

## Session II National Policies and Strategies

In this session some of the national policies and strategies being used to address the control of inadvertent radioactive material in scrap metal were presented. In addition to the papers presented orally in this session, there were contributions describing the situation in many countries of the world in the form of posters displayed during the conference. The many posters reporting national measures being used to control radioactive material in metal scrap at the conference served to indicate the global extent of the problem.

As a result of a serious incident which occurred in Spain involving the melting of an orphan radioactive source, a national system to address the issue was instituted. This system, known as the Spanish Protocol, involves all relevant national stakeholders, that is, the scrap metal industry, the steel industry, the national nuclear regulator and the national radioactive waste management organization in a voluntary collaborative scheme aimed at preventing the occurrence of radioactive materials in scrap metal through administrative controls and detection methods. The essential feature of the scheme is that it provides national support for the scrap and steel industry in return for openness and transparency. In the event of radioactive material being found in scrap metal the system provides professional help and resources to manage the situation. It is relevant to note that in Spain a facility exists for the disposal of low and intermediate level waste; this feature allows for the safe disposal of the radioactive material found in scrap metal or from the clean-up of contaminated premises. The Spanish Protocol has provided a model for the creation of other national and international schemes.

Experience with radioactive material appearing in scrap metal shipments and arrangements for its management were described for several middle European countries (Bulgaria, Ukraine, Slovenia, Georgia). Most of the detected radioactive materials are NORM radionuclides ( $^{226}\text{Ra}$ ,  $^{232}\text{Th}$  etc.)(70%) and typical orphan source radionuclides ( $^{60}\text{Co}$ ,  $^{137}\text{Cs}$ )(30%). The systems in these countries are usually based on the principles of prevention, detection and response and follow the UNECE guidelines. In all countries the control and monitoring of shipments of scrap metal from beyond national borders is a serious issue and the management of identified contaminated loads is a regular problem. In Bulgaria, the State takes the ultimate responsibility for any radioactive material found in scrap metal while in Ukraine a special fund exists for the management of radioactive waste.

In two contrasting presentations, the management of very low activity level material being released from the nuclear industry was discussed. An industry scheme in the UK for the clearance and exemption of materials from nuclear sites was described. A national working group has developed and agreed with all partners a consistent methodology for use across the UK nuclear industry. In France, clearance is not allowed because of ethical and public concerns and instead a zoning system within the facility being decommissioned is used to determine which materials may be released.

In the panel session which followed the oral presentations the following topics were discussed:

The presentations described well developed national strategies for managing the problem of radioactive material in metal scrap. However, it is apparent that these are purely national arrangements; there is no international strategy for this purpose. Countries manage the transboundary problems using their own mechanisms and resources but there appears to be little coordination between them. For example, there is no requirement to report to other potentially concerned countries that a load has been rejected at a border; there is no requirement for the provision of certificates confirming that scrap metal loads both entering and leaving the country have been monitored for radiation; there is no requirement to monitor loads which are in transit through the country; finally there is no agreement on acceptable levels of radionuclides in metal scrap. Arrangements for the return of detected radioactive material or loads of scrap metal containing radioactive material to the supplier are made on an 'ad hoc' basis with no internationally agreed procedure.

Based on these concerns, the discussions in this session focussed on the need for an international approach to the problem. It was concluded that there is a need for some form of binding international agreement that improves arrangements for the transport of scrap metal by preventing the occurrence of loads containing radioactive material, increases the likelihood of their detection and facilitates response mechanisms in the event of material being discovered. The agreement should enhance cooperation and collaboration between countries in this context. It should take account of the needs and requirements of all relevant stakeholders including scrap metal companies, the steel industry, national regulators, border authorities etc. The existing UNECE recommendations could be used as a starting point for this agreement. The actual mechanism to be used to achieve these goals should be decided upon by the relevant international organizations. In this context, it was noted that international organizations concerned with international trade such as the World Trade Organization should be involved.