



EUROPEAN PARLIAMENT

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*Committee on Industry, Research and Energy*

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**2011/0043(NLE)**

19.9.2011

# **AMENDMENTS 11 - 36**

**Draft report  
Jan Březina**

(PE469.876v02-00)

on the proposal for a Council decision concerning the specific programme, to be carried out by means of indirect actions, implementing the Framework Programme of the European Atomic Energy Community for nuclear research and training activities (2012 - 2013)

Proposal for a decision

(COM(2011)0073 – C7-0075/2011 – 2011/0043(NLE))

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PE472.082v02-00

**EN**

*United in diversity*

**EN**



**Amendment 11**  
**Michèle Rivasi**

**Proposal for a decision**

—

*Proposal for rejection*

***The European Parliament rejects the Commission's proposal.***

Or. fr

**Amendment 12**  
**Maria Da Graça Carvalho, Jean-Pierre Audy**

**Proposal for a decision**  
**Recital 3 a (new)**

*Text proposed by the Commission*

*Amendment*

***(3a) The design and implementation of the Framework Programme (2012 - 2013) should be based on the principles of simplicity, stability, transparency, legal certainty, consistency, excellence and trust following the recommendations of the European Parliament in its Report on simplifying the implementation of the Research Framework Programmes.***

Or. en

**Amendment 13**  
**Michèle Rivasi**

**Proposal for a decision**  
**Recital 6**

*Text proposed by the Commission*

*Amendment*

(6) This specific programme should contribute towards ***promoting sustainable development.***

(6) This specific programme should contribute towards ***improving the standards of radiation protection and***

*minimising the risk from exposure to ionising radiation, as well as to the rapid training of experts in the decommissioning of nuclear power plants.*

Or. fr

**Amendment 14**  
**Silvia-Adriana Țicău**

**Proposal for a decision**  
**Recital 8**

*Text proposed by the Commission*

(8) Appropriate measures – proportionate to the Union's financial interests – should be taken to monitor both the effectiveness of the financial support granted and the effectiveness of the utilisation of these funds in order to prevent irregularities and fraud. The necessary steps should also be taken to recover funds lost, wrongly paid or incorrectly used, in accordance with Regulation (EC, Euratom) No 1605/2002, Regulation (EC, Euratom) No 2342/2002, Council Regulation (EC, Euratom) No 2988/95 of 18 December 1995 on the protection of the European Communities' financial interests<sup>7</sup>, Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities<sup>8</sup> and Regulation (EC) No 1073/1999 of the European Parliament and of the Council of 25 May 1999 concerning investigations conducted by the European Anti-Fraud Office (OLAF)<sup>9</sup>.

*Amendment*

(8) Appropriate measures – proportionate to the Union's financial interests – should be taken to monitor both the effectiveness of the financial support granted and the effectiveness of the utilisation of these funds in order to prevent irregularities and fraud. ***Special attention should be paid to the development of contractual arrangements that reduce the risk of failure to perform as well as the reallocation of risks and costs over time.*** The necessary steps should also be taken to recover funds lost, wrongly paid or incorrectly used, in accordance with Regulation (EC, Euratom) No 1605/2002, Regulation (EC, Euratom) No 2342/2002, Council Regulation (EC, Euratom) No 2988/95 of 18 December 1995 on the protection of the European Communities' financial interests<sup>7</sup>, Council Regulation (Euratom, EC) No 2185/96 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities<sup>8</sup> and Regulation (EC) No 1073/1999 of the European Parliament and of the Council of 25 May 1999 concerning investigations conducted by the European Anti-Fraud

**Amendment 15**

**Michèle Rivasi**

**Proposal for a decision**

**Article 2 – paragraph 1 – introductory part**

*Text proposed by the Commission*

The specific programme shall support activities for research and training on nuclear energy, covering the whole range of indirect research actions carried out in the *following thematic areas*:

*Amendment*

The specific programme shall support activities for research and training on nuclear energy, covering the whole range of indirect research actions carried out in the *area of radiation protection*.

