The WINS Academy Elective on Nuclear Security Incident Management has been designed for managers in the nuclear and emergency response communities, as well as regulators, government departments and others who want to gain a broad understanding of the issues. It should also assist those who are planning to develop nuclear facilities and emergency management systems. The content of the module is based upon practical experience, research, and best practice as identified from WINS’ broad membership, relevant workshops, and expert professionals in the field—not only in the nuclear industry, but also in other relevant industries such as aviation.

Each State is legally accountable for its own nuclear safety and security arrangements and for introducing legislation and regulations that ensure its nuclear operators comply with national requirements. Amongst the plethora of guidance and standards that have been developed are requirements that emergency arrangements be put in place should an incident cause a radiological or nuclear event. The potential consequences of such an incident could extend far beyond the site perimeter and have international consequences and repercussions. This is why stakeholders at all levels—international, national, regional, and local—need to plan and test their arrangements regularly to ensure that their incident management will be as rapid, effective and coordinated as possible.

The module aims to address some of the key issues that organisations could face when planning and implementing security incident management arrangements. In doing so, it recognises that circumstances will vary from State to State. Therefore, the purpose of the module is not to establish standards but to provide insight into the principles of effective emergency management and incident response and to ask informed questions that will prompt reflection and further enquiry. The module’s overall objective is to give participants the opportunity to identify and address potentially complex issues that could arise when responding to security incidents (including the use of deadly force) and to translate their understanding into relevant and effective planning, training, exercising and deployment activities in their particular context.

By the end of this module, participants will understand:

— The strategic context for creating an effective Nuclear Security Programme and implementation strategy.
— Who the stakeholders are in this process and how and why their viewpoints could differ.
— How to categorise the threat using a threat assessment scale developed specifically for nuclear security.
— The hierarchy of people who would respond to a nuclear emergency, the agencies and departments they would come from, and the ways in which they could work together to resolve the situation.
— What is involved in commanding, controlling and coordinating a major incident, as well as why it is so important to document all decisions made.
— Some of the most important questions and issues surrounding the use of an armed guard force.
— What might happen in the post-incident management phase and what they need to do to prepare for it.
OUTLINE

UNIT 1: UNDERSTANDING THE STRATEGIC CONTEXT
  1.1 The Need for a National Nuclear Security Strategy
  1.2 The Importance of Stakeholder Perspectives
  1.3 Existing Guidance for Emergency Response and Incident Management

UNIT 2: MANAGING INCIDENT RESPONSE
  2.1 Incident and Crisis Management Planning
  2.2 Threat Assessment
  2.3 The Hierarchy of Incident Command
  2.4 Tactical Command: The Incident Management Team

UNIT 3: IMPLEMENTING COMMAND, CONTROL, AND COORDINATION
  3.1 Logistical Considerations
  3.2 Multi-agency Command, Control, and Coordination
  3.3 Principles of Interoperability and Joint Working

UNIT 4: PREPARING THE GUARD FORCE
  4.1 Effective Response Arrangements
  4.2 Guard Force Training
  4.3 Self-Sufficiency
  4.4 Tactical Response Plans and the Use of Deadly Force
  4.5 Remotely Operated Weapon Systems
  4.6 Transporting Nuclear Material

UNIT 5 POST-INCIDENT MANAGEMENT
  5.1 Evidence Gathering and Forensics
  5.2 Lessons to Be Learned about Interoperability

UNIT 6: PUTTING IT INTO PRACTICE: SCENARIO DEVELOPMENT