Radon requirements in the new Euratom Basic Safety Standards Directive

Council Directive 2013/59/Euratom

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Legal Basis:
The Euratom Treaty (1957)

Article 2: *In order to perform its tasks, the Community shall …*
establish ***uniform standards*** *to protect the health of workers and of the general public and ensure that they are applied;*
[…]

Article 30: *Basic standards shall be laid down within the Community for the* ***protection of the health of workers and the general public against dangers arising from ionising radiations.*** *[…]*

Article 31: *The basic standards shall be worked out by the Commission after it has obtained the opinion of a group of persons appointed by the Scientific and Technical Committee from among scientific experts, and in particular public health experts, in the Member States …*

Main objective of the Basic Safety Standards

Ensure the highest possible protection of workers, members of the public and patients against the dangers arising from exposure to ionising radiation

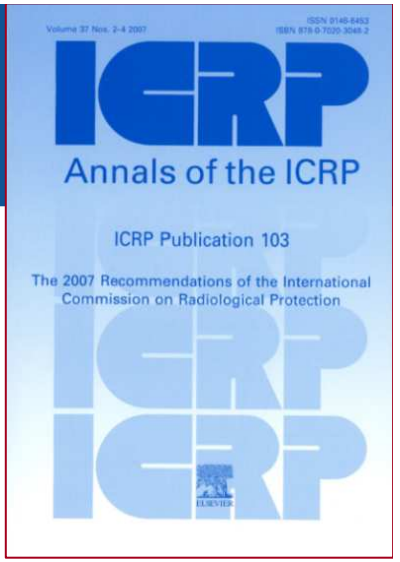
- First Directive adopted already in **1959 - r**egularly amended in 1962, 1966, 1976, 1980, 1984, 1996 and latest **2013**

New Basic Safety Standards:

- Council Directive 2013/59/Euratom laying down basic safety standards for protection against the dangers arising from exposure to ionizing radiation
  (OJ L13, 17.01.2014, p. 1 -73)

Additional elements

- Drinking water quality
- Food and feed – maximum permissible contamination levels after a nuclear accident
- Information exchange in case of a nuclear accident or radiological emergency
  - ECURIE *(European Community Urgent Radiological Information Exchange)*
  - EURDEP (*EUropean Radiological Data Exchange Platform*)



Motivation and Objective of the 2013 Revision

Modernisation of European Radiation Protection Legislation

- Takes account of latest scientific findings and recommendations (ICRP 2007) and technological development
- Covers all radiation sources – including natural radiation
- Covers all exposure situations – planned, existing, emergency
- Integrates protection of workers, members of the public, patients and the environment
- Harmonises, to the extent possible, numerical values with international standards

Consolidation and streamlining of existing pieces of legislation

- Combining five existing Euratom Directives and one *Recommendation*
    - *Basic Safety Standards, Directive 96/29/Euratom*
    - *Medical Exposures, Directive 97/43/Euratom*
    - *Public Information, Directive 89/618/Euratom*
    - *Outside Workers, Directive 90/641/Euratom*
    - *Control of high-activity sealed radioactive sources and orphan sources, Directive 2003/122/Euratom*
    - *Radon, Commission Recommendation 90/143/Euratom*

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Council Directive 2013/59/Euratom offers

- Better protection of the public, in particular from radon in dwellings, from exposure from NORM activities and building materials and from deliberate exposure for non-medical purposes;

- Better protection of workers, in particular medical staff and workers in workplaces with indoor radon and in activities processing naturally occurring radioactive material (NORM);

- Better protection of patients, in particular with regard to the avoidance of incidents and accidents in radiodiagnosis and radiotherapy;

- Strengthened requirements on emergency preparedness and response, especially with a view to the lessons learned from the Fukushima accident.

