

Comparison of legal requirements for education and training of RPE and RPO in Europe

*The HERCA workgroup on education and training
experience*

Barbara Godthelp, HERCA WG E&T in RP

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HERCA

- **Heads of Radiation Protection Authorities (HERCA):** voluntary association
- Working on topics generally covered by EURATOM Treaty
- Work program: based on common interest in significant regulatory issues

Participation

32 countries
(the 28 EU MS + Iceland, Norway, Switzerland and Serbia)

56 organisations
(RPA + TSO), + 330 nominations

Observers
EC, IAEA, WHO, US FDA, OECD/NEA



RPE and RPO implementation: legal requirements

17.1.2014

EN

Official Journal of the European Union

L 13/1

II

(Non-legislative acts)

DIRECTIVES

COUNCIL DIRECTIVE 2013/59/EURATOM

of 5 December 2013

laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom

RPE and RPO implementation: legal requirements

[73] "radiation protection expert" means **an individual** or, if provided for in the national legislation, a group of individuals having the **knowledge, training and experience** needed to give **radiation protection advice** in order to ensure the effective protection of individuals, and whose **competence** in this respect is **recognised** by the competent authority;

[74] "radiation protection officer" means an **individual** who is **technically competent** in radiation protection matters relevant for a given type of practice **to supervise or perform** the implementation of the **radiation protection** arrangements

RPE and RPO implementation: legal requirements

Article 14 General responsibilities for the **education, training** and **provision of information**

Article 34 Consultations with a radiation protection expert

Article 68 Tasks for the undertaking

Article 79 Recognition of services and experts

Article 82 Radiation protection expert

Article 84 Radiation protection officer

HERCA WG E&T in RP

- Workshops 2015/2021
- Guidance
- **Country fact sheets**
- **Questionnaire**
 - Contributions of **29 HERCA MS** (out of 32)



HERCA Guidance
Implementation of Radiation Protection
Expert (RPE) and Radiation Protection
Officer (RPO) Requirements
of Council Directive 2013/59/Euratom

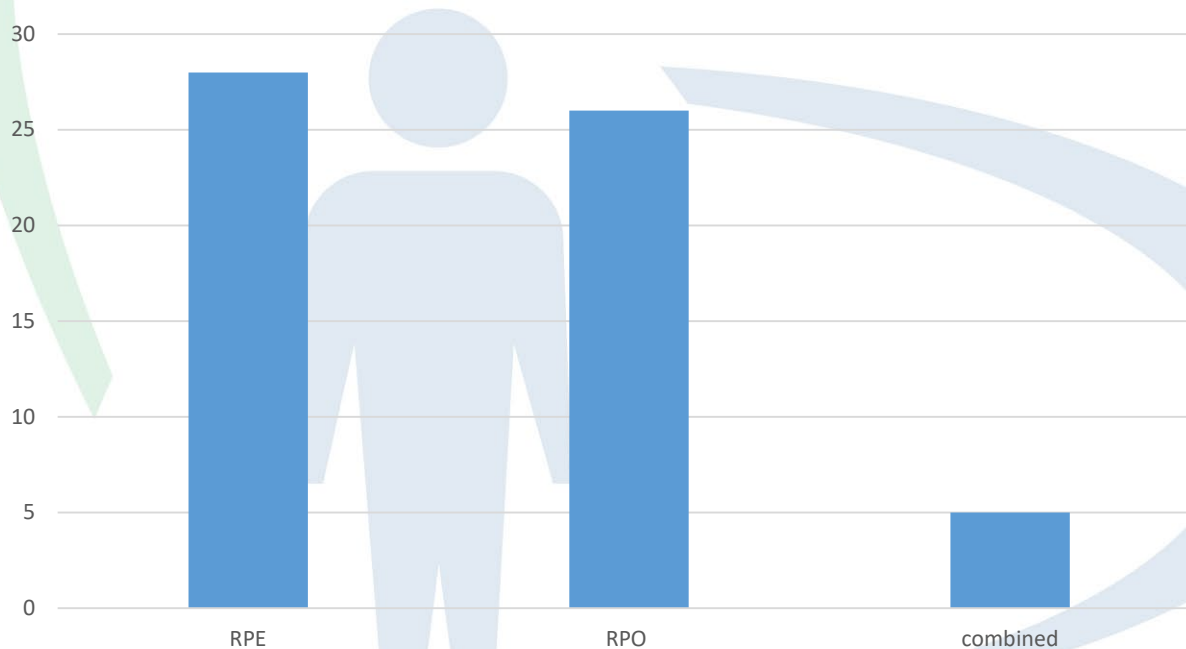
November 2017

July 2015, Paris



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Implementation of RPE and RPO in HERCA MS




