# SIPRIYEARBOOK 2015

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 2015* 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 2015* and gives samples of the data and analysis that it contains.

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#### 1. INTRODUCTION. INTERNATIONAL SECURITY. ARMAMENTS AND DISARMAMENT

#### IAN ANTHONY

A common thread in 2014 was an underlying concern about the capacity of states to manage a mounting set of often interconnected problems.

With state collapse in Iraq, Libya and Syria, external actors now appear more reluctant to assume responsibility for the internal security of other states, or uncertain about which kinds of intervention can play a constructive role. Looking forward, identifying fragile states could be an essential element in understanding where future threats lie and preparing appropriate kinds of intervention. Conversely, identifying the elements that make states resilient could be an important contribution to reducing the risk of state failure.

In Europe—where there was a serious breakdown in security both regionally and within several states during 2014—the role of the state as a security provider is also being reassessed. Despite the dense web of legal conventions, political agreements, institutions of different kinds and other security instruments in place, political crisis escalated into major conflict in Ukraine in the space of only a few months. Whether Europe is returning to a concept of security based on traditional forms of power politics has become a legitimate and widespread question.

Another subject for reflection in 2014 was the extent to which multilateralism as an approach to security governance is in decline. On some measures the United Nations Security Council was more active

than it has ever been and could be seen to be evolving and adapting into a more open system. However, in terms of providing an effective and timely response to threats to international peace and security, the picture was mixed. Its impact on the conflicts in Israel-Palestine, Syria and Ukraine was marginal, although there was a more positive record of agreed responses to the Ebola virus disease outbreak in West Africa and the recruitment of foreign terrorist fighters.

SIPRI Yearbook 2015 tends to reinforce the tentative conclusion presented in the 2014 edition-that the positive trend towards less violence and more effective conflict management witnessed over the past decade has been broken.



# 2. THE ARMED CONFLICTS IN SYRIA AND IRAQ

In 2014, the armed conflicts in Syria and Iraq intensified and included jihadi success and, especially, the rise of the Islamic State (IS). Several factors led to this crisis: years of virulent conflict of an increasing sectarian nature, a concurrent loss of state legitimacy, and large-scale social and institutional breakdown in both countries. However, IS is only one, albeit important, actor moving within the larger Syrian-Iraqi zone of war, social crisis and sectarian polarization. It is a crisis that is also characterized by an overlapping and often unclear assortment of allegiances backed by regional and international actors and associated support structures.

#### Syria

In Syria, the failure of the 2014 United Nations Geneva Conference on Syria (Geneva II) in January and February 2014 confirmed that the conflict was not amenable to a negotiated solution. A new UN negotiator, Staffan de Mistura, was appointed and began planning for a local Aleppo ceasefire, but by the end of the year this 'bottom-up' peace process was also failing. Instead, the ongoing 'enclavization' of rebel, regime and Kurdistan Workers' Party (PKK) territories accelerated. The Syrian presidential elections in June 2014 were neither free nor fair, but President Bashar al-Assad was able to turn them into a show of strength, displaying his continuing ability to mobilize millions of Syrians.

Support from the United States, Saudi Arabia and other states backing the rebels has increasingly moved from trying to topple Assad to seeking to maintain an antijihadi rebel force amenable to their interests, albeit with limited success. However, Assad's long-term prospects remain difficult, and despite his growing military advantage, in 2014 he was unable to re-establish dominance in Syria. The regime's structural and economic base continues to wither, and Assad's dependence on international allies continues to grow.

The conflict has had even more catastrophic consequences for the Syrian people. As of January 2015, the conflict had claimed more than 206 000 lives, another 840 000 wounded and more than 85 000 people are reported missing. Close to 4 million Syrians of a total population of 22 million have fled the country seeking refuge in neighbouring countries, and another 7.6 million are displaced within Syria. With these population movements comes a growing humanitarian crisis that has disastrous implications for the country and the region. With widespread economic devastation and the collapse in service provision in Syria, the future looks bleak for the millions who have lost family members, homes and livelihoods.

#### Iraq

In Iraq, the civil war continued to show trends evident since 2011, including sectarian polarization and the shrinking remit of the central government. The Shiadominated government of Nouri al-Maliki essentially transformed into a 'failed state' in Sunni Arab areas, leaving them vulnerable to IS, which took over several cities from June 2014. Maliki was eventually replaced by Haider al-Abadi, but the new government is not fundamentally different from Maliki's—the Iraqi Army in particular remains heavily dependent on



Iranian-backed Shia militias—and will find it hard to reconnect to Sunni Arab areas.

From January 2014, IS entrenched itself in eastern Syria with Ragga as its 'capital' and from June 2014 captured areas in northern Iraq, including Mosul and Tikrit. This momentum led to a 'snowballing' of recruitment and an influx of captured arms and resources in both Iraq and Syria. In June, the group announced a 'caliphate' and changed its name from the Islamic State of Iraq and Syria (ISIS)—also known as the Islamic State of Iraq and the Levant (ISIL)—to IS. While IS has increasingly overshadowed its former parent group, al-Qaeda, it has failed to move beyond Sunni Arab territory and remains structurally unable to govern even those areas.

IS also fought a protracted battle with PKK-linked Kurdish forces for the northern Syrian city of Kobane. Turkey did not actively oppose IS militarily and inhibited the flow of support and fighters to Kurdish units. Indeed, Kurdish politics were another crucial ingredient in the two conflicts. Institutionalized rivalries between the Kurdistan Democratic Party (KDP) and the Patriotic Union of Kurdistan (PUK) in Iraq's Kurdistan Regional Government (KRG) were interlocked with complex regional divisions: the KDP allied to Turkey and the USA; and the PUK allied to Iran and the PKK. The rising PKK influence in Iraq following the events of 2014 may prove of long-term significance.

#### Arms transfers and the use of force against the Islamic State

The US-led air campaign that began in Iraq in August 2014 and Syria in September 2014-combined with US and other states' efforts to strengthen the Iraqi military via

intelligence sharing and weapon supplies helped to slow and then check IS's territorial advances. However, considering the political and sectarian fragmentation in Iraq and Syria the arms supplies risk fuelling violence between the many militant groups in the two countries or even beyond them. Furthermore, for the USA this involved walking a political tightrope, especially with some traditional allies, given the de facto alignment of the US military with Iran, the PKK, and-to some extent-Assad.

The military successes of the anti-IS coalition in late 2014 may yet turn out to be temporary, and the longer-term international peace and security implications of the two conflicts remain both complex and uncertain.



# 3. THE UKRAINE CONFLICT AND ITS IMPLICATIONS

Europe has invested heavily over several decades in developing a framework of rules, procedures and institutions for conflict prevention and crisis management. In 2014 the rapid downward spiral from political crisis to armed conflict in Ukraine was evidence that the arrangements remain inadequate to the challenge. The incorporation of Crimea into Russia without the consent of the Ukrainian authorities was a major challenge to the European security order.

