# Introduction

# International security, armaments and disarmament

BATES GILL

# I. Assessing the past year

In 2010 new challenges to peace and stability arose in a number of areas around the world, such as on the Korean peninsula, in North Africa, in the Middle East and in Central Asia. Institutions and organizations that are tasked with mitigating instability and other threats at global and regional levels continued to struggle to redefine their mandates and generate necessary resources to meet them. The burdens of a growing debt crisis in Europe and the persistent economic and financial challenges in the United States constrained the ability of some of the most prosperous countries to respond to global challenges. In particular, non-state actors influenced the international security scene more, and more strongly.

In August 2010 US President Barack Obama announced the conclusion of US combat operations in Iraq, bringing to a formal end Operation Iraqi Freedom, which was launched seven years earlier by the Administration of President George W. Bush (although 50 000 troops will remain for support, training and other non-combat activities). Overall, the situation in Afghanistan remained unstable and its longer-term prospects uncertain despite an increase in troop levels by the USA—the largest counterinsurgency offensive since the war began in 2001—adjustments in counterinsurgency strategy by the USA and its allies, and the capture or killing of several senior Taliban and al-Qaeda leaders in Afghanistan and Pakistan. The North Atlantic Treaty Organization (NATO), during its November 2010 summit, issued a 'transition strategy' for Afghanistan that envisions the transfer of security responsibilities from the International Security Assistance Force (ISAF) to the Afghan security forces by the end of 2014, when ISAF would end its combat mission in the country.

Elsewhere in the world, the sinking of the South Korean warship *Cheonan* in March 2010 and the shelling by North Korea of South Korea's Yeonpyeong Island in November exacerbated existing tensions in North East Asia. In May nine people were killed when Israeli commandos intercepted a convoy of ships bound for the Gaza Strip with the intention of breaking the Israeli blockade of the territory. Peace talks that began in 2010

between Israel and Palestinian authorities in the West Bank achieved no progress. As 2010 drew to a close, in December an indebted young street vendor, Mohamed Bouazizi, set himself on fire in a public protest and suicide in Tunisia, setting off a wave of unrest and rebellion across parts of North Africa and the Middle East that continued into 2011.

Around the world, 15 major armed conflicts were active in 2010-in Africa, in the Americas, in Asia and in the Middle East-with those in Afghanistan, Iraq, Pakistan and Somalia being particularly intense. Extremists carried out politically motivated killings of innocents in all parts of the world: high-profile attacks occurred in Afghanistan, the Democratic Republic of the Congo (DRC), Iraq, Kyrgyzstan, Nepal, Pakistan, Russia and Uganda. The year also saw a number of longstanding and new problems for arms control and disarmament. North Korea continued to defy the expressed will of the United Nations and the concerns of neighbouring states by continuing its nuclear weapon and missile development. Of greatest concern in 2010 was the revelation of a previously undisclosed uranium enrichment facility in North Korea. Concerns also continued over the Iranian nuclear programme, with a new round of UN sanctions levelled against Iran in 2010. The Conference on Disarmament in Geneva, while able to agree in 2009 on a draft programme of work, including the negotiation of a fissile material cut-off treaty, proved unable to take the necessary procedural steps to actually begin substantive negotiations in 2010. Over the past year, the global levels of military spending, arms production and conventional arms transfers all continued their upward trajectories.

Some more promising developments related to nuclear disarmament, security and non-proliferation in 2010 were in Russia's relations with its Western neighbours and regarding conventional arms control. Russia and the USA concluded a new nuclear disarmament treaty, New START, in March 2010 and the two countries exchanged instruments of ratification in February 2011. In its Nuclear Posture Review, in April 2010, the US Government narrowed the circumstances under which it would use nuclear weapons and pledged not to develop new nuclear warheads or new missions and capabilities for existing nuclear warheads. This was followed by the first Nuclear Security Summit, held in Washington, DC, at which the participants, including 38 heads of state or government, agreed to reduce the risk of nuclear terrorism and to improve the security of nuclear materials and facilities across the world. In May 2010, at the 1968 Non-Proliferation Treaty (NPT) Review Conference, the parties agreed to take concrete steps towards nuclear disarmament and non-proliferation, and to work towards the establishment of a nuclear weapon-free zone in the Middle East. For the first time since the Georgia-Russia War in 2008, the NATO-Russia Council met and produced agreements related to cooperation on missile defence, counterterrorism and combating narcotics trafficking. In other encouraging developments, the 2008 Convention on Cluster Munitions entered into force in August, and the Preparatory Committee for the UN Conference on the Arms Trade Treaty (ATT) convened for the first time in New York in July 2010.

