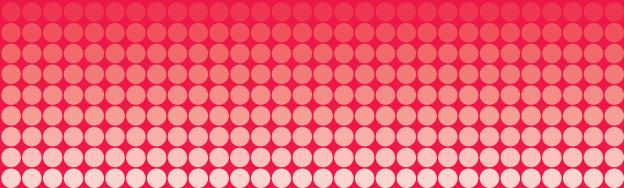


YEARBOOK Armaments, **Disarmament** and International Security

Summary



STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

SIPRI is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament. Established in 1966, SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public.

THE SIPRI YEARBOOK

SIPRI Yearbook 2014 presents a combination of original data in areas such as world military expenditure, international arms transfers, arms production, nuclear forces, armed conflicts and multilateral peace operations with state-of-the-art analysis of important aspects of arms control, peace and international security. The SIPRI Yearbook, which was first published in 1969, is written by both SIPRI researchers and invited outside experts.

This booklet summarizes the contents of *SIPRI Yearbook 2014* and gives samples of the data and analysis that it contains.

CONTENTS

Introduction	1
1. Aspects of the conflict in Syria	2
Part I. Security and conflicts, 2013	
2. Armed conflict	4
3. Peace operations and conflict management	6
Part II. Military spending and armaments, 2013	
4. Military expenditure and arms production	8
5. International arms transfers	10
6. World nuclear forces	12
Part III. Non-proliferation, arms control and disarmament, 2013	
7. Nuclear arms control and non-proliferation	14
8. Reducing security threats from chemical and biological materials	16
9. Conventional arms control and military confidence building	18
10. Dual-use and arms trade controls	20
Annexes	22

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INTRODUCTION. INTERNATIONAL SECURITY, ARMAMENTS AND DISARMAMENT

IAN ANTHONY

SIPRI Yearbook 2014 documents some disturbing tendencies in conflict, armament dynamics and international security. The world is still far from achieving anything that could be described as 'global order'. Moreover, given that political, technological, economic, ecological and military activities continue to undergo continuous and rapid change, achieving peaceful solutions to conflicts and promoting a more stable security environment may become increasingly elusive.

In terms of conclusions that can be drawn from events and developments in 2013 in armaments, disarmament and international security, the interactions between three interlocking sets of issues should continue to be analysed.

First, the evolving approach to international governance will have a direct bearing on the capacity of states to reach agreement on the best ways to promote international and regional security. The various chapters in this edition of the SIPRI Yearbook underline the emergence of a series of tensions of different kinds-for example, within the various specialized institutions and between global and regional bodies charged with security governance. The continuous movement from seeking common ground to tolerating national differences and managing their consequences has progressively corroded multilateral approaches and, as the security discourse escapes the confinement of agreed frameworks, a new fluidity can be

seen in the alignment of states over different issues.

Second, improving understanding of the relationship between development and security will help identify opportunities for joint actions by actors that have not traditionally been partners. Few would dispute the existence of a relationship between economic, social and human development, on the one hand, and peace and security, on the other. The relationship is complex: while security can lead to development and development can lead to security, neither is sufficient to promote the other and both may not always be necessary, in the short term. Better understanding of this relationship will require an approach that concentrates on analysing problems in their entirety, rather than focusing on trying to solve the individual elements. In order to understand how the different parts of these problems interact, it will be necessary to draw from many academic disciplines.

Third, the rapid pace and scope of advances in various fields of science and technology and the way that these advances interact with one another may now be considered an independent factor shaping international security. With growing complexity, the assessment of technology has become more difficult. Understanding the interaction between science and public policy has also become more of a challenge.

The need for 'competent, unbiased information concerning the physical, biological, economic, social, and political effects of the increasingly extensive and larger applications of technology' to support government decision making and the legislative process is an idea that is certainly not outdated, but arguably more necessary than ever.



1. ASPECTS OF THE CONFLICT IN SYRIA

After three years of conflict in Syria, many remain sceptical that a viable way to bring peace will be found. Any attempt to mediate in the conflict requires an understanding of the conflict's dynamics, an area to which the discipline of peace and conflict research can contribute. However, as shown in 2013 by divisions in the United Nations Security Council and among states in the region, discussions of the evidence for chemical weapon use and disputes over which groups represent the anti-government forces, there is no unified, reliable, evidence-based narrative of the conflict.

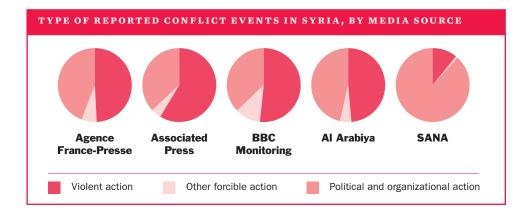
Nevertheless, three aspects of the conflict in Syria in 2013—measuring conflict incidence, the restriction of arms supplies, and the implications of the use of chemical weapons—provide a starting point from which to examine its wider impact.

Measuring conflict incidence in Syria

The principal difficulty for conflict researchers is gathering reliable data, including from media reports. Given the complexity of the Syrian conflict, media bias in reporting remains a key challenge, plaguing the collection of useful data and misinforming researchers and policymakers regarding the actual events taking place. The seriousness of the consequences of the continuing failure of diplomacy and politics, and the urgency of better understanding the key elements behind the intensification of violence, mean that a more rigorous approach to data collection is needed.

The exponential growth of online and social media outlets means that more information on conflicts is now publicly available. It is crucial for conflict researchers to integrate such sources into their coding processes. In the case of Syria, given the tight government controls on the traditional media there, social media sources have become essential alternatives. Nonetheless, information from unidentified sources needs to be carefully verified, particularly due to polarization of opinions in the dissemination of information.

The use and development of the crowdseeding methodology, coupled with the growing use of information technology in gathering and sharing data might present a new way forward for the collection of conflict event data. This will ultimately provide policymakers and humanitarian





agencies with a more complete picture of the reality of violence and political events on the ground, such as that in Syria. At the same time, crowd-seeding will not be a panacea against biases, and it is not faultfree.

Restricting arms supplies to Syria

The widespread view that international arms transfers need to be controlled to prevent such transfers from fuelling violence and armed conflict was reaffirmed in 2013 when a large majority of states adopted the Arms Trade Treaty (ATT). The acceptance of the ATT by most states—or support of at least the ATT's main principles by several others such as Russia and China—coincided with major disagreements among states about how to deal with arms supplies to the ongoing conflict in Syria, which has been marred by gross violations of human rights and international humanitarian law.

