 1991 | | |
| Angola | 1990 ¹ | | | | | | | | | | |
| Antigua and Barbuda | 1988 | | 1988 | 1988 | 1983 ¹ | 1985 | 1988 | | 1988 | | |
| Argentina | 1969 | 1961 CP | 1986 | 1969 | 1994 ¹ | | 1983 ¹ | 1979 | 1987 | S | |
| Armenia | | | 1994 | | | 1993 SA | 1994 | 1994 | | | |
| Australia | 1930 ¹ | 1961 CP | 1963 | 1967 | | 1973 SA | 1973 | 1977 | 1984 | 1983 | 1986 |
| Austria | 1928 | 1987 | 1964 | 1968 | | 1969 SA | 1972 | 1973 | 1990 | 1983 | |
| Azerbaijan | | | | | | 1992 | | | | | |
| Bahamas | | | 1976 | 1976 | 1977 ¹ | 1976 | 1989 | 1986 | | | |
| Bahrain | 1988 ¹ | | | | | 1988 | | 1988 | | | |
| Bangladesh | 1989 ¹ | | 1985 | 1986 | | 1979 SA | | 1985 | 1979 | | |

| | | | | | | | | | | |
|-----------------------------------|-------------------|------------|------|-------------------|-------------------|------------|-------------------|------|------|-------------------|
| Barbados | 1976 ² | | | 1968 | 1969 ¹ | 1980 | | 1973 | | |
| Belarus | 1970 ³ | | 1963 | 1967 | | 1993 | 1971 | 1975 | 1978 | 1982 |
| Belgium | 1928 ¹ | 1960 CP | 1966 | 1973 | | 1975 SA | 1972 | 1979 | 1982 | S |
| Belize | | | | | 1994 ¹ | 1985 | | 1986 | | |
| Benin | 1986 | | 1964 | 1986 | | 1972 | 1986 | 1975 | 1986 | 1989 ¹ |
| Bhutan | 1979 | | 1978 | | | 1985 SA | | 1978 | | |
| Bolivia | 1985 | | 1965 | S | 1969 ¹ | 1970 | S | 1975 | S | |
| Bosnia and Herzegovina | | | | | | 1994 | | 1994 | | 1993 |
| Botswana | | | 1968 | S | | 1969 | 1972 | 1991 | | |
| Brazil | 1970 | 1975 CP | 1964 | 1969 ¹ | 1968 ² | | 1988 ² | 1973 | 1984 | |
| Brunei | | | | | | 1985 SA | | 1991 | | |
| Bulgaria | 1934 ¹ | 1978 | 1963 | 1967 | | 1969 SA | 1971 | 1972 | 1978 | 1982 |
| Burkina Faso | 1971 | | S | 1968 | | 1970 | | 1991 | | |
| Burundi | | | S | S | | 1971 | S | S | | |

| State | Geneva Protocol | Antarctic Treaty | Partial Test Ban Treaty | Outer Space Treaty | Treaty of Tlatelolco | Non-Proliferation Treaty | Seabed Treaty | BW Convention | Enmod Convention | CCW Convention | Treaty of Rarotonga |
|----------------------|-------------------|------------------|-------------------------|--------------------|------------------------------------|--------------------------|-------------------|---------------|------------------|-------------------|----------------------|
| Cambodia | 1983 ⁴ | | | | | 1972 | S | 1983 | | | |
| Cameroon | 1989 | | S | S | | 1969 | S | | | | |
| Canada | 1930 ¹ | 1988 | 1964 | 1967 | | 1969 SA | 1972 ³ | 1972 | 1981 | S | |
| Cape Verde | 1991 | | 1979 | | | 1979 | 1979 | 1977 | 1979 | | |
| Central African Rep. | 1970 | | 1964 | S | | 1970 | 1981 | S | | | |
| Chad | | | 1965 | | | 1971 | | | | | |
| Chile | 1935 ¹ | 1961 CP | 1965 | 1981 | 1974 ³ | | | 1980 | 1994 | | |
| China | 1952 ⁵ | 1983 CP | | 1983 | PII: 1974 ⁴ | 1992 ¹ | 1991 ⁴ | 1984 | | 1982 ² | P2: 1989 P3: 1989 |
| Colombia | | 1989 | 1985 | S | 1972 ¹ SA | 1986 | S | 1983 | | | |
| Congo | | | | | | 1978 | 1978 | 1978 | | | |
| Cook Islands | | | | | | | | | | | 1985 |
| Costa Rica | | | 1967 | | 1969 ¹ SA ¹³ | 1970 SA | S | 1973 | | | |

| | | | | | | | | | | |
|-------------------|------|------------|------|------|---------------------------------------|-------------------------|------|------|------|-------------------|
| Côte d'Ivoire | 1970 | | 1965 | | | 1973 SA | 1972 | S | | |
| Croatia | | | 1992 | | | 1992 | 1993 | 1993 | | 1993 |
| Cuba | 1966 | 1984 | | 1977 | | | 1977 | 1976 | 1978 | 1987 |
| Cyprus | 1966 | | 1965 | 1972 | | 1970 SA | 1971 | 1973 | 1978 | 1988 ³ |
| Czech Republic | 1993 | 1993 | 1993 | 1993 | | 1993 SA | 1993 | 1993 | 1993 | 1993 |
| Denmark | 1930 | 1965 | 1964 | 1967 | | 1969 SA | 1971 | 1973 | 1978 | 1982 |
| Dominica | | | | | 1993 | 1984 | | | 1992 | |
| Dominican Rep. | 1970 | | 1964 | 1968 | 1968 ¹ SA ¹⁵ | 1971 SA | 1972 | 1973 | | |
| Ecuador | 1970 | 1987 CP | 1964 | 1969 | 1969 ¹ SA ¹⁵ | 1969 SA | | 1975 | | 1982 |
| Egypt | 1928 | | 1964 | 1967 | | 1981 ² SA | | S | 1982 | S |
| El Salvador | S | | 1964 | 1969 | 1968 ¹ SA ¹⁵ | 1972 SA | | 1991 | | |
| Equatorial Guinea | 1989 | | 1989 | 1989 | | 1984 | 1992 | 1989 | | |
| Estonia | 1931 | | | | | 1992 | | 1993 | | |

| State | Geneva Protocol | Antarctic Treaty | Partial Test Ban Treaty | Outer Space Treaty | Treaty of Tlatelolco | Non-Proliferation Treaty | Seabed Treaty | BW Convention | Enmod Convention | CCW Convention | Treaty of Rarotonga |
|-----------|-------------------|------------------|-------------------------|--------------------|---|--------------------------|---------------|-------------------|------------------|-------------------|---------------------|
| Ethiopia | 1935 | | S | S | | 1970 SA | 1977 | 1975 | S | | |
| Fiji | 1973 ¹ | | 1972 | 1972 | | 1972 SA | | 1973 | | | 1985 |
| Finland | 1929 | 1984 CP | 1964 | 1967 | | 1969 SA | 1971 | 1974 | 1978 | 1982 | |
| France | 1926 ¹ | 1960 CP | | 1970 | PI: 1992 ⁵ PII: 1974 ⁶ | 1992 SA ³ | | 1984 | | 1988 ⁴ | |
| Gabon | | | 1964 | | | 1974 | | S | | | |
| Gambia | 1966 | | 1965 | S | | 1975 SA | S | S | | | |
| Georgia | | | | | | 1994 | | | | | |
| Germany | 1929 | 1979 CP | 1964 | 1971 | | 1975 ⁴ SA | 1975 | 1983 ¹ | 1983 | 1992 | |
| Ghana | 1967 | | 1963 | S | | 1970 SA | 1972 | 1975 | 1978 | | |
| Greece | 1931 | 1987 | 1963 | 1971 | | 1970 SA | 1985 | 1975 | 1983 | 1992 | |
| Grenada | 1989 | | | | 1975 ¹ | 1975 | | 1986 | | | |
| Guatemala | 1983 | 1991 | 1964 | | 1970 ¹ SA ¹³ | 1970 SA | S | 1973 | 1988 | 1983 | |

| | | | | | | | | | | |
|----------------------|-------------------|------------|------|------|---------------------------------------|-------------------------|-------------------|-------------------|------|------|
| Guinea | | | | | 1985 | S | | | | |
| Guinea-Bissau | 1989 | | 1976 | 1976 | | 1976 | 1976 | | | |
| Guyana | | | S | | | 1993 | | S | | |
| Haiti | | | S | S | 1969 ¹ | 1970 | | S | | |
| Holy See | 1966 | | | S | | 1971 ⁴ SA | | | S | |
| Honduras | | | 1964 | S | 1968 ¹ SA ¹³ | 1973 SA | S | 1979 | | |
| Hungary | 1952 | 1984 | 1963 | 1967 | | 1969 SA | 1971 | 1972 | 1978 | 1982 |
| Iceland | 1967 | | 1964 | 1968 | | 1969 SA | 1972 | 1973 | S | S |
| India | 1930 ¹ | 1983 CP | 1963 | 1982 | | | 1973 ⁵ | 1974 ² | 1978 | 1984 |
| Indonesia | 1971 | | 1964 | S | | 1979 ⁶ SA | | 1992 | | |
| Iran | 1929 | | 1964 | S | | 1970 SA | 1971 | 1973 | S | |
| Iraq | 1931 ¹ | | 1964 | 1968 | | 1969 SA | 1972 | 1991 | S | |
| Ireland | 1930 ⁶ | | 1963 | 1968 | | 1968 SA | 1971 | 1972 ³ | 1982 | S |

| State | Geneva Protocol | Antarctic Treaty | Partial Test Ban Treaty | Outer Space Treaty | Treaty of Tlatelolco | Non-Proliferation Treaty | Seabed Treaty | BW Convention | Enmod Convention | CCW Convention | Treaty of Rarotonga |
|--------------|----------------------|------------------|-------------------------|--------------------|------------------------------------|--------------------------|-------------------|---------------|-------------------|----------------|---------------------|
| Israel | 1969 ⁷ | | 1964 | 1977 | | | | | | | |
| Italy | 1928 | 1981 CP | 1964 | 1972 | | 1975 ⁷ SA | 1974 ⁶ | 1975 | 1981 | S ⁵ | |
| Jamaica | 1970 | | 1991 | 1970 | 1969 ¹ SA ¹³ | 1970 SA | 1986 | 1975 | | | |
| Japan | 1970 | 1960 CP | 1964 | 1967 | | 1976 ⁸ SA | 1971 | 1982 | 1982 | 1982 | |
| Jordan | 1977 ⁸ | | 1964 | S | | 1970 SA | 1971 | 1975 | | | |
| Kazakhstan | | | | | | 1994 | | | | | |
| Kenya | 1970 | | 1965 | 1984 | | 1970 | | 1976 | | | |
| Kiribati | | | | | | 1985 SA | | | | | 1986 |
| Korea, North | 1989 ^{1, 9} | 1987 | | | | 1985 SA | | 1987 | 1984 | | |
| Korea, South | 1989 ¹ | 1986 CP | 1964 | 1967 | | 1975 ⁹ SA | 1987 | 1987 | 1986 ¹ | | |
| Kuwait | 1971 ¹⁰ | | 1965 | 1972 | | 1989 | | 1972 | 1980 | | |
| Kyrgyzstan | | | | | | 1994 | | | | | |
| Laos | 1989 | | 1965 | 1972 | | 1970 | 1971 | 1973 | 1978 | 1983 | |

| | | | | | | | | | |
|----------------------|--------------------|------|-------------------|--|--------------------------|------|------|------|------|
| Latvia | 1931 | | | | 1992 SA | 1992 | | | 1993 |
| Lebanon | 1969 | 1965 | 1969 | | 1970 SA | S | 1975 | S | |
| Lesotho | 1972 | | S | | 1970 SA | 1973 | 1977 | | |
| Liberia | 1927 | 1964 | | | 1970 | S | S | S | |
| Libya | 1971 ¹¹ | 1968 | 1968 | | 1975 SA | 1990 | 1982 | | |
| Liechtenstein | 1991 | | | | 1978 ¹⁰ SA | 1991 | 1991 | | 1989 |
| Lithuania | 1933 | | | | 1991 SA | | | | |
| Luxembourg | 1936 | 1965 | S | | 1975 SA | 1982 | 1976 | S | S |
| Madagascar | 1967 | 1965 | 1968 ² | | 1970 SA | S | S | | |
| Malawi | 1970 | 1964 | | | 1986 SA | | S | 1978 | |
| Malaysia | 1970 | 1964 | S | | 1970 SA | 1972 | 1991 | | |
| Maldives | 1966 | | | | 1970 SA | | 1993 | | |

| State | Geneva Protocol | Antarctic Treaty | Partial Test Ban Treaty | Outer Space Treaty | Treaty of Tlatelolco | Non-Proliferation Treaty | Seabed Treaty | BW Convention | Enmod Convention | CCW Convention | Treaty of Rarotonga |
|-----------------|--------------------|------------------|-------------------------|--------------------|------------------------|--------------------------|-------------------|-------------------|------------------|----------------|---------------------|
| Mali | | | S | 1968 | | 1970 | S | S | | | |
| Malta | 1964 | | 1964 | | | 1970 SA | 1971 | 1975 | | | |
| Mauritania | | | 1964 | | | 1993 | | | | | |
| Mauritius | 1970 | | 1969 | 1969 | | 1969 SA | 1971 | 1972 | 1992 | | |
| Mexico | 1932 | | 1963 | 1968 | 1967 ^{1,7} SA | 1969 ¹¹ SA | 1984 ⁷ | 1974 ⁴ | | 1982 | |
| Moldova | | | | | | 1994 | | | | | |
| Monaco | 1967 | | | | | | | | | | |
| Mongolia | 1968 ¹² | | 1963 | 1967 | | 1969 SA | 1971 | 1972 | 1978 | 1982 | |
| Morocco | 1970 | | 1966 | 1967 | | 1970 SA | 1971 | S | S | S | |
| Mozambique | | | | | | 1990 | | | | | |
| Myanmar (Burma) | | | 1963 | 1970 | | 1992 | S | S | | | |
| Namibia | | | | | | 1992 | | | | | |
| Nauru | | | | | | 1982 SA | | | | | 1987 |

| | | | | | | | | | | | |
|-------------------------|--------------------|------------|------|------|--|------------|------|------|-------------------|-------------------|------|
| Nepal | 1969 | | 1964 | 1967 | | 1970 SA | 1971 | S | | | |
| Netherlands | 1930 ¹³ | 1967 CP | 1964 | 1969 | PI: 1971 SA ¹⁴ | 1975 SA | 1976 | 1981 | 1983 ² | 1987 ⁶ | |
| New Zealand | 1930 ¹ | 1960 CP | 1963 | 1968 | | 1969 SA | 1972 | 1972 | 1984 | 1993 | 1986 |
| Nicaragua | 1990 | | 1965 | S | 1968 ^{1, 8} SA ¹³ | 1973 SA | 1973 | 1975 | S | S | |
| Niger | 1967 | | 1964 | 1967 | | 1992 | 1971 | 1972 | 1993 | 1992 | |
| Nigeria | 1968 ¹ | | 1967 | 1967 | | 1968 SA | | 1973 | | S | |
| Niue | | | | | | | | | | | 1986 |
| Norway | 1932 | 1960 CP | 1963 | 1969 | | 1969 SA | 1971 | 1973 | 1979 | 1983 | |
| Oman | | | | | | | | 1992 | | | |
| Pakistan | 1960 | | 1988 | 1968 | | | | 1974 | 1986 | 1985 | |
| Panama | 1970 | | 1966 | S | 1971 ¹ SA | 1977 | 1974 | 1974 | | | |
| Papua New Guinea | 1980 ¹ | 1981 | 1980 | 1980 | | 1982 SA | | 1980 | 1980 | | 1989 |
| Paraguay | 1933 ¹⁴ | | S | | 1969 ¹ SA ¹³ | 1970 SA | S | 1976 | | | |