- RPE: 28/29 countries,
- RPO: 26/29 countries,
- Combined roles 5/29 countries

RPE

Stralingbeschermingsdeskundige, Radiācijas drošības eksperts,
Квалифициран експерт по радиационна защита (КЕРЗ),
Εμπειρογνώμονας Ακτινοπροστασίας, Inspektor ochrony radiologicznej
(IOR), Pooblaščen izvedenec varstva pred sevanji, Expert agréé en
contrôle physique/Deskundige erkend in fysische controle, Sugárvédelmi
szakértő, Conseiller en radioprotection (CRP)
Radiation Protection Adviser, Strahlenschutzbeauftragte, Radiation
Protection Adviser (RPA), Radioactive Waste Adviser (RWA), Esperto
Qualificato,
Strahlenschutz-Sachverständige, Expert en Radioprotection (ERP),
Εμπειρογνώμονας Ακτινοπροστασίας, Kiirgusekspert, Strålskyddsexpert-
funktion
Radiacinės saugos ekspertas, Especialista em Proteção Radiológica (EPR)
Strålebeskyttelsesekspert, Stručnjak za zaštitu od ionizirajućeg zračenja,
Dohlížející osoba, Strahlenschutzbeauftragter in Zusammenarbeit mit
zuständiger Behörde, Stručnjak iz oblasti zaštite od jonizujućeg zračenja,
Expert in protectie radiologica, Säteilyturvallisuusasiantuntija