States had highly varied views on whether such arms supplies can or cannot contribute to establishing peace and security in Syria. Even within the European Union, with its long history of restrictive arms exports and harmonized arms exports policies and its strong support for the ATT, states could not reach agreement on the risks or utility of supplying arms to certain armed groups in Syria.

The variance in views on arms supplies to Syria raises the question of how harmonized the implementation of the ATT will be, once it enters into force. A considerable problem is that lessons related to the arms-export risk assessments required by such agreements as the ATT are hard to draw from the Syrian case. States have generally been secretive or unclear about the objectives, or the scope, of their arms supplies to parties to the conflict in Syria.

Arms control implications of the use of chemical weapons in Syria

Events in Syria in 2013 will have a longterm-if still somewhat uncertain and controversial-effect on future efforts to respond to allegations of use of chemical weapons. Arms control efforts undertaken in Svria reflected an evolution of international verification measures and activity that encompass both cooperative and coercive elements. Institutions and regimes not normally linked (e.g. the Organisation for the Prohibition of Chemical Weapons, OPCW, and the World Health Organization, WHO) were brought together due to high-level concerns within governments-especially Russia and the United States-and the international community. This occurred within the context of a worsening armed conflict with wider and long-lasting destabilizing effects.

The developments in Syria, taken as a whole, underlined the strength of the international norm against the possession and use of chemical weapons. They also brought to the fore policy and operational challenges associated with arms control in cases where non-state and state actors from within and outside the region are interacting in contested or ungoverned spaces. In addition, they provided operational lessons on what verification can or cannot achieve under such circumstances.



2. ARMED CONFLICT

In recent years there has been an upward trend in fatalities caused by state-based conflicts. Some regions of the world, notably the Middle East, have experienced significant rises in the number of battlerelated deaths. There has also been a rise in internationalized intrastate conflicts. These developments suggest a worrying upward trend in lethal violence related to state-based conflicts.

In the post-cold war period, a leading response of the international community to armed conflict involving states particularly with regional or global security dimensions (and especially international terrorism)—has been to launch interventions often involving the use of military force. In 2013 there were indications that the use of force as a means to address conflict and terrorist challenges was increasingly viewed by many in the Western community as being of limited utility and as being too costly in terms of money, lives lost and political capital expended.

Allegations of the use of chemical weapons in an attack in Damascus on 21 August 2013 triggered a substantial international debate about a military response to the civil war in Syria. There was also widespread concern about the ongoing large-scale loss of life in Syria, reports that the conflict was serving as an incubator for violent jihadi groups and indications of a growing risk of a wider regional destabilization.

Initially, the USA and key European allies seemed to be preparing for military strikes in Syria. Following a parliamentary vote in the United Kingdom against the use of force in Syria, and concern that the US Congress might also vote against action, the US administration opted to pursue a diplomatic response to the chemical weapon issue and refrained from military intervention. This was widely viewed as marking a turning point in Western policy towards a far more limited military involvement in conflicts around the world.

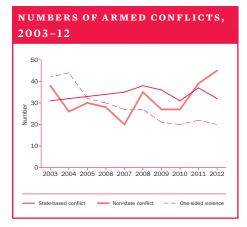
Mediation and peace agreements

Mediation offers an important means to resolve armed conflicts. Over recent decades, traditional diplomatic approaches have been supplemented by the emergence of a myriad of non-state actors involved in mediation and 'track 2' diplomacy. As a result of these efforts, a significant number of armed conflicts have been brought to resolution through mediation, often leading to a peace agreement. In recent years, however, there has been a notable decline in the number of peace agreements. This raises concerns that there may be important limits on the use of mediation as an alternative to military intervention to end conflicts, without a considerable new investment in peacemaking efforts.

The United Nations Security Council in state-based armed conflicts

In a situation of declining direct military intervention in response to conflict by the Western powers, the United Nations could take on increased responsibilities as a conflict prevention and resolution mechanism. The UN Security Council's key tools for addressing conflicts include resolutions passed under chapters VI and VII of the UN Charter. The number of such resolutions provides a useful measure of the attention that the Council pays to statebased armed conflicts. It shows a great variation in this type of attention, which





can be attributed to the length and intensity of the conflict, the conflict's location, and how it is perceived to affect the interests of any permanent member of the Council.

Patterns of organized violence, 2003–12

The Uppsala Conflict Data Program (UCDP) maps organized violence around the world according to three categories of violent action: state-based conflict, nonstate conflict and one-sided violence.

The number of incidents of violent action that resulted in the deaths of more than 25 people in a particular year (UCDP's threshold for counting) was slightly lower in 2012, at 97, than in 2003, when it stood at 111. While the number of state-based and non-state conflicts had increased over the decade, the number of incidences of onesided violence declined continuously.

Looking at the overall trend in the number of fatalities in organized violence, a more negative picture emerges. Largely due to developments in state-based conflict, the number of deaths from organized violence increased from almost 36 000 in 2003 to nearly 46 000 in 2012. Within the overall trend, each of the three types of violence has its own internal dynamics, only partially affected by the other forms. The full picture is more complex, but there is no clear indication that the three types of violence offset each other, for instance, with a decline in one type leading to an increase in the other two.

THE GLOBAL PEACE INDEX 2013

The Global Peace Index (GPI), produced by the Institute for Economics and Peace, uses 22 indicators to rank 162 countries by their relative states of peace.

Western and Central Europe was by far the most peaceful region in the 2013 GPI. North America was the second-most peaceful region, followed by East and South East Asia and Oceania. South Asia was the region least at peace.

Rank	Country	Score	Change
1	Iceland	1.162	-0.003
2	Denmark	1.207	-
2	New Zealand	1.237	+0.003
4	Austria	1.250	-0.060
5	Switzerland	1.272	+0.013
158	Sudan	3.242	+0.156
159	Iraq	3.245	+0.019
160	Syria	3.393	+0.524
161	Somalia	3.394	-0.092
162	Afghanistan	3.440	+0.075



3. PEACE OPERATIONS AND CONFLICT MANAGEMENT

With the launch of 8 new multilateral peace operations, and with only 4 closing, the total number of operations reached 57 in 2013. France, which conducted two of the new operations, placed itself at the centre stage of peace operations in 2013, and determined much of the agenda.

This increase was accompanied by a dramatic decrease in the total number of personnel deployed on peace operations from 233 642 in 2012 to 201 239 in 2013 primarily due to the drawdown of the International Security Assistance Force (ISAF) in Afghanistan. It is likely that total personnel figures will fall further in 2015. While some personnel will remain in a new North Atlantic Treaty Organization mission in Afghanistan and other European countries may follow France to Africa, or start contributing to United Nations operations, this is unlikely to make up the ISAF-related personnel decrease.

