Continuous strengthening of national and international emergency preparedness and response (EPR) arrangements is crucial to the global nuclear safety and security regime. From 19 to 23 May 2014, more than 140 delegates from some 80 countries and seven international organizations met in Vienna, Austria, to share information on EPR arrangements and capabilities at the 7th Competent Authorities Meeting, which was chaired by Ms. Lynn Hubbard, Head of Emergency Preparedness and Response, Swedish Radiation Protection Authority. The status of implementation of two key conventions was also discussed: the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident of Radiological Emergency (“Emergency Conventions”).

In his opening remarks, Mr. Denis Flory, Deputy Director General, Head of the Department of Nuclear Safety and Security, expressed appreciation for the Competent Authorities’ wide range of cooperation in providing experts and resources for the response to past emergencies. Mr. Flory welcomed the discussions on the nuclear safety/nuclear security interface in the area of EPR, as well as on the national EPR reports that were introduced to the Competent Authorities Meeting for the first time.

Conclusions and recommendations at the meeting reflected a general consensus by participants. These included encouraging the attendance of the Competent Authorities of all States at future meetings, increased participation in emergency exercises and continuous strengthening of arrangements that operationalize both Emergency Conventions.

At the closing of the meeting, Ms. Elena Buglova, Head of the IAEA’s Incident and Emergency Centre, expressed her gratitude to the participants for very productive discussions, which will further facilitate the strengthening of international EPR.
ConvEx-1b Exercise in May 2014

On 28 May 2014, at 21:00 UTC, the IEC conducted the ConvEx-1b emergency exercise. The objective of this type of exercise is to test that National Warning Points (NWPs) are continuously available and that National Competent Authorities Abroad (NCA(As)) can promptly respond to notifications received.

The exercise was announced to Contact Points by a message sent to their routine communication channels to allow the activation of Unified System for Information Exchange in Incidents and Emergencies (USIE) exercise alert channels. For the Member States that do not have any organizations nominated as NWPs or NCA(As), the message was sent to Contact Points with non-defined functions (NDs). Also, the IEC published a message on the USIE Exercise website at the same time and requested acknowledgments from Contact Points to be given there.

The target time for acknowledgement of the message on the USIE Exercise website is two hours for NCA(As). Contact Points which are not designated according to the Operations Manual for Incident and Emergency Communication (EPR-IEComm, 2012) need to send an acknowledgement of receipt within 30 minutes to verify that every State Party has a Point of Contact which is continuously available.

In this ConvEx-1b exercise, 47% of all Contact Points responded to the exercise, while 53% did not. Only 28% of the NWPs and 24% of the NCA(As) responded by the established deadline. The exercise schedule and detailed results are available on the USIE website.

ConvEx-2a Exercise in April 2014

A ConvEx-2a exercise was conducted on 29 April 2014. The main objective of ConvEx-2a exercises is to test the ability of National Competent Authorities (NCAs) to complete the appropriate reporting forms as described in the EPR-IEComm, 2012. The exercise also tests communication channels between the IEC and the NCAs that registered to participate in the exercise. A total of 38 Member States registered to participate in this ConvEx-2a.

While most NCAs used the appropriate forms for communicating with the IEC, some mistakenly submitted exercise forms through the actual USIE site and not the USIE Exercise website. Also, some counterparts submitted initial notifications to the IEC via email, which is not recommended because emails are not monitored 24/7. The preferred notification channels are fax, telephone and USIE. Some NCAs reported problems accessing USIE.

The IEC thanks all participants in the exercise and encourages participation in future ConvEx exercises. The final evaluation report will be posted on the USIE website.

IAEA Participates in First ConvEx-2e Exercise

During 26–28 May 2014, the IAEA participated in Canada’s Exercise Unified Response. The IEC was a direct player in this exercise, practicing the IAEA’s role to provide assessment of consequences and prognosis of possible scenario evolution during a nuclear and/or radiological emergency. This national level emergency preparedness exercise was conducted at the Darlington Nuclear Generating Station in the province of Ontario, Canada, involving 55 Canadian government agencies and regional organizations. This exercise is being acknowledged as the first ConvEx-2e exercise. This new designation is given to Member State national exercises that involve the IAEA to actively provide and discuss its assessment and prognosis of a developing situation.