| State | Geneva Protocol | Antarctic Treaty | Partial Test Ban Treaty | Outer Space Treaty | Treaty of Tlatelolco | Non-Proliferation Treaty | Seabed Treaty | BW Convention | Enmod Convention | CCW Convention | Treaty of Rarotonga |
|----------------------------------|--------------------|-------------------|-------------------------|--------------------|------------------------------------|--------------------------|---------------|---------------|------------------|----------------|----------------------|
| Peru | 1985 | 1981 CP | 1964 | 1979 | 1969 ¹ SA ¹³ | 1970 SA | | 1985 | | | |
| Philippines | 1973 | | 1965 | S | | 1972 SA | 1993 | 1973 | | S | |
| Poland | 1929 | 1961 CP | 1963 | 1968 | | 1969 SA | 1971 | 1973 | 1978 | 1983 | |
| Portugal | 1930 ¹ | | S | | | 1977 SA | 1975 | 1975 | S | S | |
| Qatar | 1976 | | | | | 1989 | 1974 | 1975 | | | |
| Romania | 1929 ¹ | 1971 ¹ | 1963 | 1968 | | 1970 SA | 1972 | 1979 | 1983 | S ⁷ | |
| Russia | 1928 ¹⁵ | 1960 CP | 1963 | 1967 | PII: 1979 ⁹ | 1970 SA ¹² | 1972 | 1975 | 1978 | 1982 | P2: 1988 P3: 1988 |
| Rwanda | 1964 | | 1963 | S | | 1975 | 1975 | 1975 | | | |
| Saint Kitts and Nevis | 1989 | | | | S | 1993 | | 1991 | | | |
| Saint Lucia | 1988 | | | | S | 1979 SA | | 1986 | 1993 | | |
| Saint Vincent and the Grenadines | | | | | 1992 | 1984 SA | | | | | |

| | | | | | | | | | |
|--------------------------|-------------------|------------|------|------|------------|------|------|------|------|
| Samoa, Western | | | 1965 | | 1975 SA | | | | 1986 |
| San Marino | | | 1964 | 1968 | 1970 | | 1975 | | |
| Sao Tome and Principe | | | | | 1983 | 1979 | 1979 | 1979 | |
| Saudi Arabia | 1971 | | | 1976 | 1988 | 1972 | 1972 | | |
| Senegal | 1977 | | 1964 | | 1970 SA | S | 1975 | | |
| Seychelles | | | 1985 | 1978 | 1985 | 1985 | 1979 | | |
| Sierra Leone | 1967 | | 1964 | 1967 | 1975 | S | 1976 | S | S |
| Singapore | | | 1968 | 1976 | 1976 SA | 1976 | 1975 | | |
| Slovakia | 1993 | 1993 | 1993 | 1993 | 1993 SA | 1993 | 1993 | 1993 | 1993 |
| Slovenia | | | 1992 | | 1992 | 1992 | 1992 | | 1992 |
| Solomon Islands | 1981 | | | | 1981 SA | 1981 | 1981 | 1981 | 1989 |
| Somalia | | | S | S | 1970 | | S | | |
| South Africa | 1930 ¹ | 1960 CP | 1963 | 1968 | 1991 SA | 1973 | 1975 | | |

| State | Geneva Protocol | Antarctic Treaty | Partial Test Ban Treaty | Outer Space Treaty | Treaty of Tlatelolco | Non-Proliferation Treaty | Seabed Treaty | BW Convention | Enmod Convention | CCW Convention | Treaty of Rarotonga |
|-------------|--------------------|------------------|-------------------------|--------------------|------------------------------------|--------------------------|---------------|-------------------|------------------|----------------|---------------------|
| Spain | 1929 ¹⁶ | 1982 CP | 1964 | 1968 | | 1987 SA | 1987 | 1979 | 1978 | 1993 | |
| Sri Lanka | 1954 | | 1964 | 1986 | | 1979 SA | | 1986 | 1978 | | |
| Sudan | 1980 | | 1966 | | | 1973 SA | S | | | S | |
| Suriname | | | 1993 | | 1977 ¹ SA ¹³ | 1976 SA | | 1993 | | | |
| Swaziland | 1991 | | 1969 | | | 1969 SA | 1971 | 1991 | | | |
| Sweden | 1930 | 1984 CP | 1963 | 1967 | | 1970 SA | 1972 | 1976 | 1984 | 1982 | |
| Switzerland | 1932 | 1990 | 1964 | 1969 | | 1977 ¹⁰ SA | 1976 | 1976 ⁵ | 1988 | 1982 | |
| Syria | 1968 | | 1964 | 1968 | | 1969 SA | | S | S | | |
| Taiwan | | | 1964 | 1970 | | 1970 | 1972 | 1973 | | | |
| Tanzania | 1963 | | 1964 | | | 1991 | S | S | | | |
| Thailand | 1931 | | 1963 | 1968 | | 1972 SA | | 1975 | | | |
| Togo | 1971 | | 1964 | 1989 | | 1970 | 1971 | 1976 | | S | |

| | | | | | | | | | | |
|-----------------------------|--------------------|-------------------------|------|------|---|--------------------------|------|------|----------------|----------------|
| Tonga | 1971 | | 1971 | 1971 | | 1971 SA | | 1976 | | |
| Trinidad and Tobago | 1962 | | 1964 | S | 1970 ¹ SA ¹³ | 1986 SA | | | | |
| Tunisia | 1967 | | 1965 | 1968 | | 1970 SA | 1971 | 1973 | 1978 | 1987 |
| Turkey | 1929 | | 1965 | 1968 | | 1980 ¹³ SA | 1972 | 1974 | S ³ | S |
| Turkmenistan | | | | | | 1994 | | | | |
| Tuvalu | | | | | | 1979 SA | | | | 1986 |
| Uganda | 1965 | | 1964 | 1968 | | 1982 | | 1992 | S | |
| UK | 1930 ¹ | 1960 CP | 1963 | 1967 | PI: 1969 ¹⁰ PII: 1969 ¹⁰ | 1968 SA ¹⁴ | 1972 | 1975 | 1978 | S |
| Ukraine | | 1992 | 1963 | 1967 | | 1994 | 1971 | 1975 | 1978 | 1982 |
| United Arab Emirates | | | | | | | | S | | |
| Uruguay | 1977 | 1980 ² CP | 1969 | 1970 | 1968 ¹ SA ¹³ | 1970 SA | S | 1981 | 1993 | |
| USA | 1975 ¹⁷ | 1960 CP | 1963 | 1967 | PI: 1981 ¹¹ PII: 1971 ¹² SA ¹⁵ | 1970 SA ¹⁵ | 1972 | 1975 | 1980 | S ⁸ |

| State | Geneva Protocol | Antarctic Treaty | Partial Test Ban Treaty | Outer Space Treaty | Treaty of Tlatelolco | Non-Proliferation Treaty | Seabed Treaty | BW Convention | Enmod Convention | CCW Convention | Treaty of Rarotonga |
|--|--------------------|------------------|-------------------------|--------------------|---------------------------------------|--------------------------|-------------------|---------------|------------------|----------------|---------------------|
| Uzbekistan | | | | | | 1992 | | | 1993 | | |
| Venezuela | 1928 | | 1965 | 1970 | 1970 ¹ SA ¹³ | 1975 SA | | 1978 | | | |
| Viet Nam | 1980 ¹ | | | 1980 | | 1982 SA | 1980 ⁸ | 1980 | 1980 | S | |
| Yemen | 1971 ¹⁸ | | 1979 | 1979 | | 1979 | 1979 | 1979 | 1977 | | |
| Yugoslavia (Serbia and Montenegro) | 1929 ¹⁹ | | 1964 | S | | 1970 ¹⁶ SA | 1973 ⁹ | 1973 | | 1983 | |
| Zaire | | | 1965 | S | | 1970 SA | | 1977 | S | | |
| Zambia | | | 1965 | 1973 | | 1991 SA | 1972 | | | | |
| Zimbabwe | | | | | | 1991 | | 1990 | | | |

The 1925 Geneva Protocol

¹ The Protocol is binding on this state only as regards states which have signed and ratified or acceded to it. The Protocol will cease to be binding on this state in regard to any enemy state whose armed forces or whose allies fail to respect the prohibitions laid down in it. Australia withdrew its reservation to the Protocol in 1986, New Zealand in 1989, and Bulgaria, Chile and Romania in 1991. In 1991, Canada and the UK withdrew their reservations only with regard to the right to retaliate in case of an attack by bacteriological weapons.

² In notifying its succession to the obligations contracted in 1930 by the UK, Barbados stated that it considered the reservations made by the UK to be withdrawn.

³ In 1970 at the UN, Byelorussia submitted a note which stated that 'it recognizes itself to be a party' to the Protocol. However, it did not notify the depositary.

⁴ In a note to the depositary of 30 Sep. 1993, Cambodia stated that it regarded itself bound by the Protocol to which the coalition government of Democratic Kampuchea acceded in 1983.

⁵ In 1952 the People's Republic of China issued a statement recognizing as binding upon it the 1929 accession to the Protocol in the name of China. It considers itself bound by the Protocol on condition of reciprocity on the part of all the other contracting and acceding powers.

⁶ Ireland does not intend to assume, by this accession, any obligation except towards the states having signed and ratified this Protocol or which shall have finally acceded thereto and, should the armed forces or the allies of an enemy state fail to respect the Protocol, Ireland would cease to be bound by the said Protocol in regard to such state. In 1972, Ireland withdrew these reservations.

⁷ The Protocol is binding on Israel only as regards states which have signed and ratified or acceded to it. The Protocol shall cease to be binding on Israel as regards any enemy state whose armed forces, or the armed forces of whose allies, or the regular or irregular forces, or groups or individuals operating from its territory, fail to respect the prohibitions which are the object of the Protocol.

⁸ Jordan undertakes to respect the obligations contained in the Protocol with regard to states which have undertaken similar commitments. It is not bound by the Protocol as regards states whose armed forces, regular or irregular, do not respect the provisions of the Protocol.

⁹ The Democratic People's Republic of Korea (North Korea) does not exclude the right to exercise its sovereignty *vis-à-vis* a contracting party which violates the Protocol in its implementation.

¹⁰ In case of breach of the prohibition laid down in this Protocol by any of the parties, Kuwait will not be bound, with regard to the party committing the breach, to apply the provisions of this Protocol.

¹¹ The Protocol is binding on Libya only as regards states which are effectively bound by it and will cease to be binding on Libya as regards states whose armed forces, or the armed forces of whose allies, fail to respect the prohibitions which are the object of this Protocol.

¹² In the case of violation of this prohibition by any state in relation to Mongolia or its allies, Mongolia shall not consider itself bound by the obligations of the Protocol towards that state. This reservation was withdrawn in 1990.

¹³ As regards the use in war of asphyxiating, poisonous or other gases and of all analogous liquids, materials or devices, this Protocol shall cease to be binding on the Netherlands with regard to any enemy state whose armed forces or whose allies fail to respect the prohibitions laid down in the Protocol.

¹⁴ This is the date of receipt of Paraguay's instrument of accession. The date of the notification by the depositary government 'for the purpose of regularization' is 1969.

¹⁵ The Protocol only binds the USSR in relation to the states which have signed and ratified or which have definitely acceded to the Protocol. The Protocol shall cease to be binding on the USSR in regard to any enemy state whose armed forces or whose allies *de jure* or *de facto* do not respect the prohibitions which are the object of this Protocol. In 1992 the Russian President stated that Russia withdrew its reservation concerning the possibility of using biological weapons.

¹⁶ For Spain the Protocol is binding, *ipso facto*, without special agreement with respect to any other state accepting and observing the same obligation, that is, on condition of reciprocity. This reservation was withdrawn in 1992.

¹⁷ The Protocol shall cease to be binding on the USA with respect to use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, in regard to any enemy state if such state or any of its allies fail to respect the prohibitions laid down in the Protocol.

¹⁸ In case any party fails to observe the prohibition under the Protocol, the People's Democratic Republic of Yemen will consider itself free of its obligation. This reservation appears to be valid for the united Yemen state, unless it states otherwise.

¹⁹ The Protocol shall cease to be binding on Yugoslavia in regard to any enemy state whose armed forces or whose allies fail to respect the prohibitions which are the object of the Protocol.

The Antarctic Treaty

¹ Romania stated that the provisions of Article XIII, para. 1 of the Treaty were not in accordance with the principle according to which multilateral treaties whose object and purposes concern the international community, as a whole, should be open for universal participation.

² In acceding to the Treaty, Uruguay proposed the establishment of a general and definitive statute on Antarctica in which the interests of all states involved and of the international community as a whole would be considered equitably. It also declared that it reserved its rights in Antarctica in accordance with international law.

The Outer Space Treaty

¹ Brazil interprets Article X of the Treaty as a specific recognition that the granting of tracking facilities by the parties to the Treaty shall be subject to agreement between the states concerned.

² Madagascar acceded to the Treaty with the understanding that under Article X of the Treaty the state shall retain its freedom of decision with respect to the possible installation of foreign observation bases in its territory and shall continue to possess the right to fix, in each case, the conditions for such installation.

The Treaty of Tlatelolco

¹ The Treaty is in force for this country in accordance with Article 28 (Article 29 of the amended Treaty), which waived the requirements for the entry into force of the Treaty, specified in that Article. (Colombia made this declaration subsequent to the deposit of ratification, as did Nicaragua and Trinidad and Tobago.)

² On signing the Treaty, Brazil stated that, according to its interpretation, Article 18 of the Treaty gives the signatories the right to carry out, by their own means or in association with third parties, nuclear explosions for peaceful purposes, including explosions which involve devices similar to those used in nuclear weapons. This statement was reiterated at the ratification. Brazil did not waive the requirements for the entry into force of the Treaty laid down in Article 28 (Article 29 of the amended Treaty) until 30 May 1994.

³ Chile did not waive the requirements for the entry into force of the Treaty laid down in Article 28 (Article 29 of the amended Treaty) until 18 Jan. 1994.