Peacekeeping in Africa

International attention appears to be moving from Afghanistan to Africa and in particular to the Central African Republic (CAR), the Democratic Republic of the Congo (DRC), Mali, Somalia and South Sudan. The eight new peace operations in 2013 were all deployed in Africa, and each formed part of the complex constellations of operations, organizations and actors currently engaged there. While Africa has been the host of the greatest number of peace operations since 2010, in 2013 the drawdown of ISAF meant that it also hosted the greatest number of personnel, for the first time since 2008. In fact, four of the eight new operations in 2013 were deployed to Mali, three to the CAR and one to Somalia. Two of the operations were African-led: the International Support Mission to Mali (AFISMA), jointly led by the Economic Community of the West African States (ECOWAS) and the African Union (AU), and the AU-led International Support Mission to the CAR (MISCA). With Africa increasingly taking care of its own affairs through the deployment of these missions, the question of whether Africa is ready for this task became more important.

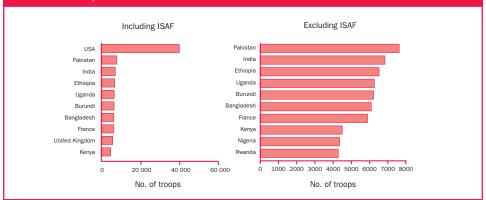
Developments in Africa in 2013 may suggest increasingly robust peace operations, as reflected in the peace enforcement character and intrusiveness of certain missions. The new Force Intervention Brigade (FIB) of the UN Organization Stabilization Mission in the DRC (MONUSCO) was mandated to 'prevent the expansion of all armed groups, neutralize the groups, and to disarm them'. Although it did not use such counterinsurgency language, the mandate of the UN Multidimensional Integrated Stabilization Mission in Mali (MINUSMA)



NUMBER OF PEACE OPERATIONS, 2004-13



TOP 10 CONTRIBUTORS OF TROOPS TO MULTILATERAL PEACE OPERATIONS, 2013



was also more robust than is usual for a UN mission. Furthermore, in an unprecedented step, the UN expanded its logistical support packages for the AU Mission in Somalia (AMISOM) to the frontline units of the Somali National Army in their joint fight against the Islamist group al Shabab. In another controversial step, MONUSCO became the first UN operation to deploy unmanned aerial vehicles (UAVs, or drones) for surveillance.

Global developments

The protection of civilians remained high on the agenda of multilateral peace operations, despite difficulties in implementation. MONUSCO's FIB showed a renewed determination to protect civilians and was generally hailed as a success. However, by the end of 2013 the UN Mission in South Sudan (UNMISS) was protecting tens of thousands of South Sudanese civilians on its bases and comparisons with safe areas in Bosnia and Herzegovina were already being made.

Consensus in the UN Security Council on controversial issues such as the use of force and the use of UAVs was found on an ad hoc basis. However, more structurally, the so-called Hollande doctrine—named after French President François Hollande—of short and limited humanitarian interventions mandated by the Security Council in cooperation with forces deployed by a regional organization, and at the invitation of the host state, appears to be similar to China's view on interventions. In fact, Operation Serval in Mali and Operation Sangaris in the CAR determined much of the agenda in 2013.

Yet, as tensions clearly increased between the AU, the UN and African regional organizations over the transitions in Mali and the CAR, it may be questioned whether deploying missions in complex constellations is really the way forward and whether these two countries will become blueprints for future peace operations. •



4. MILITARY EXPENDITURE AND **ARMS PRODUCTION**

World military expenditure in 2013 is estimated to have been \$1747 billion. representing 2.4 per cent of global gross domestic product or \$248 for each person alive today. The total is about 1.9 per cent lower in real terms than in 2012.

The pattern of increases and decreases in military spending in 2012 continued in 2013. with falls in Western countries (North America, Western and Central Europe, and Oceania) and increases in the rest of the world. There were particularly large increases in Africa and the Middle East, while the impact of austerity policies continued to be felt in Europe. The United States remained the largest military

WORLD MILITARY S	SPENDIN	G, 2013
	Spending	Change
Region	(\$ b.)	(%)
Africa	44.9	8.3
North Africa	18.7	9.6
Sub-Saharan Africa	26.2	7.3
Americas	736	-6.8
Central America	9.6	6.0
and the Caribbean		
North America	659	-7.8
South America	67.4	1.6
Asia and Oceania	407	3.6
Central and South Asia	63.7	1.2
East Asia	282	4.7
Oceania	25.9	-3.2
South East Asia	35.9	5.0
Europe	410	-0.7
Eastern Europe	98.5	5.3
Western and Central	312	-2.4
Middle East	150	4.0
World total	1 747	-1.9
Spending figures are in cu changes are in real terms.) US\$. All

WORLD MILITARY EXPENDITURE, 2004-2013



spender in 2013, followed at some distance by China and Russia.

World military expenditure now appears to be following two divergent trends: a falling trend in the West, driven by austerity, efforts to control budget deficits and the winding up of long wars; and increasing trends in the rest of the world, due to a combination of economic growth, security concerns, geopolitical ambitions and, frequently, internal political factors. While the first may play itself out in the coming few years, leading to stable spending or renewed increases, the second shows no sign of abating.

US military spending

US military spending continued to fall due both to the final withdrawal of US forces from Iraq at the end of 2011 and to the impact of the 2011 Budget Control Act on the 'base' defence budget. While budgetary gridlock continued during most of 2013, including a brief government shutdown, a congressional deal at the end of the year finally allowed a full budget to be passed, including a defence budget for 2014. While the agreed 2014 budget will mitigate the impact of the Budget Control Act, total US



military spending will still fall with the coming withdrawal from Afghanistan.

Military spending in the Asia-Pacific

China's military spending has led a strong rise in total military spending in the Asia-Pacific region for some time. In recent years this has been accompanied by increasing tensions due to territorial disputes in the South and East China seas. At the same time, the US 'pivot' to Asia has drawn attention to the region's strategic importance, while China's rise continues to reshape the security environment. Although concerns over China's rise are a key driver of military spending for some countries with which China has maritime territorial disputes, maritime issues remain a key factor for other countries that enjoy better relations with China.

