Detailed Description	
Course Full Name	**Radiation Detection Techniques for Nuclear Security Applications**
Purpose of the course	This course is addressed to front-line officers, border guards, customs officials and law enforcement officers around the world using handheld radiation detection instruments. This course explores radiation basics, how to work the basic functions of radiation detection equipment for nuclear security applications, when and how to use them, and how to verify and respond to an equipment alarm.
Target audience	This course is addressed to front-line officers, border guards, customs officials and law enforcement officers around the world using handheld radiation detection instruments, as well as participants of relevant face-to-face training and other human resource development activities implemented by the IAEA and its Member-States. Interested nuclear facility personnel and the public are also welcome.
Syllabus	1. Introduction 2. Radiation Overview 3. Introduction to Radiation Detection Equipment 4. Main Operations of Radiation Detection Equipment (RPM, PRD, RID, NSD) 5. Verification of Alarms and Confirmation of Incidents 6. Radiation Detection Scenarios
Learning Outcomes	After completing this course, the learner should be able to explain 1.1 The role of the International Atomic Energy Agency (IAEA) in the area of nuclear security 1.2 The role of radiation detection in a nuclear security system 2.1 The basics of radiation 2.2 The different types of radiation 2.3 The effects of exposure to radiation 2.4 How to stay safe when dealing with radioactive material 3.1 The reasons for using radiation detection equipment 3.2 The different types of equipment **(RPM, PRD, RID, NSD)** and their characteristics 3.3 An introduction to each of the four instruments that we will cover in more detail 3.4 Factors that might affect the detection of radiation 4.1 The different types of alarms, such as real, innocent and false 4.2 Identifying how to respond to alarms from your equipment 4.3 When expert support is necessary 4.4 Three factors that tell you when an incident is potentially hazardous 4.5 The importance of documenting the process 4.6 Safety principles, such as verifying the dose rate indication
Knowledge Domain	
Keywords	Radiation Detection, Nuclear Security, Front Line Officer, Polimaster, Thermo, Identifier, Aspect
Pre-requisites	none
Language	Arabic, Chinese, English, French, Korean, Russian, Spanish
Interactivity	Self-study
Format	Online e-learning
Duration	3 h 30 min
Assessment	Assessed
Certification	Certificate of Completion
Version Number	v1.00
Version Date	
Unique Technical Requirements	N/A
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