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### Plenary sitting

A7-0214/2011

31.5.2011

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### **REPORT**

on the proposal for a Council directive on the management of spent fuel and radioactive waste (COM(2010)0618-C7-0387/2010-2010/0306(NLE))

Committee on Industry, Research and Energy

Rapporteur: Romana Jordan Cizelj

RR\869159EN.doc PE460.863v02-00

### Symbols for procedures

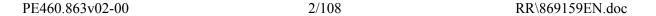
- \* Consultation procedure
- \*\*\* Consent procedure
- \*\*\*I Ordinary legislative procedure (first reading)
- \*\*\*II Ordinary legislative procedure (second reading)
- \*\*\*III Ordinary legislative procedure (third reading)

(The type of procedure depends on the legal basis proposed by the draft act.)

### Amendments to a draft act

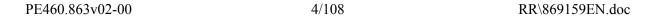
In amendments by Parliament, amendments to draft acts are highlighted in *bold italics*. Highlighting in *normal italics* is an indication for the relevant departments showing parts of the draft act which may require correction when the final text is prepared – for instance, obvious errors or omissions in a language version. Suggested corrections of this kind are subject to the agreement of the departments concerned.

The heading for any amendment to an existing act that the draft act seeks to amend includes a third line identifying the existing act and a fourth line identifying the provision in that act that Parliament wishes to amend. Passages in an existing act that Parliament wishes to amend, but that the draft act has left unchanged, are highlighted in **bold**. Any deletions that Parliament wishes to make in such passages are indicated thus: [...].



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#### DRAFT EUROPEAN PARLIAMENT LEGISLATIVE RESOLUTION

on the proposal for a Council directive on the management of spent fuel and radioactive waste

(COM(2010)0618 - C7-0387/2010 - 2010/0306(NLE))

### (Consultation)

The European Parliament,

- having regard to the Commission proposal to the Council (COM(2010)0618),
- having regard to the Treaty establishing the European Atomic Energy Community, and in particular Articles 31 and 32, pursuant to which the Council consulted Parliament (C7-0387/2010),
- having regard to Rules 55 of its Rules of Procedure,
- having regard to the report of the Committee on Industry, Research and Energy and the opinions of the Committee on Employment and Social Affairs and the Committee on the Environment, Public Health and Food Safety (A7-0214/2011),
- 1. Approves the Commission proposal as amended;
- 2. Calls on the Commission to alter its proposal accordingly, in accordance with Article 293(2) of the Treaty on the Functioning of the European Union and Article 106a of the Euratom Treaty;
- 3. Calls on the Council to notify Parliament if it intends to depart from the text approved by Parliament;
- 4. Asks the Council to consult Parliament again if it intends to substantially amend the Commission proposal;
- 5. Instructs its President to forward its position to the Council and the Commission.

#### Amendment 1

# Proposal for a directive Recital 1

Text proposed by the Commission

(1) Article 2(b) of the Treaty provides for the establishment of uniform safety standards to protect the health of workers and of the general public. Amendment

(1) Article 2(b) of the *Euratom* Treaty provides for the establishment of uniform safety standards to protect the health of workers and of the general public.

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# Proposal for a directive Recital 2

Text proposed by the Commission

(2) Article 30 of the Treaty provides for the establishment of basic standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiations.

#### Amendment

(2) Article 30 of the *Euratom* Treaty provides for the establishment of basic standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiations.

#### Amendment 3

# Proposal for a directive Recital 3

Text proposed by the Commission

(3) Article 37 of the Treaty requires Member States to provide the Commission with general data relating to any plan for the disposal of radioactive waste.

#### Amendment

(3) Article 37 of the *Euratom* Treaty requires Member States to provide the Commission with general data relating to any plan for the disposal of radioactive waste.

### Amendment 4

Proposal for a directive Recital 3 a (new)

Text proposed by the Commission

### Amendment

(3a) Council Directive 89/391/EEC of 12 June 1989<sup>1</sup> provides for the introduction of measures to encourage improvements in the safety and health of workers at work.

<sup>1</sup> OJ L 183, 29.6.1989, p. 1.

#### **Amendment 5**

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# Proposal for a directive Recital 4

Text proposed by the Commission

(4) 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 ionizing radiation<sup>22</sup> applies to all practices which involve a risk from ionizing radiation emanating from an artificial source or from a natural radiation source in cases where natural radionuclides are or have been processed in view of their radioactive. fissile or fertile properties. It also covers the authorised releases of materials that originate from such practices. The provisions of that Directive have been supplemented by more specific legislation.

<sup>22</sup> OJ L 159, 29.6.1996, p. 1.

### Amendment

(4) Council Directive 96/29/Euratom of 13 May 1996<sup>22</sup> *lays down the basic safety standards. That Directive* applies to all practices which involve a risk from ionizing radiation emanating from an artificial source or from a natural radiation source in cases where natural radionuclides are or have been processed in view of their radioactive, fissile or fertile properties. It also covers the authorised releases of materials that originate from such practices. The provisions of that Directive have been supplemented by more specific legislation.

<sup>22</sup> 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 ionizing radiation (OJ L 159, 29.6.1996, p. 1).

### Amendment 6

Proposal for a directive Recital 15 a (new)

Text proposed by the Commission

Amendment

(15a) The three former EU candidate countries, Lithuania, Slovakia and Bulgaria, operated old Soviet-designed nuclear power plants which could not be economically upgraded to meet EU safety standards; consequently, those plants were shut down and subsequently decommissioned.

#### Amendment 7

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# Proposal for a directive Recital 15 b (new)

Text proposed by the Commission

#### Amendment

(15b) The decommissioning of the nuclear power plants of the three EU countries imposed a significant financial and economical burden which could not be borne in full by the Member States concerned, and the Community therefore provided financial resources to the respective Member States, intended to cover part of the cost of decommissioning and waste projects and to offset the economic consequences.

#### Amendment 8

# Proposal for a directive Recital 18

Text proposed by the Commission

(18) In 2006 the IAEA updated its entire corpus of standards and published the Fundamental Safety Principles<sup>37</sup>, which were jointly *sponsored* by Euratom, OECD/NEA and other international organisations. As stated by the Joint Sponsoring Organisations, applying the Fundamental Safety Principles will facilitate the application of international safety standards and will make for greater consistency between the arrangements of different States. It is therefore desirable that all States adhere to and advocate these principles. The principles will be binding on the IAEA in relations to its operation and on States in relation to operation assisted by IAEA. States or sponsoring organisations may adopt the principles, at their own discretion, for application to their own activities.

#### Amendment

(18) In 2006 the IAEA updated its entire corpus of standards and published the Fundamental Safety Principles<sup>37</sup>, which were jointly *developed* by Euratom, OECD/NEA and other international organisations. As stated by the Joint Sponsoring Organisations, applying the Fundamental Safety Principles will facilitate the application of international safety standards and will make for greater consistency between the arrangements of different States. It is therefore desirable that all States adhere to and advocate these principles. The principles will be binding on the IAEA in relations to its operation and on States in relation to operation assisted by IAEA. States or sponsoring organisations may adopt the principles, at their own discretion, for application to their own activities.

#### **Amendment 9**

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# Proposal for a directive Recital 19 a (new)

Text proposed by the Commission

Amendment

(19a) The Aarhus Convention of 25 June 1998 on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters grants rights to the public and imposes on the parties thereto, and on public authorities, obligations regarding access to information and public participation and access to justice in environmental matters, which include the management of spent fuel and radioactive waste.

Amendment 10

Proposal for a directive Recital 19 b (new)

Text proposed by the Commission

Amendment

(19b) The International Labour Organization has adopted a Convention¹ and a Recommendation² on Radiation Protection, applicable to all activities involving exposure of workers to ionising radiation in the course of work, and requires appropriate steps to be taken to ensure the effective protection of workers in the light of current knowledge.

Amendment 11

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<sup>&</sup>lt;sup>1</sup> C115 Convention concerning the Protection of Workers against Ionising Radiations, adopted on 22 June 1960.

<sup>&</sup>lt;sup>2</sup> C114 Recommendation concerning the Protection of Workers against Ionising Radiations, adopted on 22 June 1960.

# Proposal for a directive Recital 22 a (new)

Text proposed by the Commission

#### Amendment

(22a) The European Parliament has also stated that, in all Member States, all nuclear undertakings should have sufficient financial resources available to cover all the costs of decommissioning, including waste management, in order to uphold the 'polluter pays' principle and to avoid any recourse to State aid, and has called on the Commission to draw up precise definitions concerning the use of financial resources earmarked for decommissioning in each Member State, taking into account decommissioning as well as the management, conditioning and final disposal of the resultant radioactive waste<sup>1</sup>.

<sup>1</sup>European Parliament resolution of 16 November 2005 on the use of financial resources earmarked for the decommissioning of nuclear power plants (OJ C 280 E, 18.11.2006, p. 117).

### **Amendment 12**

# Proposal for a directive Recital 23

Text proposed by the Commission

(23) There is a growing recognition in the Union as well as worldwide of the need *for a responsible use of* nuclear *energy, covering in particular nuclear* safety and security. In this context the issue of spent fuel and radioactive waste management needs to be addressed in order to ensure *a* safe, optimised and sustainable *use of nuclear energy*.

#### Amendment

(23) There is a growing recognition in the Union as well as worldwide, especially following the recent serious nuclear accident in Japan, of the need to strengthen the rules regarding nuclear safety and security. In this context the momentous issue of spent fuel and radioactive waste management needs to be addressed in order to ensure safe, optimised and sustainable storage and/or disposal.

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# Proposal for a directive Recital 23 a (new)

Text proposed by the Commission

#### Amendment

(23a) It should be stressed in this connection that a large proportion of spent fuel material is recoverable. The recycling of spent fuel is therefore an aspect that needs to be taken into account, together with the disposal of final waste.

## Amendment 14Proposal for a directive Recital 24

Text proposed by the Commission

(24) While it is up to the Member States to define their energy mix, all Member States generate radioactive waste, whether or not they have nuclear reactors. Radioactive waste arises mainly from activities of the nuclear fuel cycle, such as the operation of nuclear power plants and the reprocessing of spent fuel, but also from other activities, such as applications of radioactive isotopes in medicine, research and industry.

#### Amendment

(24) *All* Member States generate radioactive waste, whether or not they have nuclear *power* reactors. Radioactive waste arises mainly from activities *related to power generation, inter alia from* the operation of nuclear power plants and *their decommissioning*, but also from other activities, such as applications of radioactive isotopes in medicine, research and industry.

#### **Amendment 15**

# Proposal for a directive Recital 25

Text proposed by the Commission

(25) The operation of nuclear reactors also generates spent fuel. Each Member State may define its fuel cycle policy considering spent fuel as a valuable resource that may be reprocessed, or deciding to dispose of it as waste.

#### Amendment

(25) The operation of nuclear reactors also generates spent fuel. Each Member State may define its fuel cycle policy considering spent fuel as a valuable resource that may be reprocessed *and recycled*, or deciding to dispose of it as

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Whatever option is chosen, the disposal of high level waste, separated at reprocessing, or of spent fuel regarded as waste should be considered waste. Whatever option is chosen, the disposal of high level waste, separated at reprocessing, or of spent fuel regarded as waste should be considered

#### Amendment 16

# Proposal for a directive Recital 27

Text proposed by the Commission

(27) Radioactive waste, including spent fuel considered as waste, requires containment and isolation from humans and the living environment over the long term. Its specific nature (content of radionuclides) requires arrangements to protect human health and the environment against dangers arising from ionizing radiation, including disposal in appropriate facilities as the end point of its management. The storage of radioactive waste, including long-term storage, is an interim solution but not an alternative to disposal.

#### Amendment

(27) Radioactive waste, including spent fuel considered as waste, requires *appropriate conditioning*, containment and isolation from humans and the living environment over the long term. Its specific nature (content of radionuclides) requires arrangements to protect human health and the environment against dangers arising from ionizing radiation, including disposal in appropriate facilities as the end point of its management. The storage of radioactive waste, including long-term storage, is an interim solution but not an alternative to disposal.

### Justification

Conditioning into stable waste forms and appropriate packaging is a fundamental prerequisite to safe containment and isolation from the biosphere.

### **Amendment 17**

# Proposal for a directive Recital 28

Text proposed by the Commission

(28) A national radioactive waste classification scheme should support these arrangements taking fully into account the specific types and properties of radioactive waste. The precise criteria according to which waste is assigned to a particular waste class will depend on the specific

#### Amendment

(28) A national radioactive waste classification scheme should support these arrangements taking fully into account the specific types and properties of radioactive waste. The precise criteria according to which waste is assigned to a particular waste class will depend on the specific

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situation in the State in relation to the nature of the waste and the disposal options available or under consideration.

situation in the State in relation to the nature of the waste and the disposal options available or under consideration. To facilitate communication and exchanges of information between Member States, and to provide for transparency, a classification scheme should be described in detail in the national programme.

### Justification

Classification of radioactive waste is related to safety aspects of their management. In this context it provides a link between the waste characteristics and safety objectives that have been set up by a regulatory body or the operator of a waste management facility. Such a classification system serves in devising waste management strategies and establishing national programmes and as such should be detailed and published in the programmes.

#### Amendment 18

# Proposal for a directive Recital 29

Text proposed by the Commission

(29) The typical disposal concept for short lived low and intermediate level waste is near surface disposal. Following 30 years of research, it is broadly accepted at the technical level that deep geological disposal represents the safest and most sustainable option as the end point of the management of high level waste and spent fuel considered as waste. Thus moving towards implementation of disposal should be pursued.

#### Amendment

(29) *Disposal concepts* for short lived low and intermediate level waste vary from near surface disposal (in buildings, shallow burial or burial down to a few tens of metres below the surface) to stateof-the-art disposal in geologic repositories 70 to 100 metres underground. Nearly all the long-lived short and intermediate radioactive waste is stored. Following 30 years of research, the feasibility of deep geological disposal has been demonstrated at scientific level, and this could represent a safe and economic option as the end point of the management of high level radioactive waste. The activities conducted under the 'Implementing Geological Disposal of Radioactive Waste Technology Platform' (IGD-TP) could facilitate access to expertise and technology in this respect. Various other options are also under investigation, such as engineered storage facilities on or near-surface, dry-rock disposition or

disposal in deep bore-holes (3000 to 5000 metres deep), including possible reversibility and retrievability. Thus, further research into all the options should be pursued.

#### **Amendment 19**

Proposal for a directive Recital 29 a (new)

Text proposed by the Commission

Amendment

(29a) In view of the research into the disposal of radioactive waste by transmutation or other means of reducing its radioactivity and half-life, longer-term reversible storage of radioactive waste in deep geological formations should also be considered.

#### Amendment 20

# Proposal for a directive Recital 30

Text proposed by the Commission

(30) Although each Member State is responsible for its own policy on spent fuel and radioactive waste management, that policy should respect the relevant fundamental safety principles set by the IAEA. It is an ethical obligation of each Member State to avoid any undue burden on future generations in respect of the existing spent fuel and radioactive waste, as well as those expected from decommissioning of existing nuclear installations.

#### Amendment

(30) Although each Member State is responsible for its own policy on spent fuel and radioactive waste management, that policy should *not only* respect the relevant fundamental safety principles set by the IAEA but should also impose the highest safety standards reflecting state-of-the-art practices at regulatory and operational level and Best Available Technology (BAT). It is an ethical obligation of each Member State to avoid any undue burden on future generations in respect of the historical and existing spent fuel and radioactive waste, as well as those expected from decommissioning of existing nuclear installations. Member States should therefore establish a decommissioning policy which guarantees

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the dismantling of facilities in the safest manner as early as possible after their closure.

#### Amendment 21

# Proposal for a directive Recital 31

Text proposed by the Commission

(31) For the responsible management of spent fuel and radioactive waste, each Member State should establish a national framework which *assures* political commitments and stepwise decision making implemented through adequate legislation, regulation and organisation with a clear allocation of responsibilities.

