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SIPRI Yearbook 2003

Armaments, Disarmament and International Security

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“One of the several paradoxical aspects of the mass killings of 11 September 2001 has been that, while brutally demonstrating the reality of an interconnected world, they have bred policy perceptions and agendas which risk becoming increasingly West-centric.”

“The debate about whether the USA can be expected to act as an absolutist and unilateralist, or a lawful and cooperative hegemon is one that agitates the USA’s friends much more than its potential foes.”

“Conflating might and right is a safe strategy only for a state that can be sure of its current supremacy in all dimensions and of keeping that supremacy indefinitely.”

*From the Introduction
by Alyson J. K. Bailes*

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Key quotations from the SIPRI YEARBOOK 2003

Security and conflicts

- “The trends reported . . . may be summed up as changes in the nature of the Euro-Atlantic security community combined with challenges to the unity and coherence of Euro-Atlantic (or ‘Western’) values. . . . The most optimistic overall interpretation would be that the world is witnessing the turbulence involved in the movement towards a multi-polar system, cushioned by the globalization process which increasingly pushes towards a single world security and economic agenda. The most pessimistic would be that a corner is being turned towards deinstitutionalization and towards a world governed by power play, the nature of which is as unstable in the longer term as it seems unipolar in the short term.”
- “There was also evidence—for the conflicts surveyed and perhaps for some others, including cases within Europe—that concern about being designated as a terrorist group did have a significant impact on the behaviour of at least some non-state armed groups and political movements.”
- “[T]he UN initiated two peace-building operations [in 2002], UNAMA and UNMA, which were given stronger mandates and more resources than earlier political and peace-building missions. They are ‘multi-dimensional’, encompassing all the aspects of peace-building—immediate humanitarian relief assistance, institution building, law and order functions, and economic recovery.”
- “. . . the USA succeeded in destroying terrorist bases in Afghanistan, dismantling most of al-Qaeda’s infrastructure in the country and removing the Taliban regime from power . . . [but] key Taliban and al-Qaeda leaders (probably including bin Laden and possibly Mullah Omar) and significant numbers of al-Qaeda/Taliban fighters remain at large, . . . support for the new central government is weak, and political and military power remains in the hands of the country’s regional, ethnic and clan leaders.”
- “The 1998 nuclear tests by India and Pakistan dramatically worsened the security situation for over a billion people in the subcontinent. Since then the two countries have continued to engage in a slow but steady arms race . . . and a gradual consolidation of nuclear weapon infrastructure. Nuclear use doctrines are taking shape. There have also been two major military crises, both prominently featuring nuclear threats.”
- “[I]nstitutional and technical accomplishments notwithstanding, progress in improving the EU’s military capabilities has been only moderate. It is impeded by, among other things, the lack of strategic answers to the questions of what the rationale for the ESDP is and what the real needs of the Union in the security field are.”
- “Maintaining a focus on security sector reform *within and beyond the enlarged boundaries* [of NATO and the EU] may provide the best guide through the risks and opportunities inherent in the enlargement of these key multilateral organizations.”
- “[I]f donors focus on the application of good governance principles to the military sector rather than on the level of spending, the argument of political interference in domestic affairs of recipient countries carries much less weight and even becomes less sensitive.”

Military spending and armaments

- “[C]ontemporary changes in the security environment and . . . thinking on security . . . call for changes in the very notion of security, moving from a *narrow* concept of military, state-centric security, towards *broader* and *deeper* security concepts.”
- “[T]he acceleration [in world military expenditure] in 2002 is due almost exclusively to the huge increase in US military expenditure under the Bush Administration. . . . A review of global expenditure trends shows that the rest of the world is not prepared, or cannot afford, to follow the USA’s example in increasing military expenditure at the current level or for the same purposes.”
- “It is clear that in periods of rapid change it may be difficult for governments to keep pace with the strategies developed by companies for R&D, production, sales and marketing, which sometimes evolve much faster than governments are able to develop new policies.”
- “Just as much risk as opportunity accompanies the arrival of cruise missiles and UAVs [unmanned air vehicles] as powerful military instruments. . . . As a consequence, the growing threat of cruise missiles and UAVs underscores the need not just to develop suitable defences but also improved non-proliferation policies.”
- “It is uncertain how important anti-terrorist activities will be for the future trend in transfers of major weapons. . . . [M]ajor weapons might not be the most effective means for fighting terrorism.”

Non-proliferation, arms control and disarmament

- “While bilateral and multilateral treaties cannot carry the full weight of managing international security problems, arms control continued to play an important role as one instrument of security policy in 2002.”
- “[T]he key issue to be addressed is not whether particular treaties and regulatory arrangements have failed. Rather, it is how to deal with states which deliberately violate their obligations under these treaties and the norms underlying them.”
- “Many of the efforts to constrain or ban the development, production and use of CBW agents have focused on traditional multilateral arms control and disarmament agreements. There is, however, an increased reliance on national and ad hoc cooperation measures among like-minded states on specific issues of concern to meet perceived CBW threats, including those posed by non-state actors.”
- “European arms control remains by far the most advanced regime of its type worldwide. . . . Conventional arms control has become an integral part of an inclusive, cooperative security system that needs to evolve in parallel with changes taking place in Europe.”
- “In 2002 two interrelated discussions increased the political salience of export controls . . . how to increase the effectiveness of counter-terrorism measures . . . [and] the role of export controls in managing weapon programmes of concern.”

SIPRI Yearbook 2003

Armaments, Disarmament and International Security

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A glossary with membership of multilateral organizations, tables, figures, data appendices and extensive documentation as well as a detailed account of the armed conflicts in 2002

SUMMARIES from the SIPRI YEARBOOK 2003

Introduction: Trends and challenges in international security

Alyson J. K. Bailes

The new security debate triggered by the terrorist attacks of 11 September 2001 remains short of a solution. Heightened awareness of the deadly threats facing even the most advanced societies has not led to a new sense of global community—partly because of the lack of truly global authorities that could combine the necessary broad competence with the consistent enforcement of remedies. Carefully considered, the new sense of insecurity does not reflect a net increase in threats and conflicts, where real progress has been made since the end of the cold war. It arises rather from the correct perception that terrorists, weapons of mass destruction and ‘rogue’ states can pose asymmetric threats even to the strongest nations—combined with an incorrect assumption that the sources of these threats are always interlinked.

The decision of the USA to defend its eminence as sole superpower by actively seeking out, striking and, if necessary, anticipating those who would threaten it has dominated global security perceptions for the past 18 months. Concerns about how much further the USA will go in this direction are felt by friends at least as much as foes. The EU, the USA’s main counterweight in the economic field, is not yet (and will not soon be) able to offer a balance or alternative in the field of security.

Attempts to forge a common security-building agenda even among Western partners are dogged by real difficulties in defining international terrorism and the nature of the associated threats and remedies. Regarding weapons of mass destruction, the goal of non-proliferation is easier to define, but the establishment of threat hierarchies and consistent remedies more problematic. (The complications posed by the existence of both authorized and non-authorized nuclear weapons states, in the context of the 1968 Non-Proliferation Treaty, do not help, and a similar mentality must not be adopted on chemical and biological weapons.)

Broader policy challenges arise from the need to integrate the many non-military, ‘human’ dimen-

sions of security, and from the risk that certain protective actions may undermine what they are protecting (e.g., the economy and human rights). A correctly balanced policy should mobilize all relevant state actors, and also the private sector.

There is a need to re-balance active and ‘positive’ methods of security building—naturally more common since the end of the cold war—with measures of restraint, including a revitalized arms control agenda. Action alone is risky, uncertain, costly and potentially discriminatory: restraint needs to shake off its inflexible, unproductive image. Counter-terrorism is a good example of the need to match active (preferably transnational) measures with internationally recognized and universally binding standards, lest an equation of might with right leaves the world at the mercy of future emerging powers. Heightened awareness of terrorism should also be used to refine conflict management policy.

