



EUROPEAN PARLIAMENT

2009 - 2014

Committee on Industry, Research and Energy

2011/0400(NLE)

13.6.2012

DRAFT REPORT

on the proposal for a Council regulation on the Research and Training Programme of the European Atomic Energy Community (2014-2018) complementing Horizon 2020 – The Framework Programme for Research and Innovation
(COM(2011)0812 – C7-0009/2012 – 2011/0400(NLE))

Committee on Industry, Research and Energy

Rapporteur: Peter Skinner

Symbols for procedures

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

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

Amendments to a draft act

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

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

CONTENTS

	Page
DRAFT EUROPEAN PARLIAMENT LEGISLATIVE RESOLUTION.....	5
EXPLANATORY STATEMENT.....	33

DRAFT EUROPEAN PARLIAMENT LEGISLATIVE RESOLUTION

on the proposal for a Council regulation on the Research and Training Programme of the European Atomic Energy Community (2014-2018) complementing Horizon 2020 - The Framework Programme for Research and Innovation (COM(2011)0812 – C7-0009/2012 – 2011/0400(NLE))

(Consultation)

The European Parliament,

- having regard to the Commission proposal to the Council (COM(2011)0812),
 - having regard to Article 7 of the Euratom Treaty, pursuant to which the Council consulted Parliament (C7-0009/2012),
 - 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 Budgets and of the Committee on Legal Affairs (A7-0000/2012),
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

Recital 4

Text proposed by the Commission

(4) Notwithstanding the potential impact of nuclear energy on energy supply and economic development, severe nuclear accidents may have the potential to endanger human health. Therefore, nuclear safety and, where appropriate, security aspects should be given the greatest

Amendment

(4) Notwithstanding the potential impact of nuclear energy on energy supply and economic development, severe nuclear accidents, ***nuclear proliferation and nuclear terrorism*** may have the potential to endanger human health. Therefore, nuclear safety and, where appropriate,

possible attention in the Euratom Research and Training Programme.

security aspects should be given the greatest possible attention in the Euratom Research and Training Programme.
Attention must also be paid to third countries that border the Union and cross-border aspects of nuclear safety that underline the Union's added value.

Or. en

Justification

It is always important to highlight the potential risk posed by nuclear proliferation and nuclear terrorism. Given the nature of radioactivity, it is also important to take note of some nuclear installations which are not on Union territory but which could potentially impact upon it.

Amendment 2

Recital 5

Text proposed by the Commission

(5) As all Member States have nuclear installations or make use of radioactive materials particularly for medical purposes, the Council has recognised in its conclusions of 2 December 2008 the continuing need for skills in the nuclear field, in particular through appropriate education and training linked with research **and** coordinated at Community level.

Amendment

(5) As all Member States have nuclear installations or make use of radioactive materials particularly for medical purposes, the Council has recognised in its conclusions of 2 December 2008 the continuing need for skills in the nuclear field, in particular through appropriate education and training linked with research **as well as improved working conditions which are** coordinated at Community level.

Or. en

Justification

Given the small but potential danger of nuclear researchers and workers being exposed to harmful materials, it should be remembered that the Union should never cease trying to improve safety standards for those involved.

Amendment 3

Recital 6

Text proposed by the Commission

(6) By signing the Agreement on the Establishment of the ITER International Fusion Energy Organisation for the Joint Implementation of the ITER Project⁷, the Community has undertaken to participate in ITER construction and its future exploitation. The Community contribution is managed through the ‘European Joint Undertaking for ITER and the Development of Fusion Energy’ (hereinafter ‘Fusion for Energy’), established by Council Decision of 27 March 2007. The activities of Fusion for Energy, including ITER, are to be regulated by a separate legislative act.

Amendment

(6) By signing the Agreement on the Establishment of the ITER International Fusion Energy Organisation for the Joint Implementation of the ITER Project⁷, the Community has undertaken to participate in ITER construction and its future exploitation. The Community contribution is managed through the ‘European Joint Undertaking for ITER and the Development of Fusion Energy’ (hereinafter ‘Fusion for Energy’), established by Council Decision of 27 March 2007. The activities of Fusion for Energy, including ITER, are to be regulated by a separate legislative act. ***However, funding for the ITER Project must be secured through the Multiannual Financial Framework (MFF).***

Or. en

Justification

Although the ITER Project will be largely dealt with under a different legislative act it is the responsibility of the European Parliament to issue a signal to the Commission and the Council of the European Union that the project should have its funding secured under the Multiannual Financial Framework (MFF) as it had been previously. The Commission has not proposed any logical reason why it should be taken-out.