#### Amendment

(31) For the responsible management of spent fuel and radioactive waste, each Member State should establish a national framework which *guarantees* political commitments and stepwise decision making *in keeping with the Aarhus Convention*, implemented through adequate legislation, regulation and organisation with a clear allocation of responsibilities.

### Justification

As a party to the Aarhus Convention of 25 June 1998 on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, the European Union has undertaken to abide by the principles of this international convention and has incorporated them in Directive 2003/35/EC of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment.

#### **Amendment 22**

Proposal for a directive Recital 32 a (new)

Text proposed by the Commission

Amendment

(32a) Member States should ensure that sufficient funding is available for the management and storage of spent fuel and radioactive waste.

#### Amendment 23

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# Proposal for a directive Recital 32 b (new)

Text proposed by the Commission

#### Amendment

(32b) Further funds need to be allocated for energy projects, including the possibility of future decommissioning projects and, consequently, waste management projects.

#### Amendment 24

# Proposal for a directive Recital 33

Text proposed by the Commission

(33) A national programme should be established to ensure the transposition of the political decisions into clear provisions for the timely implementation of all steps of spent fuel and radioactive waste management from generation to disposal. This should include all activities that relate to handling, pre-treatment, treatment, conditioning, storage, and disposal of radioactive waste. The national programme may be a reference document or a set of documents.

#### Amendment

(33) A national programme should be established to ensure the transposition of the political decisions into clear provisions for the timely implementation of all steps of spent fuel and radioactive waste management from generation to disposal. This should include all activities that relate to handling, pre-treatment, treatment, conditioning, storage, and disposal of radioactive waste and spent fuel, and should comply with the principles laid down in the Aarhus Convention. The national programme may be a reference document or a set of documents.

#### Justification

As a party to the Aarhus Convention of 25 June 1998 on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, the European Union has undertaken to abide by the principles of this international convention and has incorporated them in Directive 2003/35/EC of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment.

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# Proposal for a directive Recital 34 a (new)

Text proposed by the Commission

#### Amendment

(34a) Throughout the entire chain of spent fuel and radioactive waste management, workers need to be protected and covered by health and safety legislation, regardless of their activity or status, and the long-term effects on the health and safety of workers need to be considered in any management instrument for spent fuel and radioactive waste. European Union legislation, and that of Member States, relating to health and safety at work also applies to workers involved in the management of spent fuel and radioactive waste, and noncompliance with such legislation must entail immediate and severe sanctions.

# Amendment 26Proposal for a directive Recital 35

Text proposed by the Commission

(35) Transparency is important in the management of spent fuel and radioactive waste. It should be provided by *requiring* effective public information and opportunities for all concerned stakeholders to participate in the decision-making processes.

#### Amendment

(35) Transparency is important in the management of spent fuel and radioactive waste, and it is crucial that there be public confidence in the principles governing the safety of repositories and in waste management programmes. It should be provided by ensuring effective public information and opportunities for all concerned stakeholders, local and regional authorities and the public to participate in the decision-making processes.

#### **Amendment 27**

Proposal for a directive Recital 36

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### Text proposed by the Commission

(36) Cooperation between Member States and at an international level could facilitate and accelerate decision-making through access to expertise and technology.

#### Amendment

(36) Cooperation between Member States and at an international level could facilitate and accelerate decision-making through access to *high-quality* expertise and technology, *as well as best practices*.

# Amendment 28Proposal for a directive Recital 37

Text proposed by the Commission

(37) Some Member States consider that the sharing of facilities for spent fuel and radioactive waste management, including disposal facilities, is a potentially beneficial option when based on an agreement between *Member States* concerned.

#### Amendment

(37) Some Member States consider that the sharing of facilities for spent fuel and radioactive waste management, including disposal facilities, is a potentially beneficial, safe and cost-effective option when based on an agreement between countries involved. In this connection, it is important not to hamper specific arrangements such as pre-existing agreements on spent fuel derived from research reactors. This Directive should properly define the necessary conditions to be met before such joint projects are launched.

#### Amendment 29

# Proposal for a directive Recital 39

Text proposed by the Commission

(39) The safety case and the graded approach should provide a basis for decisions related to the development, operation and closure of a disposal facility and should allow the identification of areas of uncertainty on which attention needs to be focused to further improve the understanding of those aspects influencing the safety of the disposal system, including natural (geological) and engineered

#### Amendment

(39) The safety case and the graded approach should provide a basis for decisions related to the development, operation and closure of a disposal facility and should allow the identification of areas of uncertainty on which attention needs to be focused to further improve the understanding of those aspects influencing the safety of the disposal system, including natural (geological) and engineered

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barriers, and its expected development over the time. The safety case should include the findings of the safety assessment and information on the robustness and reliability of the safety assessment and the assumptions made therein. *It should* therefore *provide* the collection of arguments and evidence in support of the safety of a facility or activity related to the management of spent fuel and radioactive waste barriers, and its expected development over the time. The safety case should include the findings of the safety assessment and information on the robustness and reliability of the safety assessment and the assumptions made therein. *The demonstration of safety will* therefore *be based on* the collection of arguments and evidence in support of the safety of a facility or activity related to the management of spent fuel and radioactive waste.

#### Amendment 30

# Proposal for a directive Recital 40

Text proposed by the Commission

(40) While recognizing that all hazards associated with spent fuel and radioactive waste should be taken into account in the national framework, this Directive does not cover non radiological hazards, which fall under the Treaty on the Functioning of the European Union.

### Amendment

(40) While recognizing that all hazards associated with spent fuel and radioactive waste should be taken into account in the national framework, this Directive does not cover non radiological hazards *with non-radiological consequences*, which fall under the Treaty on the Functioning of the European Union.

#### Amendment 31

# Proposal for a directive Recital 41

Text proposed by the Commission

(41) Maintaining and further developing competences and skills in the management of spent fuel and radioactive waste, as an essential element to ensure high levels of safety, should be based on a combination of learning through operational experience, scientific research and technological development, and technical cooperation between all actors.

### Amendment

(41) Maintaining and further developing competences and skills in the management of spent fuel and radioactive waste, as an essential element to ensure high levels of *health and environment protection*, safety *and transparency*, should be based on a combination of learning through operational experience, scientific research and technological development, and

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technical cooperation between all actors.

#### Amendment 32

Proposal for a directive Recital 42 a (new)

Text proposed by the Commission

Amendment

(42a) In this respect, the European Nuclear Safety Regulators Group (ENSREG) could make a valuable contribution towards a uniform implementation of this Directive, thereby facilitating consultation, exchange of good practices and cooperation between national regulatory authorities.

### Justification

In addition to the international peer reviews, the role of ENSREG in the implementation of the Directive should be mentioned. See similar reference in the Nuclear Safety Directive 2009/71/Euratom, Recital (16).

#### Amendment 33

Proposal for a directive Recital 42 b (new)

Text proposed by the Commission

Amendment

(42b) This Directive could be a useful instrument to be taken into account when verifying that projects receiving Union funding in the context of Euratom financial or technical assistance for spent fuel and radioactive waste management facilities or activities include the measures needed to ensure that spent fuel and radioactive waste are safely managed.

### Justification

See previous article 15(4) which would be better reformulated in a Recital rather than as a legal provision: (i) compliance with this Directive forms part of the general assessment of the Commission when deciding on technical or financial assistance, but is not as such, neither in

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the Treaty nor in the related basic acts, a condition triggering the assistance, (ii) the reference in the Article 15(4) to the Article 43 of the Euratom Treaty whereby the Commission has only the power to 'communicate its views to the Member State concerned' without any operational effect is of limited added value.

# Amendment 34Proposal for a directive Article 1 – paragraph 2

Text proposed by the Commission

(2) It ensures that Member States provide for appropriate national arrangements for *a high* level of safety in spent fuel and radioactive waste management to protect workers *and* the general public against the dangers arising from ionizing radiation.

#### Amendment

(2) It ensures that Member States provide for appropriate national arrangements for *the highest* level of safety in spent fuel and radioactive waste management to protect workers, the general public *and the natural environment* against the dangers arising from ionizing radiation.

#### **Amendment 35**

# Proposal for a directive Article 1 – paragraph 3

Text proposed by the Commission

(3) It *maintains and promotes* public information and participation *with regard* to spent fuel and radioactive waste management.

#### Amendment

(3) It *ensures the provision of necessary* public information and participation *in relation* to spent fuel and radioactive waste management.

#### Amendment 36

Proposal for a directive Article 1 – paragraph 4 a (new)

Text proposed by the Commission

### Amendment

(4a) This Directive sets minimum standards for the Member States, but Member States are free to impose higher standards on the management of spent fuel and radioactive waste.

#### **Amendment 37**

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### Proposal for a directive Article 2 – paragraph 1 – introductory wording

Text proposed by the Commission

Amendment

(1) *This* Directive shall apply to:

(1) Without prejudice to Directive 2009/71/Euratom, this Directive shall apply to:

# Amendment 38Proposal for a directive Article 2 – paragraph 1 – point a

Text proposed by the Commission

(a) all stages of spent fuel management when the spent fuel results from the operation of civilian nuclear reactors or is managed within civilian activities;

#### Amendment

(a) all stages of spent fuel management when the spent fuel results from the operation of civilian nuclear reactors or is managed within civilian activities on EU territory, including the spent fuel originating from military defence programmes if and when such spent fuel is permanently transferred to and managed in the context of exclusively civilian activities;

# Amendment 39Proposal for a directive Article 2 – paragraph 1 – point b

Text proposed by the Commission

(b) all stages of radioactive waste management, from generation up to disposal, when the radioactive waste results from civilian activities or is managed within civilian activities;

#### Amendment

(b) all stages of radioactive waste management, from generation up to *and including* disposal, when the radioactive waste results from civilian activities or is managed within civilian activities *on EU territory*;

### Proposal for a directive Article 3 – point -1 (new)

Text proposed by the Commission

#### Amendment

(-1) 'authorised releases' means planned and controlled releases of gaseous or liquid radioactive material into the environment that originates from regulated nuclear facilities or activities during normal operation, within limits authorised by the competent regulatory authority and in accordance with the principles and limits of Directive 96/29/Euratom;

#### **Amendment 41**

# Proposal for a directive Article 3 – point 3

Text proposed by the Commission

(3) 'disposal' means the emplacement of spent fuel or radioactive waste in an authorised facility with *no intention of retrieval*;

#### Amendment

(3) 'disposal' means the emplacement of spent fuel or radioactive waste in *a* potentially definitive manner in an authorised facility with due regard for the reversibility principle;

### Justification

Any disposal should ensure the removal of waste package or the access in deep geological repository. Reversibility principle forms part of the social acceptability for such repository and is linked to the long-term monitoring of the site and its memory keeping.

# Amendment 42Proposal for a directive Article 3 – point 6

Text proposed by the Commission

(6) 'radioactive waste' means radioactive material in gaseous, liquid or solid form for which no further use is *foreseen* by the

#### Amendment

(6) 'radioactive waste' means radioactive material in gaseous, liquid or solid form, *including spent fuel and radioactive* 

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Member State or by a natural or legal person whose decision is accepted by the Member State, and which is controlled as radioactive waste by a competent regulatory authority under the legislative and regulatory framework of the Member State:

material originating from reprocessing, for which no further use is envisaged, taking account of future technological developments and progress, by the Member State or by a natural or legal person whose decision is accepted by the Member State, and which is controlled as radioactive waste by a competent regulatory authority under the legislative and regulatory framework of the Member State;

### Justification

Spent fuel must be defined as waste, unless it is clear that it can be reprocessed in the near term without further impact on the environment.

#### Amendment 43

Proposal for a directive Article 3 – point 9 a (new)

Text proposed by the Commission

Amendment

(9a) 'site' means a geographical area that contains an authorised facility, including a spent fuel or radioactive waste disposal facility, or an authorised activity;

#### **Amendment 44**

Proposal for a directive Article 3 – point 9 b (new)

Text proposed by the Commission

Amendment

(9b) 'safety assessment' means the systematic process that is carried out throughout the design process to ensure that all the relevant safety requirements are met by the proposed design, and includes, but is not limited to, the formal safety analysis;

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### Proposal for a directive Article 3 – point 9 c (new)

Text proposed by the Commission

Amendment

(9c) 'safety case' means a collection of arguments and evidence in support of the safety of a facility or activity which includes the findings of a safety assessment and a statement of confidence in those findings. For a disposal facility, the safety case may relate to a given stage of development. In such cases, the safety case should acknowledge the existence of areas of uncertainty or of any unresolved issues and should provide guidance for work to resolve those issues in future development stages;

### Justification

See the International Atomic Energy Agency (IAEA) Safety Glossary: 'Terminology used in nuclear safety and radiation protection' - 2007 edition.

#### **Amendment 46**

# Proposal for a directive Article 3 – point 13

Text proposed by the Commission

Amendment

(13) 'storage' means the holding of spent fuel or of radioactive waste in an authorised facility *with the intention of* retrieval.

(13) 'storage' means the *temporary* holding of spent fuel or of radioactive waste in an authorised facility *pending its* retrieval;

### Justification

the storage corresponds to the temporary retention of waste, a necessary phase in safely managing most types of radioactive waste.

### Proposal for a directive Article 3 – point 13 a (new)

Text proposed by the Commission

Amendment

(13a) 'the public' means one or more natural or legal persons and, in accordance with national legislation or practice, their associations, organisations or groups.

#### Amendment 48

# Proposal for a directive Article 4 – paragraph 1

Text proposed by the Commission

(1) Member States shall establish and maintain national policies on spent fuel and radioactive waste management. *They have* ultimate responsibility for management of *their* spent fuel and radioactive waste.

#### Amendment

(1) Member States shall establish and maintain national policies on spent fuel and radioactive waste management. *Each Member State has the* ultimate responsibility for management of *the* spent fuel and radioactive waste *generated on its territory*.

#### **Amendment 49**

Proposal for a directive Article 4 – paragraph 1 a (new)

Text proposed by the Commission

#### Amendment

(1a) Member States shall ensure that national policies on management and spent fuel and radioactive waste are implemented through a well-founded and documented stepwise decision-making process having regard to long-term safety.

#### Amendment 50

PE460.863v02-00 26/108 RR\869159EN.doc

### Proposal for a directive Article 4 – paragraph 2 – introductory wording

Text proposed by the Commission

Amendment

(2) Member States shall ensure that:

(2) Member States shall ensure that national policies are based on the following principles:

# Amendment 51Proposal for a directive Article 4 – paragraph 2 – point a

Text proposed by the Commission

(a) the generation of radioactive waste is kept to the minimum practicable, in terms of both activity and volume, by means of appropriate design measures and of operating and decommissioning practices, including *recycle* and reuse of *conventional* materials:

#### Amendment

(a) the generation of radioactive waste is kept to the minimum practicable, respecting the 'as low as reasonably achievable' (ALARA) principle, in terms of both activity and volume, by means of appropriate design measures and of operating and decommissioning practices, including reprocessing and reuse of materials;

#### Amendment 52

Proposal for a directive Article 4 – paragraph 2 – point d

Text proposed by the Commission

(d) spent fuel and radioactive waste are safely managed, including in the long term.

### Amendment

(d) spent fuel and radioactive waste are safely managed, including in the long term, with due regard for the protection of human health and the environment;

#### **Amendment 53**

Proposal for a directive Article 4 – paragraph 2 – point d a (new)

Text proposed by the Commission

Amendment

(da) intermediate storage in spent fuels pools should take place within the

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containment and should be kept to the shortest time necessary for cooling spent fuels before off-site transportation.

