



Webinar on Overview of Operation and Maintenance of Handheld Detection Equipment

**Organized by the
IAEA Division of Nuclear Security**

Thursday, 01 December 2022

Scheduled at: 10:00, Vienna (Austria) Time

Duration: 1 hour

Information Sheet

Introduction

The IAEA Nuclear Security Series (NSS) [Implementing Guide No. 21“Nuclear Security Systems and Measures for the Detection of Nuclear and Other Radioactive Material out of Regulatory Control”](#), highlights the use of handheld detection equipment as one way to detect criminal or unauthorized acts related to nuclear and other radioactive material out of regulatory control (MORC).

In general, detection equipment is classified into passive and active detection technologies, both of which are commonly used worldwide. Passive detection equipment directly measures normal emissions of radiation from nuclear or other radioactive material, while active detection equipment works indirectly by detecting something else that may indicate the presence of nuclear or other radioactive material.

Passive detection instruments are generally less expensive, present no additional hazard to personnel and are available in several types, including handheld detection equipment. Handheld detection equipment, such as personal radiation detectors (PRDs), covers a wide array of operational needs. PRDs allow operators to continuously monitor for the presence of radiation and signal elevated levels of gamma or neutron emissions. Meanwhile, radionuclide identification devices (RIDs) help operators to identify the type of radionuclide that activates the alarm. Due to their comparatively low cost and distinct capability, passive handheld detection instruments are common tools for the detection of MORC.

This webinar focuses on the operation of common handheld detection equipment and the maintenance required for its sustainability.

Objectives

The purpose of this webinar is to:

- Raise awareness on the types of handheld detection equipment that may be used in the detection of MORC;
- Provide details on the operation of handheld detection equipment;
- Give an overview of maintenance requirements for the sustainability of handheld detection equipment.

Target Audience

This webinar is aimed at professionals from Member States responsible for the detection of MORC with existing basic knowledge of the operation of handheld passive detection equipment.

Working Language(s)

English

Registration

Please register for the webinar using [this link](#) not later than **30 November 2022**.

After the registration and acceptance of your participation, you will receive an electronic mail containing information on how to access the webinar by following a hyperlink to join the WebEx meeting or by calling in by phone.

You can test your ability to connect to a WebEx meeting at the following link: <https://www.webex.com/test-meeting.html#>. Please contact your IT department if the test fails.

For additional help regarding registration, please contact Mr Elder Magalhaes De Souza (E.DeSouza@iaea.org) or Henry Adams Jr (H.Adams@iaea.org).

Webinar Programme

Introduction

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Overview of Operation and Maintenance of Handheld Equipment

Mr Elder Magalhaes De Souza, *Nuclear Security Officer (Equipment and Instrumentation), Nuclear Security of Materials Outside Regulatory Control Section, Division of Nuclear Security, IAEA*

Q&A and Conclusions