Code of Conduct on The Safety and Security of Radioactive Sources

Noor Fitriah Bakri

POLICY, CODES AND STANDARD DIVISION

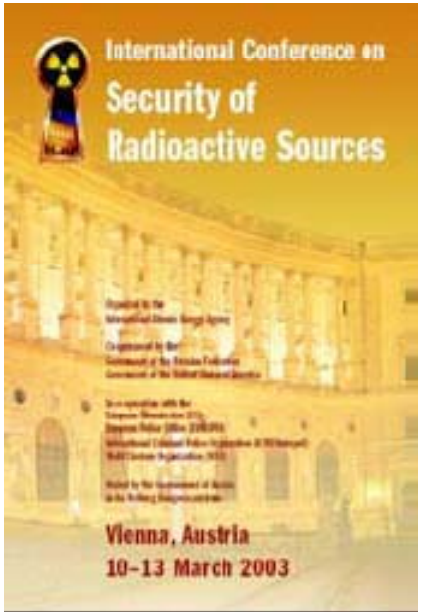
ATOMIC ENERGY LICENSING BOARD (AELB)

MINISTRY OF SCIENCE TECHNOLOGY AND INNOVATION

Security Awareness

Expert Group

Code of Conduct on The Safety and Security of Radioactive Sources



Code of Conduct on The Safety and Security of Radioactive Sources

- Approved by the IAEA Board of Governors on 19 September 2003

- Approved by the AELB Board of Meeting on August 2007

Objectives

- **to achieve and maintain a high level of safety and security of radioactive sources; and prevent unauthorized access or damage to, and loss, theft or unauthorized transfer of, radioactive sources, and**

Objectives

- **to prevent the malicious use of radioactive sources to cause harm to individuals, society or the environment; and mitigate or minimize the radiological consequences of any accident or malicious act involving a radioactive source.**

Objectives

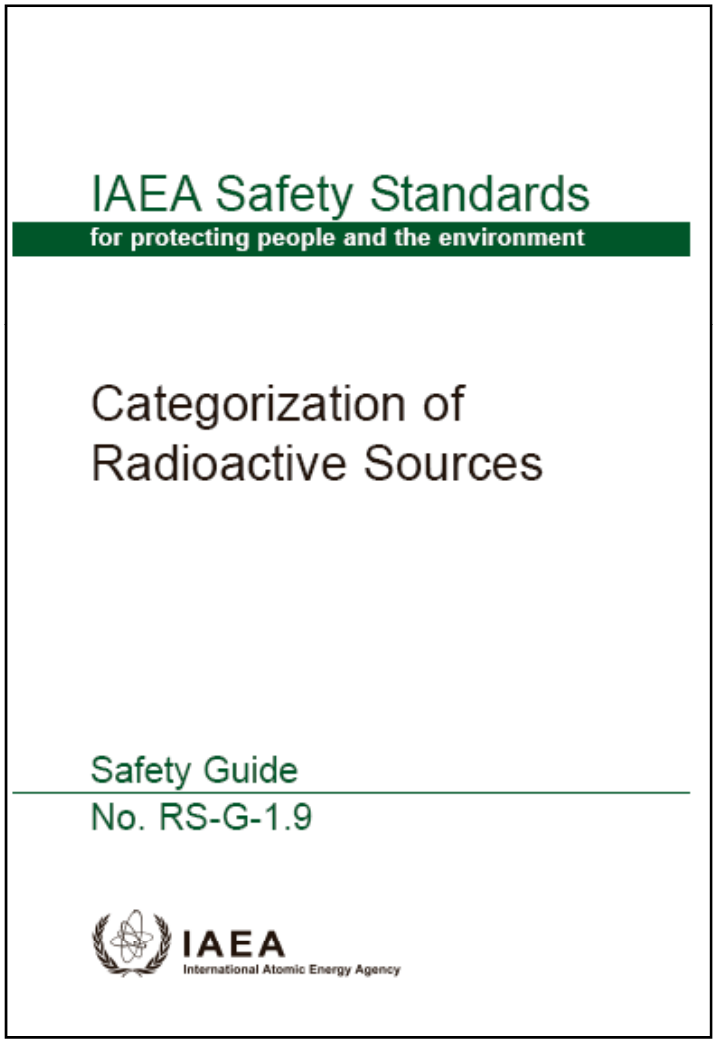
- **Ensure that sources are safely managed and securely protected during and at the end of their useful lives – Establish an effective national legislative and regulatory system of control, with primary responsibility on the persons authorized to manage sources**

3 elementary document to support the implementation CoC ;

1. **Categorization of Radioactive Sources**
2. **Security of Radioactive Sources**
3. **Guidelines on Import and Export of Radioactives Sources**

CATEGORIZATION OF RADIOACTIVES RS-G-1.9

- Provide a simple, logical system for ranking radioactive sources based on their potential to cause harm to human health
- Grouping the practices in which these sources are used into discrete categories.



