RPE – RPO: thoughts and initiatives for the transposition of the 2013/598/EURATOM Directive

Konstantinos Karfopoulos, Vasiliki Kamenopoulou
Greek Atomic Energy Commission
EEAE: Regulatory body

Competent national regulatory authority in the fields of radiological protection and nuclear safety and security
Responsibilities

- Regulatory work
- Inspections and licensing of facilities
- Individual monitoring of occupationally exposed workers
- Monitoring of environmental radioactivity levels
- Response to radiation emergencies
- Combating of radioactive materials illicit trafficking
- Calibrations of ionizing radiation instruments
- Education and training
- Research and development
- International cooperation
- Public information

- Recognition of the competence of occupationally exposed personnel in RP
- Recognition of syllabi in RP (guidelines)
- Participation in the recognition process of MP
- E&T activities:
  - Regional Training Centre of IAEA (PGEC)
  - Participation in the Post-graduate course in MP
  - Training and continuing training of occupationally exposed workers
  - Training of scientists and experts on RP and nuclear safety
Legislation - Current National Framework

Regulatory Requirements for E&T in Radiation Protection

The Radiation Protection Regulations:

- All persons involved in radiological procedures must have knowledge on RP (theoretical and practical training).
- The competence of the personnel working in radiation facilities and activities is verified before issuing (or renewing) the operation license of a facility.
- Requirements for RPE, MP recognition and RPO approval.
- EEAE issues certificates of competency on RP for occupationally exposed personnel (exams, CVs, personal interviews).
- EEAE recognizes syllabi on RP.
Basis for the regulatory framework revision

- International Basic Safety Standards (IAEA GSR 1-4, 7)
- New EC Directive
- Recommendations of the IRRS Mission in Greece
- Operational experience from the implementation of the current regulatory framework
- Policy, Strategy, Goals of EEAE (including E&T)
- Common approaches
Graded approach in the regulatory framework revision

Issuing of legislative acts (graded approach):

- Update of the Law 181/1974 (mainly on enforcement)
- Transposition of the new EC Directive in the national legislation in the form of Presidential Decree:
  - Issue of Ministerial Decrees (national policy and strategy, procedures and requirements for licensing, ...)
  - EEAE decisions describing the technical requirements
  - EEAE decisions with guidelines and explanatory circulars
Special concerns in the General Provisions

- Take into consideration the new scientific data and new technologies
- Apply the graded approach in the regulatory control
- Prime responsibility
- Safety and security culture
- Establishment of strategies (radon, NORM, ...)
- Dose limit for the lens of the eye
- Medical surveillance of the occupationally exposed workers
- Occupational health services
- Recognition, roles and responsibilities (e.g. RPE and RPO)
- Promote tools for quality (QMS, clinical audits, ...)
- Promote further the coordination and cooperation between involved parties (e.g. transport, buildings codes, local authorities, ...)

Radiation Protection
Standards on Radiation Protection
Guidelines and Training of Medical Professionals in the European Union
Special concerns in “Education and Training”

- Further strengthen education and training

- Ensure that all health professionals with specific duties in relation to radiation protection of patients have adequate education, training and competence in radiation protection

- Further promote safety and security culture
RPE and RPO general provisions

- For all exposure situations depending on the practice
- Graded approach
- RPE Recognition – RPO Approval by EEAE

- MP recognised by the Ministry of Health
- MPE to be recognised by the Ministry of Health (RP 174)
Non-Medical Applications

Simple facilities
(industry, research)

- RPE is not required
- RPO is a member of the staff with E&T in RP in the specific activity
- EEAE issues the reference curricula for RPO training
- Approval of RPO during the practice/activity licensing process
Non - Medical Applications

More complex facilities
(industry and research)

- RPE is required
- RPE is required for the Safety Report (construction design and licensing)
- RPE is:
  - A scientist with postgraduate studies in RP (theoretical and practical) and experience in the specific field of RP
  - The syllabi for RPE training is based on the IAEA PGEC
- RPO is a member of the staff with E&T in RP in the specific activity
- RPE could act as RPO but not the opposite
Medical Applications

**Simple Facilities**  
(*X-rays, in-vitro NM, dental, veterinary*)

- MP is required for the Safety Report (construction design and licensing)
- RPE is not required
- RPO can be MP, Med.doctor, Dentist, Vet.
- EEAE issues the reference curricula for RPO training
- Approval of RPO during the practice/activity licensing process

**Example Dental Radiology:**
- Dentist (RPO)
- Safety Report by MP
- an RPE is not required
Medical Applications

More complex facilities
(contrast therapy, in-vivo NM, interventional, CT, PET-CT)

- RPE is required
- RPE is required for the Safety Report (construction design and licensing)
- RPE is an MPE (for each specialty?)
- RPO is an MP
- RPE could act as RPO but not the opposite
- EEAE issues the recognition requirements and recognize the RPE

Example Interventional Radiology:
- MPE - RPE in Radiology
- MP (RPO)
- Radiologist
- Technicians
Conclusions – key points

Conclusions for RPE and RPO
• RPE covers all exposure situations depending on the practice
• Graded approach
• RPE Recognition – RPO Approval

Issues for Discussion
• In medical applications the RPE should be an MPE or an MP?
• RPE may be a group of persons or a group of RPEs?
• Could an RPE act as an RPO?
Thank you very much for your attention!!!