

Report

Interregional Workshop: Code of Conduct and Guidance Implementation to Ensure Control of the Radioactive Sources During International Transfers

1-4 of November 2016

Sliema, Malta

1. Introduction

A workshop on the implementation of the Code of Conduct and Guidance to ensure control of radioactive sources during international transfer took place in Sliema, Malta from 1 to 4 November 2016. The meeting was arranged under the IAEA Interregional Project INT/9/182: Sustaining the Cradle to Grave Control over Sealed Radioactive Sources.

The workshop commenced with an opening address by the Hon. Minister Dr. Helena Dalli, Minister for Social Dialogue, Consumer Affairs and Civil Liberties of Malta. The workshop was attended by 43 participants from 20 Member States, all members of the Interregional Project 9182. The IAEA was represented by Ms Olga Makarovska and Mr Gert Liebenberg and an external expert, Mr Fred Morris from the United States was recruited to assist during the meeting.

2. Programme of Work

The meeting agenda, attached to this report, allowed for a combination of:

- presentations by the IAEA staff and the external expert. These presentations include Code of Conduct on Safety and Security of Radioactive Sources (Code) provisions, Guidance on the Import and Export of Radioactive Sources (Guidance) provisions, safety and security overview, physical protection guidelines, security systems and measures and detection and response to radioactive material out of control.
- country feedback sessions as well as workgroup discussions based on specific issues that were identified during the country feedback sessions. The country presentations focussed on aspects related to the import and export of radioactive sources and included the following topics:
 - o Legal and Governmental Framework for the safe and secure management of sealed radioactive sources during international transfers
 - o National procedures for the import/export/transit of sealed radioactive sources
 - o Combatting of illicit trafficking
 - o Ensuring control of sealed radioactive sources during international transfers
 - Areas where improvements are required
 - Plans for improvement
- Feedback by the respective workgroups on the outcomes of the workgroup discussions.
- A case study by an exporting Member State assessing safety and security during the import/export of DSRS.
- Preparation of country action plans for improvement and harmonization of national systems for the import/export/transit of radioactive sources.

3. Observations and Recommendations

All 20 Member States shared their national experience in ensuring the control of radioactive sources during international transfers in the form of national presentations. Exchange of experience and discussions of areas for improvement continued during the group sessions. Participants worked in 3 groups and reports of the chairpersons are attached.

The Member State feedback can be summarized as follows:

1. General

All Member States have made the political commitment to follow the provisions of the Code of Conduct on the Safety and Security of Radioactive Sources (Code). Member States' experience in the implementation of the Code differs: some Member States have made the political commitment to the Code recently (the last commitment was made in 2016), others took active part in the development of the Code and started to implement the Code provisions more than 10 years ago.

16 member states out of 20 have made the political commitment to follow the provisions of the Guidance on the Export and Import of Radioactive Sources (Guidance).

6 member states have not provided the IAEA with answers to the "Importing and Exporting States Questionnaire" (Annex 1 to the Guidance). Participants started to prepare the answers and were encouraged to send the answers to IAEA through the official channels. Only one member state reported that its answers should be updated. Member States were encouraged to keep the answers up to date, as the situation in the Member State may change.

All member states are importing radioactive sources. Only one Member State, namely Argentina exports newly manufactured sources, all other Member States export only disused sources.

2. Communication channels

Member States confirmed that communication channels for ensuring control during international transfers work properly but propose the following recommendations for further improvement:

- for Member States to appoint a deputy for the national Point of Contact (POC) to serve as an acting POC when and if the main POC is not available;
- for the IAEA to continue maintain the list of POCs up-to-date:
 - a. for Member States - when appointing POCs to take into account such communication issues as language skills and responsibility/ability to manage confidential information;
 - b. for Member States - revise and send the appropriate information to the IAEA when changes happen;
 - c. for the IAEA to inform Member States about the procedure for maintaining the POC information up-to-date;

d. for the IAEA – to officially remind all Member States on an annual basis about the necessity to revise POC information is and to inform the IAEA about the updates.