Arms production and military services

Declining military spending in the USA and Western Europe was reflected in a decline in the military-related sales of the Top 100

THE 10 LARGEST ARMS-PRODUCING COMPANIES, 2012

	Company	Arms sales (\$ m.)	Profit (\$ m.)
1	Lockheed Martin	36000	2 745
2	Boeing	27 610	3900
3	BAE Systems (UK)	26850	2 599
4	Raytheon	22 500	1900
5	General Dynamics	20940	-332
6	Northrop Grumman	19 400	1978
7	EADS (trans-Europe)	15 400	1 580
8	United Technologies	13 460	5 2 0 0
9	Finmeccanica (Italy)	12 530	-1010
10	L-3 Communications	10 840	782
Companies are US-based, unless indicated			

Companies are US-based, unless indicated otherwise. The profit figures are from all company activities, including non-military sales.

THE REPORTING OF MILITARY EXPENDITURE DATA TO THE UN

The United Nations Report on Military Expenditures remains an important source for official data on military expenditure. However, the response rate of UN member states to the annual request to submit data continued to decline in 2013. The political sensitivity of military expenditure may be a primary reason for not reporting in some cases, but many of them make their military budgets available online to the general public. Equally, the fact that many countries have responded at least once suggests that they have the capacity to report but lack the political commitment to respond consistently.

arms-producing and military services companies worldwide, excluding China, which fell by 4 per cent in 2012. However, there was a sharp increase in the arms sales of Russian companies, again reflecting the major rearmament programme being pursued by Russia.

There were substantial increases by the largest companies in a number of other 'emerging' producers, such as Brazil, South Korea and Turkey. Overall, the pattern of recent years shows a gradual diffusion of the arms industry, with the traditional producers in the USA and Western Europe responsible for a slowly shrinking share of the Top 100 arms sales and the share of new players growing. However, the traditional producers remain overwhelmingly dominant.



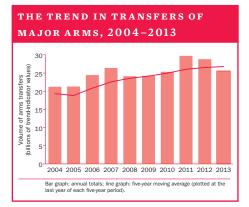
5. INTERNATIONAL ARMS TRANSFERS

The volume of international transfers of major weapons grew by 14 per cent between 2004–2008 and 2009–13. The five largest suppliers in 2009–13—the United States, Russia, Germany, China and France accounted for 74 per cent of the volume of exports. With a few exceptions from other regions, the USA and European suppliers have dominated the top tier of suppliers for the past 20 years. However, China has re-established itself as one of the top suppliers: in 2009–13 it was the fourth largest supplier.

SIPRI data on arms transfers does not represent their financial value. However, a number of states also publish figures on the financial value of their arms exports. Based on this data, SIPRI estimates that the total value of the global arms trade in 2012 was at least \$58 billion.

Developments in arms transfers, 2013

One of the consequences of the financial crisis in the arms-producing countries of Europe, North America and elsewhere has been reductions in military budgets. The



resulting reduction in domestic procurement has created additional pressure on arms-producing countries to significantly increase the export share of their total arms sale by seeking new export markets. While governments have long supported arms exports by their national industry, many major suppliers are expanding sales support in the form of government promotion and facilitation of exports, or the relaxation of arms export restrictions

Another consequence of reduced military budgets was the notable decrease in international arms flows to states in Europe between 2004–2008 and 2009–13. In contrast, flows to Asia and Africa increased. States in Asia and Oceania received nearly half (47 per cent) of all imports of major weapons in 2009–13, and the three largest recipients of major weapons were all Asian: India, China and Pakistan. Combined, they accounted for 32 per cent of all imports. Two Middle Eastern countries returned to the top-five list of recipients: the United Arab Emirates and Saudi Arabia.

Transfers of long-range guided missiles

A notable trend among the major recipients has been the acquisition of long-range, precision-guided, land-attack missiles. These weapons improve a state's capacity to threaten or attack small targets deep inside an adversary's territory while decreasing the risk of putting its own military personnel or high-value platforms in harm's way.

In the period 2004–13, 16 countries received or ordered guided missiles with ranges over 200 km from abroad and 8 exported them. The proliferation of longrange guided missiles gives rise to several concerns, such as their potential to disrupt



THE MAIN IMPORTERS AND EXPORTERS OF MAJOR ARMS, 2009–13

	Global		Global
Exporter	share (%)	Importer	share (%)
1. USA	29	1. India	14
2. Russia	27	2. China	5
3. Germany	7	3. Pakistan	5
4. China	6	4. UAE	4
5. France	5	5. Saudi Arab	ia 4
6. UK	4	6. USA	4
7. Spain	3	7. Australia	4
8. Ukraine	3	8. South Kore	a 4
9. Italy	3	9. Singapore	3
10. Israel	2	10. Algeria	3

regional conventional and nuclear weapon balances, fuel arms races, lead to military escalation, drive interstate crises and increase the likelihood of war.

While some international controls on missile proliferation have been agreed, major supplier states regularly show willingness to export guided missiles, including to regions with high levels of interstate tensions and to countries that possess nuclear arms.

Transparency in arms transfers

Official and publicly accessible data on arms transfers is important for assessing states' arms export, arms procurement and defence policies. However, publishing data on arms sales and acquisitions is a sensitive issue for nearly all states.

Similar to 2012, 2013 was a disappointing year for transparency in arms transfers. The number of states reporting their arms imports and exports to the United Nations Register of Conventional Arms (UNROCA) increased in 2013 but remained low.

In the five most recent reporting years (2008–12) several of the top 10 suppliers of

major arms have not reported to UNROCA every year and several of the largest importers have been absent for all five years. Participation from some regions has been consistently low in recent years. Only one Middle Eastern state and two African states reported in 2013.

Since the early 1990s a growing number of governments have published national reports giving details of their arms exports. As of January 2014, 35 states had published at least one national report on arms exports since 1990, including 32 that had done so in the past five years (2009–13) and 23 that had published a continuous series of annual reports from the first year of their reporting. During 2013 no state produced a national report on arms exports that had not done so previously. Of the top 10 suppliers of major weapons, 3 have never published a national report on arms exports: China, Israel and Russia.



6. WORLD NUCLEAR FORCES

At the start of 2014 nine states—the United States, Russia, the United Kingdom, France, China, India, Pakistan, Israel and North Korea—possessed approximately 4150 operational nuclear weapons. Roughly 1800 of these are kept in a state of high alert, ready for use on short notice. If all nuclear warheads are counted—including operational warheads, spares, those in both active and inactive storage, and intact warheads scheduled for dismantlement these states possessed a total of approximately 16 350 nuclear weapons, as compared with 17 270 at the beginning of 2013.

