International Workshops on Denial of Shipments

The delivery of vital radioactive material to destinations such as hospitals and industry is meeting basic human needs. When a denial of such a shipment occurs on one route, suppliers have been effective at finding alternative delivery routes. However, such ingenuity can result in greater cost to the end user and more carbon emissions related to each shipment. As the number of alternate routes continues to decrease, some areas will be unable to receive the needed radioactive materials. Therefore, it is essential to deal with denials and delays of these important shipments.

On a domestic level, some Member States have already directly intervened with carriers to re-establish delivery routes. On an international level, a series of IAEA regional workshops were held to raise awareness of suppliers, recipients, regulators, carriers/consignors and international organizations of the problems relating to denials of radioactive shipments to determine effective measures to prevent or reduce the instances of shipment denials and delays.

The workshops attracted people from a wide range of backgrounds which provided a good foundation for effective discussion and proposals for regional action. A summary of the attendance is provided in the table below.

VENUE	REGULA-TORS	CAR RIERS	INDUS-TRY	TOTAL
MONTE-VIDEO	23	6	3	32
ROME	50	11	10	71
ARUSHA	20	8	11	39
BEIJING	38	9	8	55
ANTANA NARIVO	9	5	1	15
TOTAL	140	39	33	212

Examples of radioactive shipments

An output of each event was an Action Plan for the concerned parties aimed at adopting a broadly accepted approach to addressing this problem in the region. For example, the action plan from the Beijing meeting emphasized the importance of successful communication and cooperation in addressing this issue, approved coordinators for the implementation of the regional Action Plan, and established a regional network dedicated to this issue.

Networks, such as in the Beijing example, are essential parts of the solution of the denial and delay issue, and form the infrastructure that allows the effective delivery of solutions. As an example, a communication "toolbox" is being considered at a global level, which could then be adapted region by region to the languages and issues of importance.

The future challenge is for the IAEA to facilitate the communication within and between these regional networks, to create the environment that makes it easier for the regional networks to be effective in delivering a successful regional action plan.

Communication and Knowledge Management

The Department of Nuclear Safety and Security (NS) is continuing its efforts to enhance its communications and knowledge management.

In this regard, the department is taking a harmonized approach to develop a strategic communication plan to improve upon the quality, clarity and openness of our communication activities, and a knowledge management plan to further build the technical and programmatic capacity of our staff. Each of these plans will also consider new or enhancements to existing information technology tools used for communications and knowledge management. Ultimately, our goal with these plans is to improve the quality and delivery of our products and services to Member States in support of the Global Nuclear Safety and Security Regime.

We plan on providing you with a future update as we proceed further with these initiatives.

As a continuous learning organization, your feedback is important. We welcome your questions, comments or suggestions for improvement. Please provide your feedback to Mr. Ho Nieh at h.nieh@iaea.org.

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Current safety and security activities and developments taking place in the Department of Nuclear Safety and Security

http://www.iaea.org/OurWork/ST/NS

Nuclear Security at the Beijing Olympics

The IAEA´s work in the field of nuclear security is by no means restricted to large scale events. Through international conferences, training courses, seminars, workshops, and security guidance publications, the Office of Nuclear Security helps Member States by providing or facilitating strategic planning and infrastructure to protect nuclear and other radioactive materials from theft and diversion, to protect nuclear installations and transport against sabotage and other malicious acts, and to combat illicit trafficking of nuclear or other radioactive materials.

Nuclear and other radioactive material, even in minimal amounts, can be used to harm untold numbers of victims and/or cause social or economic havoc. Data shows an increasing number of incidents involving the illicit trafficking of nuclear and other radioactive material – and this is a cause of great concern with respect to large public gatherings of any kind. Even used as a non explosive weapon, this material has the potential to cause tremendous damage and dislocation.

Being mindful of this, the IAEA has responded to this possibility by providing equipment to help Member States detect and respond to acts of nuclear terrorism as well as prevent such an event in the first place

An excellent example of the IAEA's work in protecting large scale public events was the recently concluded Beijing Olympic Games.

As the Olympics moved onto the global stage, China and the IAEA worked in unison to bolster China's nuclear security plan and minimize threats. Training workshops for security officers and officials were jointly organized that built upon efforts over the past year. The thrust of the IAEA´s work in Beijing was designed to help integrate radiological planning into established security arrangements for police, the intelligence community and bomb squads based in China. Through advisory missions and training exercises, the IAEA assisted, and continues to assist, Chinese authorities with various aspects of

radiation detection, physical protection, and emergency response.

According to Anita Nilsson, Director of the IAEA's Office of Nuclear Security, "We have been working with the Chinese authorities over the last 18 months to add a radiological dimension to their existing security plans so that security for the Olympics is as comprehensive as possible".

The IAEA notes that its efforts with respect to the nuclear security of the 2008 Olympic Games comprised the largest project of this kind in which the IAEA was involved. However, the 2008 Olympic Games was not the first major public event during which the IAEA played a key role in detection and response to radiological threats. The IAEA supported nuclear security measures for the 2004 Olympics in Greece, the 2006 FIFA World Cup in Germany, and the 2007 Pan American Games in Brazil. Lessons learned from these events informed actions with respect to the Olympic Games in Beijing, security for which, including nuclear security activities, went seamlessly.

"The IAEA has been hard at work for over fifty years in radiation safety and security. We are now further developing these skills as they become increasingly relevant to large scale public events like the Pan American Games," said Anita Nilsson.