3. Legislative and Regulatory infrastructure

Member States continue to improve their legislative and regulatory infrastructure to implement the provision of the Code and the Guidance. The areas of further improvement are: effective national legislation and regulations; an independent and empowered regulatory body; promotion of safety and security culture; availability of appropriate facilities and services including services for searching for missing sources and securing found sources, services for intervention in the event of a malicious act, storage facilities and training infrastructure.

A particularly important area for improvement is in developing and implementing a security regulation.

4. Radioactive sources export/import control system

Export/import provisions of the Code and Guidance are basically implemented in the Member States' import/export authorization systems and are followed in practice. The areas for improvement are:

- Establishment of formal procedures (standard operating procedures) for export/import/transit according to the provisions of the Code and Guidance. In these procedures timelines for assessment, consent and notification prior to the shipment can be clarified;
- Evaluation of the capabilities of Member States to manage radioactive source safely and securely according to paragraphs 7, 11, 13, 15 of the Code. In this area all Member States have difficulties and propose that the IAEA should consider:
 - a. to prepare guidance concerning where the appropriate information about the country can be found published;
 - b. to create a shared space for each country that includes available and published sources of information;
- Harmonized actions in the case the of detection of radioactive material in transit: additional guidance from the IAEA is requested;

Member States reported that they had not used “exceptional circumstances” as described the Guidance.

Member States that have not answered the export and import questionnaire in Annex 1 of the Guidance are encouraged to do so and to send the IAEA these answers using official channels.

A discussion was held concerning whether the assessment is necessary in the case of the return (export) of a disused source to the country that exported that source.

Member States recognize that implementation of the provisions for evaluation, consent, and notification remains a problem as it depends on the other country actions and expect that the user in the other country can facilitate the process.

One group of Member States confirmed that regulatory bodies have the power to reject the application if consent is not granted and deny the import if the notification prior the shipment is not made.

5. National coordination

Most of the Member States have established a system of national cooperation and coordination between regulatory bodies, customs, border guards, first responders, police, security service and other authorities that provide for the control of export and import of radioactive sources and several notable practices were discussed in this area. However, Member States recognize this is as an area for improvement and recommend the use of all available mechanisms in the Member State to strengthen such cooperation:

- Interagency procedures of interaction established in the legislative and regulatory framework (orphan sources detection, border control etc.);
- Interagency committees, boards and working groups;
- Memorandums of understanding;
- Standard operating procedures

Examples of good practices are in the reports of the Groups chairs.

6. Gaining and regaining control over orphan sources

A majority of the Member States have in place provisions and a strategy for searching for, regaining control of, and securing orphan sources. The rapid response is typically part of emergency plans, which also includes procedures for bringing orphan sources under control.

7. Training for the persons that are involved in the control of radioactive sources during the international transfers

Most of the Member States have training arrangements for the regulatory body, customs, border guards, police and other first responders and the staff of other involved agencies. At the same time, using the systematic approach to the training is an area of improvement for many Member States, in particular:

- Establishing training centers recognized by the regulatory body where applicable;
- Training of trainers (empowering national capabilities) in order to achieve the international standards on security and safety. The IAEA can assist in this area;
- A national programme with periodic training, taking into account the rotation of personnel.

8. Border monitoring

Member States recognize that:

- radiation monitoring at the borders is important part of the export/import control of the sources;
- a border radiation monitoring system should include not only installation of monitors and other types of equipment. The essential elements of the border monitoring programme should be: maintenance, calibration, competence building, operational procedures with the involvement of all competent authorities, regular national and regional exercises and drills, etc. One of the groups proposed that a State's Strategy for Sustainable Border Monitoring and Control should cover: joint working programme/ national working group establishment; integrated standard operating procedures with the involvement of all relevant competent authorities; enhancement of capacity building programme; strengthening inter agency communication; developing of knowledge, skill and ability of individuals.