This was the first time that the IAEA participated directly in a Member State national level exercise for the purpose of practicing its new extended role detailed in the IAEA Action Plan on Nuclear Safety.

The large scale national exercise provided an important opportunity for the IAEA to practice assessment and prognosis in real time during a three-day emergency exercise with the full range of national participation. Through the IEC, the IAEA developed an assessment of the situation and a prognosis for future developments, which were discussed with the Canadian Nuclear Safety Commission. A technical support team from the Cernavoda Nuclear Power Plant in Romania was also available in this exercise and provided technical views supporting the IAEA assessment and prognosis process.

The IAEA will continue to enhance and practice this process in the future. Member States planning a national level exercise are encouraged to involve the IAEA to further practice this expanded role. Please contact the IEC via IEC3@iaea.org to make the appropriate arrangements.
**Second Full Response Mode Exercise of 2014**

The IEC conducted its second internal Full Response Exercise of the year on 7 May 2014. Thirty-nine participants from twelve different divisions and sections from throughout the IAEA participated. The exercise scenario involved a train accident transporting spent nuclear fuel.

The purpose of the IEC’s Full Response Exercises is to evaluate the IAEA’s internal procedures and processes, such as information flow, accident assessment and prognosis and press release protocol. These internal procedures and processes were tested during the exercise to ensure that the IAEA is able to fulfil its response roles.

The exercise also helped to identify areas that require additional training and guidance for the participants of the IAEA’s Incident and Emergency System (IES).

Member States are encouraged to inform the IEC at an early stage in the preparation of their national exercises, specifically when planning to test reporting arrangements on the USIE Exercise website. The IEC will work directly with Members States to agree on the scope of the IEC’s involvement in a national exercise (e.g. from basic posting of messages on the USIE Exercise site to a simulated activation of the IEC to full response mode, as was the case in the exercise described above). For further information, please contact iec3@iaea.org.

**New Interactive Learning Tool on INES**

An interactive learning tool on the International Nuclear and Radiological Event Scale (INES) is now available on the IAEA website. The tool is designed to help understand and apply the INES methodology for rating the safety significance of nuclear or radiological events.

The INES Rating Interactive Learning Tool (INES RILT) is primarily intended to be used by people with background knowledge of INES, but it can also be useful to those who are not familiar with INES. Based on the INES User’s Manual (2008 Edition), this tool breaks down technical language into information that is easily understandable to a wider audience.

Are you interested in learning more about INES or refreshing your acquired knowledge of the Scale? Take a look at the INES Rating Interactive Learning Tool here: https://iec.iaea.org/inesrilt/

**INES Technical Meeting**

A Technical Meeting of the INES National Officers will be held at the IAEA’s Headquarters in Vienna, Austria, from 13 to 17 October 2014.

The purpose of the meeting is to present and discuss recent developments relating to INES, including the documents and rating tools that have been prepared since the last INES National Officers’ meeting in 2012; to share the experience gained in the participating countries regarding the evaluation of, and communication on, nuclear and radiological events using INES during the 2012 to 2014 period; and to agree on actions to enhance the use of INES.
Participation in the RAD 2014 Conference

The University of Niš (Serbia), in cooperation with the IAEA, organized the Second International Conference on Radiation and Dosimetry in Various Fields of Research (RAD 2014). Building on the first RAD 2012, this conference offered a forum for exchange to researchers and professionals involved with radiation and radiation dosimetry. This year, about 300 participants from almost 50 countries submitted some 500 abstracts, showing the professional community’s growing interest in RAD Conferences as an opportunity to discuss their latest findings.

The IEC participated in RAD 2014 by providing an outline of its latest guidance on effective protection of the public during a severe emergency at a nuclear power plant or its spent fuel pool.