Nuclear arsenals

The total number of nuclear warheads in the world is declining, primarily due to the USA and Russia continuing to reduce their nuclear arsenals as a result of their 2010 Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START) and unilateral reductions. Together, Russia and the USA hold more than 90 per cent of the global inventories of nuclear weapons. However, the pace of their reductions

WORLD NUCLEAR FORCES, 2014

<i>a i</i>	Deployed		Total
Country	warneads	warneads	inventory
USA	~2 100	5 2 0 0	~7 300
Russia	~1600	~6 400	~8000
UK	160	~65	~225
France	~290	~10	~300
China	-	~250	~250
India	-	90-110	90-110
Pakistan	-	100-120	100-120
Israel	-	~80	~80
North Korea			6-8
Total	~4150	~12 200	~16 350
All estimates are approximate and are as of			
January 2014			

appears to be slowing compared with a decade ago. At the same time, all five legally recognized nuclear weapon states as defined by the 1968 Non-Proliferation Treaty (NPT)—China, France, Russia, the UK and the USA—are either deploying new nuclear weapon delivery systems or have announced programmes to do so, and appear determined to retain their nuclear arsenals indefinitely.

The nuclear arsenals of the other nuclear-armed states are considerably smaller. However, India and Pakistan continue to develop new systems capable of



NUCLEAR FORCES OF THE 5 LEGALLY RECOGNIZED NUCLEAR WEAPON



delivering nuclear weapons and are expanding their capacities to produce fissile material for military purposes. Meanwhile, there is an emerging consensus in the expert community that North Korea has produced a small number of nuclear weapons, as distinct from rudimentary nuclear explosive devices. In 2013 North Korea conducted a third nuclear test explosion and affirmed the central role of nuclear weapons in its national security strategy.

Reliable information on the status of the nuclear arsenals and capabilities of the nuclear-armed states varies considerably. The USA has disclosed substantial information about its stockpile and forces, and France and the UK have also declared some information. Russia refuses to disclose the detailed breakdown of its forces counted under New START (even though it shares the information with the USA), and the US Government has stopped releasing detailed information about Chinese and Russian nuclear forces.

The Indian and Pakistani governments provide statements about some of their missiles tests but no information about the status or size of their arsenals. Israel has a policy of not commenting on its widely suspected nuclear arsenal, and North Korea provides no information about its nuclear capabilities.

Estimated number of nuclear explosions, 1945–2013

On 12 February 2013 North Korea conducted its third nuclear test explosion. Most estimates of the yield vary between 5 and 16 kilotons. Since 1945 there have now been 2055 known nuclear explosions, carried out by eight states—the USA, the Soviet Union, the UK, France, China, India,

GLOBAL STOCKS OF FISSILE MATERIALS, 2013

Materials that can sustain an explosive fission chain reaction are essential for all types of nuclear explosive, from first-generation fission weapons to advanced thermonuclear weapons. The most common of these fissile materials are highly enriched uranium (HEU) and plutonium.

For their nuclear weapons, China, France, Russia, the UK and the USA have produced both HEU and plutonium; India, Israel and North Korea have mainly produced plutonium; and Pakistan mainly HEU. All states with a civilian nuclear industry have some capability to produce fissile materials.

The International Panel on Fissile Materials compiles information on global stocks of fissile materials.

	Global stocks, 2013
Highly enriched uranium	~1 285 tonnes*
Separated plutonium	
Military stocks	~224 tonnes
Civilian stocks	~268 tonnes
* Not including 61 tonnes t	o be blended down.

Pakistan and North Korea. This total includes nuclear tests conducted in nuclear weapon test programmes, explosions carried out for peaceful purposes and the two nuclear bombs dropped on Hiroshima and Nagasaki in August 1945.

The Comprehensive Nuclear-Test-Ban Treaty (CTBT), which has not yet entered into force, would prohibit the carrying out of any nuclear explosion.



7. NUCLEAR ARMS CONTROL AND NON-PROLIFERATION

Iran and nuclear proliferation concerns

In 2013 the international efforts to resolve the long-running controversy over the scope and nature of Iran's nuclear programme made encouraging progress.

In November the negotiations between Iran and the P5+1 states (the five permanent members of the United Nations Security Council-China, France, Russia, the United Kingdom, and the United States-plus Germany) produced an interim deal as a first step towards a longer-term comprehensive agreement aimed at providing assurances that Iran's nuclear programme is solely for peaceful purposes. Under the six-month interim deal Iran agreed to a series of practical measures restricting its uranium-enrichment programme and heavy-water nuclear reactor project in exchange for limited relief from US and European Union (EU) financial and trade sanctions.

Earlier in November Iran and the International Atomic Energy Agency (IAEA) signed a framework agreement for cooperation to increase the transparency of Iran's nuclear programme. The agreement included a set of initial undertakings by Iran to give the IAEA additional information about, and greater access to, its nuclear sites and facilities. The agreement on the confidence-building and transparency measures was seen as setting the stage for the IAEA to pursue its investigation of allegations that Iran had carried out nuclear activities with possible military dimensions, in contravention of its commitments under the 1968 Non-Proliferation Treaty (NPT).

The tentative breakthroughs achieved in the two separate but closely related sets of talks did not resolve fundamental differences over the nature of Iran's nuclear energy rights under the NPT or the future of its sensitive nuclear fuel cycle activities. They did contribute to dampening speculation that some states-in particular, Israel-might prioritize extra-legal measures, or even resort to the preventive use of military force, to deal with a suspected Iranian nuclear weapon programme. The agreements also enhanced the credibility of international legal approaches, including UN Security Council sanctions, in dealing with suspected or known cases of states violating important arms control treaty obligations and norms.

North Korea's nuclear programme

In 2013 tensions over the nuclear weapon programme of North Korea escalated sharply before gradually abating. In February North Korea conducted a third nuclear test explosion through which it claimed to have certified a lighter and more compact nuclear warhead design. Its rejection of the UN Security Council's condemnation of the test was followed by a series of provocative steps that raised the spectre of military conflict with the USA and South Korea.

During the year North Korea's leadership reaffirmed its intention to retain nuclear weapons for the indefinite future as a core element of its 'military-first' policy and articulated a long-term strategy for expanding and improving the country's nuclear forces. The year ended with little optimism about the prospects for restarting the stalled Six-Party Talks aimed at inducing North Korea to give up its nuclear



arsenal in exchange for international assistance.

Russian-US cooperation on reducing nuclear risks

Russia and the USA agreed a bilateral accord to replace the existing legal framework for implementing nuclear security and disarmament assistance activities in Russia under the landmark Cooperative Threat Reduction (CTR) programme. The US-funded CTR programme, which began in 1992, has continued in Russia with an expanded range of activities for dismantling strategic nuclear forces, destroying Soviet-era chemical weapons, and ensuring the safety and custodial security of nuclear materials. In scaling back or ending key CTR programme activities in Russia, the new agreement reflected the evolution of Russian–US relations in the direction of a more equal partnership.