#### **Amendment 54**

Proposal for a directive Article 4 – paragraph 2 – point d b (new)

Text proposed by the Commission

Amendment

(db) measures are taken to cover the future health and environmental risks for exposed workers and the general public;

#### Amendment 55

Proposal for a directive Article 4 – paragraph 2 – point d c (new)

Text proposed by the Commission

Amendment

(dc) the costs of managing radioactive waste, including spent fuels, are borne by those who have generated such waste;

#### **Amendment 56**

Proposal for a directive Article 4 – paragraph 2 – point d d (new)

Text proposed by the Commission

Amendment

(dd) the financial reserves which the originators of the waste have to provide so as to cover all the costs arising from the management of spent fuels und radioactive waste are administered in a State-controlled fund, in order to ensure that they are available for use in connection with permanent safe disposal;

#### Amendment 57

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### Proposal for a directive Article 4 – paragraph 2 – point d e (new)

Text proposed by the Commission

Amendment

(de) competent national bodies are involved in supervising the availability of adequate financial resources;

#### Amendment 58

Proposal for a directive Article 4 – paragraph 2 – point d f (new)

Text proposed by the Commission

Amendment

(df) national parliaments are involved in supervising the availability of adequate financial resources.

#### Amendment 59

Proposal for a directive Article 4 – paragraph 3

Text proposed by the Commission

(3) Radioactive waste shall be disposed of in the Member State in which it was generated, unless *agreements are* concluded *between Member States* to use disposal facilities in *one of them*.

#### Amendment

(3) Radioactive waste shall be disposed of in the Member State in which it was generated, unless that Member State has concluded an agreement with another Member State or third country to use the disposal facilities in that other Member State or third country. If an agreement on the disposal of radioactive waste is reached with a third country, the Member State that is party to the agreement must ensure that the radioactive waste is disposed of in compliance with the provisions of this Directive.

#### Amendment 60

Proposal for a directive Article 4 – paragraph 3 – subparagraph 1 a (new)

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Text proposed by the Commission

Amendment

In the case of export to a third country, the exporting Member State shall take reasonable measures to make sure that the other country has a radioactive waste management programme with safety objectives equivalent to those prescribed by this Directive;

### **Amendment 61**

Proposal for a directive Article 4 – paragraph 3 – subparagraph 1 b (new)

Text proposed by the Commission

Amendment

All such agreements shall be notified to the Commission.

#### Amendment 62

Proposal for a directive Article 4 – paragraph 3 a (new)

Text proposed by the Commission

Amendment

(3a) On a voluntary basis, Member States may decide to establish a joint or regional disposal facility in cooperation with other Member States or a third country in order to utilise the favourable geological or technical advantages of a particular site and to share the financial burden of the joint project.

### Proposal for a directive Article 4 – paragraph 3 b (new)

Text proposed by the Commission

#### Amendment

- (3b) Before launching such a project through an intergovernmental agreement, the Member States concerned shall ensure that the initiative fulfils the necessary requirements, covering at least the following:
- (a) public acceptance and support in all the Member States concerned shall be continuously nurtured throughout all phases of the project development and the lifetime of the disposal by ensuring that the public has access to information and that the public is able to participate in the consultation process;
- (b) cooperation between, and supervision by, the competent regulatory bodies and national safety authorities shall be ensured; the safety case and supporting safety assessments shall be conducted in each of the Member States concerned, covering the exploratory, selection and implementation phases of the facility;
- (c) agreement shall be reached on liability issues and a clear allocation of responsibilities, with each Member State bearing the ultimate responsibility for its own radioactive waste;
- (d) financial arrangements shall be agreed guaranteeing that funds are secured for the lifetime of the disposal facility and the period following its closure, and that adequate human resources are available ensuring a sufficient number of properly qualified staff;
- (e) prior notification shall be given, in the national programmes of the Member States concerned, of the legal framework, organisational structure and technical

schemes and arrangements, demonstrating that, within a clear timeframe, the planned disposal satisfies the requirements laid down by this Directive.

# Amendment 64Proposal for a directive Article 5 – paragraph 1 – point a

Text proposed by the Commission

(a) a national programme for implementation of the policy on spent fuel and radioactive waste management;

### Amendment

(a) a national programme, respecting subsidiarity, for implementation of the policy on spent fuel and radioactive waste management which ensures that all radioactive waste producers have access to safe disposal of radioactive waste under the same conditions;

#### Amendment 65

Proposal for a directive Article 5 – paragraph 1 – point b a (new)

Text proposed by the Commission

#### Amendment

(ba) national requirements for the health and safety, education and training of workers;

#### **Amendment 66**

Proposal for a directive Article 5 – paragraph 1 – point c

Text proposed by the Commission

(c) a system of licensing of spent fuel and radioactive waste management activities and facilities, including prohibition of the operation of a spent fuel or radioactive waste management facility without a licence;

### Amendment

(c) a system of licensing of spent fuel and radioactive waste management activities and facilities, including prohibition of the operation of a spent fuel or radioactive waste management facility without a licence, and ensuring that all radioactive waste, by whomsoever it is produced, is

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### managed on a non-discriminatory basis;

#### **Amendment 67**

Proposal for a directive Article 5 – paragraph 1 – point d

Text proposed by the Commission

(d) a system of appropriate institutional control, regulatory inspections, documentation and reporting;

#### Amendment

(d) a system of appropriate institutional control, regulatory inspections, documentation and reporting, as well as the requisite training for the workers involved in the whole process, in order to secure and maintain their occupational safety and health;

#### **Amendment 68**

Proposal for a directive Article 5 – paragraph 1 – point e a (new)

Text proposed by the Commission

Amendment

(ea) measures to guarantee adequate financial resources in the long term for activities and facilities relating to spent fuel and radioactive waste management;

Amendment 69Proposal for a directive Article 5 – paragraph 1 – point f a (new)

Text proposed by the Commission

Amendment

(fa) measures to ensure that the funding required for the management of spent fuel and radioactive waste and for emplacement is set by the competent regulatory authority on the basis of a transparent process which is regularly reviewed and in which all interested stakeholders are regularly consulted;

### Justification

The aim is to ensure that the funding required to cover the management of spent fuel and radioactive waste, as well as emplacement operations, is set on the basis of an efficient and transparent process in which licence holders are guaranteed a say.

#### Amendment 70

Proposal for a directive Article 5 – paragraph 1 – point f b (new)

Text proposed by the Commission

Amendment

(fb) a calculation of all the costs generated by spent fuel and radioactive waste management. The information provided in that regard must specify inter alia the institutions bearing those costs.

# Amendment 71Proposal for a directive Article 5 – paragraph 2

Text proposed by the Commission

(2) Member States shall ensure that the national framework is maintained and improved as necessary, taking into account operating experience, insights gained from safety cases as referred to in *Article 8*, the *development of* technology and the results of research.

#### Amendment

(2) Member States shall ensure that the national framework is maintained and improved as necessary, taking into account operating experience, insights gained from safety cases as referred to in *point (9c) of Article 3*, the *best available* technology *(BAT)*, *health* and *safety standards and* the results of research

### **Amendment 72**

Proposal for a directive Article 6 – paragraph 1 a (new)

Text proposed by the Commission

Amendment

(1a) Member States shall ensure that their regulatory authorities are subject to democratic control.

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### Proposal for a directive Article 6 – paragraph 3 a (new)

Text proposed by the Commission

#### Amendment

(3a) The competent regulatory authority shall have the powers and resources to regularly carry out nuclear safety assessments, investigations and controls, and where necessary to take enforcement action in facilities, even during the decommissioning process. The health and safety of workers, including any subcontractors, as well as staff levels and training, shall form part of those assessments.

#### Amendment 74

# Proposal for a directive Article 7 – paragraph 1

Text proposed by the Commission

(1) Member States shall ensure that the prime responsibility for the safety of spent fuel and radioactive waste management rests with the licence *holder*. *This responsibility can not be delegated*.

### Amendment

(1) Member States shall ensure that the prime responsibility for the safety of spent fuel and radioactive waste management rests with the licence-holders to whom overall responsibility for spent fuel and radioactive waste has been entrusted by the competent authority of the Member State concerned.

# Amendment 75Proposal for a directive Article 7 – paragraph 1 a (new)

Text proposed by the Commission

#### Amendment

(1a) Member States shall ensure that a safety case and a supporting safety assessment are prepared as part of the application for a licence to carry on a radioactive waste management activity or to operate a disposal facility located on

EU territory, and that they are updated as necessary over the period during which the activity or facility subsists. The safety case and supporting safety assessments shall cover the siting, design, construction, operation, or closure of spent fuels pools, a storage facility or a disposal facility as well as long-term postclosure safety, including by passive means, and shall describe all aspects of the site relating to safety, the design of the facility, the intermediate storage cooling pools (including regular reporting of the quantity of spent fuels contained therein), the decommissioning of the facility or parts thereof and the managerial control measures and regulatory controls. The safety case and supporting safety assessment shall include an assessment of the health and safety risks for workers, including those employed by subcontractors, and of the skill levels and number of staff required for the safe operation of the facility at all times, so that action can be taken in the event of an accident.

#### Justification

See provisions of the previous article 8, now respectively introduced in article 7 and in the definitions.

Amendment 76

Proposal for a directive Article 7 – paragraph 1 b (new)

Text proposed by the Commission

Amendment

(1b) Member States shall ensure that licence-holders report to the competent regulatory authority and to other relevant competent organisations, and that they give the general public access to information relating to their activities or facilities.

# Amendment 77Proposal for a directive Article 7 – paragraph 2

Text proposed by the Commission

(2) Member States shall ensure that the national framework requires licence holders, under the supervision of the competent regulatory authority, to regularly assess and verify, and continuously improve, as far as reasonably achievable, the safety of their activities and facilities in a systematic and verifiable manner.

#### Amendment

(2) Member States shall ensure that the national framework requires licence holders, under the supervision of the competent regulatory authority, to regularly assess and verify, and continuously improve, as far as reasonably achievable, the safety of their activities, including the health and safety of workers and subcontractors and the safety of their facilities, in a systematic and verifiable manner in compliance with the best available technology (BAT). Licenceholders shall report to the competent regulatory authority and other relevant competent organisations, representatives of their employees, subcontractors and the general public regarding the results of their assessments.

#### Amendment 78

# Proposal for a directive Article 7 – paragraph 3

Text proposed by the Commission

(3) The *assessments* referred to in paragraph 2 shall include verification that measures are in place to prevent accidents and mitigate the consequences of accidents, including verification of the physical barriers and the licence holder's administrative procedures for protection that would have to fail before workers *and* the general public would be *significantly* affected by ionizing radiation.

### Amendment

(3) The actions referred to in paragraph 2 shall be the subject of formal submissions to the competent regulatory authority, as part of the licence application, providing the requisite assurance as to the safety of the activity, and shall include verification that measures are in place to prevent accidents and physical attacks and to mitigate the consequences of accidents and physical attacks, including verification of the physical barriers and the licence holder's administrative procedures for protection that would have to fail before workers, the general public and the natural environment would be affected by

### ionizing radiation.

# Amendment 79Proposal for a directive Article 7 – paragraph 4

Text proposed by the Commission

(4) Member States shall ensure that the national framework requires licence holders to establish and implement management systems which give *due* priority to safety and are regularly verified by the competent regulatory authority.

#### Amendment

(4) Member States shall ensure that the national framework requires licence holders to establish and implement management systems which give *top* priority to safety *and security* and are regularly verified by the competent regulatory authority *and workers*' representatives with specific responsibility for the safety and health of workers.

# Justification

Loss of security could have similar or worse effects than accidents on worker and public health. It is in the interests of those working in this area to be involved in the verification of standards and systems.

#### Amendment 80

# Proposal for a directive Article 7 – paragraph 5

Text proposed by the Commission

(5) Member States shall ensure that the national framework requires licence holders to provide for and maintain adequate financial and human resources to fulfil their obligations with respect to the safety of spent fuel and radioactive waste management, laid down in paragraphs 1 to 4.

# Amendment

(5) Member States shall ensure that the national framework requires licence holders to provide for and maintain adequate financial and human resources, *also in the long term*, to fulfil their obligations with respect to the safety of spent fuel and radioactive waste management, laid down in paragraphs 1 to 4.

#### **Amendment 81**

Proposal for a directive Article 7 – paragraph 5 a (new)

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# Text proposed by the Commission

#### Amendment

(5a) Member States shall ensure that licence-holders inform cross-border regional and local authorities at the earliest possible date of their plans to establish a waste management facility, if the distance of such a facility from the national border is such that it is likely to have cross-border effects during the building or operation of the facility or after its abandonment, or in the event of an accident or incident related to the facility.

#### **Amendment 82**

# Proposal for a directive Article 8

Text proposed by the Commission

Amendment

#### Article 8

# Safety case

- (1) A safety case and a supporting safety assessment shall be prepared as part of the license application for a facility or activity. They shall be updated, as necessary, over the evolution of the facility or activity. The extent and detail of the safety case and the safety assessment shall be commensurate with the complexity of the operations and the magnitude of the hazards associated with the facility or activity.
- (2) The safety case and supporting safety assessment shall cover the siting, design, construction, operation, and decommissioning of a facility or closure of a disposal facility; the safety case shall specify the standards applied for this assessment. The long-term post-closure safety shall be addressed, in particular how it is ensured by passive means to the

deleted

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# fullest extent possible.

- (3) The safety case for a facility shall describe all safety-relevant aspects of the site, the design of the facility, and the managerial control measures and regulatory controls. The safety case and supporting safety assessment shall demonstrate the level of protection provided and shall provide assurance to the competent regulatory authority and other interested parties that safety requirements will be met.
- (4) The safety case and supporting safety assessment shall be submitted to the competent regulatory authority for approval.

Justification

See Article 7 (1a) new and definitions in Article 3 (9a) new, (9b) new.

#### **Amendment 83**

Proposal for a directive Article 8 a (new)

Text proposed by the Commission

Amendment

#### Article 8a

Recording and tracking, especially with regard to the health and safety of workers

- (1) Member States shall establish a recording and tracking system in the field of management of spent fuel and radioactive waste.
- (2) Member States shall ensure that the recording and tracking system is capable of specifying the location and the conditions of production, use, transport, storage or disposal of the spent fuel and radioactive waste.
- (3) Member States shall ensure that information concerning workers who

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have been exposed to spent fuel and radioactive waste during their work is stored, either by the licence-holder or by a state body, so as to enable work-related diseases to be followed up in the long term.

**Amendment 84** 

Proposal for a directive Article 8 b (new)

Text proposed by the Commission

Amendment

#### Article 8b

#### Procedures and sanctions

In accordance with general principles, Member States shall ensure that administrative or judicial procedures, as well as sanctions that are effective, dissuasive and proportionate in relation to the seriousness of the offence, are applicable in the event of infringement of the obligations arising from this Directive.

# Amendment 85Proposal for a directive Article 9

Text proposed by the Commission

Member States shall ensure that the national framework includes arrangements for education and training covering the needs of all parties with responsibilities for spent fuel and radioactive waste management in order to maintain *and to* further develop necessary expertise and skills.

Amendment

Member States shall ensure that the national framework includes arrangements for education and regular and preventive training covering the needs of all parties with responsibilities for spent fuel and radioactive waste management in order to maintain, further develop and disseminate necessary scientific and technological expertise and skills, in line with technical and scientific progress. Member States shall pay special attention to parties indirectly involved on-site and shall ensure that they are offered up-to-date appropriate education and training before the operations involving radioactive waste

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and spent fuel are carried out. Member States shall ensure that the licence-holders are able to implement and fund those arrangements with a view to ensuring the safety and health of all the parties involved in the process. Education and training for workers shall comply with internationally recognised standards, so as to strengthen overall responsibility for health and safety in the nuclear industry. Member States shall also ensure that the national framework includes arrangements to promote further scientific research into existing disposal projects.

#### **Amendment 86**

Proposal for a directive Article 9 - paragraph 1 a (new)

Text proposed by the Commission

Amendment

Member States shall ensure that the national framework includes programmes to support research into reducing radioactive waste production and into radioactive waste management.

