Regional Meeting for Sharing Experience and Lessons Learned in Implementing the Code of Conduct on the Safety and Security of Radioactive Sources

Vilnius, Lithuania, 21 to 24 May 2013

Report of the Chairman

- 1. A regional meeting for sharing experience and lessons learned in implementing the Code of Conduct on the Safety and Security of Radioactive Sources (hereinafter Code of Conduct) was held from 21 to 24 May 2013 in Vilnius, Lithuania under the chairmanship of Ms. D. Serenaite (Lithuania).
- 2. 25 experts attended the meeting from 10 Member States of the IAEA (Armenia, Azerbaijan, Bulgaria, Georgia, Kazakhstan, Lithuania, Republic of Moldova, Russian Federation, Tajikistan and Ukraine). The Scientific Secretary for the meeting was Mr. S. Evans (IAEA Division of Radiation, Transport and Waste Safety). The workshop took place in the Russian language, to facilitate the fullest contribution of all participants.
- 3. Mr. Albinas Mastauskas, Director of the Radiation Protection Centre (Lithuania) opened the meeting and talked about implementation of the Code of Conduct and Guidance on the Import and Export of Radioactive Sources (hereinafter Guidance) and the importance of sharing experience and good practice between all Member States.
- 4. The purpose of the meeting was to obtain an overview of the current status of participating Member States' national infrastructures for safety and security in the context of Code of Conduct and its supplementary Guidance, and to provide a platform for exchanging experience, lessons learned, successes and challenges.
- 5. During the opening session Mr. S. Evans provided an update on the current number of the States committed to Code of Conduct and Guidance, on the States in the region not yet committed and the overview of the status of regulatory infrastructure, information about dedicated points of contact and IAEA efforts to raise the number of the States committed. In addition, Mr. Evans gave an update on progress with the development of a non-binding instrument on the transboundary movement of scrap metal that may inadvertently contain radioactive materials.
- 6. The remaining sessions (multinational initiatives on implementing the Code of Conduct and building common approaches on implementation of import/export controls) were dedicated to discussions and debate on the challenges and successes in implementing Code of Conduct and its supplementary Guidance. The

participants were also given an overview of the outcomes of a similar meeting held (in English) in Tirana in March 2013.

7. A day was dedicated to national presentations setting out the current regulatory frameworks and implementation status in the context of Code of Conduct and Guidance. These presentations were used to direct debate later in the week and the following paragraphs summarise the main issues arising from the debate:

National register of radioactive sources

- 8. All States present reported having established a national register of at least Category 1 and 2 radioactive sources and some include or plan to include dosimetry records in the same registers. Most participating States said they have not used, or no longer use RAIS. One country reported for instance, that while it still uses RAIS to some extent, RAIS does not produce the appropriate reports and therefore they must also use Excel. Others use RASOD or variations and one or two have unique systems. The IAEA may wish to enquire in more depth about the reasons for this tendency.
- 9. There was debate about the legal status of reports generated by State registers. It was concluded that in most cases, information from the register which has been formally approved and signed by the Director of the competent authority would be acceptable as a legal document.
- 10. Data security is an issue for some States, including the inadvertent transfer of data from the register without proper authorisation. Some countries reported that their registers are therefore kept off-line, thus making them inaccessible to interested parties (such as operators and other regulatory agencies).
- 11. There was discussion about the need for a global agreement on the labelling of sources and housings. There is no consistent approach that would allow such data to be reliably part of a minimum data set that can be transferred between States, enabling immediate identification of a source and its supplier.
- 12. To ensure accuracy of data in the national registries, most States conduct regular inspections and some States also receive weekly updates from Customs reporting imports and exports of radioactive sources.
- 13. Although all States present have established a national register of radioactive sources, they were in strong agreement with the Tirana proposal that the IAEA establish minimum criteria for data elements contained within the registry to ensure consistency and to allow the rapid international exchange or review of essential data whenever appropriate (e.g. on agreeing export and import).

