

HERCA Task Force on Education and Training on Radiation Protection

Questions obtained on the ENETRAP guidance draft
requirements related to RPE/RPO

3.3.1 Framework for RPE recognition according to ENETRAP

Establish requirement for RPE Recognition in national legislation

A requirement for those wishing to act in the capacity of RPE to have their capacity to act recognized by the relevant Competent Authority must be included in national legislation.

Establish the criteria upon which Recognition is awarded

The criteria that are required to be satisfied for RPE Recognition should be clear to all parties, that is, to potential RPEs, those assessing RPE competence and those charged with awarding Recognition.

The overarching criterion is that **anyone seeking RPE Recognition** must be able to demonstrate that the **requirements** summarised in Table 3 in section 3.2 have met, with all the **specific criteria** associated with each of the individual having been addressed.

These requirements should be readily available to all parties, either directly from the Competent Authority or via any third party organisation empowered by the Competent Authority to manage RPE Recognition within a national framework. Bespoke webpages can be a useful tool in this respect.

Need of **consensus of criteria** such as for example **the required work experience** to recognize RPE to be able to also be recognized as RPE in another country. May be difficult, since in The Netherland for instance one needs to be recognized as RPE to be able to work as one. It is therefore allowed to register for the first time as RPE without 3 years working experience but with proper training. However, for re-registration working experience is required.

3.3.1 Establishment of an RPE recognition framework: step 3 Identify/Recruit Assessors

The role of the **Assessor** in the RPE Recognition process is a key one. For the status of RPE to have value and to be viewed as a trustworthy source of expert advice there must **confidence in the recognition process** – specifically, confidence in the ability of those undertaking the assessment of competence of prospective RPEs to exercise sound judgement. This being the case **Assessors should themselves be able to satisfy the criteria of core competence for RPE** and have **significant experience in operational radiation protection**. They should be professionals in their own right with an expectation that they are able to remain independent and impartial and to act with rigor but remain flexible. It is a reasonable expectation that Assessors are members of national Radiation Protection Societies (where these exist) and, although not considered essential, there may be an advantage in Assessors being active in the international arena. In summary then, an Assessor is expected to be experienced, professionally competent and an active contributor in the radiation protection arena. In effect, the assessment is a peer review.

It need not always be the case that the assessment is undertaken by a single individual; a **panel or consortium of individuals could make a collective decision**. Such an approach may be an advantage where, for example, existing expertise within a Member State may be limited. It will also help eliminate any potential bias in the decision making process. However, irrespective of the approach taken the overall criteria for this undertaking the assessment should be the same.

Step 3 Identify/Recruit Assessors continued

Any individual, or group of individuals, charged with undertaking the assessment of competence of prospective RPEs should be expected **satisfy the following criteria:**

- (i) Be able to satisfy the criteria for core RPE competence
- (ii) Be active in the field of radiation protection, having a minimum of 10 years operational experience
- (iii) Be a member of a recognised RP professional society
- (iv) Act independently and remain impartial
- (v) Be an active contributor to the radiation protection profession on a national basis and/or in the international arena.

The selection and appointment of assessors will be the responsibility of the Competent Authority.

Need of **consensus on the qualifications of the assessor** judging whether an RPE can be recognized. May be difficult, since the number of individuals complying with the RPE competences and having a minimum of 10 years operating experience with active contribution to RP profession (national and/or international) might be limited as is the case in the regulatory body of The Netherlands.

Identify individuals or organizations with authority

Once a prospective RPE has demonstrated that he has met all the specified criteria of competence (see table 5 below) then RPE status can be conferred, that is he/she may be formally recognised as a Radiation Protection Expert. The Competent Authority should clearly establish where responsibility for awarding, or conferring, RPE status lies.

Consensus needed. In The Netherlands the competent authority undertakes both the assessment and the subsequent rewarding of recognition.

There are a number of options for this:

- i) The Competent Authority undertakes both the assessment of competence
- ii) The assessment of competence is undertaken by a 3rd party acting in accordance to an operating specification from the Competent Authority; the outcome of that assessment is forwarded to the Competent Authority for consideration and subsequent awarding of recognition. As with (i), the final decision lies with the Competent Authority.
- iii) Both the assessment of competence and awarding of Recognition is undertaken by a 3rd party acting in accordance to a specification from the Competent Authority.

Steps in recognition according to ENETRAP

The prospective RPE submits the required documentary evidence to the RPE Assessor or Assessing Body.

The nature and format of the evidence that prospective RPEs (once eligible) are required to submit to those assessing the competence should be clearly stated and understood. Documentary evidence should be submitted in support of all core requirements for recognition and must be sufficient in terms of quantity and level of detail to demonstrate that all specified criteria of competence have been satisfied.

Consensus needed on the content of the required documentation

Assessors consider the evidence.

All of the evidence submitted should be assessed against the relevant specified criteria for demonstrating competence in each of the core areas. Any evidence for education and training activities is likely to be straightforward and self-explanatory and with little, or no, interpretation required by the Assessors. The submitted evidence for developed professional competence must be sufficiently detailed to allow the assessor to gauge competence; this will require examination of the information provided for illustration of the effective application of knowledge and skills.