#### **Amendment 87**

Proposal for a directive Article 10 – paragraph 1

Text proposed by the Commission

Member States shall ensure *that* the national framework *guarantees* that *adequate* financial resources are available when needed *for* the management of spent fuel and radioactive waste, *taking due account of* the responsibility of radioactive waste producers.

Amendment

Member States shall ensure *in* the national framework that *sufficient* financial resources are available when needed *to cover all necessary expenses related to decommissioning and* the management of spent fuel and radioactive waste, *thereby fully respecting* the responsibility of radioactive waste producers *according to the 'polluter-pays' principle and avoiding* 

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### any recourse to State aid.

#### **Amendment 88**

Proposal for a directive Article 10 – paragraph 1 a (new)

Text proposed by the Commission

#### Amendment

- (1a) Member States shall ensure that, in accordance with procedures to be decided at national level:
- (a) an assessment of the costs related to the waste management strategies is properly conducted, in particular an assessment of the costs related to the implementation of long-term management solutions for low, intermediate and highlevel long-lived radioactive waste, depending on its nature. This shall include, in particular, the costs of decommissioning nuclear installations and, as regards radioactive waste management facilities, the costs of their final closure, maintenance and monitoring;
- (b) reserves are established to cover the costs referred to in point (a) and the necessary assets are earmarked for the exclusive coverage of these reserves;
- (c) appropriate monitoring of the adequacy of the reserves and the management of the assets to cover the costs referred to in point (a) is in place so as to ensure periodical adjustment.

**Amendment 89** 

Proposal for a directive Article 10 – paragraph 1 b (new)

Text proposed by the Commission

Amendment

(1b) The costs of disposal shall be

transparently set out and published by the Member States and reassessed each year. The obligations imposed on radioactive waste producers shall be revised accordingly.

#### **Amendment 90**

Proposal for a directive Article 10 – paragraph 1 c (new)

Text proposed by the Commission

Amendment

(1c) Member States shall set up or appoint a national body capable of providing an expert judgment on the management of funds and decommissioning costs, as mentioned in paragraph 2. That body shall be independent from the contributors to the funds.

### **Amendment 91**

Proposal for a directive Article 10 – paragraph 1 d (new)

Text proposed by the Commission

Amendment

(1d) Member States shall regularly report to the Commission on the conclusions of the proceedings of the relevant national body, under the conditions laid down in Article 16.

#### Amendment 92

# Proposal for a directive Article 11

Text proposed by the Commission

Member States shall ensure that appropriate quality assurance programmes concerning *the safety of* spent fuel and radioactive waste management are

Amendment

Member States shall ensure that appropriate quality assurance programmes concerning spent fuel and radioactive waste management are established and

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established and implemented.

implemented.

# Justification

Quality assurance deals not only with the safety but with all aspects of the spent fuel and radioactive waste management.

# Amendment 93Proposal for a directive Article 12 – paragraph 1

Text proposed by the Commission

(1) Member States shall ensure that information on the management of spent fuel and radioactive waste is *made* available to workers and the general public. This obligation includes ensuring that the competent regulatory authority informs the public in the fields of its competence. Information shall be made available to the public in accordance with national legislation and international obligations, provided that this does not jeopardise other interests recognised in national legislation or international obligations such as, inter alia, security.

#### Amendment

(1) Member States shall ensure that all information on the management of spent fuel and radioactive waste which is necessary in order to preserve the health, safety and security of workers and the general public is available on a regular basis. This obligation includes ensuring that the competent regulatory authority informs the public in the fields of its competence. Information shall be made available to the public in accordance with national legislation and international obligations, notably the Aarhus Convention. Information directly relevant to the health and safety of workers and the public, in particular concerning radioactive and toxic emissions and exposure to such emissions, shall be made public, irrespective of the circumstances.

#### **Amendment 94**

Proposal for a directive Article 12 – paragraph 1 a (new)

Text proposed by the Commission

#### Amendment

(1a) Member States shall ensure that information is made available to the public concerning the financial resources for the management of spent fuel and radioactive waste referred to in Article 10,

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# taking due account of the proportion of the costs incurred by producers.

# **Amendment 95**

Proposal for a directive Article 12 – paragraph 1 b (new)

Text proposed by the Commission

Amendment

(1b) Member States shall ensure that all decisions concerning sites for, and the management of, spent fuel and radioactive waste close to neighbouring countries involve the public and the institutions of the countries concerned.

#### **Amendment 96**

Proposal for a directive Article 12 – paragraph 2

Text proposed by the Commission

Amendment

(2) Member States shall ensure that the public is given opportunities to participate effectively in the process of decision making on spent fuel and radioactive waste management.

deleted

(see next AM, as part of the COM-text is introduced in Article 12 a (new) point 1)

**Amendment 97** 

Proposal for a directive Article 12 a (new)

Text proposed by the Commission

Amendment

Article 12a

Public participation

(1)Member States shall ensure that members of the public are given early opportunities to participate effectively in

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the preparation or review of the national programmes for the management of spent fuel and radioactive waste needing to be drawn up pursuant to Article 13, and members of the public have access to them once they have been drawn up. They shall place the programmes on a publicly available website.

- (2) To that end, Member States shall ensure that:
- (a) the public is informed, whether by public notices or other appropriate means such as electronic media where available, about any proposals for such programmes or for their modification or review, and that relevant information about such proposals is made available to the public including, inter alia, information about the right to participate in decision-making and about the competent authority to which comments or questions may be submitted;
- (b) members of the public are entitled to express comments and opinions when all options are open before decisions on the programmes are made;
- (c) for the purposes of making those decisions, due account is taken of the results of the public participation;
- (d) having examined the comments and opinions expressed by the public, the competent authority makes reasonable efforts to inform the public about the decisions taken and the reasons and considerations upon which those decisions are based, including information about the public participation process.
- (3) Member States shall identify the public entitled to participate for the purposes of paragraph 2. The detailed arrangements for public participation under this Article shall be determined by the Member States in such a way as to enable the public to prepare and

participate effectively. Reasonable timeframes shall be provided for, allowing sufficient time for each of the different stages of public participation required by this Article.

(see previous AM, part of the text of point 1 was originally point 2 of Article 12

#### **Amendment 98**

# Proposal for a directive Article 13 – paragraph 2

Text proposed by the Commission

(2) National programmes shall be in line

with the provisions of Articles 4 to 12.

Amendment

(2) National programmes shall be in line with the provisions of Articles 4 to *12a*.

#### **Amendment 99**

# Proposal for a directive Article 13 – paragraph 3

Text proposed by the Commission

(3) Member States shall regularly review and update their national programmes, taking into account technical and scientific progress as appropriate.

### Amendment

(3) Member States shall regularly review and update their national programmes taking into account technical and scientific progress as appropriate, and incorporating feedback from other Member States' experience of radioactive waste management, as well as the outcomes of international peer reviews.

## **Amendment 100**

Proposal for a directive Article 13 – paragraph 3 a (new)

Text proposed by the Commission

Amendment

(3a) Member States shall inform crossborder regional and local authorities of

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their national programmes at the earliest possible date, if the implementation thereof is likely to have cross-border effects.

#### Amendment 101

Proposal for a directive Article 13 - paragraph 3 b (new)

Text proposed by the Commission

Amendment

(3b) Within the national programmes, Member States shall clearly indicate the available financial resources for the management of spent fuel and radioactive waste.

### **Amendment 102**

Proposal for a directive Article 14 – point -1 (new)

Text proposed by the Commission

Amendment

(-1) an integrated, detailed scheme for the classification of radioactive waste which covers all radioactive waste management steps from the generation of radioactive waste to its disposal;

### Justification

See the Commission recommendation of 15 September 1999 on a classification system for solid radioactive waste (OJ L 265, 13.10.1999, p.37)

# Amendment 103Proposal for a directive Article 14 – point 1

Text proposed by the Commission

Amendment

(1) an inventory of all spent fuel and radioactive waste and previsions of future quantities, including those from decommissioning. The inventory shall (1) based on the classification scheme referred to in point (-1), an inventory of all spent fuel and radioactive waste and previsions of future quantities, including

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clearly indicate the location and amount of the material and, *through appropriate classification*, the level of hazard; those from decommissioning. The inventory shall clearly indicate the location and amount of the material and the level of hazard *and the origin of the waste*;

#### **Amendment 104**

# Proposal for a directive Article 14 – point 3

Text proposed by the Commission

(3) concepts and plans for the post-closure period of a disposal facility, including time over which institutional controls are retained and the means to be employed to preserve knowledge of the facility in the longer term;

#### Amendment

(3) concepts and plans for the post-closure period of a disposal facility, including time over which institutional controls are retained and the means to be employed to *ensure surveillance and maintenance of the facility and to* preserve knowledge of the facility in the longer term;

#### Amendment 105

Proposal for a directive Article 14 – point 7 a (new)

Text proposed by the Commission

# Amendment

(7a) a description of the assessment of the costs referred to in point (a) of Article 10(1a) and of the methods applied for the calculation of the corresponding reserves;

# Amendment 106Proposal for a directive Article 14 – point 8

Text proposed by the Commission

(8) description of the financing scheme(s) in force to ensure all programme costs can be met according to the foreseen schedule.

# Amendment

(8) a description of the choices related to the composition and management of the assets earmarked pursuant to point (b) of Article 10(1a) and of the financing scheme(s) in force to ensure that all programme costs can be met according to the foreseen schedule and strictly

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# following the 'polluter-pays' principle;

**Amendment 107** 

Proposal for a directive Article 14 – point 8 a (new)

Text proposed by the Commission

Amendment

(8a) a binding and verifiable time-frame for the implementation of national programmes and compliance with the requirements set out in paragraphs (1) to (8) above;

**Amendment 108** 

Proposal for a directive Article 14 – point 8 b (new)

Text proposed by the Commission

Amendment

(8b) education and vocational training plans to maintain and develop the expertise and skills necessary for the management of spent fuel and radioactive waste.

**Amendment 109** 

Proposal for a directive Article 15 – paragraph 3 a (new)

Text proposed by the Commission

Amendment

(3a) The Commission shall monitor compliance with the time-frames submitted pursuant to Article 14(8a) for the implementation of the national programmes of the Member States.

#### Amendment 110

# Proposal for a directive Article 15 – paragraph 4

Text proposed by the Commission

(4) The Commission will take into account the Member States' clarifications and progress on the national waste management programs, when deciding on the provision of Euratom financial or technical assistance for spent fuel and radioactive waste management facilities or activities, or when formulating its views on investment projects in accordance with Article 43 of the Euratom Treaty.

Amendment

deleted

Justification

See Recital (42b) new.

#### **Amendment 111**

# Proposal for a directive Article 16 – paragraph 3

Text proposed by the Commission

(3) Member States shall periodically, and at least every 10 years, arrange for self-assessments of their national framework, competent regulatory authority, national programme and its implementation, and invite international peer review of their national framework, authority and/or programme with the aim of ensuring that high standards are achieved in the management of spent fuel and radioactive waste. The outcomes of any peer review shall be reported to the Commission and the *Member States*.

### Amendment

(3) Member States shall periodically, and at least every 10 years, arrange for selfassessments of their national framework, competent regulatory authority, national programme and its implementation, and invite international peer review of their national framework, authority and/or programme with the aim of ensuring that high standards are achieved in the management of spent fuel and radioactive waste. The outcomes of any peer review shall be reported to the Commission, which shall submit a periodical report to the European Parliament and the Council addressing in an aggregated form the conclusions reached in the course of peer reviews.

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# Amendment 112Proposal for a directive Article 16 a (new)

Text proposed by the Commission

Amendment

# Article 16a

#### Revision

The Commission shall, no later than two years after peer reviews by Member States have taken place as provided for in Article 16(3), submit a report to the European Parliament and the Council which focuses on a reassessment of the concept of the management of spent fuel and radioactive waste. That reassessment shall in particular consider the issues of reversibility and retrievability of waste once placed into a disposal site in the light of research developments and further scientific expertise in this field. The report shall if necessary be followed by a revision of this Directive to reflect the latest technological research regarding spent fuel and radioactive waste management.

# **Amendment 113**

# Proposal for a directive Article 17 – paragraph 1

Text proposed by the Commission

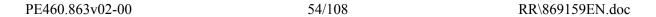
(1) Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by ....... They shall forthwith inform the Commission thereof. When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

## Amendment

(1) Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by ... \*. They shall forthwith inform the Commission thereof. When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

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\* OJ: Please insert date two years after the date of entry into force of this Directive.



## **EXPLANATORY STATEMENT**

On 3rd November, the Commission released a proposal for a directive which sets out an EU legal framework for spent fuel and radioactive waste management (COM(2010)618). The proposal lays down specific requirements to ensure that member States establish a national regulatory and organisational framework and draw up appropriate national programmes for spent fuel and radioactive waste management, from their generation to their disposal.

1. The Rapporteur welcomes and supports the general scheme of the proposal:

The European Parliament has always called for harmonised standards and robust legislation for radioactive waste management, notably through its Resolution on 'Assessing Euratom - 50 years of European nuclear energy policy'.

To this end, following the adoption of the Nuclear Safety Directive in June 2009, which only covered spent fuel storage facilities directly related to nuclear installations, the current proposal contributes to build a consistent legislative corpus in order to assure safety in the long term of the management of existing and future radioactive waste regardless of the perspectives of nuclear power and non-power applications.

The Rapporteur welcomes the structure of the proposal which, following the principles already existing at the international level<sup>2</sup>, builds on the approach adopted in the most advanced Member States and provides a framework for a more responsible management with (i) a national framework relying on clear duties and responsibilities of each actor, (ii) a national programme ensuring milestones, timeframes and clarity of the decision making process on radioactive waste, (iii) balanced rules on transparency and information, oversight and control.

2. The Rapporteur is of the opinion that some improvements should be envisaged with a view to ensuring a responsible and safe management of spent fuel and radioactive waste, not delaying the decisions to be adopted now.

Amongst the amendments proposed in the draft report for the consideration of the Members of this Committee, the Rapporteur would like to emphasize here the following outlines figuring her main priorities:

- Final disposal for radioactive waste and spent fuel:
- (i) The Rapporteur considers that the concepts and technical solutions for final disposal, in particular the deep geological disposal for spent fuel and high level waste, should be envisaged with due regard to the *reversibility* principle. The objective is to enable a potential access to and recovery of waste for technical reasons or if progress in researches allow the

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<sup>&</sup>lt;sup>1</sup> Mr Maldeikis Report, 10 May 2007

<sup>&</sup>lt;sup>2</sup> IAEA Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management ('Joint Convention') INFCIRC/546 of 24 December 1997 and the Safety Standards developed.

emergence of new technological solutions in a longer term (such as transmutation). This does not hamper the closure of the disposal, after a certain period of operation and monitoring, if future generations so decide. Reversibility therefore leaves the possibility to progress cautiously towards the safest solution in allowing to reinforce, through continuous monitoring and experience, the knowledge gained during the research phase. According to the Rapporteur, this phase of reversibility, far from weakening any final governmental solution on deep geological disposal, would be part of the social acceptability for such repository and is linked to the long-term monitoring of the site, and its memory keeping.

(ii) In addition, the Rapporteur introduced a series of amendments throughout the text to reflect her views that (a) disposals have to be performed following internationally accepted safety principles, requirements and methodologies. To this effect, training, dissemination of knowledge and maintenance of the skills are important topics, (b) there is a need to organise a relevant knowledge management at each repository for operations lasting over decades and also to prepare memory keeping; surveillance and maintenance of facilities and monitoring of the environment after the post-closure are really crucial, (c) international cooperation is essential to exchange and disseminate expertise, joint R&D programmes will also play an important role. Thus, the place given to the 'international peer review' and exchange of best practices are important in that respect and national programmes should build on those experiences.