By the end of 2014, conservative estimates suggested that at least 4364 people had been killed in the conflict and that there were approximately 500 000 internally displaced persons in Ukraine. By the beginning of 2015, there were still no prospects of a lasting settlement to the conflict.

#### The application of European confidenceand security-building measures

Diplomatic efforts facilitated face-to-face contact between key parties, including talks between Russia and Ukraine, and between the Ukrainian Government and representatives of armed groups active in the eastern part of the country. The priority for diplomatic efforts was to bring about a ceasefire and create the conditions for a more sustainable resolution to the conflict.

Confidence- and security-building measures (CSBMs) played a role in improving the amount and quality of information about events on the ground.



However, CSBMs did not significantly reduce levels of tension in the eastern part of Ukraine, raising questions about their applicability in situations of crisis and conflict.

External reaction to the conflict included the coordinated use of sanctions by the Group of Seven (G7) industrialized countries and the European Union (EU), supported by countries such as Australia and Switzerland.

European security institutions—the EU and the North Atlantic Treaty Organization (NATO)-agreed measures to help Ukraine better provide for its security. However, in 2014 the common assistance packages stopped short of providing direct support to the Ukrainian armed forces in their mission to restore control over the eastern part of the country. Individual states did provide such support on a national basis, however, and internal deliberations over the nature of future support continued at the end of the year.

#### Military spending in Europe in the wake of the Ukraine crisis

The conflict in Ukraine may be the catalyst for an increase in military spending in Europe. Russia has been increasing military spending in real terms for several years and plans to continue to do so. The impact of the conflict is already apparent in Ukraine, which is increasing its military spending significantly. Several Central and North European countries bordering Russia have also announced increases in their military spending as a direct response to the crisis. However, there is less sign of such a response in most West European countries. While the initial 2015 military budgets for NATO member states were set before the respective heads of state and

government met at the 2014 NATO summit in Newport, Wales, the defence investment pledge made at that meeting could translate into increases from 2016.

#### The impact of the crisis in Ukraine on arms transfers

The crisis in Ukraine affected arms trade relations in different ways in 2014. First and foremost, the parties to the armed conflict-the Ukrainian Government and the separatist rebels in eastern Ukrainefought a large-scale conventional war with large numbers of weapons, including heavy weapons. Most of the weapons used by both sides were in the Ukrainian inventory before the crisis started.

Ukraine asked Western countries to supply weapons. However, European governments were sceptical about supplying arms, as was the United States, despite heavy pressure from the US Congress to assist Ukraine. Russia on the other hand did supply weapons to the rebel forces.

The crisis also affected Russian-Ukrainian arms trade relations, which after some hesitation on the Ukrainian side were broken off by the end of 2014-presenting serious problems for Russia, which is dependent on Ukraine for some key weapon components. Russia's developing arms trade relations with Western states were also suspended. Both sets of broken relations are likely to affect the already stretched Russian economy and plans for military modernization.

#### 4. ARMED CONFLICT

Preliminary findings reported in early 2015 suggest that there were more wars in 2014 than any other year since the year 2000. In retrospect, 2014 may stand out as a particularly violent year. However, in 2013 there were few, if any, predictive indicators of some of the violence that unfolded in 2014, particularly of Russia's annexation of Crimea and support of violent separatism in eastern Ukraine. To a lesser degree, the same applies to the brutality of Boko Haram in Nigeria and the Islamic State (IS) in Iraq as well as the 2014 Gaza War.

#### Gender, peace and armed conflict

The relationship between gender and peace is a topic that has become a real concern for international peace and security since United Nations Security Council Resolution 1325 in 2000—one of the UN's most renowned decisions, celebrating its 15th anniversary in 2015. The evidence suggests that states with high measures of gender equality are less likely to encounter civil war, interstate war or widespread human rights abuses than states with low measures. Indeed, the 2014 war experiences mentioned above seem to coincide with the areas in which gender relations have worsened substantially, in particular in parts of Africa and the Middle East. Further, the worsening oppression of women is particularly ominous because of the relationship between gender equality and peace. Thus, policies of social exclusion primarily directed against women are likely to generate tensions in society and foreshadow wars within and between states. They serve as early warning indicators to an international community concerned with peace and security.

#### The diversity of peace and war in Africa

Contrary to many beliefs there are parts of Africa that have remained outside the cycles of large-scale violence and war. These 'zones of peace' include 10 countries that have been entirely free from such violent dynamics. There are also important variations over time—for example, 2005 was entirely without war in Africa.

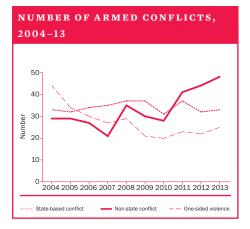
Historical legacies play a role in subsequent patterns of armed conflict. Most African countries left colonial dominance without armed conflict. The countries that had a violent struggle for independence were much more prone for conflict as independent states. These conflicts, furthermore, became intertwined with cold war dynamics.

In the post-cold war period the largest wars have been fought in the Horn of Africa, including Sudan. For much of this period, peace agreements and UN peacekeeping operations became increasingly important to the ending of armed conflict. However, since 2009, there have been no wars concluded with peace settlements—a particularly worrying development.

#### Patterns of organized violence, 2004-13

The Uppsala Conflict Data Program (UCDP) maps organized violence around the world according to three categories of violent action: state-based armed conflict, non-state conflict and one-sided violence. Each type of violence has its own dynamic and a trend in one type of violence does not correlate to a trend in another (e.g. a decline in one is not accompanied by a similar decline in others). Of the three categories, state-based armed conflict inflicts the most destruction and battle-related deaths. In this regard, the civil war in Syria stands out.





Available data points to a particularly severe situation in the Middle East, where deaths in state-based conflicts increased for the most recent years of the period 2004-13. Similarly, there were signs of increasing non-state violent conflict since 2010 in Africa and the Middle East. There was also a rise in one-sided violence in these regions for the same time period, particularly by non-state actors.

Together with data on refugees, this may have made it possible to predict that 2014 would be notably violent in the Middle East. Conversely, there is nothing in the trend data that suggested an imminent threat to Ukraine. A record of different types of violence may signal a danger of escalation, but the absence of violence does not suggest the absence of threats of violence.

#### THE GLOBAL PEACE INDEX, 2014

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.

The 2014 GPI demonstrates a continued and slow decline in global levels of peacefulness. While Europe was the most peaceful part of the world, the GPI only extends until March 2014. This also marks the beginning of deteriorating relations between Russia and Ukraine, affecting Europe as a whole. The Middle East and North Africa and sub-Saharan Africa stand out as less peaceful areas, largely due to wars. However, this overall decline for the past seven years is not indicative of a long-term trend-the world remains more peaceful today than in all periods before the year 2000.