## II. SIPRI Yearbook 2011: overview, themes and key findings

#### Overview

This volume, the 42nd edition of the SIPRI Yearbook, features 37 experts from 19 countries. These experts chronicle and analyse the most important trends and developments in international security, armaments and disarmament over the past year, including such issues as armed conflict, multilateral peace operations, military expenditure, arms production, transfers of conventional arms, non-proliferation, arms control, and confidence- and security-building measures. As in recent editions of the SIPRI Yearbook, this year's volume opens with a special feature chapter. Authored by Andrew Feinstein, Paul Holden and Barnaby Pace, the chapter examines corruption in the international arms trade. Along with his colleagues, Feinstein-an expert on corruptive practices in the arms trade and a former member of the South African Parliament—explains why the international arms trade is 'uniquely and disproportionately infected with corruption'; spells out the negative impact such corruption has on open societies, the rule of law and national security; and puts forward recommendations for limiting arms trade corruption and its corrosive effects.

The remainder of the volume is organized in three main parts. Part I provides an overview of some of the key issues shaping international security in relation to armed conflict and conflict management. Part II focuses on important global, regional and national trends in armaments, including on military expenditure, arms production, arms transfers and nuclear forces. Part III surveys critical recent developments in disarmament, including assessments of nuclear non-proliferation and arms control, chemical- and biological-related threats, efforts to control conventional arms, and controlling the transfer of other sensitive goods and technologies that present potential security concerns.

Thoroughly documented, these chapters are also supplemented by appendices and annexes with extensive data and insights on major armed conflict, multilateral peace operations, military spending, arms producers, international transfers of major conventional weapons, nuclear arsenals and fissile material stocks, international arms embargoes, international arms control and non-proliferation agreements, multilateral security institutions, and a chronology of major events related to international arms control, armaments, and conflict and security in 2010. As in recent years, SIPRI *Yearbook 2011* serves as a prominent platform for the release of the Global Peace Index (GPI) developed by the Australia-based Institute for Economics and Peace in association with the Economist Intelligence Unit.

Taken together, the contributions to *SIPRI Yearbook 2011* provide the single most comprehensive and in-depth annual assessment of developments in international security, armaments and disarmament.

### Themes and key findings

The work of the current and recent editions of the SIPRI Yearbook underscores a number of important themes and findings. This year three important themes and related findings stand out.

#### Intensifying non-state influences

States continue to be the dominant security actors on the global scene, for better and for worse. Nonetheless, the research and findings in *SIPRI Year-book 2011* underscore the continuing and growing importance of non- and quasi-state actors in shaping the global and regional security scene. On the one hand, as argued below, non-state actors could contribute more to peaceable outcomes. On the other hand, other non-state and quasi-state actors have had a fundamentally debilitating effect on peace and security.

This theme and its implications emerge most strongly in chapters 1 and 2, which examine, respectively, corruption in the arms trade and the links between resources and conflict. In chapter 1 the authors point to the deleterious influence that non-state actors involved in the arms trade-businesses, brokers and rogue government officials acting for personal gaincan have on political openness, economic viability and security in vulnerable states such as South Africa. Chapter 2 describes and assesses the range of actors, driven by political and economic motives and sometimes backed by governments, that seek to exploit resource wealth through violence and intimidation. The activities of these groups of warlords, rebel groups, criminal organizations, militias and armed gangs can fuel and finance complex and intractable conflicts that have destabilizing consequences, such as those in Afghanistan, the DRC, Guinea-Bissau and Niger. This chapter also points to the impact of natural occurrences and calamities, often exacerbated by human action (or inaction), which can be drivers of instability and conflict, including climate change, environmental degradation, resource shortages, floods, droughts and famine.

Other analysis and data on major armed conflicts in chapter 2 and its appendices provide further documentation of this theme: all of the 15 ongoing major armed conflicts in 2010 were within states and involved armed non-state groups. Indeed, as the analysis points out, of the 29 major armed conflicts in the world in 2001–10, only 2 were fought between states;

the other 27 conflicts in this period were within states and involved a state actor in conflict with at least one armed non-state actor. The societal instabilities, fierce clashes, open conflicts and political shifts that erupted in early 2011 in parts of North Africa and the Middle East also came about following largely peaceable but unanswered demands by citizens, although in the case of Libva these demands transformed to involve armed irregular forces in conflict with the national government.