Multilateral treaties and initiatives on nuclear arms control and non-proliferation

During 2013 there were signs of growing international frustration with the lack of progress made in advancing the multilateral nuclear disarmament agenda. Much unfinished business remained on that agenda, in particular the opening of negotiations on the long-stalled fissile material cut-off treaty (FMCT) and the bringing into force of the 1996 Comprehensive Nuclear-Test-Ban Treaty (CTBT). Efforts to promote an alternative international dialogue on nuclear disarmament that placed the humanitarian impact of nuclear weapons at centre stage gained momentum during the year.

The Norwegian Government hosted a major international conference on the

humanitarian impact of nuclear weapons that examined the global and long-term consequences of any nuclear detonation, accidental or deliberate, from the perspective and concerns of wide range of areas, including public health, economic development, food security and environmental issues. In addition, in 2013 the UN General Assembly convened for the first time a new Open-Ended Working Group (OEWG) to develop proposals to advance multilateral nuclear disarmament negotiations.

The status of a proposed international conference on establishing a zone free of nuclear and other weapons of mass destruction (WMD) in the Middle East remained a source of controversy in 2013. The decision to hold the conference had been taken at the NPT Review Conference in 2010, pursuant to the resolution on the Middle East adopted at the 1995 NPT Review and Extension Conference. The continued deadlock in 2013 over setting a date for the event led Egypt to stage a symbolic protest by walking out of the Preparatory Committee meeting for the 2015 NPT Review Conference.



8. REDUCING SECURITY THREATS FROM CHEMICAL AND BIOLOGICAL MATERIALS

In 2013 states continued to develop strategies to prevent and remediate the effects of the possible misuse of toxic chemicals and of biological materials. Some of these activities are carried out in the context of environmental and human health, while others are done in the security and defence spheres. The principal legal instruments against chemical and biological warfare (CBW) are the 1993 Chemical Weapons Convention (CWC) and the 1972 Biological and Toxin Weapons Convention (BTWC). They inform the consideration of CBW threats and responses, understanding of past programmes, allegations of the use of biological or chemical weapons, the nature of possible standby programmes, and efforts to ensure that science and technology are not misused for hostile purposes or as a method of warfare.

Syria

The most significant developments concerning security threats from chemical or biological materials in 2013 related to Syria. After the Syrian Government's admission in 2012 that it possessed chemical weapons, in 2013 a series of increasingly serious allegations, threats of military intervention and attempted international investigation eventually led to an international inspection team, working under the auspices of the United Nations Secretary-General, entering Syria. Its report, which confirmed the use of chemical weapons in the civil war without specifying which side had used them, led to Syria becoming a party to the CWC.

As a CWC party, Syria made a formal declaration of its stockpiles of chemical weapons and reached agreement on their removal from its territory and destruction. A multifaceted and evolving verification effort was carried out under a cooperative arrangement involving the UN Office for Disarmament Affairs (UNODA), the Organisation for the Prohibition of Chemical Weapons (OPCW), the World Health Organization (WHO) and other bodies, including national laboratories. However, the Syrian Government continued to deny that it had used chemical weapons and did not mention in its initial declaration any weapons of the two types identified by the international inspectors as having been used at Ghouta on 21 August.

Chemical weapon arms control and disarmament

The Third Review Conference of the CWC and the 18th Conference of the States Parties received significant international prominence, partly as a result of attention to the continued worsening conflict in Syria and the decision by the United States not to attack Syria for its chemical weapon use in

OLD AND ABANDONED CHEMICAL WEAPONS

As of 31 December 2013,

- 4 countries had declared that abandoned chemical weapons (ACW) are present on their territories;
- 15 countries had declared that they have possessed old chemical weapons (OCW) since the CWC's entry-into-force;
- OCW inspections were carried out in 2013 in Belgium, Canada, Germany, the Netherlands and the UK; and
- approximately 75 per cent of the 50 000 recovered ACW in China had been destroyed.



DESTRUCTION OF CHEMICAL WEAPONS

As of 31 December 2013,

- Iraq, Libya, Syria, Russia and the USA had yet to complete destruction of their chemical weapon stockpiles;
- 58 528 tonnes (81 per cent) of category 1 chemical weapons had been destroyed;
- 14 states had declared 96 former chemical production facilities; and
- 43 of these facilities had been destroyed and 22 converted to peaceful purposes.

exchange for verified chemical weapon disarmament.

The US administration had repeatedly indicated in preceding months that the use of chemical weapons in the conflict would constitute a 'red line' and would lead to 'serious consequences'—widely understood to mean the use of military force.

In 2013 the OPCW won the Nobel Peace Prize 'for its extensive efforts to eliminate chemical weapons'.

Biological weapon arms control and disarmament

The states parties to the BTWC met twice during 2013 in the second of a series of four intersessional meetings of experts and parties agreed by the 2011 Seventh Review Conference. The meetings focused on science and technology developments and on confidence-building measures—in particular, on whether and how to establish states parties' compliance with the convention.

Oversight of dual-purpose research in the life sciences

Developments in dual-purpose research in the life sciences—that is, scientific research that has potential military applicationsincluded the ending of the long-running Russian–US Cooperative Threat Reduction (CTR) programme, the recent focus of which has been on biological threat reduction.

Researchers who discovered a new botulinum neurotoxin chose not to submit the sequence data to a public repository of nucleotide sequences until an effective antitoxin has been developed because of the toxin's serious risks to public health. The threat posed by public availability of such a nucleotide sequence was illustrated by the announcement of a project to develop the biological equivalent of a threedimensional (3D) printer, which might eventually be used to sequence pathogenic microorganisms.



9. CONVENTIONAL ARMS CONTROL AND MILITARY CONFIDENCE BUILDING

Arms control has been continuously adapted in response to changes in the security environment, including the need to regulate and restrain the behaviour of non-state actors, and the emergence of new technologies. The scope of application of legal restraint measures now reaches far beyond the items that would traditionally be defined as arms. The various frameworks of restraint that have been created, or that are being discussed, are not limited to treaties and conventions. Politically binding confidence-building measures (CBMs), intended to promote the responsible use of information and communications technologies, and a shared ethical code to guide thinking about the potential misuse of new and emerging technologies in the fields of artificial intelligence and robotics, are new innovations.

In September 2013 the United Nations Security Council adopted Resolution 2117, its first ever text dedicated exclusively to the issue of small arms and light weapons. Introducing the resolution, the UN Secretary–General, Ban Ki-moon, emphasized the humanitarian impact of small arms—a theme that was echoed in the interventions by many of the states and international organizations who participated in the debate.

