2014 Annual Disarmament report
Review and outlook
2014 Annual Disarmament report
Review and outlook
The conflict situation around the globe is a matter of concern. Syria, Iraq, Iran, Libya, eastern Ukraine and Islamist terrorism are issues that occupied us in 2014 and still demand our close attention and full commitment. Our security and well-being depend on crises being overcome and especially on the prevention of armed conflicts. In this context, disarmament, arms control and non-proliferation are key instruments of conflict prevention and post-conflict stabilisation. There are, however, no simple answers or rapid, overnight-type solutions. Progress on disarmament and arms control is mostly gradual, rarely sensational.

Nevertheless, we did achieve significant successes in 2014, such as the destruction of Syria’s declared stocks of chemical weapons and the entry into force of the Arms Trade Treaty. The difficult negotiations for a comprehensive agreement on the Iranian nuclear programme are also progressing. Thanks to the Geneva Joint Plan of Action, the Iranian nuclear programme was temporarily halted at the start of 2014, and some parts of it were scaled back.
For all the efforts to move forward on disarmament, arms control and non-proliferation, we always need great patience, too. The Ukraine crisis has been a considerable setback in the absolutely imperative quest for progress on nuclear disarmament. Russia has not yet responded to President Obama’s offer of a new round of talks on nuclear disarmament. These difficult circumstances make it all the more essential for us to press for reinforcement of the Nuclear Non-Proliferation Treaty (NPT), because that treaty is and will remain the mainstay of the global nuclear disarmament and non-proliferation regime.

On the one hand, the Ukraine crisis has reminded us clearly of the great importance attached to confidence-building mechanisms under the Vienna Document and the Open Skies Treaty. On the other hand, however, it has shown that the system of conventional arms control in Europe must be adapted, particularly against a backdrop of ‘hybrid warfare’. During the German presidency of the Organization for Security and Co-operation in Europe (OSCE) in 2016, we shall have the opportunity to help shape the future of Europe’s security architecture in a responsible manner and to strengthen the OSCE as a whole in its role as the organisation for cooperative security in Europe. Preparations for the German presidency are in full swing.

At the same time, we must not forget that, of all types of weaponry, it is small arms that claim the largest number of victims worldwide. The destabilising role of the uncontrolled proliferation of small arms is most clearly visible in North Africa, where it is exacerbating conflicts and curbing development. This is one reason why establishing national small-arms control capabilities in that region is one of the priorities of the German G7 presidency.
For those areas where the traditional instruments of disarmament, arms control and non-proliferation hold insufficient sway, or none at all, we are working on new approaches and frameworks. These include efforts to step up cyber security. Recent attacks have been a telling reminder of the need for such actions. They also include the development of international standards for space, because the continuing development of anti-satellite weapons and the presence of space debris are jeopardising the sustainable peaceful use of outer space, and the formulation of rules governing the way we deal with futuristic-sounding developments such as lethal autonomous weapon systems, which raise not only issues of arms-control policy but also ethical issues.

These are only a few of the existing and new challenges we have to confront in 2015. Together with its partners in the EU, NATO the OSCE and the Non-Proliferation and Disarmament Initiative (NPDI), Germany is fully committed to peaceful cooperation and to a world with fewer weapons. Close cooperation with civil society and the research community continually lend fresh impetus to our efforts. That is and will remain important, because these issues concern all of us.

Dr. Frank-Walter Steinmeier
Federal Minister for Foreign Affairs
## Contents

Foreword by Dr Frank-Walter Steinmeier, Federal Minister for Foreign Affairs ............... 4
Important events of 2014 ........................................................................................................ 8
Introduction .......................................................................................................................... 10

**Review – Priorities of German disarmament and arms-control policy, 2014** .................. 12
   The Iranian nuclear programme ......................................................................................... 13
   Elimination of Syria’s chemical weapons .......................................................................... 15
   North Korea ...................................................................................................................... 17
   Small-arms proliferation ................................................................................................. 19
   The Arms Trade Treaty (ATT) ......................................................................................... 21
   The Biological Weapons Convention .............................................................................. 23
   Nuclear disarmament ..................................................................................................... 25
   The NPT Review Conference ......................................................................................... 27
   The Comprehensive Nuclear-Test- Ban Treaty ................................................................. 28
   Ban on the production of weapons-grade fissile material ................................................. 31
   Security Council Resolution 1540 and the Wiesbaden process ........................................ 32
   The Treaty on Conventional Forces in Europe (CFE Treaty), conventional arms control and confidence- and security-building measures in Europe .................. 33
   The Vienna Document and the Open Skies Treaty ......................................................... 34
   Humanitarian arms control ............................................................................................. 36
   Lethal autonomous weapon systems .............................................................................. 37
   Cyber security .................................................................................................................. 38
   Security in outer space .................................................................................................... 39

**Outlook – What is still on the disarmament and arms-control agenda?** ....................... 40
Important events of 2014

20 January  Entry into force of the Geneva Joint Plan of Action on the Iranian nuclear programme

13-14 February  Conference in Nayarit, Mexico, on the humanitarian impact of nuclear weapons

4-5 March  Annual Implementation and Assessment Meeting in Vienna to review how the confidence- and security-building measures of the Vienna Document are being implemented

12 April  Ministerial Meeting of the Non-Proliferation and Disarmament Initiative (NPDI) in Hiroshima

28 April – 9 May  Third session of the Preparatory Committee for the Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), held in New York


29-30 May  13th Annual Regular Meeting of the Hague Code of Conduct against Ballistic Missile Proliferation (HCoC), held in Vienna

16-20 June  Fifth Biennial Meeting of States to Consider Implementation of the UN Programme of Action (PoA) on small arms and light weapons, held in New York

23-27 June  Third Review Conference of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction, held in Maputo

1-5 September  
Fifth Meeting of States Parties to the Convention on Cluster Munitions, held in San José

26 September  
Ministerial meeting of the Friends of the Comprehensive Nuclear-Test-Ban Treaty (CTBT), held on the fringes of the UN General Assembly in New York.