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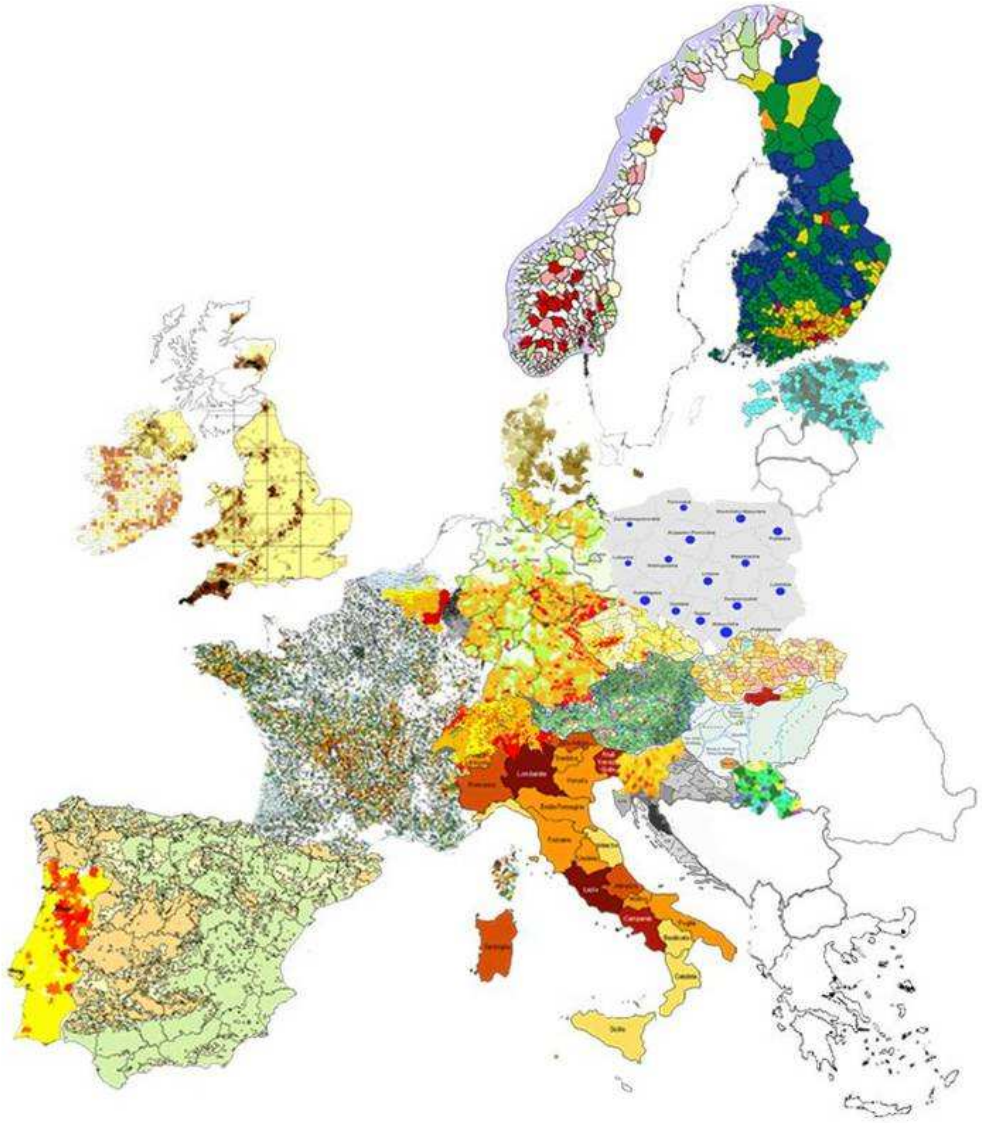
Radon in Europe



National radon action plan (Article 103)

- Establishment of a national radon action plan addressing long term risks from radon exposures (Article 103)
  - ✓ in dwellings, buildings with public access and workplaces
  - ✓ from any source of radon ingress – soil, building material, water

- National action plan needs to take into account the issues set out in Annex XVIII

- Ensure appropriate measures to prevent radon ingress into new buildings, e.g. though specific requirements in building codes

- Identify areas with a significant number of buildings expected to exceed the national reference level

National action plan needs to take into account (Annex XVIII)

(1) Strategy for conducting surveys of indoor radon concentrations or soil gas concentrations for the purpose of estimating the distribution of indoor radon concentrations, for the management of measurement data and for the establishment of other relevant parameters (such as soil and rock types, permeability and radium-226 content of rock or soil).

(2) Approach, data and criteria used for the delineation of areas or for the definition of other parameters that can be used as specific indicators of situations with potentially high exposure to radon.

(3) Identification of types of workplaces and buildings with public access, such as schools, underground workplaces, and those in certain areas, where measurements are required, on the basis of a risk assessment, considering for instance occupancy hours.

(4) The basis for the establishment of reference levels for dwellings and workplaces. If applicable, the basis for the establishment of different reference levels for different uses of buildings (dwellings, buildings with public access, workplaces) as well as for existing and for new buildings.

(5) Assignment of responsibilities (governmental and non-governmental), coordination mechanisms and available resources for implementation of the action plan.

…

National action plan needs to take into account (2)

(6) Strategy for reducing radon exposure in dwellings and for giving priority to addressing the situations identified under point 2.