⁴ On signing Protocol II, China stated, *inter alia*: China will never use or threaten to use nuclear weapons against non-nuclear Latin American countries and the Latin American nuclear weapon-free zone; nor will China test, manufacture, produce, stockpile, install or deploy nuclear weapons in these countries or in this zone, or send its means of transportation and delivery carrying nuclear weapons to cross the territory, territorial sea or airspace of Latin American countries. China maintains that, in order for Latin America to become a nuclear weapon-free zone, all nuclear weapon states, and particularly the superpowers, must: (a) undertake not to use or threaten to use nuclear weapons against the Latin American countries and the Latin American nuclear weapon-free zone; (b) dismantle all foreign military bases in Latin America and refrain from establishing new bases there; and (c) prohibit the passage of any means of transportation and delivery carrying nuclear weapons through Latin American territory, territorial sea or airspace.

⁵ On signing Protocol I, France made the following reservations and interpretative statements: The Protocol, as well as the provisions of the Treaty to which it refers, will not affect the right of self-defence under Article 51 of the UN Charter; the application of the legislation referred to in Article 3 of the Treaty relates to legislation which is consistent with international law; the obligations under the Protocol shall not apply to transit across the territories of the French Republic situated in the zone of the Treaty, and destined for other territories of the French Republic; the Protocol shall not limit, in any way, the participation of the populations of the French territories in the activities mentioned in Article 1 of the Treaty, and in efforts connected with the national defence of France; the provisions of Articles 1 and 2 of the Protocol apply to the text of the Treaty as it stands at the time when the Protocol is signed by France, and consequently no amendment to the Treaty that might come into force under Article 29 thereof would be binding on France without the latter's express consent. On ratifying Protocol I, France reiterated its statement made upon signature, and added that it did not consider the zone described in Article 4, paragraph 2, of the Treaty as established in accordance with international law; it could not, therefore, agree that the Treaty should apply to that zone.

⁶ On signing Protocol II, France stated that it interprets the undertaking contained in Article 3 of the Protocol to mean that it presents no obstacle to the full exercise of the right of self-defence enshrined in Article 51 of the UN Charter; it takes note of the interpretation of the Treaty given by the Preparatory Commission for the Denuclearization of Latin America and reproduced in the Final Act, according to which the Treaty does not apply to transit, the granting or denying of which lies within the exclusive

competence of each state party in accordance with the pertinent principles and rules of international law; it considers that the application of the legislation referred to in Article 3 of the Treaty relates to legislation which is consistent with international law. The provisions of Articles 1 and 2 of the Protocol apply to the text of the Treaty as it stands at the time when the Protocol is signed by France. Consequently, no amendment to the Treaty that might come into force under the provision of Article 29 would be binding on France without the latter's express consent. If this declaration of interpretation is contested in part or in whole by one or more contracting parties to the Treaty or to Protocol II, these instruments would be null and void as far as relations between France and the contesting state or states are concerned. On depositing its instrument of ratification of Protocol II, France stated that it did so subject to the statement made on signing the Protocol. In 1974, France made a supplementary statement to the effect that it was prepared to consider its obligations under Protocol II as applying not only to the signatories of the Treaty, but also to the territories for which the statute of denuclearization was in force in conformity with Article I of Protocol I.

⁷ On signing the Treaty, Mexico said that, if technological progress makes it possible to differentiate between nuclear weapons and nuclear devices for peaceful purposes, it will be necessary to amend the relevant provisions of the Treaty, according to the procedures established therein.

⁸ Nicaragua stated that it reserved the right to use nuclear energy for peaceful purposes such as the removal of earth for the construction of canals, irrigation works, power plants, and so on, as well as to allow the transit of atomic material through its territory.

⁹ The USSR signed and ratified Protocol II with the following statement:

The USSR proceeds from the assumption that the effect of Article I of the Treaty extends, as specified in Article 5 of the Treaty, to any nuclear explosive device and that, accordingly, the carrying out by any party to the Treaty of explosions of nuclear devices for peaceful purposes would be a violation of its obligations under Article I and would be incompatible with its non-nuclear status. For states parties to the Treaty, a solution to the problem of peaceful nuclear explosions can be found in accordance with the provisions of Article V of the Non-Proliferation Treaty and within the framework of the international procedures of the IAEA. The signing of Protocol II by the USSR does not in any way signify recognition of the possibility of the force of the Treaty being extended beyond the territories of the states parties to the Treaty, including airspace and territorial waters as defined in accordance with international law. With regard to the reference in Article 3 of the Treaty to 'its own legislation' in connection with the territorial waters, airspace and any other space over which the states parties to the Treaty exercise sovereignty, the signing of the Protocol by the USSR does not signify recognition of their claims to the exercise of sovereignty which are contrary to generally accepted standards of international law. The USSR takes note of the interpretation of the Treaty given in the Final Act of the Preparatory Commission for the Denuclearization of Latin America to the effect that the transport of nuclear weapons by the parties to the Treaty is covered by the prohibitions in Article I of the Treaty. The USSR reaffirms its position that authorizing the transit of nuclear weapons in any form would be contrary to the objectives of the Treaty, according to which, as specially mentioned in the preamble, Latin America must be completely free from nuclear weapons, and that it would be incompatible with the non-nuclear status of the states parties to the Treaty and with their obligations as laid down in Article I thereof.

Any actions undertaken by a state or states parties to the Treaty which are not compatible with their non-nuclear status, and also the commission by one or more states parties to the Treaty of an act of aggression with the support of a state which is in possession of nuclear weapons or together with such a state, will be regarded by the USSR as incompatible with the obligations of those countries under the Treaty. In such cases the USSR reserves the right to reconsider its obligations under Protocol II. It further reserves the right to reconsider its attitude to this Protocol in the event of any actions on the part of other states possessing nuclear weapons which are incompatible with their obligations under the said Protocol. The provisions of the articles of Protocol II are applicable to the text of the Treaty of Tlatelolco in the wording of the Treaty at the time of the signing of the Protocol by the USSR, due account being taken of the position of the USSR as set out in the present statement. Any amendment to the Treaty entering into force in accordance with the provisions of Articles 6 and 29 of the Treaty without the clearly expressed approval of the USSR shall have no force as far as the USSR is concerned.

In addition, the USSR proceeds from the assumption that the obligations under Protocol II also apply to the territories for which the status of the denuclearized zone is in force in conformity with Protocol I of the Treaty.

¹⁰ When signing and ratifying Protocol I and Protocol II, the UK made the following declarations of understanding: In connection with Article 3 of the Treaty, defining the term 'territory' as including the territorial sea, airspace and any other space over which the state exercises sovereignty in accordance with 'its own legislation', the UK does not regard its signing or ratification of the Protocols as implying recognition of any legislation which does not comply with the relevant rules of international law. The Treaty does not permit the parties to carry out explosions of nuclear devices for peaceful purposes unless and until advances in technology have made possible the development of devices for such explosions which are not capable of being used for weapon purposes. The signing and ratification by the UK could

not be regarded as affecting in any way the legal status of any territory for the international relations of which the UK is responsible, lying within the limits of the geographical zone established by the Treaty. Should any party to the Treaty carry out any act of aggression with the support of a nuclear weapon state, the UK would be free to reconsider the extent to which it could be regarded as committed by the provisions of Protocol II. In addition, the UK declared that its undertaking under Article 3 of Protocol II not to use or threaten to use nuclear weapons against the parties to the Treaty extends also to territories in respect of which the undertaking under Article I of Protocol I becomes effective.

¹¹ The USA ratified Protocol I with the following understandings: The provisions of the Treaty made applicable by this Protocol do not affect the exclusive power and legal competence under international law of a state adhering to this Protocol to grant or deny transit and transport privileges to its own or any other vessels or aircraft irrespective of cargo or armaments; the provisions of the Treaty made applicable by this Protocol do not affect rights under international law of a state adhering to this Protocol regarding the exercise of the freedom of the seas, or regarding passage through or over waters subject to the sovereignty of a state, and the declarations attached by the United States to its ratification of Protocol II apply also to its ratification of Protocol I.

¹² The USA signed and ratified Protocol II with the following declarations and understandings: In connection with Article 3 of the Treaty, defining the term 'territory' as including the territorial sea, airspace and any other space over which the state exercises sovereignty in accordance with 'its own legislation', the ratification of the Protocol could not be regarded as implying recognition of any legislation which does not, in the view of the USA, comply with the relevant rules of international law. Each of the parties retains exclusive power and legal competence, unaffected by the terms of the Treaty, to grant or deny non-parties transit and transport privileges. As regards the undertaking not to use or threaten to use nuclear weapons against the parties, the USA would consider that an armed attack by a party, in which it was assisted by a nuclear weapon state, would be incompatible with the party's obligations under Article I of the Treaty. The definition contained in Article 5 of the Treaty is understood as encompassing all nuclear explosive devices; Articles 1 and 5 of the Treaty restrict accordingly the activities of the parties under para. 1 of Article 18. Article 18, para. 4 permits, and US adherence to Protocol II will not prevent, collaboration by the USA with the parties to the Treaty for the purpose of carrying out explosions of nuclear devices for peaceful purposes in a manner consistent with a policy of not contributing to the proliferation of nuclear weapon capabilities. The USA will act with respect to such territories of Protocol I adherents, as are within the geographical area defined in Article 4, para. 2 of the Treaty, in the same manner as Protocol II requires it to act with respect to the territories of the parties.

¹³ Safeguards agreements under the Non-Proliferation Treaty cover the Treaty of Tlatelolco.

¹⁴ Safeguards agreements under Protocol I.

The Non-Proliferation Treaty

¹ China stated that the nuclear weapon states should undertake: (a) not to be the first to use nuclear weapons at any time and under any circumstances; (b) not to use or threaten to use nuclear weapons against non-nuclear weapon countries or nuclear-free zones; and (c) support the establishment of nuclear weapon-free zones, respect the status of such zones and assume corresponding obligations. All states that have nuclear weapons deployed outside of their boundaries should withdraw all those weapons back to their own territories. China also declared that it regards the signing and ratification of the NPT by Taiwan in the name of China as illegal and null and void.

² Egypt stated that since it was embarking on the construction of nuclear power reactors, it expected assistance and support from industrialized nations with a developed nuclear industry. It called upon nuclear weapon states to promote research and development of peaceful applications of nuclear explosions in order to overcome all the difficulties at present involved therein. Egypt also appealed to these states to exert their efforts to conclude an agreement prohibiting the use or threat of use of nuclear weapons against any state, and expressed the view that the Middle East should remain completely free of nuclear weapons.

³ An agreement between France, the European Atomic Energy Community (Euratom) and the IAEA for the application of safeguards in France had entered into force in 1981. The agreement covers nuclear material and facilities notified to the IAEA by France.

⁴ FR Germany declared that it reaffirmed its expectation that the nuclear weapon states would intensify their efforts in accordance with the undertakings under Article VI of the Treaty, as well as its understanding that the security of FR Germany continued to be ensured by NATO; it stated that no provision of the Treaty may be interpreted in such a way as to hamper further development of European unification; that research, development and use of nuclear energy for peaceful purposes, as well as international and multinational cooperation in this field, must not be prejudiced by the Treaty; that the application of the Treaty, including the implementation of safeguards, must not lead to discrimination of the nuclear industry of FR Germany in international competition; and that it attached vital importance to the

undertaking given by the USA and the UK concerning the application of safeguards to their peaceful nuclear facilities, hoping that other nuclear weapon states would assume similar obligations.

⁵ The Holy See stated, *inter alia*, that the Treaty will attain in full the objectives of security and peace and justify the limitations to which the states party to the Treaty submit, only if it is fully executed in every clause and with all its implications.

⁶ On signing the Treaty, Indonesia stated, *inter alia*, that it attaches great importance to the declarations of the USA, the UK and the USSR affirming their intention to provide immediate assistance to any non-nuclear weapon state party to the Treaty that is a victim of an act of aggression in which nuclear weapons are used. Of utmost importance, however, is not the action *after* a nuclear attack has been committed but the guarantees to prevent such an attack. Indonesia trusts that the nuclear weapon states will study further this question of effective measures to ensure the security of the non-nuclear weapon states. On depositing the instrument of ratification, Indonesia expressed the hope that the nuclear countries would be prepared to cooperate with non-nuclear countries in the use of nuclear energy for peaceful purposes and implement the provisions of Article IV of the Treaty without discrimination. It also stated the view that the nuclear weapon states would observe the provisions of Article VI of the Treaty relating to the cessation of the nuclear arms race.

⁷ Italy stated that nothing in the Treaty was an obstacle to the unification of the countries of Western Europe; it noted full compatibility of the Treaty with the existing security agreements; it noted further that when technological progress would allow the development of peaceful explosive devices different from nuclear weapons, the prohibition relating to their manufacture and use shall no longer apply; it interpreted the provisions of Article IX, para. 3 of the Treaty, concerning the definition of a nuclear weapon state, in the sense that it referred exclusively to the five countries which had manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 Jan. 1967, and stressed that under no circumstance would a claim of pertaining to such category be recognized by Italy for any other state.

⁸ Japan declared that it urged a reduction of nuclear armaments and a comprehensive ban on nuclear testing; appealed to all states to refrain from the threat or use of force involving either nuclear or non-nuclear weapons; expressed the view that peaceful nuclear activities in non-nuclear weapon states party to the Treaty should not be hampered and that Japan should not be discriminated against in favour of other parties in any aspect of such activities. It also urged all nuclear weapon states to accept IAEA safeguards on their peaceful nuclear activities.

⁹ The Republic of Korea (South Korea) took note of the fact that the depositary governments of the three nuclear weapon states had made declarations in June 1968 to take immediate and effective measures to safeguard any non-nuclear weapon state which is a victim of an act or an object of a threat of aggression in which nuclear weapons are used.

¹⁰ Liechtenstein and Switzerland stated that activities not prohibited under Articles I and II of the Treaty include, in particular, the whole field of energy production and related operations, research and technology concerning future generations of nuclear reactors based on fission or fusion, as well as production of isotopes. Liechtenstein and Switzerland define the term 'source or special fissionable material' in Article III of the Treaty as being in accordance with Article XX of the IAEA Statute, and a modification of this interpretation requires their formal consent; they will accept only such interpretations and definitions of the terms 'equipment or material especially designed or prepared for the processing, use or production of special fissionable material', as mentioned in Article III of the Treaty, that they will expressly approve; and they understand that the application of the Treaty, especially of the control measures, will not lead to discrimination of their industry in international competition.

¹¹ On signing the Treaty, Mexico stated, *inter alia*, that none of the provisions of the Treaty shall be interpreted as affecting in any way whatsoever the rights and obligations of Mexico as a state party to the Treaty of Tlatelolco. It is the understanding of Mexico that 'at the present time' any nuclear explosive device is capable of being used as a nuclear weapon and that there is no indication that 'in the near future' it will be possible to manufacture nuclear explosive devices that are not potentially nuclear weapons. However, if technological advances modify this situation, it will be necessary to amend the relevant provisions of the Treaty in accordance with the procedure established therein.

¹² The agreement provides for the application of IAEA safeguards in Soviet peaceful nuclear facilities designated by the USSR.

¹³ Turkey underlined the non-proliferation obligations of the nuclear weapon states, adding that measures must be taken to meet adequately the security requirements of non-nuclear weapon states.

¹⁴ This agreement, signed by the UK, Euratom and the IAEA, provides for the submission of British non-military nuclear installations to safeguards under IAEA supervision.

