8-9 Dec. 2011, International Forum on the Peaceful Use of Nuclear Energy and Nuclear Security

Panel 2 :

The Nuclear Security Summit and Its Follow Up : Japan's Actions and Contributions to the Strengthening of Nuclear Security

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Director, Integrated Support Center for Nuclear Nonproliferation and Nuclear Security (ISCN) Japan Atomic Energy Agency (JAEA) Japan's Activities for Strengthening Nuclear Security (1)

- Implementation of Japan's National Statement at the Washington DC Nuclear Security Summit -

(A) Establishment of Integrated Support Center for Strengthening of Nuclear Security in Asia

⇒Integrated Support Center for Nuclear Nonproliferation and Nuclear Security (ISCN) was established in JAEA in December, 2010. The ISCN activities include providing education and training on nuclear security.

(B) Development of Technology related to Measurement and Detection of Nuclear Material and Nuclear Forensics based on International Cooperation

 \Rightarrow R&D cooperation with US

(C) Contributions to IAEA Nuclear Security Programs

 \Rightarrow \$ 6.1 million assistance projects, dispatching experts to IAEA

(D) Hosting of a WINS Conference

⇒WINS Workshop was held in Tokyo in September, 2010. ISCN will co-host a workshop on nuclear security governance with WINS in March, 2012.

Japan's Activities for Strengthening Nuclear Security (2) - Integrated Support Center for Nuclear Nonproliferation and Nuclear Security (ISCN) -

Background and Establishment

In order to implement Japan's National Statement at the **Washington Nuclear Security Summit** held in April 2010, Integrated Support Center for Nuclear Nonproliferation and Nuclear Security (ISCN) was established in the Japan Atomic Energy Agency aiming at strengthening nuclear nonproliferation and security mainly in Asian countries.

Activities

- Support capacity building in Asian countries through programs on human resource and institutional infrastructure development
- Fortify nuclear security culture through providing relevant information to the international society
- Strengthen nuclear nonproliferation and nuclear security internationally through the development of measurement and detection technologies

Cooperation with Related Agencies



Japan's Activities for Strengthening Nuclear Security (3) - ISCN Activities on Nuclear Security -

Perimeter

Human Resource Development **Nuclear Security Course**

Regional Training Course on Physical **Protection of Nuclear Materials and Facilities** Cooperation: DOE/NNSA/SNL Duration: October 17-28, 2011 Location: ISCN, Tokai-mura

Participants: 28 participants from 14 countries

Workshop on INFCIRC/225/Rev.5 : Elements of the State's Physical Protection Regime

Cooperation: MEXT, DOE Duration: September 5-6, 2011 Location: Tokyo Participants: 90 domestic participants from governmental agencies, electronics companies, and nuclear industry

International Workshop on INFCIRC/225/Rev.5

Cooperation: DOE/NNSA/SNL Duration: October 31- November 1, 2011 Location: ISCN, Tokai-mura Participants: 40 participants from 16 countries

Development of Training Tools

for Practical Training on Physical Protection of **Nuclear Materials**

Training Field

Conduct field exercises in order to hold effective protection practice based on actual experience.

0- J barriers Various sensors

Fence - Sensors - Lightning system Monitoring camera

Virtual Reality System



Learning the characteristics of a facility and its physical elements by examining a three-dimensional view of the facility.

These tools will be established by the end of JFY2011 and be used in ISCN training courses.

Japan's Activities for Strengthening Nuclear Security (4) - Domestic Developments -

O Discussion at the Advisory Committee on Nuclear Security, Japan Atomic Energy Commission

Fundamental Approach to Ensuring Nuclear Security (Endorsed by AEC on Sept. 13, 2011)

The report regards nuclear security enhancement as one of the critical part of national security measures. It defines responsibility of government and licensees, roles of regulator bodies, emphasizes importance of nurturing nuclear security culture, urges to implement countermeasures to insider threats, and discusses effective physical protection system.

O Strengthening Prevention of Terrorism against Nuclear Facilities

Decision by Headquarters for Promotion of Measures Against Transnational Organized Crime and Other Relative Issues and International Terrorism, Cabinet Office (Nov. 14, 2011)

- In light of the Fukushima Daiichi NPS accident, in order to further enhance prevention of terrorism against nuclear facilities, the relevant ministries and agencies will cooperate and coordinate closely to further enhance terror-related information gathering and analysis, and promote to counter the challenges below:
 - 1. enhancement of physical protection
 - 2. enhancement of measures against insider threats
- The relevant ministries and agencies will implement necessary measures for adopting to IAEA Nuclear Security Recommendations including recommendations on the Physical Protection of Nuclear Materials and Nuclear Facilities (INFCIRC 225/Rev 5), on Radioactive Material and Associated Facilities, and on Nuclear and Other Radioactive Material out of Regulatory Control.

Japan's Activities for Strengthening Nuclear Security (5)

- Deepening US-Japan Cooperation on Nuclear Security -

- In November 2009, Japan and the U.S. issued a joint statement toward the nuclear -free world, agreeing on expanding cooperation in the filed of nuclear nonproliferation, safeguards and nuclear security.
- In April 2010, the Ministry of Education, Culture, Sports, Science and Technology and the U.S. Department of Energy signed the Memorandum of Cooperation on nuclear nonproliferation, safeguards and nuclear security.

Fields of Cooperation:

- Development of nuclear measurement and detection technologies
- Coordinate the two countries' programs on technical supports to IAEA
- Support the capacity building of emerging nuclear countries through assistance for developing safeguards implementation system and human resources in the field of nuclear security
- Development of the technical measurement for the physical protection of nuclear materials in a nuclear facility

Japan's Activities for Strengthening Nuclear Security (6)

- Deepening US-Japan Cooperation on Nuclear Security -

O Japan-US Nuclear Security Working Group (NSWG)

Agreed at Japan-US Summit meeting in November 2010 to establish NSWG

- Identify and coordinate tangible outcomes for the 2012 Nuclear Security Summit, by promoting robust security of nuclear materials at civilian nuclear facilities and during transportation
- Conduct joint activities in the fields of nuclear forensics, nuclear material detection and measurement, and the strengthening of expertise on nuclear security in the Asia-Pacific region where nuclear power utilization is expected to increase.
- Agreed on the importance of Japan's decision to establish an Integrated Support Center for Nuclear Nonproliferation and Nuclear Security.
- In connection with the establishment of the Working Group, and recognizing the serious dangers posed by nuclear terrorism, Japan and the U.S. reaffirmed the goal of securing all vulnerable nuclear material within four years.

Japan's Activities for Strengthening Nuclear Security (7) - Statement by H.E. Mr. Goshi HOSONO, Minister of State, Cabinet Office Head of Delegation of Japan (the 55th General Conference of the IAEA, Sept. 19, 2011) -

"Japan will bring forward its work on nuclear security, taking into consideration relevant IAEA documents and lessons learned from the accident. It will also continue to tackle measures against terrorist attack at nuclear facilities and information exchange with foreign authorities. Capacity building utilizing the 'Integrated Support Center for Nuclear Nonproliferation and Nuclear Security' will continue. Through these efforts, Japan believes that it will be able to contribute to the success of the Nuclear Security Summit in March next year."