18. Supply-side measures

IAN ANTHONY

I. Introduction

During the 1990s multilateral discussions influenced and guided nations in the process of revising national export controls. These controls are intended to prevent the proliferation of nuclear, biological and chemical (NBC) weapons, as well as delivery systems for these weapons, and to minimize the risk that transfers of conventional weapons and related dual-use items will undermine security. Cooperation helped many states to improve their national export control systems and so made a significant contribution to enhancing the effectiveness of the wider non-proliferation regime.

In 2002 the states that participate in multilateral export control cooperation arrangements continued to discuss how export controls could most effectively achieve their objectives. Their discussions were lent impetus by the increased political salience of the issue of weapon non-proliferation. In addition, these states examined more closely how export controls can help prevent terrorists from gaining access to military capacities. Table 18.1 lists the members of the regimes discussed in this chapter and the Zangger Committee.[1]

Illustrating the impact of combating terrorism, the Australia Group (AG), previously the loosest of the multilateral arrangements, agreed a set of licensing guidelines including a 'catch-all' provision—the first time that a multilateral regime had taken such a step—and a commitment to control the intangible transfer of knowledge and technology. The strengthened guidelines adopted by the Nuclear Suppliers Group (NSG) in December 2002 are an example of adaptation in response to the threat of terrorism.

The year 2002 also saw the adoption of an International Code of Conduct Against Ballistic Missile Proliferation (ICOC). The ICOC, which originated as an initiative of the Missile Technology Control Regime (MTCR), is described and analysed in appendix 18A and reproduced in appendix 18B.

The enlargement of the European Union (EU) passed a key milestone in December 2002 when the European Council concluded accession negotiations with 10 countries.[2] Enlargement is a further step towards the objective of developing in Europe what Javier Solana, the Secretary General of the Council of the EU and High Representative for the Common Foreign and Security

[1] The Zangger Committee is an informal group of states that meet to discuss how to interpret their obligations under Article 3.2 of the 1968 Non-Proliferation Treaty (NPT). The committee is not part of the NPT. For additional information see URL <http://projects.sipri.se/expcon/NSG_documents.html>.

[2] The countries are Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia. On EU enlargement see Europa, the European Union On-line, 'Enlargement', URL <http://europa.eu.int/comm/enlargement/enlargement.htm>.

Table 18.1. Membership of multilateral weapon and technology export control regimes, as of 1 January 2003

State	Zangger Committee[a] 1974	NSG[b] 1978	Australia Group[a] 1985	MTCR[c] 1987	Wassenaar Arrangement 1996
Argentina	x	x	x	x	x
Australia	x	x	x	x	x
Austria	x	x	x	x	x
Belarus		x			
Belgium	x	x	x	x	x
Brazil		x		x	
Bulgaria	x	x	x		x
Canada	x	x	x	x	x
China	x				
Cyprus		x	x		
Czech Republic	x	x	x	x	x
Denmark	x	x	x	x	x
Finland	x	x	x	x	x
France	x	x	x	x	x
Germany	x	x	x	x	x
Greece	x	x	x	x	x
Hungary	x	x	x	x	x
Iceland			x	x	
Ireland	x	x	x	x	x
Italy	x	x	x	x	x
Japan	x	x	x	x	x
Kazakhstan		x[d]			
Korea, South	x	x	x	x	x
Latvia		x			
Luxembourg	x	x	x	x	x
Netherlands	x	x	x	x	x
New Zealand		x	x	x	x
Norway	x	x	x	x	x
Poland	x	x	x	x	x
Portugal	x	x	x	x	x
Romania	x	x	x		x
Russia	x	x		x	x
Slovakia	x	x	x		x
Slovenia	x	x			
South Africa	x	x		x	
Spain	x	x	x	x	x
Sweden	x	x	x	x	x
Switzerland	x	x	x	x	x
Turkey	x	x	x	x	x
UK	x	x	x	x	x
Ukraine	x	x		x	x
USA	x	x	x	x	x
Total	**35**	**40**	**33**	**33**	**33**

Note: The years in the column headings indicate when the export control regime was formally established, although the groups may have met on an informal basis before then.

[a] The European Commission participates in this regime.

[b] The Nuclear Suppliers Group. The European Commission is an observer in this regime.

[c] The Missile Technology Control Regime.

[d] Joined in 2002.

Policy (CFSP), has called 'a safe haven of democracy and peace' in which differences are resolved peacefully within agreed institutional structures.[3] A near-term challenge to the development of this safe haven is the presence of groups that may commit terrorist acts within the borders of the European Union, or exploit EU territory to prepare and finance such actions elsewhere.

Enlargement is an opportunity to extend security benefits both within Europe and its immediate neighbourhood. In recent years candidate countries have worked to modify their national export control systems to make them compatible with EU rules for both dual-use items and conventional arms. Those countries that will be the new neighbours of an enlarged European Union include Belarus, Ukraine and countries in South-East Europe that could already benefit from discussions about how EU export controls function.

The EU has facilitated wider changes in export control. The catch-all provisions included in the guidelines for exports of sensitive chemical or biological items introduced by the Australia Group in 2002 might not have been introduced had they not already been part of European Union law.

After enlargement, about 70 per cent of the participants in all the multilateral export control regimes will be subject to a common EU legal framework. As this framework evolves it may influence further regime development and the national policies of countries that interact with but do not participate in informal multilateral export control. The number of countries participating in multilateral export control regimes is likely to grow as EU enlargement takes place. In addition, a number of countries are examining cooperation with the regimes without participation. Changes in the national export control system of China in 2002 may facilitate this type of cooperation.

II. Developments in the multilateral export control regimes

Multilateral export control regimes are placing increased emphasis on how to implement and enforce the national laws and regulations that many of the participating states introduced or modified during the 1990s. Outreach and transparency measures are being used by the regimes to try to widen the circle of states that review their national export control systems and modify them in line with the regime standards. It is hoped that over time this process will increase confidence that legitimate trade and investment can take place without undermining arms control obligations and objectives.

The Nuclear Suppliers Group

The Nuclear Suppliers Group was established in 1978 following three years of discussion among seven nuclear supplier countries (Canada, France, the Federal Republic of Germany, Japan, the Soviet Union, the United Kingdom

[3] Solana, J., 'Global challenges for the European Union's Common Foreign and Security Policy', Lecture at the inauguration of the Diplomatic Academy of the Polish Ministry of Foreign Affairs, Warsaw, 16 Oct. 2002, URL <http://ue.eu.int/pressdata/EN/discours/72765.pdf>.

and the United States). It is an informal arrangement of nuclear supplier states that seek to prevent the acquisition of nuclear weapons by states other than those recognized as nuclear weapon states in the framework of the 1968 Non-Proliferation Treaty (NPT).[4] In 2002 the number of countries in the NSG increased to 40 with the participation of Kazakhstan.[5]

The NSG has developed Guidelines for the Export of Nuclear Transfers and Guidelines for Nuclear-Related Dual-Use Equipment, Materials, Software and Related Technology that participating states apply in making national decisions about what exports to authorize. It has also drawn up lists of items to which these guidelines apply. The International Atomic Energy Agency (IAEA) publishes these guidelines and lists as INFCIRC/254.[6]

The NSG was designed to help prevent states from acquiring nuclear weapons. Recent discussions have included whether nuclear materials that are not related to weapon development and production should also be subject to export controls. Should such a requirement be introduced, cross-border movements of, for example, nuclear waste materials would be assessed according to security and counter-terrorism risk reduction criteria.