2 October – 5 November  
Session of the First Committee of the 69th UN General Assembly in New York

10-14 November  

24 November  

27-28 November  
Second round of informal consultations held in Berlin in preparation for the First Conference of States Parties to the Arms Trade Treaty (ATT)

1-5 December  
Meeting of the States Parties to the Biological Weapons Convention (BWC) in Geneva

1-5 December  
Conference of the States Parties to the Chemical Weapons Convention (CWC) in The Hague

8-9 December  
Conference on the Humanitarian Impact of Nuclear Weapons, held in Vienna
Introduction

Disarmament, arms control and non-proliferation make an important contribution to a safer world. They help to reduce the potential for conflict and to build confidence. In this way they contribute to our own security in Germany and Europe. This brochure provides a summary of the main issues in 2014.

With German support, great successes were recorded in 2014 in the political pursuit of disarmament and arms control. For example, Syria’s declared chemical weapon stocks were destroyed, and the entry into force of the Arms Trade Treaty (ATT) was achieved. Moreover, thanks to the Geneva Joint Plan of Action, the iranian nuclear programme was temporarily halted, and some parts of it were scaled back. The negotiations for a comprehensive resolution of the dispute, in which Germany is taking part, are continuing.
On the other hand, the Ukraine crisis considerably complicated efforts to make progress in areas such as nuclear disarmament. Political measures to build transparency and confidence in the fields of disarmament and arms control are an urgent necessity, especially in times of crisis, because they can help to guarantee military transparency and predictability and consequently foster stability.

The situation in Ukraine underlines the importance of the confidence-building measures attached to the Vienna Document and the Open Skies Treaty. The need to adapt the system of arms control in Europe to current threat perceptions, force developments and the challenges of modern conflicts is more urgent than ever.

Disarmament and arms control are often used as synonyms, and it is not easy to draw a sharp line between the two terms. While disarmament chiefly refers to the reduction of weapons stockpiles, an arms-control treaty may include an agreement permitting one or both sides to make controlled additions to their arsenals. The INF Treaty of 1987, for example, in which the United States and the Soviet Union agreed to reduce their stockpiles of ground-based intermediate-range nuclear missiles, is a classical disarmament treaty. The Treaty on Conventional Forces in Europe (CFE Treaty), on the other hand, would more likely be classed as an instrument of arms control, since it prescribes ceilings for particular weapon categories. Non-proliferation, as a rule, means preventing the spread of weapons of mass destruction (nuclear, biological or chemical weapons). The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) contributes to non-proliferation, but so do systems of export controls, which prevent certain goods from falling into the wrong hands.
Review

Priorities of German disarmament and arms-control policy, 2014
The Iranian nuclear programme

Iran’s nuclear programme has been raising many questions and has led to the imposition of extensive sanctions by the United Nations Security Council. In the E3+3 framework, comprising China, France, Germany, Russia, the United Kingdom and the United States, the Federal Government is engaged in intensive negotiations with Iran on a comprehensive solution of the Iranian nuclear issue. By virtue of the Geneva Joint Plan of Action that entered into force on 20 January 2014, the development of the Iranian nuclear programme has been temporarily halted, and parts of it have been scaled back.
Since 2002, there have been serious doubts about the peaceful nature of the Iranian nuclear programme. The Geneva agreement of 20 January 2014 between Iran and the E3+3 group – China, France, Germany, Russia, the United Kingdom and the United States – marked an important step forward after ten years of standstill and confrontation in the negotiations. At the same time as the Joint Plan of Action entered into force, talks began on a comprehensive long-term agreement on a permanent settlement of the dispute over the nuclear programme. On 24 November 2014, the E3+3 group and Iran agreed on an extension of the negotiations. In April 2015, key parameters for a lasting agreement were agreed on in Lausanne. In the meantime, the measures set out in the Geneva Joint Plan of Action will remain in force.

In return, the EU and the United States suspended some of their sanctions. The measures under the Joint Plan of Action were most recently extended on 24 November 2014 and will now continue until 30 June 2015 so that further negotiations can take place.

Germany is working with its E3+3 partners towards a comprehensive long-term agreement that will include significant restrictions on Iran’s nuclear programme. By dint of a comprehensive transparency regime, moreover, the agreement is also intended to contribute to confidence-building within the international community. The purpose of the agreement is to allay all doubts within the international community about the exclusively peaceful orientation of the Iranian nuclear programme.
The horrific use of chemical weapons in the suburbs of Damascus on 21 August 2013 claimed the lives of more than a thousand people. Under heavy pressure from the international community, the Assad regime had to agree to the destruction of its chemical weapons. The destruction of the declared Syrian stocks of chemical weapons, which has now been almost entirely completed with German assistance, is a signal success in the realm of disarmament.

