



2012 Seoul Nuclear Security Summit: Key Facts

Participants

53¹ heads of state and government, as well as representatives of the United Nations (UN), International Atomic Energy Agency (IAEA), European Union (EU) and INTERPOL, attended the 2012 Seoul Nuclear Security Summit. Compared to the 2010 Washington Summit, there were seven new participants: Azerbaijan, Denmark, Gabon, Hungary, Lithuania, Romania and INTERPOL. The EU was represented by both the President of the European Council and the President of the European Commission, making the number of participating leaders 58 in total.

Summit Program

The Seoul Summit was held on March 26-27 at the COEX Centre. The Summit officially began with a Welcome Reception and a Working Dinner on the night of the 26th, and on the 27th there was a Morning Session, a Working Luncheon and an Afternoon Session.

The agenda for each session was as follows:

- March 26 (Monday)
 - Working Dinner : Review of the Progress Made Since the 2010 Washington Summit
- March 27 (Tuesday)
 - Plenary Session I : National Measures and International Cooperation to Enhance Nuclear Security, including Future Commitments

¹ Republic of Korea(Chair), Algeria, Argentina, Armenia, Australia, Azerbaijan, Belgium, Brazil, Canada, Chile, China, Czech Republic, Denmark, Egypt, Finland, France, Gabon, Georgia, Germany, Hungary, India, Indonesia, Israel, Italy, Japan, Jordan, Kazakhstan, Lithuania, Malaysia, Mexico, Morocco, The Netherlands, New Zealand, Nigeria, Norway, Pakistan, Philippines, Poland, Romania, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, United Arab Emirates, Ukraine, United Kingdom, United States, Viet Nam,

- Working Lunch : Nuclear Security-Safety Interface
- Plenary Session II : National Measures and International Cooperation to Enhance Nuclear Security, including Future Commitments (cont.)

Seoul Communiqué

The Seoul Communiqué builds on the objectives and measures set out in the 2010 Washington Communiqué to identify 11 areas of priority and importance in nuclear security and presents specific actions in each area.

The 11 areas are as follows: the global nuclear security architecture; the role of the IAEA; nuclear materials; radioactive sources; nuclear security and safety; transportation security; combating illicit trafficking; nuclear forensics; nuclear security culture; information security; and international cooperation.

The Seoul Communiqué sets out the following specific actions in the above 11 areas:

- ✓ Eliminating and disposing of highly enriched uranium (HEU) no longer in use
- ✓ Minimizing the use of HEU
 - Encouraging voluntary announcements by the end of 2013 of specific actions to minimize the use of HEU
- ✓ Welcoming international efforts to develop high-density low-enriched uranium (LEU) fuel for the purpose of replacing HEU fuels in research reactors and medical isotope production facilities
- ✓ Seeking to bring the 2005 amended Convention on the Physical Protection of Nuclear Materials (CPPNM) into effect by 2014
- ✓ Welcoming an international conference in 2013 organized by the IAEA to coordinate nuclear security activities
- ✓ Encouraging voluntary contributions to the IAEA Nuclear Security Fund
- ✓ Developing options for national policies on HEU management within the framework of the IAEA
- ✓ Encouraging national measures and international cooperation to prevent radiological terrorism
- ✓ Strengthening the physical protection of nuclear facilities and enhancing emergency response capabilities in the case of radiological accidents while comprehensively addressing nuclear security and nuclear safety concerns
- ✓ Strengthening the management of spent nuclear fuels and radioactive wastes
- ✓ Strengthening the protection of nuclear materials and radioactive sources in transport

- Encouraging the establishment of a system to effectively manage and track such materials on a national level
- ✓ Preventing the illicit trafficking of nuclear materials
 - Strengthening technical capabilities to search for and detect illicitly trafficked nuclear materials and encouraging the sharing of information on persons involved in such activities by cooperating with the INTERPOL
- ✓ Building nuclear forensics capacity to identify the source of illicitly trafficked nuclear materials
- ✓ Welcoming the establishment of Centers of Excellence for training and education in nuclear security, and supporting networking activities between each Center
- ✓ Strengthening the nuclear security culture
 - Encouraging the participation of industry, academia, the media, NGOs and other civil actors in the discussions on nuclear security
- ✓ Strengthening the protection of sensitive nuclear security-related information and enhancing cyber security at nuclear facilities
- ✓ Promoting international cooperation, such as the provision of assistance to countries for the enhancement of national nuclear security capabilities upon request
- ✓ The hosting of the next Nuclear Security Summit in the Netherlands