The important role of the exercises and drills following the monitoring alarm and detection of suspicious material is recognized.

The following areas of assistance are recommended:

- Assistance from international institutions on the deployment of radiation and nuclear detection equipment. For Member States with many ports of entry facilitating of the local production of the monitoring equipment can be a good solution;
- International assistance in equipping border control points with radiation detection devices.

9. International cooperation

Member States recognize the importance of international, regional and bilateral arrangements for the safe and secure management of the radioactive sources during international transfers. Member states agreed that these forms of cooperation should be promoted to the extent possible.

Different good practices of regional cooperation are provided in the group chairs reports.

General conclusion:

The general conclusion of the meeting is that the IAEA should continue the promotion of the Code and Guidance to all countries, including organizing workshops and international meetings for the exchange of experience.

AGENDA

Interregional Workshop: Code of Conduct and Guidance Implementation to Ensure Control of the Radioactive Sources During International Transfers

Sliema, Malta,

**Plaza Hotel, Regency Hall
1 – 4 November 2016**

Day 1

Time	Session	Action
9:30 – 10:00	<ul style="list-style-type: none"> • IAEA welcome address and opening • Hon. Minister Dr. Helena Dalli welcome address • Introduction of participants • Overview and conduct of the Workshop • Review and adoption of the Agenda 	Minister for Social Dialogue, Consumer Affairs and Civil Liberties, IAEA experts, Participants
10:00 – 10:30	<i>Coffee Break</i>	
10:30 – 11:00	Presentation: Code of Conduct - safety and security provisions for radioactive sources export/import and border control.	IAEA, Olga Makarovska
11:00 – 12:00	Presentation: Guidance – provisions and implementation experience.	USA Fred Morris
12:00 – 12:30	Practical example of guidance implementation by Malta.	Malta Paul Brejza & Joseph Cremona
12:30 – 14:00	<i>Lunch</i>	
14:00 – 15:40	Presentations: National system for the radioactive sources export/import and border control. (Albania, Argentina, Bosnia and Herzegovina, Bulgaria, Croatia, Cuba, Egypt, FYR Macedonia, Ghana)	Country Participants
15:40 – 16:00	<i>Coffee Break</i>	
16:00 – 17:50	Presentations: National system for the radioactive sources export/import and border control. (Georgia, Greece, Indonesia, Jordan, Libya, Malaysia, Montenegro, Morocco, Serbia, Tunisia, United Republic of Tanzania)	Country Participants
17:50 – 18:00	Establishment of 3 working groups and Chairs for national experience exchange, good practices and lessons learned disseminations and preparation of action plans for improvement and harmonization with Code and Guidance provisions	IAEA experts, Participants

Day 2

Time	Session	
9:00 – 9:30	Country Presentations Summary	IAEA, Olga Makarovska
9:30 – 10:30	Group Work (3 Groups): National experience exchange, good practices and lessons learned disseminations. Preparation of proposals for improvement of interregional cooperation to provide safety and security of radioactive sources during international transfers	Participants on 3 working groups
10:30 – 11:00	<i>Coffee Break</i>	
11:00 – 12:30	Group Work (cont.)	ALL
12:30 – 13:30	<i>Lunch</i>	
13:30 – 16:30	Site visit to Malta Freeport port to see the detection system, including a visit to Customs Station	ALL
16:30 – 17:00	<i>Coffee Break</i>	
17:00 – 18:00	Group work Presentation and discussion	ALL

Day 3

Time	Session	
9:00 – 10:00	Overview of Nuclear Security – How is it different from Safety?	Gert Liebenberg
10:00 – 11:00	Security guidance and physical Security at Facilities (NSS20, 14 and 11)	Gert Liebenberg
11:00 – 11:30	<i>Coffee Break</i>	
11:30 - 12:30	Security Systems and Measures	Fred Morris
12:30 – 14:00	<i>Lunch</i>	
14:00 – 15:30	Detection of and Response to Radioactive Material Out of Regulatory Control – e.g., at Borders (NSS 15 and 21)	Fred Morris
15:30 – 16:00	<i>Coffee Break</i>	
16:00 – 17:00	Case study – Assessing Safety and Security during Import/Export of DSRS – The Argentine approach	Argentina Ms. Soledad Rodríguez Roldán