The unique route taken by European integration to suppress and sublimate security problems has been much debated this past year, mainly by its critics. The ‘European way’ is successfully incorporating Central Europe, taking charge of the Balkans and even influencing Russia—yet Europe lacks a coherent, collective response to the US-defined ‘new threats’ and a sense of its own global mission. The USA cannot seriously want Europe to ‘re-nationalize’, and the EU cannot ignore US concerns either if the Atlantic link is to survive. European coping strategies are currently a mix of bandwagoning, role division, efforts to create a counterpole, and hopes that the US storm will blow over. It is too early to assess the prospects of future rift or convergence but worth noting how many other regions of the world have chosen the EU as their model.

The year was a poor one for progress in combating poverty, famine, disease, pollution and climate change, although the Johannesburg Summit signalled some rapprochement between leaders and critics of globalization. Shrinking and sub-optimally distributed world populations are a problem to watch for the future, warning us to stop short of counter-terrorist measures which would undermine multicultural societies. A Polish proposal to look afresh at the UN’s political principles and instruments for addressing global security is well worth considering, if only to let other regions and nations join the debate.

1. The Euro-Atlantic system and global security

Ian Anthony, Alyson J. K. Bailes, Shannon N. Kile and Zdzislaw Lachowski

New US strategy documents adopted in 2002 allow for military action—pre-emptive where necessary—against ‘asymmetrical’ threats posed by terrorists and weapons of mass destruction as one means to an explicit goal of preserving US military supremacy. They prescribe the transformation of US national forces with emphasis on strike capabilities, active and passive defences, and responsive infrastructure. During the year the USA pursued its military action in Afghanistan, acquired bases and military partners in new regions and launched an ambitious homeland security programme under a new single department. In March President Bush declared his determination to stop the threat from Iraq, with prime reference to Saddam Hussein’s efforts to acquire weapons of mass destruction. Widespread international concerns were voiced about the consequences, legal propriety and relative priority of an attack on Iraq, and during the autumn the USA consented to work with other UN Security Council members for a UN resolution sending international inspectors back to the country instead. By the end of the year they had made no clear findings, while Saddam continued a policy of denial.

US–European relations were strained on a number of global policy issues besides Iraq. The US administration’s emphasis on ‘coalitions of the willing’ raised fears of its breaking away from alliances and legal constraints, while US thinkers derided Europe’s inability either to wield power or to understand it. Nonetheless, during 2002 factors of calculation or loyalty kept both sides working for compromises—fragile though these would soon prove.

NATO and the EU had a triple agenda: enlargement, adaptation and the management of the Balkans (where a trend to shift responsibility to the EU emerged by the end of the year). NATO invited seven new members to join in 2004, including the Baltic states, with minimal Russian protest. It adopted decisions opening the way for worldwide deployments, and a package of measures in November (a new Capabilities Commitment, a new Response Force and a new command structure) potentially providing tools for them. US–European tensions persisted, however, and the principal blockage to full NATO support for EU military operations was removed only after mid-

December.

The EU invited 10 new members (including Malta and Cyprus) to join in 2004, gave Romania and Bulgaria a 2007 target and—after difficult discussions—agreed to define Turkey’s target date in late 2004 if reforms have progressed far enough. It opened a new-style European Convention to discuss the Union’s adaptation for the future, including a possible ‘constitution’. The EU and NATO also reflected on new ‘outreach’ policies and structures after enlargement to promote partnership with, and contain instability from, new neighbour regions to the east and south.

In Russia, President Putin developed a personal strategy increasingly anchored in the West, conserving Russia’s limited energies for internal growth and acknowledging the common nature of many global threats. Realist but not yet deep-rooted, this policy brought Russia some rewards in 2002 for its acceptance *inter alia* of US missile defence plans, NATO enlargement and US bases in Central Asia. The policy did not, however, achieve true US–Russian equality or dispose of all disagreements. Russia handled its internal conflicts as a ‘terrorist’ challenge, opting for an imposed military and political solution in Chechnya, especially after a costly hostage incident in October, and threatening cross-border strikes into Georgia.

Russia secured a new consultative relationship ‘at 20’ with NATO when the NATO–Russia Council was inaugurated in May, with an agenda including cooperation on ‘new threats’. Kaliningrad became the main bone of contention regarding EU expansion plans, but after eventful negotiations an EU package of measures to ease Russian citizens’ transit from and to the exclave was accepted in November. Russia took steps in Central Asia, notably emphasizing the collective security functions of the Commonwealth of Independent States, to signal its continuing claim to influence there.

Appendix 1A, by Jinmi Adisa, *The African Union: the vision, programme, policies and challenges*

The African Union (AU) replaced the Organization for African Unity as a more cohesive and integrated African organization. At the time of transition, the continent was racked by a series of internal conflicts that threatened to undermine the viability of any sustained regional agenda. Disputed electoral outcomes have been a major source of political tension. The AU is also concerned with the issue of terrorism. The degree of international support will be a crucial factor in the implementation of the AU’s agenda.

2. Major armed conflicts

Sharon Wiharta and Ian Anthony

Eight of the 21 major armed conflicts ongoing in 2002 have been selected—Chechnya (Russia), Colombia, Israel–Palestine, Nepal, Democratic Republic of the Congo, Sri Lanka, Somalia and Sudan—to allow for a more thorough and analytical discussion. The first four conflicts, which intensified substantially during 2002, underlined the continuous evolution in the methods of war fighting. The latter four are cases of conflict that came close to achieving a resolution in 2002.

This was the first full year in which the effects of the September 2001 terrorist attacks in the USA could be properly assessed and, although no definite conclusions can be drawn at this time, there is evidence that they have had a direct impact on most of the conflicts examined. In Africa, the USA, concerned by possible links between cells of the al-Qaeda network and Islamic fundamentalist organizations in the region, paid a greater level of attention to developments in the conflicts in Sudan and Somalia. This resulted in the application of considerable pressure on the warring parties in both conflicts to come to a negotiated settlement. By the end of 2002, there were prospects for resolutions to both conflicts.

External influences, such as diplomatic pressure or promises of military, foreign, and humanitarian aid, played a large role in changing the dynamics in both groups of conflicts. War-weariness, financial disincentives arising from the fighting and some internal pressure were also important reasons for the parties involved in the Sri Lankan and the Sudanese conflicts to agree to negotiations.

Appendix 2A, by Mikael Eriksson, Margareta Sollenberg and Peter Wallensteen, *Patterns of major armed conflicts, 1990–2002*

In 2002, there were 21 major armed conflicts in 19 locations throughout the world. The number of major armed conflicts and the number of conflict locations in 2002 were lower than in 2001, when there were 24 major armed conflicts in 22 locations. The conflict between India and Pakistan continued to be the only active inter-state conflict. The vast majority of the conflicts in 2002 occurred in Africa and in Asia. In the 13-year post-cold war period, there were 58 different major armed conflicts in 46 different locations. The number of major armed conflicts in 2002 was the lowest since 1998.

Appendix 2B, by Mikael Eriksson, Margareta Sollenberg and Peter Wallensteen, *Gives definitions, sources and methods for the conflict data.*

3. Multilateral peace missions

Sharon Wiharta

Multilateral peace missions in 2002 underwent several important changes, many of which were central to their nature and make-up. Not only did the missions initiated in 2002 follow the new trend of smaller, short-term and mandate-specific missions, but they also tended to play more of a peace-building role and have an advisory function for the host governments.

The substantial progress achieved in the Balkans, reflected in the increased stability in the political and security arenas, allowed the two long-standing and broadly based UN missions (UNMIBH and UNMOP) to wind down in Bosnia and Herzegovina and in Croatia, respectively. The European Union Police Mission (EUPM) assumed the tasks previously undertaken by the police component (International Police Task Force) of UNMIBH on 1 January 2003.

As local institutional capacities grew in the region, the need for large and open-ended missions was not as great. Unfortunately, donor fatigue also contributed to the international community's reluctance to maintain large missions. The NATO SFOR and KFOR missions completed their phased drawdown of authorized troop strength to 12 000 and 30 000, respectively. In the Former Yugoslav Republic of Macedonia, the third instalment of NATO's engagement—Operation Allied Harmony—was launched in December for a period of six months.

Similarly, Timor-Leste's largely smooth transition from a territory under the administration of the UN to an independent state, in May 2002, allowed for a correspondingly reduced international presence. The initiation of UNMISSET marked the termination of UNTAET's interim administration of East Timor and the gradual devolution of authority to the Timorese Government. At the end of the year, the Timor-Leste police force, which works in close conjunction with UNMISSET, was solely responsible for enforcing the law in 4 of the 13 districts in the country.