In December 2002 the NSG held an extraordinary plenary meeting to discuss how best to respond to the threat of nuclear terrorism. At the meeting several amendments to the guidelines were agreed to help licensing officers identify and assess terrorist-related risks.[7]

The NSG is considering a proposal to expand reporting to cover licence approvals and denials. Over time the information contained in licence approvals could help to build a better understanding of the nuclear infrastructure of countries that import items controlled for NSG-related purposes. The information on approved licences could also help to reassure states that they have a common understanding of 'no-undercut' rules.[8]

The no-undercut policy is a political commitment not to export without prior consultation an essentially identical item to an end-user that has been denied a licence for that item by an NSG partner.[9] Implementation in good faith of the commitment not to undercut a partner is currently taken largely on trust, although exporters that have had a licence denied have sometimes asked their national authorities why a partner has approved what appears to be an essen-

[4] The Treaty on the Non-Proliferation of Nuclear Weapons.

[5] NSG, 'Nuclear Suppliers Group plenary meeting, Prague', Press Statement, 16–17 May 2002, URL <http://www.nuclearsuppliersgroup.org>.

[6] IAEA, 'Communications received from certain member states regarding guidelines for the export of nuclear material, equipment and technology', INFCIRC/254/Rev.4/Part 1, 15 Mar. 2000; and IAEA, 'Communications received from certain member states regarding guidelines for transfers nuclear-related dual-use equipment, materials, software and related technology', INFCIRC/254/Rev.4/Part 2*, 9 Mar. 2000. Most INFCIRCs and IAEA documents are available at URL <http://www.iaea.org/worldatom/Documents/>.

[7] 'Nuclear Suppliers Group extraordinary plenary meeting, Prague', 13 Dec. 2002, Press Statement, URL <http://www.nuclearsuppliersgroup.org>.

[8] US Government Accounting Office (GAO), 'Nonproliferation: strategy needed to strengthen multilateral export control regimes', GAO-03-43, p. 15, URL <http://www.state.gov/documents/organization/14867.pdf>.

[9] This policy is agreed in the AG, the MTCR and the NSG but not in the Wassenaar Arrangement. States that report licence denials for dual-use goods in the Wassenaar Arrangement still run the risk that partners will undercut their decision.

tially identical export. The reporting of approved licences could give national authorities the opportunity to put these kinds of questions to partners.

The NSG participating states have tried recently to strengthen the global non-proliferation regime by helping countries that have developed nuclear programmes and are potential nuclear suppliers but do not participate in the NSG to apply export controls. Discussions have taken place with China, Egypt, India, Indonesia, Iran, Malaysia, Mexico and Pakistan. In 2002 the NSG states decided to attempt a similar dialogue with Israel.[10]

The Missile Technology Control Regime

The Missile Technology Control Regime is an informal, voluntary association of countries that share the goal of non-proliferation of unmanned delivery systems for weapons of mass destruction and seek to coordinate national export licensing efforts aimed at preventing their proliferation. The MTCR was established by seven states in 1987; in 2002, 33 states participated in it.

Between 1999 and 2001 the participating states in the MTCR spent a considerable amount of time developing an International Code of Conduct Against Ballistic Missile Proliferation. With the ICOC no longer on its agenda in 2003, participants in the MTCR were able to devote greater attention to discussing export control issues.

In 2002 participating states made a political commitment to extend controls over unmanned air vehicles (UAVs) with a view to preventing the spread of delivery systems for biological weapons. UAVs are typically air-breathing vehicles that use aerodynamic lift to fly and thereby perform their entire mission within the earth's atmosphere.[11] UAVs equipped with aerosol-spray devices as well as aerosol-spray devices themselves and items and technologies for mounting and connecting such devices to UAVs were included in the MTCR equipment and technology annex. Participating states will be expected to modify their export control legislation to ensure that these items are subject to licensing.

The MTCR countries have acknowledged that terrorist groups and individuals may acquire missiles or unmanned delivery systems for NBC weapons. They have begun to study how possible changes to the MTCR guidelines may contribute to reducing this risk.[12]

[10] NSG, 'Nuclear Suppliers Group plenary meeting, Prague' (note 5).

[11] Vann Van Diepen, US Acting Deputy Assistant Secretary of State for Nonproliferation, has defined UAVs as 'unmanned systems that fly within the atmosphere and are not rocket-propelled. Different terms may be used in other contexts, but for MTCR purposes this term includes cruise missiles, as well as target drones, reconnaissance drones, and other forms of UAVs, be they military or civilian, armed or unarmed. UAVs can be as large as a jetliner or as small as a model airplane, can be jet or propeller driven; there are even concepts for guided, unmanned blimps that would be UAVs'. Testimony provided to the Senate Governmental Affairs Subcommittee on International Security, Proliferation and Federal Services, 11 June 2002. New developments in unmanned air vehicles and land attack cruise missiles are discussed in chapter 12 in this volume.

[12] MTCR, 'Plenary meeting of the Missile Technology Control Regime, Warsaw, Poland', Press Release, 27 Sep. 2002, MTCR/WAR/PL/02/CHAIR/19 FINAL, available at URL <http://www.mtcr.info>.

The issue of enforcing export controls is becoming a more important focus within more than one regime.[13] The MTCR has begun to establish a more systematic dialogue between the enforcement officials of participating states to allow them to exchange information and views on how to solve enforcement problems. In 2001 the MTCR initiated meetings of officials responsible for export control enforcement; these meetings continued in 2002.

The MTCR chair manages contacts of different kinds with certain states that do not participate in the regime. In 2002 the chair (currently Poland) was requested to try to open a dialogue with North Korea. Particularly noteworthy was the decision to place a priority on relations with China, which introduced a number of important changes in its export control regulations in 2002.[14]

The Wassenaar Arrangement

The Wassenaar Arrangement (WA) on Export Controls for Conventional Arms and Dual-Use Goods and Technologies is an informal arrangement that began its operations in September 1996. The participating states promote transparency and exchange of information and views on transfers of an agreed range of items with a view to promoting responsibility in transfers of conventional arms and dual-use goods and technologies. Greater responsibility with regard to national export policy is intended to prevent destabilizing accumulations of conventional arms and dual-use goods and technologies. The participating states seek to prevent transfers of agreed items from contributing to the development or enhancement of military capabilities that undermine regional and international security.

