

Citizens Summary

Council Directive laying down basic safety standards for the protection against the dangers arising from exposure to ionising radiation

What is the challenge?

The European legislation on radiation protection needs to be updated following the new recommendations in Publication 103(2007) of the International Commission on Radiological Protection (ICRP) and the experience from the implementation of the current requirements:

- there is now a strong indication of effects on the lens of the eye at radiation doses below the threshold that was assumed before. This is of importance to specific categories of exposed workers;
- an important fraction of workers in industries processing Naturally Occurring Radioactive Materials (NORM)¹ receive doses above the dose limit for members of the public, but still do not benefit from any protection as occupationally exposed workers;
- highest doses to the population result from exposure at home, due to inhalation of radon, a natural radioactive gas entering buildings from the soil below and from certain building materials;
- ICRP recommends that the radiation protection system now addresses the protection of non-human biota against exposure to ionising radiation.

The proposal and its benefits

The proposed new Basic Safety Standards Directive offers the highest protection of workers, patients and the public based on the current scientific knowledge. In addition it represents a major simplification of European legislation by replacing 5 directives with one piece of legislation - Medical

¹ Radioactive material containing no significant amounts of radionuclides other than naturally occurring radionuclides. Examples of NORM industries are the extraction of rare earths from monazite, oil and gas production, geothermal energy production, zircon and zirconium industry, production of phosphate fertilisers, mining of ores other than uranium ore.

Directive², High Activity Sealed Sources Directive³, Outside Workers Directive⁴, Public Information Directive⁵ and the BSS Directive 96/29⁶.

The new Directive introduces binding requirements on:

- protection against indoor radon (thereby upgrading an earlier Commission Recommendation⁷) and on the use of building materials;
- the assessment of the environmental impact of discharges of radioactive effluents from nuclear installations, as well as for the prevention of environmental damage in case of an accident.

The European citizens will benefit from this new Directive in receiving better health protection against ionising radiation, in particular with regard to:

- more effective campaigns against indoor radon exposure,
- better protection of workers in industries processing naturally occurring radioactive materials,
- better protection in medical applications of ionising radiation and control of the number of exposures,
- better protection and higher mobility for itinerant specialised workers in nuclear industry.

The proposal will further benefit the harmonisation of regulatory requirements in EU countries as well as their coherence with international standards, developed by the International Atomic Energy Agency.

In light of the nuclear crisis in Japan, the proposal offers more challenging requirements for managing emergency exposure situations.

Why EU action is needed

According to the Euratom Treaty the European Atomic Energy Community is mandated to "establish **uniform** safety standards to protect the health of workers and of the general public and ensure that they are applied."

² Council Directive 97/43/Euratom of 30 June 1997 on health protection of individuals against the dangers of ionising radiation in relation to medical exposure

³ Council Directive 2003/122/Euratom of 22 December 2003 on the control of high-activity sealed radioactive sources and orphan sources

⁴ Council Directive 90/641/Euratom of 4 December 1990 on the operational protection of outside workers exposed to the risk of ionising radiation during their activities in controlled areas

⁵ Council Directive 89/618/Euratom of 27 November 1989 on informing the general public about health protection measures to be applied and steps to be taken in the event of a radiological emergency

⁶ Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation, OJ L 159, 29.6.1996, p. 1

⁷ Commission Recommendation 90/143 of 21 February 1990 on the protection of the public against indoor exposure to radon

The comprehensive body of Community legislation adopted since 1958 offers a high standard of protection to European citizens, whether they are workers in nuclear industry, members of the public or patients and staff in medical applications of ionising radiation. However, developments over the past 20 years warrant an update of the legislation.

When is it expected to come into effect?

The proposed Directive is expected to be adopted by the Council and come into effect in 2012. This would give EU Member States until 2014 to transpose the new requirements and to update current national law.