Amendment 4

Recital 6 a (new)

Text proposed by the Commission

Amendment

(6a) In order to compliment other Union priorities for the coming decades, the framework for nuclear fission research should support the Union's existing objectives and proposals, such as the Strategic Technology Plans (SET- Plan)

as well as the 'Energy Roadmap 2050'. This Framework should also support the European Sustainable Nuclear Industrial Initiative (ESNII). The framework should also complement broader Union proposals in terms of co-operation with third countries as far as possible.

Or. en

Justification

It is important that the framework should act to compliment agreed-upon and established Union priorities. The framework should also provide further support for the European Sustainable Nuclear Industrial Initiative (ESNII) which was launched in November 2010.

Amendment 5

Recital 7

Text proposed by the Commission

(7) For fusion to become a credible option for commercial energy production, it is, firstly, necessary to successfully and timely complete the construction of ITER and start its operation. Secondly it is necessary to establish an ambitious, yet realistic roadmap towards the production of electricity by 2050. Reaching those goals requires the European fusion programme to be redirected. A stronger focus should be placed on the activities in support to ITER. ***Such rationalisation should be achieved without jeopardising the*** European leadership of the fusion scientific community.

Amendment

(7) For fusion to become a credible option for commercial energy production, it is, firstly, necessary to successfully and timely complete the construction of ITER and start its operation, ***and continue to support the activities of existing allied and ancillary projects such as the Joint European Torus (JET).*** Secondly it is necessary to establish an ambitious, yet realistic roadmap towards the production of electricity by 2050. Reaching those goals requires the European fusion programme to be redirected. A stronger focus should be placed on the activities in support to ITER, ***including ensuring its funding within the MFF in a complete and transparent way. Guaranteeing funding within the MFF will guarantee the Community's commitment to the long-term success of the project and prevent costs from mounting exponentially thereafter. Maintaining*** European leadership of the fusion scientific community ***is an essential aim of this framework.***

Justification

In addition to ITER there are other significant fusion energy projects such as JET, which has been in operation for years and is a source of important, on-going research into the future of fusion energy ahead of ITER's scheduled start date. It is important for the viability of the ITER project that this research continues.

Amendment 6

Recital 8

Text proposed by the Commission

(8) The Joint Research Centre (JRC) should continue to provide independent customer-driven scientific and technological support for the formulation, development, implementation and monitoring of Community policies, in particular in the field of nuclear safety and security research and training.

Amendment

(8) The Joint Research Centre (JRC) should continue to provide independent customer-driven scientific and technological support for the formulation, development, implementation and monitoring of Community policies ***and, where appropriate, international policies,*** in particular in the field of nuclear safety and security research and training.

Amendment 7

Recital 10

Text proposed by the Commission

(10) While it is for each Member State to choose whether or not to make use of nuclear power, the role of the Union is to develop, in the interest of all its Member States, a framework to support joint cutting-edge research, knowledge creation and knowledge preservation on nuclear fission technologies, with special emphasis on safety, security, radiation protection and non-proliferation. That requires independent scientific evidence, to which the JRC can make a key contribution. That has been recognised in the Commission

Amendment

(10) While it is for each Member State to choose whether or not to make use of nuclear power, the role of the Union is to develop, in the interest of all its Member States, a framework to support joint cutting-edge research, knowledge creation and knowledge preservation on nuclear fission technologies, with special emphasis on safety, security, radiation protection, ***including improved working conditions for those engaged in working directly with nuclear materials, nuclear decommissioning*** and non-proliferation.

Communication ‘Europe 2020 Flagship Initiative Innovation Union’⁹, in which the Commission stated its intention to strengthen scientific evidence for policy making through the JRC. The JRC proposes to respond to that challenge by focusing its nuclear safety and security research on the Union's policy priorities.

