# TABLE-TOP EXERCISE (TTX) ON TRANSPORT SECURITY Tokyo, Japan. 12-14 November 2013

# **BACKGROUND**

A Table-Top Exercise (TTX), organised by the Government of Japan, was successfully conducted between the 12<sup>th</sup> and 14<sup>th</sup> November 2013 in Tokyo, Japan, as a preparatory activity for the NSS 2014 under the umbrella of the Transport Security Gift Basket.

This event, attended by more than 70 participants, was derived from a bilateral TTX that took place between Japan and the United States (US) in Honolulu, Hawaii, US, in March 2012. Invited countries included France, the Republic of Korea (ROK), the United Kingdom (UK) and the US, who are the members of the Transport Security Basket Working Group. The International Atomic Energy Agency (IAEA) also attended, and some other countries of the NSS observed the TTX. The World Institute for Nuclear Security (WINS) and the World Nuclear Transport Institute (WNTI) were invited by the Government of Japan to support the organisation of this event, with Japan Nuclear Energy Safety Organization (JNES).

The discussions, which were moderated by a professional facilitator, were structured to follow the key stages in the transport of nuclear materials, and to support the exchange of experience and lessons learnt.

Participants represented a large variety of organisations with accountabilities for the transport of nuclear material, including relevant ministries, governmental agencies, nuclear and transport operators, and technical support institutions.

# **OBJECTIVES AND STRUCTURE OF THE TABLE-TOP EXERCISE**

The objective of the TTX was to generate discussion and reflection on the international and domestic arrangements for the secure transport of nuclear materials in participating countries. National presentations and follow up discussions were based on a set of two fictitious scenarios purposefully designed to consider safety/emergency response as well as security. Discussions were unclassified information. Scenarios and associated discussions were focused on the road and maritime transport of Category I and II nuclear materials. Minor modifications to the scenarios were suggested by the national delegations whenever necessary to better reflect national experiences. During the introduction session, the participants identified the following three key expectations from the TTX:

- Sharing good practices,
- Strengthening existing collaboration and establishing new contacts and networks, and
- Promoting the continuous improvement of transport operations amongst those with accountabilities for transport security and response.

The TTX was structured into six main sessions to allow participants to build on the US and Japan experience and to share the national experience of RoK, France and the UK. For both scenarios, the national presentations were complemented by a set of structured and facilitated discussions designed around the respective transport phases: Planning and preparation; Transport; Response and Post incident activities.

The purpose of the discussions was to highlight best practices in the following areas:

- Preparations and transport logistics (technical and other);
- Planning and threat assessment;
- Regulatory and other prior approvals;
- Roles and accountabilities; e.g. Command and Control, Rules of Engagement;
- Contingency planning;
- Emergency response and recovery;
- Communication to external stakeholders.

# SCENARIO-BASED DISCUSSIONS (LAND AND MARITIME SCENARIOS)

Both scenario-based discussions started with presentations by Japan and the US on the objectives, scope and key outcomes of the TTX conducted in Hawaii in 2012. The output of their TTX led to the identification of good practices related to policy and procedures and also highlighted differences and similarities in each nation's approach to transport security.

The meeting then continued with respective national presentations from France, ROK and the UK, followed by opportunities for questions and answers, and a dedicated review session moderated by the facilitator. It was agreed that many of the security concepts and principles were equally applicable to land and maritime based scenarios. The most important discussion points and outcomes are summarised below:

# Threat assessment, update and communication

- It is important to have a clear understanding of credible threats and the possible characteristics and attributes of potential adversaries.
- The need for a clear definition of roles and responsibilities in the process of assessing, keeping up to date and communicating threat information was considered essential for designing and implementing effective security measures during transport.
- Consideration needs to be given to identifying and evaluating the impact of threats that might be considered "beyond" the DBT.

# Facilitating relationships between industry and regulators

- Participants stressed the need for ensuring the independence of regulators from the organizations promoting nuclear activities, and respective responsibilities of regulators and industry were recognized according to the international legal framework.
- Adopting a non-confrontational attitude, working on possible complementarities, identifying
  potential issues and looking for solutions as soon as possible (de-escalate problems) were
  identified as foundations for facilitating relationships between the industry and regulators.

# Information security

- Plenary and group discussions identified information security as one of the biggest challenges during transport, in particular because the planning of the transport involves many different organisations and the movements are generally visible to the public.
- Information security policies and procedures should be based on realistic expectations of maintaining privacy.

