Nuclear Security Regulation



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WHO THIS MODULE IS FOR

The audience for this module consists of regulatory staff who are responsible for the licensing, regulation and oversight of security for nuclear and other radioactive materials. The module is also relevant to those with responsibilities for regulatory compliance at the licensee/operator of facilities with nuclear or other radioactive material. It also provides useful guidance and knowledge for stakeholders who wish to gain a better understanding of regulations and have an interest in helping to ensure that the regulatory regime is both effective and efficient.

KEY ISSUES

The fundamental objective of nuclear regulation is to ensure the safe and peaceful use of nuclear energy in any given State. This can only be achieved with the promulgation and implementation of effective national legal infrastructure, where nuclear security regulatory bodies have appropriate responsibilities to set requirements, monitor licensee performance, and take appropriate action when licensees are not in compliance with the requirements. The approach to regulation within a State is an important factor in the relationship between regulatory bodies, their licensees and the public, giving confidence that adequate measures are in place for the prevention and detection of, as well as response to, criminal or other intentional unauthorised acts involving or directed to nuclear and other radioactive material, associated facilities, and associated activities.

KEY LEARNING OBJECTIVES

By undertaking this module, participants will gain an understanding of the important aspects of nuclear security regulation including the functions, powers and activities that are involved in the licensing and oversight of nuclear security in relation to activities and practices with nuclear and other radioactive materials, associated facilities and associated activities. This Module will also consider the extent to which Regulators in certain States have a responsibility for activities associated with prevention, detection and response to nuclear and other radioactive material out of regulatory control (MORC).

By the time you have completed this module, you will understand:

- The features of nuclear law that inform the legal and regulatory framework for nuclear security
- The role of international instruments supporting a national nuclear security regulatory framework
- The role of the State in the creation of a legal and regulatory framework for nuclear security
- The considerations for establishing a regulatory body for regulation of nuclear security
- The legal powers a regulatory body requires to effectively discharge its activities.
- The different regulatory approaches for nuclear security regulation, including whether it also regulates safety and safeguards
- The activities of a regulatory body, including authorisation, inspection, investigation and enforcement
- The functions and activities of a regulatory body for materials out of regulatory control (MORC)
- The relationship between a regulatory body, other law enforcement bodies, its licensees and the public
- The different approaches to regulation that may be taken (prescriptive, performance, hybrid)
- Challenges that a State may face in considering new issues in nuclear security regulation
- How a regulatory framework covers the interface between safety, security and safeguards
- Incorporation of nuclear security culture in the regulatory framework
- Security by design and its impact on the regulatory framework
- The requirements to demonstrate competency in nuclear security for both the regulator and licence





OUTLINE

UNIT 1: OVERVIEW OF LEGAL AND REGULATORY FRAMEWORK FOR NUCLEAR SECURITY

- 1.1 Nuclear law
- **1.2** The legal and regulatory framework for the control of nuclear activities
- **1.3** The international framework that supports nuclear security regulation

UNIT 2: THE REGULATION BODY

- 2.1 Establishing the regulatory body
- 2.2 The difference between 1S, 2S and 3S regulatory bodies
- 2.3 The main functions and powers of a regulatory body

UNIT 3: REGULATORY ACTIVITIES

- 3.1 The regulatory role of the design basis threat and representative threat statements
- 3.2 The regulatory role in the evaluation and licence application
- 3.3 The process of conducting inspections
- 3.4 The process of conducting investigations
- 3.5 The role of enforcement powers and penalties in a regulatory framework

UNIT 4: THE PRACTICE OF REGULATION

- **4.1** Understanding the different regulatory approaches
- **4.2** The main function of the regulatory body in relation to the public
- 4.3 The relationship between the regulatory body and the licensees
- 4.4 The activities of the regulatory body in relation to MORC

UNIT 5: REGULATORY CASE STUDIES

- 5.1 Establishing nuclear security regulation
- 5.2 The evolution of a regulatory body from a 1S to 2S to 3S approach
- 5.3 Considerations when amending nuclear security regulation
- 5.4 A licensee's perspective of changes to regulatory approach
- 5.5 A licensee's perspective of internal oversight and assurance

COURSE SUMMARY