Member State Preparedness

To assist Member States with applying IAEA guidance in the area of EPR, seven training events were conducted during the second quarter of 2014, at the regional and national levels:

**Regional Level:**
- Regional Training Course on Basic Elements of Nuclear and Radiological Emergency Preparedness and Response (Austria, Vienna, 7–11 April);
- Regional Training Workshop on Emergency Preparedness and Response (Mexico, Mexico City, 11 April);
- Regional Meeting to Review the Present Status of the Region on Preparedness to Face Radiation Emergencies (Indonesia, Jakarta, 16–20 June);
- Regional Workshop on Long Term Issues Following a Nuclear or Radiological Emergency (ANSN) and Annual Meeting of ANSN EPRTG (Malaysia, Dengkil, 9–13 June);
- Regional Training Course on Emergency Preparedness and Response in Severe Accidents (China, Fuzhou City, 30 June–4 July).

**National Level:**
- National Training Course for First Responders to a Radiation Emergency (Jordan, Amman, 20–24 April);

The IEC participated in Integrated Regulatory Review Service (IRRS) missions to Jordan and Pakistan and in preparatory missions to the France, Japan, the Netherlands and Slovenia. The IEC also participated in a workshop in Japan to help the National Regional Agency prepare the IRRS self assessment prior to the IRRS mission planned for 2016. It also participated in the International Workshop on Occupational Radiation Protection in Severe Accident Management organized by the Information System on Occupational Exposure in Washington, D.C. (17–18 June).

During the 7th Competent Authorities Meeting, the IEC presented the prototype of an Emergency Preparedness and Response Information Management System (EP-RIMS). This web based platform will allow Member States to share information with selected Member States, exchange information on national arrangements and discuss aspects related to emergency preparedness and response.
Pilot Workshop for the Optimization of National Radiation Emergency Plans

The IEC successfully held its first Workshop on the Optimization of National Radiation Emergency Plans. The event took place during the Regional Workshop for Member States in the Latin America Region on Emergency Preparedness and Response, held in Mexico City from 7 to 11 April 2014 and hosted by the National Commission for Nuclear Safety and Safeguards (CNSNS) of Mexico.

The IEC’s workshop was developed to strengthen the emergency preparedness and response (EPR) arrangements of the participating Member States by:

- providing guidance on the optimization of EPR arrangements;
- driving the creation of regional networks to share complementary capabilities;
- offering a platform to share experience between the Member States of the region.

Twenty-eight participants from 12 countries in Latin America participated in this five-day workshop, which offered topical lectures in the area of optimization as well as multiple work sessions to enable self-assessment of EPR arrangements and drive the exchange of information between participants.

IEC Response to Recent Events

Peru — Overexposure involving a radioactive source

In March 2014, the IEC received information from its counterpart in Peru concerning an overexposure involving a radioactive source used in industrial radiography.

The IAEA offered its good offices, and consequently a request for assistance was received by the IEC in April 2014. An assistance mission consisting of medical experts from Brazil, France and the IAEA was deployed to Peru. The assistance mission team provided medical advice and made recommendations to the counterparts regarding the appropriate course of treatment. The IEC continues to work closely with Peru to provide the necessary assistance.
China and Switzerland Join RANET; Japan Registers in New Functional Area

The IEC is pleased to announce that, during the second quarter of 2014, China and Switzerland registered their National Assistance Capabilities (NACs) in the IAEA Response and Assistance Network (RANET), thus increasing the States registered to 25. Also, Japan updated its capabilities, becoming the first State to register in the new Nuclear Installation and Advice functional area. The IAEA thanks all States that have registered their NAC in RANET and encourages all Member States to join.

