

An Arms Control Association and Partnership for Global Security Report



The Nuclear Security Summit: Accomplishments of the Process

March 2016

Michelle Cann, Kelsey Davenport, and Jenna Parker

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About the Authors

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Cover Photo

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“The long-running debate on improving the security of nuclear material has been like running a marathon. Every now and then we make a dash forwards...We will make another in 2016 at the next summit in the U.S. - on our way to embed nuclear security firmly in national, regional and global institutions and procedures... The task we took on in 2010 demands resolve, and perhaps more patience than we would like. But in the words of Nelson Mandela... ‘It always seems impossible until it’s done.’ Let us press on in that conviction - today, tomorrow and in the days that follow - towards our goal of a safer world.”

—Dutch Prime Minister Mark Rutte, The Hague, March 25, 2014

LIST OF ACRONYMS & ABBREVIATIONS

ASEAN: Association of Southeast Asian Nations

CBRN: Chemical, biological, radiological, nuclear

Category 1: Radioactive sources most dangerous to human health in ranking of I-5

Category 2: Radioactive sources dangerous to human health in ranking of I-5

Code of Conduct: Code of Conduct on the Safety and Security of Radioactive Sources

CPPNM/A: Convention on the Physical Protection of Nuclear Material and 2005 Amendment

DBT: Design Basis Threat

ECOWAS: Economic Community of West African States

EPREV: Emergency Preparedness Review Service

EU: European Union

GICNT: Global Initiative to Combat Nuclear Terrorism

Global Partnership: Global Partnership against the Spread of Weapons and Materials of Mass Destruction

GPS: Global Positioning System

HEU: Highly-Enriched Uranium

IAEA: International Atomic Energy Agency

ICSANT: International Convention for the Suppression of Acts of Nuclear Terrorism

INDC: Intended Nationally Determined Contributions

INFCIRC: Information Circular

INIR: Integrated Nuclear Infrastructure Review

INSA: International Nuclear Nonproliferation and Security Academy

INNServ: International Nuclear Security Service

INSEN: International Nuclear Security Education Network

INSSP: Integrated Nuclear Security Support Plans

Interpol: International Criminal Police Organization

LIST OF ACRONYMS & ABBREVIATIONS (CONT.)

IPPAS: International Physical Protection Advisory Service

ISSP: Information Security Strategic Plan

IRRS: Integrated Regulatory Review Service

ISCN: Integrated Support Center for Nuclear Nonproliferation and Nuclear Security

ITDB: Incident and Trafficking Database

LEU: Low-Enriched Uranium

Mercosur: South American regional bloc including Argentina, Brazil, Paraguay, Uruguay, and Venezuela

NGO: Nongovernmental Organization

NNSA: National Nuclear Security Administration

NSF: Nuclear Security Fund

NSS: Nuclear Security Summit

R&D: Research and Development

RDD: Radiological Dispersal Device

SLD: Second Line of Defense

SNSI: Strengthening Nuclear Security Implementation Gift Basket

UN: United Nations

UNFCCC: United National Framework Convention on Climate Change

UNSCR 1540: UN Security Council Resolution 1540 (2004)

WINS: World Institute for Nuclear Security

Executive Summary

The Nuclear Security Summit (NSS) process, initiated by U.S. President Barack Obama in 2009, will conclude in April 2016. It has brought together more than 50 world leaders at four heads-of-state level summits—Washington, D.C. (2010), Seoul (2012), The Hague (2014), and Washington D.C. (2016)—in the fight to minimize the risk of nuclear and radiological terrorism through national actions and international cooperation.

The NSS pioneered the use of regular, progressive, voluntary nuclear security commitment making by states and groups of states, thereby creating an effective new tool for continuously improving the global nuclear security regime. The NSS process has resulted in the recovery or elimination of more than 1,500 kilograms of highly-enriched uranium and separated plutonium, the establishment of dozens of new training and support centers, and many updates to national laws on nuclear safety and security. Notwithstanding these successes, significant work remains to strengthen the underdeveloped international system for governing nuclear security, and it is unclear how the summit’s valuable commitment-making tradition and political momentum will be sustained after the summits end.

NSS commitment making has produced many of the most important accomplishments of the summit process while also being a central outcome itself. The voluntary pledges, often referred to as “house gifts” or “gift baskets” depending on their national or multinational focus, is a bottom-up approach, which allows states to determine their goals and then make political commitments to other leaders and the media regarding how they will achieve them. This offers a pragmatic supplement to the summit’s traditional consensus-based approach

and is now also being used by the international community to break the impasse on addressing climate change.

The end of the summit process means that the nuclear security agenda will be reabsorbed by the international organizations and initiatives responsible for various aspects of the issue prior to the initiation of the NSS process. A return to the status quo could harm the political prioritization for addressing the remaining governance gaps in the global system.

Alternate approaches for ensuring the continued improvement of the nuclear security regime exist. These include utilizing the International Atomic Energy Agency’s (IAEA) International Nuclear Security Conferences, the 2014 gift basket that became IAEA Information Circular 869, or a new gift basket in 2016 to preserve the commitment making processes that have made the NSS process effective. Focused measures that build on the foundation of progress achieved at the summits will be critical for strengthening nuclear security and continuing to expand the sense of state responsibility in the fight against nuclear terrorism. The decisions made at the final summit will be critical for influencing the trajectory of the global nuclear security regime by establishing the tone, pace, and any new structures to assist in ensuring its continuous improvement.

Significance of Nuclear Security Commitment Making

Encouraging states to make voluntary pledges at international gatherings became an important tool during the Obama administration for making progress on transnational challenges where collective action is needed but cannot be forced.

This approach acknowledged that continued skepticism in Washington over international treaties necessitated new approaches to addressing global challenges.

Initially at the Nuclear Security Summits (NSS) and now under the United National Framework Convention on Climate Change (UNFCCC), states were asked to pledge specific national actions at each gathering that they will take to help mitigate the nuclear or climate challenges. This progressive commitment making model acknowledges the limitations of traditional international diplomacy to produce comprehensive solutions to complex, transnational challenges at a single gathering. However, it simultaneously recognizes that this is not an excuse for inaction or excessive self-congratulation for minor, incremental improvements.

During the course of six years and three summits, nuclear security pledges have increased in scope and expanded from national commitments offered at the first summit in April 2010 to the multinational commitments offered in 2012 and 2014. These commitments, known as “house gifts” and “gift baskets,” are responsible for the most notable outcomes of the NSS process and have helped improve the security of nuclear and radiological materials and facilities globally. While not legally binding, the commitments made at each summit were politically binding. They were declared by the country’s head-of-state, or a senior official, and at the subsequent summit, there was an implied expectation that leaders would return to discuss how their country’s efforts were contributing to NSS goals.

At the 2015 UNFCCC Conference of the Parties in Paris, voluntary pledges were introduced as a tool that would be gradually built upon every five years to

enable the international community to reach its goal of limiting global temperature increases to two degrees Celsius. These pledges, called Intended Nationally Determined Contributions (INDC), were the primary outcome of the conference and viewed as a major step forward in achieving international climate objectives.

NSS commitments generally have expanded in scope at successive summits, although this was not a requirement, and formal reporting mechanisms are not part of the NSS process. Nuclear security progress reports (submitted voluntarily by states), government press releases, independent media coverage, and nongovernmental organization (NGO) tracking efforts are the major means of providing accountability and transparency to commitment making in the NSS process. In contrast, a detailed monitoring and reporting system was a key part of the INDC packages agreed to at the 2015 UNFCCC conference. It will take time to know whether this new reporting system will accomplish its objectives, but it is a worthwhile element to include in a package of actions designed to address an international existential threat. More consistent reporting methods would have been a useful addition to the NSS process for creating greater accountability and a more comprehensive assessment of whether state actions were sufficient.

While the climate change issue has a perpetual mandate for regular gatherings under the UNFCCC, the NSS process has been an ad hoc forum that will end in 2016. This raises important questions about whether the voluntary commitment making model for nuclear security will be carried forward by states in



The Hague Nuclear Security Summit/IAEA

Leaders from 53 countries gathered in The Hague on March 24-25, 2014, for the third NSS. Leaders signed on to multilateral initiatives to advance nuclear security in key areas at the summit.

the absence of heads-of-state summits.

NSS BACKGROUND

More than 50 world leaders have been gathering biennially since 2010 to confront the challenge of preventing nuclear terrorism and improving global nuclear security. During these six years, more than 1,500 kilograms of highly-enriched uranium (HEU) and separated plutonium has been recovered or eliminated. Twelve new countries have become HEU-free, and more than a dozen countries have established centers of excellence for training, education, and research. Though little has been done to address the underlying structural issues of the international regime governing nuclear security, many states have updated their national laws and regulations on nuclear safety and security in the wake of the Fukushima accident and political pressure from the NSS process.

Through regular meetings, information sharing, and voluntary commitment making, the NSS process has generated support for strengthening nuclear security measures and expanded the responsibility that all countries have in preventing nuclear terrorism. While always acknowledging that nuclear security is a national responsibility, the summits have operated on the basis of international cooperation and stressed the world's shared interest in reducing the vulnerabilities that endanger all citizens.

The objective of strengthening nuclear security measures through "responsible national actions and sustained and effective international cooperation" was enshrined in the 2010 NSS consensus communiqué along with the goal to "secure all vulnerable nuclear material in four years." Fissile material removal and

protection efforts dominated the early focus of the summit process, but the agenda gradually broadened to include radiological sources, the nuclear safety and security interface, and some international governance issues. Long held fissile material repatriation goals were accelerated during the summits and became marquee announcements for leaders traveling to Washington (2010), Seoul (2012), and The Hague (2014).

While the "four year goal" to lockdown weapons-usable materials in civil programs was declared a success by governments at the 2014 summit, a fourth summit was scheduled for March 31-April 1, 2016. This summit aims to create action plans for existing international organizations to continue the work of the summit process.

INTRODUCTION OF HOUSE GIFTS AND GIFT BASKETS

Leaders attending the first summit in Washington were encouraged to bring "house gifts" to the event in the form of specific actions that their country would take, or had recently completed, to improve nuclear security.

In 2010, 60 house gifts were offered, including pledges to ratify the nuclear security treaties, create new nuclear security centers of excellence and training initiatives, and contribute to the IAEA Nuclear Security Fund. By the 2012 Seoul summit, more than 90 percent of the house gifts from 2010 had been fulfilled, and approximately 100 new national commitments were made.

National commitments on nuclear material removal and protection efforts have generated important global security achievements, including reducing the number of countries that possess

weapons-usable nuclear materials from 32 in 2010 to 24 by the end of 2015. The value of this type of nuclear risk reduction work was demonstrated when conflict broke out in Ukraine over Crimea. Only a year before, Ukraine completed its 2010 summit pledge to eliminate all HEU from its territory by 2012. Without this proactive security measure, the instability in the country would have increased the risk of theft or diversion of the material and added another dimension to an already combustible situation.

National commitments also spurred states to take action to ratify relevant nuclear security treaties. Prior to the summit process, only 18 summit participants had ratified the 2005 Amendment to the Convention on the Protection of Nuclear Materials (CPPNM/A), which sets protection requirements for the domestic use, storage, and transport of nuclear materials as well as legal consequences for sabotage. Since the 2010 summit, 26 participating countries acted on national commitments to ratify the CPPNM/A. In that same time period, 17 summit participants completed ratification of the International Convention on the Suppression of Acts of Nuclear Terrorism. Pakistan is the only summit participant that has taken no action on either international instrument.

“Gift basket diplomacy” emerged from the 2012 Seoul summit as an extension of the national commitment making tradition that was established at the Washington summit. It involved multinational commitment making by groups of countries that issued joint statements describing their shared priorities, mutual goals, and the actions they planned to take in support of them. This new form of commitment making captured much of the enthusiasm around summit outcomes in 2012 and 2014.