(7) Strategies for facilitating post construction remedial action.

(8) Strategy, including methods and tools, for preventing radon ingress in new buildings, including identification of building materials with significant radon exhalation.

(9) Schedules for reviews of the action plan.

(10) Strategy for communication to increase public awareness and inform local decision makers, employers and employees of the risks of radon, including in relation to smoking.

(11) Guidance on methods and tools for measurements and remedial measures. Criteria for the accreditation of measurement and remediation services shall also be considered.

(12) Where appropriate, provision of financial support for radon surveys and for remedial measures, in particular for private dwellings with very high radon concentrations.

(13) Long-term goals in terms of reducing lung cancer risk attributable to radon exposure (for smokers and non- smokers).

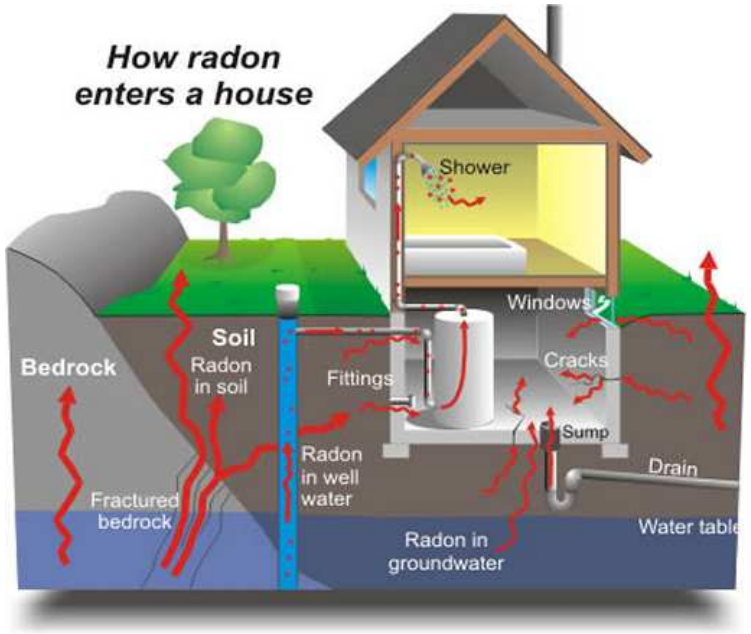
(14) Where appropriate, consideration of other related issues and corresponding programmes such as programmes on energy saving and indoor air quality.

Public exposure to indoor radon (Article 74)

- Establishment of a national reference level for indoor radon concentration ≤ 300 Bq/m^3

- Identify dwellings with radon concentrations exceeding the reference level
  - ✓ encourage radon reducing measures

- Provide information on local and national level on
  - ✓ associated health risks
  - ✓ importance of performing measurements
  - ✓ technical means to reduce radon concentrations



Radon in workplaces (Articles 54, 25 (2), 35 (2))

- Establishment of a national reference level for indoor radon concentration in workplaces ≤ 300 Bq/m^3

- Radon measurements in workplaces in
  - ✓ areas identified in accordance with Article 103 (3)
  - ✓ specific type of workplaces identified in the national action plan

- In workplaces where radon concentrations continue to exceed the national reference level despite all actions taken to optimise
  - ✓ Notification to the competent authority (Article 25 (2))
  - ✓ Occupational exposure arrangements in workplaces (Article 35 (2))
    - > 6mSv/a Situation to be managed as a planned exposure situation
    - ≤ 6mSv/a Exposures need to be kept under review

Adoption, transposition and implementation

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Adoption procedure and beyond

- Article 31 Group of Experts Opinion – ***24 February 2010***
- *Commission* draft proposal – ***29 September 2011***
- *European Economic and Social Committee* favourable Opinion – ***22 February 2012***
- *Commission* proposal – **30 May 2012**
- Legislative Resolution of the *European Parliament* – **24 October 2013**
- *European Council* formal adoption of the proposal – **5 December 2013**
- Publication in the *Official Journal of the European Union* – **17 January 2014**

Article 106

Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 6 February 2018.

Notification under the provisions of the BSS Directive

Article 106

Transposition

3. Member States shall communicate to the Commission the text of the provisions of national law which they adopt in the field covered by this Directive.

Whereas: (53) In accordance with the Joint Political declaration of Member States and the Commission on explanatory documents of 28 September 2011, Member States have undertaken to accompany, in justified cases, the notification of their transposition measures with one or more documents explaining the relationship between the components of a directive and the corresponding parts of national transposition instruments. With regard to this Directive, the transmission of such documents is justified.