¹⁵ This agreement provides for safeguards on fissionable material in all facilities within the USA, excluding those associated with activities of direct national security significance.

¹⁶ Yugoslavia stated, *inter alia*, that it considered a ban on the development, manufacture and use of nuclear weapons and the destruction of all stockpiles of these weapons to be indispensable for the maintenance of a stable peace and international security; it held the view that the chief responsibility for progress in this direction rested with the nuclear weapon states, and expected these states to undertake not to use nuclear weapons against the countries which have renounced them as well as against non-nuclear weapon states in general, and to refrain from the threat to use them.

The Seabed Treaty

¹ Argentina stated that it interprets the references to the freedom of the high seas as in no way implying a pronouncement of judgement on the different positions relating to questions connected with international maritime law. It understands that the reference to the rights of exploration and exploitation by coastal states over their continental shelves was included solely because those could be the rights most frequently affected by verification procedures. Argentina precludes any possibility of strengthening, through this Treaty, certain positions concerning continental shelves to the detriment of others based on different criteria.

² Brazil stated that nothing in the Treaty shall be interpreted as prejudicing in any way the sovereign rights of Brazil in the area of the sea, the sea-bed and the subsoil thereof adjacent to its coasts. It is the understanding of Brazil that the word 'observation', as it appears in para. 1 of Article III of the Treaty, refers only to observation that is incidental to the normal course of navigation in accordance with international law.

³ Canada declared that Article I, para. 1, cannot be interpreted as indicating that any state has a right to implant or emplace any weapons not prohibited under Article I, para. 1, on the sea-bed and ocean floor, and in the subsoil thereof, beyond the limits of national jurisdiction, or as constituting any limitation on the principle that this area of the sea-bed and ocean floor and the subsoil thereof shall be reserved for exclusively peaceful purposes. Articles I, II and III cannot be interpreted as indicating that any state but the coastal state has any right to implant or emplace any weapon not prohibited under Article I, para. 1 on the continental shelf, or the subsoil thereof, appertaining to that coastal state, beyond the outer limit of the sea-bed zone referred to in Article I and defined in Article II. Article III cannot be interpreted as indicating any restrictions or limitation upon the rights of the coastal state, consistent with its exclusive sovereign rights with respect to the continental shelf, to verify, inspect or effect the removal of any weapon, structure, installation, facility or device implanted or emplaced on the continental shelf, or the subsoil thereof, appertaining to that coastal state, beyond the outer limit of the sea-bed zone referred to in Article I and defined in Article II.

⁴ China reaffirmed that nothing in this Treaty shall be interpreted as prejudicing in any way the sovereign rights and the other rights of the People's Republic of China over its territorial sea, as well as the sea area, the seabed and subsoil thereof adjacent to its territorial sea.

⁵ India stated that as a coastal state, India has, and always has had, full and exclusive rights over the continental shelf adjoining its territory and beyond its territorial waters and the subsoil thereof. It is the considered view of India that other countries cannot use its continental shelf for military purposes. There cannot, therefore, be any restriction on, or limitation of, the sovereign right of India as a coastal state to verify, inspect, remove or destroy any weapon, device, structure, installation or facility, which might be implanted or emplaced on or beneath its continental shelf by any other country, or to take such other steps as may be considered necessary to safeguard its security. The accession by India to the Treaty is based on this position.

⁶ Italy stated, *inter alia*, that in the case of agreements on further measures in the field of disarmament to prevent an arms race on the sea-bed and ocean floor and in their subsoil, the question of the delimitation of the area within which these measures would find application shall have to be examined and solved in each instance in accordance with the nature of the measures to be adopted.

⁷ Mexico declared that no provision of the Treaty can be interpreted to mean that a state has the right to emplace nuclear weapons or other weapons of mass destruction, or arms or military equipment of any type, on the continental shelf of Mexico. It reserves the right to verify, inspect, remove or destroy any weapon, structure, installation, device or equipment placed on its continental shelf, including nuclear weapons or other weapons of mass destruction.

⁸ Viet Nam stated that no provision of the Treaty should be interpreted in a way that would contradict the rights of the coastal states with regard to their continental shelf, including the right to take measures to ensure their security.

⁹ In 1974, the Ambassador of Yugoslavia transmitted to the US Secretary of State a note stating that in the view of the Yugoslav Government, Article III, para. 1, of the Treaty should be interpreted in such a way that a state exercising its right under this Article shall be obliged to notify in advance the coastal state, in so far as its observations are to be carried out 'within the stretch of the sea extending above the continental shelf of the said state'.

The BW Convention

¹ FR Germany stated that a major shortcoming of the BW Convention is the absence of any provisions for verifying compliance with essential obligations. The right to lodge a complaint with the UN Security Council is an inadequate arrangement. Furthermore, the establishment of an independent international committee of experts able to conduct impartial investigations when doubts arise as to whether the Convention is being complied with would be a welcome development.

² India reiterated its understanding that the objective of the Convention is to eliminate biological and toxin weapons, thereby excluding completely the possibility of their use, and that the exemption with regard to biological agents or toxins, which would be permitted for prophylactic, protective or other peaceful purposes, would not in any way create a loophole in regard to the production or retention of biological and toxin weapons. Also any assistance which might be furnished under the terms of the Convention would be of a medical or humanitarian nature and in conformity with the UN Charter.

³ Ireland considers that the Convention could be undermined if the reservations made by the parties to the 1925 Geneva Protocol were allowed to stand, as the prohibition of possession is incompatible with the right to retaliate, and that there should be an absolute and universal prohibition of the use of the weapons in question. Ireland notified the depositary government for the Geneva Protocol of the withdrawal of its reservations to the Protocol, made at the time of accession in 1930. The withdrawal applies to chemical as well as to bacteriological (biological) and toxin agents of warfare.

⁴ Mexico considers that the Convention is only a first step towards an agreement prohibiting also the development, production and stockpiling of all chemical weapons, and notes the fact that the Convention contains an express commitment to continue negotiations in good faith with the aim of arriving at such an agreement.

⁵ Switzerland made the following reservation: Owing to the fact that the Convention also applies to weapons, equipment or means of delivery designed to use biological agents or toxins, the delimitation of its scope of application can cause difficulties since there are scarcely any weapons, equipment or means of delivery peculiar to such use; therefore, Switzerland reserves the right to decide for itself what auxiliary means fall within that definition.

The Enmod Convention

¹ It is the understanding of the Republic of Korea (South Korea) that any technique for deliberately changing the natural state of rivers falls within the meaning of the term 'environmental modification techniques' as defined in Article II of the Convention. It is further understood that military or any other hostile use of such techniques, which could cause flooding, inundation, reduction in the water-level, drying up, destruction of hydrotechnical installations or other harmful consequences, comes within the scope of the Convention, provided it meets the criteria set out in Article I thereof.

² The Netherlands accepts the obligation laid down in Article I of the Enmod Convention as extending to states which are not party to the Convention and which act in conformity with Article I of this Convention.

³ On signing the Convention, Turkey declared that the terms 'widespread', 'long-lasting' and 'severe effects' contained in the Convention need to be more clearly defined, and that so long as this clarification was not made, Turkey would be compelled to interpret for itself the terms in question and, consequently, reserved the right to do so as and when required. Turkey also stated its belief that the difference between 'military or any other hostile purposes' and 'peaceful purposes' should be more clearly defined so as to prevent subjective evaluations.

The CCW Convention ('Inhumane' Weapons Convention)

¹ The accession of Benin refers only to Protocols I and III of the Convention.

² On signing the Treaty, China stated that the Convention fails to provide for supervision or verification of any violation of its clauses, thus weakening its binding force. The Protocol on mines, booby traps and other devices fails to lay down strict restrictions on the use of such weapons by the aggressor on the territory of the victim and to provide adequately for the right of a state victim of an aggression to defend itself by all necessary means. The Protocol on incendiary weapons does not stipulate restrictions on the use of such weapons against combat personnel.

³ Cyprus declared that the provisions of Article 7, para. 3b, and Article 8 of Protocol II of the Convention will be interpreted in such a way that neither the status of peace-keeping forces or missions of the UN in Cyprus will be affected nor will additional rights be, *ipso jure*, granted to them.

⁴ France ratified only Protocols I and II. On signing the Convention France stated that it regretted that it had not been possible to reach agreement on the provisions concerning the verification of facts which might be alleged and which might constitute violations of the undertakings subscribed to. It therefore reserved the right to submit, possibly in association with other states, proposals aimed at filling that gap

at the first conference to be held pursuant to Article 8 of the Convention and to utilize, as appropriate, procedures that would make it possible to bring before the international community facts and information which, if verified, could constitute violations of the provisions of the Convention and the Protocols annexed thereto. Reservation: Not being bound by the 1977 Additional Protocol I to the Geneva Conventions of 1949, France considers that para. 4 of the preamble to the Convention on prohibitions or restrictions on the use of certain conventional weapons, which reproduces the provisions of Article 35, para. 3, of Additional Protocol I, applies only to states parties to that Protocol. France will apply the provisions of the Convention and its three Protocols to all the armed conflicts referred to in Articles 2 and 3 common to the Geneva Conventions of 1949.

⁵ Italy stated its regret that no agreement had been reached on provisions that would ensure respect for the obligations under the Convention. Italy intends to undertake efforts to ensure that the problem of the establishment of a mechanism that would make it possible to fill this gap in the Convention is taken up again at the earliest opportunity in every competent forum.

⁶ The Netherlands made the following statements of understanding: A specific area of land may also be a military objective if, because of its location or other reasons specified in Article 2, para. 4, of Protocol II and in Article I, para. 3, of Protocol III, its total or partial destruction, capture, or neutralization in the prevailing circumstances offers a definitive military advantage; military advantage mentioned in Article 3, para. 3 under c, of Protocol II, refers to the advantage anticipated from the attack considered as a whole and not only from isolated or particular parts of the attack; in Article 8, para. 1, of Protocol II, the words 'as far as it is able' mean 'as far as it is technically able'.

⁷ Romania stated that the provisions of the Convention and its Protocols have a restricted character and do not ensure adequate protection either to the civilian population or to the combatants as the fundamental principles of international humanitarian law require.

⁸ The USA stated that it had strongly supported proposals by other countries to include special procedures for dealing with compliance matters, and reserved the right to propose at a later date additional procedures and remedies, should this prove necessary, to deal with such problems.

III. Summaries and status of other multilateral agreements, as of 1 January 1995

Geneva Convention (IV) relative to the protection of civilian persons in time of war

Signed at Geneva on 12 August 1949; entered into force on 21 October 1950.

The Convention establishes rules for the protection of civilians in areas covered by war and on occupied territories.

Parties: Afghanistan, Albania,* Algeria, Andorra, Angola,* Antigua and Barbuda, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus,* Belgium, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Brunei, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Central African Republic, Chad, Chile, China,* Colombia, Comoros, Congo, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Cyprus, Czech Republic,* Denmark, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Estonia, Ethiopia, Fiji, Finland, France, Gabon, Gambia, Georgia, Germany, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea-Bissau,* Guyana, Haiti, Holy See, Honduras, Hungary,* Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel,* Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kiribati, Korea (North),* Korea (South),* Kuwait,* Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Libya, Liechtenstein, Luxembourg, Macedonia (Former Yugoslav Republic of), Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Mauritania, Mauritius, Mexico, Moldova, Monaco, Mongolia, Morocco, Mozambique, Myanmar (formerly Burma), Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan,* Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland,* Portugal,* Qatar, Romania,* Russia,* Rwanda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa (Western), San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Singapore, Slovakia,* Slovenia, Solomon Islands, Somalia, South Africa, Spain, Sri Lanka, Sudan, Suriname,* Swaziland, Sweden, Switzerland, Syria, Tajikistan, Tanzania, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, UK, Ukraine,* United Arab Emirates, Uruguay,* USA,* Vanuatu, Venezuela, Viet Nam,* Yemen,* Yugoslavia,* Zaire, Zambia, Zimbabwe

* With reservation and/or declaration upon ratification, accession or succession.

Protocol (I) additional to the 1949 Geneva Conventions, and relating to the protection of victims of international armed conflict

Signed at Bern on 12 December 1977; entered into force on 7 December 1978.

The Protocol confirms that the right of the parties to an international armed conflict to choose methods or means of warfare is not unlimited and that it is prohibited to use weapons or means of warfare which cause superfluous injury or unnecessary suffering.

Parties: Albania, Algeria,* Angola,* Antigua and Barbuda, Argentina,* Armenia, Australia,* Austria,* Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium,* Belize, Benin, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Brunei, Bulgaria, Burkina Faso, Burundi, Cameroon, Canada,* Central African Republic, Chile, China,* Colombia, Comoros, Congo, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Denmark,* Djibouti, Dominican Republic, Ecuador, Egypt,* El Salvador, Equatorial Guinea,* Estonia, Ethiopia, Finland,* Gabon, Gambia, Georgia, Germany,* Ghana, Greece, Guatemala, Guinea, Guinea-Bissau, Guyana, Holy See,* Hungary, Iceland,* Italy,* Jamaica, Jordan, Kazakhstan, Korea (North), Korea (South),* Kuwait, Kyrgyzstan, Laos, Latvia, Lesotho, Liberia, Libya, Liechtenstein,* Luxembourg, Macedonia (Former Yugoslav Republic of), Madagascar, Malawi, Maldives, Mali, Malta,* Mauritania, Mauritius, Mexico, Moldova, Mozambique, Namibia,

Netherlands,* New Zealand,* Niger, Nigeria, Norway, Oman,* Paraguay, Peru, Poland, Portugal, Qatar,* Romania, Russia,* Rwanda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa (Western), San Marino, Saudi Arabia,* Senegal, Seychelles, Sierra Leone, Slovakia, Slovenia, Solomon Islands, Spain,* Suriname, Sweden,* Switzerland,* Syria,* Tajikistan, Tanzania, Togo, Tunisia, Turkmenistan, Uganda, Ukraine, United Arab Emirates,* Uruguay, Uzbekistan, Vanuatu, Viet Nam, Yemen, Yugoslavia,* Zaire, Zimbabwe

* With reservation and/or declaration upon ratification, accession or succession.

Convention on the Physical Protection of Nuclear Material

Signed at Vienna and New York on 3 March 1980; entered into force on 8 February 1987.

The Convention obliges the parties to protect nuclear material for peaceful purposes during transport across their territory or on ships or aircraft under their jurisdiction.

Parties: Antigua and Barbuda, Argentina,* Armenia, Australia, Austria, Belarus, Belgium, Brazil, Bulgaria, Canada, Chile, China,* Croatia, Czech Republic, Denmark, Estonia, EURATOM,* Finland, France,* Germany, Greece, Guatemala, Hungary, Indonesia,* Ireland, Italy,* Japan, Korea (South),* Liechtenstein, Lithuania, Luxembourg, Mexico, Mongolia,* Netherlands,* Norway, Paraguay, Philippines, Poland,* Portugal, Romania, Russia,* Slovakia, Slovenia, Spain,* Sweden, Switzerland, Tunisia, Turkey,* UK, Ukraine, USA, Yugoslavia

* With reservation and/or declaration upon ratification, accession or succession.

