Education and training in radiation protection in the European Basic Safety Standards

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Rovinj, Croatia, 7-9 May 2014
Contents

- Euratom Legal Basis
- Revision of the European BSS
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EURATOM LEGAL BASIS FOR RADIATION PROTECTION
Rome, 25 March 1957

Article 2: “... the Community shall ... establish uniform standards to protect the health of workers and of the general public”

Article 31: "The basic standards shall be worked out by the Commission after it has obtained the opinion of a group of ... scientific experts

"Art.31 Group of Experts (GoE)"
Euratom Radiation Protection Law

- Euratom "Basic Safety Standards" (BSS) Directives
  - Binding Law for all EU Member States
  - First adopted in 1959, covers workers and public
  - Regular revision, current Directive 96/29/Euratom

- Supplementing legislation in other areas
  - Medical, Directives 84/466/Euratom and 97/43/Euratom
  - Outside workers, Directive 90/641/Euratom
  - Foodstuff contamination
  - Etc.
EURATOM BSS REVISION
Revised Euratom BSS Objectives

- **Revision** of the current requirements
- **Consolidation** of current legislation
  - Basic Safety Standards, **Directive 96/29/Euratom**
  - Medical Exposure, **Directive 97/43/Euratom**
  - Public Information, **Directive 89/618/Euratom**
  - Outside Workers, **Directive 90/641/Euratom**
  - HASS **Directive 2003/122/Euratom**
  - Radon, **Recommendation 90/143/Euratom**
**Procedure**

1. **Prepare draft proposal**
   - Feb 2010
   - Drafting, EC staff & Art.31 GoE
   - Art.31 GoE Opinion

2. **Consultation process**
   - May 2012
   - Commission ISC
   - EESC
   - Commission proposal, OJ

3. **Negotiation in the EU Council**
   - May 2013
   - WPAQ

4. **Formal adoption by the Council**
   - December 2013
   - EP opinion
   - All EU languages
   - Published in OJ
Službeni list
Europske unije

Zakonodavstvo

Hrvatsko izdanje
17. siječnja 2014.

Sadržaj

II. Nezakonodavni akti

DIREKTE

* Direktiva Vijeća 2013/39/Euratom od 5. prosinca 2013. o osnovnim sigurnosnim standardima za zaštitu od opasnosti koje potječe od izloženosti ionizirajućem zračenju, i o stavljaju izvan usage direktiva 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom i 2003/122/Euratom

Published in OJ, 17/01/2014

23 EU languages

5 December 2013

Formal adoption by the Council

Procedure
EDUCATION AND TRAINING IN THE REVISED EURATOM BSS
Structure

- **Preamble**
- **Chapter I: Subject matter and Scope**
- **Chapter II: Definitions**
- **Chapter III: System of radiation protection**
- **Chapter IV: Requirements for radiation protection education, training and information**
- **Chapter V: Justification and regulatory control of practices**
- **Chapter VI: Protection of workers, apprentices and students**
- **Chapter VII: Protection of patients and other individuals submitted to medical exposure**
- **Chapter VIII: Protection of members of the public**
- **Chapter IX: Protection of the environment**
- **Chapter X: Requirements for regulatory control**
- **Chapter XI: Final provisions**

**TOTAL: 109 Articles, 73 pages**
MS shall ensure that an adequate legislative and administrative framework is established for providing appropriate radiation protection education, training and information to all individuals whose tasks require specific competences in radiation protection.

Appropriate education, training and retraining shall be in place to allow the recognition (by the competent authority) of RPE, MPE, occupational health services and dosimetry services.

Member States shall lay down provisions to ensure the continuity of expertise of these services and experts.
Changes in definitions (Chapter II) of competent services and experts and their roles (Chapter X)

- Radiation Protection Expert (RPE)
  - Replaces the Qualified Expert from 96/29/Euratom

- Introduction of Radiation Protection Officer (RPO)

- New definition of Medical Physics Expert (MPE)

- Detailed consideration of functions of RPE, MPE and RPO

- Emphasis on (state) recognition and continuity of expertise
● Radiation Protection Expert (RPE)
  » an individual having the **knowledge, training and experience** needed to give radiation protection advice in order to ensure effective protection of individuals, whose capacity to act is **recognized by the competent authorities**
  » advice on **occupational and public exposure**, e.g. for plans for new installations, classifications of areas and workers, monitoring, QA, emergency arrangements, training of workers ..
  » **external or internal** advisor, could be carried out by a group of specialists
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**
- **optional**, when required by MS
- **no** need of **recognition** by the competent authority
- **reports directly** to management
- task of the RPO can be carried out by a **radiation protection unit** established within an undertaking
Medical Physics Expert (MPE)