Recognition arrangements

- **RPE:** 28 of 29 HERCA MS
- **RPO:** 12 of 29 HERCA MS



I am a recognized expert giving radiation protection advice



I supervise specific applications with ionizing radiation

Number of Categories of RPE in HERCA MS

No of RPE categories	No of MS
0	1
1	7
2	4
3	4
6	1
7	2
8	2
13	1

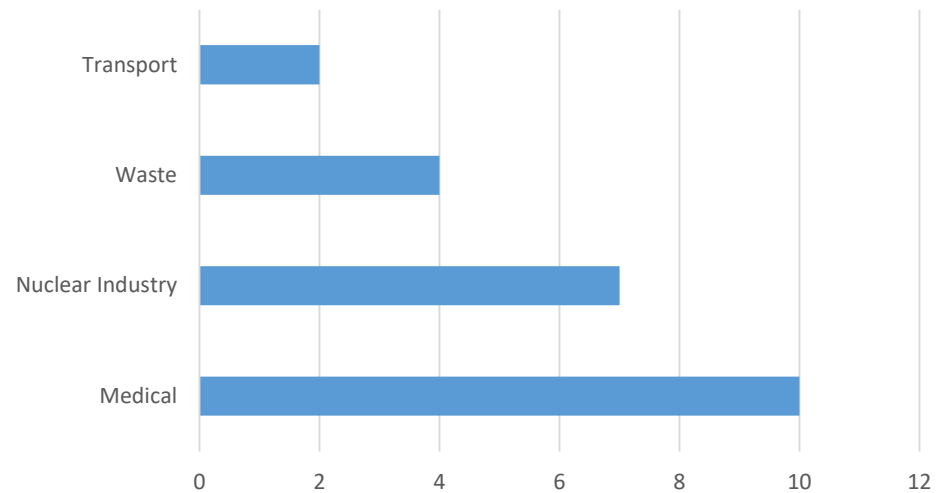


Figure 1: Specified categories of RPEs among MS

Role of RPE in HERCA MS

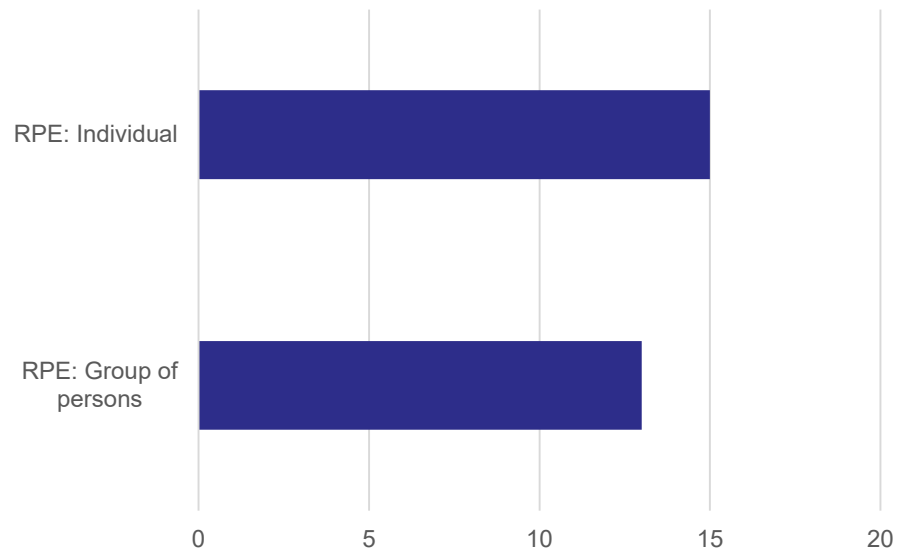
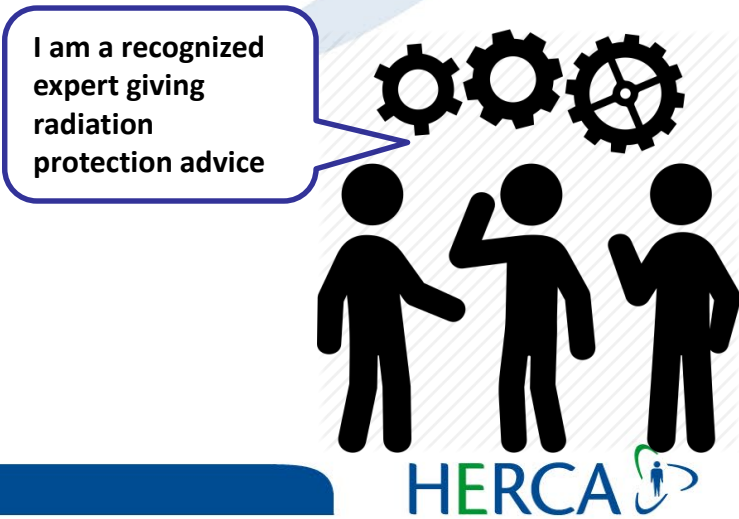


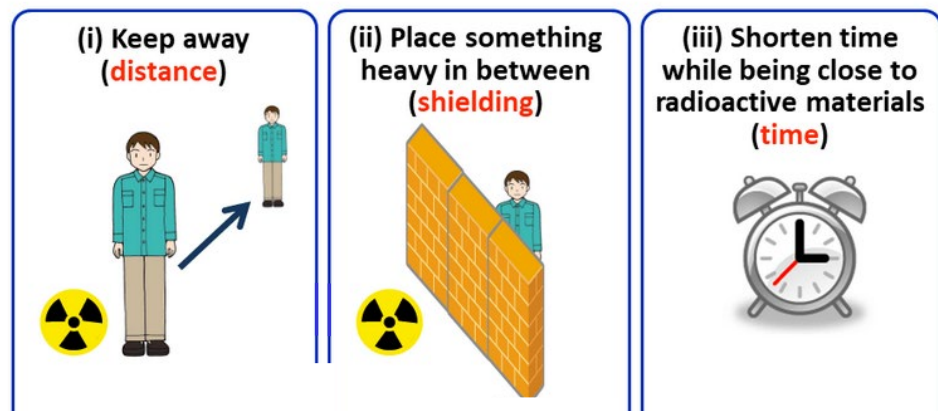
Figure 2: Who performs the role of the RPE



Training RPE



- **Basic training RPE:**
 - academic master degree or higher education in 13/29 HERCA MS
- **Initial RPE specific and/or training in RP** in 19/29 HERCA MS
- RPE specific **retraining** in 10/29 MS