That requires independent scientific evidence, to which the JRC can make a key contribution. That has been recognised in the Commission Communication ‘Europe 2020 Flagship Initiative Innovation Union’⁹, in which the Commission stated its intention to strengthen scientific evidence for policy making through the JRC. The JRC proposes to respond to that challenge by focusing its nuclear safety and security research on the Union's policy priorities.

Or. en

Justification

In addition to the necessary standards of working conditions it is important to remember that nuclear decommissioning is also of vital importance for the future.

Amendment 8

Recital 11

Text proposed by the Commission

(11) With the aim of deepening the relationship between science and society and reinforcing public confidence in science, the Euratom Programme should favour an informed engagement of citizens and civil society on research and innovation matters by promoting science education, by making scientific knowledge more accessible, by developing responsible research and innovation agendas that meet citizens' and civil society's concerns and expectations and by facilitating their participation in the Euratom programme activities.

Amendment

(11) With the aim of deepening the relationship between science and society and reinforcing public confidence in science, the Euratom Programme should favour an informed engagement of citizens and civil society on research and innovation matters by promoting science education, by making scientific knowledge more accessible, by developing responsible research and innovation agendas that meet citizens' and civil society's concerns and expectations and by facilitating their participation in the Euratom programme activities. ***This should include making scientific and research careers attractive to the next generation of researchers, in particular if they are from groups under-represented in research.***

Or. en

Justification

While there are many experts in the field of nuclear research within the Union it is vital to involve the next generation of researchers in nuclear science. At present women are underrepresented among researchers as well as other groups, which must be addressed.

Amendment 9

Recital 13

Text proposed by the Commission

(13) The Euratom Programme should **contribute to** the attractiveness of the research profession in the Union. Adequate attention should be paid to the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers, together with other relevant reference frameworks defined in the context of the European Research Area, while respecting their voluntary nature.

Amendment

(13) The Euratom Programme should **seek to promote** the attractiveness of the research profession in the Union, **having the general aim of increasing the visibility of science in society but also having the aim of preventing any skills shortage in the Union or 'brain- drain' from the Union to third countries. While much expertise currently exists within the Union, it is vitally important that a new generation of nuclear researchers be trained in all aspects of nuclear research. The Euratom Programme will also at all levels seek to give European added value for all those seeking to participate in nuclear research.** Adequate attention should be paid to the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers, together with other relevant reference frameworks defined in the context of the European Research Area, while respecting their voluntary nature.

Or. en

Amendment 10

Recital 16

Text proposed by the Commission

(16) A greater impact should also be achieved by combining the Euratom

Amendment

(16) A greater impact should also be achieved by combining the Euratom

Programme and private sector funds within public-private partnerships in key areas where research and innovation could contribute to Union's wider competitiveness goals. Particular attention should be given to the involvement of small and medium-sized enterprises.

Programme and private sector funds within public-private partnerships in key areas where research and innovation could contribute to Union's wider competitiveness goals. Particular attention should be given to the involvement of small and medium-sized enterprises *(SMEs). The need to increase the uptake of available community funding by SMEs must apply to those working in nuclear research as it does in other fields. The Euratom Framework should support SMEs at all stages in the innovation chain, especially activities closer to the market inter alia through the use of innovative financial instruments. Such support should include the dedicated SME instrument and all the revised financial instruments which should provide for appropriate measures to unleash the full innovation potential of SMEs and which will become available through the Horizon 2020 funding programme as well as similar programmes such as the Programme for the Competitiveness of Enterprises and small and medium-sized enterprises (2014 - 2020) (COSME).*

Or. en

Justification

The Horizon 2020 aims to improve the situation of SMEs across the Union. SMEs are key to job creation across the Union but often have difficulty in accessing Union funding owing to the administrative burden and are often under- represented in nuclear research. Appropriate measures should be taken at all levels to ensure an adequate balance between industry, SMEs and academia when appointing groups of independent experts. In particular SMEs must not only have access not only to the targeted SME instruments but that simplification ought to increase the potential of SMEs.