Or. fr

**Amendment 16**

**Michèle Rivasi**

**Proposal for a decision**

**Article 2 – paragraph 1 – point a**

*Text proposed by the Commission*

*(a) fusion energy research (including ITER);*

*Amendment*

*deleted*

Or. fr

**Amendment 17**

**Michèle Rivasi**

**Proposal for a decision**

**Article 2 – paragraph 1 – point b**

*Text proposed by the Commission*

*(b) research on nuclear fission and*

*Amendment*

*deleted*

*radiation protection.*

Or. fr

## **Amendment 18**

**Michèle Rivasi**

### **Proposal for a decision**

#### **Article 3**

*Text proposed by the Commission*

*In accordance with Article 3 of Decision [Reference of Euratom FP Council Decision to be added when adopted], the amount deemed necessary for the execution of **the** specific programme is EUR 2 327 054 000, of which up to 15 % shall be for the Commission's administrative expenditure. This amount is allocated as follows (in EUR):*

- a) fusion energy research 2 208 809 000;*
- b) nuclear fission and radiation protection 118 245 000.*

*Amendment*

The amount deemed necessary for the execution of **this** specific programme **on radiation protection** is EUR 60 000 000.

Or. fr

## **Amendment 19**

**Edit Herczog**

### **Proposal for a decision**

#### **Article 3**

*Text proposed by the Commission*

In accordance with Article 3 of Decision [Reference of Euratom FP Council Decision to be added when adopted], the amount deemed necessary for the execution of the specific programme is EUR 2 327 054 000, of which up to 15 % shall be for the Commission's administrative expenditure. This amount is

*Amendment*

In accordance with Article 3 of Decision [Reference of Euratom FP Council Decision to be added when adopted], the amount deemed necessary for the execution of the specific programme is EUR 2 408 809 000, of which up to 15 % shall be for the Commission's administrative expenditure. This amount is

allocated as follows (in EUR):

(a) fusion energy research: 2 208 809 000

(b) nuclear fission and radiation protection:  
*118 245 000.*

allocated as follows (in EUR):

(a) fusion energy research: 2 208 809 000

(b) nuclear fission and radiation protection:  
*200 000 000*

Or. en

**Amendment 20**  
**Silvia-Adriana Țicău**

**Proposal for a decision**  
**Article 7 – paragraph 2 a (new)**

*Text proposed by the Commission*

*Amendment*

*(2a) The membership of the committees on the fission and fusion aspects shall in each case be such as to ensure a reasonable balance between men and women and between Member States undertaking research and training activities in the nuclear field and associated states;*

Or. ro

**Amendment 21**  
**Michèle Rivasi**

**Proposal for a decision**  
**Annex – part I – section I.A**

*Text proposed by the Commission*

*Amendment*

*The whole of section I.A is deleted.*

Or. fr

**Amendment 22**  
**Vladimír Remek**

**Proposal for a decision**

**Annex – part I – section I.A – point 1 – paragraph 3**

*Text proposed by the Commission*

The R&D activities in support of ITER construction will be carried out in the Fusion Associations and European industries. They will include the development and testing of components and systems.

*Amendment*

The R&D activities in support of ITER construction will be carried out in the Fusion Associations and European industries. They will include the development, ***testing and reliability verification*** of components and systems.

Or. cs

**Amendment 23**

**Antonio Cancian**

**Proposal for a decision**

**Annex – part I – section I.A – point 2 – paragraph 1 – indent 2**

*Text proposed by the Commission*

– exploration of ITER operating scenarios by means of targeted experiments ***on JET and other facilities, and coordinated modelling activities.***

*Amendment*

– exploration of ITER operating scenarios by means of targeted experiments ***related to the existing European ventures.***

Or. it

**Amendment 24**

**Antonio Cancian**

**Proposal for a decision**

**Annex – part I – section I.A – point 2 – paragraph 1 – indent 2 a (new)**

*Text proposed by the Commission*

*Amendment*

***– planning of a new satellite experiment under the 8th FP which can complement ITER experimentation, with a view to ensuring the facilities required while limiting risks and operational costs, and can also cover the study of key aspects of***



*the DEMO technologies;*

Or. it

**Amendment 25**  
**Antonio Cancian**

**Proposal for a decision**  
**Annex – part I – section I.A – point 6**

*Text proposed by the Commission*

The realisation of ITER in Europe, within the international framework provided by the ITER Organisation, will add to the new research infrastructures with a strong European dimension.