#### > Financial resources:

The Rapporteur would like to refer here to specific parliamentary resolutions on the funding of decommissioning strategies<sup>1</sup>, recalling notably the internal market dimension of this issue. As it stands, the proposal of the Commission is found as rather weak with no other binding commitment for the Member States as the general one to guarantee that adequate financial resources are available.

For the Rapporteur, the objective of the proposal should be to ensure that financial resources are set aside to meet the requirements of nuclear plant decommissioning as well as the management, conditioning and final disposal of the resultant radioactive waste and that they will be available when required and managed in a transparent manner.

That is the purpose of the amendments suggested on article 10 which define more stringent obligations for Member States, to be implemented in accordance with their national procedures: assessment of the costs related to the waste management strategy; reserves established for the financing of future decommissioning or waste management activities and necessary assets earmarked for the coverage of these reserves; appropriate monitoring of the levels of the reserves and of the management of the assets; reviews by an independent national body to verify that the revenues raised for these future activities are only be used for decommissioning or waste management activities; regular reporting by the Member State to the Commission. Subsequent requirements are in parallel introduced on the content of national programmes in article 14.

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<sup>&</sup>lt;sup>1</sup> Ms Harms Report on the 'Kozloduy Programme', adopted in Plenary on 20th May 2010 Ms Harms report on 'Nuclear safety: financial resources earmarked for the decommissioning of nuclear power plants' - adopted in November 2005

# > Development of regional disposal

Member States bear ultimate responsibility for the safe management, including disposal, of spent fuel and radioactive waste that they generate. The Rapporteur deems that the respect of this fundamental requirement can be combined with the exploration of a shared solution for radioactive waste between Member States, provided that it is operated under certain tight conditions properly framed. Though it is crucial that each Member States develop its own national programme and adopt final decision concerning spent fuel and radioactive waste, the Rapporteur is of opinion that the proposed directive - which potentially already recognises the interest of joint solution in its Recital 37 - should define the preliminary requirements to be fulfilled for the launching of such joint projects on a voluntary basis.

Exploratory studies or projects on multi-national cooperation already exist such as the ongoing work carried out within the International Atomic Energy Agency<sup>1</sup> and revitalised for non-proliferation concern, or through the ERDO-Working group<sup>2</sup> associating several Member States<sup>3</sup> to study the feasibility of establishing a multinational European Repository Development Organisation. Those works pave the way for the development of a methodology structuring the concept of a shared deep geological repository, safe, secure and socially accepted.

Building on those works and recognizing that this concept can be of interest under certain circumstances, the Rapporteur considers however that this solution cannot be a way for the Member States to avoid their national responsibilities, as laid down in the current proposal, or delay the adoption of a final decision on waste management. Thus, like for national solutions, any joint or regional disposal initiative could be described in respective national strategy, give rise to extended public consultation, and be launched after the fulfilment of preliminary requirements proposed in article 4, notably addressing the safety standards, the liabilities schemes, and the securing of the financing for the lifetime and post-closure of the facility.

Related to this issue, the possibility of transboundary shipments of nuclear waste, properly authorised on the basis of the directive 2006, has to be restored in the provisions of article 4.

#### > Transparency and participation of the public

The Rapporteur deems essential to build consensus with public participation in respect of the elaboration and review of the national programme, in line with directive 2003/35/EC<sup>4</sup>. Public participation leads to agreement and involvement, then to the social legitimacy of the radioactive waste management strategies.

Specific provisions are introduced in article 12a (new).

In addition, other detailed amendments are proposed throughout the text, such as the modifications related to the 'safety case' which originally appeared in a specific article 8 and whose provisions are now moved in the relevant articles - definitions and article 7 on 'Licence

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<sup>&</sup>lt;sup>1</sup> 'Developing multinational radioactive waste repositories: infrastructural framework and scenarios of cooperation' October 2004, IAEA-TECDOC-1413

<sup>&</sup>lt;sup>2</sup> www.erdo-wg.eu

<sup>&</sup>lt;sup>3</sup> Austria, Bulgaria, Ireland, Italy, Netherlands, Lithuania, Poland, Romania, Slovakia, Slovenia

<sup>&</sup>lt;sup>4</sup> Directive 2003/35/EC of 26 may 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment, OJ L 156, 25.6.2003, p.17.

holder' - and reshaped in consistency with the scope of the directive.

\* \*

### OPINION OF THE COMMITTEE ON EMPLOYMENT AND SOCIAL AFFAIRS

for the Committee on Industry, Research and Energy

on the proposal for a Council directive on the management of spent fuel and radioactive waste (COM(2010)0618 - C7-0387/2010 - 2010/0306(NLE))

Rapporteur: Jean Lambert

#### SHORT JUSTIFICATION

This proposal for a Council Directive, on which Parliament is only consulted, has the EURATOM TREATY as its legal basis. The Commission considers that Chapter 3 and Article 2(b) and Article 30 of the Euratom Treaty: provide a sound legal base. However, your Drafter considers that this raises a question as to the applicability of certain standards relating to Health and Safety, consultation of workers and other legislation under the EU Treaties - hence your drafter's first amendment relating to the legal base. Such a change would also bring the Parliament into full co-decision. on this important issue.

The Commission's supporting explanation states:

'The basic principle of radioactive waste management is containment and isolation from humans and the biosphere for as long as the waste represents a radiological hazard. Furthermore, it is an accepted ethical principle that society should avoid imposing undue burdens on future generations, and this places the onus on the current generation, which has benefited from nuclear electricity or medical interventions, to manage appropriately all existing waste.'

Given the importance of "isolation" your Drafter proposes a widening of the scope of the Directive in order to include all workers who may have responsibility for dealing with radioactive waste and spent fuel: it cannot be assumed that military material will not be handled by civilians or at civil installations. She also proposes a more inclusive definition of what constitutes "radioactive waste" and "spent fuel" (Article 3) in order to include the widest number of workers Historic waste may also present particular handling problems due to degradation of storage conditions and this would need to be considered in safety planning and given due prominence.

Given the potentially disastrous effects of human error in managing radioactive waste and spent fuel, it is essential that there are rigorous standards of training, workplace safety and inspection by independent forces. Workers themselves, or their representatives, should be consulted and involved in the creation and application of safety procedures. On-going training should be provided for all workers on sites where hazardous material is held or for those who are involved in the transportation of such material: this does not simply mean technical staff but all workers, whatever the duration of their employment contract or their role on-site At every level of waste, all workers need to understand the potential risks. Given that workers involved with the more dangerous substances are subject to certain limits in terms of exposure, it is crucial that there are sufficient trained personnel available and there also needs to be a means of follow-up regarding the health of workers. It is also important that any sub-contractor fulfils rigorous safety and training criteria and is fully competent to carry out maintenance, construction or any other work required. Your Drafter has tabled proposals relating to all these issues, including the question of liability for any long-term work-related condition in terms of necessary resources.

#### **AMENDMENTS**

The Committee on Employment and Social Affairs calls on the Committee on Industry, Research and Energy, as the committee responsible, to incorporate the following amendments in its report:

### Amendment 1

Proposal for a directive Citation 1

*Text proposed by the Commission* 

Amendment

Having regard to the Treaty *establishing the European Atomic Energy Community*, in particular *Articles 31 and 32* thereof,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 153 thereof,

#### Justification

The aim of the Directive as it currently stands is to coordinate national social policies in the field of the protection of workers' health from hazards arising from spent fuel and radioactive waste, and does not set any basic standards of safety, as the Euratom legal basis requires. Therefore the appropriate legal basis is 153 TFEU (Social policy).

#### Amendment 2

# Proposal for a directive Citation 1 a (new)

Text proposed by the Commission

#### Amendment

Having regard to the Charter of Fundamental Rights of the European Union and in particular Articles 31 and 35 thereof,

#### Amendment 3

# Proposal for a directive Recital 1

Text proposed by the Commission

(1) Article 2(b) of the Treaty provides for the establishment of uniform safety standards to protect the health of workers and of the general public.

#### Amendment

(1) Article 2(b) of the *Euratom* Treaty provides for the establishment of uniform safety standards to protect the health of workers and of the general public.

#### Amendment 4

# Proposal for a directive Recital 2

Text proposed by the Commission

(2) Article 30 of the Treaty provides for the establishment of basic standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiations.

# Amendment

(2) Article 30 of the *Euratom* Treaty provides for the establishment of basic standards for the protection of the health of workers and the general public against the dangers arising from ionizing radiations.

#### Amendment 5

# Proposal for a directive Recital 3

Text proposed by the Commission

(3) Article 37 of the Treaty requires Member States to provide the Commission with general data relating to any plan for

# Amendment

(3) Article 37 of the *Euratom* Treaty requires Member States to provide the Commission with general data relating to

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the disposal of radioactive waste.

any plan for the disposal of radioactive waste.

# Amendment 6

Proposal for a directive Recital 3 a (new)

Text proposed by the Commission

Amendment

(3a) Article 153 of the Treaty on the Functioning of the European Union (TFEU) provides for the establishment of minimum standards for the health and safety of workers.

#### Amendment 7

Proposal for a directive Recital 3 b (new)

Text proposed by the Commission

Amendment

(3b) Council Directive 89/391/EEC of 12 June 1989 provides for the introduction of measures to encourage improvements in the safety and health of workers at work.

#### Amendment 8

Proposal for a directive Recital 3 c (new)

Text proposed by the Commission

Amendment

(3c) Article 31 of the Charter of Fundamental Rights of the European Union lays down the basic right for every worker to working conditions which respect his or her health, safety and dignity.

#### Amendment 9

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# Proposal for a directive Recital 3 d (new)

Text proposed by the Commission

Amendment

(3d) Article 35 of the Charter of Fundamental Rights provides that everyone has the right of access to preventive health care.

# Amendment 10

Proposal for a directive Recital 19 a (new)

Text proposed by the Commission

Amendment

(19a) The ILO has adopted a Convention¹ and a Recommendation² on Radiation Protection to all activities involving exposure of workers to ionizing radiation in the course of work and requires appropriate steps to be taken to ensure the effective protection of workers in the light of knowledge available at the time.

### **Amendment 11**

# Proposal for a directive Recital 27

Text proposed by the Commission

(27) Radioactive waste, including spent fuel considered as waste, requires containment and isolation from humans and the living environment over the long

#### Amendment

(27) Radioactive waste, including spent fuel considered as waste, requires *appropriate conditioning*, containment and isolation from humans and the living

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<sup>&</sup>lt;sup>1</sup> C115 Convention concerning the Protection of Workers against Ionising Radiations, 22. 6. 1960.

<sup>&</sup>lt;sup>2</sup> C114 Recommendation concerning the Protection of Workers against Ionising Radiations, 22. 6. 1960.

term. Its specific nature (content of radionuclides) requires arrangements to protect human health and the environment against dangers arising from ionizing radiation, including disposal in appropriate facilities as the end point of its management. The storage of radioactive waste, including long-term storage, is an interim solution but not an alternative to disposal.

environment over the long term. Its specific nature (content of radionuclides) requires arrangements to protect human health and the environment against dangers arising from ionizing radiation, including disposal in appropriate facilities as the end point of its management. The storage of radioactive waste, including long-term storage, is an interim solution but not an alternative to disposal.

# Justification

Conditioning into stable waste forms and appropriate packaging is a fundamental prerequisite to safe containment and isolation from the biosphere.

#### **Amendment 12**

# Proposal for a directive Recital 30

Text proposed by the Commission

(30) Although each Member State is responsible for its own policy on spent fuel and radioactive waste management, that policy should respect the relevant fundamental safety principles set by the IAEA. It is an ethical obligation of each Member State to avoid any undue burden on future generations in respect of the existing spent fuel and radioactive waste, as well as those expected from decommissioning of existing nuclear installations.

#### Amendment

(30) Although each Member State is responsible for its own policy on spent fuel and radioactive waste management, that policy should respect the relevant fundamental safety principles set by the IAEA It is an ethical obligation of each Member State to avoid any undue burden on future generations in respect of the existing spent fuel and radioactive waste, as well as those expected from decommissioning of existing nuclear installations. Member States should therefore establish a decommissioning policy that guarantees that facilities are dismantled in the safest manner and as early as possible after their closure.

# Justification

The current wide range from immediate to 100-year delay decommissioning in the various Member States is not acceptable under the ethical obligation as defined in the previous sentence.

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#### Amendment 13

Proposal for a directive Recital 34 a (new)

Text proposed by the Commission

Amendment

(34a) Throughout the entire chain of spent fuel and radioactive waste management, workers need to be protected and covered by health and safetly legislation, regardless of their activity or status and the long term effects on the health and safety of workers need to be considered in any management instrument for spent fuel and radioactive waste.

#### **Amendment 14**

Proposal for a directive Recital 34 b (new)

Text proposed by the Commission

Amendment

(34b) When implementing this Directive, special attention should be given to workers at risk and non-compliance with health and safety legislation must be followed by immediate and severe sanctions.

# **Amendment 15**

Proposal for a directive Recital 39 a (new)

Text proposed by the Commission

Amendment

(39a) Union legislation on health and safety at work is also applicable to the management of spent fuel and radioactive waste.

#### Amendment 16

# Proposal for a directive Recital 41

Text proposed by the Commission

(41) Maintaining and further developing competences and skills in the management of spent fuel and radioactive waste, as an essential element to ensure high levels of safety, should be based on a combination of learning through operational experience, scientific research and technological development, and technical cooperation between all actors.

#### Amendment

(41) Maintaining and further developing competences and skills in the management of spent fuel and radioactive waste, as an essential element to ensure high levels of safety *and to protect workers*, should be based on a combination of learning through *preventive training*, operational experience, scientific research and technological development, and technical cooperation between all actors.

#### Amendment 17

Proposal for a directive Article 1 – point 2

Text proposed by the Commission

2. It ensures that Member States provide for appropriate national arrangements for *a high* level of safety in spent fuel and radioactive waste management to protect workers and the general public against the dangers arising from ionizing radiation.

#### Amendment

2. It ensures that Member States provide for appropriate national arrangements for *the highest* level of safety in spent fuel and radioactive waste management to protect workers and the general public against the dangers arising from ionizing radiation.

#### Justification

Reference should always be made to the highest level of safety possible.

## **Amendment 18**

Proposal for a directive Article 1 – point 3

*Text proposed by the Commission* 

Amendment

(3) It maintains and promotes public

(3) It maintains and promotes *a high level* 

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information and participation with regard to spent fuel and radioactive waste management. of public information and participation with regard to spent fuel and radioactive waste management.

#### Amendment 19

Proposal for a directive Article 1 – point 4 a (new)

Text proposed by the Commission

Amendment

(4a) This Directive sets minimum standards for the Member States, but Member States are free to impose higher standards on management of spent fuel and radioactive waste.

#### Amendment 20

Proposal for a directive Article 2 – point 1 – subpoint (b)

Text proposed by the Commission

(b) all stages of radioactive waste management, from generation up to disposal, when the radioactive waste results from civilian activities or is managed within civilian activities;

Amendment

(b) all stages of radioactive waste management, from generation up to *and including* disposal;

### Justification

A reference to which framework applies to nuclear facilities is lacking. It should be noted that civilians also work for the military and might dismantle the military facilities and clean up the waste. Some services are contracted out. It is vital for the protection of citizens of member states that all radioactive waste is managed to the highest safety standards.

#### **Amendment 21**

Proposal for a directive Article 2 – point 2

# Text proposed by the Commission

2. Waste from extractive industries which may be radioactive and falls within the scope of Directive 2006/21/EC shall *not* be subject to this Directive.

#### Amendment

2. Waste from extractive industries which may be radioactive and falls within the scope of Directive 2006/21/EC shall *also* be subject to this Directive.

### Justification

All natural radioactive material that has been managed in some way and that qualifies for classification as radioactive waste must also be covered by this Directive. There is no reason to exclude e.g. radioactive waste from uranium mining and processing from this Directive.