14. Appropriate documentary outputs from all registers should be harmonised as common forms that may be signed as official documents and exchanged internationally.

Infrastructure for regulatory control

- 15. It was agreed that the effective independence of the regulatory body was desirable, but there was no consensus that it was essential. However, it was strongly agreed that where there is more than one national regulatory agency, formal national cooperation and coordination is very important.
- 16. Participants agreed that establishment of an effective regulatory infrastructure is the basis for effective control of radioactive sources, in particular regarding the enforcement of requirements. All States demonstrated that a legislative framework has been established within their respective States but some States reported that legislation does not yet fully provide effective control of radioactive sources.
- 17. Some States require amendment to regulations for control of radioactive sources. The general theme was that the drafting or revision of regulations is still necessary in most States to fully address security of radioactive sources and their long term-management. There was also some debate, unresolved, on the status of Code of Conduct. Some countries participating feel that the 'voluntary' nature of Code of Conduct constrains their capacity to encourage their governments to write the provisions into legislation. Thus, in due course, a more binding approach would be preferred. It was pointed out by the Scientific Secretary that Code of Conduct provisions have been introduced in recent IAEA safety standards and security recommendations, notably GSR Part 1, and that the relevant requirements of these standards and recommendations can and should be incorporated into national legislation.
- 18. Many States discussed a need for legal requirements to return radioactive sources to the manufacturer as part of their long-term management strategy. In some cases, this legal requirement is difficult to establish.
- 19. The legal provision and ability to implement financial guarantees to manage radioactive sources throughout their life-cycle and in particular to ensure proper end of life-cycle management was highlighted by many States. One State suggested that exporting States should consider implementation of financial guarantees on exporting facilities (such as insurance) to cover expenses related to returning sources to the manufacturer.
- 20. It was agreed to be good practice that all States develop national requirements for insurance or other sources of funding to cover the cradle to grave management of any source. A globally harmonised approach was preferred and this was stated as a matter for the IAEA's consideration.

Training of staff in the regulatory body, law enforcement agencies and emergency service organizations

- 21. Many participants indicated that staffing levels remain challenging and this has resulted in constraints on implementation of Code of Conduct and Guidance.
- 22. The importance of training programmes for regulatory body staff was highlighted and emphasized in many national presentations. Many States present still struggle with establishing an effective training programme for staff due to financial constraints.
- 23. Some States with established training programmes for regulatory body staff have also established outreach and training programmes for other relevant government agencies (customs, law enforcement officers and emergency response agencies). However, it was widely accepted that such training is not well coordinated between national organisations.
- 24. There was some discussion about the approval of training centres and their curricula with emphasis on the capacity of the competent authorities to do so. Similarly, the regulatory body oversight of staff training given by operators was difficult to implement effectively.
- 25. Concern was raised that the qualifications of recognised experts are not necessarily accepted when such persons travel to other countries. This may have a direct impact on developing a common approach to globally implementing the guidance of Code of Conduct and appears to be an issue of harmonisation of educational requirements and curricula.

Domestic and international cooperation for implementation of Code of Conduct

26. To ensure effective coordination and cooperation between countries responding to an event involving radioactive sources, several States have established agreements between the respective competent authorities. However, where these agreements have been tested in reality, they are sometimes slow or ineffective. It was felt by participants that an improved global system of information exchange that would be fast and effective should be considered (notwithstanding the systems already available through the IAEA).

Long-term management of radioactive sources

27. The long-term management of radioactive sources remains a challenge for all States present. Many challenges on this subject were discussed during the course of the meeting.