By 23 June 2014, Syria had handed over its declared 1,300-tonne stock of chemical weapons to the international community for destruction. By 18 August 2014, the deadliest of the Syrian regime’s chemical weapons had been destroyed aboard the US vessel Cape Ray. The residual substances were destroyed in various special installations, including the GEKA facility in Munster, Germany. The international community made great efforts to ensure the destruction of Syria’s declared chemical weapons, efforts to which the Federal Government made a significant contribution, amounting to six million euros in 2014. Nevertheless, questions about the Syrian
Since the 1970s, Syria has been developing a chemical weapons programme involving the production of nerve and skin agents. Since 2013 chemical weapons have been used repeatedly in the Syrian civil war. The heaviest attack took place on 21 August 2013 in the suburbs of Damascus. It is believed that more than 1,400 people died from the effects of the nerve agent sarin.

Under pressure from the international community, Syria acceded to the Chemical Weapons Convention (CWC) with immediate effect in September 2013 and declared itself willing to dismantle its chemical weapons programme. In a parallel move, the United States and Russia agreed on a framework that required Syria to disclose and destroy its chemical weapons as well as its production and storage facilities within one year. The findings of the UN investigation team headed by Professor Åke Sellström, known as the Sellström Mission, established beyond all doubt that chemical weapons had been used during the incidents on 21 August 2013. In response, on 27 September 2013 the UN Security Council unanimously adopted Resolution 2118 and the Executive Council of the Organisation for the Prohibition of Chemical Weapons (OPCW) adopted Decision EC-M-33/DEC.1. These two decisions established a joint OPCW-UN mission on the elimination of Syrian chemical weapons and subjected Syria to a stringent verification and destruction regime. This regime prescribed the complete elimination of all Syrian chemical weapons materials and equipment by 30 June 2014.

chemical weapons programme and the possible use of chlorine gas by the Assad regime remain unanswered. Moreover, the destruction of former production and storage facilities that were part of Syria’s chemical weapons programme has not yet been fully completed. The Federal Government therefore continues to press vigorously for Syria to honour the disarmament commitments it has made.

With the accession of Syria, the Chemical Weapons Convention (CWC) now has 190 States Parties. To be universally applicable it would need the accession of only six more UN members – Angola, Egypt, Israel, Myanmar, North Korea and South Sudan. In coordination with the Organisation for the Prohibition of Chemical Weapons (OPCW), Germany is participating in international efforts, through specific consultations and offers of support, to persuade these nations to accede.
The North Korean missile and nuclear programmes pose a threat to regional and international security. In 2014, North Korea once again refused to cooperate with the international community with regard to its missile and nuclear programmes and threatened several times to carry out another nuclear test. In the spring of 2014, North Korea infringed relevant UN Security Council resolutions by launching two medium-range ballistic missiles, which the UN Security Council immediately condemned. Launches of several short-range missiles between the end of June and mid-July 2014 likewise brought condemnation from the UN Security Council.
Various UN Security Council resolutions demand that North Korea abandons its nuclear and missile programmes and prohibit North Korea from using any ballistic missile technology. North Korea is also banned from engaging in any trade in goods that could be used for its nuclear programme.

The Federal Government is pressing for the start of substantive negotiations on the North Korean missile and nuclear programmes. North Korea must abandon these programmes as the UN Security Council demands. During his visit to South Korea in October 2014, the Federal Minister for Foreign Affairs, Dr Frank-Walter Steinmeier, sharply criticised the lack of transparency in North Korea. He called on the North Korean regime to dismantle its nuclear programme.

The Federal Government continues to regard the six-party talks as the right format for a diplomatic solution. Until these are resumed, Germany is offering to host informal talks between the United States and North Korea.

Since North Korea's withdrawal from the Nuclear Non-Proliferation Treaty (NPT) in 2003, China, Japan, North Korea, Russia, South Korea and the United States had been working for a solution to the nuclear issue in the framework of six-party talks. In 2009, North Korea walked out of the talks. In 2006, 2009 and 2012, North Korea carried out three tests of intercontinental missiles, declaring them to be ‘satellite launches’. Shortly after each of these tests, nuclear tests took place in 2006, 2009 and 2013 with gradually increasing yields. North Korea is not a party to the Comprehensive Nuclear-Test-Ban Treaty (CTBT). It rejects accession to the Hague Code of Conduct against Ballistic Missile Proliferation (HCoC), citing its own security situation. Since 1987 North Korea has been a State Party to the Biological Weapons Convention (BWC), but it is not a party to the Chemical Weapons Convention (CWC).
Small-arms proliferation

In the global context, it must not be forgotten that small arms still claim more victims throughout the world than any other type of weapon. Their proliferation, difficult to control, contributes to the escalation of conflicts, destabilises societies and hampers development. The community of nations is in agreement on the problems that arise from the proliferation of small arms and light weapons. In the outcome document of the Biennial Meeting of States to Consider the Implementation of the UN Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons, options for the use of new technologies in small-arms control are discussed for the first time. This discussion will be intensified during the deliberations of a UN group of governmental experts in the spring of 2015. Germany has lent significant impetus to this process.
At the same time, the Federal Government allocated considerably more funds in 2014 to the promotion of crisis-prevention projects focused on small arms and light weapons. In this way, Germany has been playing an active part in the practical implementation of the UN Programme of Action on Small Arms and Light Weapons. The Federal Government is, for example, supporting projects in Africa and South-East Europe and is making various efforts to apply appropriate control standards for arms and munitions. These include the provision of assistance to governments in creating national control capabilities, the registration and secure storage of arms and munitions and the destruction of identified surplus stocks of arms and munitions.
The Arms Trade Treaty (ATT)

There have scarcely ever been any binding international rules restricting cross-border trade in firearms, armoured vehicles or other conventional armaments. The international Arms Trade Treaty (ATT) is therefore an important step towards tighter arms control. It is the first instrument to create legally binding, globally uniform, robust minimum standards for the regulation of international trade in conventional arms. In practical terms, this means that it is prohibited to export conventional arms by circumventing an embargo or sanctions. The Treaty also prohibits the supply of arms to regimes that may use them to commit war crimes, crimes against humanity or genocide.