Peace-building missions were given a new lease of life with the launch of UNAMA in Afghanistan and UNMA in Angola. Both missions were given more robust mandates and more resources and are 'multidimensional', encompassing the various components of peace-building—immediate humanitarian relief assistance, institution building, law and order functions, and economic recovery.

Despite the differences in mandate and struc-

ture, the four new missions initiated in 2002 shared one commonality—they were all designed to play a secondary role to the host government and to let the countries in question take ownership of the transition process.

• **Appendix 3A**, by **Sharon Wiharta**, *The International Criminal Court*

The year 2002 was a watershed for the International Criminal Court (ICC). After several years of drawn-out negotiations and drafting, the world's first permanent international legal entity tasked to deal with war-related crimes formally came into being on 1 July 2002.

Approximately half of the ratifications enabling the Statute to enter into force were deposited after 1 January 2002. At the First Assembly in September 2002, states parties agreed a budget for the court and a process for nominating judges. The first 18 judges were elected in March 2003.

However, the establishment of the ICC has continued to be controversial, with many states opposed to its creation, and the USA one of its strongest opponents. The ICC was made a political pawn between its proponents and opponents and the USA took several steps to dilute the effectiveness of the court and shield its citizens from its jurisdiction. In the post-11 September 2001 context, and by virtue of its superpower status, the USA sees itself as particularly vulnerable to politically motivated prosecutions. In May, the US administration rescinded its signature of the Statute. Other measures included passing into law the American Service Members' Protection Act (ASPA), which denies military aid to those non-NATO states that choose to ratify the Statute; restricting US participation in UN peace missions; threatening to veto the extension of the UN Mission in Bosnia and Herzegovina unless UN peacekeepers were granted immunity from prosecution by the ICC; and negotiating bilateral waiver agreements with several states.

The European Union, on the other hand, made several efforts to promote the early ratification of the Statute and to ensure the survival of the ICC. Policy directives and a Common Position were adopted to support the establishment of the court. However, the strength of the EU's commitment to the ICC, and its political cohesiveness, was put to the severest test when the USA approached several member states to sign waiver agreements. This created a rift in transatlantic relations and resulted in a shaky start to the ICC.

4. Afghanistan and the new dynamics of intervention: counter-terrorism and nation building

Andrew Cottey

In the wake of the 11 September 2001 terrorist attacks, the US-led intervention and subsequent international peace-building efforts in Afghanistan marked a significant shift in patterns of international military intervention. A new focus on counter-terrorism and regime change now runs alongside the longer-standing challenges of peacekeeping and nation building.

The al-Qaeda terrorist group, which had its primary base in Afghanistan, was widely viewed as responsible for the September 2001 terrorist attacks on the USA. After the withdrawal of Soviet forces in 1989, Afghanistan was fractured by civil war. In the late 1990s the fundamentalist Islamic Taliban regime came to power. Al-Qaeda's leader Osama bin Laden moved to Afghanistan in 1996 and a close relationship developed between the Taliban and al-Qaeda.

After the September 2001 terrorist attacks, the Taliban refused to break its ties with al-Qaeda or surrender the organization's leaders. As a result, on 7 October 2001 the USA launched military operations against Afghanistan. The action was justified on grounds of self-defence, in order to prevent further attacks. Rather than deploy large numbers of ground forces, the USA relied on local Afghan allies (the Northern Alliance), supplied with Russian arms and supported by relatively small numbers of special forces. The combination of highly accurate US airpower, the Northern Alliance allies, special forces on the ground, and the military weakness of the Taliban and al-Qaeda resulted in the dramatic collapse of the Taliban regime in November and early December. Senior Taliban and al-Qaeda leaders and significant numbers of fighters, however, escaped and fled into the mountainous Afghan–Pakistani border region. Some of these forces have continued to fight a low-level war against US forces and its local allies in southern and eastern Afghanistan.

The US-led intervention raised important ethical and legal issues. Intervention to remove a state's government and attack a terrorist organization it was harbouring went significantly beyond traditional interpretations of self-defence. The subsequent debate over the legitimacy of intervention in Iraq highlighted the controversial nature of the Bush Administration's doctrine of pre-emptive intervention and the precedent set in Afghanistan.

Reports of human rights abuses, atrocities and possible war crimes committed by Northern Alliance forces raised questions about the ethics of relying on local allies with poor human rights records. The capture of hundreds of Taliban and al-Qaeda fighters and the reluctance of the US Government to grant formal prisoner-of-war status to these detainees raised questions about the legal status and rights of non-state terrorist groups. More generally, the US-led intervention raised difficult questions about the applicability of the existing international laws of war to counter-terrorist operations.

The collapse of the Taliban made the development of a new political and security framework for Afghanistan an urgent priority. The December 2001 Bonn Agreement, signed by representatives of the majority of non-Taliban groups, established a multi-ethnic Interim Administration and laid out a political process for the country's development. A Loya Jirga (Grand Assembly) was held in June 2002, bringing together over 1500 delegates from across Afghanistan and establishing a new Transitional Authority to govern the country. Despite the establishment of a theoretically multi-ethnic government and the selection of Hamid Karzai (a member of Afghanistan's Pashtun ethnic majority) as president, the government is dominated by the Tajiks and Uzbeks of the Northern Alliance and most of the country is under the control of regional warlords. Violent incidents and human rights abuses continue, the rule of law is non-existent and in the south and east there is significant Pashtun resistance against the central government and the continued US military presence.

The international community has provided an International Security Assistance Force (ISAF) of about 5000 troops, a small United Nations Assistance Mission (UNAMA) and a commitment of about \$5 billion in aid over six years. ISAF's mandate is, however, limited to the capital, Kabul. Critics argue that the international community has not done enough to provide for security, law and order, and socio-economic reconstruction. The situation remains extremely fragile: the central government is weak, regional warlords are the dominant force in the country, sporadic low-level violence continues and renewed conflict could break out.

The US and wider international interventions in Afghanistan show that it is possible to use military force to counter and disrupt terrorist groups. However, they also illustrate that terrorist groups cannot be defeated by military means alone.

5. The nuclear confrontation in South Asia

M. V. Ramana and Zia Mian

Since the 1998 nuclear tests, India and Pakistan have been through a war and a major military crisis, both prominently featuring nuclear threats, making clear that the nuclearization of India and Pakistan has not made conventional war obsolete. Both states have pushed forward with establishing the institutions, doctrines and delivery systems required to deploy their nuclear arsenals.

Emboldened by the tests, in 1999 Pakistan's army and political leaders sent Islamist militants and troops across the Line of Control near the town of Kargil in Indian-held Kashmir. After two months of bitter fighting, and intervention by the USA, the troops were withdrawn. Pakistani leaders believe that, while they failed to fulfil their anticipated military or political objectives in the Kargil war, Pakistan's nuclear weapons prevented India from launching a massive military attack across either the Line of Control in Kashmir or the long international border.

For Indian leaders, Pakistan is clearly seen to have lost the Kargil war, especially politically. Nonetheless, the war inspired a search for ways to wage limited war against Pakistan that would not lead to the eventual use of nuclear weapons. At the same time, the Indian military has been conducting training exercises with scenarios involving the use of nuclear weapons.

The December 2001 militant attack on the Indian Parliament triggered a major crisis that stopped short of war, including a tense stand-off for several months involving over half a million troops. Indian politicians, media commentators and military personnel called for India to follow the USA's lead in unilaterally bombing Afghanistan without a UN Security Council resolution and attack facilities in the part of Kashmir held by Pakistan.

Since India did not actually conduct any military attacks, Pakistan claimed this as further evidence of its nuclear deterrent at work. For Indian leaders, Pakistani President Musharraf's promise in January 2002 to rein in the Islamic militant organizations that fight in Kashmir is seen as proof that India's 'coercive diplomacy' worked. Indian leaders also emphasize that the military crisis forced the international community to recognize Pakistan's support for terrorism.

The fact that the lessons taken from the Kargil war and the 2002 crisis by leaders in the two countries have been so very different has important implications for the future of South Asia. The USA may be a possible source of instability in a future crisis. Indian leaders may believe that the USA would intervene to prevent Pakistan's use of nuclear weapons.