There are a number of points particularly worthy of note in the Seoul Communiqué. Firstly, it provides important timelines for advancing nuclear security objectives, such as the target year (end of 2013) for states to announce voluntary actions on minimizing the use of HEU and the goal year (2014) for bringing the amended CPPNM into effect. Secondly, it reflects the need to address both the issues of nuclear security and nuclear safety in a coherent manner for the sustainable peaceful uses of nuclear energy. It also emphasizes the need to better secure spent nuclear fuel and radioactive waste. Thirdly, it sets out specific measures to prevent radiological terrorism, an issue which was only briefly touched upon at the Washington Summit.

Achievements and Commitments by Participating Countries

32 countries made over 70 commitments on specific actions to enhance nuclear security at the Washington Summit, and the national progress reports submitted by the participating countries have shown that nearly all of these have been achieved. Likewise, over 100 commitments were made from participating countries at the Seoul Summit.

The following is a summary of the progress made on the commitments announced at the Washington Summit, as well as new commitments made at the Seoul Summit.

(Removing HEU or Converting HEU to Non-military Use)

Since the Washington Summit, around 530 kilograms of HEU from eight countries have been removed for disposal, an amount enough to produce about 21 nuclear weapons. In addition, several countries newly committed to repatriate their unneeded HEU.

In particular, Ukraine and Mexico accomplished a total "cleanout" of all stockpiles of HEU just prior to the Seoul Summit by returning them to Russia and the US, respectively.

During the past two years since the Washington Summit, HEU equivalent to around 3,000 nuclear weapons in Russia and the US has been downblended to LEU.

On the minimization of the use of HEU, the Seoul Communiqué encourages participants by the end of 2013 to announce voluntary specific actions to minimize HEU. It also recognizes that the development within the framework of the IAEA of options for national policies on HEU management will advance nuclear security objectives.

(Disposing and Securing Plutonium)

Russia and the US are working on implementing the Plutonium Management and Disposition Agreement signed between the two countries at the Washington Summit, which, when implemented, will result in the disposal of plutonium enough for 17,000 nuclear weapons.

Kazakhstan, in cooperation with Russia, the US, the UK and the IAEA, secured spent nuclear fuel which contained enough HEU and plutonium to make several hundreds of nuclear weapons by moving them to a new facility for a long-term storage in November 2010.

Sweden returned several kilograms of Plutonium to the US immediately before the Seoul Nuclear Security Summit.

(Converting Research Reactors and Medical Isotope Production Facilities using HEU fuel to LEU fuel)

The Czech Republic, Mexico and Viet Nam have converted their research reactors using HEU fuel to LEU fuel since the Washington Summit. In addition, several countries have presented their plans to this end.

In particular, it is worthy of note that Belgium, France, the Republic of Korea and the

US announced a joint project on assessing the effectiveness of a high-density LEU fuel which may replace HEU fuels in high performance research reactors. If the technology, which is based on the centrifugal atomization method developed by the Republic of Korea, is proven to be effective, it will significantly contribute to the minimization of the use of civilian HEU worldwide.

Furthermore, Belgium, France, the Netherlands and the US announced a joint project to convert the production of medical isotope molybdenum-99 (Mo-99) from the use of HEU targets to LEU targets by 2015. This effort represents a meaningful progress both in terms of enhancing human welfare and eliminating the threat of nuclear terrorism.