Although national governments will still be responsible for authorising transfers, they will have to do so on the basis of specific, common and binding criteria within a mandatory national control system. The ATT entered into force on 24 December 2014 following the deposit of the 50th instrument of ratification and only 18 months after its adoption. Germany had signed the ATT back in June 2013, and the Act transforming its provisions into national law entered into force on 26 October 2013. In January 2014 the Federal Government decided that the Treaty would apply with immediate effect in Germany, even before it became legally binding on the entire EU by virtue of the relevant Council Decision of April 2014. In the meantime, preparations are under way for the first Conference of States Parties to the ATT, which will take place under Mexican chairmanship in 2015. At the end of November 2014, the Federal Government hosted informal consultations under Mexican-German co-chairmanship in Berlin, where significant progress was achieved. Germany is pressing for the widest possible validity of the ATT and is assisting other signatory states in their implementation of the Treaty.
Besides major weapon systems, the ATT also encompasses small arms and light weapons as well as a wide range of munitions and key parts and components of the armaments covered by the Treaty. The export assessment criteria, which form the core of the Treaty, reflect many of the assessment criteria that have already applied for some considerable time on a broader basis in Germany and the EU. In particular, the Treaty largely enshrines the ‘golden rule’ whereby exports must not be authorised if there is a clear risk of serious violations of human rights or of international humanitarian law. Similarly, if there is an overriding risk that an arms export will undermine peace and security, it must not be authorised. Besides absolute prohibitions relating to the use of arms for purposes such as war crimes or crimes against humanity, an identified risk of diversion also constitutes grounds for withholding an export licence. Special, albeit less detailed, provisions apply to imports, brokering, transit and trans-shipment. Even after the entry into force of the ATT at the end of 2014, however, decisions whether to authorise transfers, particularly exports, remain a national responsibility, but they must now be made on the basis of specific, common and binding criteria as a minimum requirement within a mandatory national control system. For the first time, an expandable basic structure has thus been created for a globally applicable system of transfer controls for armaments.
Unlike the Chemical Weapons Convention, the Biological Weapons Convention (BWC) does not possess its own treaty organisation with globally binding transparency and monitoring mechanisms. In view of advances in biotechnology and life sciences, Germany is pressing for the reinforcement of the BWC as a disarmament and non-proliferation treaty. The fact is that new scientific developments also increase the risk of abuses. It is theoretically possible to produce biological weapons with relatively simple resources.

The Federal Foreign Office launched the German Partnership Programme for Excellence in Biological and Health Security in the framework of the G8 Global Partnership against the Spread of Weapons of Mass Destruction with a budget of €22m. for the period from 2013 to 2016. The biosecurity programme now has live projects in 18 countries, chiefly in Africa. The link between security and health considerations is helping to counteract both the misuse of biological agents and natural outbreaks of disease. Assistance is given to partner countries so that they can guard against dangerous

The Biological Weapons Convention
pathogens more effectively and achieve quicker recognition and better containment of diseases such as the Ebola virus disease that is currently rife in West Africa. At the same time, the programme is promoting a responsible approach to research in the life sciences. The present Ebola epidemic shows how important the programme is. Nigeria, for instance, has been managing to combat the deadly virus by diagnosing suspected Ebola cases rapidly and reliably with the aid of laboratories operating in partnership with the German Bernhard Nocht Institute in the framework of a joint project.

The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction (the Biological Weapons Convention – BWC) of 10 April 1972 entered into force on 26 March 1975. Germany acceded to the BWC on 7 April 1983. The BWC is the first multilateral agreement to ban an entire category of weapons. A total of 171 states have acceded to the BWC, the most recent accession being that of Myanmar in December 2014. Most of the 25 nations that are not parties to the Convention are to be found in Africa, the Pacific and the Middle East. Nine of them have signed the BWC but have not yet ratified it. The application of the BWC is the subject of deliberations at review conferences, which are held at five-yearly intervals. The main challenge facing the BWC is that it does not prescribe a verification regime to oversee compliance with the Convention. Negotiations on an additional protocol dealing with verification collapsed in 2001. Since then, a mechanism, known as the intersessional process (ISP), has been used to bridge the gaps between review conferences.
Nuclear disarmament

