A Review of EU Legislation on EP&R

IAEA – 8th Meeting of the Representatives of Competent Authorities

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DG ENER
Directorate D - Nuclear Energy, Safety and ITER
Unit D3 – Radiological Protection and Nuclear Safety
Legal basis: Euratom Treaty

Separate legal personality

European Atomic Energy Community 1957, EEC >> EU
Examples of relevant areas of the Euratom Treaty:

- Nuclear safeguards
- Nuclear safety
- Waste management
- Radiation protection
  - Emergency preparedness and response
- Fuel supply policy
- International relations
Euratom Treaty
Title I: The Tasks of the Community

- **Article 2** - In order to perform its task, the Community shall, as provided for in this Treaty:

- (b) establish uniform safety standards to protect the health of workers and of the general public and ensure that they are applied;
Euratom Treaty
Title II- Chapter 3:

- Health and safety:
  - Article 30 - basic standards
  - Article 31 - group of experts
  - Article 32/33 - revision, compliance & implementation by MSs
  - Article 34 - dangerous experiments
  - Article 35/36 - environmental monitoring
  - Article 37 - radioactive waste
  - Article 38 - recommendations on the level of radioactivity
Legal instruments available

• **Regulations**
  
  *Binding legislative act which must be applied in its entirety across the EU.*

• **Directives**
  
  *A legislative act that sets out a goal that all EU MSs must achieve through their own laws (transposition).*

• **Decisions**
  
  *Binding and directly applicable on those to whom it is addressed.*

• **Recommendations, opinions, communications**
  
  *Non-binding*
Main legal instruments on radiation protection (few years ago)

- Early exchange of information in event of radiological emergency
  Council Decision 87/600

- Public information

- Protection of Outside Workers

- Medical exposure
  Council Directive 97/43

- Control of high activity sealed sources - Council Directive
  2003/122

- Indoor Exposure to Radon
  Comm. Recommendation 90/143

- Exp. to Radon in drinking Water
  Comm. Recommendation 2001/928

- Foodstuffs Regulations
  3954/87, 944/89, 770/90

- Post-Chernobyl Regulations

- Safety of nuclear installations
Preparedness for Nuclear Emergencies

Member State legal framework

*Responsibility to protect population and environment is directly on the Member States, not the Community.*

- National legislation (*)
- EU Regulations & Decisions
- International Conventions (IAEA)
  - Early Notification Convention
  - Assistance Convention
- Non-binding international standards and guidance
- Bilateral Agreements

(*) Including also Transposed Community legislation
MS obligations under Chapter 3 - examples

- To transpose into the national legislation the basic safety standards; to communicate to the Commission the draft transposing measures.
- To inform the Commission on dangerous experiments to take place on their territory and the respective health and safety measures; to obtain the assent of the Commission should such experiments be liable to affect other MS.
- To carry out continuous monitoring of the level of radioactivity in the air, water and soil and ensure compliance with basic safety standards; to give access to the Commission to the monitoring facilities for verification of their operation.
- To communicate to the Commission the results from the monitoring checks.
- To provide the Commission with information on any plan for disposal of radioactive waste.
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| Safety of nuclear installations  
| Radioactive Substances In Water *(Drinking Water Dir.*)  
Recasting of the European Radiation Protection Legislation (New BSS – Euratom)

• Combine the following into one legal instrument:
  – Basic Safety Standards, Directive 96/29/Euratom
  – Public Information, Directive 89/618/Euratom
  – Outside Workers, Directive 90/641/Euratom
  – Medical Exposures, Directive 97/43/Euratom
  – Control of high-activity sealed radioactive sources and orphan sources, Directive 2003/122/Euratom
  – Radon, Commission Recommendation 90/143/Euratom

• The new Euratom BSS Directive 2013/59/EURATOM was adopted in December 2013

• Transposition by the Member States before 18 February 2018
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Main legal instruments on radiation protection (future application)

- Early exchange of information in event of radiological emergency
  Council Decision 87/600

- Public information

- Protection of Outside Workers

- Medical exposure
  Council Directive 97/43


- Indoor-Exposure to Radon
  Comm. Recommendation 94/143

- Exp. to Radon in drinking Water
  Comm. Recommendation 2001/928

- New BSS Directive 2013/59

- BSS Directive 96/29

- Foodstuffs Regulations 3954/87, 944/89, 770/90

- Post-Chernobyl Regulations

- Safety of nuclear installations

- Radioactive Substances In Water (Drinking Water Dir.)
Basic Safety Standards Directive
Directive 2013/59/Euratom