CATEGORIZATION OF RADIOACTIVES RS-G-1.9

The purpose of categorizing radioactive sources is to provide a fundamental and internationally harmonized basis for risk-informed decision making. It is envisaged that the categorization system will be used as an input to many activities relating to the safety and security of radioactive sources, including:

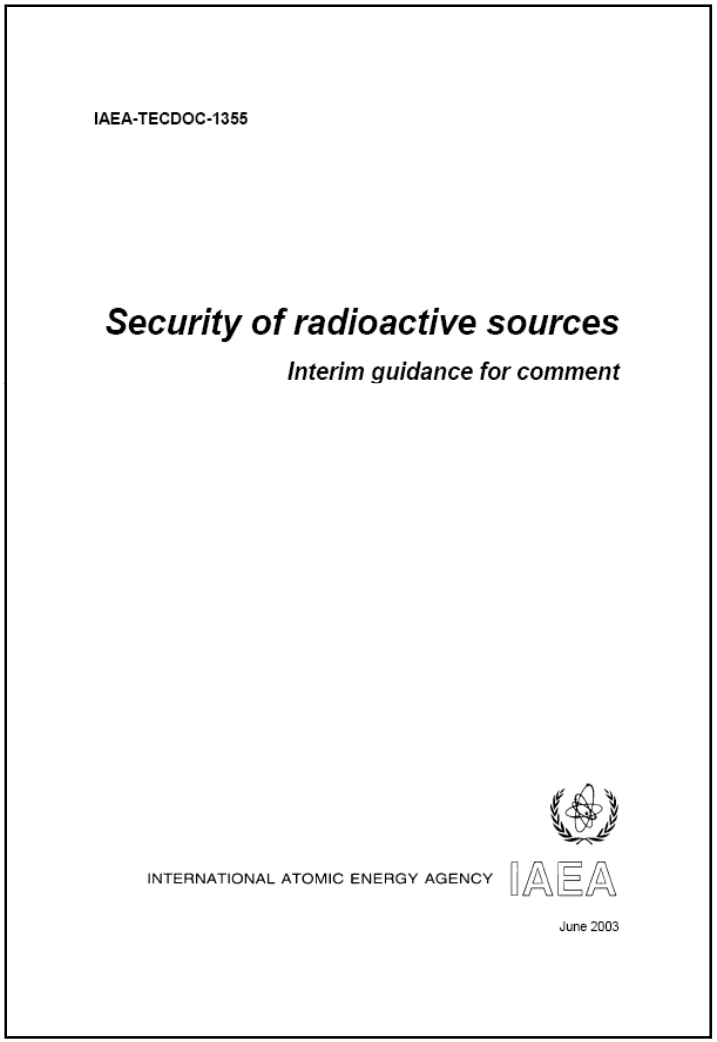
- Developing or refining international safety standards;
- Developing or refining national regulatory infrastructures to meet the circumstances of a State;
- Optimizing decisions about priorities for regulation within resource constraints;
- Optimizing security measures for radioactive sources, including potential malicious use; Emergency planning and response;
- Developing national strategies for improving control over radioactive sources; Other decision making.

SECURITY OF RADIOACTIVE SOURCES

Tecdoc 1355

- Intended to provide guidance to regulatory body, manufacturers, suppliers and users of sources in deciding which security measures are needed to ensure consistency with the International Basic Safety Standards and the Revised Code of Conduct for the Safety and Security of Radioactive Sources.

- It is recognized that there must be a balance between managing sources safely and securely, while still enabling them to be used by authorized personnel without undue hindrance



SECURITY OF RADIOACTIVE SOURCES

Tecdoc 1355

- The level of security should be commensurate with the potential hazard posed by the source, recognizing the need to ensure appropriate use of the source for beneficial purposes.
- To ensure security of sources requires that measures be applied to prevent unauthorized access to radioactive sources at all stages of their life cycle, as well as loss, theft, and unauthorized transfer of sources.
- To ensure the safety of radioactive sources requires controlling exposure to radiation from sources, both directly and as a consequence of incidents, so that the likelihood of harm attributable to such exposure is very low.

GUIDANCE ON THE IMPORT AND EXPORT OF RADIOACTIVE SOURCES

- This Guidance provides a common framework, to other radioactive sources in addition to Category 1 and 2 sources.
- Aggregation of sources that may pose a risk similar to Category 1 or 2 sources will be considered under the context of this Guidance

GUIDANCE ON THE IMPORT AND EXPORT OF RADIOACTIVE SOURCES

- This Guidance does not apply to sources or programmes that are not covered by the guidance in the Code.
- This is document is in accordance with activities furthering non-proliferation, nuclear security, and the avoidance of malicious acts using radioactive sources.

LICENSEES RESPONSIBILITY

- bear the responsibility for setting up and implementing the technical and organizational measures that are needed to ensure both the safety and security of the authorized sources.

LICENSEES RESPONSIBILITY

Ensure that sources are managed in accordance with the authorization:-

- when not in use, sources are promptly stored in an approved manner and relevant to the requirements of the category & security grouping to which the source(s) belong;
- the transfer of sources to another person is documented and that person is appropriately authorized to receive the transferred source;

LICENSEES RESPONSIBILITY

Ensure that:-

- financial provisions in accordance with regulatory requirements are in place for the safe disposal of disused sources

- sources are shipped and received in accordance with regulatory requirements

LICENSEES RESPONSIBILITY

- perform an inventory check of all radiation sources at regular intervals, including x-ray equipment, spent, calibration and crawler control radioactive sources.

- that all radioactive sources are surveyed when removed from, and returned to, storage.

LICENSEES RESPONSIBILITY

- apply the same survey and audit procedures to locations where extended field site work is taking place and where a temporary store is established.;

- if a radiation source cannot be located, take action as if an accident has occurred and shall immediately notify the Regulatory Authority.

LICENSEES RESPONSIBILITY

In addition to normal reporting requirements relating to safety issues, licensees should report to the Regulatory Authority:-

- any loss of control over a radioactive source;
- unauthorized access to, or unauthorized use of, a source;
- malicious acts threatening authorized activities;
- failures of equipment containing radioactive sources which may have security implications;
- the discovery of any unaccounted source.

Adoption of CoC

Way Forward?

AELB make compulsory

to licensee to implements elements of Code of Conduct on the Safety and Security of Radioactive Sources and the three supporting documents;

1. **Categorization of Radioactive Sources**
2. **Security of Radioactive Sources**
3. **Guidelines on Import and Export of Radioactive Sources**

in license conditions effective January 2009

Thank you