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Timing: 6 February 2018

Transposition of Council Directive 2013/59/Euratom

- 28 Member States of the European Union will have four years to transpose this comprehensive Directive into national legislation
  - ✓ 99 definitions, 109 articles and 19 annexes

- Commission strategy to monitor and support the transposition and implementation of the Directive
  - ✓ 2014 – 2016 (early planning phase)
    - Evaluation of Member States' strategies and plans
    - Detection of issues, exchange of experiences/resolutions, identification of good practices
    - Development of appropriate guidance
  - ✓ 2016 – 2018
    - Analysis of Member States' (draft) national transposition measures
      - ➢ submitted under Article 33 of the Euratom Treaty / Article 106.3 of the BSS Directive
    - Assessing compliance with the BSS Directive

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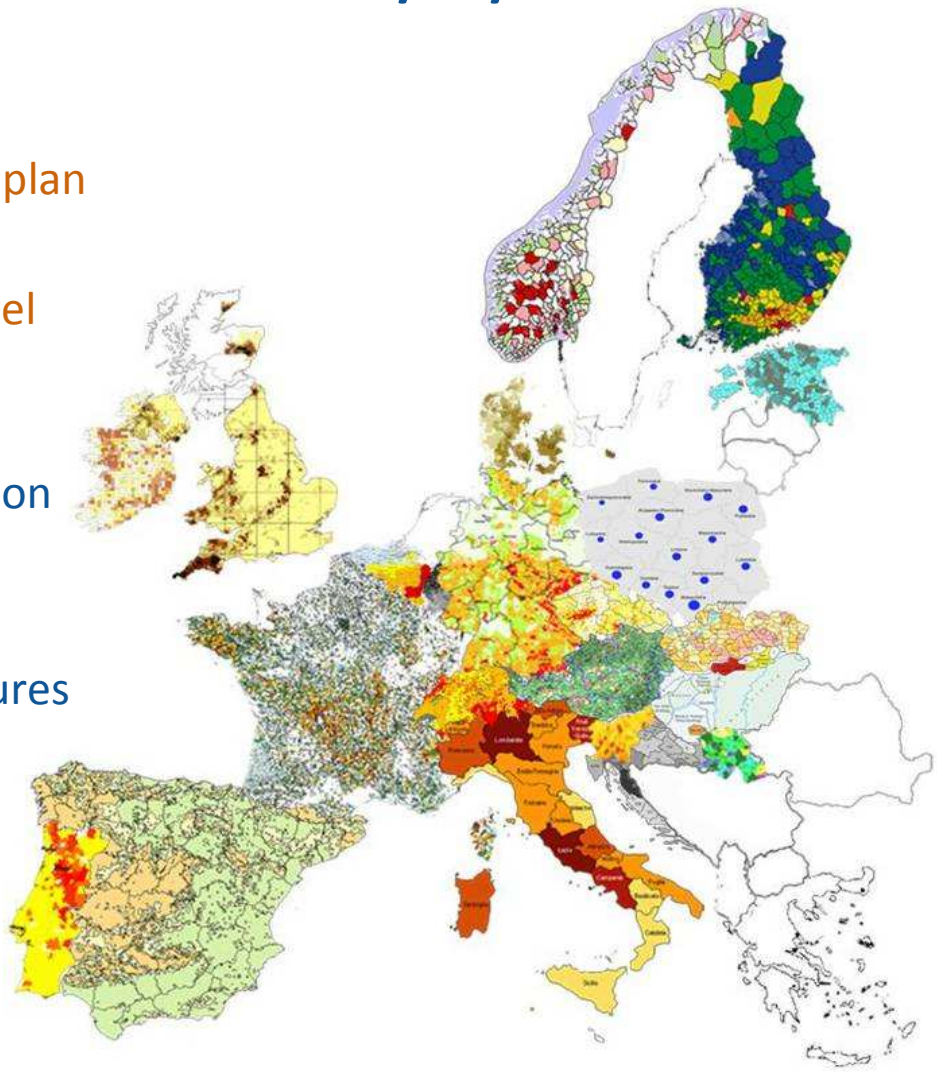
Radon requirements in Council Directive 2013/59/Euratom
Résumé

- Establishment of a national radon action plan
  - ✓ Details given in Annex XVIII
- Establishment of a national reference level for dwellings and workplaces
  ≤ 300 Bq/m^3
- Identification of areas with increased radon concentrations
- Provision of information on radon
- Encouragement of radon reducing measures
- Occupational radiation protection arrangements in workplaces where radon concentrations continue to exceed national reference level

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Thank you for your attention
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