Day 4

Time	Session	
9:00 – 10:30	Preparation of Country action plan for improvement and harmonization of national system for the radioactive sources export/import and border control with Code and Guidance provisions including national and international cooperation and coordination of export/import of radioactive sources.	Each country participants consulted by IAEA experts
10:30 – 11:00	<i>Coffee</i>	
11:00 – 12:30	The way forward: Roundtable report on countries' plans for radioactive sources safety and security enhancement during the international transfers	Participants, IAEA experts
12:30 – 13:00	Feedback, conclusions and recommendations. Closing	Participants, IAEA experts
13:00	<i>Lunch</i>	

Interregional Workshop: Code of Conduct and Guidance Implementation to Ensure Control of the
Radioactive Sources during International Transfers

Report of Chairman of Group A

Interregional Workshop: Code of Conduct and Guidance Implementation to Ensure Control of the
Radioactive Sources during International Transfers in Sliema, Malta from 1 – 4 November 2016 .

In the second day of the workshop the participants were split in three groups for discussing the national experience exchange, good practices and lessons learned disseminations to provide safety and security of radioactive sources during international transfers.

Group A has participants form Albania, Bulgaria, Egypt, Georgia, Montenegro, Morocco, Tunisia, Malta and was chaired by Mr. Rustem PACI from Albania.

The meeting took place in the premises of the hotel where the workshop were organized.

The working group A discussed issues as follows:

Code of Conduct

Infrastructure for regulatory control of the safety and security of radioactive sources

In all countries has been a strong process in developing regulatory infrastructure for safety and security of radioactive sources.

Most of the country of the group A has established legislation addressing mainly safety, but regarding the security legislations is in process of establishing. Some countries almost have some part of legislation regarding security in place which needs further improvement. These improvement is related with the role of other stakeholders in security like customs, border police, national security council etc...Some countries declared that has been having good practice for implementing security measures. Not in all country of the group is established effective system for radiation protection safety and security. Elements which need further attentions are:

- There is not appropriate financial support to deliver regulatory tasks;
- There is a lack of competence in RB;
- There are elements of managements system but is missing an integrated management system.

Many country has been establishing independent regulatory authority clearly distinct from any organization having role in promotion of nuclear techniques in the decision making process.

Almost all countries confirmed that core processes of RB are established for safety:

- Preparation of legislation,
- Authorization,
- Inspection,
- Enforcement.

The core processes for security are in early stage, and countries are in different stages of implementations.

Most of the countries declared that there are processes for establishing, Authorizations and recognitions of TSO, also in many of them not clearly required by law to establish such services.

Promotion of safety and security is done through training, meeting, promotion of safety and security culture, International cooperation, public involvements.

Legislation in all countries place the prime responsibility to the users.

The requirements and programs for qualification, training, competencies regarding safety are established, but for security there is a lack of training programs in place. (Minority of the countries have established security training program). No clear definitions of establishment of radiation security officer, role of stakeholder etc are in place.

All countries have in place provisions and strategy for searching regaining control and securing orphan sources. The rapid response is part of emergency plan as well as for procedures to bring them under control. Some countries do not have written strategy but they have written procedures how to react in case of detection of an orphan source.

Detection at border is established almost everywhere but this does not cover 100 % of entrance points. The system of detections is not fully efficient in all countries. Entrance points are equipped with RPM as well as hand held equipment and pagers.

There is established system of disseminations of information inside the countries but no formal procedures for coordinating with nearby countries, in case of trafficking of RS.

All countries have established, maintained and updated the Inventory of RS.

Procedures are in place for safe management of disused sealed radiation sources (return, reuse, recycle, store and disposal) in many countries.