India and Pakistan have been taking steps towards gradually making their nuclear arsenals operational. In 2003 India set up a Nuclear Command Authority to manage a proposed nuclear triad. An official nuclear doctrine emphasizes the retaliatory capability of its nuclear weapons. It has also claimed the right to nuclear retaliation if India is attacked using chemical and biological weapons. Following the other nuclear weapon states, semi-official documents have suggested that India should develop: (a) sufficient, survivable and operationally prepared nuclear forces; (b) a robust command and control system; (c) effective intelligence and early-warning capabilities; (d) planning and training for nuclear operations; and (e) the will to employ nuclear weapons.

Pakistan set up a National Command Authority in February 2000. Statements by officials and retired officials suggest that Pakistan would try to match India in posture and that it would use its nuclear weapons if: (a) India attacks Pakistan and takes a large part of its territory; (b) India destroys a large part of Pakistan's armed forces; (c) India imposes an economic blockade on Pakistan; or (d) India creates political destabilization or large-scale internal subversion in Pakistan.

Currently, neither country is believed to keep its nuclear weapons mounted on missiles and ready for launch. However, recurring crises and the growing familiarity of the military in both countries with nuclear weapons is likely to generate pressures for deployment of nuclear weapons with a launch-on-warning posture—with the attendant grave risk of accidental nuclear war.

Public opinion in the region is in flux. Hindu nationalist groups in India and Islamic fundamentalist groups in Pakistan have repeatedly called for the use of nuclear weapons. An active peace movement has emerged in both India and Pakistan, with national coalitions of civil society groups working for nuclear disarmament and peace.

6. The military and security dimensions of the European Union

Renata Dwan and Zdzislaw Lachowski

The European Union continues to pursue its 1999 Helsinki Headline Goal of making the European Security and Defence Policy (ESDP) fully operational. During 2002, member states made progress towards enabling the EU to carry out its Petersburg tasks by the end of 2003. However, institutional and procedural accomplishments notwithstanding, headway in improving the EU's military capabilities has been only moderate. It is impeded by, among other things, the lack of answers to the strategic questions of what the rationale for the ESDP is and what the real needs of the Union in the security field are.

The deadlock over EU access to NATO assets was overcome at the end of 2002. However, EU forces were not deployed for crisis management tasks in 2002. In the civilian field the EU made remarkable progress, crowned with the launch of the European Union Police Mission (EUPM) in Bosnia and Herzegovina on 1 January 2003.

Prospects for significant increases in military expenditure are slim (except in France and the UK). Other solutions, national and multinational, to the problem of capacity shortfalls, and ways to use existing resources better, are therefore being considered and pursued. The launch of the European Capabilities Plan gave a boost to rationalization, flexibility and coordination in member states' efforts in the run-up to the EU Conference on Military Capabilities in May 2003. One prominent idea that is gaining support from France, Germany and the UK is that of creating an intergovernmental defence capability development body, which may eventually lead to a common procurement programme. This would make it easier to depart gradually from the long-standing EU ban on using EU financial resources for defence purposes.

EU efforts in the civilian arena proved to be most successful in the police field, where it attained its objectives ahead of time. The other priority areas—the rule of law, civilian administration and civil protection—also met their specific targets by the end of 2002, although progress was slower. The main challenges for civilian capabilities are the coordination of disparate capabilities and the creation of common EU planning and mission support capacities.

More worrying is the fact that the two ESDP tracks—military and civilian—seem to be taking separate courses rather than pursuing increased compatibility. Agreement on a comprehensive concept of coordination between the military and the civil dimensions of the ESDP is necessary if the EU's potential is to be used to the full. Lack of agreement may also adversely affect the suggested adaptation of the Petersburg tasks to include combating terrorism.

The European Convention, started in February 2002, encouraged EU member states (and prospective members) to begin a debate and produce innovative ideas on security and defence issues that go beyond the original Helsinki Headline Goal of 1999. Two initiatives seemed especially pertinent to the consolidation of the ESDP in a new strategic environment—the principle of 'solidarity', and the invoking of the 'enhanced cooperation' clause to allow more ambitious material or doctrinal advances by groups of like-minded states. The latter initiative, aimed at moving away from the requirement for unanimity in security and defence matters, would help to make EU responses more flexible and efficient, but would also run the risk of creating political divisions within the Union. All this re-emphasizes the need for a clear definition of interests in the sphere of EU foreign, security and defence policy.

At the end of 2002, the major obstacles to launching a first crisis management operation had been overcome. However, the military crisis management operation in the Former Yugoslav Republic of Macedonia will not be fully 'European' because it remains dependent on NATO assets and planning.

Quite apart from the current problems, in preparing for its next major enlargement, in May 2004, the European Union is likely to face both a weakening of its political capacity and an even further deepening of its diversity. These challenges will need careful examination and appropriate decisions where the Common Foreign and Security Policy and the ESDP are concerned, both during the run-up to and after completion of enlargement.

7. Security sector reform and NATO and EU enlargement

Marina Caparini

Security sector reform (SSR) is a globally applied concept calling for the enforcement of good governance norms in all aspects of security policy making and implementation (i.e., not just military defence activities). Within Europe, both NATO and the EU have sought to promote democratic standards in the defence and security sphere and have placed this among the criteria for accession candidates. At the same time, however, both organizations have set positive objectives of reform and capability building in the same dimensions. The imminent entry of a large number of new members to both organizations, coupled with the impact of the new global agenda focusing on terrorism and proliferation control, makes it timely to review the way ahead for SSR in the larger European area.

NATO's concrete targets for military reform in applicant countries were clear, but have not been fully realized either before or (in the case of the three Central European countries already admitted) after accession. Modernization of defence structures, technology, financing, and public understanding and support all remain problematic points within the countries of this region. NATO's new concentration on out-of-area deployments, and its call for 'niche' contributions to these, may have the effect of dividing Central European defence establishments into a relatively sophisticated, small, deployable capacity and a majority of underpaid and under-equipped territorial forces. For the new set of candidates due to accede in 2004, NATO has adopted an improved set of accession goals and a better coaching process, but may also have diluted the strictness of its conditions somewhat in order to permit the wide-ranging incorporation of territory dictated by the post-11 September 2001 agenda.

The EU has been particularly strict in demanding that all its new members scheduled to accede in 2004 should demonstrate their ability to enforce the full 'Schengen' system of border control and internal security cooperation (from which some existing members have been allowed to opt out). This reflects concerns about the pressure of illegal migration, smuggling, crime, and so on, on the Union's extended eastern borders. Given the relatively weak development of scrutiny and democratic control mechanisms both at the European level and within the new democracies, however,

this pro-security emphasis risks tilting the balance in member states against the protection of their citizens' and foreign residents' human rights. Potential problem areas in this respect include asylum, immigration and refugee policies, inadequate support for national police, and attitudes towards non-EU neighbours. The continuing pressure to strengthen the EU's anti-terrorism and migration control capacities means that this problem will not quickly go away.

Both NATO and the EU—and in their own contexts, the Organization for Security and Co-operation in Europe and the Council of Europe—will have to consider how to develop SSR as an element in their policies towards 'new neighbours' in the east, south-east and south after enlargement. The new frontier zones from Minsk to Morocco are strategically and culturally diverse but all have below-average standards of security governance, and it is not yet clear how far the methods of leverage which achieved improvements within the existing round of NATO/EU entrant countries can take effect in these different environments. Devoting more resources to SSR as a part of 'out-reach' is desirable, but also means withdrawing resources from Central European countries before the corresponding reforms on their own territories are soundly anchored. Ultimately, the challenge of monitoring and enforcement *within* the enlarged institutions could only be met by more clearly defining the SSR norms applicable to *all* their members.

In sum, NATO and the EU have sought, and to a considerable extent achieved, SSR goals in Central Europe through the medium of a conditional accession process, and have shown the value (in terms of both effectiveness and legitimacy) of addressing these issues through a multi-lateral authority. It has not been altogether possible, however, to keep political distortions out of the process or to avoid 'mixed messages' resulting from the institutions' concurrent demands for—constantly evolving—performance standards in the fields of military intervention and security enforcement. Maintaining a focus on SSR *within as well as beyond the enlarged boundaries* may provide the best guide through the risks and opportunities inherent in the enlargement of these key multilateral organizations.