- 28. The main challenge to States for long-term management of radioactive sources is tied directly to the associated costs. States that do not have long-term storage solutions indicated that the cost of returning sources to the country of origin remains prohibitive.
- 29. Financial guarantees were discussed as an option to ensure sources are returned to country of origin and as a means to effectively secure sources should the operator become insolvent. A number of options were discussed and some participants reported they had implemented financial guarantees for long-term management of radioactive sources.
- 30. It was discussed that long-term management should be considered prior to authorizing import and use of the radioactive source. Exporting States should also take into consideration the importing States capacity to effectively manage the radioactive source through out the life cycle prior to authorization of export. This returned participants to the issue of minimum criteria in State registries.
- 31. Participants discussed the re-using and recycling of radioactive sources. Some of the participating States mandate reuse and recycling but while the majority agree it has value, they are not yet in a legal or technological position to do so effectively.
- 32. There was some concern that sources which have been modified through a recycling process in order to extend their lifetimes may no longer be eligible for return to the supplier of the source.
- 33. Global harmonisation of all aspects of the process and procedures for returning sources to supplier was felt to be essential.
- 34. Russia reported a legal uncertainty where the supplier country was originally part of a larger federation (the Soviet Union). The question now arises about whether legally, Russia is now considered to be the State of origin of the source and therefore obliged to accept it.

National strategies for gaining or regaining control over orphan sources, including arrangements for reporting loss of control and to encourage awareness of, and monitoring to detect orphan sources

- 35. Orphan sources remain an issue for many States present at the meeting.
- 36. Some States present have established a national strategy for regaining control over orphan sources and others have agreements with relevant governmental departments for detection and regaining control of such sources.
- 37. Most participants reported that when an orphan source is discovered, the State budget would cover costs, even where there is no national strategy.

- 38. Most States have installed portal monitors at border crossings and some have outreach campaigns to educate the public on orphan sources.
- 39. Some countries routinely monitor scrap metal shipments and at scrap metal premises etc., others do not. Legislation varies on this. In some countries monitoring is a requirement. In others, where it is not, the regulatory body has little authority to control this activity.
- 40. Global harmonisation of legislative requirements for the management, monitoring and/or regulatory oversight of scrap metal facilities and activities were strongly supported by States present.

Import and export, transport, transhipment of radioactive sources

- 41. All States indicated that under their regulatory framework the capacity to authorize imports and exports exists. Some States indicated that challenges exist to implement the import and export provisions of Code of Conduct and Guidance due to legal constraints.
- 42. There was discussion about achieving adequate control of sources which are routinely mobile and may cross borders regularly, unknown to the States concerned. Typically, where detected at borders, such sources are only reported several days later. This problem is exacerbated within the Schengen region of the EC, where border controls are less rigid.
- 43. In some States, the issue of security of the source is considered to override safety considerations in some circumstances. Thus, in these countries it is difficult to fully implement TS-R-1 labelling and other requirements (as per Para 29 of Code of Conduct).
- 44. For some States present, coordination and cooperation regarding transhipment is considered to be problematic. One State in particularly considers that the process of agreement between States takes too long and is inefficient.
- 45. Interesting observation for the attention of the IAEA: Paragraph 23 of the English version of Code of Conduct refers to import and export whereas the Russian version refers to import only.

European Region Potential Topics for the Abu Dhabi Conference

46. The participants listed the following topics of interest to the European region that could be offered for discussion at the International Conference on Safety and Security of Sources to be held in Abu Dhabi, UAE, 27-31 October 2013:

- Minimum criteria for data elements contained within the registry to ensure consistency and to allow the rapid international exchange or review of essential data whenever appropriate.
- Effective independence of the regulatory body with particular regard to the control of safety and security of radioactive sources.
- Harmonisation of all aspects of the process and procedures for returning sources to supplier.
- Financial guarantees on the radioactive source supplier to cover future return and end of life-cycle management and ensure the safety and security of the radioactive source.
- The feasibility of regional radioactive source long-term storage repositories to support States in addressing short-term storage challenges. The long-term goal being to increase regional capacity to effectively manage radioactive sources throughout their life-cycles.
- Encouraging and facilitating the reuse and recycling of radioactive sources, as outlined in Code of Conduct.
- Global harmonisation of legislative requirements for the management, monitoring and/or regulatory oversight of scrap metal facilities and activities.