• Confidential information should be restricted to those with a need to know, and personnel associated with the transport should be adequately trained to protect sensitive information.

# Transport security plan and verification of transport security arrangements

- The requirement for a Transport Security Plan to be submitted for approval to the Security Regulator was considered essential to ensure the Regulator has sufficient information to assess the adequacy of the proposed arrangements.
- The Plan should provide the necessary information to clarify the roles and responsibilities of all parties involved in the transport operations.
- Frequent rehearsals of contingency plans and procedures should be conducted.
- Training and exercises should be developed based on realistic assumptions and previous experiences and should be designed to help identify areas for improvement.
- For effective exercises, it would be useful to establish security references or identify capabilities that need to be built.

# Design of the conveyance and associated security equipment

- The transport unit, using a graded approach, and associated security equipment should be designed based on clear security objectives derived from a threat assessment.
- Effectiveness of the performance of the security provisions should be regularly tested and, when relevant, minimum performance standards should be established.
- Transport units should be equipped with robust communication methods and devices, including tracking and monitoring, using encryption with a graded approach as much as possible.

# Multi-agency relationships and readiness to manage incidents

- Participants indicated that in many cases, cooperation and coordination amongst multiple agencies needed regular testing to confirm that each understood the roles of their own as well as others.
- The need to prepare for as wide as possible range of situations and to establish effective and efficient chains of command were highlighted as priorities.
- Clear and applicable rules of engagement, based on a demonstrable legal basis, should be in place to ensure effective and proportionate responses to threats or actual incidents.
- The participants stressed the importance of coordinating the management of safety and security aspects in an incident.
- Ensuring absolute clarity in the transfer of responsibilities when changing jurisdictions, either during domestic or international transports, was considered essential and challenging.

# **Communication during and post-incidents**

- Timely and effective communication, both at operational and strategic levels, was assessed as a critical component during incidents.
- At an operational level, good communication requires clear definition of roles and responsibilities, proper management process of information and prompt and accurate provision of information.
- At a more strategic level, communication plans, prepared in advance and using modern media, should be activated, and the messages relayed by various stakeholders should be consistent, coordinated and channelled through individuals and organisations identified in advance.

- Participants highlighted the challenge to balance the need to disclose safety information and the absolute necessity to keep security information confidential according to national regulations.
- The importance of general communication, in particular communication to inform the public
  of transport of nuclear and other radioactive materials, on potential radiological risks and
  safety measures in place was highlighted as an on-going challenge for the transport
  community.

#### **Professional development**

- An effective response to security threats is greatly dependent on the capacities and knowledge
  of involved personnel to perform their tasks at the highest level possible.
- Demonstrable skills and competencies are important and the participants discussed that it is necessary to raise awareness on security issues and develop and maintain skills and competencies in nuclear security adapted to meet the needs of organisations and positions.
- Maintaining knowledge and experiences over time was highlighted as one of the biggest challenges for the various organisations involved in transport operations.

# The IAEA and the 5 countries working together

- Participants agreed that the implementation of international requirements, recommendations
  and guidance was a prerequisite for effective transport security. Implementing IAEA
  recommendations gives confidence in the security level. The participants confirmed their
  support to the IAEA program for development of transport security guidance to assist member
  States in establishing a legislative and regulatory framework.
- Further efforts could be made to strengthen the identification and sharing of good practices.
- The 5 countries committed to continue to support the development of an effective international framework for the security of nuclear material and other radioactive materials during transport, and indicated their readiness to support new comers in establishing robust national transport security infrastructures.

# **CONCLUSIONS AND WAY FORWARD**

The Participants concluded that the TTX had been a highly beneficial exercise, including the preparatory work for the TTX, which had encouraged a broader dialogue within the participant countries. The exchange of information at the international level had identified good practices that could be implemented. It was recognized that the approaches to transport security in the different countries vary, but the promotion of high standards and expectations was strongly encouraged. It was also concluded that there were strong reasons for advanced countries to support less experienced ones carrying out transportations, upon their request.

Participant countries expressed their satisfaction in actively participating in the TTX and appreciated the opportunity to exchange information with other countries. They noted that the high level of transparency to the extent permitted by their respective national laws and regulations, openness and trust supported the information exchange and networking. They considered that the event was well-attended and well-conducted, involving a number of countries. Also, they considered a State-led exercise might be beneficial for other relevant subjects.