#### **Amendment 22**

Proposal for a directive Article 2 – point 3

Text proposed by the Commission

Amendment

3. This Directive shall not apply to authorised releases.

deleted

# Justification

There are a number of nuclear sites in member states, most importantly reprocessing facilities and perhaps also facilities contaminated by nuclear accidents, where "authorised releases" have created a situation where clean-up operations produce radioactive waste which must then be supervised and managed.

## **Amendment 23**

Proposal for a directive Article 3 – paragraph 1 – point 5 a (new)

Text proposed by the Commission

Amendment

(5a) 'exposed worker' means any person involved in activities along the chain of the management of waste fuel or radioactive waste management, regardless of their activity or status;

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#### **Amendment 24**

Proposal for a directive Article 4 – point 2 – subpoint d

Text proposed by the Commission

Amendment

(d) spent fuel and radioactive waste are safely managed, *including in* the *long term*.

(d) spent fuel and radioactive waste are safely managed for as long as they are hazardous to people and the environment.

#### **Amendment 25**

Proposal for a directive Article 4 – point 2 – subpoint d a (new)

Text proposed by the Commission

Amendment

(da) exposure of workers and the public to spent fuel and radioactive waste is avoided;

Justification

Article 4 does not list a general protective principle for workers and general public.

#### **Amendment 26**

Proposal for a directive Article 4 – point 2 – subpoint d b (new)

Text proposed by the Commission

Amendment

(db) measures are taken to cover the future health risks for exposed workers, including non-regular workers;

#### Amendment 27

Proposal for a directive Article 4 – point 2 – subpoint d c (new)

Text proposed by the Commission

Amendment

(dc) measures are taken to cover all

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workers involved in the process related to the management of spent fuel and radioactive waste, including those workers indirectly involved, such as transport workers, security workers, members of the armed forces and police officers;

## **Amendment 28**

Proposal for a directive Article 4 – point 2 – subpoint d d (new)

Text proposed by the Commission

Amendment

(dd) liability is joint and several, so as to protect all actors involved in the management of spent fuel and radioactive waste.

#### Amendment 29

Proposal for a directive Article 5 – point 1 – subpoint b a (new)

Text proposed by the Commission

Amendment

(ba) national requirements for the health and safety, education and training of workers;

### Amendment 30

Proposal for a directive Article 5 – point 1 – subpoint d

Text proposed by the Commission

(d) a system of appropriate institutional control, regulatory inspections,

documentation and reporting;

Amendment

(d) a system of appropriate institutional control, regulatory inspections, documentation and reporting, as well as necessary training for the workers involved in the whole process in order to secure and maintain their occupational safety and health;

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#### **Amendment 31**

# Proposal for a directive Article 5 – point 1 – subpoint e

Text proposed by the Commission

(e) enforcement actions, including suspension of activities and modification or revocation of a licence;

Amendment

(e) enforcement actions, including suspension of activities and modification or revocation of a licence, covering, inter alia, infringements of health and safety legislation in respect of the workers concerned;

# Justification

Waste management facilities should also incur penalties if they do not comply with health and safety standards.

#### Amendment 32

Proposal for a directive Article 6 – point 1 a (new)

Text proposed by the Commission

Amendment

(1a) Member States shall ensure that the regulatory authority is subject to democratic control.

#### **Amendment 33**

Proposal for a directive Article 6 – point 3 a (new)

Text proposed by the Commission

Amendment

3a. The competent regulatory authority will have the powers and resources to regularly carry out nuclear safety assessments, investigations and controls, and, where necessary, enforcement actions in the facilities, even during decommissioning. The health and safety of workers, including any sub-

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contractors, as well as staffing levels and training are to form part of those assessments.

#### **Amendment 34**

Proposal for a directive Article 6 – point 3 b (new)

Text proposed by the Commission

Amendment

3b The assessment of the health and safety of the workers referred to in paragraph 3a shall be carried out in cooperation with the authorities responsible for the safety and health of workers.

### **Amendment 35**

Proposal for a directive Article 6 – point 3 c (new)

Text proposed by the Commission

Amendment

3c. Member States shall ensure that the competent regulatory authority is empowered to order the suspension of operations in cases where safety is not guaranteed.

# **Amendment 36**

Proposal for a directive Article 6 – point 3 d (new)

Text proposed by the Commission

Amendment

3d. The competent regulatory authority will report to the Member States and to the relevant competent organisations, to licence holders, to the workers' representatives of the licence holder, to sub-contractors and to the general public

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### **Amendment 37**

Proposal for a directive Article 6 – point 3 e (new)

Text proposed by the Commission

### Amendment

3e. Member States shall ensure that the competent regulatory authority establishes or specifies a body which is responsible for conserving, for at least 50 years, records relating to workers involved in the handling of spent fuel and radioactive waste and for compiling records independently of the employer or subcontractor, in keeping with applicable data protection rules, and which is required to release information to the workers concerned and their descendants.

### **Amendment 38**

Proposal for a directive Article 7 – point 2

Text proposed by the Commission

2. Member States shall ensure that the national framework requires licence holders, under the supervision of the competent regulatory authority, to regularly assess and verify, and continuously improve, as far as reasonably achievable, the safety of their activities and facilities in a systematic and verifiable manner.

#### Amendment

2. Member States shall ensure that the national framework requires licence holders, under the supervision of the competent regulatory authority, to regularly assess and verify, and continuously improve, as far as reasonably achievable, the safety of their activities including the health and safety of workers and sub-contractors and the safety of their facilities in a systematic and verifiable manner. The licence holder shall report to the competent regulatory authority and to other relevant competent organisations, to the workers' representatives of the licence holder, to representatives of their employees, to sub-contractors and to the general public regarding the results of

### their assessments.

#### Amendment 39

# Proposal for a directive Article 7 – point 3

Text proposed by the Commission

3. The assessments referred to in paragraph 2 shall include verification that measures are in place to prevent accidents and mitigate the consequences of accidents, including verification of the physical barriers and the licence holder's administrative procedures for protection that would have to fail before workers and the general public would be significantly affected by ionizing radiation.

### Amendment

3. The assessments referred to in paragraph 2 shall include verification that measures are in place to prevent accidents *and physical attacks* and mitigate the consequences of accidents *and physical attacks*, including verification of the physical barriers and the licence holder's administrative procedures for protection that would have to fail before workers and the general public would be significantly affected by ionizing radiation.

### Justification

Terrorist attacks, especially with insider help, can have extremely severe consequences on the safety and health of workers and the public.

### Amendment 40

# Proposal for a directive Article 7 – point 4

Text proposed by the Commission

4. Member States shall ensure that the national framework requires licence holders to establish and implement management systems which give due priority to safety and are regularly verified by the competent regulatory authority.

### Amendment

4. Member States shall ensure that the national framework requires licence holders to establish and implement management systems which give due priority to safety *and security* and are regularly verified by the competent regulatory authority *and workers*' representatives with specific responsibility for the safety and health of workers.

### Justification

Loss of security could have similar or worse effects than accidents on worker and public health. It is in the interests of those working in this area to be involved in the verification of

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standards and systems.

#### Amendment 41

Proposal for a directive Article 7 – point 5 a (new)

Text proposed by the Commission

### Amendment

(5a) Member States shall ensure that the licence holders are able to guarantee and implement the application of occupational and health safety standards to all workers involved in the process and shall ensure that, throughout the whole process, they receive the training necessary for them in view of scientific progress.

### **Amendment 42**

# Proposal for a directive Article 8 – point 2

Text proposed by the Commission

(2) The safety case and supporting safety assessment shall cover the siting, design, construction, operation, and decommissioning of a facility or closure of a disposal facility; the safety case shall specify the standards applied for this assessment. The long-term post-closure safety shall be addressed, in particular how it is ensured by passive means to the fullest extent possible.

### Amendment

(2) The safety case and supporting safety assessment shall cover the siting, design, construction, operation, and decommissioning of a facility or closure of a disposal facility; the safety case shall specify the standards applied for this assessment. The long-term post-closure safety shall be addressed, in particular how it is ensured by passive means to the fullest extent possible. The safety case and supporting safety assessment shall include an assessment of the health and safety risks for workers, including those employed by subcontractors, and of the skill levels and of the number of staff required for the safe operation of the facility at all times, so that appropriate action can be taken in the event of an accident.

### **Amendment 43**

# Proposal for a directive Article 8 – point 4

Text proposed by the Commission

4. The safety case and supporting safety assessment shall be submitted to the competent regulatory authority for approval.

### Amendment

4. The safety case and supporting safety assessment shall be submitted to the competent regulatory authority for approval. Representatives of the workers concerned will be informed and consulted before the safety assessments are submitted to the competent regulatory authority.

### Amendment 44

Proposal for a directive Article 8 – point 4 a (new)

Text proposed by the Commission

Amendment

4a. The safety case shall include information not only concerning the site but also concerning any related issues, such as the transport of radioactive waste to or the removal of spent fuel from the site.

### **Amendment 45**

Proposal for a directive Article 8 a (new)

Text proposed by the Commission

Amendment

Article 8a

Recording and tracking especially with regard to health and safety of workers

(1) Member States shall establish a recording and tracking system in the field of management of the spent fuel and radioactive waste.

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- (2) Member States shall ensure that the recording and tracking system is capable of specifying the location and the conditions of production, use, transport, storage or disposal of the spent fuel and radioactive waste.
- (3) Member States shall ensure that information on workers that have been exposed to spent fuel and radioactive waste during their work is stored, either by the licence holder or by a state body, so as to enable work-related diseases to be followed up in the long term.

### **Amendment 46**

Proposal for a directive Article 8 b (new)

Text proposed by the Commission

Amendment

### Article 8b

### **Procedures and Sanctions**

In accordance with general principles, Member States shall ensure that administrative or judicial procedures, as well as sanctions that are effective, dissuasive and proportionate in relation to the seriousness of the offence committed and the injury caused to workers, are applicable in the event of infringement of the obligations arising from this Directive.

### **Amendment 47**

Proposal for a directive Article 9

Text proposed by the Commission

Member States shall ensure that the national framework includes arrangements for education and training covering the needs of all Amendment

Member States shall ensure that the national framework includes arrangements for education and *regular and preventive* training covering the needs of all parties

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parties with responsibilities for spent fuel and radioactive waste management in order to maintain and to further develop necessary expertise and skills.

with responsibilities for spent fuel and radioactive waste management in order to maintain and to further develop necessary expertise and skills, in line with technical and scientific progress. Member States shall special attention to parties indirectly involved on-site and ensure that they are offered up-to-date appropriate education and training before the operations involving radioactive waste and spent fuel are carried out. Member States shall ensure that the licence holders are able to implement and fund those arrangements with a view to ensuring the safety and health of all the parties involved in the process.

### **Amendment 48**

# Proposal for a directive Article 10

Text proposed by the Commission

Member States shall ensure that the national framework guarantees that adequate financial resources are available when needed for the management of spent fuel and radioactive waste, taking due account of the responsibility of radioactive waste producers.

### Amendment

Member States shall ensure that the national framework guarantees that adequate financial resources are available when needed for the management of spent fuel and radioactive waste, taking due account of the responsibility of radioactive waste producers, health and safety matters and the occupational diseases which may occur as a result of long-term exposure to radioactive emissions.

### Amendment 49

# Proposal for a directive Article 11

Text proposed by the Commission

Member States shall ensure that appropriate quality assurance programmes concerning the safety of spent fuel and radioactive waste management are

### Amendment

Member States shall ensure that appropriate quality assurance programmes, *including education and training*, concerning the safety of spent fuel and

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established and implemented.

radioactive waste management are established and *regularly* implemented.

### Amendment 50

# Proposal for a directive Article 12 – point 1

Text proposed by the Commission

(1) Member States shall ensure that information on the management of spent fuel and radioactive waste is *made* available to workers and the general public. This obligation includes ensuring that the competent regulatory authority informs the public in the fields of its competence. Information shall be made available to the public in accordance with national legislation and international obligations, provided that this does not jeopardise other interests recognised in national legislation or international obligations such as, inter alia, security.

### Amendment

(1) Member States shall ensure that all information on the management of spent fuel and radioactive waste which is necessary for preserving the health, safety and security of workers and the general public, shall be available on a regular basis. This obligation includes ensuring that the competent regulatory authority informs the public in the fields of its competence. Information shall be made available to the public in accordance with national legislation and international obligations, provided that this does not jeopardise other interests recognised in national legislation or international obligations such as, inter alia, security. Information directly relevant to the health and safety of workers and the public,in particular concerning radioactive and toxic emissions and exposure to such emissions, shall be made public, irrespective of the circumstances.

### **Amendment 51**

# Proposal for a directive Article 14 – point 2

Text proposed by the Commission

2. concepts, plans and technical solutions from generation to disposal;

### Amendment

2. concepts, plans and technical solutions from generation to disposal. High priority shall be given to historic radioactive waste and spent fuel in intermediate storage pools, in particular with regard to their impact on the health and safety of

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### workers;

## Justification

The lack of appropriate conditioning and storage for large quantities of radioactive waste has been tolerated for decades. Some spent fuel in storage ponds is particularly vulnerable to physical attack. Remediation is urgent and also essential to avoid inadvertent exposure to risk for staff and public

### Amendment 52

Proposal for a directive Article 14 – paragraph 1 – point 7

Text proposed by the Commission

7. assessment of programme costs and the underlying basis and hypotheses for this assessment, which must include a profile over time;

Amendment

7. detailed plans concerning the number of inspections, the resources for inspection and the training of inspection bodies;



# **RESULT OF FINAL VOTE IN COMMITTEE**

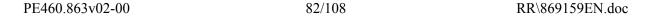
Date adopted	14.4.2011
Result of final vote	+: 44 -: 4 0: 0
Members present for the final vote	Regina Bastos, Edit Bauer, Heinz K. Becker, Mara Bizzotto, Philippe Boulland, Milan Cabrnoch, David Casa, Alejandro Cercas, Ole Christensen, Derek Roland Clark, Marije Cornelissen, Tadeusz Cymański, Frédéric Daerden, Karima Delli, Proinsias De Rossa, Frank Engel, Sari Essayah, Richard Falbr, Ilda Figueiredo, Thomas Händel, Marian Harkin, Roger Helmer, Nadja Hirsch, Liisa Jaakonsaari, Ádám Kósa, Patrick Le Hyaric, Veronica Lope Fontagné, Olle Ludvigsson, Thomas Mann, Elisabeth Morin-Chartier, Csaba Őry, Siiri Oviir, Rovana Plumb, Konstantinos Poupakis, Sylvana Rapti, Licia Ronzulli, Elisabeth Schroedter, Jutta Steinruck, Emilie Turunen, Traian Ungureanu
Substitute(s) present for the final vote	Tunne Kelam, Gesine Meissner, Ria Oomen-Ruijten, Csaba Sógor, Cecilia Wikström, Gabriele Zimmer
Substitute(s) under Rule 187(2) present for the final vote	Edit Herczog, María Muñiz De Urquiza

# OPINION OF THE COMMITTEE ON THE ENVIRONMENT, PUBLIC HEALTH AND FOOD SAFETY

for the Committee on Industry, Research and Energy

on the proposal for a Council directive on the management of spent fuel and radioactive waste (COM(2010)0618 - C7-0387/2010 - 2010/0306(NLE))

Rapporteur: Pavel Poc



### SHORT JUSTIFICATION

The proposed Directive sets out EU legal framework for spent fuel and radioactive waste management. It revises the Commission proposal for a Council (Euratom) Directive on the management of spent fuel and radioactive waste<sup>1</sup>.

All the Member States have radioactive waste. Thus, whatever the future of nuclear power and non-power applications is, the implementation of disposal as the end point in the management of existing and future radioactive waste is needed in order to assure safety in the long term.