Amendment 11

Recital 17

Text proposed by the Commission

(17) **The Euratom** Programme should

Amendment

(17) **The** Programme should, **in particular**,

promote cooperation, in particular in the field of safety, with third countries based on common interest and mutual benefit.

take account of all nuclear installations in third countries which border the Union, especially if it is located in an area susceptible to natural disasters. International cooperation on nuclear energy should contain appropriate instruments for securing mutual financial obligations. This must include cooperative contracts and reciprocal financial obligations

Or. en

Justification

At the 2012 Seoul Nuclear Security Summit, President Van Rompuy said he would like to see the emergence of "a global security culture" It is important that the Union contribute to all attempts to raise nuclear security standards worldwide.

Amendment 12

Recital 19

Text proposed by the Commission

(19) The need for a new approach to control and risk management in Union research funding was recognised by the European Council of 4 February 2011, asking for a new balance between trust and control and between risk-taking and risk avoidance. The European Parliament, in its Resolution of 11 November 2010 on simplifying the implementation of the Research Framework Programmes¹¹, called for a pragmatic shift towards administrative and financial simplification and stated that the management of Union research funding should be more trust-based and risk-tolerant towards participants.

Amendment

(19) The need for a new approach to control and risk management in Union research funding was recognised by the European Council of 4 February 2011, asking for a new balance between trust and control and between risk-taking and risk avoidance. The European Parliament ***has made numerous calls for a shift towards much greater administrative and financial simplification.*** In its Resolution of 11 November 2010 on simplifying the implementation of the Research Framework Programmes¹¹ the European Parliament called for a pragmatic shift towards administrative and financial simplification and stated that the management of Union research funding should be more trust-based and risk-tolerant towards participants. ***The Euratom programme should also duly consider the concerns and recommendations from the researchers' community as expressed in***

the final report of the Expert Group 'Interim Evaluation of the 7th Framework Programme' of 12 November 2010 as well as the Commission's Green Paper of 9 February 2011. 'From Challenges to Opportunities towards a Common Strategic Framework for EU Research and Innovative Funding'.

Or. en

Justification

The framework should follow the simplification agenda of Horizon 2020 and will follow the regulation on Rules of Participation. It is hoped that that this will relieve SMEs, universities and others of much of the administrative burden of the previous framework programmes make the preparation of proposals and the management of projects easier and the possibility of an 'opt-out' for certain kinds of participants such as universities and non-profit organisations that have already adopted a full-costing system should be considered.

Amendment 13

Recital 29 a (new)

Text proposed by the Commission

Amendment

(29a) Following the entry into force of the Lisbon Treaty and the enhanced role granted to the European Parliament in terms of budgetary procedure, the current legal framework should be discussed.

Or. en

Justification

The Lisbon Treaty gave the Parliament, together with the Council, equal say in the adoption of the EU budget. The European Parliament adopted 2011/0046(NLE) in 2011 which called for the process of amending the Euratom treaty to begin so as to strengthen its provisions on the information and co-legislation rights of the European Parliament on Euratom research and environmental protection issues in order to facilitate, inter alia, future budgetary procedures.

Amendment 14

Article 3 – paragraph 1

Text proposed by the Commission

1. The general objective of the Euratom Programme is to improve nuclear safety, security and radiation protection, and to contribute to the long-term decarbonisation of the energy system in a safe, efficient and secure way. The general objective shall be implemented through the activities specified in Annex I in the form of direct and indirect actions which pursue the specific objectives set out in paragraphs 2 and 3 of this Article.

Amendment

1. The general objective of the Euratom Programme is to improve nuclear safety, security and radiation protection, and to contribute to the long-term decarbonisation of the energy system in a safe, efficient and secure way, ***to contribute to other areas of research related to nuclear research such as medical research and to guarantee the long-term future of European nuclear research***. The general objective shall be implemented through the activities specified in Annex I in the form of direct and indirect actions which pursue the specific objectives set out in paragraphs 2 and 3 of this Article.