Even before the outbreak of the Ukraine crisis, it had become apparent that nuclear disarmament had stalled. In July 2014, the United States publicly accused Russia for the first time of a breach of the 1987 Intermediate Nuclear Forces (INF) Treaty, one of the cornerstones of Europe’s security architecture. The Federal Government welcomes the fact that both sides have declared their desire to maintain the INF Treaty. The offer of a new round of disarmament talks that President Obama made to Russia in Berlin in June 2013 is still on the table. The Russian side, however, has not yet delivered a positive response. In spite of the strained relations between the United States and Russia, whose nuclear arsenals contain more than 90% of all nuclear weapons, Germany made various efforts in 2014 to ensure that their dialogue did not dry up.
The Federal Government campaigned for new disarmament talks, encouraged exchanges between experts and helped to keep communication channels open, for example by supporting the trilateral Deep Cuts Commission, which comprises arms-control experts from the United States, Russia and Germany and is dedicated to the aim of developing a comprehensive disarmament agenda. Under the Non-Proliferation Treaty (NPT), all nuclear-weapon states are under an obligation to pursue negotiations on general and complete disarmament. At the same time, in view of the humanitarian effects of nuclear-weapon detonations, calls for an immediate ban on such weapons are growing louder. In the opinion of the Federal Government, any demands for the negotiation of a convention on nuclear weapons or a prohibition of nuclear weapons without the prospect of participation by the nuclear-weapon states would be pointless. It is nevertheless important to make an issue of the humanitarian consequences of a nuclear detonation. That is why the Federal Government took part in conferences in Nayarit (Mexico) and Vienna in 2014 on the humanitarian impact of nuclear weapons.

The 1968 Treaty on the Non-Proliferation of Nuclear Weapons, also known as the Non-Proliferation Treaty (NPT), is the foundation stone of the international nuclear non-proliferation and disarmament architecture.

The Treaty requires non-nuclear-weapon states to renounce nuclear weapons and to subject their nuclear installations to international supervision. Article VI commits all nuclear-weapon States Parties to the NPT (the United States, Russia, China, the United Kingdom and France) to the aim of complete nuclear disarmament in the context of general and complete disarmament by all States Parties. The NPT also requires all States Parties to cooperate in matters relating to the peaceful use of nuclear energy. Every five years, a review conference assesses how the States Parties are implementing the Treaty. The Review Conference (RevCon) is preceded by three Preparatory Committee sessions (PrepComs). A total of 190 states have acceded to the NPT, while four states – India, Israel, Pakistan and South Sudan – have not. On 9 January 2003, North Korea announced its withdrawal from the Treaty, and its status remains unclear. Germany acceded to the Treaty on 2 May 1975.
The NPT Review Conference

At the Ninth Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the States Parties failed to reach agreement on a final document. The general strategic environment was more complex than at the preceding successful conference of 2010, which had adopted a comprehensive plan of action on the three core aims of the NPT, namely nuclear disarmament, non-proliferation and peaceful uses of nuclear energy, and had benefited from the positive momentum generated by the negotiations on the new Strategic Arms Reduction Treaty (New START). The deepest divisions emerged in the relationship between the nuclear-weapon States Parties, known as the ‘P5’, and the vast majority of states, which pressed for more rapid progress on nuclear disarmament. Many states expressed support for the start of negotiations on a prohibition of nuclear weapons. This was unanimously rejected by the P5. The ultimate failure of the conference, however, was due to differences of opinion on the best way to advance the project for a zone free of weapons of massive destruction (WMD) in the Middle East.

Germany, together with its partners in the Non-Proliferation and Disarmament Initiative (NPDI), had been pressing for a compromise right to the end. The crucial task now is to strengthen the NPT by launching new initiatives, because it is an indispensable cornerstone of the international non-proliferation and disarmament architecture. The NPDI, an initiative comprising 12 nations drawn from almost every continent, could play an important role in these efforts.
The Comprehensive Nuclear-Test-Ban Treaty

An important step towards further progress on nuclear disarmament would be the entry into force of the Comprehensive Nuclear-Test-Ban Treaty (CTBT). Next to the Non-Proliferation Treaty (NPT), the CTBT is the main instrument against the initial and continuing development of nuclear weapons. As a member of the group known as the Friends of the CTBT, the Federal Government canvasses states that are not yet parties to the Treaty for signatures and ratifications of the CTBT, most recently at the Friend's ministerial meeting in New York in September 2014. Even though the CTBT is not officially binding, it has already been making an impact in practice through its International Monitoring System (IMS), a large-scale network of monitoring stations. This network was able to furnish evidence of the nuclear tests in North Korea in 2006, 2009 and 2013 and also delivered valuable civil measuring data during the reactor accident in Fukushima, Japan, in March 2011. The extensive network of monitoring stations was further expanded in 2014.

Germany’s involvement includes a total of five monitoring stations – two seismic monitoring stations and two infra-sound stations belonging to the Federal Institute for Geosciences and Natural Resources as well as one radionuclide station belonging to the Federal Office for Radiation Protection. With an annual allocation of some €7.5m., Germany is the third-largest contributor to the budget of the Comprehensive Nuclear-Test-Ban Treaty Organization, which operates the International Monitoring System.
German monitoring stations in the CTBTO International Monitoring System

