

Second Open-ended Meeting of Technical and Legal Experts to develop a Non-binding Instrument on the Transboundary Movement of Scrap Metal that may Inadvertently Contain Radioactive Material

Vienna, 30 January to 3 February 2012

Report of the Chairman

1. The second open-ended meeting of technical and legal experts to develop a non-binding instrument on the transboundary movement of scrap metal that may inadvertently contain radioactive material was held from 30 January to 3 February 2012 at the IAEA Headquarters in Vienna under the chairmanship of Mr R. Irwin (Canada).
2. The meeting was attended by 41 experts from 28 Member States of the IAEA (Angola, Argentina, Bahrain, Belgium, Brazil, Bulgaria, Canada, Croatia, Egypt, Finland, France, Germany, India, Indonesia, Islamic Republic of Iran, Mexico, Pakistan, Russian Federation, Saudi Arabia, Slovenia, South Africa, Spain, Sudan, Sweden, Thailand, Turkey, Ukraine, and the United States of America). The meeting was also attended by 3 observers from: the European Commission (EC), Bureau of International Recycling (BIR) and the Federacion Espanola de la Recuperacion (FER). The Scientific Secretaries for the meeting were Mr E. Reber (Division of Radiation, Transport and Waste Safety) and Mr W. Tonhauser (Office of Legal Affairs). The rapporteur for the meeting was Mr A. Wrixon.
3. Previously, pursuant to GC(54)/RES/7, the first open-ended meeting of technical and legal experts was held in July 2011 to undertake exploratory discussions concerning the development of a non-binding international instrument that will establish and harmonize an appropriately graded approach by States to the protection of people, property and the environment from the inadvertent presence of radioactive material in scrap metal that is transported across State boundaries. The Chairman's report of that meeting indicated that, after some discussion, it has been decided that the instrument should be a Code of Conduct. In the form of a Code of Conduct, an instrument familiar to and understood by Member States as non-binding, it would follow a development process at the IAEA similar to the two other codes of conduct, namely the Code of Conduct on the Safety and Security of Radioactive Sources and the Code of Conduct on the Safety of Research Reactors. Further to the Chairman's report, GC(55)/RES/9 called upon the Secretariat to proceed with the development of a Code of Conduct.
4. The purpose of this second open-ended meeting of technical and legal experts was therefore to finalize the text of the draft Code of Conduct on the basis of the text developed at the first open-ended meeting.
5. The meeting was opened by Mr Pil-Soo Hahn, Director of the Division of Radiation, Transport and Waste Safety. Mr Hahn reminded participants of the importance of metal recycling, while indicating the health and economic problems that could result from the unwanted presence of radioactive material. He noted that the International Conference on Control and Management of Radioactive Material Inadvertently Incorporated into Scrap Metal, convened in 2009 in response to these concerns, had unanimously recognized the potential benefit that would result from establishing some form of binding international agreement between governments to unify the approach to trans-border issues concerning scrap metal containing radioactive material. He indicated that the focus of this second open-

ended meeting should be to work towards finalizing the text of the draft Code of Conduct for consideration by the IAEA's policy-making organs.

6. Mr E. Reber gave an overview of the work that had been undertaken by the IAEA on the safety and security of radioactive sources. Mr Reber also described the Code of Conduct on the Safety and Security of Radioactive Sources, the Conventions on "Early Notification" and "Assistance" and the relevant Safety Guides, one dealing with concepts of exclusion, exemption and clearance (RS-G-1.7), another with the categorization of sources (RS-G-1.9), and the most recent with scrap metal (SSG-17).
7. Following this, the Chairman gave his opening remarks, covering in particular, the work done at the first open-ended meeting, including the main issues that were discussed, and his expectations regarding the output from this second open-ended meeting.
8. Further to the request of the first open-ended meeting, Mr W. Tonhauser considered the relationship and boundaries between the proposed draft Code of Conduct (the Metal Recycling Code) and existing international legal instruments, notably the Code of Conduct on Safety and Security of Radioactive Sources (the Radioactive Sources Code) and the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (the Joint Convention). He indicated that his main concern was whether there were any conflicts or overlaps in the draft Metal Recycling Code with those existing instruments.
9. Mr Tonhauser noted that, simply speaking, the draft Metal Recycling Code, the Joint Convention and the Radioactive Sources Code had a shared objective, namely to maintain a high level of safety in order to protect people, property and the environment from ionizing radiation. Concerning their respective scope of application however, while the Metal Recycling Code essentially applied to radioactive material that had inadvertently been incorporated into scrap metal, the primary focus of the Joint Convention and the Radioactive Sources Code was on radioactive waste (and spent fuel) and on radioactive sources (including disused sources), respectively, that were within a system of regulatory control. The only overlap of the draft Metal Recycling Code with any of the latter instruments could therefore arise in respect of radioactive material in scrap metal that had been discovered and had been brought under such control. At this point, however, the draft Metal Recycling Code did not contain any conflicting obligations in this regard.
10. Mr R. Turner (United States) gave an overview of incidents involving radioactive material. He noted that more than 80% were due or perceived to be due to naturally occurring radioactive material (NORM). Dependent on the type of facility and magnitude of contamination, clean-up costs resulting from a melted radioactive source could run into tens of millions of dollars. In the case of radioactive material found in a load of scrap metal, he noted that it is sometimes difficult to separate the radioactive source from the consignment of metal especially for such items as compressed bales of metal and that it is often difficult to identify the origin. He also covered the problems of detection and the types of monitors that are used and indicated that monitoring systems and protocols need to be better established and communicated.
11. Mr J. Stewart (IAEA, Division of Radiation, Transport and Waste Safety) gave a presentation on the application of the IAEA Transport Regulations (TS-R-1) to the transport of radioactive material discovered in scrap metal. He noted that in a non-compliant situation, paragraph 309 of TS-R-1 applies. This requires the consignor to be notified and immediate steps to be taken to mitigate the consequences and, inter alia, for the relevant competent authority(ies) to be informed promptly. He indicated the various options for the subsequent transport of the radioactive material – the application of the Transport Regulations for normal packages or

special arrangements, the enforcement powers of the competent authority and the provisions for regulatory exemption.

12. Mr S. G. Mikheenko (Russian Federation) presented a proposal for a further annex to the draft Metal Recycling Code covering the radiation monitoring of scrap metal and the semi-finished products of the metal recycling industry.
13. The general view of the participants was that the draft Metal Recycling Code presented to the first plenary session of the meeting addressed most of the matters in a satisfactory manner but a number of detailed points still needed to be addressed.
14. To do this, the meeting divided into four working groups to further discuss the main issues that had been identified:
 - a. Legal review focusing on the paragraphs dealing with the responsibilities of exporting, importing and transit states;
 - b. Transboundary matters;
 - c. Radiation monitoring matters; and
 - d. Transportation matters.
15. A number of amendments proposed by the working groups were accepted during the plenary session; the final draft Metal Recycling Code resulting from the meeting is attached.
16. The industry representatives also welcomed the draft Metal Recycling Code that was produced at the meeting.
17. The meeting recommended that the Secretariat circulate the draft Metal Recycling Code and necessary background information to all Member States for comment, and unless fundamental objections were raised, the Director-General submit the draft Metal Recycling Code to the Agency's policy-making organs for their approval.



Robert Irwin

Chairman

3 February 2012