Rank	Country	Score	Change
1	Iceland	1.189	+0.027
2	Denmark	1.193	-0.001
3	Austria	1.200	-0.049
4	New Zealand	1.236	0.000
5	Switzerland	1.258	-0.001
158	Somalia	3.368	-0.026
159	Iraq	3.377	+0.132
160	South Sudan	3.397	+0.795
161	Afghanistan	3.416	-0.025
162	Syria	3.650	+0.244



# 5. PEACE OPERATIONS AND CONFLICT MANAGEMENT

Many of the trends related to peace operations and conflict management in 2013 continued in 2014: the number of peace operations further increased, while the total number of personnel deployed again decreased. According to SIPRI data, there were 62 peace operations in 2014, a rise of 3 over the previous year. The number of deployed personnel in all peace operations, including the International Security Assistance Force (ISAF) in Afghanistan, fell by 20 per cent to 162 052. However, excluding ISAF, the total number of deployed personnel increased by 4 per cent to 148 716-a new record high. The closure of ISAF was a defining moment for 2014 and influenced many of the year's peace operation-related figures.

As a consequence of ISAF's drawdown, peace operations in Africa came into even greater focus: Africa is the continent with the largest number of such operations and hosts more personnel than all the other regions combined. Seven new peace operations were launched in 2014 and four of them were in Africa. The three new missions outside Africa were all established in response to the conflict in Ukraine.

# Non-traditional and traditional challenges to peace operations

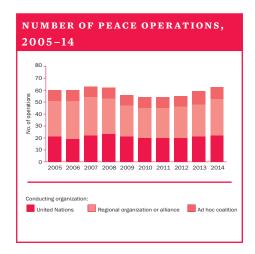
The non-traditional challenges faced by peace operations became increasingly prominent during the year. The African Union Mission in Somalia (AMISOM) and ISAF continued to face asymmetric threats from non-state actors, while the UN Disengagement Observer Force (UNDOF) in the Golan Heights and the UN Multidimensional Integrated Stabilization

Mission in Mali (MINUSMA) became targets of jihadist groups. Another challenge was the Ebola epidemic, which especially affected the UN Mission in Liberia (UNMIL). A third non-traditional challenge was that several UN missions faced popular demonstrations, some of which even resulted in the death of protestors at the hands of mission personnel.

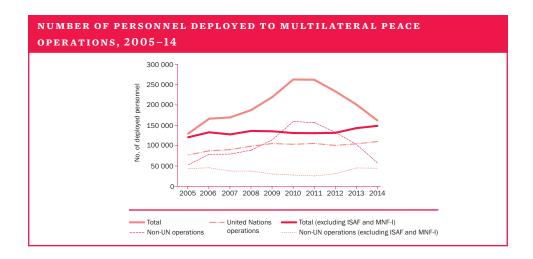
Peace operations also continued to operate in contexts of more traditional challenges, among them the rising tensions related to larger geopolitical changes and struggles. Such conflicts arose in Ukraine, for example, where Russia and the West struggled over geopolitical influence.

Meanwhile, China's increasingly robust contributions to UN peace operations have been partly explained as a means for protecting Chinese energy interests in Africa.

Peace operations seem to have become more robust, with a number of UN missions actively involved in combat in Africa. At the same time, the UN and its troop contributors came under closer scrutiny. For example, a troop contributor (the







Netherlands) was, for the first time, held liable for the death of civilians (in Srebrenica, Bosnia and Herzegovina, in 1995).

#### Peace operations as a conflict management tool

Despite these challenges and the frequent criticism of operations and their effectiveness, the international community and conflict parties continue to view peace operations as a useful conflict management tool. Proposals for new operations in 2014 included some of the most difficult situations. Ukrainian parliamentarians and certain UN Security Council members hoped to deploy a UN peace operation to Ukraine, while pro-Russian activists wanted a Russian peacekeeping force. President Mahmoud Abbas of the Palestinian Authority proposed a North Atlantic Treaty Organization (NATO) operation to patrol a future Palestinian state and, towards the end of the 2014 Gaza War, the European Union (EU) repeated its offer to reactivate its Border Assistance Mission for the Rafah Crossing Point (EU BAM Rafah). Further, the Syrian

opposition called for a UN mission to observe a future ceasefire, while some hoped that the UN would send a rescue mission to liberate schoolgirls kidnapped from Chibok, Nigeria, by Boko Haram.

In light of increasingly demanding missions, high expectations and a changing geopolitical environment, the UN Secretary-General announced a comprehensive review process for UN peace operations. A High-Level Panel on Peace Operations was appointed to assess the current state and future needs of peace operations. In undertaking this important yet difficult endeavour, the Panel could look at the core recommendations of the Brahimi Report, many of which are still valid today. If the Panel's efforts would contribute to the implementation of at least some of these recommendations, it would already mark a great leap forward.



#### **6. EUROPEAN SECURITY**

In 2014 the escalating political crisis in Ukraine was followed by a rapid descent into a major conflict that drew in a wide range of external actors in a variety of roles—including as combatants, armourers and mediators. The political relationship between Russia and a spectrum of Western countries deteriorated rapidly, and some institutional relationships—such as those between the North Atlantic Treaty Organization (NATO) and Russia, and Russia and the European Union (EU)—may have been damaged irrevocably.

The speed with which a relatively new and previously unknown armed actor— Islamic State—could establish military and administrative control over a large territory in western Iraq and eastern Syria was a further shock. Murders in European cities carried out by individuals with connections to the conflicts in Iraq and Syria highlighted the erosion of the lines between internal and external security of states in Europe.

# A renewed emphasis on the military dimension of Euro-Atlantic security

Dramatic events contributed to a sense that Europe, which has become accustomed to a relatively benign security environment, had underestimated the need to prepare for military threats. The decisions taken by NATO leaders at the Wales Summit towards the end of 2014 suggest that some rebalancing of security policy instruments might be expected. The full results of those decisions cannot yet be seen, but they could include the regeneration of larger military forces configured for territorial defence and a concerted attempt to restore

deterrence as a central element in the security policy of European NATO allies.

Aside from decisions related to military security, events put further strain on the cooperative security approach that
European leaders have promoted since the end of the cold war—a model that has been subject to increasing pressures. The decisions taken in 2014 may signal that states might in the future once again see the capabilities of their national armed forces as the most important factor in promoting their security.

The active participation of citizens from European countries in armed conflicts inside Europe and at its periphery was the catalyst for a political discussion about national and regional measures aimed at preventing radicalization to terrorism and violent extremism. On the one hand, these discussions have lead to increased focus on security implications of social exclusion in Europe. On the other hand, this development has fuelled policy responses that limit the movements of certain individuals.

While these tendencies were seen in 2014, it would be premature to draw farreaching conclusions about the future development of European security. It remains to be seen whether states progressively re-emphasize a balanced approach that pays equal respect to the various tools of cooperative security—military defence, arms control, crisis management, conflict prevention and conflict resolution.



