Nuclear Security Regulation



CONTENTS

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 other stakeholders who interact with regulators and have an interest in helping to ensure that the regulatory regime is both effective and efficient.

KEY ISSUES

The fundamental objective of all nuclear regulatory bodies is to ensure that nuclear licensees operate their facilities at all times in a safe and secure manner. It is the responsibility of nuclear security regulators to set requirements, monitor licensee performance, and take appropriate action when licensees are not in compliance with the requirements. Regulations that involve overwhelming layers of requirements, bureaucracy and red tape not only hamper the regulated, but also the regulators, thereby increasing unproductive costs for everyone involved.

KEY LEARNING OBJECTIVES

By the end of the course, participants will understand the benefits of an outcome-focused, risk-based approach to nuclear regulation and implementation, how to build trust between regulators and licensees, the steps in the regulatory cycle, and how to measure regulatory performance and competence.





OUTLINE

UNIT 1: THE EVOLUTION OF REGULATORY REGIMES

- 1.1 Overview of Regulation
- 1.2 Failures in Regulation
- 1.3 Alternatives to Regulation

UNIT 2: FACTORS CONTRIBUTING TO EFFECTIVE REGULATION

- **2.1** Building Trust between Regulators and Operators
- 2.2 Regulatory Independence
- 2.3 Effective Regulatory Reporting

UNIT 3: THE REGULATORY CYCLE

- 3.1 The Design Basis Threat
- 3.2 The Phases of Regulation; Permissioning, Inspection and Enforcement
- 3.3 The Enforcement Management Model
- 3.4 A Security Event/Non-Compliance Assessment Scale
- 3.5 Other Regulatory Activities

UNIT 4: STYLES OF REGULATION

- **4.1** Prescriptive versus Performance-Based Regulation
- 4.2 Self-Regulation and Co-Regulation
- 4.3 Operator Assurance Programmes

UNIT 5: REGULATORY PERFORMANCE AND COMPETENCE

- 5.1 Measuring Regulatory Performance
- 5.2 Strategy Mapping and Performance Metrics
- 5.3 Competency Requirements for Nuclear Security Regulators
- 5.4 The Safety/Security Interface: Consequences for Regulation

COURSE SUMMARY