8. The processes of budgeting for the military sector in Africa

Wuyi Omitoogun

The 1990s witnessed a strong interest in military spending in Africa by external actors, especially donors of economic aid to the continent. Three main factors accounted for this: first, the end of the cold war allowed donors to become involved in non-traditional matters such as national security and the cost of maintaining military establishments; second, the widespread armed conflict in Africa; and third, the establishment of a linkage between good governance and development in the 1990s, which led development actors to question 'excessive' or 'unproductive' expenditure, such as military spending, at the expense of the social sector and the alleviation of poverty.

The initial policy choice of donors to force a change in priorities in public sector spending was to impose a predetermined level of military spending in recipient countries. However, this policy had the unintended consequence of increasing the secrecy surrounding military budgets in aid-dependent countries which wanted to hide the true cost of their military expenditure, and thus reduced the reliability of the military expenditure data on which donors' judgements were based.

Another deficiency of the policy of imposing a maximum level of military spending on recipient countries was that it did not take into consideration the legitimate security needs of the countries concerned. Having realized the limitations of *the level approach*, from 1997 donor countries began to discuss alternative ways of addressing the issue of excessive military spending.

By the early 2000s a new approach emerged, articulated primarily by the British Department for International Development (DFID). This approach emphasizes the process of arriving at military spending rather than the level of military spending. It also emphasizes the importance of applying sound financial management principles to the whole of the public sector, including defence. However, *the process approach* has not been universally accepted by donors and its details are yet to be fully understood by all donor countries.

A SIPRI study, launched in 2001, has examined the processes of budgeting for the military sector in eight African countries with a view to understanding how military spending decisions are made, and how to contribute to the improvement of the processes for military sector management in these countries. The study identifies a number of challenges that must be overcome before the process approach can take root as a tool of military spending management. These challenges include the need for proper policy development in the military sector in the countries as a necessary first step towards an integrated defence planning system.

The absence of a defence policy in many of the countries hinders planning and makes budgetary allocation to defence ad hoc. The problem is partly lack of expertise and partly lack of an enabling environment. To correct this, many of the states require capacity building not just in the defence sector but also in the other policy areas that defence interacts with.

Institutions that need to be strengthened include the parliament, the ministries of finance and defence, and the audit departments. Another major challenge is the need to develop clear rules to guide the budgeting process and to specify clear roles for the various actors involved. A third major challenge is to overcome the lack of transparency in the military budgets. There is a need to have a sufficiently detailed budget that will allow for proper scrutiny of every aspect of the budget. This challenge is as much a problem of capacity as it is a result of lack of policy.

These challenges have several implications for donor countries, including a need for enhanced policy dialogue between them and recipient countries on how to correct existing deficiencies in order to boost the chances of the process approach taking firm root. Furthermore, helping to address some of the present shortcomings in the systems will require long-term commitment as opposed to the short-term initiatives donors are used to.

9. The military sector in a changing context

Björn Hagelin and Elisabeth Sköns

A critical discussion is now required about the provision and use of quantitative indicators for security analysis, such as military expenditure, military production and arms transfers. A fundamental question for all producers and users of quantitative indicators is: how useful are the data? The purpose of the SIPRI databases on the military sector is to produce the most reliable and consistent global data that it is possible to collect, based on official and other open information. However, there are serious limitations to the use of all of these data sets. The challenge is to adapt the indicators and/or supplement them in the light of changes in the security environment.

The limitations to the use of data on national military expenditure relate not only to reliability and international comparability but also to contemporary changes in the security environment. Three major changes give rise to this challenge: the global pattern of armed conflict; the increased focus on the threat of transnational terrorism; and the trend for a stronger link to be made between military security and economic development—reflected in the new concept of ‘human security’.

While it will continue to be important to provide data on military expenditure, there is also a need to develop alternative measures of the cost of security provision—in particular for non-military activities associated with a broader concept of security. There are also various options for improving quantitative approaches to the study of security-related issues.

The objectives of a broader security agenda illustrate the shortcomings of data on arms production and international arms transfers. New forms of international defence industry cooperation, both horizontal and vertical; new political (national security) as well as commercial demands for arms exports; and less clear borders between certain military and civilian technologies all complicate the production, as well as use of, arms transfers data. There is a need to incorporate ‘internationalization’ and changing circumstances into the methodology of the study of arms transfers. There is no publicly available indicator that takes all these changes into account. Until one is developed, it will be impossible to describe market changes reliably and to devise and evaluate control measures.

Finally, there is a strong national-security linkage between arms production and arms transfers, on the one hand, and arms control, on the other. These two policy ambitions do not necessarily support each other. The way in which this political dilemma is resolved will be important for the achievement of security, in a military or non-military, or a broader or deeper, definition.

10. Military expenditure

Elisabeth Sköns, Wuyi Omitoogun,
Sam Perlo-Freeman and Petter Stålenheim

World military expenditure, which has been increasing since 1998, accelerated sharply in 2002—increasing by 6% in real terms to \$794 billion in current prices. It accounted for 2.5% of world GDP and was \$128 per capita. The current level of world military expenditure is 14% higher in real terms than it was at the post-cold war low of 1998, but is still 16% below its 1988 level, when world military expenditure was close to its cold war peak.

The increase in 2002 is dominated by a 10% real terms increase by the USA, accounting for almost three-quarters of the global increase, in response to the events of 11 September 2001. Further substantial increases are planned up to 2009. Furthermore, the budgets for fiscal years (FYs) 2003 and 2004 do not include the cost of the war in Iraq. A stated goal of the increased spending is to pursue the ‘transformation’ of US armed forces to better meet the challenges of 21st century warfare. This has been questioned, however, given the continuation of a large number of ‘legacy’ systems designed during the cold war.

The USA now accounts for 43% of world military expenditure, when currencies are converted at market exchange rates, as is the SIPRI practice in this Yearbook. The top five spenders—the USA, Japan, the UK, France and China—account for 62% of total world military expenditure and the top 15 account for 82%. These rankings depend strongly on the choice of exchange rate for conversion to US dollars.

Market exchange rates tend to undervalue the actual purchasing power of money in developing countries and economies in transition. When military expenditures are compared using purchasing power parity (PPP) rates, which reflect the actual volume of goods and services that can be purchased in each country with its currency, the USA remains the top spender but China, India and Russia become numbers two, three and four, respectively. SIPRI has chosen to use market exchange rates because of the lack of reliable PPP data for all countries and a need to apply a consistent methodology for currency conversion.

There are marked regional disparities in the share of economic resources devoted to military expenditure. In 2001, the most recent year for which data are available, the Middle East spent an estimated 6.3% of gross domestic product on the military compared to a global average of 2.3%,

while Latin America spent only 1.3%. Africa, Asia (including Oceania) and Western Europe also spent less than the world average (2.1%, 1.6% and 1.9%, respectively), while North America, at 3%, and Central and Eastern Europe, at 2.7%, spent somewhat more.

While the war on terrorism is a major factor in the increase in US military expenditure, this has not been the case elsewhere—except in a handful of countries. In particular, military expenditure in Western Europe remained flat in 2002. On the other hand, the UK and France have announced increases from 2003, some of this linked to developing ‘network-centric’ warfare, which is seen as important in the war on terrorism. However, these increases are not matched by most other countries in the region.

Other major powers increased military expenditure in 2002 for differing reasons. Russia’s 12% real terms increase in military spending relates mainly to efforts at military reform and the maintenance of technological capability in Russian industry. China increased military spending by 18% in real terms in 2002, also in pursuit of military reform and modernization.

In the Balkans, some countries appear to be reducing military spending as the region gradually returns to normality, while prospective NATO members in Central and Eastern Europe have been increasing military spending in pursuit of their candidacies and to promote NATO interoperability. In the Middle East most countries made only modest increases in military spending in deference to public opinion, which was against further increases in spite of tension in the region over Iraq. However, escalation in the Israeli–Palestinian conflict drove up Israeli spending. African military spending rose slightly, with armed forces modernization tending to become a more important driver than conflict in most cases. In South Asia, continued regional political rivalry and armed conflict between India and Pakistan pushed up military spending, reinforced by Pakistan’s role in the US-led war on terrorism.