Signed but not ratified: Dominican Republic, Ecuador, Haiti, Israel, Morocco, Niger, Panama, South Africa

Treaty on Conventional Armed Forces in Europe (CFE Treaty)

Signed at Vienna on 19 November 1990; entered into force on 9 November 1992.

The Treaty sets ceilings on five categories of military equipment (battle tanks, armoured combat vehicles, artillery pieces, combat aircraft and attack helicopters) in an area stretching from the Atlantic Ocean to the Ural Mountains (the ATTU zone).

Parties: Armenia, Azerbaijan, Belarus, Belgium, Bulgaria, Canada, Czech Republic, Denmark, France, Georgia, Germany, Greece, Hungary, Iceland, Italy, Kazakhstan, Luxembourg, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Turkey, UK, Ukraine, USA

The **Tashkent Document**, signed by former Soviet republics with territories within the ATTU zone (except the Baltic states) at Tashkent on 15 May 1992, includes the Agreement on the Principles and Procedures for Implementing the CFE Treaty (**Tashkent Agreement**), establishing maximum levels for holdings of armaments and equipment for implementation of the treaty and a number of certain types of helicopters not subject to CFE Treaty limits. The Document also includes a Declaration by which the states recognize how to implement the CFE Treaty after the breakup of the USSR.

All the CFE Treaty parties signed, at Oslo, on 5 June 1992, the Final Document of the Extraordinary Conference of the States Parties to the CFE Treaty (**Oslo Document**), introducing modifications, necessary because of the emergence of new states as a consequence of the breakup of the USSR.

The Concluding Act of the Negotiation on Personnel Strength of Conventional Armed Forces in Europe (CFE-1A Agreement)

Signed by the parties to the CFE Treaty at Helsinki on 10 July 1992; entered into force simultaneously with the CFE Treaty.

The Agreement limits the personnel of the conventional land-based armed forces within the ATTU zone.

Vienna Documents 1990, 1992 and 1994 on CSBMs

The Vienna Documents were adopted by all the CSCE states. The Vienna Document 1994 was adopted at Vienna on 28 November 1994.

The Vienna Document 1990 on CSBMs repeats many of the provisions in the 1986 Stockholm Document and expands several others. It establishes a communications network and a risk reduction mechanism. The Vienna Document 1992 on CSBMs builds on the Vienna Document 1990 and supplements its provisions with new mechanisms and constraining provisions. The Vienna Document 1994 on Confidence- and Security-Building Measures amends and expands the previous Vienna Documents.

Treaty on Open Skies

Signed at Helsinki on 24 March 1992; not in force on 1 April 1995.

The Treaty obliges the parties to submit their territories to short-notice unarmed surveillance flights. The area of application stretches from Vancouver, Canada, eastwards to Vladivostok, Russia.

Signatories: Belarus, Belgium, Bulgaria, Canada, Czech Republic, Denmark, France, Georgia, Germany, Greece, Hungary, Iceland, Italy, Kyrgyzstan, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Turkey, UK, Ukraine, USA

Ratifications deposited: Bulgaria, Canada, Czech Republic, Denmark, France, Germany, Greece, Hungary, Iceland, Italy, Norway, Portugal, Romania, Slovakia, Spain, Turkey, UK, USA

Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction (Chemical Weapons Convention, CWC)

Opened for signature at Paris on 13 January 1993; not in force on 1 April 1995.

The Convention prohibits not only the use of chemical weapons (prohibited by the 1925 Geneva Protocol) but also the development, production, acquisition, transfer and stockpiling of chemical weapons. Each party undertakes to destroy its chemical weapons and production facilities.

Signatories: Afghanistan, Albania, Algeria, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Belarus, Belgium, Benin, Bolivia, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo, Cook Islands, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Cyprus, Czech Republic, Denmark, Djibouti, Dominica, Dominican Republic, Ecuador, El Salvador, Equatorial Guinea, Estonia, Ethiopia, Fiji, Finland, France, Gabon, Gambia, Georgia, Germany, Ghana, Greece, Guatemala, Guinea, Guinea Bissau, Guyana, Haiti, Holy See, Honduras, Hungary, Iceland, India, Indonesia, Iran, Ireland, Israel, Italy, Japan, Kazakhstan, Kenya, Korea (South), Kuwait,

Kyrgyzstan, Laos, Latvia, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Marshall Islands, Mauritania, Mauritius, Mexico, Micronesia, Moldova, Monaco, Mongolia, Morocco, Myanmar (formerly Burma), Namibia, Nauru, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Romania, Russia, Rwanda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa (Western), San Marino, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Singapore, Slovak Republic, Slovenia, South Africa, Spain, Sri Lanka, Swaziland, Sweden, Switzerland, Tajikistan, Tanzania, Thailand, Togo, Tunisia, Turkey, Turkmenistan, Uganda, UK, Ukraine, United Arab Emirates, Uruguay, USA, Venezuela, Viet Nam, Yemen, Zaire, Zambia, Zimbabwe

Ratifications deposited: Albania, Australia, Bulgaria, Cook Islands, Fiji, Germany, Greece, Lesotho, Maldives, Mauritius, Mexico, Norway, Paraguay, Seychelles, Spain, Sri Lanka, Sweden, Turkmenistan, Uruguay

From 1 Jan. to 1 Apr. 1995, the following states had ratified the Convention: Armenia, Finland, France, Mongolia, Oman, Romania, Switzerland, Tajikistan

IV. Summaries and status of the major US–Soviet/Russian agreements, as of 1 January 1995

Treaty on the limitation of anti-ballistic missile systems (ABM Treaty)

Signed by the USA and the USSR at Moscow on 26 May 1972; entered into force on 3 October 1972.

The Treaty prohibits the development, testing and deployment of sea-, air-, space- or mobile land-based ABM systems.

Treaty on the limitation of underground nuclear weapon tests (Threshold Test Ban Treaty, TTBT)

Signed by the USA and the USSR at Moscow on 3 July 1974; entered into force on 11 December 1990.

The parties undertake not to carry out any underground nuclear weapon test having a yield exceeding 150 kilotons.

Treaty on underground nuclear explosions for peaceful purposes (Peaceful Nuclear Explosions Treaty, PNET)

Signed by the USA and the USSR at Moscow and Washington, DC, on 28 May 1976; entered into force on 11 December 1990.

The parties undertake not to carry out any underground nuclear explosion for peaceful purposes having a yield exceeding 150 kilotons.

**Treaty on the elimination of intermediate-range and shorter-range missiles
(INF Treaty)**

Signed by the USA and the USSR at Washington, DC, on 8 December 1987; entered into force on 1 June 1988.

The Treaty obliges the parties to destroy all land-based missiles with a range of 500–5500 km (intermediate-range, 1000–5500 km; and shorter-range, 500–1000 km) and their launchers by 1 June 1991. The INF Treaty was implemented before this date.

**Treaty on the reduction and limitation of strategic offensive arms
(START I Treaty)**

Signed by the USA and the USSR at Moscow on 31 July 1991; entered into force on 5 December 1994.

The Treaty reduces US and Russian offensive strategic nuclear weapons to equal aggregate levels over a seven-year period. It sets numerical limits on deployed strategic nuclear delivery vehicles (SNDVs)—ICBMs, SLBMs and heavy bombers—and the nuclear warheads they carry. In the 1992 Protocol to Facilitate the Implementation of the START Treaty (**the Lisbon Protocol**), Belarus, Kazakhstan and Ukraine pledge to accede to the START I Treaty, to eliminate all strategic weapons on their territories within the seven-year reduction period and to join the NPT as non-nuclear weapon states in the shortest possible time. In separate formal letters addressed to the US President, the leaders of Belarus, Kazakhstan and Ukraine pledge to ‘guarantee’ the elimination of all nuclear weapons located on their territories. The three states had all joined the NPT before the START I Treaty entered into force.

**Treaty on further reduction and limitation of strategic offensive arms
(START II Treaty)**

Signed by the USA and Russia at Moscow on 3 January 1993; not in force as of 1 April 1995.

The Treaty requires the USA and Russia to eliminate their MIRVed ICBMs and sharply reduce their strategic nuclear warheads to no more than 3000–3500 each (of which no more than 12750 may be deployed on SLBMs) by 1 January 2003 or no later than 31 December 2000 if the USA and Russia reach a formal agreement committing the USA to help finance the elimination of strategic nuclear weapons in Russia.

Annexe B. Chronology 1994

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For the convenience of the reader, key words are indicated in the right-hand column, opposite each entry. They refer to the subject-areas covered in the entry. Definitions of the acronyms can be found on page xviii.

- 10 Jan.* The Guatemalan Government and the Guatemalan National Revolutionary Unity sign, in Mexico, a Framework Agreement codifying the UN as the moderator and primary verifier of all future accords to come out of the negotiations on the settlement of the dispute. Guatemala; UN
- 10–11 Jan.* The NATO heads of state and government, participating in the North Atlantic Council Meeting in Brussels, reaffirm that the Alliance remains open for membership of other European states that are in a position to further the security of the North Atlantic area. The concept of Combined Joint Task Forces as a means to facilitate contingency operations, including operations with participating states outside the Alliance, is endorsed. The Council will provide separable but not separate military capabilities, employed by NATO or the WEU. The meeting launches the Partnership for Peace (PFP) programme, inviting all the NACC and other CSCE states able and willing to contribute to join. NATO; PFP; WEU
- 14 Jan.* The Presidents of the USA, Russia and Ukraine, meeting in Moscow, issue a Trilateral Statement that agreement has been reached on the transfer of all Ukrainian nuclear weapons to Russia for dismantlement. Ukraine will receive compensation from Russia for the highly enriched uranium (HEU) in the warheads, in the form of fuel assemblies for nuclear power stations. The USA, Russia and the UK will give Ukraine security assurances upon its accession to the Non-Proliferation Treaty (NPT) as a non-nuclear weapon state (see *5 Dec.*). The USA will provide technical and financial assistance in the safe and secure dismantlement of the nuclear weapons and the storage of fissile material. In addition, the US and Russian presidents sign an agreement that by 30 May they will detarget their strategic nuclear missiles so that neither country will be targeted by the other's strategic forces (the agreement was implemented by this date). USA/Russia/ Ukraine; Nuclear weapons; NPT; Fissile material
- 25 Jan.* The Conference on Disarmament (CD) agrees on a mandate for negotiations on a comprehensive test ban treaty (CTBT). CD; CTBT

- 12 Feb.* The final consignment of highly enriched uranium (HEU) is removed from Iraq, thus completing the removal of declared stocks of nuclear weapon-grade material from Iraq, according to UN Security Council Resolution 687 of 3 Apr. 1991. Iraq; Fissile material; UN
- 14 Feb.* Kazakhstan deposits its instruments of accession to the NPT as a non-nuclear weapon state. Kazakhstan; NPT
- 15 Feb.* British Prime Minister Major and Russian President Yeltsin, meeting in Moscow, issue a declaration that measures will be implemented so that all strategic missiles under the two countries' respective commands will be detargeted not later than 30 May (the measures were implemented by this date). UK/Russia; Nuclear weapons
- 15 Feb.* North Korea informs the IAEA that it accepts the requested inspection of seven declared nuclear facilities (not including the two sites suspected of producing nuclear weapon-grade material). On 25 Feb. the USA and North Korea agree to continue high-level talks in Geneva. The US-South Korean 'Team Spirit' manoeuvre is cancelled. IAEA/ N. Korea; USA/N. Korea
- 25 Feb.* An Israeli settler opens fire in a crowded mosque in Hebron on the West Bank; 48 Palestinians are killed. The bilateral negotiations between Israel and Jordan, Syria and Lebanon, respectively, are temporarily suspended. Israel/Palestine
- 28 Feb.* Because of violations of Security Council Resolution 816 (1993), prohibiting unauthorized flights in the airspace of Bosnia and Herzegovina, NATO aircraft shoot down four Serbian fighter-bombers in central Bosnia and Herzegovina. This is the first NATO military action since the organization was established in 1949. UN; NATO; Bosnia
- 1 Mar.* An agreement on a Confederation between the Bosnian and the Bosnian Croat peoples is signed in Washington by the Bosnian Prime Minister, the Croatian Foreign Minister and a Bosnian Croat representative. Bosnia
- 4 Mar.* The 1991 quadripartite (Argentina-Brazil-ABACC-IAEA) Agreement on the Exclusively Peaceful Utilization of Nuclear Energy enters into force. Argentina; Brazil; IAEA
- 14 Mar.* The UN Secretary-General issues a report on Improving the Capacity of the United Nations for Peace-keeping. UN; Peacekeeping
- 15 Mar.* President Clinton informs Congress that the US moratorium on nuclear tests will be extended through Sep. 1995. USA; Nuclear tests

- 18 Mar.* The UN Security Council adopts Resolution 904, condemning the Hebron massacre (see *25 Feb.*). It calls upon Israel, the occupying power in the West Bank, to confiscate arms with the aim of preventing illegal acts of violence by Israeli settlers and calls for a temporary international foreign presence in the occupied territories to help protect Palestinian civilians. (The resolution is adopted without a vote, but the USA abstains from two paragraphs concerning the description of the territories occupied by Israel in 1967 as 'occupied Palestinian territory' and the particular reference to Jerusalem.) UN; Israel/Palestine
- 20 Mar.* The first round of free elections for the presidency and the legislative assembly in El Salvador are held under the supervision of the UN. The second round is held on 14 Apr. The ARENA Party candidate takes 49.6% of the votes and the FMLN-CD 25.3%. In the second round, on 14 Apr., the ARENA candidate wins the necessary absolute majority. El Salvador; UN
- 4 Apr.* Georgian and Abkhazian representatives, meeting in Moscow, agree on an immediate cease-fire. Georgia/Abkhazia
- 5 Apr.* President Yeltsin issues a decree establishing approximately 50 permanent military bases in the former Soviet republics. Russia
- 10 Apr.* In response to the continued bombing by Bosnian Serbs of the Muslim enclave Gorazde, NATO conducts its first air strike against Bosnian Serb positions (in one of the UN 'safe havens'). Bosnia; NATO
- 14 Apr.* The CIS defence ministers sign, in Moscow, a Declaration on Collective Security, aiming at a new structure which would operate as a defensive alliance in the Euro-Asian region. CIS
- 26-29 Apr.* For the first time non-racial, democratic elections are held in South Africa, supervised by the UN. The African National Congress (ANC) takes 62.6% of the national vote; Nelson Mandela wins the presidential election and is inaugurated president on 10 May. S. Africa; UN
- 4 May* The PLO leader and the Israeli Prime Minister sign, in Cairo, an agreement providing for Palestinian self-rule in the Gaza Strip and Jericho, as stipulated under the 1993 Israel-PLO Declaration of Principles. Israel/PLO
- 9 May* The Western European Union (WEU) adopts, at Kirchberg, Luxembourg, a Declaration opening the WEU to Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and the Czech Republic as Associate Partners. The nine states formally become Associate Partners the same day. WEU