In 2012, the 13 gift baskets offered covered a wide range of issues, including nuclear information security, counter nuclear smuggling, and educational outreach. Some groups of states used the gift basket tool to share information on the work that they were doing in other forums that contributed to NSS goals. These included the joint statements issued by the Global Initiative to Combat Nuclear Terrorism; Global Partnership

against the Spread of Materials and Weapons of Mass Destruction; and a trilateral initiative by Russia, Kazakhstan, and the United States on the securing of the Semipalatinsk test site. Other statements expressed support and guidance on enhancing efforts around specific nuclear security issues, such as training and support centers, national legislation implementation, and radioactive source security. A few statements were very precise in the set of activities that its signatories would complete, specifically the technical projects on low-enriched uranium (LEU) fuel production and transitioning medical isotope production from using HEU to LEU.

Gift baskets have been signed by as many as 35 countries and as few as three. Unlike the summit communiqués, which require consensus support and are meticulously refined by the NSS participants months in advance, gift baskets are flexible tools that involve a degree of improvisation. Any summit participant can initiate a gift basket, and there is no defined criteria for what a gift basket should accomplish. Having other countries support a gift basket is the only real requirement for offering one, as their multinational nature is their distinguishing characteristic. Summit planning meetings have included time for countries to introduce, receive feedback, and build support for gift baskets, but much of this work is supplemental to the formal planning for the summits.

At the 2014 summit, 14 gift baskets were offered, and more than half of these were updates to the multilateral commitments from the previous summit. These follow-on gift baskets often reported on the actions taken under their 2012 versions and pledged additional steps to be completed by the next summit in 2016. Participation in some gift baskets varied from one summit to the next, and in one instance, a gift basket was even led by a new country that did not sign the previous version of it. New gift basket topics introduced in 2014 include the security of the maritime supply chain, nuclear forensics, and supporting implementation of United Nations Security Council Resolution (UNSCR) 1540 (2004).



Leaders from 53 countries gathered in The Hague on March 24-25, 2014, for the third Nuclear Security Summit.

REPORTING ON COMMITMENT IMPLEMENTATION

National progress reports, submitted voluntarily, provide the most detailed information published by states about their implementation of commitments made at the summits. These reports were initiated after the 2010 NSS but not without controversy. Countries originally rejected a reporting template proposed at an early planning meeting for the 2012 summit and resisted the idea of having to report on non-binding, political commitments made at these ad hoc summits. This tension over information sharing on national actions to strengthen nuclear security reflected the traditional view that conflates effective nuclear security with secrecy. Keeping truly sensitive information protected is critical, but overzealous confidentiality makes it difficult to assess and identify areas in need of improvement, learn from other states, and fix vulnerabilities.

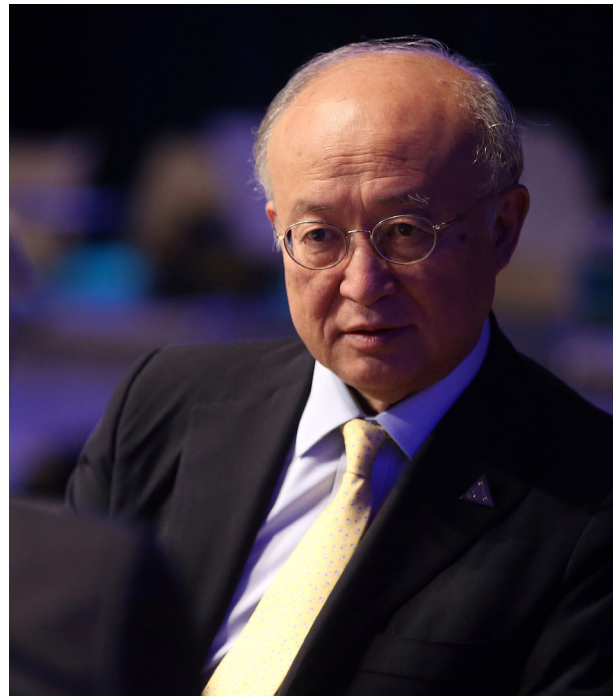
Despite early protests, more than 90 percent of the participants issued national progress reports at the 2012 and 2014 summits. The quality and structure of these reports varied, but the reporting process broke an important taboo about information sharing. Prior to the NSS, regular reporting on nuclear security largely was limited to submissions to the UNSCR 1540 Committee or a paragraph in national statements at IAEA General Conferences. In contrast, the NSS reports are often multiple pages and describe non-sensitive national and cooperative actions that the state has pursued to strengthen nuclear security domestically and internationally. A learning curve is visible in some of the countries' statements from 2012 to 2014, as later versions demonstrate a clearer understanding of how national regimes intersect with the international nuclear security system.

Every state has made at least one national commitment, and some countries have been prolific in their national and multinational commitment making, such as the three summit host countries, along with Canada, Japan, Kazakhstan, Norway, Philippines, Spain, and the United Kingdom. From 2012 to 2014, participation in gift basket diplomacy rose from approximately 80 percent to nearly 90 percent. Azerbaijan, China, Gabon, India, and Saudi Arabia are the only summit participants that have not yet signed a single gift basket.

House gifts, gift baskets, and national progress reports are again being welcomed at the 2016 summit. All 53 countries that attended the 2014 summit were invited by the United States to Washington, D.C. to attend, and only Russia declined.

COMMITMENT MAKING AND THE IAEA

An important milestone in the summit process and multilateral commitment making was reached in



Sean Gallup/AFP/Getty Images

IAEA Director General Yukiya Amano following the closing session of the NSS in The Hague on March 25, 2014.

October 2014. At this time, the Strengthening Nuclear Security Implementation (SNSI) initiative, a gift basket from The Hague summit, was introduced into the IAEA as an Information Circular (INFCIRC/869). As an INFCIRC, any state may now join the initiative regardless of whether it is a summit participant. Thirty-five states already signed the SNSI at the 2014 summit, making it one of the two most popular gift baskets to date. In November 2015, Jordan became the first country to use the INFCIRC process to issue its support. As an INFCIRC, the initiative will outlive the summit process and could grow to provide a platform for further nuclear security progress.

SNSI (INFCIRC/869) also is unique for its content. Sponsored by the three summit hosts, it commits states to subscribe to the IAEA's Fundamentals of Nuclear Security and meet the intent of recommendations contained in the IAEA Nuclear Security Series and Code of Conduct. Signatories pledge to continually improve their nuclear security regimes through self-assessments and peer reviews, and ensure that the management and personnel responsible for nuclear security are "demonstrably competent." The initiative also includes a non-exhaustive list of a dozen actions that countries may take to "contribute to the continuous improvement of nuclear security."

The initiative begins to address weaknesses in the international nuclear security regime in a way that no other summit outcome has. It has important norm-building implications because it commits states to reflect the IAEA's non-binding recommendations in

their national regimes, which consequently gives them the force of law. At a press conference following the 2014 summit, U.S. Secretary of Energy Ernest Moniz described this as creating “the closest thing we have to international standards” for nuclear security. If the INFCIRC/869 can continue to grow and evolve, it offers a potential structure for states to move the nuclear security mission forward after the summits.

In December 2016, eight months after the last NSS, the IAEA will convene the International Nuclear Security Conference in Vienna. This event, held every three years, draws government officials, regulators, technical specialists, and some nongovernmental experts together from around the world. When the last meeting was held in 2013, political participation was elevated to the ministerial level, a precedent which the IAEA would like to carry forward. After the NSS summits end, these IAEA conferences may become the highest-level, regular gatherings on nuclear security and could provide an opportunity for states to meet to discuss priorities and continue the tradition of commitment making.

IMPORTANCE OF THE 2016 SUMMIT

The 2016 summit is the final of the series, and the commitments made at it will have special significance but also face a relevancy challenge. Consistent, progressive voluntary commitment making is a key innovation of the summit process and is responsible for many of its achievements. The value of this tool in broader international diplomacy has been recognized in the UNFCCC process and its components have been better defined as part of the long-term, international strategy on climate change.

Despite the positive influence the NSS process has had in reducing nuclear security dangers, substantial challenges will continue after the 2016 summit. Like climate change, global nuclear security would benefit from a predictable approach involving a regularized and high-level process with progressive commitment making toward a common goal. Without an agreed upon mechanism for maintaining political attention after 2016, nuclear security will be in danger of backsliding to a largely technical issue for states.

During the past six years, the upcoming summits exerted political pressure on countries to complete actions ahead of the next gathering. Countries wanted to avoid being seen as weak on security issues on the global stage and were incentivized to build on their previous commitments at the summits. This forcing mechanism will no longer exist after 2016 and could affect the level of ambition of commitments made at the final summit. It will be particularly important for the multinational pledges to include aspirational projects with long-term goals that can provide a clear rationale for continued collaboration on pressing nuclear security issues. While taking stock of past

actions and celebrating accomplishments will be a dimension of the 2016 summit, it should not be the only focus. It is critical that countries use the progress made at the past three summits, and will make in 2016, as a foundation for a stronger nuclear future that binds even more countries together in pursuit of common objectives.

As no single institution will inherit the summit process, states must be proactive in expressing how they want to see the nuclear security dialogue evolve after 2016. The IAEA will be an important actor for improving nuclear security after the summit, with its annual General Conferences and triennial International Conferences on Nuclear Security providing key forums for states to meet and discuss next steps. The International Conference, with nuclear security as its sole focus, is better suited than the General Conference for adopting the commitment making tradition. However, for this to happen, several states must decide that it is a valuable model to continue and then offer meaningful commitments at the December 2016 event to establish the tradition at the new venue.

Alternatively, infrastructure built around INFCIRC/869 or a new forward-looking gift basket in 2016 could provide for a forum that continues commitment making and periodic meetings on nuclear security. The conclusion of the summit process does not necessitate an end to gift basket initiatives.

Gift baskets have the flexibility to set broad goals, attract support, and evolve as necessary to further their goals. They do not require full consensus to act or have bureaucratic structures or political baggage to slow progress. However, that lack of bureaucratic structure also can be a weakness, as it allows them to be more easily set aside than a treaty-based initiative. However, with creativity and determination this can be overcome, as seen with the transition of SNSI from the NSS to the IAEA. This initiative now benefits from broader legitimacy and procedural support from the agency, while remaining in the control of subscribing states. Building on this initiative in 2016, or creating a similarly ambitious gift basket with broad support, can provide other potential paths forward for preserving nuclear security commitment making and improving the regime.

Ultimately, it is up to the NSS participants to determine what they have found most valuable about the NSS process and then make a political decision about how to preserve it. These are issues that countries have been grappling with in the lead up to the 2016 summit, and there are options for moving forward in a way that maintains momentum and builds on past achievements. In this way, the outcomes of the 2016 NSS will be important for determining the future of the nuclear security commitment making model and the trajectory of the global nuclear security regime.

Methodology

This final report in a series of six is a cumulative snapshot of what states have done to strengthen nuclear security during the course of the Nuclear Security Summit (NSS) process (2010-2016). It covers all reported action from when the first summit took place in April 2010 through January 2016. New announcements made at or immediately before the March 31-April 1, 2016 summit were too recent to be incorporated.

The report features 53 country profiles which showcase how the summit's political momentum resulted in tangible actions in each participating country. These actions are organized into five categories:

1. Nuclear and radiological security
2. Counter nuclear and radiological smuggling
3. Education and training
4. Governance structures and processes
5. Joint statement participation

These categories were developed by the authors and do not reflect an official categorization of summit outcomes by governments. There was no formal reporting mechanism used by states to uniformly report on their progress implementing nuclear security goals. However, categorizing action in this way provides a clearer picture of what types of activities states chose to focus their attention on during the summits. The profiles strive to be comprehensive but are not necessarily exhaustive, given the inherent limitations on information availability, publishing time constraints, and the ongoing nature of some projects. The profiles differentiate between completed and ongoing activities as much as possible through verb tenses. Information provided by states on activities completed before the summit process began was excluded.

Information for this report is primarily drawn

from the national progress reports submitted by states at the 2012 and 2014 summits. Of the 53 participants, 90 percent of states issued voluntary reports at these summits detailing how they were implementing their nuclear security responsibilities. Only Egypt did not submit a progress report either year. There is substantial variation in what states chose to include in their progress reports. However, many reports issued in 2014 grew in length and sharpened in scope, demonstrating a clearer depiction of the state's national regime, how it interacts with the international system, and why sharing this information is useful. A new set of reports are expected to be released at the 2016 summit.