• **Appendix 10A** contains tables of military expenditure in local currency and constant dollars, and as a share of gross domestic product for the period 1993–2002.

• **Appendix 10B** contains data on NATO military expenditure.

• **Appendix 10C** explains the sources for and methods of data collection.

11. Arms production

Elisabeth Sköns and Hannes Baumann

A survey of military expenditure and arms exports data suggests that arms production has increased in the USA and Russia and declined slightly in Western Europe. Expenditure on military equipment in the USA increased by 26% in real terms between 2000 and 2002. Although US arms exports declined, the net effect is most likely to be an increase in the level of US arms production during these years. The combined equipment expenditure of West European NATO member states declined by 3% in real terms between 2000 and 2002, while arms exports continued to decline, but only slightly. The spending gap on military equipment between the USA and NATO Western Europe reached a ratio of 3:1 in 2002, according to NATO data. In military R&D the gap is greater, exceeding a ratio of 4:1 between the USA and the European Union countries in the 1990s, according to the Organisation for Economic Co-operation and Development. Russian arms production has been increasing since 1998. The average annual rate of increase was 28% during the period 1998–2002.

The concentration of the US arms industry continued in 2002 through a series of mergers and acquisitions. The largest deal was Northrop Grumman's acquisition of TRW. Northrop Grumman aimed to increase its market share in advanced military technologies such as unmanned air vehicles, space-based technologies, and ballistic missile defence. During the 1990s the main purpose of acquisitions was to eliminate redundant arms production capacities or overheads in R&D in order to reduce procurement costs. With increasing concentration a new risk of cost growth emerged because of reduced competition in many sectors of the US arms industry. For instance, the number of suppliers of tactical missiles declined from 13 in 1990 to only 3 in 2000. This may give increased bargaining power to the few remaining companies when negotiating arms contracts with governments. The US Department of Defense expects that the 'transformation' of warfare will enable many non-traditional defence suppliers to rise to the ranks of major arms producers and thus ensure competition in the long run. However, a survey of the production of unmanned air vehicles suggests that this is unlikely to happen.

In Europe, the process of industrial restructuring continued with a number of smaller cross-border transactions, primarily in the aerospace sectors (aircraft, missiles and space) and to a lesser extent

in the vehicle and shipbuilding sectors. The European Union is increasing its influence on defence industrial policy through initiatives, such as, its Strategic Aerospace Review for the 21st Century (the STAR 21 Report) and the renewed proposal for an EU arms procurement agency in the context of the European Convention. Despite their aim of further integration, European governments still differ on issues such as procurement policy, competition policy and foreign ownership of arms production assets. They also disagree on whether to pursue a 'buy European' policy or to strengthen transatlantic industrial links as ways to overcome the perceived technology gap with the USA.

The goal of the Russian Government's restructuring plan is to establish 35–40 major groups of holding companies that will constitute the core of the Russian arms industry. However, this is being implemented very slowly. Many issues still need to be resolved, including the role of the state in the restructuring, appropriate legislation for the holding companies, opposition by regional leaders concerned about centralization, and inter-firm rivalries. The Russian arms industry continues to depend heavily on arms exports. However, there is no mechanism for redistributing export earnings to companies that produce mainly for domestic needs.

The rapid development of military technology and the processes of concentration, internationalization and privatization in the arms production industry present new challenges regarding affordability and the control of arms procurement. The emerging structure of arms production may make it more difficult for governments to control cost, competition and technology. The increasing cost of advanced military technology has also made it impossible for countries to avoid at least some dependence on foreign arms suppliers. Governments have difficulties keeping pace with the strategies developed by companies regarding technology, sales and marketing. In particular, it is more difficult to monitor and control international technology transfers if they take place within large transnational corporations. There is therefore a need for greater transparency in these companies, preferably laid down in international agreements.

• **Appendix 11A** contains tables of arms production.

12. New developments in unmanned air vehicles and land-attack cruise missiles

Dennis M. Gormley

While over 75 000 anti-ship cruise missiles are deployed by more than 70 countries worldwide, only about 12 industrialized countries currently produce land-attack cruise missiles (LACMs)—most notably exemplified by the US Tomahawk. However, this class of cruise missile is expected to proliferate widely by the end of the decade. More readily available now is the unmanned air vehicle (UAV), which seems likely to become a significantly more prominent means of precise weapon delivery. The Predator reconnaissance UAV has been adapted by the USA to carry two Hellfire missiles and was used in Afghanistan and Yemen to attack al-Qaeda targets.

The use of armed Predator UAVs by the USA raises important questions about the kind of expanded roles that UAVs may be adapted to perform in the future and, more immediately, to what extent other countries or terrorist groups might emulate US actions and transform their own unarmed UAVs or piloted light aircraft into unmanned weapon-delivery systems or crude terror weapons. UAV and cruise missile proliferation makes an answer to this question urgent.

The arming of the Predator reconnaissance UAV illustrates the potential for UAVs to become reusable weapon-delivery vehicles. Target drones, employed as air targets for test purposes, are also UAVs that could be converted into weapon-delivery vehicles. Given the explosive growth anticipated in UAV systems over the next decade, there will inevitably be increased pressure—led by the USA—to create more flexible, less restrictive, rules governing the export of unarmed UAVs and unmanned combat air vehicles (UCAVs). If adverse international security implications are to be avoided, or at least minimized, effective non-proliferation policy must be elevated to a truly complementary role alongside defence acquisition and security planning. Participants of the Missile Technology Control Regime (MTCR) have now agreed precise ground rules for calculating the range of LACMs. However, other problems remain regarding the transfer of complete LACMs and large UAVs, as well as critical component technologies.

Because of their capacity to strike with such great precision and effectiveness without causing significant collateral damage, cruise missiles have been called the paradigmatic weapon of the Revolution in Military Affairs. UAVs, unarmed and armed, have started to play crucial companion roles as key instruments of an evolving military transformation in the USA. However, just as much risk as opportunity accompanies the arrival of cruise missiles and UAVs as powerful military instruments. If UAV and LACM proliferation proceeds unimpeded, it could combine with the further spread of ballistic missiles to give multidimensional offensive forces a distinct advantage over layered defences. This would have negative consequences for homeland defence, regional stability and the spread of potent terrorist capabilities. As a consequence, the growing threat of cruise missiles and UAVs underscores the need not just to develop suitable defences but also improved non-proliferation policies.

The non-proliferation problems are challenging. They merit the highest level of attention within affected governments. Because existing MTCR provisions can be adapted to achieve better controls on cruise missiles and UAVs, the MTCR will remain the best tool available to slow the scope and pace of missile proliferation. In considering the merits of various alternatives to the MTCR, the non-proliferation community should recall the MTCR's many successes in slowing the qualitative spread of ballistic missiles.

13. International arms transfers

Björn Hagelin, Pieter D. Wezeman, Siemon T. Wezeman and Nicholas Chipperfield

Major conventional arms transfers in the period 1998–2002 remained at a post-cold war low. Despite an increase in the period 2000–2002, the five-year moving average for 2002 was the lowest so far. The five largest suppliers in the period 1998–2002 accounted for about 80% of major conventional arms transfers. While the trend for Russia has constantly increased since 1998, that for the USA has constantly decreased. France, Germany and the UK show varied trends over recent years.

The USA was the largest supplier in 1998–2002 with 41% of global deliveries. Russia accounted for 22% of total arms transfers, which gave it second place. However, for the second year in a row, Russia was the largest supplier, with 36% of global deliveries in that year. China was the fourth largest supplier in 2002, which was a major change from previous years. It accounted for 5% of all deliveries—mainly as a result of its deliveries of combat aircraft to Pakistan.

Among the major arms recipients were countries involved in wars against terrorism. The initial focus of military action was on Afghanistan, but intra-state conflicts in other parts of the world were redefined during 2002 by their respective governments in an attempt to gain legitimacy for their actions. Taken together, the cases studied did not support the hypothesis that levels of major arms transfers would be higher because of anti-terrorist deliveries in 2002. In fact, most transfers of major conventional weapons during 2002 were the result of decisions taken before September 2001.