#### 7. EAST ASIAN SECURITY

A number of significant regional militarysecurity trends emerged in East Asia during 2014. A key aspect of these trends is China's efforts to actively shape the regional security dynamic. Regional tensions have been increasing in East Asia since 2008, mainly because of concerns related to maritime territorial disputes, China's strategic assertiveness, nuclear proliferation, military build-up in the region and the fear of a spillover of instability from Afghanistan and Pakistan. Regional military expenditure trends show that states engaged in territorial disputes with China have launched military modernization programmes. With the United States developing stronger military and security ties with allies in the region as part of its 'pivot to Asia' strategy, some analysts have evoked a 'return of geopolitics'.

#### The US rebalance towards the Asia-**Pacific**

Military cooperation between the USA and its allies in the region is evolving as part of the US pivot to Asia strategy. Fuelled by China's continued military modernization efforts, defence cooperation between the USA and a number of states in Asia deepened in 2014. This cooperation has been viewed by China as a US campaign to enlist regional states in US efforts to counter China's rise.

#### Maritime disputes in the South and East China seas

In 2014, tensions remained high in the South China Sea while the security situation improved slightly in the East China Sea. Chinese oil-exploration efforts and the acceleration of land reclamation activities in disputed areas of the South China Sea have led to repeated standoffs with and protests by other claimants, especially the Philippines and Viet Nam. However, there was a reduction of Chinese Coast Guard patrols around the disputed Senkaku/Diaovu Islands in the East China Sea in 2014, and a historic handshake between Chinese President Xi Jinping and Japanese Prime Minister Shinzo Abe during the Asia-Pacific Economic Cooperation (APEC) summit in November marked the resumption of high-level bilateral relations between the two countries.

#### China's security diplomacy initiatives

A number of new security diplomacy initiatives have emerged from President Xi's 'Asia for Asians' concept. China is accelerating efforts to create economic, financial and political institutions that provide an alternative to the traditional Western-led world order. Within the area of regional security, China is increasingly using its own forums to advance structures that diminish the capacity of the USA to help manage and resolve conflicts in the region.

#### Japan's national defence policy reforms

The Abe administration has been promoting comprehensive reforms of the Japanese defence policy. Abe has continued to promote institutional and constitutional reforms that would allow for a 'normalization' of Japan's defence policies. Efforts to change Japan's pacifist post-World War II constitution have triggered negative reactions in China and South Korea, while the USA has encouraged the



potential of a greater Japanese contribution to regional security.

# **Terrorism and China's international security cooperation**

China has been engaging in extensive counterterrorism efforts in Xinjiang, China's most westerly autonomous region. In addition to bordering Afghanistan and Pakistan, Xinjiang also borders on Central Asian states, many of them former Soviet states. China has become increasingly active in regional counterterrorism cooperation as a result of a rise in domestic jihadist attacks, concerns about a spillover of instability from Afghanistan associated with the drawdown and closure of the International Security Assistance Force (ISAF) mission, and the fear of jihadist fighters returning home to China from conflict areas abroad, especially from Iraq and Syria.

# Russia's evolving role in North East Asian security

Russia has been attempting to cultivate diplomatic and security initiatives in North East Asia in the wake of the Ukraine crisis. Russia's relationship with the West has deteriorated significantly as a result of its de facto annexation of Crimea and its military involvement in eastern Ukraine. As a result, Russia has attempted to strengthen its strategic relations in North East Asia: it has sought to deepen bilateral ties with China at the same time as it is exploring closer economic and political relations with North Korea. However, Russia's attempts to raise its profile in North East Asia are unlikely to have a major strategic impact.



#### 8. SECURITY AND DEVELOPMENT

Security and development have traditionally formed distinct discourses in international studies. Development has in the past been defined as economic growth and well-being, and recently it has expanded to include capabilities, opportunities and choice. Meanwhile, within the international relations discourse, security has been interpreted in a variety of ways: as individual, human and state security. These policy domains concern different actors and focus on different threats-internal and external, existential and otherwise. The focus of each threat often differs in time horizon: development threats are a generational endeavour, while security threats are often immediate.

#### **Development implications of insecurity** and conflict

Nonetheless, in an increasingly interconnected and complex world, it has become clear that security and development are inextricably linked, especially in least-developed countries. Threats to security can have socioeconomic roots, including contests over natural resources, spillover effects of environmental degradation, economic and social inequalities, economic and political migration, and natural disasters, among others. For over 20 years, development has been linked to security through the concept of human security. The relationship can be complex: lagging development can lead to grievance, and conflict can threaten development. The 2000 United Nations Millennium Declaration emphasized peace and security as prerequisites for poverty reduction and recent stocktaking on the

UN Millennium Development Goals (MDGs) reaffirms that the countries most affected by conflict, instability and displacement have fallen farthest behind in poverty reduction. This often becomes a vicious cycle as economic shocksincluding those associated with environmental pressures, migration and food price shocks—may reduce security.

#### Fragile systems, health and gender

As the world sets a new global agenda for sustainable development, security and development research bridges these two domains. The intersection of security and development in fragile systems (both in less-developed and, increasingly, middleincome countries) is complex. One example of such complexity is the affect that violence against healthcare workers has on service delivery and public trust.

One way to understand fragility is through a systems framework. Unlike a state-centric model, systems thinking facilitates a deeper analysis of the linkages between the symptoms and causes of fragility, as well as the impact of various processes on one another. Fragile systems are settings where low security and low development interact to form complex challenges for both development and security.

Incorporating a gender perspective within a systems framework, helps to identify structural inequalities based on social norms. Gender analysis, for instance, can illustrate how men and women experience insecurity and fragility differently, thereby informing more effective policy. In this way, an improved understanding of the relationship between structural inequalities and security and development processes could contribute to increased peace and security. •

#### 9. MILITARY EXPENDITURE

World military expenditure was estimated at \$1776 billion in 2014, representing 2.3 per cent of global gross domestic product or \$245 per person. Total expenditure was about 0.4 per cent lower in real terms than in 2013.

Military spending continued to increase rapidly in Africa, Eastern Europe and the Middle East. A combination of high oil prices until the latter part of 2014 and numerous regional conflicts contributed to rising military expenditure in several of the major spending countries in these regions. The conflicts in Ukraine, and in Iraq and Syria, among others, are likely to continue to drive military expenditure in a number of states in these regions. However, the

WORLD MILITARY SPENDING, 2014		
	Spending	Change
Region	(\$ b.)	(%)
Africa	(50)	5.9
North Africa	20.1	7.6
Sub-Saharan Africa	(30.1)	4.8
Americas	705	-5.7
Central America	10.4	9.1
and the Caribbean		
North America	627	-6.4
South America	67.3	-1.3
Asia and Oceania	439	5.0
Central and South Asia	65.9	2.0
East Asia	309	6.2
Oceania	28.0	6.9
South East Asia	35.9	-0.4
Europe	386	0.6
Eastern Europe	93.9	8.4
Western and Central	292	-1.9
Middle East	(196)	5.2
World total	1776	-0.4

() = uncertain estimate. Spending figures are in current (2014) US\$. All changes are in real terms.

dramatic fall in oil prices towards the end of 2014 may herald a change in the trend for some countries that are highly dependent on oil revenues—although the effect may not be felt for some time in those countries with substantial financial reserves.