Humanitarian arms control

How to regulate different kinds of weapons in order to ensure compliance with international humanitarian law has become an important theme in arms control. In the first instance, participation in existing treaties that can be considered humanitarian arms control agreements is far from universal. Furthermore, the states that are parties to such agreements still have a lot of work to do in order to implement them.

Several states that are parties to the 1997 Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction (APM or Mine Ban Convention) remain in non-compliance. Others have requested extensions to their deadlines for compliance.

In 2013, participation in the 2008 Convention on Cluster Munitions (CCM) Weapons continued to expand as five countries joined the convention and seven others made a commitment to join once national implementation measures are in place.

Reducing the threat posed by improvised explosive devices (IEDs) is a formidable challenge, and one to which traditional arms control approaches are difficult to apply. However, the indiscriminate use of IEDs has serious humanitarian consequences. States continued to discuss how non-state actors can be denied access to key materials and elements needed to construct an IED.

The governance of autonomous weapons

States have begun to discuss how to regulate new and emerging technologies to ensure that they do not become an unacceptable risk to the principles of humanitarian law or human rights law.

The issue of whether or not to regulate fully autonomous weapons and, if so, how to do that, was discussed in the framework of the 1981 Convention on Certain Conventional Weapons (CCW Convention)



and the UN General Assembly Human Rights Council. At the end of 2013 the CCW participating states agreed that a more focused discussion of issues related to fully autonomous weapons will become a formal part of their work programme from 2014.

Confidence-building measures for information and communication technologies

In December 2013 the participating states of the Organization for Security and Co-operation in Europe (OSCE) agreed to develop a set of confidence-building measures to reduce the risk that a suspicious activity in cyber space could be misinterpreted as a hostile act. The OSCE agreement to apply CBMs to information and communications technologies is the first such agreement in the world. The ultimate objective of the OSCE participating states is to contribute to an international understanding and agreement on principles for responsible state behaviour in cyberspace, and to strengthen the rule of international law. At the same time and in parallel, many OSCE participating states continue to develop their national capabilities to conduct operations in cyberspace.

European debates and discussions on conventional arms control

In Europe, concern was expressed over whether the conventional arms control agreements reached in the 1990s, along with politically binding confidence- and security-building measures, were any longer playing their main role of ensuring predictability in military behaviour and promoting confidence that armed forces exist only for legitimate defensive purposes. During 2013, members of the North Atlantic Treaty Organization (NATO), as well as Russia and other European states identified a risk that military exercises carried out in close proximity to the shared boundaries between NATO allies, Russia and Belarus might raise additional questions about the implications of current tendencies in military planning. The emerging pattern of military exercises may no longer be consistent with the shared objective of making Europe more secure and more peaceful.



10. DUAL-USE AND ARMS TRADE CONTROLS

In 2013 considerable progress was made in global efforts to strengthen trade controls for conventional arms, with the United Nations General Assembly agreeing in April on the text of the Arms Trade Treaty (ATT) after six years of negotiation. Multilateral efforts in the area of dual-use trade controls were not marked by similar landmark developments, but followed the incremental development path of recent years.

The Arms Trade Treaty

The final conference on the ATT in March 2013 ended with Iran, North Korea and Syria blocking consensus. The draft treaty text was subsequently put to a vote in the UN General Assembly in June 2013, with 155 states voting in favour, 3 against (Iran, North Korea and Syria) and 22 abstentions. The approval of the treaty text was the result of global efforts to reach a consensus on an international treaty to establish the 'highest possible common international standards for the transfer of conventional arms'. The ATT will enter into force once 50 countries have ratified. By 31 December 2013 a total of 115 states-including the United States-had signed the ATT, of which 9 had ratified the treaty.

The ATT is the first agreement of an international treaty covering the brokering, transit and export of conventional arms. Sections of the treaty also apply to parts, components and ammunition. The ATT provides for information exchange on various aspects of the treaty, although the precise scope and mechanisms are yet to be defined. The treaty also includes an obligation to report on national implementation systems as well as on transfers of the seven categories of major conventional weapons established by the UN Register of Conventional Arms (UNROCA), as well as on transfers of small arms and light weapons (SALW). The compulsory reporting of SALW imports and exports distinguishes the ATT from UNROCA. However, the scope of the ATT is narrower than the Munitions List of the Wassenaar Arrangement and does not include dual-use items with conventional arms applications.

Advocates for an ATT sought to build on principles and standards that already exist in some conventional arms trade control instruments at the regional and national

MULTILATERAL ARMS EMBARGOES IN FORCE, 2013

United Nations (14 embargoes) • Al-Qaeda and associated individuals and entities • Central African Republic • Democratic Republic of the Congo (NGF) • Côte d'Ivoire • Eritrea • Iran • Iraq (NGF) • North Korea • Lebanon (NGF) • Liberia (NGF) • Libya (NGF) • Somalia • Sudan (Darfur) • Taliban

European Union (21 embargoes)

Implementations of UN embargoes (10): • Al-Qaeda, the Taliban and associated individuals and entities • Central African Republic • Democratic Republic of the Congo (NGF) • Côte d'Ivoire • Eritrea • Iraq (NGF) • Lebanon (NGF) • Liberia (NGF) • Libya (NGF) • Somalia (NGF)

Adaptations of UN embargoes (3): • Iran

• North Korea • Sudan

Embargoes with no UN counterpart (8):

- Belarus China Egypt Guinea
- Myanmar South Sudan Syria Zimbabwe
- Arab League (1 embargo)

• Syria

NGF = non-governmental forces.



levels. The specific mention of genderbased violence as a criterion goes beyond most national and regional agreements, including the European Union (EU) Common Position on Arms Exports, although it is implied in the latter. The compromise agreement on the ATT sought to reconcile a wide spectrum of UN member states' positions regarding the relationship between state security prerogatives and human security considerations-including obligations under international humanitarian and human rights law-as well as the interests of exporters and importers. This has resulted in language that leaves scope for interpretation as states translate the treaty into law, policy and practice.

Multilateral arms embargoes

In the area of arms embargoes, results were mixed, given the continued failure to agree a UN arms embargo against Syria, with divisions among the five permanent members of the UN Security Council playing an important role.

The Arab League's embargo against Syria remained in force, while in June 2013 the EU allowed its 2011 arms embargo to expire, due to a lack of agreement among member states on whether to extend or adapt the embargo, and in particular on whether arms supplies to the opposition should be permitted. In April the EU had agreed to allow the supply of certain nonlethal equipment to Syrian opposition forces, but the supply of equipment and software for use in monitoring of communications by the Syrian Government remained prohibited.