This report also drew information from the NSS joint statements (also known as gift baskets), national statements made at IAEA General Conferences (2010-2015), and IAEA Nuclear Security Reports (2010-2015). Additionally, this report utilized credible open source material and direct communication with government officials. Information referenced from these sources is not individually cited. IAEA documents are available on its website, and a full catalogue of official NSS documents can be found on the PGS website.

In mid-2015, drafts of each country profile were sent to respective embassies in Washington, D.C. States were given the opportunity to confirm details and specify additional projects or initiatives that they have taken during the summit period. While several governments responded to this outreach, the final inclusion of any data provided was at the authors' discretion.

Country Profiles



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ALGERIA

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- None

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB

Progress on Education and Training Initiatives

- Established a Nuclear Security Training and Support Center
- Hosted the Regional Office for North Africa and Sahel region of the EU CBRN Center of Excellence
- Organized IAEA national and regional workshops and training courses
- Hosted an IAEA workshop on radiological crime scene management
- Established Master's degree program courses in nuclear security and modules on nuclear security and physical protection for nuclear engineering programs

Progress on Governance Structures and Processes

- Joined the GICNT
- Ratified the ICSANT
- Cooperated with the IAEA on an INSSP
- Amended its penal code to criminalize the malicious use of radioactive materials
- Updated domestic regulations to strengthen physical protection and export controls

Participation in Joint Statements

- Nuclear Information Security (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- Comprehensive Approach to Nuclear Security (2014)
- Enhancing Radiological Security (2014)
- Forensics in Nuclear Security (2014)
- Strengthening Nuclear Security Implementation (2014)

ARGENTINA

National and Multinational Commitment Results

**WEAPONS
USABLE
MATERIAL**

Progress on Nuclear and Radiological Security

- Expanding radioisotope production from LEU targets

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Strengthening border control infrastructure and capabilities

Progress on Education and Training Initiatives

- Incorporated nuclear security into training center course on nuclear and radiation safety
- Organized IAEA regional workshops on the CPPNM/A, nuclear security culture, and information security
- Developed bilateral training activities with countries in the region to prevent smuggling
- Held a multi-national, multi-sector workshop on improving radioactive source security
- Hosted a WINS workshop for industry personnel
- Co-hosted a GICNT exercise on radiological emergency management with Chile

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Joined the GICNT
- Updated export control procedures

Participation in Joint Statements

- Nuclear Security Training and Support Centers (2014)
- Comprehensive Approach to Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)

ARMENIA

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Removed and secured radioactive sources with assistance from the United States

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Conducted a radiological material interdiction exercise with Georgia

Progress on Education and Training Initiatives

- Hosted a counter-proliferation investigation training
- Established a Laboratory for Technical and Forensics Analysis of Nuclear and Radioactive materials with the United States to strengthen nuclear forensic and counter smuggling capacity
- Hosted an IAEA IPPAS national workshop
- Implemented an Action Plan under the Nuclear Smuggling Outreach Initiative

Progress on Governance Structures and Processes

- Ratified the ICSANT
- Ratified the CPPNM/A
- Received an IAEA IPPAS mission
- Received an IAEA EPREV mission
- Updated and approved an IAEA INNSP
- Passed a new law on the safe and secure use of nuclear energy
- Passed a new export control law
- Drafted a new law on the regulation and control of nuclear materials with the IAEA and United States
- Revising rules on the physical protection of radioactive materials

Participation in Joint Statements

- Nuclear Security Training and Support Centers (2014)
- Enhancing Radiological Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)

AUSTRALIA

National and Multinational Commitment Results

**WEAPONS
USABLE
MATERIAL**

Progress on Nuclear and Radiological Security

- Repatriated surplus HEU stocks to the United States
- Revised its DBT, including cyber-security for the first time
- Evaluated and tested facility security through a multi-agency exercise program

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Developing nuclear detection technologies and forensic procedures

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Hosted IAEA training course on new physical protection recommendations
- Hosted IAEA regional workshop on radiological crime scenes and nuclear forensics
- Hosted an IAEA national IPPAS workshop
- Conducted outreach activities in the Asian region on nuclear security
- Hosted GICNT exercises on public messaging and on information sharing during nuclear smuggling events
- Co-hosted a GICNT exercise on countering the financing of nuclear terrorism
- Chaired the GICNT Nuclear Forensics Working Group

Progress on Governance Structures and Processes

- Ratified the ICSANT
- Received an IAEA IPPAS mission

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Security of Radioactive Sources/Enhancing Radiological Security (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- GICNT (2012, 2014)
- Enhancing the Security of the Maritime Supply Chain (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Global Partnership (2012)

AZERBAIJAN

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- None

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Established a national registry of all radioactive sources
- Enhanced capacities of border and customs agencies with equipment and training through bilateral and international cooperation
- Implemented an Action Plan under the Nuclear Smuggling Outreach Initiative

Progress on Education and Training Initiatives

- Chaired a UN meeting on counter terrorism and international cooperation
- Organized regional workshops on security culture, UNSCR 1540 implementation, and export controls

Progress on Governance Structures and Processes

- Joined the GICNT
- Received an IAEA EPREV mission
- Notified support for the IAEA Code of Conduct
- Adopted a Maritime Security Strategy that defines threats and delineates responsibilities
- Strengthening export control system to combat illicit trafficking
- Strengthening regulatory expertise and capabilities through international cooperation

Participation in Joint Statements

- None

BELGIUM

National and Multinational Commitment Results



Progress on Nuclear and Radiological Security

- Repatriated HEU and separated plutonium to the United States
- Updated its DBT
- Extended the scope of EU nuclear safety “stress tests” to include cyber-attacks and security incidents
- Restructuring physical protection systems at nuclear facilities to conform with new laws
- Converting a research reactor and processing facility for medical isotopes to LEU

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Hosted an IAEA regional workshop on the CPPNM/A
- Hosted an IAEA workshop on communication with the public during a nuclear or radiological emergency
- Organized domestic workshops on the insider threat, crisis communication, and nuclear security legal responsibilities and culture
- Established the Cyber Security Center for Belgium with relevance for nuclear facilities

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Received an IAEA IPPAS mission
- Strengthened nuclear security legal and regulatory framework with new laws and decrees

Participation in Joint Statements

- Multinational Cooperation on High-Density and LEU Fuel Development (2012, 2014)
- Nuclear Information Security (2014)
- Nuclear Security Training and Support Centers (2014)
- Enhancing the Security of the Maritime Supply Chain (2014)
- Strengthening Nuclear Security Implementation (2014)
- Minimization of HEU and the Reliable Supply of Medical Radioisotopes (2012)
- Global Partnership (2012)

BRAZIL

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Improving security standards of material in domestic transport in cooperation with industry

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Worked at the regional level to detect and respond to the threat of nuclear and radiological illicit trafficking under the Mercosur arrangements

Progress on Education and Training Initiatives

- Established the Brazilian Nuclear Physical Security Support Center
- Offered workshops, seminars, and training to strengthen security culture in industry
- Hosted an IAEA training course on the new physical protection recommendations

Progress on Governance Structures and Processes

- Received an IAEA INSServ mission on nuclear security at major public events
- Revising domestic regulations on nuclear and radiological security

Participation in Joint Statements

- National Legislation Implementation Kit (2014)
- Comprehensive Approach to Nuclear Security (2014)

CANADA

National and Multinational Commitment Results

**WEAPONS
USABLE
MATERIAL**

Progress on Nuclear and Radiological Security

- Repatriated HEU reactor core and targets to the United States
- Supported HEU removals from Mexico, Vietnam, and Jamaica
- Returning spent HEU fuel and booster rods to the United States
- Ending HEU-based medical isotope production and investing in alternative technologies
- Supporting radiological security projects in Latin America and Africa
- Updating its DBT
- Strengthening fitness for duty requirements

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Contributed to the Nuclear Smuggling Outreach Initiative
- Finalizing strategy to enhance domestic forensic capabilities

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Hosted WINS workshops and funded best practice guides
- Hosted a GICNT table-top exercise on response, mitigation, and investigation of attacks
- Hosted an IAEA IPPAS workshop
- Announced \$100 million in new bilateral nuclear security cooperation with Russia
- Supporting workshops on CPPNM/A and UNSCR 1540 programming

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Ratified the ICSANT
- Requested an IAEA IPPAS mission
- Adopted the Nuclear Terrorism Act and new regulations on radioactive source security
- Championed extending and enlarging the Global Partnership
- Developing national standards for cyber protection
- Strengthening nuclear security regulatory requirements and performance testing
- Conducting regular outreach to nuclear industry on security exercises, training, and intelligence sharing

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Security of Radioactive Sources/Enhancing Radiological Security (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- Enhancing the Security of the Maritime Supply Chain (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Global Partnership (2012)

CHILE

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Repatriated all HEU to the United States and became HEU-free

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Developed centralized remote monitoring system for radioactive sources
- Improved monitoring and control of radioactive sources under agreement with Canada
- Strengthening monitoring capabilities at border posts with the IAEA

Progress on Education and Training Initiatives

- Co-hosted a GICNT exercise on radiological emergency management with Argentina
- Hosted an IAEA national workshop on IPPAS missions
- Hosted IAEA regional training courses on material accounting and control, nuclear forensics, legal measures, and experiences implementing the Code of Conduct
- Held courses on cyber security assessment at nuclear facilities
- Organized working group and held meetings on the illicit trafficking of nuclear and radioactive material within the Mercosur framework
- Establishing a Nuclear Security Support Center
- Operating a Security Culture Awareness Plan for domestic operators

Progress on Governance Structures and Processes

- Ratified the ICSANT
- Received an IAEA INSServ mission on detection and response and institutional infrastructure
- Cooperated with the IAEA on an INSSP
- Drafting a nuclear security bill
- Updating national regulatory instruments on nuclear security
- Establishing an independent regulatory authority

Participation in Joint Statements

- Nuclear Information Security (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- National Legislation Implementation Kit (2014)
- Comprehensive Approach to Nuclear Security (2014)
- Countries Free of HEU (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Nuclear Security Summit Outreach Effort (2012)

CHINA

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Conducted national examinations of the safety and security of radioactive sources used in nuclear technology, uranium mining, metallurgy, and transportation
- Upgrading facility safety and security with lessons learned from Fukushima accident
- Converting miniature research reactors in China and Ghana to use LEU fuel



Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Implemented the Megaports Initiative Yangshan Port pilot program in Shanghai
- Established a national radioactive source database
- Held a national-level nuclear security exercise
- Established a Radiation Detection Training Center with the United States
- Increasing deployment of radiation detecting equipment at border crossings
- Creating a National Base for Research and Development of Nuclear and Radiological Safety and Security Monitoring technologies

Progress on Education and Training Initiatives

- Contributed to IAEA NSF
- Hosted an IAEA national IPPAS workshop
- Hosted IAEA international and regional workshops on CPPNM/A, nuclear security, nuclear forensics, transport security, and radioactive source security
- Trained nuclear regulatory personnel, including in cooperation with the United States
- Establishing a nuclear security Center of Excellence

Progress on Governance Structures and Processes

- Ratified the ICSANT
- Signed the Practical Arrangement on Nuclear Security Cooperation with the IAEA
- Included nuclear security, safety, and emergency management in Five-Year Period plans
- Issued new radioactive waste regulations
- Updating domestic regulations, legislation, guidelines, and industry standards

Participation in Joint Statements

- None

CZECH REPUBLIC

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Repatriated HEU from a research reactor to Russia with U.S. assistance, becoming HEU free
- Updated its DBT

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB

Progress on Education and Training Initiatives

- Hosted a regional performance testing workshop on physical protection and trafficking
- Held a course on physical protection of high risk radioactive sources for facility operators
- Hosted workshops on export licenses that bring together industry and regulators
- Hosted an IAEA pilot training course on radiological crime scene management

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Revised its Atomic Act to harmonize it with international safety and security norms

Participation in Joint Statements

- Nuclear Information Security (2012, 2014)
- Security of Radioactive Sources/Enhancing Radiological Security (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- National Legislation Implementation Kit (2014)
- Countries Free of HEU (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Global Partnership (2012)
- Nuclear Security Training and Support Centers (2012)

DENMARK

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- None

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Introduced portable radiation detection systems across the country
- Enhanced database containing information on radioactive source licenses
- Exchanged information through online portal with EU members on dual-use goods