*Amendment*

The realisation of ITER in Europe, within the international framework provided by the ITER Organisation, will add to the new research infrastructures with a strong European dimension, ***and will entail, in the context of the complementary European programme, the creation of a new research infrastructure in support of the ITER experiment.***

Or. it

**Amendment 26**  
**Michèle Rivasi**

**Proposal for a decision**  
**Annex – part I – section I.B - title**

*Text proposed by the Commission*

***I.B. Nuclear fission and radiation protection***

*Amendment*

***I.B. Radiation protection***

Or. fr

**Amendment 27**  
**Michèle Rivasi**

**Proposal for a decision**  
**Annex – part I – section I.B – paragraph 1**

*Text proposed by the Commission*

*Amendment*

***The overall objective is to enhance in particular the safety, performance, resource efficiency and cost-effectiveness of nuclear fission and uses of radiation in industry and medicine. Indirect actions in nuclear fission and radiation protection will be undertaken in five principal areas of activity detailed below. There are important links with research in the Seventh Framework Programme of the Union adopted by Decision No 1982/2006/EC of the European Parliament and of the Council, in particular in the areas of energy, European standards, education and training, environmental protection, health, material science, governance, common infrastructures, security and safety culture. International collaboration will be a key feature of the activities in many of the activity areas, in particular advanced nuclear systems that are being investigated in the Generation IV International Forum.***

***deleted***

Or. fr

## **Amendment 28**

**Alejo Vidal-Quadras**

### **Proposal for a decision**

**Annex – part I – section I.B – paragraph 1**

*Text proposed by the Commission*

*Amendment*

The overall objective is to enhance in particular the safety, performance, resource efficiency and cost-effectiveness of nuclear fission and uses of radiation in industry and medicine. Indirect actions in nuclear fission and radiation protection will be undertaken in five principal areas of activity detailed below. There are

The overall objective is to enhance in particular the safety, performance, resource efficiency and cost-effectiveness of nuclear fission and uses of radiation in industry and medicine. Indirect actions in nuclear fission and radiation protection will be undertaken in five principal areas of activity detailed below. There are

important links with research in the Seventh Framework Programme of the Union adopted by Decision No 1982/2006/EC of the European Parliament and of the Council<sup>13</sup>, in particular in the areas of energy, European standards, education and training, environmental protection, health, material science, governance, common infrastructures, security and safety culture. International collaboration will be a key feature of the activities in many of the activity areas, in particular advanced nuclear systems that are being investigated in the Generation IV International Forum.

important links with research in the Seventh Framework Programme of the Union adopted by Decision No 1982/2006/EC of the European Parliament and of the Council<sup>13</sup>, in particular in the areas of energy, European standards, education and training, environmental protection, health, material science, governance, common infrastructures, security and safety culture, ***as well as with the nuclear fission proposals of the Strategic Energy Technology Plan endorsed by the Council in March 2008.*** International collaboration will be a key feature of the activities in many of the activity areas, in particular advanced nuclear systems that are being investigated in the Generation IV International Forum.

