Radiation and Transport Safety

Objective

To support Member States in improving radiation safety of people and the environment through the development of safety standards and by providing for their application. To support Member States in establishing the appropriate safety infrastructure through support and implementation of the Code of Conduct on the Safety and Security of Radioactive Sources and Supplementary Guidance, as well as through safety reviews and advisory services. To support Member States in capacity building, through education and training, and in encouraging the exchange of information and experience.

Radiation Safety and Monitoring

Two Postgraduate Educational Courses in Radiation Protection and the Safety of Radiation Sources were held at the Agency affiliated regional training centres in Africa. A virtual train-the-trainer event on the course was held for lecturers from Malaysia.

The Agency contributed to the preparation of a position statement entitled 'Managing Exposure Due to Radon at Home and at Work' by the Inter-Agency Committee on Radiation Safety. The document summarizes the committee's understanding of strategies for the use of the new dose conversion factor for occupational exposure to radon, as recommended by the International Commission on Radiological Protection, and includes the outcomes of the Technical Meeting on the Implications of the New Dose Conversion Factors for Radon.

The Agency organized the virtual International Conference on Radiation Safety: Improving Radiation Protection in Practice in cooperation with the European Commission, the Food and Agriculture Organization of the United Nations, the International Labour Organization, the Nuclear Energy Agency, the Pan American Health Organization, the United Nations Environment Programme and the World Health Organization. The conference, held in November, took stock of the worldwide radiation safety situation as well as lessons learned from applying *Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards* (IAEA Safety Standards Series No. GSR Part 3) and improvements to be considered to further facilitate its application.

Participants in a virtual Technical Meeting on the Justification and Optimization of Protection of Patients Requiring Multiple Imaging Procedures reviewed the latest data on patient exposure from recurrent radiological imaging and agreed on a joint position statement and call for action.

The Agency published *Occupational Radiation Protection Appraisal Service (ORPAS) Guidelines* (IAEA Services Series No. 43), which draws on the experiences and lessons learned from past missions. The Agency also continued to develop a global survey of the Information System on Occupational Exposure in Medicine, Industry, and Research: Industrial Radiography and published, for the first time, an annual report on the survey.

A new Dose Management System developed by the Agency for use by individual monitoring services in Member States was released through the Occupational Radiation Protection Networks web platform.

The Agency developed and launched the Scrap Metal Tool Kit, a new collaboration platform for the exchange of information on controlling radioactive material inadvertently incorporated into scrap metal and semi-finished products of the metal recycling industries (Fig. 1). The Agency simultaneously launched a supporting e-learning course entitled 'Control of Radioactive Material Inadvertently Incorporated into Scrap Metal'.

Regulatory Infrastructure

The Agency conducted a 17 day Integrated Regulatory Review Service (IRRS) follow-up mission to Lithuania. This was the first peer review mission to be organized completely on-line, owing to the restrictions relating to the COVID-19 pandemic.

A virtual Technical Meeting on the Implementation of the IAEA's Self-Assessment Methodology and Tools was held to exchange views on the latest developments of the Integrated Review of Infrastructure for Safety component of the Self-Assessment of Regulatory Infrastructure for Safety on-line tool.

FIG. 1. Radioactive material may be inadvertently incorporated into scrap metal.

The Agency created a dedicated area on the Cyber Learning Platform for Network Education and Training (CLP4NET) to host materials from the virtual School for Drafting Regulations on Radiation Safety.

Transport Safety

The Agency launched Version 2 of Modules 1–4 of the e-learning course on the safe transport of radioactive material, to reflect the requirements established in *Regulations for the Safe Transport of Radioactive Material* (IAEA Safety Standards Series No. SSR-6 (Rev. 1)).

Radiation Safety Information Management System

Two virtual interregional workshops were held to train Radiation Safety Information Management System (RASIMS) national coordinators in the use of the RASIMS 2. By the end of 2020, 87% of nationally appointed RASIMS coordinators had been trained to use the new platform.