Progress on Education and Training Initiatives

- Contributed to IAEA NSF

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Chaired EU Council's Ad Hoc Group on Nuclear Security
- Signed a memorandum of understanding on illicit trafficking between the Danish Customs and Tax Administration and the Danish Health and Medicines Authority

Participation in Joint Statements

- Security of Radioactive Sources/Enhancing Radiological Security (2012, 2014)
- Countries Free of HEU (2014)
- Strengthening Nuclear Security Implementation (2014)
- Global Partnership (2012)

EGYPT

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- None

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB

Progress on Education and Training Initiatives

- Hosted IAEA regional workshops on INSSP and ITDB

Progress on Governance Structures and Processes

- Cooperated with the IAEA on INIR activities
- Passed a new nuclear law that includes nuclear security, criminalization of sabotage, and illicit trafficking provisions
- Established an independent authority for controlling nuclear materials

Participation in Joint Statements

- Comprehensive Approach to Nuclear Security (2014)

FINLAND

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Updated its DBT

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Enhancing radiation monitoring and first responder capabilities
- Supporting border security projects in Eastern Europe and Central Asia

Progress on Education and Training Initiatives

- Contributed to IAEA NSF
- Supported NGO efforts to promote implementation of UNSCR 1540
- Hosted an IAEA nuclear security culture workshop
- Hosted a GICNT Plenary
- Hosted a GICNT nuclear detection exercise
- Hosted national and international workshops on nuclear security culture
- Piloted customs personnel training courses for the EU Nuclear Security Training Center
- Chaired the GICNT Nuclear Detection Working Group

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Hosted IAEA IPPAS missions
- Revised nuclear security regulatory requirements to reflect new IAEA recommendations
- Issued new regulatory requirements and guide on information security
- Established a Standing Nuclear Security Commission
- Developing national nuclear security detection architecture for radioactive materials outside of regulatory control

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Forensics in Nuclear Security (2014)
- Strengthening Nuclear Security Implementation (2014)
- Security of Radioactive Sources (2012)
- Global Partnership (2012)

FRANCE

National and Multinational Commitment Results



Progress on Nuclear and Radiological Security

- Updated its DBT
- Repatriated vulnerable radioactive sources, including from Madagascar and Sudan
- Repatriating French origin radioactive sources worldwide

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Contributed to the Nuclear Smuggling Outreach Initiative

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Hosted a GICNT response and mitigation working group workshop
- Hosted the first IAEA international seminar on IPPAS experience and lessons learned
- Developed updated training courses for nuclear personnel at the Institute for Radioprotection and Nuclear Security
- Established the International Nuclear Energy Institute
- Incorporated training in nuclear security at the European Nuclear Safety Training and Tutoring Institute
- Signed an agreement with India's Center of Excellence to cooperate on nuclear security training and R&D

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Ratified the ICSANT
- Received an IAEA IPPAS mission
- Updated its INSSP with the IAEA
- Served as the coordinator of the UNSC 1540 Committee's Working Group on Assistance
- Updated national laws and regulatory frameworks on nuclear and radiological materials
- Finalizing new legislation on the security of radioactive sources

Participation in Joint Statements

- Nuclear Information Security (2012, 2014)
- Transport Security (2012, 2014)
- Multinational Cooperation on High-Density and LEU Fuel Development (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Security Training and Support Centers (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Global Partnership (2012)
- Nuclear Terrorism (2012)
- Minimization of HEU and the Reliable Supply of Medical Radioisotopes (2012)

GABON

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- None

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Hosted a technical mission on the security of installations with radioactive sources at Port-Gentil with the United States

Progress on Education and Training Initiatives

- Organized a national training program for customs officers
- Held a workshop to finalize and consolidate the INSSP

Progress on Governance Structures and Processes

- Established the Gabonese Agency on Nuclear Safety and Security
- Established a national team of authorities to deal with CBRN risks
- Enacted a new bill on the Regulatory Framework of Nuclear and Radiation Safety, Security, and Safeguards
- Established a Strategic Committee and Steering Committee for oversight of mining radioactive ores
- Signed memorandum of understanding on imports and export controls between the national Regulatory Authority and the Customs Authority
- Created an action plan for nuclear security around the African Cup of Nations with the IAEA

Participation in Joint Statements

- None

GEORGIA

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Consolidated disused high-activity radiation sources with U.S. assistance
- Conducted search-and-secure operations for radioactive sources with U.S. assistance
- Upgrading physical protection infrastructure at a historical radioactive waste disposal site

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Established a National Register of Radioactive Sources
- Enhanced border security in cooperation with the United States and IAEA
- Implemented an Action Plan under the Nuclear Smuggling Outreach Initiative

Progress on Education and Training Initiatives

- Hosted the Regional Secretariat in Tbilisi for the EU CBRN Centers of Excellence
- Conducted regular trainings and workshops on nuclear security with the United States
- Established a Nuclear Non-Proliferation Center at the Institute of Physics
- Establishing the Nuclear Forensics Laboratory in the Criminalistics Service of the Ministry of Internal Affairs
- Opened a new Technological Innovation and Technical Training Center in Tbilisi

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Ratified the ICSANT
- Received an INSSP review mission
- Received an IAEA EPREV
- Expressed support for the IAEA Code of Conduct
- Enacted a Law on Export Control of Military and Dual Purpose Commodities
- Updated the Law on Nuclear and Radiation Safety
- Elaborated on a national strategy to reduce CBRN threats
- Developing a Joint Response Plan for illicit trafficking
- Establishing a coordination body to identify gaps and communicate with stakeholders

Participation in Joint Statements

- Nuclear Information Security (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- National Legislation Implementation Kit (2014)
- Nuclear Security Training and Support Centers (2014)
- Countries Free of HEU (2014)
- Enhancing Radiological Security (2014)
- Enhancing the Security of the Maritime Supply Chain (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)

GERMANY

National and Multinational Commitment Results

**WEAPONS
USABLE
MATERIAL**

Progress on Nuclear and Radiological Security

- Revised its DBT
- Assisting Libya to improve physical protection of the Nuclear Research Centre Tadjoura and with staffing by the Libyan Nuclear Authority

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Installed a special CBRN reporting scheme for police and customs
- Doubled the number of mobile radiation measurement devices

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Hosted a GICNT nuclear forensics seminar and table-top exercise
- Supported IAEA regional workshops in Europe, South America, and Africa, focused on CPPNM/A ratification
- Hosted IAEA training courses on the new physical protection recommendations and radioactive material transport
- Established a Master's Degree program for nuclear security
- Establishing a curriculum for nuclear security for the IAEA's Safeguards Analytical Laboratory in Austria

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Updated nuclear safety regulations to include interface of man-technology-organization
- Updating national nuclear security regulatory framework, including transport and cyber
- Developing comprehensive guidelines to reflect IAEA Implementing Guide on radioactive sources

Participation in Joint Statements

- Nuclear Information Security (2012, 2014)
- Security of Radioactive Sources/Enhancing Radiological Security (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- Multinational Cooperation on High-Density LEU Fuel Development (2014)
- Enhancing the Security of the Maritime Supply Chain (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Global Partnership (2012)

HUNGARY

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Repatriated HEU from a research reactor to Russia and became HEU-free
- Updated its DBT
- Established a radiation detection system at an international airport with the United States
- Upgrading the physical security systems at sites with Category 1 and 2 radioactive sources
- Completing conversion of research reactors from HEU to LEU fuel

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Compiled national central registry of radioactive materials and waste

Progress on Education and Training Initiatives

- Established a Nuclear Security Support Center
- Presided over the 2013 IAEA International Conference on Nuclear Security
- Hosted an IAEA regional workshop on nuclear security culture
- Hosted a GICNT nuclear forensics tabletop exercise
- Hosted a tabletop exercise with the United States on the physical protection of high activity radioactive sources

Progress on Governance Structures and Processes

- Received an IAEA IPPAS mission
- Updated national nuclear security regulatory and legal frameworks
- Developed a graded approach for the classification of sensitive national information and its management
- Concluded a cooperation agreement with the IAEA Office of Nuclear Security
- Joined the European Nuclear Security Regulators Association
- Drafting a new decree implementing actions to be performed in connection with missing, found, and seized materials

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- Countries Free of HEU (2014)
- Joint Statement on Enhancing Radiological Security (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Security of Radioactive Sources (2012)

INDIA

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- None

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Hosted a 1540 Workshop on Building New Synergies on Nuclear Security
- Signed memoranda of understanding with France, Russia, United States, and the IAEA in support of its new Center of Excellence; the Global Centre for Nuclear Energy Partnership
- Offered off-campus courses during Center of Excellence's construction phase

Progress on Governance Structures and Processes

- Amending the Indian Atomic Energy Act
- Establishing an independent Nuclear Safety Regulatory Authority

Participation in Joint Statements

- None

**WEAPONS
USABLE
MATERIAL**

INDONESIA

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Revised its DBT
- Converting production of radioisotopes from HEU to LEU fuel
- Strengthening security of radioactive sources at industrial and medical facilities
- Establishing a national network on the security of radioactive sources

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Established a mobile expert support team and qualification program for related personnel
- Installed and expanding radioactive portal monitors at key seaports
- Monitored radioactive sources with GPS tracking

Progress on Education and Training Initiatives

- Contributed to IAEA NSF
- Held domestic field training exercises on countering radiological and nuclear terrorism
- Hosted IAEA regional workshops on nuclear security culture and INSSP
- Hosted an IAEA national IPPAS workshop
- Establishing the Indonesia Center of Excellence on Nuclear Security and Emergency Preparedness
- Establishing a Center for Security Culture and Assessment
- Organizing national training courses for front line officers at key ports
- Hosting regional training course on transport security for nuclear materials

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Ratified the ICSANT
- Received an IAEA IPPAS mission
- Received an IAEA INSServ mission on detection and response
- Issued regulations on the safety and security of nuclear installations
- Developing an international action plan on nuclear security based on the INSSP
- Drafting a law on nuclear security to complement nuclear energy laws
- Revising a regulation on the safe transport of radioactive materials
- Preparing a presidential decree on the safety and security of nuclear institutions

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- Comprehensive Approach to Nuclear Security (2014)
- Forensics in Nuclear Security (2014)
- Security of Radioactive Sources (2012)

BY THE NUMBERS: SUMMIT ACCOMPLISHMENTS

APRIL 2010 - JANUARY 2016

53

countries made national commitments; took action on counter nuclear smuggling, education and training initiatives, and governance structures and processes

48

countries signed on to at least one joint statement, 46 in 2014 and 43 in 2012

42

countries took action on nuclear and radiological security

10

countries became HEU free, 6 of which are summit participants

HEU-FREE COUNTRIES

SWITZERLAND* (Sept. 2015)

UZBEKISTAN (Sept. 2015)

JAMAICA (Sept. 2015)

HUNGARY* (Nov. 2013)

VIETNAM* (July 2013)

CZECH REPUBLIC* (Apr. 2013)

AUSTRIA (Dec. 2012)

UKRAINE* (Mar. 2012)

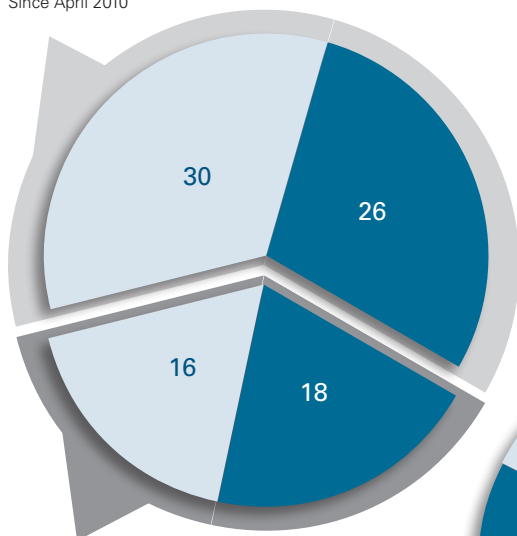
MEXICO* (Mar. 2012)

SERBIA (Dec. 2010)

* Summit Participant

Ratifications of the 2005 Amendment to the Convention on the Physical Protection of Nuclear Material*

Since April 2010

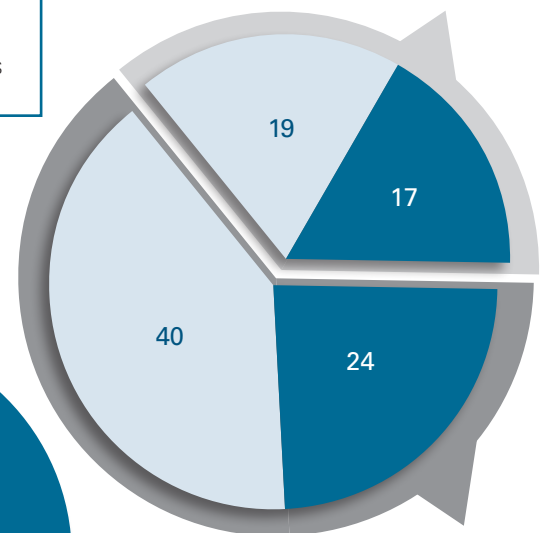


September 2005 - March 2010

* Ten additional ratifications necessary for entry into force.