The increasingly important role and impact of non-state actors also come to the fore elsewhere in the volume. For example, chapter 5 on arms production details the world's Top 100 arms-producing companies, which alone generated approximately \$401 billion in arms sales in 2009—an increase of 58 per cent in real terms since 2002. This figure gives a sense of the economic- and security-related clout that these firms wield, especially in the countries where they are concentrated. Chapter 9, which focuses on potential biological and chemical threats and efforts to minimize them, also notes the work under way within the framework of the 1972 Biological and Toxin Weapons Convention (BTWC) and the 1993 Chemical Weapons Convention (CWC) to respond to the roles and impact, both positive and negative, of non-state actors. This is particularly the case as scientific and technological advances, including the increasing overlap between chemistry and life sciences, arise as new potential challenges for non-proliferation efforts. The research and findings in this and previous editions of the SIPRI Yearbook on conventional arms transfers and on strategic trade controls point out that non-state groups continue to access a wide range of military equipment and weapons, including anti-ship missiles, helicopters and landmines. In examining strategic trade controls, chapter 11 notes the continuing need for the international community to focus on non-state actors in the procurement supply chain, as well as on states, in order to prevent the proliferation of weapons of mass destruction (WMD). Scientists, brokers, shippers and financial institutions, knowingly or unknowingly, often contribute to proliferation and the procurement of dual-use goods for WMD programmes.

#### Emerging global and regional powers

A second major theme illuminated throughout SIPRI Yearbook 2011 concerns the continued expansion of the role and impact of 'new powers' at global and regional levels. While commentators on the international security situation frequently remark on that development, this volume, like its predecessors, provides a factual and analytical basis to inform those discussions and looks ahead to the implications. Chapter 2, for example, discusses the increasingly important role that China and India play in the geopolitical competition for resources; concerns over Chinese exports of rare earth metals became a significant political and economic issue in 2010. Chapter 3 examines multilateral peace operations and focuses much of its analysis on the increasing presence in peace operations of countries such as Brazil, China, India and South Africa, and the plusses and minuses of this development. These four countries provided more than 15 per cent of UN peace-keepers at the end of 2010 and are asserting greater influence to determine the principles and practice of peace operations, even as such operations are in higher demand and undergoing greater scrutiny and calls for change.

Research and findings in chapter 4, on military spending, also reflect and underscore the important and growing role of emerging powers in global security and regional affairs, with special focus on Brazil, China, India, Russia, Turkey and South Africa. The USA has far and away the highest military expenditure of any country, accounting for nearly 43 per cent of total global military spending in 2010. But China, which became the world's second-largest military spender in 2009, not only maintained its ranking in 2010, but both widened the gap between its military spending and that of lower ranking countries and narrowed the gap between its spending and that of the USA. China's military spending in 2010, estimated by SIPRI at \$119 billion, was roughly twice that of any of the next four countries' military spending levels: the United Kingdom (\$59.6 billion), France (\$59.3 billion), Russia (\$58.7 billion) and Japan (\$54.5 billion). Among the world's top 15 countries in military spending in 2010, the five whose military budgets grew the fastest over the period 2001-10 were China (189 per cent), Russia (82 per cent), the USA (81 per cent), Saudi Arabia (63 per cent) and India (54 per cent). Military spending by European NATO countries remained flat or even declined in some years between 2001 and 2010; in contrast, military spending by countries in the Shanghai Cooperation Organisation (SCO), primarily accounted for by China and Russia, increased by nearly 145 per cent over the same period.

Chapter 5, on arms production, also gives special attention to advances in domestic military-industrial development in three non-Western countries with companies among the SIPRI Top 100 arms-producing companies—Israel, South Korea and Turkey—and examines the motivations and challenges for these smaller producers to rise in the ranks of global arms production. Chapter 6, which analyses conventional arms transfers worldwide, focuses on India and Pakistan as among the world's leading importers of weapons. India rose to become the world's largest arms importer for the period 2006–10, overtaking China, which now stands as number two, while South Korea holds third place. Together, these three countries accounted for just over 20 per cent of the volume of conventional arms transfers in 2006–10. Some of the growing clout of emerging powers is related to the modernization of their nuclear weapon arsenals. Chapter 7 details and analyses the nuclear weapon programmes of eight states—the USA, Russia, the UK, France, China, India, Pakistan and Israel—and the military nuclear