(Strengthening Nuclear Security-Related International Conventions and Multilateral Initiatives)

During the past two years since the Washington Summit, 20 additional countries have ratified the amended Convention on Physical Protection of Nuclear Material (CPPNM), making the total number of states party to the Convention 55. Meanwhile, 14 countries have newly ratified the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT), increasing the number of states party to the Convention to 79. Among the 34 countries which have newly joined the two Conventions, 18 countries are participants in the Nuclear Security Summit. Meanwhile, over 10 additional countries are proceeding with the process of the ratification of the two Conventions. As for the Republic of Korea, it obtained the approval of the National Assembly for the ratification of both Conventions in December 2011 and is in the process of amending its domestic law to deposit the instrument of ratification. With regard to the amended CPPNM, participating states agreed to work together to bring it into force by 2014 as stated in the Seoul Communiqué.

Six countries - Argentina, Mexico, the Philippines, Singapore, Thailand, and Viet Nam - have followed through on their pledges made at the Washington Summit to join the Global Initiative to Combat Nuclear Terrorism (GICNT), thereby making the number of partners to the GICNT 82 in total. In addition, Algeria and Malaysia have indicated their intention to join the GICNT. Kazakhstan became the 24th member to join the Global Partnership against the Spread of Weapons and Materials of Mass Destruction in January 2012. The decision to extend the mandate of the Global Partnership and the Security Council Committee established pursuant to Resolution 1540 (2004) was made in 2011; the Seoul Communiqué welcomes the extension and encourages wider participation in both initiatives.

The IAEA plans to organize an international conference in 2013 aimed at strengthening coordination among nuclear security-related multilateral initiatives.

(Establishing Centers of Excellence)

Since the Washington Summit, countries are establishing Centers of Excellence (CoE) to enhance national nuclear security capabilities. In addition to the six countries - China, India, Italy, Japan, Kazakhstan and the Republic of Korea – which have announced plans to establish a CoE at the Washington Summit, around ten countries are either establishing a CoE or have plans in this regard.

The IAEA is working to establish an international network between the CoEs to facilitate the sharing of experience, and in so doing, create a synergy effect.

(Supporting the Activities of the IAEA)

A number of countries, including Belgium, Canada, Denmark, France, Japan, the Republic of Korea, Norway, Netherlands and the UK, have pledged contributions to the IAEA Nuclear Security Fund.

Four countries - France, Netherlands, Sweden and the UK - have received a review mission of the IAEA's International Physical Protection Advisory Service (IPPAS) since the Washington Summit, and Australia, Finland, the Republic of Korea, Romania and the US have presented plans in this regard.

(Countering the Illicit Trafficking of Nuclear and Radiological Materials)

51 countries out of the 53 Summit participants are participants in the IAEA's Illicit Trafficking Database. Singapore became the newest participant early this March.

A number of joint proposals were made, including on countering nuclear smuggling and the security of radioactive sources. Japan released a statement on transport security jointly with France, the Republic of Korea, the UK and the US. Participants agreed to enhance international cooperation on nuclear forensics which will enable the identification of the origin of stolen nuclear materials.

A number of countries have newly joined the Megaport Initiative led by the US to prevent the illicit trafficking of nuclear materials and radioactive sources through seaports.

The Republic of Korea and Viet Nam are working on a pilot project on establishing within Viet Nam a system to track radiological materials using GPS technology in cooperation with the IAEA. The project will contribute to securing and preventing the theft of radiological materials.

(Hosting of Nuclear Security Conferences and Events)

The US presented its intention to host a first “International Regulators Conference on Nuclear Security” by the end of 2012; France plans to host an international conference in 2012 to assist the implementation of United Nations Security Council Resolution 1540; Sweden presented its plan to host the second INTERPOL Radiological and Nuclear Trafficking and Terrorism Analysis Conference in April 2012; Mexico announced that it will be hosting the 2013 GICNT Plenary Meeting; the Netherlands revealed that it would organize a tabletop exercise in November 2012 to foster international cooperation in the field of nuclear forensics; and Finland introduced its plan to host IAEA International Workshop on Nuclear Security Culture in the fall of 2012. In addition, several countries proposed plans to host conferences and events related to nuclear security.

Future Plans

The next Nuclear Security Summit will be held in 2014 in the Netherlands. Several Sherpa Meetings and Sous-Sherpa Meetings will be held in the lead up to the Netherlands Summit. /End/