Ratifications of the International Convention for the Suppression of Acts of Nuclear Terrorism

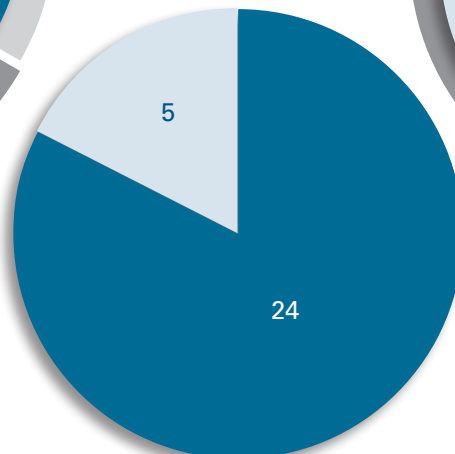
Since April 2010



April 2005 - March 2010



International Physical Protection Advisory Service Missions Requested Since 2010



SUMMIT PROCESS



FIVE KEY INSTITUTIONS & INITIATIVES

	NUMBER OF MEMBERS	NUMBER OF NSS MEMBERS
UN	193	53
IAEA	168	53
INTERPOL	190	53
GICNT	86	46
GLOBAL PARTNERSHIP	29	26

ISRAEL

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Repatriated HEU spent fuel to the United States
- Conducted national preparedness exercises
- Hosted a U.S. delegation to conduct a physical protection assessment at a research reactor
- Constructing a new applied research accelerator facility to help phase out HEU fuel

**WEAPONS
USABLE
MATERIAL**

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Began operating Megaports Initiative detection systems at two ports

Progress on Education and Training Initiatives

- Hosted a GICNT workshop on nuclear forensics
- Held drills for security personnel at nuclear research centers
- Held a national level exercise simulating a RDD scenario
- Hosted a joint workshop with the United States on human reliability
- Conducting a two-year technical exchange with Canada to establish nuclear forensics best practices and procedures

Progress on Governance Structures and Processes

- Ratified the CPPNM/A

Participation in Joint Statements

- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Information Security (2014)
- Nuclear Security Training and Support Centers (2014)
- Enhancing the Security of the Maritime Supply Chain (2014)
- Strengthening Nuclear Security Implementation (2014)

ITALY

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Repatriated excess HEU and plutonium to the United States

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Signed a Megaports Agreement and operating it at a port
- Improved early warning radiation network

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Hosted a GICNT joint working group meeting
- Held domestic table-top exercise for responding to a RDD incident
- Established an International School on Nuclear Security in Trieste
- Established new masters courses on nuclear security at the University of Rome

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Upgraded regulatory authority under the new National Inspectorate for Nuclear Safety and Radiation Protection
- Developing a National Nuclear Security Plan
- Developing a comprehensive emergency response system

Participation in Joint Statements

- Nuclear Information Security (2012, 2014)
- Security of Radioactive Sources/ Enhancing Radiological Security (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Global Partnership (2012)

**WEAPONS
USABLE
MATERIAL**

JAPAN

National and Multinational Commitment Results



Progress on Nuclear and Radiological Security

- Strengthened physical protection at nuclear facilities
- Enhancing radioactive isotope security
- Conducting a feasibility study to convert Kyoto University reactors to LEU
- Preparing to ship HEU fuel from the Material Testing Reactor to the United States
- Removing all HEU and separated plutonium from Fast Critical Assembly
- Working to down-blend HEU from Yayoi reactor at University of Tokyo, the National Institute of Advanced Industrial Science and Technology, and the Japan Materials Testing Reactor Critical Assembly
- Developing a personnel reliability system

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Contributed to the Nuclear Smuggling Outreach Initiative
- Researching nuclear detection and forensics techniques
- Developing a radioactive source registry

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Hosted an IAEA national workshop on IPPAS missions
- Hosted an IAEA regional workshop on nuclear security culture
- Hosted and shared results of a transport security table-top exercises
- Established a Center of Excellence, the ISCN
- Hosted national, regional, and international training courses at the ISCN
- Hosted exercises for police, Coast Guard, and nuclear power plants operators
- Produced a security-by-design handbook with the United States
- Hosted WINS conferences
- Established the U.S.-Japan Nuclear Security Working Group

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Received an IAEA IPPAS mission
- Established an independent Nuclear Regulatory Agency
- Established the Committee on Nuclear Security under the Nuclear Regulation Authority
- Developing a system to issue export certificates for radioactive isotopes

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Security of Radioactive Sources/Enhancing Radiological Security (2012, 2014)
- Transport Security (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Global Partnership (2012)

JORDAN

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- None

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Created a counter nuclear smuggling team

Progress on Education and Training Initiatives

- Hosted an international workshop at the Dead Sea on counter smuggling
- Hosted IAEA national workshops on nuclear security culture and on DBT

Progress on Governance Structures and Processes

- Received an IAEA INIR mission
- Received an IAEA EPREV mission
- Joined the Strengthening Nuclear Security Implementation Initiative through the IAEA process

Participation in Joint Statements

- Activity and Cooperation to Counter Nuclear Smuggling (2012, 2014)
- Implementation of UNSCR 1540 (2014)
- Nuclear Security Training and Support Centers (2012)

KAZAKHSTAN

National and Multinational Commitment Results

**WEAPONS
USABLE
MATERIAL**

Progress on Nuclear and Radiological Security

- Completed the BN-350 reactor shutdown and secured its fuel
- Downblended 33kg of HEU from Institute of Nuclear Physics to LEU
- Secured residual material and strengthened nuclear security at the Semipalatinsk testing site
- Converting the VVR-K research reactor to LEU and secured its fresh and spent fuel
- Exploring the conversion of two research reactors at the Institute of Atomic Energy
- Strengthening security at Ulba Metallurgical Plant and Nuclear Physics Institute

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Implemented an Action Plan under the Nuclear Smuggling Outreach Initiative
- Created national register of ionizing radiation sources
- Developing nuclear forensics capabilities
- Cooperating with SLD, Interpol, and Europol
- Establishing an Identification Center on nuclear materials

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Co-hosted a GICNT exercise on countering the financing of nuclear terrorism and an implementation and assessment group meeting
- Launched the Kazakhstan Regional Training Centre
- Hosted a national IAEA workshop on nuclear security culture

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Joined the Global Partnership
- Received an IPPAS mission
- Received an IAEA EPREV mission
- Signed an agreement with the IAEA to establish a LEU Fuel Bank
- Established Commission on Non-Proliferation of Weapons of Mass Destruction
- Adopted a plan to respond to nuclear safety and security incidents
- Proposed a multilateral treaty on strengthening nuclear security, preventing illicit trafficking, and combating terrorism under the Treaty on a Nuclear Weapons Free Zone in Central Asia
- Notified support for the IAEA Code of Conduct
- Creating a transport security action plan based on IAEA recommendations
- Updating law "On the Use of Nuclear Energy"
- Elaborating on draft "Law on Radioactive Waste"

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Security of Radioactive Sources/Enhancing Radiological Security (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- Comprehensive Approach to Nuclear Security (2014)
- Forensics in Nuclear Security (2014)
- Comprehensive Approach to Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Enhancing the Security of the Maritime Supply Chain (2014)
- Global Partnership (2012)
- Trilateral Cooperation at Semipalatinsk (2012)

LITHUANIA

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Updated its DBT
- Conducted force-on-force exercises at nuclear facilities

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Conducted counter smuggling training activities with the United States, Japan, and the IAEA

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Established a Nuclear Security Center of Excellence
- Hosted a regional workshop on implementing UNSCR 1540
- Organized workshops on enhanced nuclear security at borders with the EU and Japan
- Organized a study visit for Georgian officials on nuclear security, radiation protection, and customs and border control

Progress on Governance Structures and Processes

- Received an IAEA EPREV mission
- Updated national laws on nuclear materials
- Adopted new regulations on ionizing radiation
- Issued a Joint Action Plan with the United States on illicit trafficking
- Joined the European Nuclear Security Regulators Association
- Created an Interagency Working Group to coordinate nuclear counter smuggling
- Requesting IAEA IPPAS and IRRS missions in 2016

Participation in Joint Statements

- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- Enhancing Radiological Security (2014)
- Enhancing the Security of the Maritime Supply Chain (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)

MALAYSIA

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Upgrading the physical protection of nuclear irradiators with U.S. assistance
- Developing a disposal facility for disused sealed radioactive sources

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Expanding its Megaports Initiative to Penang Port
- Registered for the International Catalogue of Sealed Radioactive Sources and Devices

Progress on Education and Training Initiatives

- Established a Nuclear Security Support Centre and offered national and international courses
- Hosted GICNT cross-disciplinary trainings and exercises
- Hosted international, regional, and bilateral nuclear safety and security capacity building and border control workshops
- Hosted a national workshop for nuclear security culture at medical institutions with the IAEA
- Hosted an IAEA workshop on radiological crime scene management
- Setting up cooperation with Myanmar on exchanging best practices for radioactive sources
- Establishing an integrated national nuclear security training module for frontline law enforcement officers

Progress on Governance Structures and Processes

- Joined the GICNT
- Received an IAEA INSServ mission focusing on nuclear security at major public events
- Requested an IAEA IPPAS mission
- Endorsed the IAEA Code of Conduct and Import/Export Guidance
- Revised its INSSP for 2013-2015 to include new IAEA recommendations
- Passed a new export control law
- Mandated the Atomic Energy Licensing Board of Malaysia to implement nuclear security measures
- Updating Atomic Energy Licensing Act

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Comprehensive Approach to Nuclear Security (2014)
- Forensics in Nuclear Security (2014)
- Security of Radioactive Sources (2012)
- Nuclear Security Training and Support Centers (2012)

MEXICO

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Eliminated all HEU stockpiles, and became HEU free
- Converted an HEU research reactor to use LEU fuel
- Repatriated three irradiators containing radioactive material to the United States for disposition
- Completed two-year pilot program to build capacity to implement UNSCR 1540
- Securing Category 1 and 2 radioactive sources with U.S. support

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Signed a Megaports Initiative agreement and operating it in ports
- Signed a radiation monitoring agreement with Canada

Progress on Education and Training Initiatives

- Hosted a GICNT plenary
- Hosted a GICNT nuclear detection workshop and exercise
- Hosted a regional workshop for Central America on radiation safety at medical facilities with Canada
- Hosted an IAEA regional workshop on the CPPNM/A
- Hosted an IAEA pilot regional training course on implementing its new physical protection recommendations
- Developed national and regional courses on identifying sensitive materials and export controls with the United States

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Received an IAEA IRRS mission
- Established a National Integrated Security System
- Joined the GICNT
- Created an intergovernmental committee for the legal harmonization of its national regulations on nuclear safety and security with its international obligations
- Joining four international export control regimes
- Creating a national Export Control Committee

Participation in Joint Statements

- Nuclear Information Security (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- Comprehensive Approach to Nuclear Security (2014)
- Countries Free of HEU (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)

MOROCCO

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Strengthened physical protection at research reactors and radioactive sources facilities
- Initiated a human reliability program at Mâamora Nuclear Research Center

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Enhancing border control and national capacity to detect illicit trafficking
- Updating national registry of radioactive materials and nuclear accounting system