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<sup>13</sup>. *OJ L 412, 30.12.2006, p. 1.*

Or. en

**Amendment 29**  
**Michèle Rivasi**

**Proposal for a decision**  
**Annex – part I – section I.B – point 1**

*Text proposed by the Commission*

*Amendment*

**1. Geological disposal**

***deleted***

***Objectives***

***Through implementation-oriented research, to establish a sound scientific and technical basis for demonstrating the technologies and safety of disposal of spent fuel and long-lived radioactive wastes in geological formations, and to underpin the development of a common European view on the main issues related to the management and disposal of waste.***

***Activities***

***Geological disposal: Engineering studies and demonstration of repository designs, in situ characterisation of repository host rocks (in both generic and site-specific underground research laboratories), understanding of the repository environment, studies on relevant processes in the near field (waste form and engineered barriers) and far-field (bedrock and pathways to the biosphere), development of robust methodologies for performance and safety assessment and investigation of governance and societal issues related to public acceptance.***

Or. fr

**Amendment 30  
Vladimír Remek**

**Proposal for a decision  
Annex – part I – section I.B – point 1 – paragraph 2**

*Text proposed by the Commission*

Geological disposal: Engineering studies and demonstration of repository designs, in situ characterisation of repository host rocks (in both generic and site-specific underground research laboratories), understanding of the repository environment, studies on relevant processes in the near field (waste form and engineered barriers) and far-field (bedrock and pathways to the biosphere), development of robust methodologies for performance and safety assessment and investigation of governance and societal issues related to public acceptance.

*Amendment*

Geological disposal: Engineering studies and demonstration of repository designs, in situ characterisation of repository host rocks (in both generic and site-specific underground research laboratories), understanding of the repository environment, studies on relevant processes in the near field (waste form and engineered barriers) and far-field (bedrock and pathways to the biosphere), development of robust methodologies for performance and safety assessment and investigation of governance and societal issues related to public acceptance. ***To secure more effective confinement of radioactive substances in case of unanticipated events, it is necessary to implement robust systems maintaining the service with downgraded modes of operation.***

**Amendment 31**  
**Michèle Rivasi**

**Proposal for a decision**  
**Annex – part I – section I.B – point 2**

*Text proposed by the Commission*

*Amendment*

**2. Reactor systems**

*deleted*

**Objectives**

*To underpin the safe, efficient and more sustainable operation of all relevant reactor systems (including fuel cycle facilities) in use or under development in Europe, and to investigate ways of reducing the amount and/or hazard of the waste.*

**Activities**

*Nuclear installation safety: Operational safety of current and future nuclear installations, especially plant life assessment and management, safety culture (minimising the risk of human and organisational error), advanced safety assessment methodologies, numerical simulation tools, instrumentation and control, and prevention and mitigation of severe accidents, with associated activities to optimise knowledge management and maintain competences.*

*Advanced nuclear systems: Improved efficiency of present systems and fuels and the study of advanced reactor systems in order to assess their potential, proliferation resistance and impacts on long-term sustainability, including basic and key cross-cutting research activities (such as material science)<sup>14</sup> and the study of the fuel cycle, innovative fuels and waste management aspects, including partitioning and transmutation the more*

*efficient use of fissile material in existing reactors.*

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*<sup>14</sup> It is understood that the ERC is responsible for supporting frontier research in all areas of science and technology.*

Or. fr

**Amendment 32**  
**Edit Herczog**

**Proposal for a decision**  
**Annex – part I – section I.B – point 2 – paragraph 2**

*Text proposed by the Commission*

Nuclear installation safety: Operational safety of current and future nuclear installations, especially plant life assessment and management, safety culture (minimising the risk of human and organisational error), advanced safety assessment methodologies, numerical simulation tools, instrumentation and control, and prevention and mitigation of severe accidents, with associated activities to optimise knowledge management and maintain competences.