Military spending in Asia and Oceania also rose in 2014, although this was almost entirely driven by the increase in China. Elsewhere in the region, there was a mixed pattern of increases and decreases. Meanwhile, military expenditure in Latin America and the Caribbean was essentially unchanged from 2013, with regional leader Brazil cutting spending due to its economic difficulties. However, the fight against drug cartels in Central America remained a key driver of increased spending in that subregion.

#### **United States military spending**

United States military expenditure continued to fall due to the ongoing withdrawal of US forces from Afghanistan and the effects of the Budget Control Act (BCA) of 2011. However, agreements in Congress in 2014 started to mitigate the impact of the BCA, in particular finding ways around the automatic, across-theboard cuts applied by the sequestration mechanism. The conflicts in Iraq and Ukraine may also slow the decline in spending on Overseas Contingency Operations that might be expected from the withdrawal of most of the US troops in Afghanistan. Nonetheless, US military spending is projected to fall again in 2015, albeit at a slower pace.

# The availability of military expenditure data

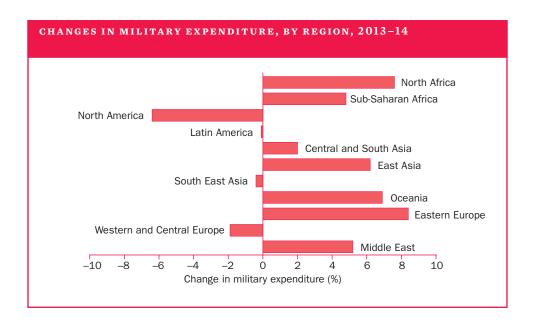
While the availability of military expenditure data increased in the 1990s



and early 2000s, this trend has slowed in the past 5-10 years, in particular in Africa and the Middle East. Analysis of data availability according to different country characteristics shows that civil liberties and levels of political freedom are strongly correlated with the availability of good quality military expenditure data, while state fragility is associated with a severe drop in data availability and quality. National income, however, is not a significant factor in explaining data availability, once the other two factors have been controlled.

#### 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 decreased in 2014, reversing an increase in 2013. The overall response rate remains low at 25 per cent. The political sensitivity of military expenditure may be a primary reason for not reporting in some cases, but many states 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 they may lack the resources or political commitment to respond consistently.

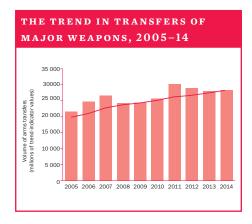


# 10. INTERNATIONAL ARMS TRANSFERS AND ARMS PRODUCTION

The volume of international transfers of major weapons grew by 16 per cent between 2005-2009 and 2010-14. The five largest suppliers in 2010-14—the United States, Russia, China, Germany and Franceaccounted for 74 per cent of the total global volume of arms exports. Since 1950 the USA and Russia (or the Soviet Union before 1992) have consistently been by far the largest suppliers. They, together with Western European suppliers, have historically dominated the top 10 list of suppliers, and there are no signs there will be any major changes in the near future. However, China has now firmly established itself as one of the top 5 suppliers: in 2010-14 it was the third largest supplier, narrowly surpassing Germany and France.

#### Developments in arms transfers, 2014

The flow of arms to Africa and Asia increased in 2010–14 when compared to 2005–2009. Flows to Europe decreased notably. States in Asia and Oceania received 48 per cent of all imports of major weapons



in 2010-14. Of the five largest recipients of major weapons, three were located in Asia and Oceania: India, China and Pakistan. There was also a marked increase in imports by states in the Middle East, two of which were among the five largest importers in 2010-14: Saudi Arabia and the United Arab Emirates. The significant growth in Saudi Arabia's imports and its rise to the position of second largest importer in 2010–14 was especially noteworthy. Saudi Arabia and several other Arab states of the Gulf have placed substantial orders in recent years. Deliveries of those orders have only just started and thus further growth in the region's imports is expected.

Tension and conflict were ongoing in large parts of the world during 2014, and these often had direct links to arms acquisitions from abroad. Arms imports by North East Asian countries, for example, are linked to various tensions in that region. These imports, along with acquisitions from growing national arms industries in the region, may well serve to increase such tensions.

Arguably the most important event in 2014 related to arms transfers was the entry into force of the Arms Trade Treaty in December 2014.

#### **Transparency in arms transfers**

Following the trend set in 2012 and 2013, 2014 proved to be another 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) decreased in 2014. Only just over a quarter of all UN members answered the Secretary-General's request to report basic data on imports and exports. In the period 2009–13



#### THE MAIN IMPORTERS AND EXPORTERS OF MAJOR WEAPONS, 2010-14

	Global		Global
Exporter	share (%)	Importer	share (%)
1. USA	31	1. India	15
2. Russia	27	2. Saudi Arabi	a 5
3. China	5	3. China	5
4. Germany	5	4. UAE	4
5. France	5	5. Pakistan	4
6. UK	4	6. Australia	4
7. Spain	3	7. Turkey	3
8. Italy	3	8. USA	3
9. Ukraine	3	9. South Kore	a <i>3</i>
10. Israel	2	10. Singapore	3

several of the top 10 suppliers of major arms, as recorded by SIPRI, have not reported to UNROCA every year and a number of the largest importers have been absent for all five years.\* Participation from some regions has been consistently low in recent years, particularly from Africa and the Middle East.

#### Arms transfers to conflict zones and nonstate actors

Arms supplies to countries involved in armed conflict and to non-state forces became a key issue in 2014. Suppliers had to make decisions on transfers to Iraq and other states involved in the war against the Islamic State, including supplies to militias not fully under the control of the central Iraqi Government. The conflict in Ukraine also led to discussions among Western countries on the issues surrounding the supply of arms to the Ukrainian Government.

#### The financial value of states' arms exports, 2013\*

While SIPRI data on arms transfers does not represent their financial value, many arms exporting states do publish figures on the financial value of their arms exports. Based on such data, SIPRI estimates the total value of the global arms trade in 2013 to be at least \$76 billion. However, the true figure is likely to be higher.

#### Arms production and military services, 2013\*

The sales of arms and military services by the SIPRI Top 100-the world's 100 largest arms-producing and military services companies (excluding China), ranked by their arms sales-totalled \$402 billion in 2013. This is a decrease of 2 per cent in real terms compared to Top 100 revenues in 2012, continuing the decline that started in 2011, but at a slower rate.

#### THE 10 LARGEST ARMS-PRODUCING COMPANIES, 2013

	Company	Arms sales (\$ m.)	Profit (\$ m.)
1	Lockheed Martin	35 490	2 981
2	Boeing	30700	4585
3	BAE Systems (UK)	26820	275
4	Raytheon	21 950	2 013
5	Northrop Grumman	20200	1952
6	General Dynamics	18 660	2 3 5 7
7	EADS (trans-Europe)	15 740	1 9 5 9
8	United Technologies	11900	5 721
9	Finmeccanica (Italy)	10 560	98
10	Thales (France)	10 370	761

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



<sup>\*</sup> The latest year for which data is available.

