

# Incident and Emergency Preparedness and Response

## Objective

*To have in place effective and compatible national and international arrangements for early warning, for responding to actual and potential nuclear/radiological incidents and emergencies independently of their cause, and for feedback and continuous improvement.*

## Early Notification and Assistance Conventions and the International Action Plan

In 2007, the Agency organized the fourth meeting of the competent authorities identified under the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (Early Notification and Assistance Conventions, respectively). The meeting reviewed progress in the area of international emergency preparedness and response, including the activities of the Agency's Incident and Emergency Centre (IEC). With the endorsement of many of the recommendations of the Working Groups on International Communications and International Assistance, work under the Action Plan for Strengthening International Preparedness and the Response System for Nuclear and Radiological Emergencies has now entered an implementation phase, which will build on these recommendations. In particular, the meeting endorsed recommendations relating to the development of an Agency system for incident and emergency communications.

## Preparedness for Response to Incidents and Emergencies

To assist Member States in developing an adequate level of preparedness and response capabilities and arrangements, the Agency issues guidance, organizes training events and exercises, and provides reviews of national emergency systems. In 2007, the Agency, in cooperation with

several international organizations,<sup>1</sup> published *Arrangements for Preparedness for a Nuclear or Radiological Emergency* (IAEA Safety Standards Series No. GS-G-2.1). To assist Member States in applying this guidance, the Agency conducted a number of training courses, workshops and exercises at the national and regional levels covering topics such as emergency planning, first response, radiological monitoring, medical response and biodosimetry, and emergency communications (Fig. 1).

The Agency offers its Emergency Preparedness Review (EPREV) service upon request to provide an independent assessment of a Member State's emergency preparedness and response programme and its conformance with the Agency safety standard *Preparedness and Response for a Nuclear or Radiological Emergency* (IAEA Safety Standards Series No. GS-R-2). In 2007, the Agency conducted EPREV missions to Egypt, the Russian Federation and Tajikistan. The results of these missions were the country specific EPREV Mission Reports, which contain specific recommendations based on identified weaknesses and shortcomings, as well as strengths and good practices, in the countries' emergency preparedness and response programmes. The aim is to improve their national, regional and local capabilities to respond to a nuclear or radiological emergency.

## Emergency Exercises

Being well prepared is the basis for an effective and efficient response to incidents and emergencies. The Agency conducts regular exercises — referred to as Convention Exercises or ConvEx — of varying scope with the contact points and international organizations identified under the Early Notification and Assistance Conventions. Small scale ConvEx exercises to test the reliability and responsiveness of communications were conducted throughout 2007. In addition, the Agency participated in a number of national exercises.

<sup>1</sup> Specifically, FAO, the International Labour Office, PAHO, the United Nations Office for the Coordination of Humanitarian Affairs and WHO.



FIG. 1. Participants in an international intercomparison exercise for emergency assessment in the field.

## Response Assistance Network (RANET)

The Agency's ability to render assistance to a country affected by a nuclear or radiological emergency relies on Member States making known the national assistance capabilities they could make available to a requesting country. In 2007, the Director General followed up on the 2006 launch of RANET — a registry of national assistance capabilities that can be called upon on request under the Assistance Convention — by sending a letter to all Parties to the Convention encouraging their registration in the network. In addition, within the framework of the Asian Nuclear Safety Network, a roster of experts with many competences that are foreseen in RANET was established to support the implementation of the Assistance Convention.

## Reporting and Response to Incidents and Emergencies

In 2007, the Agency's IEC was informed or became aware of 140 events involving or sus-

pected to involve ionizing radiation. In 25 cases the Agency, in accordance with established arrangements for response to incidents and emergencies, facilitated the provision of official information to Member States or coordinated international assist-

ance. For example, in November the Agency, at the request of the authorities of Honduras, arranged for regional assistance from the USA

to recover radioactive sources detected in a scrap metal shipment container. During the year, the Agency also received a number of requests for official information on events at nuclear facilities and facilitated the provision of authoritative information to concerned Member States and the public.

The International Nuclear Event Scale (INES) serves as a tool for communicating to the public the safety significance of events and covers a broad range of events related to nuclear facilities, radiation sources and the transport of radioactive material. In 2007, the Agency conducted two regional training seminars within the framework of the Asian Nuclear Safety Network in China and the Philippines. The seminars had the goal of supporting countries in the broader application of the scale.

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