The arrangement mainly provides a mechanism for information exchange and does not attempt to develop common controls. However, under its Initial Elements the arrangement is intended 'to enhance cooperation to prevent the acquisition of armaments and sensitive dual-use items for military end-uses, if the situation in a region or the behaviour of a state is, or becomes, a cause for serious concern to the participating states'.[15]

In 2002 the WA participating states reached several agreements. Changes were agreed to the Munitions List and to the List of Dual-Use Goods and Technologies, including a change in the performance parameters of computers subject to export controls. Certain general-purpose microprocessors were removed from the dual-use control list.[16]

[13] In 2000 the Wassenaar Arrangement (WA) agreed a list of what were called 'best practices' for effective export control enforcement based on information about how each WA participating state approached enforcement at the national level. The items on the list were grouped under 4 headings: preventive enforcement, investigations, effective penalties, and international cooperation and information exchange.

[14] These changes are discussed further below. Chinese national export control decisions and regulations are archived on the SIPRI Internet site at URL <http://projects.sipri.se/xpcon/natexpcon/China/china.htm>.

[15] WA, 'Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies: Initial Elements', 12 July 1996, URL <http://www.wassenaar.org/docs/IE96.html>.

[16] The changes are identified in 'Summary of changes: List of Dual-Use Goods & Technologies and Munitions List', 12 Dec. 2002, URL <http://www.wassenaar.org/list/wa-list_02_tableofcontents.html>.

Participating states exchange information every six months on deliveries of certain conventional arms to non-participating states. The items reported are those conforming to seven categories of equipment defined in an annex to the Initial Elements document that describes the purposes, scope and procedures of the Wassenaar Arrangement. The seven categories are battle tanks, armoured combat vehicles, large calibre artillery, military aircraft/unmanned air vehicles, military and attack helicopters, warships and missiles or missile systems. In December 2002 the participating states modified the reporting category 'warships'. States will now exchange information on transfers of vessels or submarines armed and equipped for military use with a standard displacement of 150 tonnes or above, and those with a standard displacement of less than 150 tonnes equipped for launching missiles with a range of at least 25 km or torpedoes with a similar range. The standard displacement parameter had previously been 750 tonnes.[17]

The WA participating states adopted a document setting out Best Practice Guidelines for Exports of Small Arms And Light Weapons (SALW).[18] These guidelines combine elements of the documents already agreed in the 2001 United Nations Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms And Light Weapons as well as the 2000 Organization for Security and Co-operation in Europe (OSCE) Document on Small Arms and Light Weapons.[19]

While confirming guidelines that participating states should already be implementing, section II of the best practice guidelines presents a consolidated menu of guidelines that states may choose to implement nationally. Because regular meetings bring together officials responsible for licensing and enforcement of national export controls, the WA has advantages in overseeing how participating states implement the best practice guidelines. However, while participating states have discussed reporting transfers of items meeting a definition derived from the OSCE Document on Small Arms and Light Weapons, they were unable to expand their information exchange in 2002 to include this eighth category.[20] If the information exchange was expanded it would become easier for participating states to evaluate how the guidelines are implemented.

The Wassenaar Arrangement has also been discussing the issue of arms brokerage and at its December 2002 meeting agreed a statement of understanding on this issue. With the adoption of this document the WA stated the

[17] The amended Initial Elements document is available at URL <http://www.wassenaar.org/docs/IE96.html>.

[18] It is available on the Wassenaar Arrangement's Internet site at URL <http://www.wassenaar.org>.

[19] The OSCE Document on Small Arms and Light Weapons is reproduced in *SIPRI Yearbook 2001: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2001), pp. 590–98. See also Lachowski, Z., 'Conventional arms control', *SIPRI Yearbook 2001* (note 19), pp. 561–62; and Wezeman, P. D., 'The UN conference on the illicit trade in small arms and light weapons', SIPRI *Yearbook 2002: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 2002), pp. 736–39.

[20] The participating states agreed to make a formal study of adopting such a category. 'Public statement: 2002 plenary of the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies, Vienna', 12 Dec. 2002, URL <http://www.wassenaar.org/docs/public_statement_021212.htm>.

aim of developing a policy on international arms brokerage based on elaborating criteria for effective legislation and enforcement of that legislation.[21]

Revisions to China's national export control system

China published several new regulations in 2002 and the Chinese Foreign Ministry noted that China 'is ready to conduct in-depth exchange and consultation with all parties concerned and actively participate in multi-level discussions and cooperation in this regard'.[22]

In August 2002 the Chinese Government introduced Regulations on Export Control of Missiles and Missile-related Items and Technologies as well as an associated control list defining such items and technologies. While official spokesmen made it clear that China intended to continue exports of missiles and missile technologies, the regulations introduced a licensing system for exports of identified items.[23] Moreover, the control list was alleged to contain certain materials, metals and propellants not covered by MTCR controls.[24] On 15 October, Regulations on the Control of Military Products Export were published, revising and updating regulations initially introduced in 1997. On 17 October, Regulations on Export Control of Dual-Use Biological Agents and Related Equipment and Technologies were published. On 19 October, Measures on Export Control of Certain Chemicals and Related Equipment and Technologies were published. In November 2000 the Chinese Government stated its intention to modify the national export control system in order to reduce the risk that exports would assist another country to develop ballistic missiles without the approval of the responsible Chinese authorities.[25] The regulations published in 1997 on conventional arms exports were also revised in 2002.[26]

In explaining the decision to introduce these regulations the Deputy Foreign Minister stressed the need to adjust China's export controls to safeguard non-proliferation commitments in the context of changes in the domestic economy and foreign trade. While administrative means were considered adequate to control foreign trade in a planned economy under full government ownership, a mixed economy required a transition to control using a different type of legislation. Implementing export controls on private exporters in an economy as large and complicated as China's was considered to require a legal order

[21] 'Statement of Understanding on Arms Brokerage adopted by plenary meeting of the Wassenaar Arrangement', 11–12 Dec. 2002, URL <http://www.wassenaar.org/docs/sou_arms_brokerage.htm>. Currently, not all WA participating states have national controls on arms brokerage, a term that does not have an agreed definition within export control discussions.

[22] Xinhua News Agency, 'FM spokesman on regulations on missile export control', 25 Aug. 2002, URL <http://www.china.org.cn/english/international/40309.htm>.

[23] Agence France-Presse (Hong Kong), 'China issues regulations on missile export controls ahead of Armitage visit', 25 Aug. 2002, in Foreign Broadcast Information Service, *Daily Report–China (FBIS-CHI)*, FBIS-CHI-2002-0825, 26 Aug. 2002.

