Opinion of the European Economic and Social Committee on the 'Proposal for a Council Directive laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation'

COM(2011) 593 final — 2011/0254 (NLE)

(2012/C 143/22)

Rapporteur: **Mr ADAMS**

On 28 September 2011, the European Commission decided to consult the European Economic and Social Committee, under Article 31 of the Treaty on the Euratom Treaty, on the

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

(COM(2011) 593 final – 2011/0254 (NLE)).

The Section for Transport, Energy, Infrastructure and the Information Society, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 3 February 2012.

At its 478th plenary session, held on 22 and 23 February 2012 (meeting of 22 February), the European Economic and Social Committee adopted the following opinion by 118 votes to 1 with 5 abstentions.

1. **Conclusions and recommendations**

1.1 *Conclusions*

1.1.1 The Committee welcomes this proposal, which uses the most recent scientific analysis on the dangers of ionising radiation to address, define and extend the health protection needs of people and the environment.

1.1.2 In particular the presentation of a consistent, coherent and unified approach to safety through the merging of five existing directives will have a practical and positive operational impact.

1.2 *Recommendations*

1.2.1 The Committee notes that, possibly, additional requirements will be requested of Member States following transposition into national law. We feel it particularly important that, to meet both the spirit and substance of the legislation, adequate resources are consequently made available to the competent authorities with responsibility for national implementation. This particularly applies in terms of building a quality approach, through comprehensive education and training.

1.2.2 The Committee fully supports the approach which extends protection requirements to the environment and recommends adoption of Chapter IX provisions (with due acknowledgement to the reference to pending ICRP (International Commission on Radiological Protection) criteria (application guidance) as soon as these criteria have been formalised.

1.2.3 The Committee appreciates the very thorough work on the proposal carried out by all the bodies involved and recommends proceeding with its adoption as soon as possible.

2. **Background to the proposed directive**

2.1 Ionising radiation is ubiquitous in the environment. Everyone on the planet is exposed to a background of natural radiation. It arises from naturally occurring radioactive materials in rocks, soils, food and air. Because types of rock vary so too does the level of radiation and radioactive substances (Radon) coming from the ground; exposure thus depends on location. There is also an effect from cosmic radiation. Cosmic rays are more intense at higher altitudes and latitudes, so aircrew and frequent flyers are exposed more. Everyone is also exposed to man-made radiation. The most significant of these artificial sources is medical exposure to ionising radiation. There is also occupational exposure from industrial practices, such as weld radiography, and public exposure from discharges from nuclear plants and there remain traces of radioactivity in the environment from nuclear weapons testing and the military use of depleted uranium projectiles.

2.2 Radiation has many practical uses in medicine, research, construction, and other areas. The danger from radiation comes from its ability to ionise molecules in living cells and thus bring about biochemical change. If there is enough change in a living cell it may die, or its genetic information (DNA) may be altered beyond repair. This possibility meant early adoption of national protective and regulatory measures, even before the precise damage mechanism was known, and, from the outset, the development of common measures for the EU as a whole under the Euratom Treaty.

2.3 In determining appropriate protection measures European legislation has always followed the recommendations of the ICRP and in 2007 this body issued new and detailed guidance on radiation protection needs which takes into account developments of the last 20 years. These include the

proliferation of man-made sources of radiation and ongoing research into the effects of natural sources, such as radon gas. The intention of this directive is to offer, based on current scientific knowledge, high protection of workers, patients and the public against the adverse health effects of ionising radiation. It also advances into new areas, such as protection for the environment.

2.4 This is a major piece of work, comprising 110 articles which together with 16 annexes, runs to more than 100 pages of text. It, in effect, recasts and consolidates five existing directives [1] into a single directive and introduces binding requirements on protection against indoor radon and the use of building materials, the assessment of the environmental impact of discharges of radioactive effluents from nuclear installations and the prevention of environmental damage in case of an accident.

2.5 In summary, European citizens will benefit from this new directive by receiving better health protection against ionising radiation, notably with regard to:

— more effective campaigns and supporting measures 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.

2.6 Regulatory requirements in EU countries will be harmonised and made coherent with international standards. Following the particular focus on nuclear safety resulting from the Fukushima crisis the proposal offers more challenging requirements for managing emergency exposure situations.

2.7 This directive is complementary to the Directive on radioactive substances in drinking water on which the Committee has recently passed an opinion [2].

