

## **WP 3 Define requirements for RPO competencies and establish European guidance for RPO training**

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## **WP 3 Define requirements for RPO competencies and establish European guidance for RPO training**

### **Background**

RPO in hospitals, industrial companies or teaching and research institutions should have an adequate level of understanding of concepts related to radiation protection and understand the radiation protection issues pertinent to their radiation application. Therefore, the level and format of training required by an RPO is dependant on the complexity of that application.

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### **EUTERP - Conclusions: competence of the RPO**

- competence is built by knowledge, training and experience.
- general support for the description of core competencies and additional practice-specific elements.
- competence of RPO should be elaborated in a guidance document.

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### WP3 - Description of work

- Identification of the required level of knowledge, understanding and competence for RPOs across the range of applications of radiation.
- Establishment of European guidance on the content and mechanisms for delivery of RPO training.

=> Development of a work programme for WP3 and organisation of meetings with WP3 participants.

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### Work programme for WP 3

Elements defining the competence of RPO

- minimum educational level (which level for which application/task)
- appropriate training (course content/duration)
- work experience (how long for which application/task)
- ability to supervise (is it required by law / in practice)

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### Work programme for WP 3

**Educational levels** depend on skills and technical requirements of the job as well as on radiation protection needs.

- ▶ Define minimum requirements: secondary level or lower?  
Some application might require tertiary level

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### Work programme for WP 3

#### Training:

Provided in courses including practical exercises, case studies, etc.

- core knowledge
- further practice-specific training

- ▶ Define minimum duration of training for a variety of applications, criteria?

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### Work programme for WP 3

#### Work experience:

Significant experience of routine procedures and emergency arrangements is needed before an individual is appointed as RPO

- ▶ Define minimum duration of work experience for a variety of applications
- ▶ Criteria: for example, activity of the source, sealed or unsealed source, complexity of the application, etc.



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### Work programme for WP 3

#### Ability to supervise:

- Communication skills
- Able to exercise some authority
- Close involvement with the work in question
- Knowledge and application of local procedures

► Is it required everywhere? How is this assessed?

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### Work programme for WP 3

#### Assessment of competence:

after completion of the appropriate education, training and work experience, it has to be assessed if the individual is

- able to apply knowledge effectively
- able to exercise sound judgement
- able to supervise

► How is it done? For example, by specific exercises/tasks to be carried out?

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### Work programme for WP 3

#### Maintenance of RPO competence:

- participate in refresher courses,
- update training, (new equipment/procedures)
- RPO takes pro-active role

► How is this regulated/done in practice in European countries?

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### **WD3.1 Report on Requirements for RPO Competencies**

Content:

- Summary
- Introduction
- RPO on the EU level
- RPO on the international level
- Competence requirements for the RPO
- Conclusions
- References

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### WD3.1 Report on Requirements for RPO Competencies

**RPO on the European level** Draft Euratom BSS (Version Feb. 2010)

Radiation Protection Officer (RPO):

*an individual technically competent in radiation protection matters relevant for a given type of practice who is designated by the undertaking to oversee the implementation of the radiation protection arrangements of the undertaking.*

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### **WD3.1 Report on Requirements for RPO Competencies**

#### **RPO on the European level** Draft EuratomBSS (Version Feb. 2010)

EC is requesting an adequate legislative and administrative framework for providing appropriate radiation protection education, training and information to all individuals with specific competences in radiation protection.

In particular with regard to RPO: =>

- RPO is required to perform radiation protection tasks within undertakings;
- undertakings have to provide to the RPO the means necessary to carry out their duties.
- RPO has to report directly to the undertaking.

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### WD3.1 Report on Requirements for RPO Competencies

#### RPO on the international level (IAEA Safety Glossary)

*A person technically competent in radiation protection matters relevant for a given type of practice who is designated by the registrant or licensee to oversee the application of relevant requirements established in international safety standards.*

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### WD3.1 Report on Requirements for RPO Competencies

#### RPO on the international level

IAEA Safety Guide on “Building competence in radiation protection and the safe use of radiation sources”

IAEA Safety Report on “Training in radiation protection and the safe use of radiation sources”

► stated that “*competence means the ability to apply knowledge, skills and attitudes so as to perform a job in an effective and efficient manner and to an established standard*”.



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### **WD3.1 Report on Requirements for RPO Competencies**

#### **Conclusions**

- RPO need appropriate training in radiation protection and a certain level of work experience tailored to the specific needs to fulfil particular radiation protection tasks.
- Definition and role of RPO as well as training requirements have been considered on the European and on the international level.
- Main requirement for RPO competencies: a combination of training (successful completion of a suitable course) and work experience, together with personal attributes (ability to apply knowledge effectively). This combination will enable the person to act as RPO.

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### Observations:

- other than the issues of general competency and suitability, there is no prescription on the European or international level of any “specification” of the individual being an RPO.
- difficult to draw any dividing line between an RPE and an RPO; clearly some RPE have also the function of an RPO in his/her institution and some RPO can certainly be considered as RPE.

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### Observations:

- building RPE competence is more easy, since RPE is a full-time professional RP and a reference training scheme exists,
- building RPO competence is more complex, since RPO is a function carried out mostly part-time by a worker (for example, a medical doctor or an industrial radiography operator), building competence is a complex issue and depends much more on the area of application

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### **WD3.2 Establishment of European guidance for RPO training**

Outline of the content of this report:

- Role, functions and duties of the RPO
- Competence requirements:
  - Educational requirements
  - Training (core syllabus, practice specific modules)
  - Work experience
- Assessment of competence
- Maintenance of RPO competence
- Mechanisms for delivery of RPO training

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### **WD3.2 Establishment of European guidance for RPO training**

#### Role, functions and duties of the RPO

Depending on the nature of the practice, the tasks of the RPO may include the following:

- ensure that work with radiation is carried out in line with specified procedures or local rules;
- oversee the implementation of the programme of workplace monitoring;
- maintain adequate records of radioactive sources held by the practice;
- carry out periodic assessments of the condition of the relevant safety and warning systems;
- oversee the implementation of personal monitoring and health surveillance programmes;
- give new employees an introduction in local rules and procedures;
- give advice and comments on work plans; authorise work plans;
- participate in the arrangements for emergency exposure situations; etc.

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### **WD3.2 Establishment of European guidance for RPO training**

Examples for RPO training divided into professional categories or competence groups:

- medicine, dentistry
- handling of radioactive materials and practices on installations producing ionising radiation
- operation of x-ray equipment (technical, medical (without patients), veterinary medicine)

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### **WD3.2 Establishment of European guidance for RPO training**

**ENETRAP II WD3.1 and 3.2 deliverables => Guidance document**

### ***Requirements for RPO competencies and guidance for RPO training***

To assist the implementation of Title V of the Euratom Basic Safety Standards :  
Requirements for Radiation Protection Education, Training and Information

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**THANK YOU FOR YOUR ATTENTION**