It is uncertain how important anti-terrorist activities will be for the future trend in transfers of major weapons. On the one hand, major weapons might not be the most effective means for fighting terrorism. On the other hand, if military anti-terrorist activities multiply and become long, drawn-out operations, continued deliveries involving major weapons may be regarded as necessary in order to increase the chances of success. This could lead to new or additional legislation or reduced political willingness to implement arms export controls restrictively vis-à-vis certain countries. Should that happen, it could become increasingly difficult to distinguish between a legitimate ambition to support anti-terrorism abroad and attempts to help indigenous military companies to find foreign markets. Even without major long-term changes to that effect, low-level ad hoc transfers of major weapons

could become important for smaller suppliers and make a substantial contribution to the military capability of particular recipients. It is not certain that such developments will support regional stability. To that should be added problems with illegal transfers.

There are also problems with implementing UN arms embargoes. There is a need for further development of instruments for enforcement, not only by closing legal loopholes but also by cooperating and coordinating the monitoring of arms transfers from departure to arrival at the authorized final destination.

Although few significant new developments took place in national arms transfers reporting during 2002, the EU showed a willingness to create more public transparency in arms transfers. Nonetheless, more scope for openness remains, not least at the regional level. The Organization for Security and Cooperation in Europe (OSCE) Document on Small Arms and Light Weapons is also a first step that could develop into an open and public report, also including transfers of small arms outside the OSCE area.

- **Appendices 13A, 13B and 13C** provide data on the transfers of major conventional weapons.
- **Appendix 13D** explains the sources and methods for the data collection.
- **Appendix 13E**, by Peter C. Evans, explores the role of export credits and guarantees in the financing of arms sales.

Easy credit for military equipment buyers induced by the competition between supplier states is the norm rather than the exception in the international arms market. Financing has emerged as an important factor in winning the large military equipment orders arising from NATO enlargement. The Polish competition for fighter jet aircraft, won by Lockheed Martin in December 2002 with the support of a \$3.8 billion loan authorization from the US Government, illustrates the mixed incentives that drive supplier states to offer subsidized export financing. Only limited effort has been made internationally to extend export credit financing disciplines to the military sector.

14. Arms control in the new security environment

Ian Anthony

While bilateral and multilateral treaties cannot carry the full weight of managing international security problems, arms control continued to play an important role as one instrument of security policy in 2002. Public statements by major powers—including the USA—confirmed their belief that other approaches cannot substitute for certain features of multilateral arms control.

While a lack of political agreement over the priority to be given to different threats, risks and challenges is a barrier to further progress in many areas of arms control, there is a growing awareness of the need to take further action to ensure compliance with existing agreements and address identified cases of non-compliance. Recent developments suggest that the issue area in which political agreement can be reached among the widest circle of states is around the proposition that nuclear, biological and chemical (NBC) weapons should not spread to new states or to any non-state actor.

The recognized need to give higher priority to addressing treaty compliance and proliferation concerns has led to a wide range of initiatives of different types. While the essence of arms control remains constant—self-restraint either with regard to national military capacities or with regard to decisions, such as the denial of authorization to export, that could support military capacities in other countries—events in 2002 underlined that this objective is being sought through at least four distinct, complementary but non-hierarchical approaches.

First, many different activities are continuing to take place in the framework of multilateral and bilateral arms control treaties and arrangements. These treaties and arrangements—the scope of which include NBC and conventional weapons as well as many types of missiles—continue to provide a central element of the framework for overall efforts to control armaments and military capacities.

Second, certain country-specific approaches have been developed that combine different political, legal, economic and military instruments to achieve disarmament. The United Nations Security Council continued to be directly engaged in efforts to eliminate weapons of mass destruction and prohibit ballistic missiles in Iraq. In Resolution 1441

the Security Council took a number of decisions unanimously and warned Iraq that it would face 'serious consequences as a result of its continued violations of its obligations'. At the end of 2002 a number of countries, principally the USA and the UK, prepared for military action against Iraq to add credibility to the decisions contained in Resolution 1441.

Third, in June 2002, the leaders of the Group of Eight formed a Global Partnership Against the Spread of Weapons and Materials of Mass Destruction to provide material, technological and financial assistance to states (in the first instance the Russian Federation) that lack the means to implement shared disarmament, non-proliferation and counter-terrorism objectives.

Fourth, the states that participate in multilateral export control cooperation continued to develop common standards implemented through national laws and regulations. Some states that do not participate in such arrangements (such as China) made important changes to their national export control systems.

Taken together, these activities, in each of which the role of the USA has been prominent, can be characterized as order-building diplomacy carried out among groups with relevant membership. This approach, which has been described as 'effective multilateralism', best balances current needs and realities within the international system.

15. Nuclear arms control, non-proliferation and ballistic missile defence

Shannon N. Kile

In 2002 concerns about the viability of the nuclear non-proliferation regime moved to the fore of the nuclear arms control and disarmament agenda. There were signs that strains within the principal legal foundation of that regime, the 1968 Non-Proliferation Treaty (NPT), were building up to a breakdown.

Two major developments during the year called into question the future of the non-proliferation regime. First, the Democratic People's Republic of Korea (DPRK) admitted in October that it had a secret uranium enrichment programme under way. The DPRK moved to reactivate the nuclear facilities which had been 'frozen' under the terms of a 1994 agreement with the USA and subsequently announced its intention to become the first state party to withdraw from the NPT. Second, it was revealed that Iran was constructing a number of hitherto undeclared nuclear facilities, including a uranium enrichment plant, which would give it a complete nuclear fuel cycle. These facilities did not contravene Iran's NPT-mandated safeguards agreement with the International Atomic Energy Agency (IAEA). However, the revelation of their existence gave rise to widespread suspicion that Iran was putting in place the infrastructure to produce nuclear weapons under the guise of a civil nuclear energy programme permitted by the NPT.

One of the most important questions that re-emerged during the year was how—and with what instruments—the international community should respond to states which deliberately violate their legally binding arms control commitments and obligations. An acrimonious debate erupted in the UN Security Council over the US-led push to authorize military action against Iraq to bring it into compliance with the obligations set out in previous Security Council resolutions. The resulting deadlock highlighted the US administration's embrace of a robust counter-proliferation strategy, including the unilateral use of military force, and its mistrust of multilateral legal instruments.

During 2002 there was growing concern about the risks posed by the acquisition by terrorists of nuclear or other weapons of mass destruction. This gave rise to several new multilateral initiatives aimed at combating the risks of 'leakage' of weapons and materials of mass destruction from

the former Soviet Union and elsewhere. It also led to renewed attention to existing cooperative efforts to reinforce the technical chokepoint (i.e., the difficulty in acquiring weapon-usable fissile material) on which the NPT is based.

In May 2002 Russia and the USA signed the Strategic Offensive Reductions Treaty (SORT). This marked a breakthrough in a strategic arms reduction process that had been deadlocked since the signing—and subsequent failure to enter into force—of the 1993 START II Treaty. Unlike cold war agreements which set out carefully balanced limits on strategic nuclear arms accompanied by detailed verification provisions, SORT gives the two parties unprecedented flexibility in implementing what amount to parallel, unilateral force reductions. At the same time, SORT marks a fundamental change in the nature of the arms control process. The treaty is one part of a more comprehensive bilateral 'package deal'. This deal not only includes a strategic restraint component, but also extends beyond arms reductions to encompass 'positive' measures. These measures include improved political consultation and coordination, particularly with regard to combating terrorism and halting the proliferation of weapons of mass destruction, as well as increased economic and scientific cooperation.

In December 2002, President Bush announced that he had ordered the Pentagon's Missile Defense Agency to begin deploying an initial missile defence system in 2004–2005 'to meet the near-term ballistic missile threat' to the USA's 'homeland, deployed forces and friends and allies'. The announcement marked the first time that the Bush Administration had defined an initial BMD capability to protect US territory and committed to a specific deployment date. It followed in the wake of the USA's formal withdrawal earlier in the year from the 1972 Anti-Ballistic Missile Treaty (ABM Treaty). It provoked immediate, albeit relatively restrained, expressions of concern from China and Russia about the implications of the USA's deployment decision for global stability. At the same time, however, Russia continued to press for inclusion in the missile defence plans of the USA.