2.8 The International Basic Safety Standards, approved by the International Atomic Energy Authority (IAEA), and reflecting international consensus, are detailed but non-binding. They allow scope for worldwide differences in national capacity. The directive goes beyond this in establishing uniform standards for Member States whilst also recognising internal market rules. The directive benefits from an extensive consultation process involving the Group of Experts under Article 31 Euratom, IAEA, the Heads of European Radiological Protection Competent Authorities (HERCA) and the International Radiation Protection Association (IRPA), and other stakeholders.

2.9 The legal basis of the directive is the Euratom Treaty. The Committee notes, with some sympathy, the concerns that have been expressed about whether the Treaty, unamended since 1957, remains a suitable basis on which to deal with environmental issues. However, there is little likelihood of a Euratom revision in the immediate future whereas concerns about environmental protection are a reality and need addressing. It should be noted that Article 37 of the Euratom Treaty represented, in 1957, pioneering primary legislation concerning binding trans-frontier obligations with respect to both environmental impact and protection of humans.

3. **Outline summary of the proposed directive**

3.1 In a complex directive of this nature it is neither appropriate, nor is space available within the necessary constraints of a Committee opinion, to offer a detailed summary. However, a short headline analysis of the Commissions approach together with relevant chapter headings can provide an overview.

General approach	Chapter headings
— Revision and consolidation of BSS	Chapter I: Subject matter and scope
— Exposure situations	
— System of Protection	Chapter II: Definitions
— Existing exposure situations	Chapter III: System of radiation protection
— Radon (workplace, dwellings)	
— Building materials	Chapter IV: Requirements for radiation protection education, training and information
— Living in contaminated territory	
	Chapter V: Justification and regulatory control of practices

[1] OJ L 180 of 9.7.1997, pp. 22-27.
OJ L 346 of 31.12.2003, pp. 57-64.
OJ L 349 of 13.12.1990, pp. 21-25.
OJ L 357 of 7.12.1989, pp. 31-34.
OJ L 159 of 29.6.1996, pp. 1-114.

[2] OJ C 24 du 28.1.2012, pp. 122.

General approach	Chapter headings
— Planned exposure situations	Chapter VI: Protection of workers, apprentices and students
— Justification and regulatory control	Chapter VII: Protection of patients and other individuals subjected to medical exposure
— Graded approach	
— Categories of exposure	Chapter VIII: Protection of members of the public
— Emergency exposure situations	Chapter IX: Protection of the environment
— Emergency workers	Chapter X: Requirements for regulatory control
— Emergency planning and response	Chapter XI: Final provisions
— Public information	
— Institutional infrastructure	
— Recast Directives	
Transposition in national law	

4. **General comments**

4.1 The Committee notes that the most recent scientific analysis on the dangers of ionising radiation has been used in the preparation of this directive and welcomes the approach taken to address, define and extend the health protection needs of people and the environment.

4.2 The Commission has chosen to recast and consolidate five existing directives into a unified whole and this will have a practical and positive operational impact and offers a consistent, coherent and unified approach to safety.

4.3 A number of comparative analyses of the implementation and operation of previous directives in national law has revealed various shortcomings. This is not a fault in transposition but in application – e.g. resources applied to education and training, providing public awareness programmes, recognition of local professionals, information to the public on how to behave in the event of accident etc.

4.4 The Committee suggests that to meet the increased demands resulting from national transposition legislation and to remedy possible existing shortfalls, the Commission should facilitate the work of national authorities by organising workshops to discuss legal and practical difficulties in national implementation. The use of civil society observatories to monitor and evaluate the application of legislation through concrete measures – additional to the role of national competent authorities – should also be encouraged.

4.5 The Committee regrets that although the directive deals comprehensively with natural and civilian sources of radiation, releases of radiation from military facilities can be exempt as the Euratom Treaty only applies to civil situations ([3]).

4.6 The Committee is encouraged that the directive anticipates and makes provision for the protection of citizen's right to minimise their exposure to man-made radiation sources through, for example, the increasing use of security devices such as whole-body X-ray scanners.

4.7 While strongly supporting the new issue of protection of the environment, the Committee notes that first of all the pending ICRP (International Commission on Radiological Protection) criteria (and application guidance) have to be formalised before defining binding quantitative rules. They will present a common scientific understanding about the specific criteria to be applied in this case in order to provide a common basis for all Member States.

Brussels, 22 February 2012.

The President
of the European Economic and Social Committee
Staffan NILSSON

([3]) ECJ case C-61/03 from 12.4.2005.