#### 11. WORLD NUCLEAR FORCES

At the start of 2015, nine states—the United States, Russia, the United Kingdom, France, China, India, Pakistan, Israel and the Democratic People's Republic of Korea (DPRK, or North Korea)—possessed approximately 15 850 nuclear weapons, of which 4300 were deployed with operational forces. Roughly 1800 of these weapons are kept in a state of high operational alert.

#### **Nuclear arsenals**

The total number of nuclear warheads in the world is declining, primarily due to Russia and the USA continuing to reduce their nuclear arsenals. Together, their arsenals account for more than 90 per cent of global inventories of nuclear weapons. The pace of reductions appears to be slowing compared with a decade ago, however, and neither country has made substantial cuts in its deployed strategic nuclear forces since bilaterally agreeing the 2010 Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START). At the same time, both Russia and the USA have extensive and expensive modernization programmes under way for their nuclear delivery systems, warheads and production facilities.

The other legally recognized nuclear weapon states, as defined by the 1968
Treaty on the Non-Proliferation of Nuclear Weapons (Non-Proliferation Treaty, NPT)—China, France, Russia, and the UK—are either developing or deploying new weapon systems or have announced their intention to do so. In the case of China, this may involve a modest increase in the size of its nuclear weapon inventory. All five

WORLD NUCLEAR FORCES, 2014			
	Deployed	Other	Total
Country	warheads	warheads	inventory
USA	~2 080	5 180	~7 260
Russia	~1 780	~5 720	~7500
UK	150	~65	~215
France	~290	~10	~300
China	-	~260	~260
India	_	90-110	90-110
Pakistan	-	100-120	100-120
Israel	_	~80	~80
North Korea	••		6-8
Total	~4300	~11 545	~15 850
All estimates are approximate and are as of			
January 2015.			

legally recognized nuclear weapon states appear determined to retain their nuclear arsenals indefinitely.

The nuclear arsenals of the other nuclear-armed states are considerably smaller. However, India and Pakistan are both expanding their nuclear weapon stockpiles as well as their missile delivery capabilities, while Israel is testing a new long-range nuclear-capable ballistic missile. A ninth state—North Korea—appears to be improving its military nuclear capability, but it is not known whether it has developed a nuclear warhead that can be carried by a ballistic missile.

#### Transparency: a mixed picture

The existence of 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 the UK and France have also declared some information. Even though it shares such information with the USA, Russia does not otherwise disclose the detailed breakdown of its strategic



nuclear forces counted under New START. The US Government has stopped publishing detailed information about Russian and Chinese nuclear forces. China remains highly non-transparent, and little information is publicly available about its nuclear forces and weapon production complex. The governments of India and Pakistan make statements about some of their missile tests but provide no information about the status or size of their respective arsenals. Israel has a policy of not commenting on its nuclear arsenal and North Korea provides no public information about its nuclear capabilities.

#### GLOBAL STOCKS OF FISSILE MATERIALS, 2014

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 produced mainly plutonium; and Pakistan is moving from mainly HEU to plutonium weapons. All states with a civilian nuclear enrichment or reprocessing industry have some capability to produce fissile materials for weapons.

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

Global stocks, 2014

Highly enriched uranium ~1 345 tonnes Separated plutonium

Military stocks ~223 tonnes Civilian stocks ~270 tonnes



# 12. NUCLEAR ARMS CONTROL AND NON-PROLIFERATION

Nuclear arms control and non-proliferation had a mixed record during 2014.

# Iran's nuclear programme and international concerns

Efforts to address long-running international concerns about the scope and nature of Iran's nuclear programme continued to be a key focus of nuclear non-proliferation efforts.

Negotiations continued between Iran and France, Germany and the United Kingdom (E3), China, Russia and the United States (+3), facilitated by the European Union (EU)—jointly referred to as E3/EU+3—'to reach a mutually agreed long-term comprehensive agreement that would ensure Iran's nuclear programme will be exclusively peaceful'. As part of the first step towards this agreement, Iran undertook a series of voluntary measures as laid out in an interim Joint Plan of Action (JPA) agreed between the E3/EU+3 and Iran on 24 November 2013.

Implementation of the JPA began in January 2014. Initially agreed for a period of six months, the JPA was extended in July for a further six-month period until November, and subsequently extended again for an additional seven months to the end of June 2015.

At the request of the E3/EU+3 and Iran, the International Atomic Energy Agency (IAEA) undertook to monitor, verify and provide periodic progress reports on Iran's implementation of the nuclear-related measures set out in the JPA. Pursuant to the JPA, among other measures, the IAEA reported that Iran had not enriched uranium hexafluoride (UF6) above 5 per

cent at its declared facilities during 2014. In addition, all Iranian stocks of UF6 enriched to up to 20 per cent uranium-235 (U-235) had been further processed through downblending and conversion into uranium oxide (UO2). Iran did not make any further advances to its activities at the Fuel Enrichment Plant (FEP) at Natanz, the Fordow Fuel Enrichment Plant (FFEP), or at the under-construction Arak reactor (IR-40). Iran provided daily access for the IAEA to its enrichment facilities at Natanz and Fordow.

Throughout 2014 Iran continued to implement its safeguards agreement with the IAEA in relation to the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (Non-Proliferation Treaty, NPT). Iran also continued to implement the safeguardsrelated 'Joint Statement on a Framework for Cooperation', agreed between the IAEA and Iran in November 2013, and designed to resolve all past and present issues of safeguards relevance. By the end of the year as reported by the IAEA, Iran had completed 16 of the 18 measures under the Framework for Cooperation with two remaining outstanding since May 2014. The IAEA continued to emphasize the need to accelerate the work on all outstanding issues including those specified in the Framework for Cooperation for it to be able to comprehensively understand Iran's nuclear programme-including any possible military dimensions—and report on its assessment to the IAEA Board of Governors. During 2014 the IAEA maintained its safeguards conclusion that although it had continued to verify the nondiversion of declared nuclear material at the nuclear facilities and locations outside facilities declared by Iran under its Safeguards Agreement, the IAEA was not



in a position to provide credible assurance on the absence of undeclared nuclear material and activities in Iran. Therefore. the IAEA could not conclude that all nuclear material in Iran remained solely in use for peaceful activities.

#### Russian-US nuclear arms control

The strategic arms reduction dialogue remained at an impasse between Russia and the USA, although both sides continued to implement the 2010 Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START), albeit at a slow pace. At the same time, the two countries engaged in mutual recriminations over compliance with the 1987 Intermediate- and Shorter-Range Nuclear Forces (INF) Treaty.

#### **Developments in multilateral arms control** and disarmament

The Conference on Disarmament (CD)—the world's sole multilateral forum for negotiating arms control and disarmament agreements-once again failed to agree on a Programme of Work and thus was unable to commence negotiations on any item on its agenda. The CD held a High-Level Segment in March, where foreign ministers addressed the conference.