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| 13 May | Ukraine and the USA sign, in Washington, a Memorandum of Understanding on missile-related exports under which Ukraine agrees to conduct its missile- and space-related exports according to the Missile Technology Control Regime (MTCR). | Ukraine/USA; MTCR |
| 14 May | An Agreement on a Cease-fire and Separation of Forces is signed in Moscow by Georgian and Abkhazian representatives. | Georgia/ Abkhazia |
| 17 May | The UN Security Council adopts Resolution 918B by a vote of 14 to 1 (Rwanda votes against), declaring an arms embargo against the parties to the conflict in Rwanda. | UN; Rwanda |
| 25 May | Recognizing the new, democratic South Africa, the UN Security Council unanimously adopts Resolution 919, lifting the 1977 embargo on the sale of arms to South Africa and the 1984 ban on the purchase of arms from South Africa. | UN; S. Africa |
| 26–27 May | The negotiations on a Pact on Stability in Europe (proposed by French Prime Minister Balladur in June 1993) are launched at the inaugural conference in Paris. | Stability Pact; EU |
| 9 June | The North Atlantic Council, meeting in Istanbul, issues a document on the 'Alliance Policy Framework on Proliferation of Weapons of Mass Destruction', which states that in the light of recent events in Iraq and North Korea NATO will seek, if necessary, to improve its defence capabilities to protect NATO territory, populations and forces against the use of weapons of mass destruction. The Political–Military Steering Committee of the PFP and the <i>Ad Hoc</i> Group on Co-operation in Peacekeeping should closely coordinate their work, and later in the year these bodies should merge to serve as the main NACC–PFP forum for consultations on political and conceptual issues related to peacekeeping. | NATO; Nuclear weapons; CBW; NACC; PFP; Peacekeeping |
| 10 June | China conducts a nuclear test at its test site in the Lop Nor area. | China; Nuclear test |
| 13 June | Following an IAEA resolution withdrawing technical aid to North Korea, North Korea announces its withdrawal from the IAEA. | IAEA/N. Korea |
| 13–15 June | The heads of state and government of the Organization of African Unity (OAU), holding their annual meeting in Tunis, adopt a resolution which supports the establishment of an African Nuclear Weapon-Free Zone. | OAU; NWFZ |
| 14 June | The UNSCOM Chemical Destruction Group concludes its activities after having fulfilled the Commission's mandate to eliminate Iraq's declared chemical weapons stockpile. | UN; CW; Iraq |
| 22 June | The Russian Foreign Minister signs, in Brussels, the NATO Partnership for Peace Framework Document. | PFP; Russia |

- 22 June The UN Security Council adopts Resolution 929 by a vote of 10 to 0 (Brazil, China, New Zealand, Nigeria and Pakistan abstain from voting), supporting the plan for a French-led force to move into Rwanda with the mandate to use all necessary means to protect civilians and humanitarian aid operations. UN; Rwanda; France
- 23 June The US Vice President and the Russian Prime Minister, meeting in Moscow, sign an agreement to end the operation of plutonium production reactors in both countries by the year 2000 and to stop using newly produced plutonium from nuclear reactors. The two countries may not re-start any of the plutonium production reactors already closed. (In the USA all reactors used for plutonium production are already shut down.) USA/Russia; Fissile material
- 29 June The UN Security Council unanimously adopts Resolution 931, calling for the establishment of a mechanism to monitor, encourage respect for and prevent violations of a cease-fire in the war between northern and southern Yemen. (A civil war had broken out in Feb.) UN; Yemen
- 6 July Germany, France, Russia, the UK and the USA present a peace plan for Bosnia, proposing that the Muslim Croats of Bosnia and Herzegovina be awarded 51% of the territory, that the Bosnian Serbs cede about one-third of the territory which they currently occupy, that many towns that have been 'ethnically cleansed' of their Muslim population by the Serbs remain under Serb control, and that the UN and the EU protect key areas (including Sarajevo and Gorazde). Bosnia; UN; EU
- 12 July The Defence Ministers of Russia and China sign, in Moscow, an agreement on the prevention of dangerous military activities. Russia/China
- 21 July The UN Security Council unanimously adopts Resolution 937, welcoming the contribution made by Russia of a peacekeeping force in Abkhazia. The number of UN observers (ONOMIG) in the area is increased to monitor and verify the implementation of the Agreement on a Cease-fire and Separation of Forces (see 14 May). UN; Russia; Abkhazia/Georgia
- 22-23 July At the ASEAN Ministerial Meeting, held in Bangkok, Viet Nam is invited to become a member of ASEAN in 1995. ASEAN
- 25 July The ASEAN Regional Forum (ARF), established at the ASEAN Post Ministerial Conference in Singapore on 23-24 July 1993, holds its first meeting, in Bangkok. ASEAN; ARF
- 25 July Jordanian King Hussein and Israeli Prime Minister Rabin, with President Clinton as witness, sign, in Washington, a Declaration pledging to end hostilities and to settle conflicts between the two states by peaceful means in the future. (See also 26 Oct.) Jordan/Israel

- 27 July The defence ministers of Armenia and Azerbaijan, together with the commander of the Nagorno-Karabakh Army, sign an agreement formalizing a cease-fire that has been in effect for about two months. Nagorno-Karabakh; Armenia/Azerbaijan
- 31 July The UN Security Council adopts Resolution 940 by a vote of 12 to 0 (Brazil and China abstain from voting, Rwanda does not participate), authorizing the member states to form a multilateral force under a unified command and the use of 'all necessary means' to restore the Aristide Government in power in Haiti. (On 21 July the US Administration had asked for UN approval for an invasion of Haiti.) UN; Haiti; USA
- 31 Aug. The last post-Soviet troops leave eastern Germany. Germany/Russia
- 31 Aug. The Irish Republican Army (IRA) announces a cease-fire as of midnight. UK/IRA
- 31 Aug. The withdrawal of Soviet/Russian troops from Estonia and Latvia is completed. Estonia/Russia; Latvia/Russia
- 1 Sep. The UN Secretary-General releases a report on government submissions to the UN Register of Conventional Arms for calendar year 1993, the second year of implementation of the UN Register. (The first report was released on 13 Oct. 1993.) UN; Conventional arms
- 3 Sep. President Yeltsin and Chinese President Jiang, meeting in Moscow, issue a joint statement announcing that measures have been taken to ensure the non-targeting of the two states' strategic weapons, promising not to use force or to be the first to use nuclear weapons against each other. China/Russia; Nuclear weapons; No-first-use
- 5-7 Sep. The first combined international peacekeeping training exercise with US and Russian troops is held in Totskoye, Russia. Peacekeeping; USA; Russia
- 8 Sep. The last US, British and French troops leave Berlin. USA; UK; France/Germany
- 12-16 Sep. The first training exercise under NATO's Partnership for Peace (PFP) programme is held in Poland. Troops from 13 NATO and PFP states take part in the manoeuvre. Two more PFP-NATO exercises are held in 1994: on 28 Sep.-7 Oct. (in the North Sea) and on 21-28 Oct. (in the Netherlands). PFP
- 18 Sep. A cease-fire agreement is signed, in Teheran, by the Tajik Government and the opposition forces. Tajikistan
- 19-30 Sep. The Special Conference of the States Parties to the 1972 Biological Weapons Convention is held, in Geneva, to examine the report of the *Ad Hoc* Group of Governmental Experts on BW verification measures. The Conference decides to establish a group with the task of considering measures to strengthen the Convention. BWC

- 22 Sep. The US Department of Defense and the Joint Chiefs of Staff issue the Nuclear Posture Review (NPR, their first such review since 1979), establishing the missions and levels for US nuclear forces through 2003. According to the NPR, US nuclear forces will in the future be smaller, more secure and maintained at lower alert rates. USA; Nuclear weapons
- 23 Sep. The UN Security Council adopts Resolution 943 by a vote of 11 to 2 (Djibouti and Pakistan vote against, Nigeria and Rwanda abstain from voting), lifting, for an initial period of 100 days, the sanctions concerning civil flights imposed on Yugoslavia (Serbia and Montenegro) in 1991, 1992 and 1993, in return for its acceptance of the international peace plan for Bosnia and Herzegovina (see 6 July). UN/ Yugoslavia; Bosnia
- 26 Sep. In his address to the UN General Assembly, President Clinton calls for a UN global control regime eventually to eliminate all the world's land-mines. UN; USA; Land-mines
- 26 Sep. In his first address to the UN General Assembly, President Yeltsin proposes a new treaty on nuclear security and strategic stability among the five nuclear weapon states. He calls for further elimination of nuclear weapons, more precise security guarantees for non-nuclear weapon states and a new international agreement to curb the production of fissile material for nuclear weapons. UN; Russia; Nuclear weapons; Fissile material
- 28 Sep. In a joint statement, issued in Washington, President Clinton and President Yeltsin agree to accelerate the timetable of the START II Treaty so that the two parties begin dismantling their nuclear weapons as soon as the agreement is ratified instead of taking the nine years allowed. Further reductions and limitations on the remaining nuclear forces are also foreseen. The two leaders agree to exchange on a regular basis detailed information on aggregate stockpiles of nuclear warheads and fissionable materials. USA; Russia; START; Fissile material
- 28 Sep. In his speech to the UN General Assembly, the Chinese Vice Premier and Foreign Minister proposes that all nuclear weapon states should pledge not to be the first to use nuclear weapons and should immediately start negotiations on a treaty on no-first-use of nuclear weapons against each other. They should also undertake not to use or threaten to use nuclear weapons against any non-nuclear weapon state. UN; China; No-first-use; Nuclear weapons
- 28–30 Sep. The NATO Defence Ministers hold an informal meeting in Seville, Spain. For the first time since France withdrew from the NATO integrated command in 1966, the French Foreign Minister takes part in a NATO meeting. NATO; France
- 29 Sep. The UN Security Council adopts Resolution 944 by a vote of 13 to 0 (Brazil and Russia abstain from voting), ending the sanctions against Haiti immediately after the return of President Aristide. UN; Haiti

- 4 Oct. China officially agrees to observe the MTCR Guidelines, and the USA agrees to lift the sanctions (imposed on China in 1993) on certain high-technology items. China/USA; MTCR
- 7 Oct. China conducts a nuclear test, its second in 1994 (see 10 June), at its test site in the Lop Nor area. China; Nuclear test
- 10 Oct.–2 Dec. The Fifth CSCE Review Conference is held in Budapest. The Conference prepares decisions for the CSCE Summit Meeting on 5–6 Dec. CSCE
- 13 Oct. The Protestant groups in Northern Ireland announce a cease-fire as of midnight. (See also 31 Aug.) UK/Northern Ireland
- 21 Oct. North Korea and the USA sign, in Geneva, an agreement according to which North Korea pledges to close one nuclear reactor and stop building two reactors which could produce weapon-grade plutonium. It also promises to abide by the Non-Proliferation Treaty (NPT) and accept full-scope IAEA safeguards agreements. The USA will finance—together with among others Japan and South Korea—the building of two light water reactors in North Korea. Special IAEA inspections of the two nuclear reactors (suspected of producing weapon-grade plutonium) will be conducted before the essential parts of the new reactors arrive. The USA and North Korea agree to establish low-level diplomatic relations. N. Korea/USA; NPT; IAEA
- 21 Oct. Russia and Moldova sign an agreement on the withdrawal of former Soviet troops from Moldova over a three-year period. The agreement will enter into force after the fulfilment of 'necessary intra-state procedures'. Russia/Moldova
- 26 Oct. The Prime Minister of Israel and the King of Jordan sign a peace agreement (see 25 July) at Wadi Araba (on the Jordanian–Israeli border), witnessed by President Clinton. Israel/Jordan
- 27–29 Oct. For the first time free elections are held in Mozambique, under UN supervision. President Chissano wins the presidential election with 53.7% of the votes. Frelimo receives 44.3% of the votes in the legislative election, but obtains an absolute majority in the Parliament. Mozambique
- 4 Nov. The UN Security Council unanimously adopts Resolution 954, designating 31 Mar. 1995 as the termination date for UNOSOM II (UN Operation in Somalia) and affirming the general and complete embargo on all deliveries of weapons and military equipment to Somalia. UN; Somalia
- 11 Nov. The USA declares that as from 12 Nov. it will stop monitoring the maritime embargo on weapon deliveries to Bosnia and Herzegovina and Croatia. However, the USA will not supply weapons and will continue to abide by the UN arms embargo against Yugoslavia (Serbia and Montenegro). USA; Bosnia; Croatia; Yugoslavia; UN

- 13 Nov.* The Deputy Prime Minister of Iraq transmits a letter to the UN Security Council enclosing a Revolution Command Council Decision of 10 Nov., signed by President Saddam Hussein, and a Declaration of the Iraqi National Assembly (also of 10 Nov.), confirming Iraq's recognition of the sovereignty, territorial integrity and political independence of Kuwait, and of the international boundary between Iraq and Kuwait as demarcated by the UN Iraq-Kuwait Boundary Demarcation Commission, and also confirming Iraq's respect for the inviolability of that boundary, in accordance with UN Security Council Resolution 833 (1993). (On 14 Nov. the UN Security Council decides to continue the sanctions against Iraq.) Iraq/Kuwait; UN
- 14 Nov.* The ministerial meeting of the WEU Council, held in Noordwijk, the Netherlands, adopts a Declaration, confirming the WEU's role as the EU defence component and the European pillar of NATO. The ministers' aim is to develop the present WEU policy document into a comprehensive common European defence policy statement in the perspective of the EU Intergovernmental Conference in 1996. WEU; EU
- 16 Nov.* The United Nations Convention on the Law of the Sea, opened for signature in 1982, enters into force, one year after the 60th ratification, according to Article 308 of the Convention. UNCLOS
- 17 Nov.* At the end of the second phase of the CFE implementation period, nearly all the parties have fulfilled the 60% reductions stipulated as the target in the Treaty for this period. CFE
- 19 Nov.* The UN Security Council unanimously adopts Resolution 958, deciding that the authorization given to member states in UN Security Council Resolution 836 (1993) to take 'all necessary measures' through the use of air power in and around the safe areas in Bosnia to support UNPROFOR shall also apply to such measures taken in Croatia. UN; Croatia
- 20 Nov.* A Protocol, brokered by the UN, is signed by the Government of Angola and UNITA in Lusaka. A cease-fire is proclaimed as from 22 Nov. UN; Angola
- 28 Nov.* The Vienna Document 1994 of the Negotiations on Confidence- and Security-Building Measures, amending and expanding the 1990 and 1992 Vienna Documents, is adopted in Vienna by the Special Committee of the Forum for Security Co-operation of the CSCE. CSBMs; CSCE; FSC
- 29 Nov.* President Yeltsin issues an ultimatum demanding the disarmament of 'illegal armed formations' in Chechnya. Intensified fighting has been going on in Chechnya since early September. (Chechnya declared itself an independent state in 1991.) Russia/Chechnya