» an individual having the knowledge, training and experience to act or give advice on matters relating to radiation physics applied to medical exposure, whose competence to act is recognised by the competent

» increased involvement and wider responsibilities
  • commensurate with complexity and the radiation risk
  • balanced with roles and responsibilities of other clinical staff

» task of the MPE may be carried out by a group of specialists who together have the necessary expertise
<table>
<thead>
<tr>
<th>RPE – advises on</th>
<th>RPO – performs tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>optimisation, e.g. dose constraints</td>
<td>ensure work is carried out in accordance with specified procedures or local rules</td>
</tr>
<tr>
<td>plans for new or modified installations / sources</td>
<td>maintain adequate records of radiation sources</td>
</tr>
<tr>
<td>categorisation of areas</td>
<td>supervise implementation of workplace monitoring</td>
</tr>
<tr>
<td>classification of workers</td>
<td>supervise implementation of the personal monitoring</td>
</tr>
<tr>
<td>quality assurance</td>
<td>supervise implementation of the health surveillance programme</td>
</tr>
<tr>
<td>waste management</td>
<td>carry out periodic assessments of safety and warning systems</td>
</tr>
<tr>
<td>workplace and individual monitoring programmes</td>
<td></td>
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<tr>
<td>monitoring instrumentation</td>
<td></td>
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<tr>
<td>environmental monitoring</td>
<td></td>
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<tr>
<td>prevention of accidents and incidents</td>
<td></td>
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</tbody>
</table>
### Services and Experts (6)

- **RPE – advise on**
  - preparedness and response in emergency
  - investigation and analysis of accidents and incidents and remedial actions
  - training of workers
  - employment conditions for pregnant and breastfeeding workers
  - prior risk assessments and written procedures
  - liaise with RPO
  - may be assigned RPO tasks, if provided by legislation

- **RPO – performs tasks**
  - participate in emergency prevention, preparedness and response
  - introduce workers to local rules and procedures
  - information and training of exposed workers
  - establish and/or advise and comment on work plans
  - liaise with the radiation protection expert
Other E&T requirements

- New **Chapter IV**: Requirements for Radiation Protection Education, Training and Information

  » Grouping existing requirements on E&T of
     • Exposed workers, apprentices and students
     • Workers potentially exposed to orphan sources
     • Emergency workers
     • Medical staff

  » Changes made wherever deemed necessary
RECENT AND ONGOING EU PROJECTS FOR E&T IN RP
Nuclear energy

Publications

Publications covering a wide range of issues related to nuclear energy.


173: Comparison of Codes Assessing Radiation Exposure of Aircraft Crew due to Galactic Cosmic Radiation [3 MB]
FP7 Projects

ENETRAP II
EUROPEAN NETWORK ON EDUCATION AND TRAINING IN RADIOLOGICAL PROTECTION

- March 2009 – December 2012
- ENETRAP III – M. Coeck

EUTEMPE-RX

- August 2013 – 2016
  - network of excellent teaching centres to prepare courses for MPE in Diagnostic and Interventional Radiology
  - set up a multi-campus Educational and Training platform
  - course to be either accredited or serve as an example
FUTURE ACTION
Transposition by 6 February 2018

- Member States shall bring into force the laws, regulations and administrative provisions to comply with this Directive
- Member States shall communicate to the Commission the text of the provisions of national law

- Euratom Treaty, Art. 33: Member States shall communicate to the Commission ... draft provisions
- Any recommendations the Commission may wish to issue with regard to such draft provisions shall be made within three months

- EC review of draft national provisions
  - 28 Member States, same deadline
  - only three months for review – unrealistic

⇒ Need to act early, establish continuous process and collaborate with MS

- early exchange on national plans, deadlines, etc.
- general workshop to discuss national plans – late 2014
- topical workshops, e.g. on medical, E&T, etc. – 2015-2017
- formal Art. 33 submission – mid-late 2017
- Some of the work to be outsourced
TAKE HOME POINTS
● The **EU BSS** have just been *revised*

● The new EU BSS introduces *changes* in **E&T** and in *roles & responsibilities* for RP

● **28 EU countries** will go through legislation and practice changes over the *next four years*

● Some **recent EU projects** have provided help in implementing the legal changes

● **Further support** will be available through EU projects and collaborative European action

● We will *succeed* if we *cooperate*
Thank you for your attention!