In August EU member states suspended exports to Egypt of any equipment that might be used for internal repression, although this was not formalized in a legally binding embargo.

In 2013 the UN Security Council imposed one new arms embargo, on the Central African Republic. As in previous years, the UN panels tasked with monitoring violations of UN arms embargoes reported violations.

Export control regimes

During 2013 four informal, non-legally binding regimes—the Australia Group, the Missile Technology Control Regime (MTCR), the Nuclear Suppliers Group (NSG) and the Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies continued to work on consensus-based decisions to strengthen strategic trade controls. These multilateral regimes routinely updated the lists of items subject to control, but did not agree on new guidelines or principles for export-related activities such as brokering, transit and transshipment.

Mexico joined the Australia Group in 2013, having already been admitted by the NSG and the Wassenaar Arrangement in 2012. Additional membership applications are pending. India's interest in joining the regimes continued to be subject to considerable discussion, without results.

The relevance and importance of the Australia Group, which covers items that have applications in biological and chemical weapons, were highlighted through the use of chemical weapons in Syria. Continued supplies of nuclear reactors to China by Pakistan were subject to controversy inside and outside the NSG. •



ANNEXES

Arms control and disarmament agreements in force, 1 January 2014

- 1925 Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare (1925 Geneva Protocol)
- 1948 Convention on the Prevention and Punishment of the Crime of Genocide (Genocide Convention)
- 1949 Geneva Convention (IV) Relative to the Protection of Civilian Persons in Time of War; and 1977 Protocols I and II Relating to the Protection of Victims of International and Non-International Armed Conflicts
- 1959 Antarctic Treaty
- 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water (Partial Test-Ban Treaty, PTBT)
- 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (Outer Space Treaty)
- 1967 Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco)
- 1968 Treaty on the Non-proliferation of Nuclear Weapons (Non-Proliferation Treaty, NPT)
- 1971 Treaty on the Prohibition of the Emplacement of Nuclear Weapons and other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil thereof (Seabed Treaty)
- 1972 Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological

(Biological) and Toxin Weapons and on their Destruction (Biological and Toxin Weapons Convention, BTWC)

- 1974 Treaty on the Limitation of Underground Nuclear Weapon Tests (Threshold Test-Ban Treaty, TTBT)
- 1976 Treaty on Underground NuclearExplosions for Peaceful Purposes(Peaceful Nuclear Explosions Treaty,PNET)
- 1977 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (Enmod Convention)
- 1980 Convention on the Physical Protection of Nuclear Material
- 1981 Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects (CCW Convention, or 'Inhumane Weapons' Convention)
- 1985 South Pacific Nuclear Free Zone Treaty (Treaty of Rarotonga)
- 1987 Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles (INF Treaty)
- 1990 Treaty on Conventional Armed Forces in Europe (CFE Treaty)
- 1992 Treaty on Open Skies
- 1993 Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (Chemical Weapons Convention, CWC)
- 1995 Treaty on the Southeast Asia Nuclear Weapon-Free Zone (Treaty of Bangkok)
- 1996 African Nuclear-Weapon-Free Zone Treaty (Treaty of Pelindaba)
- 1996 Agreement on Sub-Regional Arms Control (Florence Agreement)



CHRONOLOGY 2013, SELECTED EVENTS

11 Jan.	France launches Operation Serval to
	support Mali's armed forces
12 Feb.	North Korea carries out an
	underground nuclear weapon test
24 Mar.	Séléka rebels sieze power in the
	Central African Republic
2 Apr.	The UN General Assembly adopts the
	Arms Trade Treaty
2 May	The UN Security Council establishes
	the UN Assistance Mission in
	Somalia
6 June	The existence of Prism, a secret US
	surveillance programme, is revealed
	by Edward Snowden
18 June	Afghan Government forces take on
	full security role in the country
3 July	The Egyptian military ousts
	President Mohamed Morsy
21 Aug.	Reports emerge of a chemical
	weapon attack in Ghouta, Syria
12 Sep.	Syria agrees to join the 1993
	Chemical Weapons Convention
31 Oct.	A proposed government amnesty bill
	sparks large demonstrations against
	the Thai Government
24 Nov.	Iran agrees to restrict its nuclear
	activities for a 6-month period
17 Dec.	Japan announces plans to increase its
	military spending

- 1997 Inter-American Convention Against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials (CIFTA)
- 1997 Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (APM Convention)
- 1999 Inter-American Convention on Transparency in Conventional Weapons Acquisitions

- 2006 ECOWAS Convention on Small Arms, Light Weapons, their Ammunition and Other Related Materials
- 2006 Treaty on a Nuclear-Weapon-Free Zone in Central Asia (Treaty of Semipalatinsk)
- 2008 Convention on Cluster Munitions
- 2010 Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START)
- 2011 Vienna Document 2011 on Confidence- and Security-Building Measures

Agreements not yet in force, 1 January 2014

- 1996 Comprehensive Nuclear-Test-Ban Treaty (CTBT)
- 1999 Agreement on Adaptation of the CFE Treaty
- 2010 Central African Convention for the Control of Small Arms and Light Weapons, Their Ammunition and All Parts and Components That Can Be Used for Their Manufacture, Repair and Assembly (Kinshasa Convention)
- 2013 Arms Trade Treaty (ATT)

Security cooperation bodies

Notable changes in 2013 included Mexico joining the Australia Group, Croatia becoming a member state of the European Union and Serbia becoming a member of the Nuclear Suppliers Group.



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STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

Signalistgatan 9 SE-169 70 Solna, Sweden Telephone: +46 8 655 97 00 Fax: +46 8 655 97 33 Email: sipri@sipri.org Internet: www.sipri.org





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- *International arms transfers*, with a study on transfers of long-range guided missiles and an assessment of transparency efforts
- World nuclear forces, with a description of the nuclear explosion in North Korea
- Nuclear arms control and non-proliferation, featuring developments related to Iran and North Korea and the Russian–US Cooperative Treat Reduction Programme
- *Reducing security threats from chemical and biological materials*, describing the international response to the use of chemical weapons in Syria and developments in dual-purpose research in the life sciences
- *Conventional arms control and military confidence building*, with studies on the governance of autonomous weapons, cybersecurity and European debates on conventional arms control
- *Dual-use and arms trade controls*, with an account of the adoption of the Arms Trade Treaty and developments in multilateral arms embargoes and export control regimes

as well as a series of essays on aspects of the conflict in Syria, and extensive annexes on arms control and disarmament agreements, international security cooperation bodies, and events during 2013.