- Strengthened requirements, a comprehensive approach
  - Emergency workers (Art. 17)
  - Occupational exposure, em. response (Art 53, 69)
  - Public information (Art 70, 71)
  - Emergency management system (Art 97)
  - Emergency preparedness (Art 98)
  - International cooperation (Art 99)
  - Strategies for long-term (Art 100-101)
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Nuclear Safety Directive Amendment
Directive 2014/87/Euratom

• Reinforced requirements
  • Independence and role of national regulatory authorities (Art 5)
  • EU-wide safety objective (Art 8a)
  • Defence-in-depth, accident prevention mitigation (Art 8b,d)
  • Consistency, continuity on-site EPR and the BSS provisions (Art 8d)
  • European system of topical peer reviews (Art 8e)
How these provisions apply on-site and off-site EP&R

Provisions of Nuclear Safety Directive
- Design to avoid early, large releases
- Defence-in-depth
- Accident prevention, management, mitigation
- Organisational structure
- Assessment of emergency situations
- Management emergency exposures,
- Emergency response plans, protective measures, notification, emergency workers

Provisions of Basic Safety Standards
- International cooperation
- Information to the public
- Transition from emergency to existing exposure situation
Current phase

NSD and BSS Directives

• Enactment into national legislation, (NSD) Aug. 2017 and (BSS) Feb. 2018

Dialogue with Member States

• Transposition workshops
• Strategies and plans for implementation inc. EP&R

Transposition checks

• Need for guidance
• Further work, expert groups
New Council Regulation 2016/52 for food and feed:

- Includes a consolidation of the existing Euratom legislation for future accidents

- Implements the new "Comitology" system

- Provides more flexible procedures allowing specific and proportionate reactions to any nuclear accident or radiological emergency *(in the EU, in the vicinity of the EU or in a distant country)*
Implementation of the new "Comitology" system:

Procedure: "If the radiological circumstances so require"

- The Commission shall adopt an implementing Regulation rendering maximum permitted levels applicable in accordance with the examination procedure

- The Commission is assisted by a Committee of representatives of the Member States chaired by a representative of the Commission
## Main legal instruments on radiation protection (future application)

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- New BSS Directive 2013/59

- Foodstuffs Regulations (Council Regulation 2016/52)

- Post-Chernobyl Regulations
  - C.Reg.1048/2009, Rec. 2003/74

- Safety of nuclear installations
  - Amended by Directive 2014/87

- Radioactive Substances In Water (Drinking Water Dir.)

- Early exchange of information in event of radiological emergency (Council Decision 87/600)

- Exp. to Radon in drinking Water
  - Comm. Recommendation 2001/928
Early Exchange of Information Framework

April 1986: 
Chernobyl accident

September 1986: 
IAEA Convention on Early Notification of Nuclear Accidents

December 1987: 
Council Decision 87/600/EURATOM on Community arrangements for the early exchange of information the event of a radiological emergency
Early Exchange of Information - When?

Whenever a Member State *decides to take measures*
- of a widespread nature
- in order to protect the general public
- in case of a radiological emergency

following:

(1) **an accident in its territory**
    involving facilities (*listed in §2*) from which a significant release of radioactive material occurs or is likely to occur

(2) **the detection, within or outside its territory, of abnormal levels of radioactivity**
    which are likely to be detrimental to public health in that Member State.
Early Exchange of Information - What?

- **MS(s) promptly** inform the Commission & MSs which are or are likely to be affected of:
  - measures taken
  - recommendations issued
  - other relevant information

- the Commission forwards the information to all MSs

- **MSs inform the Commission, at appropriate intervals of levels of radioactivity measured by their facilities**
  - in foodstuffs, feedingstuffs, drinking water
  - in the environment
Early Exchange of Information - How?

- Detailed procedures are agreed among the Member States competent authorities and tested at regular intervals
- Current technical implementation systems: WebECURIE and EURDEP.
- Member States indicate competent national authorities and points of contact.
- Points of contact and the designated Commission services are available on 24-hour basis.
Thank you for your attention

Further information on DG ENERGY radiation protection website


Contacts:
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DG ENER / Unit D3 - Radiation protection and Nuclear Safety