[24] Agence France-Presse (Hong Kong), 'China calls on US to end sanctions following new regulations on missile export controls', 27 Aug. 2002, FBIS-CHI-2002-0827, 28 Aug. 2002.

[25] Described in Anthony, I., 'Multilateral weapon and technology export controls', *SIPRI Yearbook 2001* (note 19), pp. 619–21.

[26] See note 14.

with 'clearly defined rights and obligations, wider scope of application, high transparency and good operability'.[27]

In an address to the United Nations First Committee, the Chinese Ambassador on Disarmament referred to the impact of China's integration into the World Trade Organization (WTO) on China's thinking about the legal basis for controlling trade.[28] The changes introduced in 2002 can be seen as part of a process initiated in the 1990s, including passing a Foreign Trade Law in 1994 that gave the government the authority to restrict or prohibit the export of items for reasons of national security.[29]

In bilateral discussions the US Government has continued to raise concerns about the implications of Chinese exports for weapon programmes of concern.[30] The USA introduced national sanctions against Chinese entities for non-proliferation purposes three times in 2002. In January sanctions were placed on two Chinese companies and one Chinese national for the transfer of 'sensitive equipment and technology' to Iran.[31] In May sanctions were placed on eight Chinese entities as well as two Armenian and two Moldovan entities for the transfer of 'equipment and technology controlled under multilateral export control lists' to Iran.[32] In July sanctions were imposed on nine Chinese entities and one Indian entity for 'proliferation activities'.[33]

In considering the motivations for changes to China's national export regulations three sets of factors appear to have influenced China's thinking. First, China's interest in multilateral engagement has grown and official statements point out that the changes in the export control system considered necessary to meet national interests would also facilitate exchanges and cooperation with other countries in the framework of international non-proliferation processes. Second, the United States has continued to stress the importance of exports of sensitive technology for bilateral relations. Third, changes in the domestic economy and in foreign trade seem to be enhancing the role of public institutions and reducing the role of the Communist Party.

[27] Wang Guangya, Deputy Minister for Foreign Affairs, 'Constantly perfect non-proliferation mechanism, promote international peace and development: China's non-proliferation policy and practice', *Renmin Ribao*, 16 Oct. 2002, p. 7 (in Chinese), in 'Vice FM Wang Guangya writes for RMRB on PRC's non-proliferation policy, practice', FBIS-CHI-2002-1016, 18 Oct. 2002.

[28] Xinhua News Agency, 1 Oct. 2002, in 'China makes concrete contribution to global non-proliferation process', FBIS-CHI-2002-1001, 2 Oct. 2002.

[29] For a general discussion see the set of articles published under the heading 'Export controls in the People's Republic of China', *The Monitor*, vol. 3/4, no. 4/1 (fall 1997/winter 1998).

[30] E.g., Wolf, J. S., Assistant Secretary for Nonproliferation, US Department of State, 'Russia and China: proliferation concerns', Testimony before the Senate Governmental Affairs Committee Subcommittee on International Security, Proliferation and Federal Services, 6 June 2002, URL <http://www.state.gov/t/np/rls/rm/10929.htm>.

[31] 'Bureau of Nonproliferation: imposition of nonproliferation measures against three Chinese entities, including ban on U.S. government procurement', *Federal Register*, vol. 67, no. 16 (24 Jan. 2002), p. 3528. Moreover, these sanctions were additional to sanctions that have been in place since 1997 on different Chinese entities.

[32] 'Bureau of Nonproliferation: imposition of nonproliferation measures against Armenian, Chinese and Moldovan entities, including ban on U.S. government procurement', *Federal Register*, vol. 67, no. 95 (16 May 2002), pp. 34983–84.

[33] 'Bureau of Nonproliferation: imposition of nonproliferation measures against entities in the People's Republic of China and in India', *Federal Register*, vol. 67, no. 143 (25 July 2002), p. 48696.

III. The Australia Group

The Australia Group was established in 1985 and is an informal network of countries that consult on and harmonize national export licensing measures that apply to lists of items agreed among the group.[34] The participating states have agreed six lists of items and have made a political commitment that all of the items on these lists will be subject to national export controls. The objective is to prevent trade and international cooperation from contributing to chemical or biological weapon (CBW) programmes. It has been pointed out that the effectiveness of the AG activities depends on the level of commitment to CBW non-proliferation goals and:

> on the effectiveness of measures implemented nationally which aim at preventing the spread of chemical and biological weapons. The purpose of the Australia Group meetings is to explore the scope for making the measures already taken by participating countries more effective, including through the exchange of information, the harmonisation of measures already taken and, where necessary, consideration of the introduction of additional national measures.[35]

The participating states made important changes to the AG in 2002. Procedures were revised to facilitate more regular interactions between export control practitioners and technical experts and changes were made to control lists.[36] A set of guidelines to be applied by licensing officers in national export licensing decisions was agreed for the first time in June 2002.[37]

The guidelines for sensitive chemical or biological items

The agreed AG guidelines included a catch-all provision obliging an exporter to seek permission before exporting any item whose intended use could contribute to a purpose considered unsuitable by the export control authorities. The use of this type of 'end-use' provision expanded in the 1990s along with concerns about NBC weapon programmes or missile delivery systems for them. The AG participating states also made a political commitment to control the intangible transfer of information and knowledge that could be used for CBW purposes.[38]

[34] The background to the establishment of the Australia Group is discussed in Anthony, I. and Zanders, J. P., 'Multilateral security-related export controls', *SIPRI Yearbook 1998: Armaments, Disarmament and International Security* (Oxford University Press: Oxford, 1998), pp. 373–400.

[35] AG, 'Background paper: export licensing measures on materials used in the manufacture of chemical and biological weapons', AG/May00/Press/Chair/18, URL <http://www.australiagroup.net/releases/background.htm>.

[36] The lists are of chemical weapons precursors, dual-use chemical manufacturing facilities and equipment and related technology, dual-use biological equipment, biological agents, plant pathogens and animal pathogens. AG, 'Common control lists', URL <http://www.australiagroup.net/agcomcon.htm>.

[37] The 'Guidelines for transfers of sensitive chemical or biological items' are available at URL <http://www.australiagroup.net/guidelines.html>.

[38] AG, 'New measures to fight the spread of chemical and biological weapons', Press Release, 7 June 2002, URL <http://www.australiagroup.net/press_07_06_02.html>.

While in a few cases the guidelines may require changes in national legislation, most participating states already have the legal authority to require exporters to seek a licence before shipping unlisted items. However, the AG is the first regime to introduce the catch-all requirement in its public guidelines and this may promote discussion within the AG of both national implementation of catch-all requirements and their impact on industry.