In total, about 40 000 m³ of radioactive waste is produced each year in the European Union of which about 80% is short-lived low-level radioactive waste, about 5% long-lived low-level radioactive waste and less than 10% high level waste, which includes both vitrified waste from reprocessing and spent fuel considered as waste.

### Summary of the Commission's proposal

Specific arrangements, depending on the characteristic of the waste, are required to protect humans and the environment against dangers arising from ionizing radiation. The basic principle of radioactive waste management is containment and isolation from humans and the biosphere for as long as the waste represents a radiological hazard. In the longer term, only disposal with its inherent passive safety characteristics can guarantee protection against all potential hazards. For high level waste (HLW) there is a world-wide scientific and technical consensus that deep geological disposal represents the safest and most sustainable option.

Despite this fact, there are currently no final disposal facilities in any of the Member States for high-level and long-lived radioactive waste generated by the use of nuclear energy. Not one final disposal site has been set up in more than fifty years of existence of the nuclear industry and at present radioactive waste is held provisionally in interim storage facilities.

Ultimate responsibility for the management of spent fuel and radioactive waste rests with the Member States. Furthermore, it is an accepted ethical principle that the society should avoid imposing undue burdens on future generations, and this places the onus on the current generation, who has benefited from nuclear electricity or medical interventions, to manage appropriately all existing waste.

Despite these considerations, most countries have yet to take key decisions regarding the management of spent fuel and radioactive waste. Safe management of radioactive waste and spent fuel, at all stages from generation to disposal, requires a national framework that guarantees political commitments, a clear allocation of responsibilities, and ensuring that sufficient scientific, technical and financial resources are available when needed. Given the highly sensitive nature of the issue, public information and participation in the decision-making processes has to be ensured as well.

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<sup>&</sup>lt;sup>1</sup> Initial 2003 Commission proposal (COM(2003)0032) and revised 2004 version (COM(2004)0526).

The general objective of this proposal is therefore to set up an EU legal framework for the management of spent fuel and radioactive waste as an integral part of the safe use of nuclear energy for electricity production and of the ionizing radiation in medicine, industry, agriculture, research and education.

## Rapporteur's point of view

Rapporteur welcomes the draft proposal for a Council Directive as it will help all the Member States to take the necessary political decisions to establish and implement their national programs especially with regards to the responsible and safe management of high level radioactive waste and spent fuel.

Special attention has to be paid to ensure the proposed Directive is consistent with existing European legislation. Current industrial practice and existing consensus position among international experts should be taken into consideration.

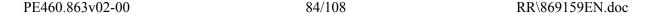
Aiming at the sustainable use of nuclear energy, the Directive proposal should not eliminate the option of future use of radioactive material over the long-term and should not lead to any reclassification of reusable material as radioactive waste.

There is a very broad international consensus amongst technical experts that geological disposal is the most suitable method for long-term management of the most hazardous forms of solid and solidified radioactive waste. However, years of research will be needed in order to design and implement these repositories. In this respect research and technical development need to be maintained and financially supported.

Agreements on radioactive waste exports, which have been concluded between countries, need to be examined on case-by-case basis and not to be banned. Indeed, there are some specific cases in which Member States send/have sent their spent fuel for reprocessing to non EU country and some of the residual waste which is being generated rests with the recipient country; and likewise, Member States performing reprocessing activities should be allowed to send the residual waste to the countries where the spent fuel was first generated.

Safety cases should not be addressed in this draft proposal for a Council Directive unless it refers solely to safety cases relating to radioactive waste disposal facilities.

Rapporteur is convinced that regardless any particular policy in the Member States, radioactive waste disposal is an actual issue, existing and waiting to be solved. Discussion on the proposed Directive should remain of technical character and should not become a political battlefield about the future of nuclear energy itself.



### **AMENDMENTS**

The Committee on the Environment, Public Health and Food Safety calls on the Committee on Industry, Research and Energy, as the committee responsible, to incorporate the following amendments in its report:

### Amendment 1

Proposal for a directive Recital 19 a (new)

Text proposed by the Commission

Amendment

(19a) The Aarhus Convention of 25 June 1998 on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters grants the public rights and imposes on parties and public authorities obligations regarding access to information and public participation and access to justice in environmental matters, which include the management of spent fuel and radioactive waste.

### Amendment 2

# Proposal for a directive Recital 25

Text proposed by the Commission

(25) The operation of nuclear reactors also generates spent fuel. Each Member State may define its fuel cycle policy considering spent fuel as a valuable resource that may be reprocessed, or deciding to dispose of it as waste. Whatever option is chosen, the disposal of high level waste, separated at reprocessing, or of spent fuel regarded as waste should be considered.

### Amendment

(25) The operation of nuclear reactors, as well as their decommissioning, also generates spent fuel and radioactive waste. Each Member State may define its fuel cycle policy considering spent fuel as a valuable resource that may be reprocessed, or deciding to dispose of it as waste. Whatever option is chosen, the final storage or disposal of high level waste, separated at reprocessing, or of spent fuel regarded as waste should be considered.

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### Amendment 3

# Proposal for a directive Recital 25 a (new)

Text proposed by the Commission

### Amendment

(25a) Spent fuels stored in pools represent an additional potential source of radioactivity in the environment, in particular if the cooling ponds are not covered anymore, as recently shown in Fukushima.

### **Amendment 4**

Proposal for a directive Recital 27 a (new)

Text proposed by the Commission

### Amendment

(27a) The hazards of radioactive waste disposal were made evident by the Fukushima accident and similar accidents could occur in existing or under construction nuclear installations in areas of the Union and its neighbouring countries with high seismic and tsunami risk, such as in Akkuyu (Turkey). The Union should take any appropriate measures to prevent radioactive waste disposal in such areas.

## **Amendment 5**

# Proposal for a directive Recital 29

Text proposed by the Commission

(29) The typical disposal concept for short lived low and intermediate level waste is near surface disposal. Following 30 years of research, it is broadly accepted at the

### Amendment

(29) The typical disposal concept for short lived low and intermediate level waste is near surface disposal. Following 30 years of research, it is broadly accepted at the

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technical level that deep geological disposal *represents* the safest and most sustainable option as the end point of the management of high level waste and spent fuel considered as waste. *Thus moving towards implementation of disposal should* be pursued.

technical level that deep geological disposal *could represent* the safest and most sustainable option as the end point of the management of high level waste and spent fuel considered as waste.

Implementation may be pursued if remaining safety issues are solved.

#### Amendment 6

# Proposal for a directive Recital 30

Text proposed by the Commission

(30) Although each Member State is responsible for its own policy on spent fuel and radioactive waste management, that policy should respect the relevant fundamental safety principles set by the IAEA. It is an ethical obligation of each Member State to avoid any undue burden on future generations in respect of the existing spent fuel and radioactive waste, as well as those expected from decommissioning of existing nuclear installations.

### Amendment

(30) Although each Member State is responsible for its own policy on spent fuel and radioactive waste management, that policy should respect the relevant fundamental safety principles set by the IAEA. It is an ethical obligation of each Member State to avoid any undue burden on future generations in respect of the existing spent fuel and radioactive waste, as well as those expected from decommissioning of existing nuclear installations. Member States should therefore establish a decommissioning policy that guarantees that facilities are dismantled in the safest manner as early as possible after their closure.

### Amendment 7

# Proposal for a directive Recital 31

Text proposed by the Commission

(31) For the responsible management of spent fuel and radioactive waste, each Member State should establish a national framework which *assures* political commitments and stepwise decision making implemented through adequate legislation, regulation and organisation

### Amendment

(31) For the responsible management of spent fuel and radioactive waste, each Member State should establish a national framework which *guarantees* political commitments and stepwise decision making *in keeping with the Aarhus Convention*, implemented through

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with a clear allocation of responsibilities.

adequate legislation, regulation and organisation with a clear allocation of responsibilities.

### Justification

As a party to the Aarhus Convention of 25 June 1998 on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, the European Union has undertaken to abide by the principles of this international convention and has incorporated them in Directive 2003/35/EC of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment.

### Amendment 8

# Proposal for a directive Recital 33

Text proposed by the Commission

(33) A national programme should be established to ensure the transposition of the political decisions into clear provisions for the timely implementation of all steps of spent fuel and radioactive waste management from generation to disposal. This should include all activities that relate to handling, pre-treatment, treatment, conditioning, storage, and disposal of radioactive waste. The national programme may be a reference document or a set of documents.

#### Amendment

(33) A national programme should be established to ensure the transposition of the political decisions into clear provisions for the timely implementation of all steps of spent fuel and radioactive waste management from generation to disposal. This should include all activities that relate to handling, pre-treatment, treatment, conditioning, storage, and disposal of radioactive waste and spent fuel and should comply with the principles laid down in the Aarhus Convention. The national programme may be a reference document or a set of documents.

### Justification

As a party to the Aarhus Convention of 25 June 1998 on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, the European Union has undertaken to abide by the principles of this international convention and has incorporated them in Directive 2003/35/EC of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment.

### Amendment 9

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# Proposal for a directive Recital 34 a (new)

Text proposed by the Commission

Amendment

(34a) Workers along the whole chain of spent fuel and radioactive waste management need to be protected and covered, regardless of their activity or status. The long term effects on the health and safety of workers need to be considered in any management instrument for spent fuel and radioactive waste.

### **Amendment 10**

Proposal for a directive Recital 34 b (new)

Text proposed by the Commission

Amendment

(34b) When implementing this Directive, special attention should be given to workers at risk. Non-compliance with health and safety legislation should be followed by immediate and severe sanctions.

### **Amendment 11**

# Proposal for a directive Recital 35

Text proposed by the Commission

(35) *Transparency is important* in the management of spent fuel and radioactive waste. *It should be provided by requiring effective public information and opportunities* for all concerned stakeholders *to participate* in the decision-making processes.

### Amendment

(35) The Aarhus Convention should be respected in connection with the management of spent fuel and radioactive waste. This entails ensuring access for the public and all concerned stakeholders to all information concerning disposal and stipulating that the public and all concerned stakeholders must be involved at an early stage in the decision-making processes. Should access to information

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be denied in connection with decisions covered by the public participation requirement, and in general in the event of infringements of environmental law, any natural or legal person shall have the right to object and to bring legal proceedings.

### Justification

As a party to the Aarhus Convention of 25 June 1998 on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, the European Union has undertaken to abide by the principles of this international convention and has incorporated them in Directive 2003/35/EC of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment.

### Amendment 12

# Proposal for a directive Recital 37

Text proposed by the Commission

(37) Some Member States consider that the sharing of facilities for spent fuel and radioactive waste management, including disposal facilities, is a potentially beneficial option when based on an agreement between Member States concerned.

#### Amendment

(37) Some Member States consider that the sharing of facilities for spent fuel and radioactive waste management, including disposal facilities, is a potentially beneficial *and cost-effective* option when based on an agreement between Member States concerned.

### Amendment 13

# Proposal for a directive Recital 41

Text proposed by the Commission

(41) Maintaining and further developing competences and skills in the management of spent fuel and radioactive waste, as an essential element to ensure high levels of safety, should be based on a combination of learning through operational experience, scientific research and technological development, and technical cooperation

### Amendment

(41) Maintaining and further developing competences and skills in the management of spent fuel and radioactive waste, as an essential element to ensure high levels of *health and environment protection*, safety, *and transparency*, should be based on a combination of learning through operational experience, scientific research

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between all actors.

and technological development, and technical cooperation between all actors.

### Amendment 14

# Proposal for a directive Article 1 – paragraph 2

Text proposed by the Commission

(2) It ensures that Member States provide for appropriate national arrangements for *a high* level of safety in spent fuel and radioactive waste management to protect workers and the general public against the dangers arising from ionizing radiation.

### Amendment

(2) It ensures that Member States provide for appropriate national arrangements for *the highest* level of safety in spent fuel and radioactive waste management to protect workers and the general public against the dangers arising from ionizing radiation.

### Amendment 15

## Proposal for a directive Article 2 – paragraph 1 – point a

Text proposed by the Commission

(a) all stages of spent fuel management when the spent fuel results from the operation of civilian nuclear reactors or is managed within civilian activities;

### Amendment

(a) all stages of spent fuel management, *including transportation*, when the spent fuel results from the operation of civilian nuclear reactors or is managed within civilian activities;

### **Amendment 16**

Proposal for a directive Article 2 – paragraph 1 – point b

Text proposed by the Commission

(b) all stages of radioactive waste management, from generation up to disposal, when the radioactive waste results from civilian activities or is managed within civilian activities;

### Amendment

(b) all stages of radioactive waste management, from generation up to *final storage or* disposal, *and including transportation*;

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### Amendment 17

# Proposal for a directive Article 3 – paragraph 7

Text proposed by the Commission

(7) 'radioactive waste management' means all activities, that relate to handling, pretreatment, treatment, conditioning, storage, or disposal of radioactive waste, *excluding* off-site transportation;

### Amendment

(7) 'radioactive waste management' means all activities that relate to handling, pretreatment, treatment, conditioning, storage, or disposal of radioactive waste, including the monitoring of those operations and subsequent maintenance work on interim or final radioactive waste storage premises, including off-site transportation;

### **Amendment 18**

# Proposal for a directive Article 3 – point 11

Text proposed by the Commission

(11) 'spent fuel management' means all activities that relates to the handling, storage, reprocessing, or disposal of spent fuel, *excluding* off-site transportation;

#### Amendment

(11) 'spent fuel management' means all activities that relates to the handling, storage *including in intermediate storage pools*, reprocessing, or disposal of spent fuel, *including* off-site transportation;

### Amendment 19

# Proposal for a directive Article 3 – point 13

Text proposed by the Commission

(13) 'storage' means the holding of spent fuel or of radioactive waste in an authorised facility with the *intention of* retrieval.

### Amendment

(13) 'storage' means the holding of spent fuel or of radioactive waste in an authorised facility with the *concrete* possibility of retrieval in the long term;

### Amendment 20

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## Proposal for a directive Article 4 – paragraph 2 – point a

Text proposed by the Commission

(a) the generation of radioactive waste is kept to the minimum practicable, in terms of both activity and volume, by means of appropriate design measures and of operating and decommissioning practices, including recycle and reuse of conventional materials;

### Amendment

(a) the generation of radioactive waste is kept to the minimum practicable, in terms of both activity and volume, by means of the use of alternatives where economically, socially and environmentally sustainable alternatives exist, appropriate design measures and of operating and decommissioning practices, including recycle and reuse of conventional materials;

### **Amendment 21**

Proposal for a directive Article 4 – paragraph 2 – point d

Text proposed by the Commission

(d) spent fuel and radioactive waste are safely managed, *including in the long term*;

### **Amendment 22**

Proposal for a directive Article 4 – paragraph 2 – point d a (new)

Text proposed by the Commission

Amendment

(d) spent fuel and radioactive waste are safely managed in so far as they are hazardous to people and the environment;

Amendment

(da) exposure of workers, the public and the environment to spent fuel and radioactive waste is avoided;

### Amendment 23

Proposal for a directive Article 4 – paragraph 2 – point d b (new)

Text proposed by the Commission

Amendment

(db) measures are taken to cover the future health and environmental risks for

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### exposed workers and the general public;

#### Amendment 24

# Proposal for a directive Article 4 – paragraph 3

Text proposed by the Commission

(3) Radioactive waste shall be disposed of in the Member State in which it was generated, unless agreements are concluded between Member States to use disposal facilities in one of them.

### Amendment

(3) Radioactive waste shall be disposed of in the Member State in which it was generated, unless agreements are *voluntarily* concluded between Member States to use *storage or* disposal facilities in one of them;

### **Amendment 25**

Proposal for a directive Article 4 – paragraph 3 a (new)

Text proposed by the Commission

### Amendment

- (3a) This Directive shall not affect the right of a Member State or an undertaking in the Member State to which:
- (a) radioactive waste is to be shipped for processing; or
- (b) other material is to be shipped with the purpose to recover the radioactive waste,

to return the radioactive waste after treatment to its country of origin. Nor shall it affect the right of a Member State or an undertaking in that Member State to which spent fuel is to be shipped for reprocessing to return to its country of origin radioactive waste recovered from the reprocessing operation.