- 1 Dec.* The ministerial meeting of the North Atlantic Council, held in Brussels, expresses full support for the development of a European defence and security identity and for the WEU and the development of the Combined Joint Task Forces concept. NATO; WEU
- 5 Dec.* At the CSCE Summit Meeting in Budapest, Ukraine deposits its NPT accession documents with the three depositary governments (Russia, the UK and the USA). In a separate memorandum Russia, the UK and the USA pledge that none of their nuclear weapons will ever be used against Ukraine except in self-defence and that they will seek UN Security Council action to provide assistance to Ukraine if Ukraine should become a victim of a nuclear-weapon attack (see *14 Jan.*). Belarus and Kazakhstan also receive security guarantees. The 1991 Treaty on the Reduction and Limitation of Strategic Offensive Arms (START I Treaty) enters into force as the leaders of the five parties (the USA, Russia, Belarus, Kazakhstan and Ukraine) sign a protocol for the exchange of instruments of ratification of the Treaty. CSCE; Ukraine; NPT; START
- 5-6 Dec.* The CSCE heads of state and government, meeting in Budapest, adopt the Budapest Summit Declaration and the Budapest Decisions, including provisions for strengthening the CSCE and principles governing non-proliferation, endorsing universal adherence to the NPT and its indefinite and unconditional extension. A Code of Conduct on Politico-Military Aspects of Security that sets forth principles guiding the role of armed forces in democratic societies is established. The meeting fails to reach consensus on a common statement on the situation in the former Yugoslavia. It is decided that as from 1 Jan. 1995 the name of the Conference will be the Organization for Security and Co-operation in Europe (OSCE). CSCE; NPT
- 9 Dec.* President Yeltsin authorizes the use of force against 'illegal' armed groups in Chechnya. On 11 Dec. Russian troops officially launch an attack; air raids start on 19 Dec. Russia/Chechnya
- 9-10 Dec.* The EU Council, meeting in Essen, Germany, states that the tasks of the Union's foreign policy are to ensure the lasting peace and stability of Europe and neighbouring regions by preparing for the future accession of the associated countries of Central and Eastern Europe and developing in parallel the special relationship of the EU to its other neighbours, particularly the Mediterranean countries. EU
- 14 Dec.* The USA announces that it will not send nuclear-armed ships to New Zealand's ports. (The USA suspended its security obligations to New Zealand under the ANZUS Treaty in 1986, owing to New Zealand's refusal to allow nuclear-armed naval units into its ports.) USA/New Zealand

- 15-16 Dec.* The UN General Assembly adopts over 40 resolutions on disarmament, i.a. supporting a moratorium on the export of anti-personnel land-mines (49/75D), requesting an advisory opinion from the International Court of Justice on the legality of the threat or use of nuclear weapons (49/75K), supporting the finalization of a treaty on a Nuclear Weapon-Free Zone in Africa (49/138) and deciding to convene, in 1997 if possible, the fourth General Assembly special session devoted to disarmament (49/75I). UN; Land-mines; ICJ; Nuclear weapons; NWFZ
- 19 Dec.* The EU Council of Ministers approves the text of a Regulation establishing a regime for the control of export of goods which may have military as well as civilian uses. EU; Export regulations
- 21 Dec.* After five years of internal war, a peace agreement is signed by the warring parties in Liberia. Liberia
- 28 Dec.* A spokesman of the Russian Ministry for Foreign Affairs confirms that Russia is calling for immediate revision of the 1990 CFE Treaty since its flank zone provisions are seen by Russia as discriminatory. Russia, CFE
- 31 Dec.* A four-month agreement on a cease-fire in Bosnia and Herzegovina is signed in Sarajevo by the Bosnian Federation and the Bosnian Serbs. Bosnia

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ABSTRACTS

ROTFELD, A. D., 'Introduction: the international system in transition', in *SIPRI Yearbook 1995*, pp. 1-10.

The international system is in a profound state of transition. The United Nations is seeking to master a new agenda as the demands on its assets increase dramatically both quantitatively and qualitatively. New strategic features of the post-cold war system are beginning to emerge in the face of increased instability and volatility. The security structures and institutions called into being in the cold war period are not fully equal to the task of preventing the new type of conflicts. In Europe, NATO continues its process of adaptation and change. China, Japan and Russia must perform new roles in the new international order. New security principles are also expressed which point to a long-term process of at least partially 'demilitarizing' security policies.

URQUHART, B., 'Introduction to Part I: towards a new United Nations', in *SIPRI Yearbook 1995*, pp. 13-20.

The role of the UN in the maintenance of international peace and security has expanded in the wake of the cold war, specifically with respect to peacekeeping and conflict prevention operations. Consequently, there is a recognized need for the establishment of a permanent UN volunteer force, as well as for reforms to improve the effectiveness of the UN organization. The success of these reforms depends in large part on the attitudes of the governments of individual member states.

SOLLENBERG, M. and WALLENSTEEN, P., 'Major armed conflicts', in *SIPRI Yearbook 1995*, pp. 21-25.

In 1994, 31 major armed conflicts were waged in 27 locations around the world, compared with 33 conflicts and 28 conflict locations in 1993 (revised data for 1993). No 'classic' interstate war was waged in 1994. Two new major armed conflicts appeared in 1994: the war in Yemen and that between the Myanmar Government and the Mong Tai Army. Removed from the list for 1993 were two conflicts in South Africa, the conflict in Croatia, one in Punjab in India and one in Kurdistan in Iraq. The distribution of conflict locations across regions is more even than in 1993. Peace initiatives in 1994 ended a major armed conflict in South Africa and resulted in improved relations between the PLO and Israel. Cease-fire agreements or other arrangements reduced the level of fighting in a number of cases.

FINDLAY, T., 'Armed conflict prevention, management and resolution', in *SIPRI Yearbook 1995*, pp. 37-82.

Some of the longest running and most intractable armed conflicts were resolved or brought closer to resolution in 1994. At the same time inadequacies in the international community's capacity for preventing and containing armed conflict were revealed by events in Chechnya, Rwanda and Yemen. The UN continued its reforms while the Security Council was less inclined to intervene robustly in peacekeeping or peace enforcement operations. The debate about the use of force was sharpened by the end of the ill-fated Somali mission and continued failure to bring Bosnia closer to peace. While some progress was made in focusing African states on the need for a regional conflict prevention, management and resolution strategy, other regions, apart from Europe, showed little inclination to help relieve the UN of the heavy burden of tackling all of the world's crises simultaneously.

KARHILO, J., 'Case study on peacekeeping: Rwanda', in *SIPRI Yearbook 1995*, pp. 100–116.

The United Nations was slow to respond to the politically motivated ethnic violence that engulfed Rwanda in April 1994. Constrained by its limited mandate and resources, the UN Assistance Mission to Rwanda (UNAMIR) was unable to halt the massacres that resulted in the deaths of up to a million people, mostly Tutsi, in what amounts to a pre-planned campaign of genocide. The UN capability for rapid reaction was hampered by the difficulties it faced in raising additional troops and equipment either bilaterally or through the stand-by arrangements. The world body was further challenged by the unprecedented exodus of refugees to neighbouring countries, where the armed activity of the former government forces and militia continued to destabilize the region.

OHLSON, T., 'South Africa: from apartheid to multi-party democracy', in *SIPRI Yearbook 1995*, pp. 117–45.

A multi-party government dominated by the African National Congress (ANC) came to power in 1994 in South Africa after the country's first ever elections based on a universal franchise. The main protagonists, the ANC and the National Party, were by the late 1980s forced by objective circumstances into a stalemate which made implementation of unilateral conflict resolution strategies impossible. The transition was a drawn out stop-and-go process which mixed confrontation and violence with compromise and negotiation as the main parties gradually abandoned old goals and moved towards positions based on tolerance, pragmatism and problem-solving. The biggest challenge facing South Africa's young democracy and fragile culture of peaceful conflict resolution is the necessity to rapidly improve life for the majority without upsetting the weak social contract that underpins the new post-apartheid polity.

BARANYI, S., 'Central America: a firm and lasting peace?', in *SIPRI Yearbook 1995*, pp. 147–70.

Central America has experienced major changes in the 1990s. Wars in El Salvador and Nicaragua were terminated, and United Nations-sponsored peace negotiations in Guatemala were begun. Despite this progress, enduring institutional weaknesses, human rights violations, and social and economic inequities are impeding permanent resolution of the conflicts in El Salvador and Nicaragua, and the obstacles to peace in Guatemala appear even more daunting. The global, regional and national factors which facilitated earlier breakthroughs have not been sufficient to resolve these conflicts. Still, those with a stake in conflict resolution can work together to safeguard what has been accomplished and thereby gradually move towards a firm and lasting peace in Central America.

KEMP, G. and PRESSMAN, J., 'The Middle East: continuation of the peace process', in *SIPRI Yearbook 1995*, pp. 171–96.

By the end of 1994, the Arab–Israeli peace process had reached a critical threshold. Despite significant achievements, the future of the peace process was threatened by terrorism, communal violence and stalled negotiations. On the positive side, Israel and Jordan signed a peace treaty, and Israeli and Palestinian negotiators produced several new agreements to implement the Declaration of Principles of 13 September 1993 and begin the programme of Palestinian self-rule. On the regional level, multilateral talks began to build a foundation for regional cooperation on a number of subjects, including economic, military and environmental issues. However, bilateral talks between Israel and Syria did not produce any major breakthroughs.

ZUCCONI, M., 'The former Yugoslavia: lessons of war and diplomacy', in *SIPRI Yearbook 1995*, pp. 211-29.

As 1994 began, the ultimatum establishing a weapons exclusion zone around Sarajevo seemed to indicate a heightened involvement and resolve, above all on the part of the Western countries, to find a way out of the political and diplomatic impasse in Bosnia and Herzegovina. Despite their displaying a heightened willingness to intervene during the second half of the year, a bitter dispute continued between the UN and NATO and among the NATO members about when and how to apply force. For a time, this dispute appeared to make the withdrawal of the UN peacekeeping forces from Bosnia a foregone conclusion. The failure of the outside actors to agree on a common line and the repeated failure of diplomatic initiatives had an increasingly negative impact on the functioning and legitimacy of the multilateral organizations channelling the international response to the conflict in the former Yugoslavia, and the year ended with worrying signs of a possible broadening of the conflict.

BARANOVSKY, V., 'Russia and its neighbourhood: conflict developments and settlement efforts', in *SIPRI Yearbook 1995*, pp. 231-64.

In 1994, alongside the continuing conflict-generating trends in the newly independent states of the former Soviet Union (FSU), there were modest signs of stabilization and successful conflict management. The hostilities in some areas stopped; negotiations were modestly successful; and the relations between the new states were less troubled than in the first years of independence. However, the risk of serious domestic crises within and tensions between the former Soviet republics remains, the situation in and the policies of Russia being the most important factors at play. The war in Chechnya was the most dramatic culmination of the crises in 1994, significantly spoiling the record of the year. The domestic trends in Russia and their impact on Russian foreign and security policy, the course of the war in Chechnya and the search for integration by the members of the Commonwealth of Independent States (CIS) are examined.

ROTFELD, A. D., 'Europe: the multilateral security process', *SIPRI Yearbook 1995*, pp. 265-301.

As part of the process initiated by the collapse of the bipolar system and the breakup of multinational totalitarian states in Europe, national security interests have been reasserted, overriding international community or alliance interests. Local and regional conflicts have created a major source of instability. Expanding and deepening European integration is accompanied by centrifugal tendencies and the growth of nationalism in the East, competition among EU partners and a weakening of links between Western Europe and the USA. The political debate and decisions in 1994 on security in Europe constituted a new stage in the European security process. The Western states face the dilemma of how to expand NATO and the EU eastward without creating new divisions in Europe. A serious effort was made to harmonize security policy within the framework of NATO and NACC, the PFP, the EU/WEU and the CSCE. The priority in shaping an efficient multilateral security system is inclusion of the reforming CEE states into the mutually reinforcing Western security institutions.

ALBRIGHT, D., ARKIN, W. M., BERKHOUT, F., NORRIS, R. S. and WALKER, W., 'Inventories of fissile materials and nuclear weapons', in *SIPRI Yearbook 1995*, pp. 317-36.

While 1994 may mark a turning-point in the development of nuclear warheads and weapon systems, nuclear disarmament carries its own risks. Weapons must be dismantled, components stored and fissile materials disposed of. Reductions under way do not necessarily reduce the threat of proliferation nor do they amount to complete nuclear disarmament. Civil nuclear programmes also give rise to increasing quantities of plutonium which could fall into the wrong hands. The central estimates of the world inventories of plutonium and highly enriched uranium (HEU) at the end of 1993, rounded to two significant figures, are: for plutonium, 1100 tonnes; and for HEU, 1700 tonnes. At the beginning of 1995, there were at least 20 000 nuclear warheads in the operational inventories of the NPT nuclear weapon states.

STOCK, T. and DE GEER, A., 'Chemical and biological weapons: developments and destruction', in *SIPRI Yearbook 1995*, pp. 337-57.

In 1994 attention in the chemical and biological warfare field focused primarily on the ratification of the 1993 Chemical Weapons Convention (CWC). However, the proliferation of chemical weapon (CW)-related material continued to be of serious concern. The number of countries accused of being involved in proliferation activities was of the same magnitude as in past years. Concern about the cost and pace of CW destruction in both Russia and the USA is increasing. Progress was made in implementing the US-Russian bilateral agreement on CW destruction. Russia still does not have an approved and funded CW destruction programme. The cause of the so-called 'Gulf War Syndrome' remained unclear at the end of 1994. The issue of old CW dumped at sea (especially in the Baltic Sea) and the possible consequences for the environment continued to be debated.

ARNETT, E., 'Military technology: the case of China', in *SIPRI Yearbook 1995*, pp. 359-86.

China's military technology base showed few signs of progress on its major design projects in 1994. It remains weak and has been further weakened by the process of reform, despite some countervailing new strengths. Weaknesses include the lack of resources and prestige, continued reliance on the Soviet management model, loss of expertise to and lack of cooperation with the civilian sector, and the first signs of an emergent difference of objectives between COSTIND and the armed services. The level of foreign military cooperation still appears to be low, and the ability to exploit imported civilian technology remains limited.

GEORGE, P., BEDESKI, R., BERGSTRAND, B.-G., COOPER, J. and LOOSE-WEINTRAUB, E., 'World military expenditure', in *SIPRI Yearbook 1995*, pp. 389-433.

Declining military spending levels in the Western industrialized countries continue to drive down global military expenditure. However, military expenditure is increasing, or remains at very high levels, in regions such as the Middle East and South Asia. The lack of reliable data on defence budgets, exchange rates and inflation figures for the CIS countries and China makes it difficult to determine an aggregate figure for global defence spending. To alleviate this situation, SIPRI recommends that all countries should report their military expenditure in an open and transparent manner through the UN system. Because there appears to be a trend towards an increase in military expenditure as economies grow in some developing countries, the chapter presents case studies of South America, South Asia and South East Asia in order to identify patterns of military expenditure in these important regions.

SKÖNS, E. and GONCHAR, K., 'Arms production', in *SIPRI Yearbook 1995*, pp. 455-83.