Training RPE

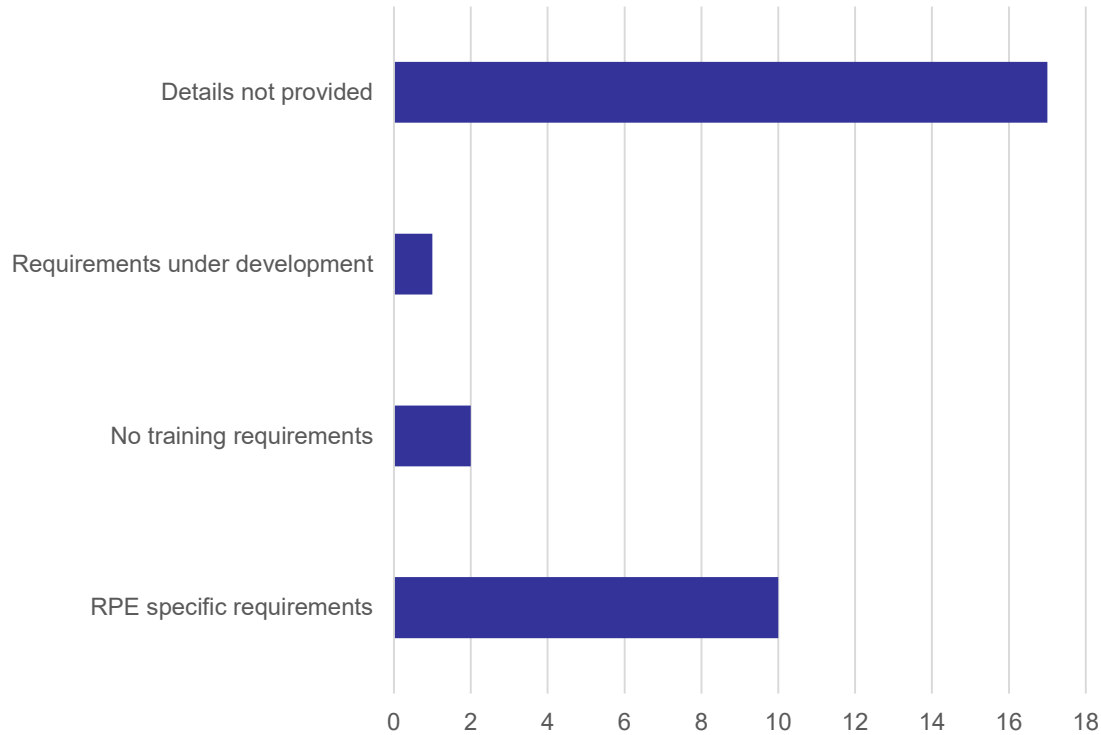


Figure 3: RPE training and re-training requirements in MSs

Recognition arrangements RPE

- By competent authority in 28/29 MS
- Work experience: 18/29 MS
 - No/not specified 8/29 MS
 - 0.5-3 years 5/29 MS
 - > 3 years 9/29 MS
 - Yes, no period 4/29 MS
- On the job training (OJT)/mentoring
 - Only in 4/29 countries
- Graded approach RPE requirements
 - In place in 20/29 countries
 - No graded approach/not specified in 8/29
- Assessing competence to give advice on RP
 - 7/29 countries

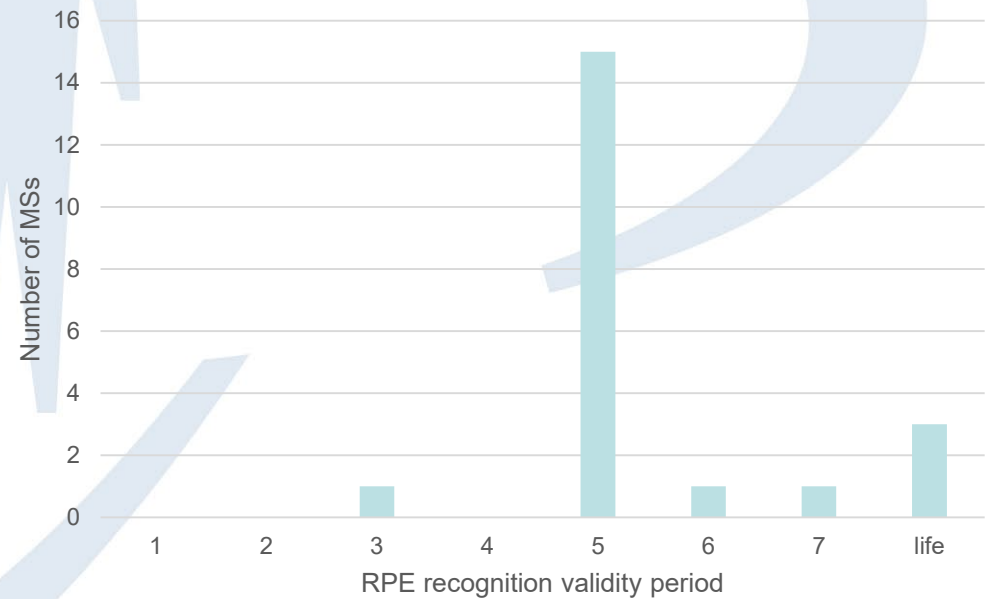
I am a recognized expert giving radiation protection advice



