
Incident and Emergency Preparedness and Response

Objective

To maintain and further enhance efficient Agency, national and international EPR [emergency preparedness and response] capabilities and arrangements for effective response to nuclear or radiological incidents and emergencies independent of the triggering events. To improve exchange of information on nuclear or radiological incidents and emergencies among Member States, international stakeholders and the public and media in the preparedness stage and during the response to nuclear or radiological incidents and emergencies, independent of the triggering events.

Strengthening Emergency Preparedness Arrangements

At the Technical Meeting on Twenty Years of EPREV: Building on Two Decades of Experience, held in Vienna, participants shared their experiences and proposed further improvements. The Agency and WHO took the opportunity to discuss coordination between EPREV and the WHO Joint External Evaluation service's module on radiation emergencies.

The Agency also developed new technical guidance and conducted capacity building activities to support implementation of the EPR related safety requirements established in *Preparedness and Response for a Nuclear or Radiological Emergency* (IAEA Safety Standards Series No. GSR Part 7). A total of 55 training events were held, with 1368 participants from 133 Member States.

Innovation in EPR technology used by first responders was one of the topics discussed at the Technical Meeting on Advances in Emergency Preparedness and Response Technology and Arrangements, held in Vienna. Participants shared developments in technology and advances in operational arrangements, tools for accident simulation and atmospheric dispersion modelling, and techniques for handling data.

At the Workshop on Capacity Building Centres on Emergency Preparedness and Response, held in Vienna, the Agency launched the International Network for Education and Training on Emergency Preparedness and Response (iNET-EPR). The network will support national and regional EPR capacity building and educational activities in EPR.

Member State use of the Emergency Preparedness and Response Information Management System (EPRIMS) has increased notably. The Agency conducted seven webinars to support users in the application of the system.

The Agency launched a new CRP entitled 'Effective Use of Dose Projection Tools in the Preparedness and Response to Nuclear and Radiological Emergencies'.



FIG. 1. A member of the RANET Joint Assistance Team ‘sweeps’ a stadium in Las Vegas (United States of America) to detect any hidden radioactive sources before a simulated major sport event. (Photograph courtesy of S. Carragher.)

Response Arrangements with Member States

The Agency held a Response and Assistance Network (RANET) Joint Assistance Team exercise in Las Vegas, United States of America (Fig. 1) where participants managed and resolved matters that might arise during an Assistance Mission.

Two ConvEx-1 exercises and ten ConvEx-2 exercises were conducted. In October, the Agency held a 36 hour ConvEx-2d exercise, based on a national exercise in Sweden. In response to a request for assistance during that exercise, it coordinated a RANET Joint Assistance Team mission to Forsmark, Sweden, in the week following the exercise, to assess the radiological situation in the environment. It also piloted the first ConvEx-2g exercise testing Member States’ emergency response arrangements for communicating effectively with the public during a nuclear or radiological emergency, which included the use of the Agency’s social media simulator.

The Agency participated in, and supported Member States in conducting and evaluating, 26 national emergency exercises. Member States used the Unified System for Information Exchange in Incidents and Emergencies (USIE) Exercise web site for 100 of their exercises in 2019.

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Response to Events

The Agency was informed, or became aware, of 245 events involving or suspected to involve ionizing radiation (Fig. 2).

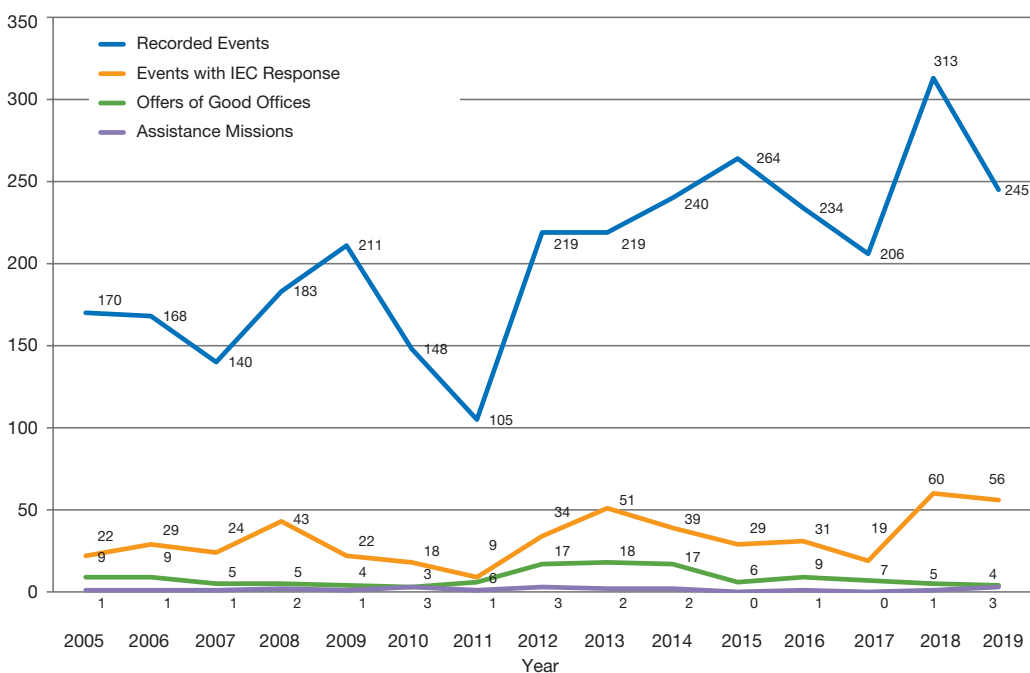


FIG. 2. Number of events involving or suspected to involve nuclear or radiological facilities or activities, about which the Agency was informed by the competent authorities, or became aware through earthquake alerts or media reports.

Inter-Agency Coordination

The Agency convened the 27th regular meeting of the Inter-Agency Committee on Radiological and Nuclear Emergencies (IACRNE) in Geneva, Switzerland, hosted by WHO to discuss preparedness and response activities in all participating and corresponding organizations and the IACRNE work programme for the next two year period.

The interface for automatic exchange of information from European Union member countries between the Agency and the European Commission emergency web sites was made operational.

In-house Preparedness and Response

Almost 200 Agency staff are certified emergency responders in the Incident and Emergency System. Throughout 2019, the Agency organized training classes and exercises – including four full response exercises (Fig. 3) – to ensure that the staff are prepared to respond. In addition, 700 external visitors learned about the Centre during presentations and tours of its operational area.



FIG. 3. Agency staff participate in a full response exercise at the Incident and Emergency Centre in Vienna.