Workshop on Radiation Monitoring

This Emergency Preparedness and Response Workshop took place from 7 to 11 April in Fukushima Prefecture, Japan, at the IAEA’s RANET Capacity Building Centre (CBC). Seventeen participants from 10 countries enhanced their skills in radiation monitoring, environmental sampling and other related topics. The participants took part in working sessions as well as in field exercises in areas of Fukushima Prefecture that remain evacuated following the 2011 accident at the Fukushima Daiichi nuclear power plant. RANET experts from France, Japan and Sweden gave lectures on strengthening Member States’ emergency preparedness and response capabilities.

The workshop was conducted with the support of Fukushima Prefecture and the Ministry of Foreign Affairs of Japan. Prior to the workshop, IEC staff welcomed Governor Yuhei Sato from Fukushima Prefecture to the CBC in Fukushima City. He thanked the IAEA for the support it is providing to the Fukushima Prefecture and expressed his appreciation for the Agency’s presence there. The IEC continues to offer workshops on radiation monitoring as part of the capacity building activities conducted through the IAEA RANET CBC.

New Publication Translation

The Training Material Portable Digital Assistant for First Responders to a Radiological Emergency (EPR-First Responders/PDA 2009) is now available in Russian. The tool is designed for use on portable devices, such as handheld computers and smart phones, and requires only a web browser to be used. It is intended for emergency service personnel as an aid in the field when responding to a radiological emergency.

Based on the material in the IAEA Manual for First Responders to a Radiological Emergency (EPR-First Responders 2006), the PDA contains quick action guides with response actions to a radiological emergency performed by Incident Commander, Fire Brigade, Resource Coordinator, Emergency Medical Service, Law Enforcement/Security Team, Forensic Evidence Management Team, First Responder Monitor and Public Information Officer/Team. It also contains instructions for hazard assessment, personnel protection, public protection and registration, monitoring of public and responders, public decontamination, response contamination control, monitoring/decontamination of vehicles and equipment, and field triage for mass casualties.

IEA RANET Officer Mr. P. Kenny (right) demonstrates the CBC’s equipment to Governor of the Fukushima Prefecture, Yuhei Sato (centre), during his visit to the IAEA RANET CBC on 3 April 2014. (Photo: T. Ozawa/IAEA).
New USIE Feature: USIE Connect

In May 2014, the IEC released an upgraded version of USIE (v 4.1) which includes USIE Connect, a new feature which enables contact points to connect their own domestic emergency information systems with the IAEA’s USIE system in order to expedite the information exchange with the IEC during an emergency.

USIE Connect was developed following the recommendations of the communication expert groups of the 2004–2009 IAEA EPR Action Plan and is based on the IAEA’s IRIX standard. It was first demonstrated during the USIE side event at the Competent Authorities meeting in May. Mats Eklund of the IEC demonstrated how USIE Connect can be used by contact points in order to send and receive emergency notifications (EMERCON) to/from a national system. Also, it allows to forward notifications to a regional system, such as the European WebECURIE system, reducing the need for manual entering of information when reporting to different organizations.

More information about USIE Connect is available in the most recent version of the USIE User Manual. For further information please contact USIE.Contact-Point@iaea.org.

Twitter Milestone

Do you follow us?

The IEC is happy to announce that we have reached the milestone of 500 Twitter followers! If you wish to stay up to date on recent events and news as well as trainings taking place world wide, follow us: @IAEAIEC

IEC News

The IEC welcomes Marian Madela (Germany) and Zsuzsanna Sera (Hungary) as Team Assistants, and Andras Karmán (Hungary), Peder Kock (Sweden) and Nora Wellhausen (Germany) as Consultants.
IEC Launches New Website

Next time you visit iec.iaea.org you will see a fully revised and up-to-date website, which includes clear information on the IEC and its activities as well as new sections such as IEC Informational Material and IEC News.

We invite you to explore the new web pages, and we hope that you find them interesting and user-friendly.

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Impressum

IEC Newsletter
No. 48, Second Quarter, September 2014

The IEC Newsletter is prepared by the Incident and Emergency Centre, Department of Nuclear Safety and Security

Vienna International Centre, PO Box 100, 1400 Vienna, Austria
Printed by the IAEA in Austria, September 2014

14-36691

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