Recognition arrangements RPE – cont'd

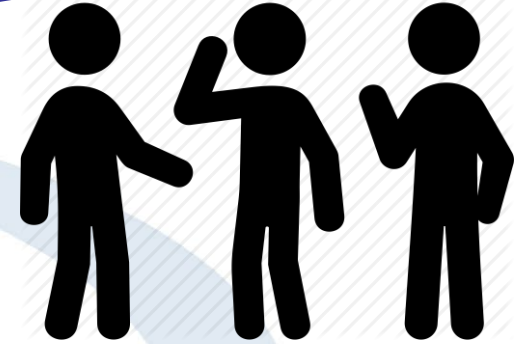
- Recognition for:
 - 3 years in 1/29 MS
 - **5 years in 15/29 MS**
 - 6 years in 1/29 MS
 - 7 year in 1/29 MS
 - life in 3/29 MS

I am a recognized expert giving radiation protection advice

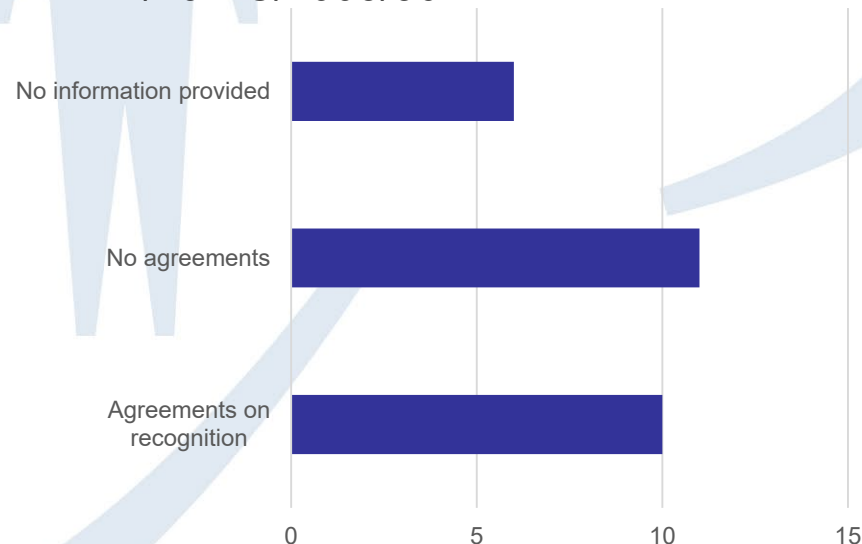


Recognition arrangements RPE

I am a recognized expert giving radiation protection advice



- Combination of function RPE/MPE (other combinations)
 - Possible in 3/29, in 1/29 only when head RPS, unknown in most countries (CFS information)
- (Bilateral) agreements on recognition
 - Agreements 10/29, of which 7/29 EC/2005/36



RPO

Toezichthoudend medewerker stralingsbescherming, Darbu vadītājs, Отговорник по радиационна защита (ОРЗ), Επόπτης Ακτινοπροστασίας, Strålevernskoordinator, wyznaczony pracownik, Odgovorna oseba za varstvo pred sevanji, Agent de radioprotection/ agent van de stralingsbescherming, sugárvédelmi megbízott, Supervisor, Personne compétente en radioprotection (PCR), Radiation protection officer, Strahlenschutzbeauftragter, Radiation Protection Supervisor (RPS), Strahlenschutz-Fachkraft, - Techniker (nuclear field), Personne chargée de la radioprotection (PCR), Υπεύθυνος Ακτινοπροστασίας, Kiirgusohutuse spetsialist, Asmuo, atsakingas už radiacinę saugą (RPO) Responsável pela Proteção Radiológica (RPR), Strålebeskyttelseskoordinator, Osoba odgovorna za zaštitu od ionizirajućeg zračenja, Osoba s přímým dohledem nad radiační ochranou, Strahlenschutzbeauftragter, Lice odgovorno za zaštitu od jonizujućeg zračenja, Säteilyturvallisuuksvastaava (STV)