Within the European Union, which introduced a catch-all requirement for all member states in 1994, the provisions are implemented nationally.[39] Exporters must seek a pre-shipment assessment of an export if national authorities have informed the exporter that items are or may be used for a prohibited purpose. The questions of how to collect information and how to interact with exporters are left for national authorities. To meet this obligation authorities need to monitor activities in states where CBW concerns may exist, but this monitoring is a difficult challenge for small states given that it is both politically sensitive and resource intensive. Over time it would be logical to develop a more common approach to monitoring and information sharing within the EU.

The EU catch-all provision also includes a requirement for an exporter to seek an assessment from national authorities if aware that items are or can be used for a prohibited purpose. National authorities also define what measures exporters can reasonably be expected to take to ensure compliance with this provision. However, the measures adopted should be equivalent in their effect across the EU in order to avoid discrimination against exporters in any given member state.

This obligation to inform national authorities raises the question of how much exporters of civilian products that may have military applications can reasonably be expected to know about weapon programmes of concern in countries in which they are doing business. From a technological perspective, the international legal prohibitions on CBW mean that few entities in exporting countries are developing or manufacturing products with a dedicated military application.[40] Manufacturers may find it difficult to identify how a customer might misapply civilian products. Moreover, in a number of countries there may not be sufficient technical understanding to assist industry with authoritative advice on this matter.

While catch-all provisions have been under discussion since the beginning of the 1990s, and in operation for roughly 10 years in many AG participating states, there is less experience with the implementation of legal requirements to control exports of intangible technology. The rapid growth in electronic information exchange has created this new problem for export controls and the European Union only introduced a legal requirement to control this form of export in 2000.

[39] The provision is now contained in 'Article 4 of the revised Council Regulation (EC) no. 1334/2000 of 22 June 2000 setting up a Community regime for the control of exports of dual-use items and technologies', *Official Journal of the European Communities*, no. L159, vol. 43 (30 June 2000).

[40] Hart, J. *et al*., 'Maintaining the effectiveness of the Chemical Weapons Convention', SIPRI Policy Paper Oct. 2002, URL <http://projects.sipri.se/cbw/research/cwc_policypaper2.pdf>.

The role of the Australia Group in preventing the threat from biological weapons

It has always been recognized that export controls can only represent a partial approach to preventing the development, production, acquisition or use of weapons—which is their objective. Over time export controls may be defeated by the ease with which end-users may gain access to controlled items as a result of deep-rooted and profound processes of international technological and industrial cooperation. Recent developments within the 1972 Biological and Toxin Weapons Convention (BTWC)[41] regime and heightened awareness of the threats posed by dangerous materials in the hands of people who intend to use them to commit terrorist acts add additional layers of complexity to the discussions. The role of the AG may change under these circumstances.

States are beginning to examine how best to strengthen the BTWC through actions taken outside the framework of the convention. For example, in its Green Paper the government of the United Kingdom pointed out that:

> other measures, primarily at the national level, are already being taken and could be expanded upon or revised to combat the BW [biological weapon] threat by strengthening the other 'pillars' of export controls, deterrence and defence. These include effective national legislation on the export of agents, equipment and materials potentially useful for offensive BW programmes (including revisions to the Australia Group's control lists to ensure that they remain up to date and effective) . . . Pooled resources, sharing experiences and information, joint training and coordination will help improve the efficacy of steps taken nationally.[42]

The primary task of the Australia Group will continue to be facilitating discussions of how export controls can be applied more effectively to reduce the risk of illegal BW programmes of any kind. Given the characteristics of the market for items controlled for BW-related purposes, the effectiveness of different approaches to export control will have to be reviewed continuously.

The biotechnology industry includes a wide range of entities that develop, make and sell products for human and animal health care, the agro-food industry and environmental applications.[43] International transfers that may be considered relevant for BW-related purposes involve a diverse set of actors (on both the export and import sides) as well as different transaction types. Moreover, in the light of changing trends in technology development and shifting threat perceptions there is also a need for a regular review of what should make a particular transaction subject to control for BW non-proliferation purposes.

[41] The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction.

[42] 'Strengthening the Biological and Toxin Weapon Convention: countering the threat from biological weapons', Report presented to Parliament by the Secretary of State for Foreign and Commonwealth Affairs, Cm 5484, Apr. 2002, p. 16, URL <http://files.fco.gov.uk/npd/btwc290402.pdf>.

[43] A clearly organized generic overview that is understandable to non-specialists is provided on the Internet site of the Massachusetts Biotechnology Council and the Massachusetts Biotechnology Education Council, URL <http://www.massbio.org/directory/companies/>.

Three different types of general categories of transfer can be distinguished: exports of pathogens with characteristics considered to make them usable for biological attack; exports of items for use in military programmes not prohibited by the BTWC (e.g. for certain defensive applications); and exports of items for civilian end-use that may have military applications.

A rough breakdown of actors engaged in international transfer by purpose and activity produces the following spectrum. The breakdown includes entities engaged in research (academic organizations as well as commercial companies), equipment suppliers (e.g., medical devices companies), software suppliers, product suppliers, service providers (including companies specializing in facilitating technology transfer, consulting and information provision) and raw material suppliers (of both reagents and raw materials).

International transfers could be accomplished using several different transaction types. In addition to the export of controlled items across a customs boundary, transfers could be made through electronic transfer of information or verbally, either over the telephone or through personal communication. In the latter case, an international transfer might take the form of a visit by a foreign national for the purpose of obtaining information that will then be taken out of the country (a so-called 'deemed export'). Alternatively, the transfer might take place through a visit to a foreign country by an individual.

The actors engaged in international transfers include government agencies, academic institutions and private sector companies. While the first two categories are known to national authorities and, for the most part, used to working with government regulators, the third category involves a large and diverse group of actors. The size and shape of the private sector has been changing rapidly in response to market conditions and technology development.

The brief overview above illustrates that there are a large number of licensable transactions involving Australia Group participants. Moreover, recent changes in export control—notably, the introduction of end-use controls by more countries and the gradual spread in controls on intangible technology transfers—have further increased this number. For each licensable export, information is gathered both about the recipient of the item and the use to which the item will be put. Since there are so many licensable transactions, export control activities have generated a large amount of information within national systems that is relevant to potential activities of concern.

While sharing this information could enhance the overall effectiveness of arms control and non-proliferation activities, no integrated or real-time information management and exchange mechanism has yet been found that is acceptable to states. However, the greater political weight attached to AG activities in 2002 is stimulating movement towards greater information sharing and may permit states to build a more complete knowledge of the international pattern of transfers.

Information and knowledge within export control systems could find other uses given that some countries do not maintain separate centres of expertise on technical issues for different BW-related activities but draw on the same experts in different processes. National technical expert meetings that discuss

and advise on changes to the Australia Group control lists bring together the most qualified scientists and technologists from AG participating states.