<table>
<thead>
<tr>
<th>Station</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS19</td>
<td>Near Bischofsreut in the Bavarian Forest</td>
<td>Primary seismic monitoring station is located near Bischofsreut in the Bavarian Forest. In cooperation with South Africa, auxiliary seismic monitoring station AS05 is operated at the research station of the South African National Antarctic Expedition (SANAE). Just like earthquakes, underground nuclear explosions create shock waves that are registered by seismometers. Their resolution is in the order of magnitude of atomic radii.</td>
</tr>
<tr>
<td>AS035</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RN33</td>
<td>Near Freiburg in the Black Forest</td>
<td>The RN33 radionuclide monitoring station is situated on the Schauinsland mountain near Freiburg in the Black Forest. When a nuclear explosion occurs, radioactive particles and noble gases are released into the atmosphere. These are dispersed by the wind and can still be registered several thousand kilometres away in concentrations of one part per million.</td>
</tr>
<tr>
<td>IS26</td>
<td>Co-located with PS19 in the Bavarian Forest</td>
<td>The IS26 infra-sound station has been co-located with primary seismic monitoring station PS19 in the Bavarian Forest. Infra-sound station IS27 is operated at the Neumayer Antarctic research station of the Alfred Wegener Institute. Tiny fluctuations in air pressure, measured in millipascals, are registered with the aid of microbarometers. In this way atmospheric nuclear explosions can also be detected.</td>
</tr>
<tr>
<td>IS27</td>
<td>Neumayer Antarcic research station</td>
<td></td>
</tr>
</tbody>
</table>
The Comprehensive Nuclear-Test-Ban Treaty (CTBT) was laid out for signature on 24 September 1996 and prohibits any type of nuclear explosion anywhere – underground, underwater and in the atmosphere. Its aim is the global renunciation of nuclear explosions and the full substantiation and verification of nuclear explosions. The CTBT is a major building block in the structure of nuclear disarmament and non-proliferation and an important complement to the NPT, the Treaty on the Non-Proliferation of Nuclear Weapons. It is intended to inhibit the nuclear-weapon states from further developing their stocks and the non-nuclear-weapon states from developing nuclear weapons. In this way, the CTBT underpins the requirement of nuclear disarmament that is enshrined in Article VI of the NPT. All signatory states to the CTBT observe moratoriums on nuclear tests, including China and the United States, and are members of the Vienna-based Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO). The CTBTO is recognised as an international organisation and is operating on a provisional basis pending the entry into force of the CBTB. The CTBTO is building up an International Monitoring System (IMS) to oversee compliance with the ban on nuclear tests. In 2014 the number of established monitoring stations rose to 299, compared with 294 in 2013; a total of 278 were certified, two more than in 2013. This means that more than 88% of the planned global network of 337 monitoring stations have been established.
Ban on the production of weapons-grade fissile material

Besides the entry into force of the Comprehensive Nuclear Test Ban Treaty, the start of negotiations on an international Treaty Banning the Production of Fissile Materials for Nuclear Weapons or Other Nuclear Explosive Devices (Fissile Material Cut-off Treaty – FMCT) would be a significant advance in the realm of nuclear arms control. Such a treaty would limit the volume of weapons-grade fissile material and consequently restrict the production of nuclear weapons. Negotiations on this subject would normally take place in the Geneva-based Conference on Disarmament, but the proposal has been persistently blocked there. For this reason the UN General Assembly appointed a Group of Governmental Experts, which has been deliberating since April 2014 on the aspects that would have to be taken into account in the negotiation of such a treaty. Germany is a member of this 25-strong group of experts, which is expected to report in the autumn of 2015.

The Conference on Disarmament (CD) in Geneva is part of what is referred to as the disarmament machinery of the UN and is the only standing multilateral negotiating forum on matters of disarmament, arms control and non-proliferation. The Conference has 65 member countries, including all of the nuclear-weapon states. Decisions on membership, the agenda, the programme of work and procedural matters are taken by consensus. The purpose of the Conference is to deal with four core issues, namely comprehensive and systematic nuclear disarmament, a Fissile Material Cut-off Treaty (FMCT), designed to prevent the development of more and higher-quality nuclear weapons, prevention of an arms race in outer space (PAROS) and pledges known as negative security guarantees, which are given by nuclear-weapon states to non-nuclear-weapon states. In addition, new types of weapons of mass destruction, radiological weapons and transparency in military matters have traditionally been featured on the CD agenda.
Security Council Resolution 1540 and the Wiesbaden process

UN Security Council Resolution 1540 of 28 April 2004 requires the members of the international community to prevent any access to weapons of mass destruction (WMD) by non-State actors such as terrorists. The main means of implementation are legislation, export controls and physical protection of WMD-related materials. The UN Security Council calls on member states to work with industry in implementing Resolution 1540.

Germany took the initiative to establish this dialogue with industry through the Wiesbaden process. In cooperation with the UN Office for Disarmament Affairs (UNODA), it hosted the first Industry Conference on UN Security Council Resolution 1540 in Wiesbaden in April 2012 with a view to involving industry in the effective implementation of all elements of Resolution 1540. Continuing its tried and tested cooperation with UNODA, the Federal Government arranged another conference in December 2013, which focused on the subject of biosecurity. A third conference, devoted to governance and compliance management, took place in November 2014. The participants, about 70 in number, included not only representatives of international companies and business organisations from Africa and Asia but also experts from think tanks and from national and international governmental authorities. The cross-sectoral composition of these conferences enabled participants to share wide-ranging in-depth experience of enlisting the private sector to help curb the proliferation of weapons of mass destruction.

Because of the German initiative, the term ‘Wiesbaden process’ has established itself as the designation of this dialogue with industry on the implementation of Resolution 1540. In 2014, UN Secretary-General Ban Ki-moon marked the tenth anniversary of UN Security Council Resolution 1540 by calling on states and stakeholders to devote their utmost efforts to the implementation of the Resolution. Germany is wholeheartedly supporting this call in the framework of the Wiesbaden process.
The Federal Government, not least in the light of the Ukraine crisis, regards conventional arms control in Europe as a central and indispensable element of a cooperative European security architecture. Germany is pressing for a comprehensive new approach; it advocates modernisation going beyond the CFE Treaty and focusing primarily on verifiable transparency about modern military capabilities. A future regime should also improve regional security in Europe, even where regional conflicts have not yet been finally resolved.