Appendix 15A, by Hans M. Kristensen and Shannon N. Kile, contains tables of the nuclear forces of the USA, Russia, the UK, France, China, India, Pakistan and Israel.

Appendix 15B, by Ted Molczan and John Pike, contains tables of operational military satellites.

16. Chemical and biological weapon developments and arms control

John Hart, Frida Kuhlau and Jacqueline Simon

In 2002 the USA and, to varying degrees, a number of other countries continued to shift their policies away from reliance on traditional multilateral arms control and disarmament regimes towards a greater emphasis on bilateral and regional efforts to ensure that national measures to criminalize the possession, development and use of chemical and biological weapons are undertaken. Attention was also focused on international activities such as the harmonization and strengthening of export control regulations, improving national and international disease surveillance, preparing for emergencies and response measures.

The extent to which the problem of possible terrorist attacks with chemical and biological weapons requires an intelligence and law enforcement response and the extent to which a military response is called for remain unclear. Many of the counter-terrorism activities against non-state actors are of a law enforcement and intelligence nature and have not been publicized. No suspects were arrested or charged in 2002 for the 2001 attacks in the USA with anthrax-contaminated letters.

The states parties to the 1972 Biological and Toxin Weapons Convention concluded the resumed session of the Fifth Review Conference in 2002. (The first session had been abruptly suspended in 2001.) The review conference agreed to hold expert meetings and annual meetings of the parties until the Sixth Review Conference convenes in 2006.

In early 2002 the Organisation for the Prohibition of Chemical Weapons (OPCW), the body that oversees implementation of the 1993 Chemical Weapons Convention (CWC), faced financial and organizational problems. However, the Seventh Conference of the States Parties (CSP), which met in October, took steps to ease these difficulties. In April the OPCW Director-General was voted out of office at a Special Session of the CSP. The CWC is now a well-established treaty and, for the first time, large-scale destruction operations are under way in all four declared chemical weapon possessor states.

The use of chemical and biological substances for law enforcement purposes received increased attention in 2002 because of new information about US non-lethal weapon programmes and the use of

a chemical by Russia against Chechen hostage takers in a Moscow theatre in October 2002.

In September US-led pressure in the UN Security Council and elsewhere resulted in the unanimous adoption of a new resolution on Iraq and, as a result, inspectors of the UN Monitoring, Verification and Inspection Commission (UNMOVIC) were allowed to resume the work of the UN Special Commission on Iraq (UNSCOM). There was disagreement in the Security Council on what evidence or behaviour by Iraq would justify military action and on what, if any, further UN sanction this would require. UNMOVIC executive chairman Hans Blix drew a distinction between Iraqi compliance on 'process' versus 'substance'. The inspections therefore highlighted the problem of verifying compliance with the implementation of relevant UN resolutions in a country whose active and full cooperation was questionable.

17. Conventional arms control in Europe

Zdzislaw Lachowski

More than two years after its negotiated modernization, the conventional arms control adaptation process in Europe remains hamstrung with limited hope of opening it to other European states. Since the 1999 Agreement on Adaptation of the 1990 Treaty on Conventional Armed Forces in Europe (CFE Treaty) was signed, it has been deadlocked by the issue of non-compliance. Progress is blocked by questions related to Russia's failure to comply with the political commitments it made at the 1999 Organization for Security and Co-operation in Europe (OSCE) Istanbul Summit Meeting regarding Georgia and Moldova.

The changes in the international scene, including the rapprochement between Russia and NATO after the 11 September 2001 terrorist attacks in the USA and the forthcoming enlargement of NATO and the European Union in 2004, will affect the evolution of military stability in Europe. Russia no longer actively opposes the admission of the Baltic states to NATO (although it considers it an inadequate response to current challenges and threats), but it clings to the view that they must first become parties to the CFE Treaty. Such signals from Russia have set the stage for a discussion of accession to the arms control regime devoid of the cold-war straitjacket.

Currently, the conventional arms control regime in Europe faces two major interrelated political challenges. The first is the deadlock over the entry into force of the Agreement on Adaptation of the CFE Treaty. The second challenge is the enlargement of NATO in the vicinity of 'Russia proper' by the admission of the Baltic states. Russia continues to be concerned about the military consequences of NATO enlargement. In the run-up to the May 2004 NATO enlargement summit, Russia insists on closing the arms control 'gap' emerging on its borders because of the impending NATO membership of the Baltic states, and it is seeking an international-level legal solution to this development. Significantly, most parties to the CFE Treaty demand Russian compliance not only with the letter of the treaty, but also with the spirit of cooperative security reflected in the commitments made by Russia at the OSCE Istanbul Summit Meeting. However, discussion of possible commitments and constraints to be adopted by the new NATO members has yet to begin.

Security building in Europe is increasingly influenced by the fight against terrorism. In 2002 the OSCE made further efforts to adapt its arms control tools to better deal with this threat by improving the implementation of the politico-military commitments made by its participating states. The OSCE made considerable progress in this area by enhancing the confidence- and security-building measures embodied in the 2000 Document on Small Arms and Light Weapons and the 1994 Code of Conduct on Politico-Military Aspects of Security.

At the regional level, the security situation in the Balkans has improved and it may soon be possible to hand over responsibility for the implementation of regional arms control and CSBM agreements to regional actors. The first attempt to use CSBMs with regard to naval activities in the Baltic and Black Sea regions was an interesting development in 2002.

Appendix 17A, by Frida Blom, Landmines and destruction efforts.

The 1997 Anti-Personnel Mine (APM) Convention faces two major challenges. The first relates to mine action cooperation, given that funding levels appear to have stagnated. The second major challenge is bringing many important countries into the convention, including China, India, Pakistan, Russia and the USA. In this respect, the engagement of non-state actors in a ban on APMs is fundamental. Important developments have taken place within the 1981 Certain Conventional Weapons (CCW) Convention in the past two years, especially the agreement in December 2002 to start negotiations on a new protocol on explosive remnants of war. The APM and CCW landmine processes are generally mutually supportive and have contributed to increased international and bilateral assistance and cooperation in mine action.

18. Supply-side measures

Ian Anthony

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 may undermine security. Cooperation helped many states to improve their national export control systems and enhanced the effectiveness of the wider non-proliferation regime.

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.

Illustrating the impact of combating terrorism, the Australia Group, 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 in December 2002 were an example of adaptation in response to the threat of terrorism.

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. Members and representatives of the multilateral cooperation arrangements are spending a greater share of their time on 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 developed during the 1990s can be implemented and enforced effectively.

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. EU reform and the enlargement of membership are changing the context in which these changes are considered. While the EU 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 uncoordinated decisions, each following its own logic, than the pursuit of a coherent plan. Current developments suggest the need for a review of EU approaches to managing non-proliferation and implementing export controls.

The enlargement of the EU is a further step towards developing what Javier Solana has called 'a safe haven of democracy and peace', in which differences are resolved peacefully within agreed institutional structures.

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. A short-term challenge to the development of this safe haven is the presence of groups that may commit terrorist acts within the borders of the EU or exploit EU territory to prepare and finance such actions elsewhere.

The EU has facilitated wider changes in export control. In recent years candidate countries have worked to modify their national export control systems in ways that 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 EU include Belarus, Ukraine and countries in South-Eastern Europe that could already benefit from discussions about how EU export controls function.

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 EU law. After enlargement, about 70% of the participants in 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.

Appendix 18A, by **Christer Ahlström**, examines the development and substance of the *International Code of Conduct Against Ballistic Missile Proliferation (ICOC)*.

The international community has devoted increased attention in recent years to the question of the proliferation of ballistic missiles. Several initiatives have been launched to investigate how best to address the issue. One such initiative was brought to fruition in November 2002 when over 90 states declared their readiness to subscribe to the International Code of Conduct Against Ballistic Missile Proliferation. However, this can only be described as a partial success as several states with missile development programmes decided not to join the initiative.

Appendix 18B contains the full text of the *International Code of Conduct Against Ballistic Missile Proliferation*.

Annex A, by **Nenne Bodell and Connie Wall**, summarizes the major arms control and disarmament agreements and lists the states parties as of 1 January 2003.

Annex B, by **Nenne Bodell and Olle Persson**, is a chronology of the major arms control and security-related events of 2002.