Stagnation continues in the sale and production of military equipment in the OECD and developing countries. The decline in arms sales between 1992 and 1993 was 6 per cent for the 100 major arms-producing companies and probably more for the arms industry as a whole in these countries. The drop in Russian arms production has been significant—about two-thirds between the first half of 1991 and the first half of 1994—with the sharpest drops in high-technology industries. In the OECD countries many arms-producing companies are characterized by high market values and profits in spite of stagnating arms sales. This has been achieved through divestitures, rationalizations, personnel cuts and other forms of cost reduction. In Russia the changes in the defence complex have been rather chaotic and reflect more its adjustment to the declining economy and diminishing state power than deliberate company strategies or government policy.

ANTHONY, I., WEZEMAN, P. D. and WEZEMAN, S. T., 'The trade in major conventional weapons', in *SIPRI Yearbook 1995*, pp. 491–509.

The SIPRI trend-measuring device was designed to permit measurement of changes in the total flow of major conventional weapons and to illustrate its geographical pattern. The global trend-indicator value of foreign deliveries in 1994 is estimated at \$21 725 million in constant (1990) US dollars. The global volume of deliveries of major conventional weapons appears to have been stable during 1991–94 after a period of rapid decline in 1987–91. While its volume of deliveries declined for the second successive year, the USA still accounted for 55 per cent of total deliveries. The volume of deliveries recorded for Russia was sharply reduced from the 1993 level. Asia, Europe and the Middle East remain the most important recipient regions. The European share has increased despite the significant reduction in major weapon acquisition by members of the former WTO. South-eastern Europe—notably Greece and Turkey—has seen significant deliveries of major conventional weapons in 1990–94.

LAURANCE, E. J. and WULF, H., 'The 1994 review of the UN Register of Conventional Arms', in *SIPRI Yearbook 1995*, pp. 556–68.

The first review of the UN Register of Conventional Arms, established in 1991, was undertaken by the UN Group of Experts in 1994. The review focused on the participation in and the precision of the reporting by member states. The level of participation, as measured by the number of member states filing information, decreased for the year 1993 as compared to 1992 by 3, from 91 to 88, about half of the UN membership. Governments of 39 states reported arms imports for 1992, compared to 30 for 1993. The total number of transfers reported was lower in 1993, although the number of weapon system items reported increased. Exporters reported 149 transfers in 1993 compared to 157 in 1992. Importers reported 86 imports in 1993 compared to 120 in 1992.

SINGH, R. P. and WEZEMAN, P. D., 'South Africa's arms production and exports', in *SIPRI Yearbook 1995*, pp. 569–82.

The twin challenges facing defence policy makers in South Africa are the integration of guerrilla and homeland armies into a revamped South African National Defence Force (SANDF) and managing the competing budgetary demands of the defence and national socio-economic priorities. South Africa secretly built up a substantial arms production base over the past 30 years which after the lifting of the UN arms embargoes in 1994 can operate in the open market and became more transparent. However, a new debate has opened on the future of the arms industry and exports. It seems likely that the South African arms industry will survive in a reorganized and down-sized form with arms exports, necessary to keep the industry going, continuing in a more responsible and controlled way.

SMITH, C., 'The impact of light weapons on security: a case study of South Asia', in *SIPRI Yearbook 1995*, pp. 583–93.

India and Pakistan continue to experience sub-national crises and conflicts, communal violence, and varying degrees of threat to internal security and national unity. These problems are exacerbated by an increased supply of light weapons—crew-portable land-based armaments—both from regional manufacturers and those originating from the 1979–88 Soviet intervention in Afghanistan. Several countries in South Asia produce light weapons, of which India and Pakistan have the most developed capacities. Modern light weapons are introduced in increasing number and sophistication because of their capacity to alter the balance of power between the state and sub-state groups, and they are used to raise the level of violence in a conflict.

ANTHONY, I., DE GEER, A., KOKOSKI, R. and STOCK, T., 'Multilateral weapon-related export control measures', in *SIPRI Yearbook 1995*, pp. 597–633.

Participation in multilateral export control is a highly concentrated activity. In 1994 only 33 states participated actively in multilateral weapon-related export control regimes. Each regime examined has or had a different focus. In 1994 the progressive harmonization in the membership and procedures of the different regimes continued, but because of differences in major suppliers' interests no agreement was reached on conventional arms transfers. There is consensus among 30–35 states that they have a mutual self-interest in preventing proliferation of nuclear, biological and chemical weapons. Regime members also focused their attention on attracting new members. To this end, the regimes no longer emphasize technology denial but seek to establish rules for trade and technology transfer.

GOODBY, J. E., KILE, S. and MÜLLER, H., 'Nuclear arms control', in *SIPRI Yearbook 1995*, pp. 635–71.

Several important developments advanced the nuclear arms control and non-proliferation agenda in 1994. Ukraine acceded to the NPT as a non-nuclear weapon state, which facilitated the subsequent entry into force of START I and concluded one of the key pieces of 'unfinished business' left over from the cold war, paving the way for further reductions in Russian and US strategic nuclear arsenals. The resolution of the diplomatic impasse over START I was facilitated by the intensified bilateral denuclearization cooperation between the USA and Belarus, Kazakhstan, Russia and Ukraine, as US-funded Cooperative Threat Reduction programmes shifted decisively to the implementation phase. International efforts to halt the spread of nuclear weapons continued to occupy a prominent place on the arms control agenda, as 7 states acceded to the NPT as non-nuclear weapon states in the run-up to the 1995 NPT Review and Extension Conference. Regional non-proliferation efforts, particularly on the Korean peninsula, made promising headway as well.

KOKOSKI, R., 'Nuclear weapon destruction', in *SIPRI Yearbook 1995*, pp. 672–80.

Dismantlement of nuclear weapons is creating a substantial, rapidly growing surplus of weapon-usable fissile material. It is important to make the elimination of these weapons as irreversible as possible to avoid the proliferation dangers associated with the fissile material removed. The real difficulty in destroying nuclear weapons lies in eliminating fissile material, the acquisition of which is the most difficult step in weapon construction. HEU can be dealt with by blending it down for use as reactor fuel, but there is no such procedure for plutonium and effectively dealing with the proliferation danger inherent in plutonium stockpiles requires substantially more effort.

ARBATOV, A., 'The ABM Treaty and theatre ballistic missile defence', in *SIPRI Yearbook 1995*, pp. 681–96.

In 1994 the landmark 1972 Anti-Ballistic Missile (ABM) Treaty again became the focal point of controversy as a result of US proposals to permit the testing and deployment of new advanced-capability theatre missile defence (TMD) systems. Critics have argued that these systems would have significant capabilities to intercept strategic ballistic missiles and that allowing deployment would undermine the ABM Treaty. Discussions between the USA and Russia at the Standing Consultative Commission (SCC) in Geneva seeking to establish a demarcation between theatre and strategic missile defence systems based upon demonstrated technical performance parameters had stalled by the end of the year. The Clinton Administration announced in early 1995 that the USA would proceed with the flight-testing of a sophisticated new long-range TMD system.

ARNETT, E., 'The comprehensive nuclear test ban', in *SIPRI Yearbook 1995*, pp. 697-718.

A draft comprehensive nuclear test ban (CTB) treaty emerged from the Conference on Disarmament (CD) in 1994. There is consensus that the verification system should include a network of seismic and atmospheric monitoring stations. Support for including hydro-acoustic and infrasound monitoring rose during the year. Negotiators also made a great deal of progress on administrative matters. The quiet debate over hydronuclear experiments appears further from resolution than others. Despite the resurrected argument that the CTB will not prevent nuclear modernization, planned or foreseen British, Chinese, French, Russian and US programmes would be complicated or disrupted by the treaty.

FERM, R., 'Nuclear explosions, 1945-94', in *SIPRI Yearbook 1995*, pp. 719-24.

In 1994 France, Russia, the UK and the USA continued to abide by their unilateral moratoria on nuclear weapon tests. China conducted two nuclear tests in 1994, the only tests that were conducted during the year. In June 1994 the US Department of Energy (DOE) in a continuation of the Clinton Administration's policy of increased openness regarding nuclear weapon test matters disclosed that on 63 occasions the USA had detonated more than one nuclear device simultaneously. However, the DOE noted that none of these tests was conducted with the UK. Tables of registered nuclear explosions in 1994 and estimates of nuclear explosions from 1945 to 1994 are included in this appendix.

STOCK, T., GEISSLER, E. and TREVAN, T., 'Chemical and biological arms control', in *SIPRI Yearbook 1995*, pp. 725-60.

In 1994 steady progress was made towards implementation of the Chemical Weapons Convention (CWC), but the pace was slower than expected. Only 19 states had ratified the CWC by 31 December 1994. The Preparatory Commission for the CWC continued work on procedures related to declarations and verification. Establishing the legal and organizational framework for ratification and national implementation has proven to be more time consuming and expensive than expected. In 1995 significantly more states are expected to ratify the CWC. The parties to the Biological Weapons Convention (BWC) are increasingly interested in strengthening it by legally binding measures, and 80 parties to the BWC participated in a Special Conference in September 1994 to evaluate a report submitted by the VEREX group. In 1994 the United Nations Special Commission on Iraq (UNSCOM) continued its activities in Iraq to fulfil its mandated obligations, and the destruction of all CW and chemical agents was completed. UNSCOM then shifted its focus to installing the compliance-monitoring system, which will be developed and evaluated in 1995.

LACHOWSKI, Z., 'Conventional arms control and security dialogue in Europe', in *SIPRI Yearbook 1995*, pp. 761-90.

In 1994 the second phase of reducing CFE Treaty-limited equipment in the Atlantic-to-the-Urals zone and the massive Russian troop pull-out from the Central European and Baltic states were completed. Reductions of military personnel under the CFE-1A Agreement were under way. However, Russian assertiveness in the former Soviet republics and beyond increased and the armed conflict in Chechnya contravened the spirit of the CSCE code of conduct, infringed CSBM provisions and threatened the CFE Treaty regime. The Budapest CSCE Review Conference and Summit Meeting took important decisions with respect to security cooperation, but failure to agree on key issues illustrated the complexity of the problems addressed by the Forum on Security Co-operation and the apparent impotence of the international community in the face of local crises and conflicts.

BAILER, S., 'The Treaty on Open Skies', in *SIPRI Yearbook 1995*, pp. 821-24.

There are 27 signatories to the 1992 Open Skies Treaty—the 16 NATO member states, the Visegrad states (the Czech Republic, Hungary, Poland and Slovakia), Bulgaria, Romania and 5 former Soviet republics—Belarus, Georgia, Kyrgyzstan, Russia and Ukraine. In 1994, 7 states ratified and deposited their instruments of ratification with the depositary states bringing the number of ratifications to 19 (including the Netherlands, which has yet to deposit its instrument of ratification), and the Treaty stands a good chance of entering into force in 1995. Demonstration and trial overflights were conducted for training purposes in 1994, partly over the signatories' own territories and partly over the territories of other signatories.

GOLDBLAT, J., 'Inhumane conventional weapons: efforts to strengthen the constraints', in *SIPRI Yearbook 1995*, pp. 825-35.

The 1981 Inhumane Weapons Convention restricts the use of conventional weapons which are particularly cruel and directly affect the civilian population. Its provisions, especially those regarding mines, have proved ineffective. Mines—mostly anti-personnel—planted in many countries kill and maim thousands of non-combatants and render whole regions uninhabitable. To reinforce the constraints, a Review Conference will be held in the autumn of 1995. The experts preparing the Conference recognized the need to ban the use of anti-personnel mines which are not equipped with detectable elements and self-destructing mechanisms. However, the new restrictions would not apply to mines placed within marked and guarded minefields. Moreover, any party would be exempt from compliance in situations where military action makes it impossible to comply. This escape clause could bring all constraints to nothing. Nor is it likely that all transfers of anti-personnel mines will be banned. The expected meagre results of the forthcoming Review Conference could be partly offset by the prohibition on the use of laser weapons to blind persons.

Errata

SIPRI Yearbook 1994

- SIPRI Governing Board, page ii:* 'Dr Ryukichi Imal (Japan)', should read: 'Dr Ryukichi Imai (Japan)'.
- Contents, page vii:* The title of chapter 5 should read '5. North-East Asia and multilateral security institutions'.
- Contents, page xiv:* For Annexe A, II. Status of the implementation of the major multilateral arms control agreements, 'as of 31 December 1993' should read 'as of 1 January 1994'.
- Preface, page xvi:* Paragraph 5, line 5 should read: '. . . seven chapters were contributed by prominent experts not at SIPRI . . .'.
- Acronyms, page xxi:* For SSD, it should read: Safe and Secure Dismantlement Talks.
- Chapter 1, page 21:* Section 'The Security Council', paragraph 3, in lines 1–2, 'the 20-member body' should read: 'the 15-member body'.
- Chapter 1, footnotes:* Page 42, note 159, the name should read 'Rikhye'; page 47, note 183, should read 'Alao (note 181), p. 431'; page 47, note 186, should read 'United Nations (note 182), p. 105'; page 49, note 197, should read 'Annan (note 195), p. 6'; page 49, note 201, name should read 'Hill, F'; page 49, note 201, should read 'and Greene (note 200), p. 156'; page 50, note 204, should read 'See Greene (note 200), p. 159'; page 50, note 208, should read 'See *New Times International* (note 207)'; page 51, note 209, should read 'Hill and Jewett (note 201)'.
- Chapter 5, page 159, lines 1–2 from the bottom:* 'Vice-President of the Republic and' should read: 'second in command of the Party and' (for Kim Jong Il).
- Chapter 6, page 176:* In the section 'Territorial issues', line 6 should read: 'returned to administration of the Russian Soviet Federal Socialist Republic (RSFSR) in 1944'.
- Chapter 6, page 176, note 28:* 'border territories annexed by the USSR in 1994' should read: 'border territories administered by the RSFSR since 1944'.
- Chapter 6, page 185:* In lines 1–2, 'one-sixteenth' should read '16 per cent'.
- Chapter 8, page 302, table 8.4:* Range for Mirage 2000N should read '2750' km.
- Chapter 12, page 437:* In the section 'Poland', paragraph 2, line 5, for 38.4 trillion zlotys, '(\$2.25 billion)' should read '(\$1.83 million)'.

*Chapter 12, table 12.16,
page 440:*

In footnote *b*, '138 558 billion lei' should read '138 558 million lei'. The rest of the footnote should read: 'however, this does not include an additional 20 million lei that was approved by the parliament in July 1992, of which 5 million lei was for O&M and 15 million lei for capital expenditure, . . . '.

*Chapter 15, page 610,
lines 24–25:*

Sentence should read 'In June, US–North Korean bilateral discussions started, and on 11 June . . . '.

Chronology 1993, page 804:

At 16 Nov., the entry for UNCLOS should not appear in this chronology; the United Nations Convention on the Law of the Sea entered into force on 16 Nov. 1994.

Abstracts, pages 815ff:

The titles of the Introduction, Chapter 5 and Appendix 13E should read as the actual titles.

*Index, pages 823 (under
'Australia') and at page 832:*

'Naura' should read: 'Nauru'.

Index, page 831:

'Maastricht Treaty (1992)' should read: 'Maastricht Treaty (1991)'.

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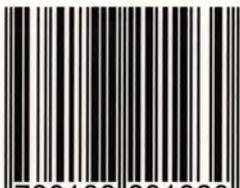
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