Guidance

In most countries export procedure for Cat 1 and cat 2 sources are established, but not in all countries these procedures are in compliance with the Guidance.

Import Authorization for Cat 1 and Cat 2 are in established as well as the validity of authorization is from 2 months to 1 year. The time line for notification is not clear.

Exceptional circumstances never used during the import or export in all countries of the group.

Channels of communication for implementation of the guidance work properly, but some time there are the problems of language, different understanding of issues or sensitive information.

Group A conclude that IAEA shall continue to update of PoC data:

- By sending a request through official channels to MSs to update the point of contact once a year;
- By clarification of the procedure of updating the PoC information by the member State;
- Based on the information from country when changes happen;
- To be contact regulatory body with official email...
- By proposing to nominate two or more people with indication who is the first POC and to whom the requests can be addressed if the first POC is absent (deputy POC).

Suggestions

- MoU strongly facilitate the cooperation....
- Enforcement of the provisions for the evaluation, consent, notification remains a problem, the user in the other country of importing can facilitate the process.

The IAEA should continue the promotions of the code to all countries, as well as through organizing workshops and international meetings...

Interregional Workshop: Code of Conduct and Guidance Implementation to Ensure Control of the
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Report of Chairman of Group B

Participating countries: Croatia, The FYR Macedonia, Malta, Greece, Libya, Morocco, United Republic of Tanzania and Argentina

Chairperson: Ms María Soledad RODRIGUEZ ROLDAN from Argentina

In the group we discuss and conclude:

1. Point of Contact
 - All countries have Points of Contacts.
 - In our experience the channels of communication work properly.
 - The POC has to be updated regularly.
 - For us there are not problems in communication with POC.
 - There is need to have a person who acts as POC when and if POC is not available. However, it is necessary to consider that the POC needs to have experience and manages confidential information.
 - We recognized the importance of the POC.
2. National cooperation and interaction between Regulatory Body, customs, border guards, police, security, services, Emergency Response Agencies
 - Ideal situation is when such cooperation is covered by regulations (is established as a legal basis) and is supported by the memos of understanding and by the operating procedures.
3. Assessment of capabilities (paragraph 11 the Guidance)
 - It is difficult to make assess of capabilities;
 - Is necessary to know the "History" of the country;
 - IAEA should aid the State that export the disused source to evaluate the capability of the State that manufactured the source and to which the re-export is done. IAEA can provide guidance where the appropriate and public information about the State capabilities can be found.
4. Bilateral arrangements
 - Good idea if it can be arranged (political aspect can complicate appropriate agreements establishment).
 - The bilateral arrangements facilitate the exchange of information and harmonize the procedures in international practices for import and export.
5. Transit
 - During transit contaminated material can be detected at border crossings.
 - Contaminated material poses a problem to the State detecting it.
 - Some States send contaminated material back to country of origin.

6. Exceptional Circumstances

- No experience within the group.
- IAEA may decide to provide advice in such circumstances in view that the Agency is likely to have knowledge of destination State.

7. Sustainable training

- Adequate training of RBs, operators of facilities, customs, police, borders etc is of crucial importance.
- Ideally the RB will authorize a training organization.
- National/regional exercises are required to test procedures.

8. Border Control

- It is important to ensure that all relevant staff at borders is trained, this can be difficult due to high turn-over of staff.
- Need to have clearly defined procedures in place which will identify the responsibilities of all stake-holders.
- Need for sufficient monitoring equipment and that the equipment is maintained and calibrated.
- For Border control, and sustainable training, we recognized the need for technical facilities, with appropriate equipment and qualified staff.

9. Consent and notification. Is it followed in practice? How is it done?

- Yes it is followed (pursuant to Paragraphs 6, 7, 8, 9, 12, 14, 15 and 16 of the IAEA Guidance on the Import and Export of Radioactive Sources, and Paragraphs 23-25 of the Code of Conduct on the Safety and Security of Radioactive Sources).
- the Regulatory Body have the power to reject the application if consent is not granted or deny the import if the notification prior the shipment is not done.