### Justification

Agreements on radioactive waste exports which have been concluded between countries need to be examined on a case by case basis and not to be forbidden. The directive should not create legal uncertainty over the return of ultimate waste after reprocessing of spent fuel to

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the country where the nuclear fuel was used and should be fully in accordance with the 2006/117/ Euratom Council Directive on the supervision and control of shipments of radioactive waste and spent fuel.

### **Amendment 26**

Proposal for a directive Article 4 – paragraph 3 b (new)

Text proposed by the Commission

Amendment

(3b) Radioactive waste shall not be disposed of in areas of high seismic and tsunami risk.

### Amendment 27

Proposal for a directive Article 5 – paragraph 1 – point e

Text proposed by the Commission

(e) enforcement actions, including suspension of activities and modification or

Amendment

(e) enforcement actions, including suspension of activities and modification or revocation of a licence, covering, inter alia, infringements of health and safety legislation for the workers concerned;

### Amendment 28

revocation of a licence:

Proposal for a directive Article 5 – paragraph 1 – point f a (new)

Text proposed by the Commission

Amendment

(fa) measures to ensure that the funding required for the management of spent fuel and radioactive waste and for emplacement purposes is set by the competent regulatory authority on the basis of a transparent process which is regularly reviewed and in which the licence holder is involved at all times.

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### Justification

This amendment seeks to ensure that the funding required to cover the management of spent fuel and radioactive waste, as well as emplacement operations, is set on the basis of an efficient and transparent process in which licence holders are guaranteed a say.

### **Amendment 29**

# Proposal for a directive Article 5 – paragraph 2

Text proposed by the Commission

(2) Member States shall ensure that the national framework is maintained and improved as necessary, taking into account operating experience, insights gained from safety cases as referred to in Article 8, the *development of* technology and the results of research.

### Amendment

(2) Member States shall ensure that the national framework is maintained and improved as necessary, taking into account operating experience, insights gained from safety cases as referred to in Article 8, the *best available* technology (*BAT*) and the results of research.

### Amendment 30

Proposal for a directive Article 5 – paragraph 2 a (new)

Text proposed by the Commission

### Amendment

(2a) National programmes shall be subject to socio-economic and environmental impact assessments and ensure there is no risk of uranium leakage.

## **Amendment 31**

Proposal for a directive Article 6 – paragraph 3 a (new)

Text proposed by the Commission

### Amendment

(3a) The competent regulatory authority will have the powers and resources to regularly carry out nuclear safety assessments, investigations and controls, and where necessary enforcement actions

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in the facilities even during decommissioning. The health and safety of workers, including any subcontractors, as well as staff levels and training are to form part of these assessments.

### **Amendment 32**

Proposal for a directive Article 6 – paragraph 3 b (new)

Text proposed by the Commission

Amendment

(3b) Member States shall ensure that the competent regulatory authority is empowered to order the suspension of operations in cases where safety is not guaranteed.

### **Amendment 33**

Proposal for a directive Article 6 – paragraph 3 c (new)

Text proposed by the Commission

Amendment

(3c) The competent regulatory authority will report to the Member States and relevant competent organisations, licence holders, workers' representatives of the licence holder, sub-contractors and the general public regarding the results of their assessments.

### Amendment 34

Proposal for a directive Article 7 – paragraph 1 a (new)

Text proposed by the Commission

Amendment

(1a) Member States shall determine the moment at which responsibility for the management of spent fuel and radioactive waste is transferred from the licence

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# holder to the body entrusted with such management under national law.

### Justification

This amendment seeks to make it clear exactly when responsibility for the management of spent fuel and radioactive waste is transferred from the licence holder to the body entrusted with its long-term management. This is because radioactive material could be transferred before the end of a nuclear facility's useful life, in which case the licence holder could not be held responsible for material that is no longer held at the facility.

### **Amendment 35**

# Proposal for a directive Article 7 – paragraph 2

Text proposed by the Commission

(2) Member States shall ensure that the national framework requires licence holders, under the supervision of the competent regulatory authority, to regularly assess and verify, and continuously improve, as far as reasonably achievable, the safety of their activities and facilities in a systematic and verifiable manner

### Amendment

(2) Member States shall ensure that the national framework requires licence holders, under the supervision of the competent regulatory authority, to regularly assess and verify, and continuously improve, as far as reasonably achievable, the safety of their activities including the health and safety of workers and subcontractors and the safety of their facilities - in a systematic and verifiable manner. Licence holders shall report to the competent regulatory authority and other relevant competent organisations, representatives of their employees, subcontractors and the general public regarding the results of their assessments.

Amendment 36

Proposal for a directive Article 7 – paragraph 3

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### Text proposed by the Commission

(3) The assessments referred to in paragraph 2 shall include verification that measures are in place to prevent accidents and mitigate the consequences of accidents, including verification of the physical barriers and the licence holder's administrative procedures for protection that would have to fail before workers and the general public would be significantly affected by ionizing radiation.

### Amendment

(3) The assessments referred to in paragraph 2 shall include verification that measures are in place to prevent accidents and *physical attacks and* mitigate the consequences of accidents *and physical attacks*, including verification of the physical barriers and the licence holder's administrative procedures for protection that would have to fail before workers and the general public would be significantly affected by ionizing radiation.

### **Amendment 37**

Proposal for a directive Article 7 - paragraph 5 a (new)

Text proposed by the Commission

### Amendment

(5a) Member States shall ensure that licence holders inform cross-border regional and local authorities of their plans to establish a waste management facility at the earliest possible date, if such a facility is located within such a distance of the national border that cross-border influence is likely to occur during building, operation or after abandonment of the facility or in the event of an accident or incident related to the facility

## **Amendment 38**

Proposal for a directive Article 7 a (new)

Text proposed by the Commission

Amendment

Article 7a

Marking and documentation

Member States shall ensure that licenceholders mark containers and document

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the disposal of spent fuel and radioactive waste in a form not subject to weathering. The documentation shall comprise both the chemical, toxic and radiological composition of the inventory and an indication of whether it is solid, liquid or gaseous.

## Justification

This is intended to inform future generations whether containers are filled with valuable raw materials and/or hazardous substances.

### **Amendment 39**

# Proposal for a directive Article 8 – paragraph 2

Text proposed by the Commission

(2) The safety case and supporting safety assessment shall cover the siting, design, construction, operation, and decommissioning of a facility or closure of a disposal facility; the safety case shall specify the standards applied for this assessment. The long-term post-closure safety shall be addressed, in particular how it is ensured by passive means to the fullest extent possible.

### Amendment

(2) The safety case and supporting safety assessment shall cover the siting, design, construction, operation, and decommissioning of a facility or operation of spent fuel pools, a final storage facility or operation and closure of a disposal facility; the safety case shall specify the standards applied for this assessment. The long-term and post-closure safety shall be addressed, in particular how it is ensured by passive means to the fullest extent possible. The safety case and supporting safety assessment shall include an assessment of the health and safety risks for workers, including those employed by subcontractors, and of the skill levels and number of staff required for the safe operation of the facility at all times, so that action can be taken in the event of an accident.

### Amendment 40

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# Proposal for a directive Article 8 – paragraph 3

Text proposed by the Commission

(3) The safety case for a facility shall describe all safety-relevant aspects of the site, the design of the facility, and the managerial control measures and regulatory controls. The safety case and supporting safety assessment shall demonstrate the level of protection provided and shall provide assurance to the competent regulatory authority and other interested parties that safety requirements will be met.

#### Amendment

(3) The safety case for a facility shall describe all safety-relevant aspects of the site, the design of the facility, the decommissioning of the facility or parts thereof and the managerial control measures and regulatory controls. The safety case and supporting safety assessment shall demonstrate the level of protection provided and shall provide assurance to the competent regulatory authority and other interested parties that safety requirements will be met.

#### Amendment 41

# Proposal for a directive Article 9

Text proposed by the Commission

Member States shall ensure that the national framework includes arrangements for education and training covering the needs of all parties with responsibilities for spent fuel and radioactive waste management in order to maintain and to further develop necessary expertise and skills.

### Amendment

Member States shall ensure that the national framework includes arrangements for education and training covering the needs of all parties with responsibilities for spent fuel and radioactive waste management in order to maintain and to further develop necessary expertise and skills, *in line with technical and scientific progress*.

### **Amendment 42**

Proposal for a directive Article 9 - paragraph 1 a (new)

Text proposed by the Commission

### Amendment

Member States shall ensure that the national framework includes programmes to support research into reducing radioactive waste production and into

### radioactive waste management.

#### Amendment 43

# Proposal for a directive Article 10

Text proposed by the Commission

Member States shall ensure that the national framework guarantees that adequate financial resources are available when needed for the management of spent fuel and radioactive waste, taking due account of the responsibility of radioactive waste producers.

### Amendment

Member States shall ensure that the national framework guarantees that adequate financial resources are available when needed for the management of spent fuel and radioactive waste, taking due account of the responsibility of radioactive waste producers, health and safety matters and occupational diseases which might occur in the longer term following radioactive exposure, according to the polluter-pays principle.

### **Amendment 44**

# Proposal for a directive Article 11

Text proposed by the Commission

Member States shall ensure that appropriate quality assurance programmes concerning *the safety of* spent fuel and radioactive waste management are established and implemented.

### Amendment

Member States shall ensure that appropriate quality assurance programmes concerning spent fuel and radioactive waste management are established and implemented.

### Justification

Quality assurance deals not only with the safety but with all aspects of the spent fuel and radioactive waste management.

#### Amendment 45

Proposal for a directive Article 12 – paragraph 1

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### Text proposed by the Commission

(1) Member States shall ensure that information on the management of spent fuel and radioactive waste is made available to workers and the general public. This obligation includes ensuring that the competent regulatory authority informs the public in the fields of its competence. Information shall be made available to the public in accordance with national legislation and international obligations, provided that this does not jeopardise other interests recognised in national legislation or international obligations such as, inter alia, security.

### Amendment

(1) Member States shall ensure that workers and the general public have access to information on the management of spent fuel and radioactive waste and the building of a facility to dispose of radioactive waste and spent fuel. This obligation includes ensuring that the competent regulatory authority regularly, properly and effectively provides all legal and natural persons, upon request, with up-to-date information on the disposal of radioactive waste and spent fuel. Every Member State shall ensure that the competent regulatory authorities advise all legal or natural persons on how to access information. Information shall be made available to the public in accordance with national legislation and international obligations, notably the Aarhus Convention. Information directly relevant to the health and safety of workers and the public (in particular radioactive and toxic emissions and the exposure to emissions) shall be made publicly available irrespective of the circumstances.

### **Amendment 46**

Proposal for a directive Article 12 – paragraph 2 a (new)

Text proposed by the Commission

### Amendment

(2a) The public participation procedures shall include reasonable time-frames for the different phases, allowing sufficient time for informing the public and for the public to prepare and participate effectively during the decision-making process.

### Amendment 47

## Proposal for a directive Article 12 – paragraph 2 b (new)

Text proposed by the Commission

Amendment

(2b) Each Member State shall ensure that in the decision-making process due account is taken of the outcome of the public participation.

### **Amendment 48**

Proposal for a directive Article 13 - paragraph 3 a (new)

Text proposed by the Commission

Amendment

(3a) Member States shall inform crossborder regional and local authorities of their national programmes at the earliest possible date, if implementation is likely to have cross-border effects.

### **Amendment 49**

Proposal for a directive Article 13 - paragraph 3 b (new)

Text proposed by the Commission

Amendment

(3b) Within the national programmes, Member States shall clearly indicate the available financial resources for the management of spent fuel and radioactive waste.

### Amendment 50

Proposal for a directive Article 15 - paragraph 4

Text proposed by the Commission

Amendment

(4) The Commission will take into account the Member States' *clarifications* and

(4) The Commission will take into account the Member States' *notifications* and

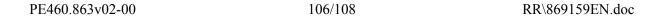
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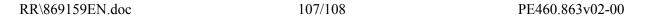
progress on the national waste management programs, when deciding on the provision of Euratom financial or technical assistance for spent fuel and radioactive waste management facilities or activities, or when formulating its views on investment projects in accordance with Article 43 of the Euratom Treaty.

progress on the national waste management programs, when deciding on the provision of Euratom financial or technical assistance for spent fuel and radioactive waste management facilities or activities, or when formulating its views on investment projects in accordance with Article 43 of the Euratom Treaty.

# **RESULT OF FINAL VOTE IN COMMITTEE**

Date adopted	12.4.2011
Result of final vote	+: 29 -: 12 0: 17
Members present for the final vote	János Áder, Elena Oana Antonescu, Kriton Arsenis, Sophie Auconie, Pilar Ayuso, Paolo Bartolozzi, Sergio Berlato, Milan Cabrnoch, Martin Callanan, Nessa Childers, Chris Davies, Esther de Lange, Anne Delvaux, Bas Eickhout, Elisabetta Gardini, Gerben-Jan Gerbrandy, Julie Girling, Françoise Grossetête, Satu Hassi, Jolanta Emilia Hibner, Dan Jørgensen, Karin Kadenbach, Christa Klaß, Holger Krahmer, Jo Leinen, Corinne Lepage, Peter Liese, Linda McAvan, Radvilė Morkūnaitė-Mikulėnienė, Miroslav Ouzký, Gilles Pargneaux, Antonyia Parvanova, Sirpa Pietikäinen, Mario Pirillo, Pavel Poc, Vittorio Prodi, Frédérique Ries, Oreste Rossi, Dagmar Roth-Behrendt, Daciana Octavia Sârbu, Horst Schnellhardt, Richard Seeber, Theodoros Skylakakis, Claudiu Ciprian Tănăsescu, Åsa Westlund, Glenis Willmott, Sabine Wils
Substitute(s) present for the final vote	Margrete Auken, Tadeusz Cymański, Matthias Groote, Riikka Manner, Miroslav Mikolášik, Renate Sommer, Bart Staes, Marianne Thyssen, Michail Tremopoulos, Anna Záborská
Substitute(s) under Rule 187(2) present for the final vote	Ashley Fox





# **RESULT OF FINAL VOTE IN COMMITTEE**

Date adopted	26.5.2011
Result of final vote	+: 33 -: 6 0: 12
Members present for the final vote	Jean-Pierre Audy, Ivo Belet, Bendt Bendtsen, Jan Březina, Reinhard Bütikofer, Maria Da Graça Carvalho, Jorgo Chatzimarkakis, Giles Chichester, Christian Ehler, Gaston Franco, Adam Gierek, Robert Goebbels, Fiona Hall, Jacky Hénin, Edit Herczog, Romana Jordan Cizelj, Krišjānis Kariņš, Lena Kolarska-Bobińska, Philippe Lamberts, Bogdan Kazimierz Marcinkiewicz, Judith A. Merkies, Jaroslav Paška, Anni Podimata, Herbert Reul, Teresa Riera Madurell, Michèle Rivasi, Jens Rohde, Paul Rübig, Amalia Sartori, Francisco Sosa Wagner, Konrad Szymański, Britta Thomsen, Evžen Tošenovský, Ioannis A. Tsoukalas, Niki Tzavela, Vladimir Urutchev, Adina-Ioana Vălean, Kathleen Van Brempt, Alejo Vidal-Quadras, Henri Weber
Substitute(s) present for the final vote	Maria Badia i Cutchet, Antonio Cancian, Vicky Ford, Rebecca Harms, Jolanta Emilia Hibner, Ivailo Kalfin, Vladko Todorov Panayotov, Mario Pirillo, Algirdas Saudargas, Peter Skinner, Hannes Swoboda

