

P7_TA(2011)0295

Spent fuel and radioactive waste *

European Parliament legislative resolution of 23 June 2011 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 Rule 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.

Amendment 2

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 1989¹ provides for the introduction of measures to encourage improvements in the safety and health of workers at work.

¹ OJ L 183, 29.6.1989, p. 1.

Amendment 5

Proposal for a directive Recital 4

Text proposed by the Commission

(4) Council Directive 96/29/Euratom of 13

Amendment

(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*²² 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.

²² OJ L 159, 29.6.1996, p. 1.

May 1996²² *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.

²² *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 131

Proposal for a directive

Recital 4 a (new)

Text proposed by the Commission

Amendment

(4a) Since neither the Euratom Treaty nor the TFEU provide Parliament with co-decision powers in relation to nuclear matters, it is crucial that a new legal base be found for any future legislation in the nuclear field.

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

Proposal for a directive Recital 15 b (new)

Text proposed by the Commission

Amendment

(15b) The decommissioning of the nuclear power plants of those three Member States imposed a significant financial and economical burden on them which they could not bear in full, and the Union therefore provided financial resources to those Member States, which were 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

Amendment

(18) In 2006 the IAEA updated its entire corpus of standards and published the Fundamental Safety Principles³⁷, 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.

(18) In 2006 the IAEA updated its entire corpus of standards and published the Fundamental Safety Principles³⁷, 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

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.

¹ *C115 Convention concerning the Protection of Workers against Ionising Radiations, adopted on 22 June 1960.*

² *R114 Recommendation concerning the Protection of Workers against Ionising Radiations, adopted on 22 June 1960.*

Amendment 11

Proposal for a directive Recital 22 a (new)

(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 waste¹.

¹European 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***.

Amendment 13

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 15

Proposal for a directive

Recital 25

Text proposed by the Commission

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, 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.

(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 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 115

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 pools are not covered anymore.

Amendment 132

Proposal for a directive

Recital 27

Text proposed by the Commission

Amendment

(27) Radioactive waste, including spent fuel considered as waste, requires

(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*.

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, *with the option of retrievability based on the reversibility principle*. The storage of radioactive waste, including long-term storage, is an interim solution.

Amendment 133

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 future nuclear installations in areas of the Union and its neighbouring countries at high seismic and tsunami risk, such as in Akkuyu in Turkey. The Union should take all appropriate measures to prevent radioactive waste disposal in such areas.

Amendment 17

Proposal for a directive Recital 28

Text proposed by the Commission

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

(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 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.

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 *state-of-the-art disposal in geological repositories 70 to 100 metres underground*. *Nearly all long-lived low and intermediate level 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 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.

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

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

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. The national programme may be a reference document or a set of documents.

(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.

Amendment 25

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. 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 non-compliance with such legislation must entail immediate and severe sanctions.

Amendment 26

Proposal for a directive Recital 35

Text proposed by the Commission

Amendment

(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.

(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

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 practice**.

Amendment 28

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, **safe and cost-effective** option when based on an agreement between **the 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 barriers, and its expected development over the time. The safety case should include the findings of the safety assessment and

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 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.

information on the robustness and reliability of the safety assessment and the assumptions made therein. ***The demonstration of safety should*** 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 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 practice and cooperation between national regulatory authorities.

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.

Amendment 34

Proposal for a directive Article 1 – paragraph 2

Text proposed by the Commission

Amendment

(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.

(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

Amendment

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

(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, although Member States are free to impose higher standards for the management of spent fuel and radioactive waste.

Amendment 37

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 38

Proposal for a directive

Article 2 – paragraph 1 – point a

Text proposed by the Commission

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;

(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 39

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 ***and including*** disposal, when the radioactive waste results from civilian activities or is managed within civilian activities ***on EU territory***;

Amendment 40

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***;

Amendments 42 and 134

Proposal 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 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;

Amendment

(6) ‘radioactive waste’ means radioactive material in gaseous, liquid or solid form, *including spent fuel and radioactive material originating from reprocessing, reduced to the minimum volume that is technologically possible*, for which no further use is *contemplated or 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;

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;

Amendment 45

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;

Amendment 46

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 ***temporary*** holding of spent fuel or of radioactive waste in an authorised facility ***pending its*** retrieval;

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*** 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 spent fuel and radioactive waste management are implemented through a well-founded and documented stepwise decision-making process having regard to long-term safety.

Amendment 50

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 51

Proposal for a directive

Article 4 – paragraph 2 – point a

Text proposed by the Commission

Amendment

(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;

(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 121

Proposal for a directive

Article 4 – paragraph 2 – point 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 122

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

Text proposed by the Commission

Amendment

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

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

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 135

Proposal for a directive

Article 4 – paragraph 2 a (new)

Text proposed by the Commission

Amendment

(2a) Since spent fuel pools involve major risks, especially when they are uncovered, all spent fuels shall therefore be moved out of pools and into dry storage as soon as possible. As part of that process, priority shall be given to the oldest of the spent fuel pools.