programme of North Korea. China, with the world's fourth largest nuclear arsenal, is strengthening its nuclear deterrent by expanding and diversifying its ballistic missile force and through deployment of new nucleararmed submarines. India, too, is taking important steps to modernize its nuclear forces through expansion and improvements to its Agni series of ballistic missiles and the development of submarine-launched ballistic missiles for deployment at sea by the mid-2010s. Chapter 8 on nuclear arms control and non-proliferation notes how in 2010, to the consternation of some Western governments, particularly the USA, Brazil and Turkey attempted to broker a deal with Iran in which the latter would export half of its low-enriched uranium stockpile to Turkey, in return for reactor fuel for civilian purposes.

#### Increasing institutional uncertainty and fragility

A third important theme in many of the chapters in this volume is the problem of institutional inefficiency, uncertainty and weakness. Many of the organizations that are tasked with promoting peace and security find it increasingly difficult to generate the necessary political will and financial resources needed to meet their mandates, or there is simply a lack of political will to establish governance mechanisms where they are needed. In discussing the links between resources and conflict, chapter 2 argues that cooperative international governance on issues of resource scarcity and dependence may become more difficult in the years ahead due to a sharpening sense of competition and lack of institutional capacity. Chapter 3 points out how major institutions, such as the UN, NATO and the European Union (EU), are all reassessing their peace operations, yet lack strategic thinking to realize a new consensus. UN peace operations may face a growing North-South divide, in which developing world countries, which supply the vast majority of peacekeepers, will demand greater authority to determine the principles and purposes of these operations.

Despite what many called an 'arms control spring' in 2010, institutions that are concerned with arms control, disarmament and non-proliferation are nevertheless going through a period of uncertainty, change and even challenges to their normative legitimacy. As discussed in chapter 8, 'traditional arms control'-that is, bilateral treaties between Russia and the USA aiming solely to reduce their nuclear forces—may have come to an end with the 2010 Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START). Any future disarmament of Russian and US nuclear weapons will demand far more difficult negotiations to address a range of complex issues, including missile defences, space weapons and long-range precision strike weapons, and may also require a move from bilateral to multilateral negotiations. This chapter also notes continued concerns about the future of the NPT, which, despite public

declarations of the success of its review conference in 2010, was unable to substantially close the divide between the nuclear weapon 'haves' and 'have-nots' over the relative importance of the treaty's three main pillars: non-proliferation, disarmament and access to nuclear energy for peaceful uses. Looking ahead, and as discussed in chapter 9, the BTWC and the CWC both face important turning points in 2011 that will have important consequences in either weakening or strengthening these securityenhancing regimes. Efforts to revive and reform the single most important and elaborate conventional arms control treaty, the 1990 Treaty on Conventional Armed Forces in Europe (CFE Treaty), while relatively active in 2010, remain slow and face an uncertain future, even as the treaty is eroded by the actions of some of its parties. Chapter 10 focuses on developments for the CFE Treaty and other conventional arms control measures in Europe and concludes that, while there are some promising signs of progress, a variety of strategic and technical factors still obstruct the path towards a more cooperative and acceptable pan-Europe approach to future conventional arms limitations and related confidence-building measures.

The very nature of an increasingly globalized, complex and interdependent world is forcing countries to rethink the best approaches to countering proliferation threats. Chapter 11 notes that such factors as rapid scientific and technological advances, the increased diffusion of dual-use items, and the growing complexity of global trade and procurement networks are forcing traditional strategic trade control regimes, initiatives and capacity-building activities to introduce new enforcement tools, legal mechanisms and cooperative approaches to combat the proliferation of WMD and counter the threat of WMD use.

# III. Implications and looking ahead

In view of these key trends, it is clear that the current arrangement of institutions, agreements and processes intended to manage the challenges of global and regional security, armaments and disarmament—what could be called the 'security governance system'—is under mounting pressures. These pressures come from both within and outside the current system.