Progress on Education and Training Initiatives

- Established a Center of Excellence
- Hosted GICNT implementation assessment group meetings
- Hosted a GICNT radioactive material detection and response exercise
- Hosted a GICNT Africa outreach event
- Hosted a GICNT workshop on radiological crime scene management
- Hosted an IAEA regional workshop on nuclear security culture
- Hosted an IAEA national workshop and regional course on radioactive material transport
- Hosted a Regional EU CBRN Center of Excellence for African countries in Rabat
- Hosted a joint exercise with Spain on response and mitigation and emergency planning
- Hosted and shared the results of an international exercise on a terrorist RDD scenario
- Chairing the GICNT Response and Mitigation Working Group

Progress on Governance Structures and Processes

- Ratified the ICSANT
- Adopted the Joint Action Plan with Spain and the IAEA on an import/export control system
- Passing a law to establish a legal framework for licensing, supervision, and inspection of nuclear and radiological facilities and activities
- Developing new export and import control laws with the EU and United States
- Developing an IAEA INSSP

Participation in Joint Statements

- Security of Radioactive Sources/Enhancing Radiological Security (2012, 2014)
- GICNT (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- National Legislation Implementation Kit (2014)
- Nuclear Information Security (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Nuclear Security Summit Outreach Effort (2012)

NETHERLANDS

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Updated its DBT to include mandatory cyber security provisions
- Conducted force-on-force exercises to test physical protection systems at facilities
- Provided grants to industry to further develop and improve security
- Converting medical isotope production to use only LEU targets

**WEAPONS
USABLE
MATERIAL**

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Organized an international tabletop exercise on nuclear forensics
- Launched a program to foster cooperation on nuclear forensics at institutes worldwide

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Hosted a GICNT international conference and mock trial on nuclear forensics
- Chaired the GICNT Nuclear Detection Working Group
- Hosted international table-top exercises on nuclear and radiological terrorism
- Co-hosted a workshop with WINS for the radiological industry
- Established a Master's program in nuclear security at Delft University
- Hosted regional training courses and a train-the-trainers course on physical protection
- Chairing the GICNT Implementation and Assessment Group
- Establishing a Center of Excellence at Delft University

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Ratified the ICSANT
- Received an IAEA IPPAS mission and a follow up mission
- Hosted the 2014 Nuclear Security Summit
- Strengthened requirements on radioactive sources and nuclear materials and facilities through ministerial orders
- Studying the development of an international regulatory system for nuclear and radiological security

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- GICNT (2012, 2014)
- Counter Nuclear Smuggling (2014)
- Enhancing Radiological Security (2014)
- Enhancing the Security of the Maritime Supply Chain (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Minimization of HEU and the Reliable Supply of Medical Radioisotopes (2012)
- Global Partnership (2012)

NEW ZEALAND

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Conducted national assessments and exercises to test domestic preparedness for emergencies involving radioactive sources
- Provided funding to repatriate HEU from Uzbekistan

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Contributed to the Nuclear Smuggling Outreach Initiative
- Provided funding for mobile radiation detection in Latin America
- Secured orphan radioactive sources with Australia in Cambodia

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Created a table-top exercise for other small GICNT states to test and improve national nuclear and radiological systems
- Hosted IAEA IPPAS national workshop

Progress on Governance Structures and Processes

- Updated Codes of Safe Practice for radioactive source security
- Received an IAEA IPPAS mission
- Revising radiation safety legislation

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Security of Radioactive Sources/ Enhancing Radiological Security (2012, 2014)
- Comprehensive Approach to Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Global Partnership (2012)

NIGERIA

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Developed its DBT
- Carried out regulatory inspections of facilities that store or use nuclear materials, radioactive sources or devices generating ionizing radiation
- Converting a research reactor from HEU to LEU fuel
- Conducting annual IAEA Physical Inventory Verification reviews at research reactor
- Upgrading physical security at nuclear and radiological facilities with IAEA and U.S. assistance

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Installed radiation portal monitor at an international airport
- Installing additional radiation monitors at seaports
- Searching for and securing orphan and legacy radioactive sources

Progress on Education and Training Initiatives

- Established a Nuclear Security Support Center
- Hosted several ECOWAS meetings to raise awareness about nuclear security

Progress on Governance Structures and Processes

- Ratified the ICSANT
- Received an IAEA EPREV mission
- Submitted a domestic Depleted Uranium Survey to the IAEA
- Reviewed the Nuclear Safety and Radiation Protection Act
- Established an Inter-Ministerial Technical Committee on the legacy of radioactive sources at the Ajaokuta Steel Complex
- Developed Draft Regulations on the Physical Protection of Nuclear Materials and Nuclear Facilities
- Passing the Nuclear Safety, Security, and Safeguards Bill
- Updating the Nigerian Safety and Security of Radioactive Sources Regulations

Participation in Joint Statements

- Nuclear Security Summit Outreach Effort (2012)

NORWAY

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Improved information security measures for operators of two research reactors
- Phasing out high-activity radiological sources in blood irradiators at hospitals
- Consolidating and securing spent nuclear fuel and radioactive materials
- Increasing the security of two research reactors
- Removing and disposing of Russian-origin radioactive sources in the Baltic Sea
- Cooperating with Sweden on physical protection of Russian spent nuclear fuel transport
- Enhancing security projects at Leningrad Nuclear Power Plant
- Undertaking a comprehensive review of nuclear and radiological security at facilities

**WEAPONS
USABLE
MATERIAL**

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Contributed to the Nuclear Smuggling Outreach Initiative
- Contributed to upgrading Kazakhstan's radiation monitors
- Supported the development of new best practice guidelines for government-to-government communications on transports of radioactive material by sea
- Securing borders in Central Asia to prevent smuggling of nuclear materials with Kazakhstan and the United States
- Co-hosting a conference on illicit trafficking in Moldova

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Contributed to the IAEA LEU fuel bank
- Contributed to WINS
- Established a Master's program in nuclear security at the University of Oslo
- Co-hosted a symposium on HEU Minimization in Vienna

Progress on Governance Structures and Processes

- Ratified the ICSANT
- Requested an IAEA IPPAS mission

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Security of Radioactive Sources/Enhancing Radiological Security (2012, 2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Global Partnership (2012)

PAKISTAN

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Upgraded security measures at more than a dozen medical centers with Category 1 sources
- Assessed safety, security, and emergency preparedness of power plants and implemented lessons learned from Fukushima accident
- Upgrading physical protection at the Karachi nuclear power plant

**WEAPONS
USABLE
MATERIAL**

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Deployed special nuclear material portals to counter trafficking

Progress on Education and Training Initiatives

- Opened a Center of Excellence for nuclear security training
- Established a Training Academy for the Strategic Plans Division with courses on nuclear security
- Established a School for Nuclear and Radiation Safety
- Hosted an IAEA nuclear security culture workshop
- Offering training course for first responders at the Nuclear and Radiological Emergency Support Center and National Radiation Emergency Coordination
- Hosting IAEA regional training course on the security of radioactive sources
- Offering a specialization in nuclear security at a nuclear engineering Master's program at the Pakistani Institute of Engineering and Applied Sciences

Progress on Governance Structures and Processes

- Revised its National Export Control Lists
- Received an IAEA EPREV mission
- Renewed its Nuclear Security Action Plan with the IAEA
- Developed a national Nuclear Emergency Management System

Participation in Joint Statements

- Nuclear Security Training and Support Centers (2012, 2014)

PHILIPPINES

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Upgraded security alarm systems at all Category 1 source licensed facilities
- Enhanced radioactive source security through the Regional Security of Radioactive Sources Project with Australia and United States
- Completed a project on the Condition of Spent High Activity Radioactive Sources with South Africa and the IAEA

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Expanded its Megaports Initiative to Cebu Port
- Cooperated with the United States to improve transport security for high-activity radioactive sources
- Established new training for national police regarding radiological incident response
- Equipped national police force with mobile detection system with the United States
- Adopted the IAEA Regulatory information system for its national registry of radioactive sources
- Hosted an IAEA regional forum on effective border control in Asia and the Pacific

Progress on Education and Training Initiatives

- Hosted a GICNT exercise on public messaging for emergency management
- Co-hosted a seminar with the Republic of Korea on nuclear safety and security
- Hosted an IAEA national workshop on the CPPNM/A
- Conducted outreach seminars to universities on commodity identification
- Established a National Nuclear Security Support Center
- Hosting the Regional Secretariat for the EU CBRN Center of Excellence Initiative

Progress on Governance Structures and Processes

- Joined the GICNT
- Joined the Global Partnership
- Renewed and updated its IAEA INSSP
- Received an IAEA EPREV mission
- Developed regulations on the security of radioactive sources and requirements for transport based on IAEA guidance

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- Comprehensive Approach to Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Security of Radioactive Sources (2012)

POLAND

National and Multinational Commitment Results



Progress on Nuclear and Radiological Security

- Conducted peer review with Croatia on UNSCR 1540 implementation and reporting
- Launched an effort to fully implement the IAEA's DBT recommendations
- Set up a CBRN Task Force to help protect a European Football Championship
- Established a team for strengthening anti-terrorist security at Swierk research reactor
- Converted MARIA reactor from HEU to LEU
- Removing spent HEU fuel from EWA and MARIA research reactors by end of 2016

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITBD
- Established a nuclear accounting and control system and radioactive source registry
- Strengthened counter smuggling border controls and deployed equipment in coordination with the EU and United States

Progress on Education and Training Initiatives

- Hosted a Law Enforcement Counter Nuclear Smuggling Conference
- Hosted an IAEA national workshop on DBT and on IPPAS
- Preparing a national nuclear security training program with the IAEA
- Hosting a Polish-Ukrainian scenario-based exercise focused on illicit trafficking of nuclear and radioactive materials

Progress on Governance Structures and Processes

- Ratified the ICSANT
- Received an IAEA IRRS mission
- Received an IAEA IPPAS mission
- Received an INIR mission and published a report on the results
- Adopted a resolution to increase the safety and security of the Polish Nuclear Power Program, including through human resource training and recruitment

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Security of Radioactive Sources (2012)
- Global Partnership (2012)
- Nuclear Security Summit Outreach Effort (2012)

REPUBLIC OF KOREA

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Strengthened nuclear security culture of industry personnel
- Developing high-density LEU fuel as an alternative to HEU

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Contributed to the Nuclear Smuggling Outreach Initiative
- Developed a GPS, real-time monitoring system of radioactive sources with Vietnam
- Signed a Megaports Agreement and operating a port

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Hosted a GICNT Plenary
- Hosted GICNT Implementation Assessment Group meetings
- Chaired the GICNT Implementation Assessment Group
- Hosted IAEA regional workshop on nuclear security culture
- Hosted exercises on nuclear forensics and material tracking and detection
- Established a Center of Excellence; the International Nuclear Non-Proliferation and Security Academy
- Established a nuclear security unit within KINAC
- Developing cyber security at nuclear facilities education program with the IAEA

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Ratified the ICSANT
- Received an IAEA IPPAS mission
- Hosted the 2012 Nuclear Security Summit
- Established a Nuclear Safety and Security Commission to reinforce regulatory capacity for safety, security, and safeguards
- Updated national regulations to reflect new IAEA guidance on nuclear security

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Security of Radioactive Sources/Enhancing Radiological Security (2012, 2014)
- Transport Security (2012, 2014)
- Multinational Cooperation on High-Density and LEU Fuel Development (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- GICNT (2014)
- Countries Free of HEU (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Global Partnership (2012)
- Nuclear Security Summit Outreach Effort (2012)

ROMANIA

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Completed repatriation of all spent HEU and LEU fuel to Russia
- Upgraded the safety of radioactive sources and nuclear material, including DBT
- Enhanced the physical protection systems for special nuclear materials and radioactive sources under a bilateral agreement with the United States
- Received an EU peer review “stress test” mission to Cernavoda Nuclear Power Plant

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Installed new nuclear detection equipment at land crossing and sea access points

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Co-hosted an IAEA training seminar on nuclear security culture
- Hosted a regional IAEA meeting on nuclear security detection and response
- Co-hosted an exercise involving a radiological incident at a hospital
- Hosted a national training on computer and information security at nuclear facilities

Progress on Governance Structures and Processes

- Received an IAEA IPPAS mission
- Received an IAEA INNSServ mission focusing on detection and response
- Received an IAEA EPREV mission
- Passed a new law for the responsible management of spent fuel and radioactive waste
- Creating a National Operational Centre for Radioactive Waste Management
- Updating national practices and regulatory framework to reflect IAEA guidance