Since the spring of 2013, this topic has also been the subject of intensive discussions within NATO. The NATO summit in Wales at the beginning of September 2014 re-emphasised the need for modernisation.

The Treaty on Conventional Forces in Europe (CFE Treaty) was concluded in 1990 by the states that were members of NATO or the Warsaw Pact at that time. Its aims were to create a secure and stable balance of conventional forces at the lowest possible level in Europe and to ensure that neither side possessed the capability to launch a surprise attack or initiate a large-scale offensive action. The Treaty limits the number of conventional heavy weapon systems – battle tanks, armoured combat vehicles, artillery, combat aircraft and attack helicopters – and builds mutual trust through provisions requiring detailed notification of holdings and through on-site inspections of notified equipment. In 1996, an amendment to the CFE Treaty gave Russia and Ukraine greater latitude for the redeployment of conventional forces within a specifically designated area known as the flank region. The Adapted
Conventional Armed Forces in Europe Treaty (aCFE Treaty), which was adopted by the States Parties in 1999, has not entered into force. In December 2007, Russia suspended its implementation of the CFE Treaty on the grounds that it no longer met Russian security needs. In view of this move, the overwhelming majority of States Parties suspended their implementation obligations to Russia at the end of 2011. The remaining States Parties are still fulfilling their obligations to each other.

The Vienna Document and the Open Skies Treaty

In view of Russia’s suspension of the CFE Treaty, particular importance is attached to the two other key instruments of conventional arms control, namely the Vienna Document on Confidence- and Security-Building Measures and the Treaty on Open Skies. In the Vienna Document framework, Germany pressed for broader information exchange in order to increase transparency about armed forces and their holdings of military armaments. The Open Skies Treaty is the only legally binding security- and confidence-building measure that applies to relations between NATO and Russia and is therefore very important. This is why Germany is pressing for its unrestricted implementation and further development. One important step in this direction was the certification in the summer of 2014 of a new generation of airborne cameras for cooperative observation flights.

In 2016 Germany will take over the presidency of the Organization for Security and Co-operation in Europe. This task, with its great responsibilities and challenges, underlines the willingness of the Federal Government to play a responsible part in shaping the future of Europe’s security architecture and strengthening the OSCE as a whole in its function as the organisation for cooperative security in Europe. With its 57 participating states, the OSCE is the only organisation in the field of security policy in which every European country and the successor states of the Soviet Union as well as the United States and Canada are all represented.
The Vienna Document on Confidence- and Security-Building Measures (CSBMs) is a politically binding agreement concluded by all OSCE participating states for the regulation of military aspects of mutual confidence and security. It is an integral part of the security architecture constructed in Europe by the CSCE process. In particular, the Vienna Document includes an annual exchange of military information, covering military forces, major weapon and equipment systems, defence planning and sizeable military activities. It also sets out appropriate verification measures and encourages additional confidence-building measures such as observation of military exercises. The Document also seeks to reduce risks in the zone of application for CSBMs; to this end, it contains a mechanism for consultations and cooperation in the event of unusual military activities. The majority of the participating states are seeking an adaptation of the Vienna Document to reflect the security situation in today’s world.

The Treaty on Open Skies, or Open Skies Treaty, is an integral component of the structure of cooperative arms control in the Euro-Atlantic area. It allows its states parties to conduct unimpeded observation flights on a reciprocal basis, using contractually agreed categories of sensors, in the entire area of application “from Vancouver to Vladivostok”. The Open Skies Treaty is therefore the agreement with the widest geographical scope in the realm of military verification and of confidence- and security-building. Its essential objective, besides increasing military intelligence, is to enhance confidence and transparency among states parties by means of cooperative airborne observation missions. In the context of the Ukraine crisis, recent cooperative observation flights under the Open Skies Treaty have established greater transparency in the conflict zone. The third Conference of States Parties will be held in Vienna in 2015. The national objective of the Federal Government is to support the implementation of the Open Skies Treaty by procuring an observation aircraft for Germany.
Humanitarian arms control

The term ‘humanitarian arms control’ currently covers two major milestones in the field of arms control, namely the global bans on anti-personnel mines under the Ottawa Convention and on cluster munitions under the Oslo Convention. The Federal Government is pressing for the universalisation of these instruments, and its commitment includes extensive project work. In 2014, Germany was one of the main contributors to humanitarian arms-control efforts, providing some €15m. to assist partner countries in clearing mines and ordnance, destroying stockpiles, treating victims and raising public risk awareness. In addition, the Federal Government played an active part in the third Review Conference of the Anti-Personnel Mine Ban Convention in Maputo, Mozambique, in June 2014 and in the fifth Meeting of States Parties to the Convention on Cluster Munitions in San José, Costa Rica, in September 2014.
Lethal autonomous weapon systems

Technological advances leading to the development of increasingly automated systems have lent completely new momentum to discussions on future weapon systems, which may one day be able to decide autonomously on life or death by means of artificial intelligence. The question of how to deal with what are known as lethal autonomous weapon systems (LAWS), which are as yet hypothetical, must be distinguished from the debate on drones. Although present-day drones are unmanned, they still operate by remote control; in other words, the critical functions of target recognition and use of force are controlled by a human operator. In the case of the hypothetical LAWS, by contrast, the issue is whether weapon systems might operate independently of human agency in future and whether they might not be able, at each stage of their deployment, to make predictable decisions on the use of force. Germany is pressing for a ban on fully automated weapon systems in international law.