In order to reduce the risk of terrorist acts, a number of states have begun to establish and maintain a list of biological agents and toxins that have the potential to pose a severe threat to public health and safety. States are also examining new domestic safeguards to prevent access to biological agents and toxins for use in domestic or international terrorism or for any other criminal purpose, including updating internal administrative routines and increased investment in people and technology to enhance security. To the extent that there is a common pool of technical experts on BW-related matters participating in these different discussions, the talks and discussions on biotechnology and public safety, enhancing security at facilities and export controls may be mutually supporting.

The technical experts within the Australia Group could also help develop knowledge about BW-related threats that may emanate from developments in science and technology. Moreover—given that the AG is tasked with considering both chemical weapon and biological weapon related issues—this group would provide a forum where the impact of developments in biochemistry could be considered in a sustained and systematic manner.

The AG has relevant expertise that could be applied in assisting states to strengthen national legislation. Participating states have always encouraged the adoption by the widest possible number of states of a range of national measures to reduce the risks and threats stemming from CBW. Either individually or through ad hoc cooperation with other participating states, the AG maintains contacts with non-participating states with a view to help develop and implement national legislation. The promotion of more effective national measures has been seen by the AG participating states as a worthwhile objective in and of itself, independent from expanding regime participation. However, over time assistance to non-participating states may be linked to and may facilitate further expansion in AG membership. The enlargement of the European Union is likely to require an expansion in participation in all of the multilateral export control regimes.

IV. The impact of European Union enlargement on supply-side measures

The EU regime for the control of exports of dual-use items and technologies is intended to facilitate the movement of items within the EU while continuing to assess exports outside the EU to reduce the risk that any transaction will contribute to a weapon programme of concern.[44]

The development of this regime has already had a positive impact within existing member states. The use of the control lists agreed in the various multilateral regimes as the basis for the common EU control list has translated a political commitment into a law that is harmonized at the highest current inter-

[44] Council Regulation (EC) no. 1334/2000 of 22 June 2000 (note 39).

national standard. In preparation for membership, candidate countries have already made this EU list the basis of their national control systems. Moreover, this includes those candidate countries that do not participate in multilateral export control regimes. Article 8 of Regulation 1334/2000 establishes export control norms within EU law applicable in all member states. Member states must now take into account obligations and commitments in a range of specified documents (including not only treaties but also a number of politically binding agreements) when making export control assessments. Implementing the law has also created a network among national officials and the European Commission through which information can be passed quickly and efficiently. These benefits will extend to any states that join the European Union.

The impact of EU enlargement on multilateral export control regimes

Table 18.2 indicates the current regime participation of EU candidate countries. While three of the countries (the Czech Republic, Hungary and Poland) participate in all four regimes, three others (Estonia, Lithuania and Malta) do not participate in any.

On joining the European Union countries will participate fully in the single market and the dual-use export control system. This means that almost all dual-use goods can move freely to the territory of new member states and that their national authorities will be able to authorize exports of these items to destinations outside the EU. Council Regulation 1334/2000 will legally oblige new member states to apply the decisions of the multilateral export regimes to export licence assessments. The regulation will also oblige them to assess the risks that items will be diverted to unauthorized end-users or end-uses after shipment. However, because they do not participate in multilateral regimes, new member states will not always receive the information about rules and end-users needed to implement their obligations. In a worst-case scenario, the rules about information sharing applied within the multilateral regimes could impede the development of a European Union information system by blocking information exchange among EU member states.

For these reasons, it is very likely that all new member states will be brought into all of the regimes when they join the EU. The EU countries will then make up more than 50 per cent of the participants in all the regimes, rising in some cases to close to 70 per cent. After enlargement, any joint EU proposal would carry great weight. However, EU member states do not act as a coherent lobby within regime discussions; changes in agreed norms or lists that member states would like to occur are introduced by individual member states on their own behalf. The EU is passive in its relationship with the multilateral export control regimes both regarding normative aspects and control list development. The complexity of developing a common position behind a specific proposal for introduction into the regime would be increased with enlargement.

Table 18.2. Participation by EU candidate countries in multilateral export control regimes as of January 2003

Country	Australia Group	Missile Technology Control Regime	Nuclear Suppliers Group	Wassenaar Arrangement
Bulgaria[b]	x		x	x
Cyprus[a]	x		x	
Czech Republic[a]	x	x	x	x
Estonia[a]				
Hungary[a]	x	x	x	x
Latvia[a]			x	
Lithuania[a]				
Malta[a]				
Poland[a]	x	x	x	x
Romania[b]	x		x	x
Slovakia[a]	x		x	x
Slovenia[a]			x	
Turkey[c]	x	x	x	x

[a] Acceding country, expected to join the EU on 1 May 2004.
[b] May join the EU in 2007.
[c] Not currently negotiating membership.

Source: On EU enlargement see Europa, the European Union On-line, 'Enlargement', URL <http://europa.eu.int/comm/enlargement/enlargement.htm>.

Under current conditions the EU Presidency would probably be responsible for launching any more coherent initiative that could be developed. In considering the efficient interaction between the regimes and the EU, the role of the European Commission also has to be taken into account.

The Commission has an exclusive right of initiative in modifying EU Regulation 1334/2000 and legal responsibility for monitoring uniform application by member states. In its representative capacity the Commission has different types of participation in the four multilateral regimes. The Commission is a participant in the Australia Group and an observer in the Nuclear Suppliers Group but attends plenary meetings of the MTCR and the WA in the delegation of the EU Presidency. A strengthened role for the Commission could have practical advantages given the current legal structure of the export control system. However, within the Commission responsibility for the dual-use export control system belongs to the Directorate General for Trade, which lacks knowledge about non-proliferation issues and accords them a low priority. Its main objective is the progressive abolition of restrictions on international trade and the lowering of customs barriers.

Counter-terrorism in an enlarged EU[45]

The EU system is based on the principle that the free movement of goods within the EU does not create a proliferation risk because: (*a*) transfers to other EU states could not lead to misuse of the items transferred, and (*b*) all EU states have national export control systems capable of preventing undesirable exports. As noted above, if the EU member states can reassure one another that their national export control systems are harmonized at the highest international standard enlargement will have made a very positive contribution to security building in this area. However, after the September 2001 terrorist attacks on the USA there are some questions about the first assumption.

The internal movement of dual-use goods has been considered risk-free because all EU countries believe their fellow member states to be in full compliance with their arms control and disarmament commitments. However, while these state-level commitments are respected, the system is not designed to take into account conditions when non-state actors seeking, for example, a BW capability are already located and operating within the EU. Moreover, EU exporters (including those in new member states) will be able to export dual-use items to a number of destinations (including the USA) using a European Community general export authorization. Therefore, there is some risk that dual-use items could be imported into the USA from Europe by a group planning to carry out a terrorist act with minimal intervention from European export control authorities.