Participation in Joint Statements

- National Legislation Implementation Kit (2014)
- Nuclear Security Training and Support Centers (2014)
- Countries Free of HEU (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Nuclear Information Security (2014)

RUSSIA

National and Multinational Commitment Results

**WEAPONS
USABLE
MATERIAL**

Progress on Nuclear and Radiological Security

- Received Russian-origin HEU back from 14 countries
- Ended plutonium production
- Converted excess military HEU to LEU fuel for use in power plants
- Assessed the feasibility of converting six research reactors to LEU
- Developing and certifying new high-density LEU to convert reactors in Tomsk and the Kurchatov National Research Center from HEU fuels
- Planning fuel repatriations from Belarus, Kazakhstan, and Poland

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Implemented a state system to prevent illicit trafficking of radioactive materials in the Murmansk, Kaliningrad, and Sverdlovsk regions
- Maintaining and improving a registry of radioactive sources
- Establishing automated systems to locate and assess the physical security of materials in transport in real-time and to better control the cross-border movement of nuclear and radiological materials
- Developing a system of forensic laboratories to identify nuclear materials and radioactive waste removed from illicit trafficking

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Hosted a workshop on nuclear security culture
- Conducted annual training workshops on information security in automated physical protection systems
- Hosted workshops on nuclear materials control and accounting

Progress on Governance Structures and Processes

- Signed the Plutonium Disposition Protocol
- Received an IAEA EPREV mission
- Revised federal norms and regulations on the accounting and control of nuclear and radioactive materials as well as on physical protection
- Adopted the Federal Law on Radioactive Waste Management

Participation in Joint Statements

- GICNT (2012, 2014)
- Global Partnership (2012)
- Trilateral Cooperation at the Former Semipalatinsk Test Site (2012)

SAUDI ARABIA

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- None

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB

Progress on Education and Training Initiatives

- Hosted an UNSCR 1540 conference and regional training course for Gulf Cooperation Council countries
- Established the King Abdullah city for Atomic and Renewable Energy, including a Center of Excellence

Progress on Governance Structures and Processes

- Ratified the CPPNM/A

Participation in Joint Statements

- None

SINGAPORE

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- None

Progress on Counter Nuclear and Radiological Smuggling

- Joined the IAEA ITDB
- Established a national nuclear forensics laboratory

Progress on Education and Training Initiatives

- Co-hosted a conference on export controls and non-proliferation
- Co-hosted workshops on nuclear forensics, emergency preparedness and response, and radiological and nuclear terrorism prevention

Progress on Governance Structures and Processes

- Ratified the CPPNM
- Ratified the CPPNM/A
- Joined the GICNT
- Introduced a bill to strengthen legislation related to nuclear security
- Amended Computer Misuse and Cybersecurity Act
- Updated its export control lists

Participation in Joint Statements

- National Legislation Implementation Kit (2014)
- Implementation of UNSCR 1540 (2014)
- Comprehensive Approach to Nuclear Security (2014)
- Security of Radioactive Sources (2012)

SOUTH AFRICA

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Converted Molybdenum-99 production from the use of HEU to LEU
- Repatriated HEU fuel from the SAFARI reactor

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Operating a program to recover, consolidate, and return disused and orphan radioactive sources throughout Africa
- Establishing a nuclear forensics capability

Progress on Education and Training Initiatives

- Hosted workshops on UNSCR 1540 implementation, DBT, and detection architecture
- Hosted an IAEA training course on the new physical protection recommendations
- Hosted IAEA national workshops on DBT
- Establishing a Center of Excellence

Progress on Governance Structures and Processes

- Endorsed the IAEA Code of Conduct
- Received an IAEA INIR mission to assess readiness for nuclear program expansion
- Received an IAEA INSServ mission on border monitoring
- Received an IAEA EPREV mission

Participation in Joint Statements

- Comprehensive Approach to Nuclear Security (2014)

**WEAPONS
USABLE
MATERIAL**

SPAIN

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Developing a national assessment of DBT
- Constructing a centralized storage facility for spent fuel and high-level waste

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Installed new radiation detection systems at four harbor facilities
- Strengthened detection capabilities at airports with handheld detectors
- Launched the National Nuclear Forensics Taskforce
- Installed new Megaports Initiative equipment in Valencia, Algeciras, and Barcelona
- Developing a national nuclear forensics library

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Chaired the GICNT Implementation and Assessment Group
- Co-hosted a GICNT response and mitigation exercise with Morocco
- Hosted a seminar on the physical protection of radioactive sources with Latin American countries
- Hosted an IAEA workshop on radiological crime scene management
- Organized seminars with civil society on multi-sector nuclear security coordination
- Offering national courses on nuclear security for nuclear operators and emergency responders organized by the Nuclear Safety Council

Progress on Governance Structures and Processes

- Strengthened legislation on the physical protection of nuclear facilities
- Amended anti-smuggling act and export control regulations
- Adopted the Joint Action Plan with Morocco and the IAEA on an import/export control system
- Signed a Megaports Initiative Protocol with the United States
- Drafting a Strategic Sectorial Plan for the nuclear industry under the recently revised legal framework for the protection of critical infrastructure
- Developing security instructions on transport and radioactive sources
- Developing a national plan for nuclear and radiological detection in cross-border areas

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- GICNT (2012, 2014)
- Nuclear Security Training and Support Centers (2014)
- Enhancing the Security of the Maritime Supply Chain (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Security of Radioactive Sources (2012)

SWEDEN

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Repatriated separated plutonium to the United States
- Updated threat analysis for nuclear facilities and materials
- Supported nuclear security projects in Russia, Ukraine, Georgia, and Moldova

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Co-hosted a conference on illicit trafficking for Black Sea region
- Carried out training activities in Ukraine and Russia

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Contributed to the Nuclear Smuggling Outreach Initiative
- Hosted Interpol's Radiological and Nuclear Trafficking and Terrorism Conference

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Ratified the ICSANT
- Received an IAEA IPPAS mission
- Requested another IAEA IPPAS mission
- Formed a national physical protection coordination group of industry and government regulators and law enforcement to share information and best practices
- Updated its national and regulatory nuclear security framework for the protection of nuclear facilities
- Revising guidelines regarding information security

Participation in Joint Statements

- Nuclear Information Security (2012, 2014)
- Security of Radioactive Sources/Enhancing Radiological Security (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Security Training and Support Centers (2014)
- National Legislation Implementation Kit (2014)
- Countries Free of HEU (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Global Partnership (2012)

SWITZERLAND

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Removed all stocks of HEU and separated plutonium, becoming free of HEU and plutonium
- Conducted an exercise to assess the effectiveness of safety and security systems
- Updated its DBT

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Established a national registry of radioactive sources for Category 1 and 2 sources

Progress on Education and Training Initiatives

- Required annual training courses on nuclear security and radioprotection for all personnel using radiation equipment at medical and research institutions
- Developing a nuclear security culture program based on IAEA guidance

Progress on Governance Structures and Processes

- Updated legal and regulatory framework for physical protection of nuclear facilities
- Adopted a National Strategy for the Protection Against Cyber Risks
- Updating legislation to comply with IAEA Code of Conduct
- Promoting nuclear security at the regional level through the European Nuclear Security Regulators Association

Participation in Joint Statements

- Nuclear Information Security (2012, 2014)
- National Legislation Implementation Kit (2014)
- Forensics in Nuclear Security (2014)
- Security of Radioactive Sources (2012)
- Global Partnership (2012)

THAILAND

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Reviewed the DBT for a research reactor

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Operated a Megaports Initiative at Port of Laem Chabang

Progress on Education and Training Initiatives

- Established a Network of Excellence for Nuclear Forensics in Southeast Asia under the EU CBRN Centers of Excellence project
- Established a Master of Science degree program in safeguards and nuclear security at Chulalongkorn University with the EU and IAEA
- Hosted the International Conference on Safety, Security & Safeguards in Nuclear Energy
- Co-hosted an ASEAN Regional Forum workshop on Nuclear Forensics
- Creating a Nuclear and Radiation Technical Support Center

Progress on Governance Structures and Processes

- Joined the GICNT
- Received an IAEA EPREV mission
- Strengthened national regulatory infrastructure for the physical protection of nuclear and radiological material
- Helped develop ASEANTOM, a regional nuclear regulator network
- Implementing a National Nuclear and Radiological Emergency Plan

Participation in Joint Statements

- Nuclear Information Security (2012)
- Security of Radioactive Sources (2012)
- Nuclear Security Summit Outreach Effort (2012)

TURKEY

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Returned HEU spent fuel from Cekmece Nuclear Research Centre research reactor, becoming HEU free

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Operated new radiation detection and counter smuggling customs procedures

Progress on Education and Training Initiatives

- Established the Ankara Nuclear Research and Training Center
- Hosted a joint workshop with the IAEA and Interpol on best practices in countering illegal trafficking of radioactive materials
- Hosted a workshop on the physical protection of nuclear materials and facilities for newcomers to nuclear power
- Shared counter-smuggling best practices at workshops and training programs with the United States and countries in the region
- Hosted an IAEA IPPAS national workshop

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Ratified the ICSANT
- Requested an IAEA IPPAS mission
- Received an IAEA INIR mission
- Notified support for IAEA Code of Conduct and Import/Export Guidance
- Revised national regulations on the physical protection of nuclear materials and facilities and accounting
- Updating legislation and practices to reflect IAEA's latest safety and security standards and guidance
- Working with industry to identify nuclear security requirements and develop necessary legal and practice infrastructure to support nuclear power program

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Security Training and Support Centers (2014)
- Countries Free of HEU (2014)
- Enhancing Radiological Security (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)

UKRAINE

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Repatriated HEU to Russia, becoming HEU-free
- Updated its DBT
- Upgraded nuclear physical protection system to secure radioactive sources and improve accounting at industrial, medical, and R&D institutions with U.S. assistance

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Implemented an Action Plan under the Nuclear Smuggling Outreach Initiative
- Established a radioactive detection system to secure border crossings

Progress on Education and Training Initiatives

- Hosted an IAEA regional course on radioactive material transport
- Hosted a GICNT workshop on planning and organization guidelines development
- Updated physical protection and accountancy trainings and courses
- Introduced a model training program on the physical protection for nuclear power plant personnel
- Conducted special exercises to determine the rules of engagement for nuclear protection teams and plant personnel in emergencies
- Co-hosted a workshop on illicit trafficking and considered IAEA best practices for the planning of mass gatherings and major sporting events

Progress on Governance Structures and Processes

- Strengthened regulation of physical protection and personnel operations
- Established the State Nuclear Inspectorate to enhance nuclear security regulation
- Issued a presidential decree to implement the Work Plan of the 2010 NSS
- Developing a new plan for nuclear security with the IAEA

Participation in Joint Statements

- Comprehensive Approach to Nuclear Security (2014)
- Countries Free of HEU (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Nuclear Information Security (2014)
- Global Partnership (2012)
- Nuclear Security Training and Support Centers (2012)

UNITED ARAB EMIRATES

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- None

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Signed a Megaports Initiative Protocol with the United States

Progress on Education and Training Initiatives

- Hosted a GICNT Plenary
- Established a nuclear scholarship program
- Established the Gulf Nuclear Energy Infrastructure Institute
- Hosted a workshop to advance security education programs with the United States
- Hosted the International Conference on the Safety and Security of Radioactive Sources
- Hosted IAEA workshops on transport security of nuclear materials, cyber security, and an integrated regulatory to safety, security, and safeguards
- Organized regional seminar on the implementation of safety, security, and safeguards legislation

Progress on Governance Structures and Processes

- Signed an IAEA INSSP
- Hosted IAEA INIR activities
- Requested an IAEA IPPAS mission
- Requested an IAEA EPREV mission
- Notified support for the IAEA Code of Conduct and Import/Export Guidance
- Established a regulatory infrastructure for radioactive material
- Created the Federal Authority for Nuclear Regulation as the independent regulatory authority of the nuclear sector
- Created General Authority of Ports, Borders, and Free Zones
- Issued new regulations related to nuclear security that reflect latest IAEA guidance
- Concluded nine bilateral agreements for cooperation on nuclear energy
- Requiring nuclear facilities to develop Cyber Security Plans based on international guidance