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 in order to utilise the favourable geological or technical advantages of a particular site and to share the financial burden of the joint project.

Amendment 63

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 136

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

Text proposed by the Commission

Amendment

(3c) In no circumstances may radioactive waste be exported to non-EU countries; shipment of spent fuel outside the EU should be allowed under the condition of its subsequent import back into the EU after recycling.

Amendment 124

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

Text proposed by the Commission

Amendment

(3d) All nuclear waste facilities in seismic regions or coastal areas at significant risk of rising sea levels or of tsunamis shall be prohibited.

Amendment 64

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

Text proposed by the Commission

Amendment

(a) a national programme for

(a) a national programme, *respecting*

implementation of the policy on spent fuel and radioactive waste management;

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

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;

(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, regardless of who produces it, is managed on a non-discriminatory basis;***

Amendment 67

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

Text proposed by the Commission

Amendment

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

(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 69

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 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;

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 71

Proposal for a directive

Article 5 – paragraph 2

Text proposed by the Commission

Amendment

(2) Member States shall ensure that the national framework is maintained and

(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.

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.

Amendment 73

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 sub-contractors, as well as staff levels and training, shall form part of those assessments.

Amendment 137

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

Text proposed by the Commission

Amendment

(3b) The competent regulatory authority shall have the power to order that certain activities cease where the assessments have shown that they are not safe. Those and all other assessments by the competent regulatory authority shall be

made public;

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 130

Proposal 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 post-closure 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 which they contain), 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.

The safety case and supporting safety assessment shall demonstrate the level of protection ensured and shall provide assurance to the competent regulatory authority and other interested parties that safety requirements will be met. The safety case and supporting safety assessment shall be submitted to the competent regulatory authority for approval.

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 77

Proposal for a directive Article 7 – paragraph 2

Text proposed by the Commission

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 and facilities in a systematic and verifiable

(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***

manner.

and subcontractors and the safety of their facilities, in a systematic and verifiable manner in compliance with the best available technology (BAT). 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 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 79

Proposal 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 ***the highest*** 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.

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, ***including 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)

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 146

Proposal for a directive Article 7 a (new)

Text proposed by the Commission

Amendment

Article 7a

Marking and documentation

Member States shall ensure that licence holders mark containers and document the disposal of spent fuel and radioactive waste in a form not subject to weathering. The documentation shall comprise both the chemical, toxicological and radiological composition of the inventory and an indication whether it is solid, liquid or gaseous.

Amendment 82

Proposal for a directive

Article 8

Text proposed by the Commission

Amendment

Article 8

deleted

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 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.

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 have been exposed to spent fuel or 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 penalties

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

Amendment 85

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 *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 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

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.

1. 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 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 high-level long-lived radioactive waste, depending on its nature. Those costs 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 those 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 1a. 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

Amendment

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

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

Amendment 127

Proposal for a directive Article 11 – paragraph 1 a (new)

Text proposed by the Commission

Amendment

Member States shall ensure that full third party liability in respect of any damage caused by accidents and long-term radioactive waste management, including damage to the terrestrial, water and marine environments, is borne by the licence holders.

Amendment 93

Proposal for a directive Article 12 – paragraph 1

Text proposed by the Commission

Amendment

(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

(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

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.*

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, *in particular 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 financial resources for the management of spent fuel and radioactive waste referred to in Article 10, 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

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 the preparation or review of national programmes for the management of spent fuel and radioactive waste needing to be drawn up pursuant to Article 13, and that 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 members of 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 time-frames shall be provided for, allowing sufficient time for each of the different stages of public participation required by this Article.

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 cross-border regional and local authorities of 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;

Amendment 103

Proposal for a directive Article 14 – point 1

Text proposed by the Commission

Amendment

(1) an inventory of all spent fuel and radioactive waste and *provisions* of future quantities, including those from

(1) on the basis of the classification scheme referred to in point (-1), an inventory of all spent fuel and radioactive

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

waste and *forecasts* of future quantities, including those from decommissioning. The inventory shall clearly indicate the location and amount of the material and the level of hazard, ***as well as the origin of the waste***;

Amendment 128

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 ***storage or*** disposal. ***High priority shall be given to historical radioactive waste and spent fuel in intermediate storage pools***;

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 monitoring 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 106

Proposal 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 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 points (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

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 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, *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 the peer reviews.*

Amendment 138

Proposal for a directive Article 16 a (new)

Text proposed by the Commission

Amendment

Article 16b

Reassessment

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 and the export provisions laid down in Article 4(3). That reassessment shall in particular consider the issues of reversibility and retrievability of waste once it is placed in a disposal site in the light of research developments and further scientific knowledge 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.

** Two years after the date of entry into force of this Directive.*