*Amendment*

Nuclear installation safety: Operational safety of current and future nuclear installations, especially plant life assessment and management, safety culture (minimising the risk of human and organisational error), advanced safety assessment methodologies, numerical simulation tools, instrumentation and control, and prevention and mitigation of severe accidents, with associated activities to optimise knowledge management and maintain competences. ***Additional work to be undertaken as a consequence of the Fukushima accident should include: improved seismic resistance, redefinition of ‘beyond design basis’ accidents, analysis of common failure modes, better emergency management, avoidance of hydrogen accumulation from hot metal/steam reactions, hydrogen recombination, design of filter/scrubber systems able to withstand gas overpressure.***

Or. en

**Amendment 33**  
**Alejo Vidal-Quadras**

**Proposal for a decision**  
**Annex – part I – section I.B – point 2 – paragraph 2**

*Text proposed by the Commission*

Nuclear installation safety: Operational safety of current and future nuclear installations, especially plant life assessment and management, safety culture (minimising the risk of human and organisational error), advanced safety assessment methodologies, numerical simulation tools, instrumentation and control, and prevention and mitigation of severe accidents, with associated activities to optimise knowledge management and maintain competences.

*Amendment*

Nuclear installation safety: Operational safety of current and future nuclear installations, ***taking into account particularly the research implications of the Fukushima accident***, especially plant life assessment and management, safety culture (minimising the risk of human and organisational error), advanced safety assessment methodologies, numerical simulation tools, instrumentation and control, and prevention and mitigation of severe accidents, with associated activities to optimise knowledge management and maintain competences.

Or. en

**Amendment 34**  
**Alejo Vidal-Quadras**

**Proposal for a decision**  
**Annex – part I – section I.B – point 2 – paragraph 3**

*Text proposed by the Commission*

Advanced nuclear systems: Improved efficiency of present systems and fuels and the study of advanced reactor systems in order to assess their potential, proliferation resistance and impacts on long-term sustainability, including basic and key cross-cutting research activities (such as material science)<sup>14</sup> and the study of the fuel cycle, innovative fuels and waste management aspects, including partitioning and transmutation the more efficient use of fissile material in existing reactors.

*Amendment*

Advanced nuclear systems: Improved efficiency of present systems and fuels and the study of advanced reactor systems in order to assess their potential, proliferation resistance and impacts on long-term sustainability, including basic and key cross-cutting research activities (such as material science)<sup>14</sup> and the study of the fuel cycle, innovative fuels and waste management aspects, including partitioning and transmutation the more efficient use of fissile material in existing reactors. ***The above activities should be geared to***

*supporting the European Sustainable Nuclear Industrial Initiative (ESNII), launched at the Strategic Energy Technology Plan conference of the Belgian Presidency in November 2010, including the design of the key research demonstrators ASTRID, ALLEGRO, ALFRED and MYRRHA.*

Or. en

**Amendment 35**  
**Michèle Rivasi**

**Proposal for a decision**  
**Annex – part I – section I.B – point 5 – paragraph 1**

*Text proposed by the Commission*

To support the creation and spreading of scientific competences and know-how *throughout the sector*, thereby guaranteeing the earliest possible availability of suitably qualified researchers, engineers and technicians, and to improve coordination between Union educational institutions in order to ensure qualifications are equivalent across all Member States.

*Amendment*

To support the creation and spreading of scientific competences and know-how *in radiation protection and the decommissioning of nuclear installations*, thereby guaranteeing the earliest possible availability of suitably qualified researchers, engineers and technicians, and to improve coordination between Union educational institutions in order to ensure qualifications are equivalent across all Member States.

Or. fr

**Amendment 36**  
**Michèle Rivasi**

**Proposal for a decision**  
**Annex – part I – section I.B – point 5 – paragraph 2**

*Text proposed by the Commission*

Human resources and training:  
Coordination of national programmes and provision for general training needs in

*Amendment*

Human resources and training:  
Coordination of national programmes and provision for general training needs in



**nuclear** science and technology through a range of instruments, including competitive ones, as part of general support to human resources in all thematic domains. Includes support for training courses and training networks, and measures to make the sector more attractive to young scientists and engineers.

**radiation protection and in the science and technology of decommissioning nuclear installations** through a range of instruments, including competitive ones, as part of general support to human resources in all thematic domains. Includes support for training courses and training networks, and measures to make the sector more attractive to young scientists and engineers.

Or. fr