Participation in Joint Statements

- Nuclear Information Security (2012, 2014)
- Security of Radioactive Sources / Enhancing Radiological Security (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- National Legislation Implementation Kit (2014)
- Enhancing the Security of the Maritime Supply Chain (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)

UNITED KINGDOM

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Completed joint project to shut down Kazakhstan's BN-350 reactor and secure its fuel
- Completed physical security projects at seven civil nuclear sites in Russia and retrieval of spent nuclear fuel at Andreeva Bay
- Conducted annual threat assessments to inform DBT
- Decommissioning and defueling its only remaining domestic HEU reactor
- Supporting nuclear and radioactive security projects in Ukraine
- Supporting a project to repatriate HEU from a research reactor in Uzbekistan



Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Contributed to the Nuclear Smuggling Outreach Initiative
- Supported multilateral counter smuggling and forensics events, working groups, exercises, and programs like SLD and Interpol's Operation Fail Safe
- Sharing nuclear and radiological detection technology

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Supported King's College London's development of nuclear security training courses with the IAEA INSEN
- Hosted an IAEA workshop on the Fundamentals of Nuclear Security
- Created a National Nuclear Center for Excellence
- Established a Nuclear Industry Training Framework and developed a "Certificate of Nuclear Professionalism" to verify competence after completion
- Developed online training for nuclear security to be shared for free
- Chaired the Global Partnership working group on Centers of Excellence
- Supported the extension of the Global Partnership
- Established a Global Partnership working group on radiological and nuclear security
- Established a comprehensive Master's degree program in nuclear security
- Hosted a GICNT radiological exercise design and development workshop, a symposium on the detection of special nuclear material, and a nuclear forensics workshop and exercise
- Hosted events to encourage states to fulfill UNSCR 1540 reporting responsibilities
- Published a nuclear security culture development guidance document
- Supported WINS best practice guides and the establishment of the WINS Academy
- Funded VERTIC to provide legislative assistance to countries seeking to ratify the CPPNM/A and ICSANT
- Developing a Code of Conduct on Information Security with academics

UNITED KINGDOM (cont.)

National and Multinational Commitment Results

- Co-hosting a workshop to identify best practices for securing sensitive nuclear-related knowledge and expertise
- Increasing the number of undergraduate and post-graduate training opportunities involving radioactive source security
- Hosting a Civil Nuclear Security Industry Forum every six months for government and industry to discuss safety and security issues

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Received an IAEA IPPAS mission, becoming the first nuclear weapon state to do so
- Requested an IAEA IPPAS follow-up mission
- Extended civil nuclear regulation to cover sites under construction
- Strengthened radioactive security measures beyond IAEA Code of Conduct and Import/Export Guidance

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Transport Security (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- Enhancing Radiological Security (2014)
- Enhancing the Security of the Maritime Supply Chain (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Global Partnership (2012)
- Nuclear Terrorism (2012)

UNITED STATES

National and Multinational Commitment Results

**WEAPONS
USABLE
MATERIAL**

Progress on Nuclear and Radiological Security

- Assisted in the removal of 400kg of HEU from 10 countries
- Recovered more than 4,000 domestic radiological sources and repatriated U.S.-origin sources
- Downblended 13 metric tons of domestic HEU and assisted Russia in downblending 2 metric tons
- Consolidated the number of domestic sites with weapons-usable materials
- Removed all Category 1 material from the Lawrence Livermore National Laboratory
- Upgraded physical protection at more than 240 domestic facilities
- Incorporated security-by-design features into new buildings with sensitive materials
- Updated DBT and implemented new material control and accounting, physical protection, and information security policies based on vulnerability assessments
- Completed zero-based security assessments at all NNSA facilities
- Updated access requirements to sensitive nuclear information
- Enhanced force-on-force and performance testing for domestic facilities
- Conducted exercises to increase domestic nuclear preparedness and response
- Established a U.S.-Japan nuclear security working group
- Conducted a peer review with Japan on security-by-design at processing facilities
- Strengthened human reliability evaluations to protect against insider threats
- Demonstrating U.S. commercial capabilities to produce Molybdenum-99 without HEU by 2016
- Encouraging international manufacturers of high-activity sealed sources to perform voluntary vulnerability assessments of their machines
- Conducting R&D to enable additional and quicker HEU reactor conversions to LEU
- Continuing spent fuel take-backs for disposition and storage and modifying casks to use in unique reactor designs
- Converting remaining domestic HEU reactors to LEU

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Finalized a national classification guide for nuclear forensics
- Launched an international effort to develop a nuclear forensics library, exercises, a common lexicon, and other foundational elements for a framework for cooperation
- Contributed to Interpol's Radiological and Nuclear Terrorism Prevention Unit
- Developed, tested, and deployed new radiation detection technologies
- Expanded domestic and international capabilities to arrest nuclear smugglers, seize material, and prosecute perpetrators

UNITED STATES (cont.)

National and Multinational Commitment Results

- Created a domestic search plan and trained thousands of law enforcement officers in nuclear detection
- Continuing to develop and evaluate new radiation detection technologies
- Equipping an additional 80+ sites around the world with radiation detection systems, deploying more than 60 mobile and man-portable radiation detection systems to more than 20 countries, and transitioning another 100 sites to partner country responsibility

Progress on Education and Training Initiatives

- Contributed to the IAEA NSF
- Trained more than 1,400 U.S. primary responders in radiological alarm response
- Supported WINS workshop, best practice guides, and outreach activities
- Hosted a nuclear forensics methodology international workshop with the IAEA
- Hosted the first International Regulators Conference on Nuclear Security
- Co-hosted counter nuclear smuggling workshop with the EU to share best practices
- Co-hosted a GICNT exercise on countering the financing of nuclear terrorism
- Hosted a GICNT nuclear detection working group workshop in Germany
- Provided training and equipment to Centers of Excellence and Nuclear Security Support Centers
- Leading a series of virtual, web-based tabletop exercises for international participants on developing and using national nuclear forensics libraries
- Hosting a P-3 expert-level security information exchange about protecting sites with significant amounts of weapons-usable materials
- Improving international emergency management through trainings in consequence management to improve national capabilities and integrate safety and security
- Conducting weapons of mass destruction counterterrorism table-top exercises with key foreign partners

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Ratified the ICSANT
- Received an IAEA IPPAS mission
- Advocated for the extension of the 1540 Committee and provided funding
- Advocated for the extension of the Global Partnership and committed \$10 billion
- Signed the Protocol of the Plutonium Management and Disposition Agreement with Russia
- Hosted 2010 and 2016 NSS
- Completed implementation of the HEU Purchase Agreement with Russia
- Developed regulations on the physical protection of radioactive byproduct material
- Developed a strategic plan for the Global Nuclear Detection Architecture
- Completed approval process for taking back 100kg of separated plutonium

UNITED STATES (cont.)

National and Multinational Commitment Results

- Reported on the security of military material through the UNSCR 1540 process
- Assessing and verifying implementation of cyber security regulatory requirements at operating nuclear power plants in accordance with their cyber plans
- Updating physical protection regulations in line with IAEA INFCIRC225/Rev5
- Reflecting INFCIRC225/Rev 5, published studies, and lessons learned from other nuclear security incidents in provisions for securing military materials
- Publishing regulations governing the security of military materials and associated annual budgets
- Establishing a material attractiveness approach to better inform national graded security regulations in consultation with regulators around the world

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Transport Security (2012, 2014)
- Multinational Cooperation on High-Density LEU Fuel Development (2012, 2014)
- Counter Nuclear Smuggling (2012, 2014)
- Nuclear Security Training and Support Centers (2012, 2014)
- GICNT (2012, 2014)
- Enhancing Radiological Security (2014)
- Enhancing the Security of the Maritime Supply Chain (2014)
- Forensics in Nuclear Security (2014)
- Implementation of UNSCR 1540 (2014)
- Strengthening Nuclear Security Implementation (2014)
- Minimization of HEU and the Reliable Supply of Medical Radioisotopes (2012)
- Global Partnership (2012)
- Trilateral Cooperation at the Former Semipalatinsk Test Site (2012)
- Nuclear Security Summit Outreach Effort (2012)
- Nuclear Terrorism (2012)

VIETNAM

National and Multinational Commitment Results

Progress on Nuclear and Radiological Security

- Converted the Da Lat Research Reactor from HEU to LEU fuel
- Repatriated spent fuel to Russia becoming HEU-free
- Upgraded physical protection at more than 20 facilities with Category 1 sources with U.S. support

Progress on Counter Nuclear and Radiological Smuggling

- Participated in the IAEA ITDB
- Established a national registry of all radioactive sources
- Installed radiation portal monitors at Noi Bai International Airport with IAEA and EU assistance
- Operated a Megaports Initiative at the Cai Mep Seaport
- Developed a real-time, GPS monitoring system of radioactive sources with the Republic of Korea

Progress on Education and Training Initiatives

- Organized national workshops for frontline officers and Mobile Expert Support Team to ensure effective nuclear detection and response
- Hosted IAEA national workshops on DBT
- Establishing a Technical Centre for Nuclear Security and Safeguards

Progress on Governance Structures and Processes

- Ratified the CPPNM/A
- Joined the GICNT
- Developed an IAEA INSSP
- Received an IAEA INSServ mission on nuclear security infrastructure
- Received an IAEA INIR mission
- Approved the “Project on Ensuring Nuclear Security in the Atomic Energy Security up to 2020” and developed action plans to implement it
- Strengthening legal and regulatory framework for nuclear safety, security, and safeguards in line with the IAEA's latest recommendations

Participation in Joint Statements

- National Legislation Implementation Kit (2012, 2014)
- Nuclear Information Security (2012, 2014)
- Nuclear Security Training and Support Centers (2014)
- Comprehensive Approach to Nuclear Security (2014)
- Countries Free of HEU (2014)
- Strengthening Nuclear Security Implementation (2014)

The Arms Control Association (ACA), founded in 1971, is a national nonpartisan membership organization dedicated to promoting public understanding of and support for effective arms control policies. Through its public education and media programs and its magazine, Arms Control Today (ACT), ACA provides policy-makers, the press and the interested public with authoritative information, analysis and commentary on arms control proposals, negotiations and agreements, and related national security issues. In addition to the regular press briefings ACA holds on major arms control developments, the Association's staff provides commentary and analysis on a broad spectrum of issues for journalists and scholars both in the United States and abroad.

The Partnership for Global Security (PGS) has more than 15 years of experience evaluating nuclear security policy needs, developing responses, and driving demonstrable results. Its focus on strategic thinking and deep understanding of how to shape, write, and package timely, authoritative, and actionable policy proposals for busy policymakers has led to new international security programs and millions in funding for nuclear security. PGS has a unique perspective on the nuclear security challenge and a track record of creating broad and integrated networks and public-private partnerships to address transnational issues. PGS is constantly evaluating how the convergence of security, technology, and economic issues is shaping the 21st century's global nuclear challenges.



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The Fissile Materials Working Group (FMWG) is a non-governmental coalition of 80 organizations from around the world that are committed to improving fissile material security through the development of actionable policy proposals and advocacy for government of adoption and implementation of improved policies.

For more details, please visit www.fmwg.org or follow @FMWG on Twitter.

This report is the final in a series by the Arms Control Association and Partnership for Global Security that tracks and assesses the political commitments made by each state, or group of states, during the past six years of the Nuclear Security Summit process.

The biennial summits, which began in 2010, brought high-level political attention to the threat posed by vulnerable nuclear and radiological materials around the world. Through national commitments and multilateral actions, summit initiatives have secured nuclear and radioactive materials, strengthened international institutions, and increased collaboration among states to prevent nuclear terrorism. While these accomplishments are significant, more work remains to be done, and the global nuclear security regime requires continuous improvement.

The Nuclear Security Summits will conclude in 2016, and continued responsibility for improving global nuclear security will revert to existing organizations that pre-date the summit process. Maintaining political attention, preserving the commitment making tools developed during the summits, and fostering sustainability must be key priorities for world leaders gathering in Washington in 2016. It is critical that countries use the progress made during the summit process as a foundation for a stronger nuclear future that binds even more countries together in pursuit of common objectives.

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