Interregional Workshop: Code of Conduct and Guidance Implementation to Ensure Control of the
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Report of Chairman of Group C

Participants: Bosnia and Herzegovina, Cuba, Ghana, Indonesia, Malaysia and Serbia
Group was chaired by Dr. Syahrir SYAHRIR.

This is the Group C report on the Interregional Workshop on Code of Conduct on the Safety and Security of Radioactive Sources and Guidance on the Import and Export of Radioactive Sources in Malta, 1-4 November 2016. Each country member provided national experiences regarding good practices related to export/import radioactive sources in the group. Group also discuss challenges and the strategy to cope with. Finally, it discussed international assistance considered necessary to the country members.

Good Practices

Two countries disclosed internal cooperation and interaction among institutions related to import and export arrangement. Both countries have independent regulatory bodies (RBs) and exclusively have the authority on controlling radioactive sources. Indonesia develops National Single Window System (NSW) which consists of the RB and 14 Ministries. Each ministry to some extent have the authority in import and export. Under NSW, all parties develop the infrastructures and functions on import and export. Simplification on the procedures is encouraged and should be put in regulation. Malaysia develops Nuclear Security Support Centre (NSSC) to integrate the function of nuclear security and safety and radiation emergency among national institutions. It develops national front line officer (FLO) training to the customs, police etc. NSSC also develops Expert Nuclear Security Group to prepare trainers for FLO courses. Joint training and exercises are conducted with neighbouring country (Thailand).

One country mentioned that it considers as good practice finding consent from the regulatory body of the exporting country before a source is imported to the country. This is not required by regulation but is considered necessary to ascertain the products are already licensed in the country.

All countries issue import/export permit before a source is brought/sent out of the country. One RB is notified by the airport 48 hours before the arrival of radioactive sources.

Several countries have policy to export all DSRS to the importer countries. One country requires importers to get insurance in order the DSRS exportation later on can be conducted well.

It was mentioned that country members may utilize existing international cooperation like ASEANTOM (ASEAN Network of Regulatory Bodies for Atomic Energy) and Eu CAS Network and even bilateral diplomacy for the interest of import and export and border issues among the countries.

Challenges

Two countries indicate the need of border facilities including illicit trafficking like RPM and environmental radiation monitoring system. One concerns with the maintenance of the system. The cost of the equipment becomes the problem in providing them.

To get sustainable program, human resources development was discussed. Different ways on providing training centers are come up. A management system is needed to get a comprehensive training program starting from the goal, need analysis up to an effective training that achieve the goals. In the customs, the personnel rotation becomes concerned. Some countries have rotation every 2 years.

Several countries have no complete SOPs on export/import and need to provide them. Lack of legislation was detected to some countries. This situation generates problems in coordination with other institutions which already had acts related to the matter. One country has 3 inspections from 2 ministries and an RB on radiation. A harmonized regulator need to be created that simplify the control and avoid duplication.

Most countries have no agreement with other country regarding on illicit trafficking especially related to land borders. There are concerns on the need of aids from international institutions on the deployment of radiation and nuclear detection equipment. Indonesia has too many entry points (seaports). One solution to facilitate the equipment is by developing the capability of local content.

Strategies for Sustainable Border Monitoring and Control should cover :

- join working programme/ national working group
- integrated SOP among relevant/competent agencies
- enhancement of capacity building programme
- to strengthens inter agency communication
- development of knowledge, skill and ability of individual

International Assistance

1. Border monitoring system stand out profoundly. Not only the equipment is needed but also the infrastructure to build and the functions.
2. Assessment capabilities raised on evaluating importing products. Regarding on transit issues the capabilities of countries to assess the potential hazard of the items related to criticality and loading/unloading.
3. Training of trainers (empowering national capabilities) in order international standards on nuclear security and safety could be achieved.