The existing regulation does specify certain circumstances under which intra-community trade requires authorization. However, the number of items for which individual licences are still required for such trade is limited to all nuclear and some chemical items. Many chemical weapon precursors, human pathogens and toxins, animal and plant pathogens and dual-use biological items can move within the single market without being assessed against national and international security criteria.[46]

The US definition of homeland security is a concerted effort to prevent terrorist attacks, to reduce vulnerability to terrorism, and to minimize the damage and recover from attacks that do occur. In the EU context, thinking about these questions has a particular character created by the unique nature of the European Union. The new conditions challenge the boundaries between internal and external dimensions of national security as well as between military and non-military aspects. EU governments are responsible for the security of their populations. At the same time, people and goods move freely throughout a common legal space. Laws that are agreed by governments but applied by common institutions regulate many aspects of life in the EU.

[45] Military and security dimensions of EU development are discussed in chapter 6 in this volume.

[46] Because of the dangerous nature of these items many are subject to other regulations related to safe and secure transport. Therefore the somewhat bizarre circumstance that a shipment might be delivered to a terrorist group with a police escort could not be excluded.

Nuclear security and non-proliferation-related aspects of EU security in the context of enlargement

While nuclear power will continue to play a part in the overall energy programme of the European Union, none of the current member states or candidate countries has complete control over the nuclear fuel cycle. Three current member states—Finland, France and the UK—plan to continue nuclear power generation. Many of the candidate countries have significant civilian nuclear infrastructure and several have nuclear power plants.[47] Enlargement will create a new dimension in the EU–Russia relationship as Russia is the only supplier of nuclear fuel, spare parts and other items for these reactors.[48]

Two of the countries among the group scheduled to join the EU in 2004 (Lithuania and Slovakia) operate Soviet-designed reactors that the EU has judged cannot be upgraded to meet existing safety standards and will therefore have to close, probably by 2009. Bulgaria operates similar reactors. Other countries that will join the EU operate nuclear reactors that will be upgraded to meet safety standards.

Discussions with candidate countries have focused on ensuring the highest standards of safety in the operation of nuclear facilities, meaning the application of technical and administrative measures to prevent harm to people or the environment from the functioning of facilities. However, physical security and non-proliferation aspects of enlargement have also been examined closely. Physical security depends on measures to ensure that nuclear materials are properly accounted for and not diverted from their intended use or stolen. Non-proliferation safeguards are intended to ensure that states do not acquire or divert nuclear materials for the purpose of making nuclear weapons.

The focus of EU activities related to physical security and non-proliferation is the European Atomic Energy Community (EAEC or Euratom) Safeguards Office (ESO), part of the Directorate General for Energy and Transport (TREN) within the Commission. The ESO is tasked with ensuring that within the EU nuclear material is not diverted from its intended use and that safeguards obligations assumed by the Community under an agreement with a third state or an international organization are complied with.[49] In February 2002 a High Level Expert Group (HLEG) appointed by the European Commission to examine the operation of the ESO found that the balance of ESO activities was heavily weighted towards inspections intended to ensure that no

[47] Seven of the candidate countries (Bulgaria, Czech Republic, Hungary, Lithuania, Romania, Slovakia and Slovenia) together operate a total of 19 reactors in 7 different nuclear power plants.

[48] For a detailed overview of the issues see Commission of the European Communities, 'Nuclear safety in the European Union', Communication from the Commission to the Council and the European Parliament, COM/2002/605 final, Brussels, 6 Nov. 2002.

[49] Commission of the European Communities, 'Operation of the Euratom Safeguards Office 1999–2000', Report from the Commission to the European Parliament and the Council, COM/2001/436 final, Brussels, 26 July 2001.

nuclear explosive device is developed within any EU member state other than France or the UK.[50]

All EU member states have signed Additional Protocol agreements with Euratom and the IAEA that will lead to the application of strengthened safeguards against the misapplication of civilian nuclear programmes for military purposes.[51] Strengthened safeguards are already in force for eight candidate countries (Bulgaria, the Czech Republic, Hungary, Latvia, Lithuania, Poland, Romania and Turkey) and three (Cyprus, Estonia and Slovakia) have signed Additional Protocols, but these have not yet been ratified or deposited at the IAEA. Under the Additional Protocol, states prepare an expanded national declaration including information on all aspects of nuclear and nuclear fuel-cycle activities. By helping to build a comprehensive picture of nuclear activities in each member state, these Additional Protocols will give additional assurances that no EU state has an illegal nuclear weapon proliferation.

The HLEG found that over time the ESO had developed an elaborate information system to monitor events for which there was no legal requirement and that reflected political conditions in the 1950s, when the system was established. The HLEG found these activities to be 'costly and politically irrelevant' in current conditions. It recommended that the ESO should emphasize nuclear material security and this was considered particularly important in the context of enlargement. While responsibility for nuclear security would remain a national obligation, it was recommended that the ESO collect, analyse and summarize information with a view to monitoring national compliance with obligations related to physical protection of nuclear materials.

The Phare Programme has financed the development of new material protection and accountancy programmes in candidate countries.[52] If the recommendations of the HLEG are implemented, the EU could be expected to carry out additional efforts in this area.

Spent fuel and other radioactive waste from reactors located in the EU will have to be managed in a satisfactory and transparent way. In addition to its environmental and economic aspects, waste management also raises security concerns. In the context of increased concern about the potential use of a radiological weapon in a terrorist act, nuclear waste storage facilities need to incorporate safeguards against unauthorized access. In addition, because Russia (or other countries) are likely to have a role in storing and reprocessing spent fuel, steps are needed to make sure that waste will not be diverted or misused by terrorists or in an illegal weapons programme after leaving the EU.

[50] Commission of the European Communities, 'Review of the Euratom Safeguards Office', Main Report by a High Level Expert Group appointed by the European Commission Directorate General for Energy and Transport, 15 Feb. 2002.

[51] IAEA 'Model Protocol additional to the agreement(s) between state(s) and the International Atomic Energy Agency for the application of safeguards, INFCIRC/540(Corrected), 1998, URL <http://www.iaea.org/worldatom/Documents/Infcircs/1998/infcirc540corrected.pdf>.

[52] The Phare Programme is described at URL <http://europa.eu.int/comm/enlargement/pas/phare/>.

Justice and Home Affairs cooperation, non-proliferation and counter-terrorism in the context of enlargement

The development of the dual-use export control system and the nuclear-related activities noted above point in the direction of enhanced controls over items that may threaten security within the EU. However, in addition to concentrating on items and technologies, the EU system is also beginning to look more closely at how to monitor and prevent the activities of individuals and groups within the EU that may be planning to carry out terrorist acts. This type of activity provides a logical counterpart to greater controls on the movement of items.