The Preparatory Committee for the 2015 Review Conference of the Parties to the NPT held its third and final session at the United Nations in New York, but was unable to agree on recommendations to the review conference for further action on nuclear non-proliferation and nuclear disarmament.

Mexico hosted the second international Conference on the Humanitarian Impact of Nuclear Weapons in February, and Austria hosted the third conference in December.

More than 150 states attended along with civil society and international organizations, the hibakusha (survivors of the nuclear bombings of Hiroshima and Nagasaki). Both conferences highlighted the lack of national and global capacity to deal with the humanitarian and environmental consequences of a nuclear explosion. Austria made a national pledge calling for the global prohibition and elimination of nuclear weapons.

The third in a series of Nuclear Security Summits was held at The Hague in March. The communiqué adopted at the summit reaffirmed support for strengthening security of nuclear material and facilities and agreed to hold a fourth (and last) summit meeting in the USA in 2016.



# 13. REDUCING SECURITY THREATS FROM CHEMICAL AND BIOLOGICAL MATERIALS

Health and security concerns raised by the Ebola virus disease outbreak in West Africa pushed global public health towards the top of the international security agenda in 2014. Approximately 20 000 confirmed probable and suspected Ebola cases were reported in West Africa resulting in at least 8000 deaths. Shortcomings in national and international preparedness for managing emerging infectious disease threats were evident, and the response capacities of some national public health systems in West Africa and of international organizations were stretched to their limits. Delays and inefficiencies in response efforts also occurred as states and international bodies (e.g. the World Health Organization, WHO) sought to agree priorities and on how to implement a more coordinated approach. These efforts also underscored the uneven implementation of the WHO's revised 2005 International Health Regulations.

More broadly, 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 strategies fall within the context of environmental and human health, while others fall within the security and defence spheres. The principal legal instruments against chemical and biological warfare are the 1993 Chemical Weapons Convention (CWC) and the 1972 Biological and Toxin Weapons Convention (BTWC).

#### **Biological arms control**

The states parties to the BTWC met twice in 2014. The meetings mainly consisted of

an exchange of views and experience, with a focus on cooperation and assistance in the life sciences for peaceful purposes, a review of science and technology developments, and strengthening capacity to assist those potentially threatened with biological weapons. Perhaps the most notable development, particularly with a view towards the Eighth Review Conference that will be held in 2016, was a proposal by Russia that called for a reconsideration of treaty compliance issues.

#### Chemical arms control and disarmament

The Organisation for the Prohibition of Chemical Weapons (OPCW) continued to verify implementation of the CWC. The OPCW coordinated an international cooperative effort to remove chemical agents from Syria and conducted a factfinding mission, which concluded that chemical weapons-most likely chlorinewere used again in Syria in 2014. The 19th Conference of the States Parties to the CWC considered the completeness and correctness of Syria's declarations on, and destruction of, its chemical weapons. The OPCW's operations in Syria provide a starting point for a wider discussion of the challenges posed to verification in the conflict zones of Iraq, Libya and Syria.



#### 14. CONVENTIONAL ARMS **CONTROL AND MILITARY CONFIDENCE BUILDING**

In 2014, conventional arms control continued to be underutilized in security and peacebuilding. In general, states do not emphasize the role of arms control as an important part of their national security policy—at either a global or a regional level. Instead of taking a balanced approach—in which arms control plays a role alongside military defence, crisis management, conflict prevention and conflict resolution states prefer to predominantly rely on the capabilities of their national armed forces to promote their security.

#### **Humanitarian arms control**

The largest challenge posed to existing humanitarian arms control conventions continues to be the use of certain inhuman weapons in conflict by states not parties to the conventions and by non-state actors. Participation has increased as countries have joined and implemented existing humanitarian arms control conventions. However, the new adherents mainly appear to be countries for which participation carries relatively few obligations. Discussions on widening the coverage of humanitarian arms control, to take account of new and emerging technologies, continued in 2014-notably the discussion on how to reduce the risks associated with lethal autonomous weapon systems.

#### Small arms control measures

In 2014, further progress was made in developing and implementing 'small arms' and 'firearms' control measures, with particular regard to the United Nations Programme of Action (POA) on small arms and light weapons and the UN Firearms Protocol, Calls to coordinate and consolidate the main international instruments in small arms control, in order to avoid unnecessary duplication, were given additional weight by the December 2014 entry into force of the Arms Trade Treaty, which also covers areas dealt with by the POA and the UN Firearms Protocol. However, while overlap and duplication does exist between these instruments, it has not formed an insurmountable barrier to effective regional work on small arms and firearms issues, particularly in Africa and Latin America. Here, and in other parts of the world, a range of regional and nongovernmental organizations have successfully drawn on both sets of instruments to deal with practical issues such as stockpile management and destruction of surpluses.

#### **Confidence- and security-building** measures in Europe

Confidence- and security-building measures (CSBMs) in Europe were tested in 2014 by a deteriorating security environment. Recently there has been a significant increase in the number of largescale military exercises organized by Russia at short notice, and a growing number of incidents where Russian military aircraft and naval vessels appear to have engaged in potentially hazardous manoeuvres. Decisions taken in 2014 by the North Atlantic Treaty Organization (NATO) may further increase the number and diversity of military exercises in coming years. In these circumstances, renewed attention to the role of CSBMs in Europe may be warranted.



# 15. DUAL-USE AND ARMS TRADE CONTROLS

A landmark event in the control of the trade in conventional arms took place in December 2014 when the Arms Trade Treaty (ATT) entered into force.

Multilateral efforts in the area of dual-use trade controls were not marked by similar milestones, but followed the incremental development path of recent years.

#### The Arms Trade Treaty

In 2014 there was a focus on both the ATT's entry into force as well as the ongoing process of preparing for the First Conference of States Parties, which will take place on 24–27 August 2015. Although the ATT was negotiated under the auspices of the United Nations General Assembly First Committee, which focuses on disarmament issues, it is mainly centred on issues related to controls on the trade in conventional arms.

While the ATT represents a significant achievement, doubts remain over the impact it will have, particularly given the vague nature of some of its provisions and the number of important arms supplying and recipient states that have yet to sign it. In 2014 discussions focused mainly on procedural issues, particularly the location and financing of the ATT Secretariat and the level of access to negotiations that should be afforded to non-signatories and to non-governmental organizations opposed to the content of the treaty.

While it will not ensure that the treaty improves standards in the trade in conventional arms, a successful outcome to these discussions is of central importance to its long-term development. These discussions will also have implications for

future negotiations in other areas of arms control and disarmament, since the standards agreed in relation to the ATT may be applied elsewhere.