NS Update, No. 8, September 2008

The Incident and Emergency Centre's Participation in the ConvEx 3 Exercise

From 9 to 10 July 2008 the IAEA participated in a large scale exercise (ConvEx-3), which took place at the Laguna Verde nuclear power plant in Mexico. During the 43 hour long exercise, the Incident and Emergency Centre (IEC) was fully activated. Staff members participating in the exercise represented different departments within the IAEA and the diversity of their knowledge and experience ensured an effective response. The last time a full scale exercise of this kind was carried out was in 2005 in Romania.

A satellite view of the 'accident' area.

The ConvEx-3 (2008) exercise had three over-arching goals. These were to test the response of Member States and relevant international organizations in a severe nuclear accident; to test and evaluate the international emergency management system (e.g. current ENATOM arrangements); and to identify good practices as well as deficiencies and areas requiring improvement that cannot be identified in national exercises.

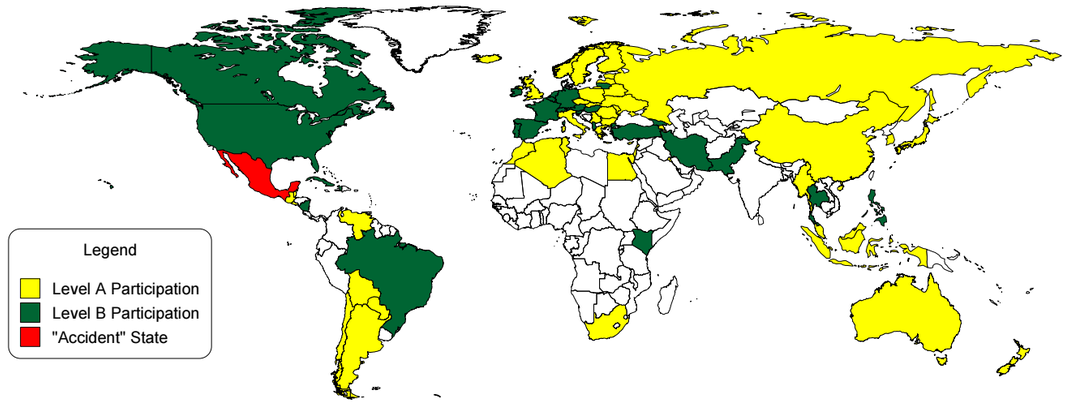
The exercise was based on a severe nuclear emergency with trans-national implications: 'actual' for a few States, 'potential' for some and 'perceived' for many. In total, 75 Member States and ten international organizations participated, substantially more than in 2005.

IAEA staff members in training for ConvEx-3 (2008)

The Emergency Response Manager (ERM briefs his team during the exercise.

Member States were given a choice regarding their level of participation in ConvEx-3 (2008). Level A participation signified that the Contact Points under the Early Notification and Assistance Conventions received messages/information from the IAEA and/or the "Accident State" according to bilateral/multilateral agreements, and were expected to confirm receipt of the messages that declare or reclassify the emergency class according to EPR/ENATOM. The aim of this level of participation is to test basic communication and train/drill response personnel in using the Emergency Notification and Assistance Convention website (ENAC), over an extended period of time.

Level B participation denoted that, in addition to Level A participation, States or international organizations tested elements of their emergency response system to identify the strength of the response and deficiencies or areas requiring improvement. States and international organizations used common exercise objectives and evaluation processes in order to produce a harmonized exercise evaluation. Additionally, Level B participants were free to have their own specific objectives, if they so chose.



ConvEx-3 (2008) Levels of Participation

A credible scenario for the ConvEx-3 (2008) exercise was prepared by the Laguna Verde nuclear power plant together with the National Nuclear Safety and Safeguards Commission (CNSNS) and the IACRNA Working Group on Coordinated International Exercise, for which the IAEA provides the Secretariat.

The following elements were included in the exercise scenario: (1) evolution of the nuclear safety situation, (2) radioactive release into the atmosphere, (3) medical and public health issues, (4) specific interests in the 'Accident State' and other affected countries such as commerce, industry and tourism (food and products contamination – issues of import/export, contamination of vehicles, ships – border crossings issues, foreign nationals). However, the details of the fictional emergency scenario remained restricted and were not known to exercise participants until the exercise was in play.

A simulated press conference.

IAEA staff members who participated in the exercise are part of the IAEA's Incident and Emergency System (IES). Prior to the exercise, they received special training in response to radiation incidents or emergencies. Members of the IES served several functions such as: liaison officers, public information officers, emergency response managers, logistics officers, technical specialists, communication specialists, etc…

A number of staff members were appointed the role of evaluator and their observations and comments will be included into a post-exercise report. Their initial feedback was generally positive, noting a high level of commitment on the part of IAEA staff and effective facilities within the IEC. In order to improve the efficiency of such exercises and to be better prepared for any actual emergency, it was recommended that they be carried out more frequently (they are currently held every three years) and that they also include a security component to reflect the changing nature of the world's emerging security threats.

Photos courtesy of Dean Calma

Inside the IEC

Mission: Global Focal Point for International Preparedness, Communication and Response for Nuclear and Radiological Safety or Security Related Incidents, Emergencies, Threats or Events of Media Interest

24/7 Coverage

ON CALL:
- Emergency Response Manager
- Logistics Support Officer
- Radiation Safety Specialist
- Nuclear Installation Safety Specialist
- Nuclear Security Specialist