On 13 June 2002, the European Council agreed a framework decision on combating terrorism; it included a list of acts that EU member states will regard as terrorist offences. The member states pledged to take the necessary measures to establish jurisdiction over these offences, with national legislative measures to be undertaken by 31 December 2002.[53] One of the offences that EU member states agreed to incorporate into their national laws was the:

> manufacture, possession, acquisition, transport, supply or use of weapons, explosives or of NBC weapons, as well as research into, and development of, biological and chemical weapons if these acts were committed with the aim of seriously intimidating a population, or unduly compelling a Government or international organization to perform or abstain from performing any act, or seriously destabilizing or destroying the fundamental political, social, constitutional, economic or social structures of a country or an international organization.[54]

Member states also undertook to criminalize a range of terrorist-linked offences including aggravated theft, extortion, falsification of documents and inciting, aiding or abetting or attempting to commit the offences noted above.

In order to assist in counter-terrorism, the EU member states also agreed other measures in 2002. These measures included the development of joint investigation teams to stimulate closer cooperation between police forces, customs authorities and other authorities in the member states. These joint investigation teams were to be set up 'as a matter of priority, to combat offences committed by terrorists'.[55] The European Union also agreed a European arrest warrant entailing a judicial decision by one member state to arrest a requested person and surrender that person to another member state for the purpose of criminal prosecution, executing a custodial sentence or a detention order. The list of criminal acts for which the arrest warrant could be issued included terrorism, illicit trafficking in weapons, munitions and explosives as well as illicit trafficking in nuclear or radioactive materials.

These measures were not conceived specifically to reduce risks associated with NBC and radiological weapons but reflect a broader desire to provide EU

[53] 'Council Framework decision of 13 June on combating terrorism (2002/475/JHA)', *Official Journal of the European Communities*, no. L164, 22 June 2002, pp. 3–7.

[54] 'Article 1.1 of Council Framework decision of 13 June on combating terrorism' (note 52), p. 4.

[55] 'Council Framework Decision of 13 June 2002 on joint investigation teams (2002/465/JHA)', *Official Journal of the European Communities*, no. L162, 20 June 2002, pp. 1–3.

citizens with an environment that is both free and safe. Nevertheless, enhanced EU cooperation in developing the legal base and in criminal law enforcement has the potential to reduce the risk from terrorism.

The European Union Code of Conduct for Arms Exports

In December 2002 the European Union released its fourth Annual Report on the implementation of the June 1998 Code of Conduct for Arms Exports.[56] The Code of Conduct, which was established by a political declaration, has had a significant effect on the national laws and policies of member states. In spite of its lack of legal foundation, the Code of Conduct has been described as 'the most comprehensive international arms export control regime. No other such regime has such a sharing of information on arms transfers. It sets the standards which others should follow'.[57]

The candidate countries have previously aligned themselves with the Code of Conduct and agreed to apply its criteria when making national export licensing decisions. Croatia aligned itself with the Code in May 2002. However, the candidate countries—which after joining the EU will participate fully in the Code of Conduct—had relatively little engagement with its operative provisions prior to 2002. In 2002 the EU member states increased contacts on this subject by means of Troika meetings with the candidate countries.[58] A pattern of regular ad hoc meetings with candidate countries was also established to address the application of the Code.

The equipment to which the Code of Conduct criteria are applied has been agreed by the member states. Under the operative provisions of the Code the member states circulate details of licences denied for exports of agreed military equipment when the denial is in accordance with the criteria of the Code of Conduct. The member states agreed to share this information on licence denials with candidate countries and encouraged candidate countries to provide information to the EU regarding similar licence denials.[59] The information to be exchanged should include the country of destination, a short description of the equipment denied and its military list rating, a classification of the end-user and the reasons for refusal.

The European Union has identified nine priority measures for the further development of the Code of Conduct including the harmonization of national reporting on arms exports, developing controls on non-military security and police equipment, agreeing a political commitment to control arms brokerage

[56] The text of the EU Code of Conduct for Arms Exports of 8 June 1998 is available at URL <http://projects.sipri.se/expcon/eucode.htm>.

[57] Titley, G., Rapporteur, 'Report on the Council's Third Annual Report according to Operative Provision 8 of the European Union's Code of Conduct on Arms Exports (2001/2254(INI))', Committee on Foreign Affairs, Human Rights, Common Security and Defence Policy, European Parliament Report no. A5-0286/2002, 10 Sep. 2002. See also chapter 13 in this volume.

[58] The Troika consists of representatives of the country holding the EU Presidency, assisted by the Secretary General of the Council/High Representative for the Common Foreign and Security Policy, the European Commission and, for certain tasks, the member state that will hold the following presidency.

[59] 'Fourth Annual Report according to operative provision 8 of the European Union Code of Conduct on Arms Exports', *Official Journal of the European Communities*, vol. C 319, 19 Dec. 2002, pp. 1–45.

and agreeing common core elements in end-user certificates. The closer engagement of candidate countries in discussing future measures increases the likelihood that the Code will be implemented effectively after enlargement.

V. Conclusions

In 2002 two interrelated discussions increased the political salience of export controls. First, discussions continued over how to increase the effectiveness of counter-terrorism measures. Second, the role of export controls in managing weapon programmes of concern was further discussed.

In regard to the first issue, export controls that were designed as an instrument to address weapon programmes under the control of states face challenges in denying technology to non-state actors. It is likely that new approaches and procedures will have to be developed based on enhanced information sharing between states. This information sharing will probably be enhanced both between export control authorities, and between the national authorities of exporting and importing states, respectively.

The second issue is familiar within export control and has been the subject of discussions for the past decade. In this case it is more a question of greater political awareness of developments in export control. Members and representatives of the multilateral cooperation arrangements are spending a greater share of their time on two activities: explaining their activities to a wider group of states with which they may be able to develop cooperation, and beginning to consider how the legislation that was developed during the 1990s can be implemented and enforced effectively.

The fact that international transfers of dual-use items could contribute to illegal weapon programmes was brought home by the important (but unwitting) role that European exporters played in illegal NBC weapon programmes in Iraq during the 1980s. In order to avoid a similar unpleasant surprise in future it is important that EU member states consider how to reduce the risk that they may unknowingly contribute to new threats.

The European Union is progressively developing a distinctive approach to security policy, including in the area of non-proliferation and export control. This approach is more the product of a number of uncoordinated decisions, each following its own logic, than the pursuit of a coherent plan. EU reform and the enlargement of membership are changing the context in which these changes are considered. Current developments suggest the need for a review of EU approaches to managing non-proliferation and implementing export controls.

The boundaries between domestic and international dimensions of security as well as between the military and non-military aspects of security have become increasingly difficult to draw within the European Union. While free association within the EU is one benefit of integration, the free movement of goods and people also carries certain risks. Realizing the benefit depends on developing and implementing common approaches to managing these risks.