Uniform assessment of evidence is needed to assure equal judgement enabling exchange of RPE's between MS

ENETRAP guidance: questions raised

Assessors consider the evidence. Continued

If the assessment, on the basis of the submitted evidence is that core competence is demonstrated it is considered prudent for the assessor(s)/assessing body to conduct an interview with the prospective RPE. The objective of such an interview would be to confirm that the RPE understands of the underpinning principles and the wider factors influencing radiation protection and to assess verbal communication skills.

Consensus needed, in the Netherlands for example an **interview** with the prospective RPE is at the moment not part of the RPE recognition process.

Retention of RPE status

Once awarded, the period of validity of RPE recognition should not exceed 5 years. Re-recognition should, be required if the individual wishes to continue to practice as an RPE. In order to obtain re-recognition and RPE should be required to submit evidence of continuous professional development (CPD) to the assessor(s)/assessing body; the submission of documentary evidence only should be required for the purposes of re-recognition.

Uniform re-recognition rules should enable mutual recognition of RPE in MS. The period of validity of any re-recognition should be the same as that specified for first recognition.

3.4.1 Criteria for mutual recognition

In very simple terms mutual recognition, or acceptance, means that RPE status gained in one Member State is accepted by another Member State. An RPE satisfying the criteria for core competence and having been awarded recognition in Country A would not have to go through the full process of RPE recognition again in order to practice in Country B.

Taking each of the criteria for core competence in turn:

i) An **education** to:

- Bachelor degree level either specifically in radiation protection, or in a physical/engineering/mathematical discipline
- Or An academic equivalent

Need of **consensus on the disciplines to be eligible for a future RPE**. Not easy, since several countries (ie Netherlands, Hungary, other?) accept medicine, natural sciences such as chemistry, biology, environmental sciences as also eligible for a future RPE.

ii) Knowledge and understanding of **fundamental principles of radiation protection**

This is a potential field for consensus. This implies the definition of specific training courses (graduate or post-graduate) in the field of radiation protection and the definition of minimum requirements regarding the topic of these courses.

(iv) The ability to develop and provide appropriate advice with those topics on which the RPE is expected to provide advice.

There are two issues that need to be considered here.

The topic areas

As noted above, having a good understanding of the operational “basics” of radiation protection, ie the topics listed in Article xx and in table xx is a fundamental skill for an RPE. An RPE having gained recognition in his/her home country will have provided evidence to demonstrate competence in these areas and there is little need, or value, in an assessing body in another country in re-assessing this evidence.

However, legislation is clearly a country-specific issue; any RPE advising within a country must have working knowledge of the national radiation protection legislation and be able to interpret, and advise in accordance with the various requirements. This being the case, an RPE wishing to practice in a country other than the country in which initial recognition was obtained should only be permitted to do so once he/she is able to demonstrate an appropriate level of knowledge and understanding of relevant national legislation to the RPE assessing body in that country.

Mutual recognition is very difficult keeping in mind the **national legislation**. Recognition of an RPE might therefore require **country-specific refresher courses** to become competent to function as an RPE in a specific MS.

4. The Training and competency of an RPO

4.1 The duties of the RPO

Employees appointed to act as RPO will need to have an adequate level of understanding of concepts related to radiation protection and should also be acquainted with the safe and secure use of radiation sources as relevant to the application. The level of training required will be very dependent on the complexity of the radiation application the RPO is responsible for, and the associated duties and radiation protection tasks. There will, however, be a core level of training that is necessary for all RPOs regardless of the practice or sector in which they work. This publication provides guidance on this required core training and for many applications only minor changes or additions will need to be made to this core component to make the training appropriate for specific RPOs.

Consensus needed on the required minimum **specialisations of RPO** (how many types of applications) and the accompanying level of training. In the Netherlands it is proposed to identify nine main specialisations covering the majority of applications.

4. The Training and competency of an RPO

Table 9: Primary duties of the Radiation Protection Officer

Table 10/11 - Core learning outcomes for the RPO

Consensus needed for both the primary duties as well as core learning outcomes of the RPO. Difficulty might be that core learning outcomes are (partly) related to the **specialisations** recognized which may differ from MS to MS.

4.4 Training requirements

The RPO must be provided with **sufficient training** to enable him to effectively carry out his **supervisory duties**.

However, education and training are only two of a number of attributes that result in a person being both competent and suitable to act as an RPO for a practice. The provision of core knowledge training will provide an appropriate level of knowledge and some of the required skills but this will need to be re-enforced with **practical experience and on-the-job training** before core competence is achieved.

The RPO may need to have **further practice-specific training and experience** before he is considered suitable for a specific practice. For example, an RPO may be considered to be competent and suitable for a straightforward practice, such as industrial gauges, if he has a good understanding of the core requirements of the RPO role, together with experience of applying this knowledge in the field. However, such a person will not be a suitable RPO for industrial radiography without first receiving additional training and experience on the radiation protection issues associated with this area of work. It follows that RPO training will fall into two categories: **core training**, common to all practices, and **supplementary training related to practice-specific radiation protection elements**.

Consensus required both for **core training** and for **practise specific training** to enable exchange of RPO's between MS. Might require **uniform learning outcomes** for different types of RPO.