Number of Categories of RPO in HERCA MS

No of RPO categories	No of MS
1	10
2	1
4	2
6	2
9	1
11	1
13	1



I supervise specific applications with ionizing radiation

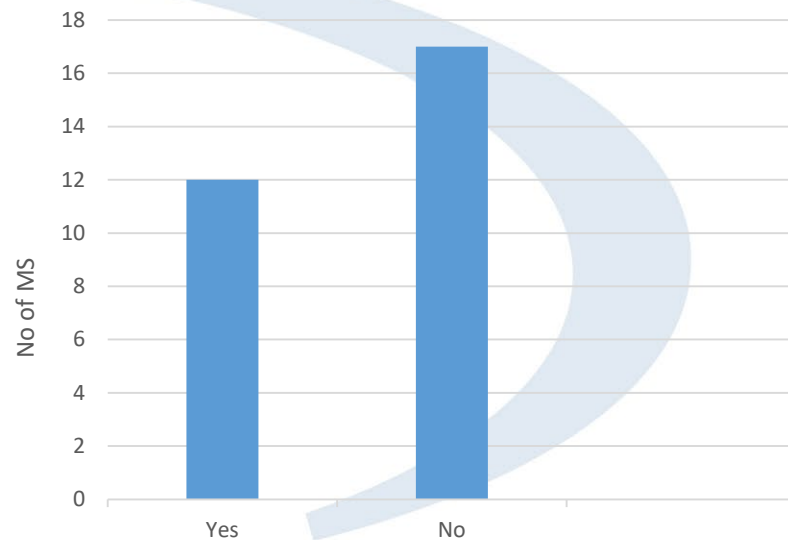


Figure 6: Number of MSs applying a graded approach in the RPO assignment

Training RPO

- Certified RPO training and/or qualification 18/29 MS
- No 1/29 MS
- With RPE 1/29 MS

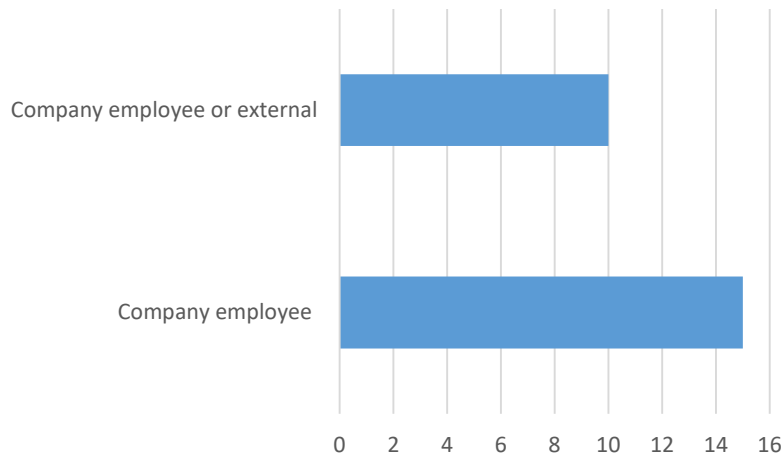
- Retraining:
 - After 3 years 1/29 MS
 - 5-7 years 10/29 MS



I supervise specific applications with ionizing radiation

RPO function

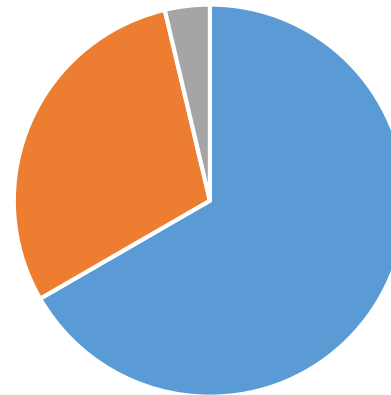
- RPO employee company and/or external



I supervise specific applications with ionizing radiation



- Certification/ approval scheme in 18/29 MS
- Outcome RPO training approved by PB/NA
In 18/29 MS
- Retraining in 10/29 MS



■ Yes ■ No ■ Not specified

Conclusions CFS analysis

- RPE and RPO are implemented in most of the European countries.
 - Many similarities in implementation among MSs
 - Different approaches are followed (e.g., qualification, training requirements).
 - Focus on the competences which are considered necessary for the effective and efficient performance of the RPEs and RPOs.
 - Route to common ground for the recognition of the RPEs
- HERCA WG E&T in RP guidance document for MSs for the mutual recognition of the RPEs and certification/approval of the RPOs regardless of their educational approach.

Questions