#### Multilateral arms embargoes

There were a number of developments in multilateral arms embargoes, focusing on restrictions imposed by the UN, the European Union (EU) and other regional bodies. Discussions on imposing a UN arms embargo on South Sudan reached an advanced stage during 2014 without leading to a final decision. Reports

# MULTILATERAL ARMS EMBARGOES IN FORCE, 2014

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 (23 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 (Darfur)

Embargoes with no UN counterpart (10):

- Belarus China Egypt Guinea (lifted April 2014) • Myanmar • Russia • South Sudan
- Syria Ukraine (lifted July 2014)
- Zimbabwe

Arab League (1 embargo)

• Syria

NGF = non-governmental forces.



indicated that the United States, in particular, was reluctant to agree to an embargo. In February 2014 EU member states agreed to suspend exports to Ukraine of any equipment that might be used for internal repression. This embargo was lifted in July. In the same month the EU imposed an arms embargo on Russia. Several violations of UN embargoes were again reported in 2014, highlighting some of the difficulties of enforcing multilateral arms embargoes.

#### **Export control regimes**

During 2014 four multilateral export control regimes-the Australia Group, the Missile Technology Control Regime, the Nuclear Suppliers Group (NSG) and the Wassenaar Arrangement on Export Controls for Conventional Arms and Dualuse Goods and Technologies-sought to strengthen strategic trade controls. There were ongoing discussions-particularly within the NSG-on agreeing common standards for expanding the scope of activities subject to controls to include brokering and transit/trans-shipment, among other things.

Another theme in 2014 was the expansion of each regime's coverage through engagement with non-participating states. Regimes also kept up their efforts to address the challenge of emerging technologies through amendments to common control lists. The issue of chemical weapons was a key focus of attention in 2014 on the basis of clear evidence of the use of such weapons in Syria, while nuclear weapons maintained their prominent position on the nonproliferation of weapons of mass destruction agenda. Discussions also continued on India's participation in the regimes, in particular the NSG.

#### **EU** export control developments

In 2014, the review continued of the EU Common Position defining common rules governing the control of exports of military technology and equipment (EU Common Position). Final outcome documents are expected in 2015. The process is unlikely to result in major changes to the instrument, but some adjustments to certain export criteria are expected (partly to take account of the adoption of the ATT) along with improvements to the accompanying systems of information exchange. EU member states moved ahead with the implementation of the EU Intra-Community Transfer Directive (ICT Directive), although its impact appears uneven and is difficult to measure. Developments in the EU Common Position and the ICT Directive indicate a certain reduction in EU member states' interest in the process of harmonizing their national controls on arms exports, which has been ongoing since the early 1990s. EU-level controls on the export, transit and brokering of dual-use items are currently subject to a review process, with resulting changes expected from late 2015. The review process represents an important opportunity for the EU to demonstrate its ability to continue to be a lead actor in the creation and implementation of effective export control mechanisms. This is particularly the case with regard to controls on transfers of surveillance technologies, which have become a key component of the review process. This discussion may lead to a fundamental revision of the dual-use concept beyond the dichotomy of military versus civilian applications.

#### **ANNEXES**

# Arms control and disarmament agreements in force, 1 January 2015

- 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 Nuclear Explosions 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)1997InterAmerican 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



- 2001 Protocol on the Control of Firearms,
  Ammunition and other related Materials
  in the Southern African Development
  Community (SADC) Region
- 2004 Nairobi Protocol for the Prevention, Control and Reduction of Small Arms and Light Weapons in the Great Lakes Region and the Horn of Africa
- 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 Confidenceand Security-Building Measures
- 2013 Arms Trade Treaty (ATT)

# Agreements not yet in force, 1 January 2015

- 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)

#### **Security cooperation bodies**

Notable changes in 2014 included the G8 reverting to the G7 following the suspension of Russia; Bangladesh and Qatar joining the Conference on Interaction and Confidence-building Measures in Asia (CICA); and Brunei and the Bahamas joining the International Atomic Energy Agency (IAEA).

# CHRONOLOGY 2014, SELECTED EVENTS

- 20 Jan. Implementation of the interim Joint Plan of Action (JPA) agreed between the E3/EU+3 and Iran begins
- 13-14 Mexico hosts the second
- Feb. International Conference on the Humanitarian Impact of Nuclear Weapons
- 6 Mar. The EU and UN Security Council hold emergency meetings on the crisis in Ukraine.
- 18 Apr. The IAEA says Iran has diluted half of its higher-enriched uranium stockpile
- 12 May Major General Kristin Lund from Norway becomes the first woman to command a UN peacekeeping force
- 23 June The Joint Mission of the OPCW and the UN announces that the removal of Syria's chemical weapons material is complete
- 17 July Malaysian Airlines flight MH17 crashes in eastern Ukraine
- 7 Aug. The WHO officially declares the
  Ebola outbreak a Public Health
  Emergency of International Concern
- 30 Sep. Bilateral Security Agreement
  between the USA and Afghanistan
  and a Status of Forces Agreement
  between NATO and Afghanistan are
  signed.
- 31 Oct. UN Secretary-General appoints
  High-Level Independent Panel on
  Peace Operations under the
  chairmanship of Jose Ramos-Horta
- 24 Nov. The UN assesses the number of foreign terrorist fighters in the Syria and Iraq conflicts to be over 15 000 people from 81 countries
- 17 Dec. The Arms Trade Treaty (ATT) enters into force

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## STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

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# STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

# **SIPRI YEARBOOK 2015**

### Armaments, Disarmament and International Security

The SIPRI Yearbook is appreciated worldwide by politicians, diplomats, journalists, scholars, students and citizens as an authoritative and independent source of data and analysis on the topics of armaments, disarmament and international security. It provides an overview of developments in international security, weapons and technology, military expenditure, the arms trade and arms production, and armed conflicts, along with efforts to control conventional, nuclear, chemical and biological weapons.

The first edition of the SIPRI Yearbook was published in 1969, with the aim of producing 'a factual and balanced account of a controversial subject—the arms race and attempts to stop it'.

This booklet summarizes the 46th edition of the SIPRI Yearbook, which covers developments during 2014 in

- *Armed conflict*, with a focus on Syria, Iraq and Ukraine, as well as studies on the relationship of gender equality to peace and armed conflict, and the diversity of peace and war in Africa
- Security, with coverage of East Asian and European security, as well as global and regional trends in peace operations, and development challenges in fragile states
- Military expenditure, arms production and international arms transfers
- World nuclear forces, with an overview of each of the nine nuclear-armed states
- *Nuclear arms control*, featuring developments in Iran's nuclear programme and multilateral arms control and disarmament
- Reducing security threats from chemical and biological materials, including implications of the Ebola outbreak and the challenge of addressing issues related to chemical and biological weapons in conflict zones
- Conventional arms control and military confidence building, with studies on humanitarian arms control, small arms control measures and confidence- and security-building measures in Europe
- *Dual-use and arms trade controls*, including developments in the Arms Trade Treaty, multilateral arms embargoes and export control regimes

as well as a 10-year overview of patterns of armed violence, a summary of the Global Peace Index, and extensive annexes on arms control and disarmament agreements, international security cooperation bodies, and events in 2014.