The first intergovernmental discussion on LAWS took place in Geneva in May 2014 in the form of an informal meeting of experts in the framework of the UN Inhumane Weapons Convention. Germany was to chair the follow-up meeting in April 2015. The fruit of these deliberations is the production of a substantively comprehensive report, for which the presiding state is responsible, on the state of intergovernmental discussions and on a wide range of scientific views, a report that could serve as a basis for the future debate on this subject. The discussion to date has shown that further clarification is needed on the precise nature of LAWS and on the conceptualisation of automation and autonomous action and that interests still diverge on many aspects of this issue within the international community. Germany is committed to a continuation of this discussion process.
Security risks in cyberspace also confront us with formidable new challenges. The traditional instruments of arms control have insufficient effect in this domain. Germany, for its part, believes in a cooperative approach, transparency and confidence-building. Germany is a member of a United Nations group of governmental experts on cyber security. In June 2015, the group is to present a report on responsible behaviour by states in cyberspace. The Organization for Security and Co-operation in Europe (OSCE) also deals with cyber security. In early December 2013, the OSCE participating states reached an agreement on confidence-building measures and regular exchanges of information on threats to cyber security and on the nomination of central contact points. The implementation of these measures was under way in 2014, Germany being one of the first countries to exchange key documents on cyber security with other OSCE participating states. In 2014 Germany held bilateral consultations on cyber security with the United States and China as a security- and confidence-building measure. The Federal Government also held informal talks with Brazil, France, India, South Korea and the United Kingdom.
Security in outer space

The international community attaches the utmost importance to a security policy for the complex and challenging domain of airspace and outer space. At the present time, there are about 1,000 satellites belonging to some 60 countries in outer space, most of them used for communications, navigation or earth observation. This is why it is essential to have rules that safeguard the sustainable use of outer space and prohibit actions designed to damage or destroy space objects such as satellites, whether for military or other reasons.

Accordingly, in 2014 Germany remained a staunch advocate of the International Code of Conduct for Outer Space Activities (ICoC), also known as the Space Code of Conduct (SCoC), that was first mooted during the German presidency of the EU Council in 2007. Since the persistent stalemate in the Geneva-based Conference on Disarmament is blocking the development of legally binding instruments of arms control for outer space, making the Code of Conduct a politically binding set of rules would be an important transitional step. In its concluding report of July 2013, the Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities endorsed efforts to create a multilateral code of conduct. In October 2014, the UN Secretary-General, in a letter to the High Representative of the EU for Foreign and Security Policy, praised the Code and pledged his support. Following several rounds of multilateral consultations, in which Germany played an active part, most recently in Luxembourg in May 2014, the international community has moved a good bit closer to finalising the International Code of Conduct. The Federal Government emphatically supports the forthcoming transition from a process of multilateral consultation to formal negotiations. The first official round of negotiations will take place in New York in late July 2015.
Outlook

What is still on the disarmament and arms-control agenda?
Germany regards disarmament and arms control as essential elements of its foreign and security policy. For this reason, Germany will continue to pursue and intensify its efforts in all areas of disarmament, arms control and non-proliferation, including confidence- and security-building. The main focus of these efforts is on the following specific tasks and objectives:

- **G7 presidency**: Priorities are small-arms control, especially in Africa, and promotion of biosecurity in the framework of the G7 Global Partnership.

- **NPT**: Commitment to a stronger NPT as a key regulatory basis for nuclear disarmament, nuclear non-proliferation and peaceful uses of nuclear energy in cooperation with our partners in the Non-Proliferation and Disarmament Initiative and within the EU framework.

- **Iran**: Diplomatic resolution of the Iranian nuclear issue that guarantees the peaceful nature of the Iranian nuclear programme permanently and beyond any doubt.

- **Europe’s security architecture**: Promotion of confidence and security in Europe through support for the 2015 Review Conference of States Parties to the Open Skies Treaty and contribution to the updating of the Vienna Document under the OSCE umbrella.

- **Chemical weapons**: Full compliance by Syria with the disarmament obligations it has assumed; further efforts towards universal validity of the Chemical Weapons Convention.

- **Biological weapons**: Reinforcement of the Biological Weapons Convention (BWC) as a disarmament and non-proliferation treaty; helping to shape the content of the discussions on a verification mechanism for the BWC.
Small arms: Implementation and further development of the relevant rules and control standards in the realm of small arms and light weapons; improvement of the traceability of these weapons in conflict zones with the aid of modern marking, registration and tracking technology; support for partner countries, through targeted project activities, in establishing the capability to control small arms responsibly; promotion of regional structures to combat the proliferation of small arms and light weapons; exploration, as a member of the UN Group of Governmental Experts under the UN Programme of Action on small arms and light weapons, of the potential applications of modern technology to small-arms control.

The Arms Trade Treaty: Preparation of the first Conference of States Parties and full implementation of the international Arms Trade Treaty (ATT); provision of support for measures to implement and universalise the ATT, for example through the establishment and promotion of the UN Trust Fund Facility.


Lethal autonomous weapon systems: Use of the German chairmanship of the informal working group on the UN Inhumane Weapons Convention to advance the initiated discussion of lethal autonomous weapon systems (LAWS); convocation of another meeting of experts in the framework of the Inhumane Weapons Convention in the spring of 2015; continuation of the discussion in the Convention framework with a view to creating an international basis for dealing with LAWS as a subject of arms-control policy.

Treaty on Open Skies (Open Skies Treaty): Support for the Treaty through the procurement of a German observation aircraft.