



European
Commission

Radiation and nuclear detection – Advanced Module

eLearning module

This easy-to-use eLearning module aims to help the customs officers to learn about the radioactive and nuclear control at border, being land, airport or seaport borders.

In this course, you will learn about the customs officers' role in detecting nuclear and radioactive materials, exploring more advanced concepts like the primary and secondary inspections, the development of NORM databases or more advanced information related to radiation detectors.

Another module in this topic is also available. To fully benefit from this course, we recommend to follow the Basic module first and then the Advanced module. And also to integrate the courses in your own training programme and to develop a full blended learning programme.

Target audience

Customs officers, especially if they work at border controls. As the course contains sensitive information, it is only available for customs national administrations.

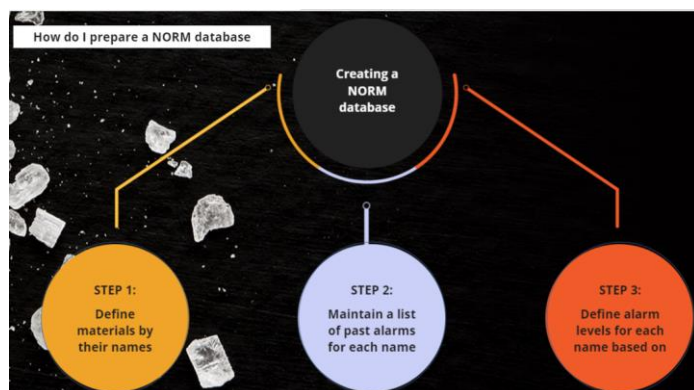
Course duration

The course takes around 1 hour.

Available languages

The course is available in English.

Consult the table on the [EUROPA](#) website to check the availability of further EU language versions.



Learning objectives

At the end of the course, you will be able:

- to understand how to develop a NORM database;
- to perform primary and secondary inspections, and which are the key elements you need to keep in mind during these processes;
- to understand the front-line officers' performance and evaluation, with emphasis on frequent mistakes and error you will need to avoid in your work;
- to get more advance information related to radiation detectors and their use.

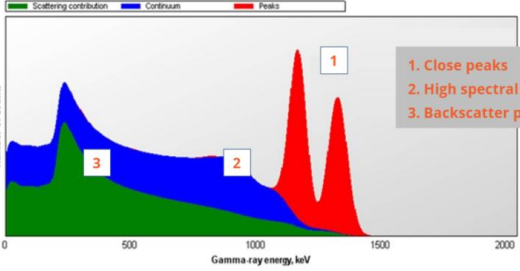
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Menu Course map Glossary Library Print Help EU eLearning

5. Spectral interferences. Masking

5.3. Detector resolution

The types of spectral interferences ("masking scenarios"). Spectral interferences are the inability to identify radio-nuclides because of the presence of other radio-nuclides.



Click on the **graphs** to find more information!

Particularities of this course

The course includes an interactive section with real case stories: chapter 6 – Case files. Here the users can choose between 3 scenarios (seaport, airport or land border) and follow a real example exercise taking the correct decisions in each step of the process.

General Features

You may interrupt your course. When reopening the course you can resume where you have left the course off.

Besides the menu, in the upper toolbar of the course, a course map allows you to quickly access the sections and subsections.

A course summary of the most relevant information is available in a printable format. You can also print any screen of the course with the print option.

How to start and use the eLearning course?

- Select the version you wish to download.
- You have the choice between 'non-SCORM' (iso, exe, html/html5) and 'SCORM' (for LMS systems).
- If you use a 'non-SCORM' version, read the Quick Start Guide available in the downloaded zip folder. It explains how to install the courses to your system.
- Using the course does not require a high level of information technology skills from the learners.
- In case of technical issues contact first your local administrator. If the problem persists, send the description (including screenshots) to taxud-elearning@ec.europa.eu

Contact: DG TAXUD / E3
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