From within, the security governance system is strained by many factors. One of the most important is the ongoing diffusion of hard and soft power among the principal states of the world. As relative strength and influence become more evenly distributed with the emergence of 'new' powers in the international system, the global and regional institutions, agreements and processes created in and reflective of an earlier era must realistically confront and adapt to this new reality. It is increasingly evident that even powerful states must cooperate and compromise with other states in order to meet and mitigate their shared security problems. With the greater

strength and influence of countries such as Brazil, China, India, Russia and others, competing or divergent interests mean greater difficulties in achieving consensus for action in the established global and regional security structures. Most visibly, the world's most important multilateral global security institution, the UN Security Council and its permanent membership, does not adequately reflect the changing realities of the global security system. The recently revived Group of 20 (G20) major economies may more accurately reflect these realities, but the organization has not begun to take security governance as a primary task and is not likely to do so in the near future.

Relatedly, those powers that in the past often took the lead to bolster security governance at global and regional levels are no longer able to do so as well as they once did. The role of these countries—principally the USA and its allies in Europe—is affected by the ongoing relative power shifts just noted. Their ability to deliver global public goods for security has also been weakened by the global financial crisis and lengthy economic downturn. The citizens of the USA and of its major allies around the world are likely to demand that their leaders focus on domestic recovery, rein in foreign aid and security-related assistance, and eschew proactive security agendas abroad.

The current system of security governance is also affected by external pressures. The character of world security is becoming even more dynamic, complex and transnational, with intensified and increasing flows of information, people, capital and goods. The world is changing faster than established security-related institutions and processes, which struggle to cope with the potentially destabilizing consequences of the current era, including such problems as cyberattacks, climate change, resource scarcity, unregulated migration, violent extremism, transnational criminal activity, the proliferation of sensitive technologies, and illicit transfers of weapons, drugs and money. Moreover, most of the challenges arising outside the established security governance system come from non-state actors. The ability of non-state actors to affect, influence and even shape the security agendas of states and state-based security institutions continues to increase, and the consequences can be positive or negative. However, in the end states and their institutions have been slow to respond to the challenges and opportunities that non-state actors pose.

Looking ahead, the current system of security arrangements must undertake bold reforms. The principal institutions of security governance at the global and regional levels will need to step up the equitable integration of newly emerging countries to foster more positive and energetic support for meeting the complex security challenges of today and tomorrow. Such steps could include an expansion in the permanent membership of the UN Security Council and a more active security-related role for the G20. Regional institutions concerned with security issues—such as the African Union, the Association of Southeast Asian Nations (ASEAN), the Arab League and the SCO—have much work to do to build their political and operational capacities to mitigate transnational security challenges in their neighbourhoods, further strengthen capacities for peace and humanitarian relief, and deepen cooperation with other regional and global institutions.

In building such capacities, established institutions and other security-related mechanisms must strive to move beyond many of the restraints that state-centric and consensus-based, lowest-common-denominator norms can often impose. An important step forward would be the deepening and expanding of partnerships and other forms of cooperation with the widening spectrum of non-state actors involved at the nexus of security, foreign policy and development assistance. Developing such partnerships for peacebuilding and humanitarian relief operations is critically important, both to improve coordination in acute phases of such operations and to foster more stable transitions to longer-term peacebuilding and reconstruction. Peacebuilding efforts should also invest more heavily in expanding and improving the valuable contributions of civilian experts, so-called civilian corps, in such areas as education, justice systems, health care delivery, and government finance and accounting systems.

Partnerships which bring government organizations together with non-governmental organizations (NGOs), businesses, religious and ethnic leaders, and other civil society representatives can be more effective in dealing with difficult security challenges on the ground. Efforts such as the Kimberley Process and the Extractive Industries Transparency Initiative discussed in chapter 2, and the engagement of industry and NGOs in developing stronger mechanisms for nuclear security, for controlling security threats from chemical and biological materials, and for strategic trade controls will be increasingly needed. State-based institutions must also consider innovative and effective means to interact, if possible, with a range of increasingly potent and influential non-state actors in certain fragile and conflicted areas—local councils, political factions, groups controlled by warlords, militias, irregular forces and criminal organizations—and achieve more peaceable and stable outcomes.

Important though they are, such steps are difficult to realize, especially as the challenges to international security continue to mount. The world is likely to face a difficult period of growing uncertainty and fragility and a diffusion of risks and threats. In light of these challenges, SIPRI and the SIPRI Yearbook will continue to diligently observe and analyse these and other developments related to international security, armaments and disarmament. In doing so, SIPRI aims to serve as an authoritative and informative resource for our readership of decision makers, analysts and concerned citizens around the world.