Or. en

Amendment 15

Article 3 – paragraph 2 – point a

Text proposed by the Commission

(a) support safe operation of nuclear systems;

Amendment

(a) support safe operation of ***all existing civilian*** nuclear systems;

Or. en

Amendment 16

Article 3 – paragraph 2 – point d

Text proposed by the Commission

(d) foster radiation protection;

Amendment

(d) foster radiation protection; ***and seek to maintain the highest level of working conditions for those engaged in working directly with nuclear materials;***

Amendment 17

Article 3 – paragraph 2 – point g

Text proposed by the Commission

(g) promote innovation and industrial **competitiveness**;

Amendment

(g) promote innovation and **European industrial leadership in fission and fusion**;

Or. en

Justification

Currently the Union is seen as a leading area of expertise for both fusion and fission, it is important that this status is not lost and can be used to help attract new researchers and investment.

Amendment 18

Article 3 – paragraph 2 – point g a (new)

Text proposed by the Commission

Amendment

(ga) support the stated priorities of Horizon 2020: excellent science, industrial leadership and societal challenges;

Or. en

Justification

The three goals of Horizon 2020; excellence in science, industrial leadership and tackling the grand societal challenges are all supported by nuclear research.

Amendment 19

Article 3 – paragraph 3 – point a

Text proposed by the Commission

Amendment

(a) improve nuclear safety including: fuel

(a) improve nuclear safety including: fuel

and reactor safety, waste management and decommissioning, **and** emergency preparedness;

and reactor safety, waste management and decommissioning, emergency preparedness **and working conditions for those engaged in working directly with nuclear materials**;

Or. en

Amendment 20

Article 3 – paragraph 3 – point d

Text proposed by the Commission

(d) foster knowledge management, education and training;

Amendment

(d) foster knowledge management, education and training, **including increasing the uptake of nuclear research among European scientists as well as attracting those from outside the Union**;

Or. en

Amendment 21

Article 3 – paragraph 3 – point e

Text proposed by the Commission

(e) support the policy of the Union on nuclear safety and security and the related evolving Union legislation.

Amendment

(e) support the policy of the Union on nuclear safety and security and the related evolving Union legislation, **including working towards the development of internationally recognised standards of nuclear safety for fission reactors**;

Or. en

Justification

The framework programme for fission should also continue to support the demonstration reactors in operation in the Union, which are preparing for the future of fission reactors.

Amendment 22

Article 3 – paragraph 3 – point e a (new)

Text proposed by the Commission

Amendment

(ea) address any skills shortage with relation to nuclear expertise and prevent any future skills leakage or 'brain drain' of nuclear scientists from the Union;

Or. en

Amendment 23

Article 3 – paragraph 3 – point e b (new)

Text proposed by the Commission

Amendment

(eb) complement all required safety improvements suggested following the results of the stress tests carried out on all nuclear reactors in the Union and third countries that border the Union;

Or. en

Justification

In 2011 stress tests were carried out on all nuclear power plants in the Union following the accident at the Fukushima Dai-ichi nuclear power plant in Japan. It is important that framework support all Union efforts that seek to improve safety at plants following the results of these tests.

Amendment 24

Article 3 – paragraph 3 – point e c (new)

Text proposed by the Commission

Amendment

(ec) support the simplification agenda of Horizon 2020, reducing the administrative burdens of previous frameworks, in particular upon on SMEs, universities and smaller research institutes.

Amendment 25

Article 3 – paragraph 4

Text proposed by the Commission

4. The Euratom Programme shall be implemented in such a way as to ensure that the priorities and activities supported are relevant to changing needs and take account of the evolving nature of science, technology, innovation, policy making, markets and society.

Amendment

4. The Euratom Programme shall be implemented in such a way as to ensure that the priorities and activities supported are relevant to changing needs and take account of the evolving nature of science, technology, innovation, policy making, markets and society, ***as well as the direct consequences of nuclear safety incidents, however unlikely they may be.***

Or. en

Amendment 26

Article 4 – paragraph 1 – subparagraph 1 – introductory part

Text proposed by the Commission

The financial envelope for the implementation of the Euratom Programme shall be EUR 1 788.889 million. That amount shall be distributed as follows:

Amendment

The financial envelope for the implementation of the Euratom Programme shall be [EUR 1 788.889 million.] That amount shall be distributed as follows:

Or. en

Amendment 27

Article 4 – paragraph 1 – subparagraph 1 – point a

Text proposed by the Commission

(a) indirect actions for the fusion research and development programme, EUR 709.713 million;

Amendment

(a) indirect actions for the fusion research and development programme, [EUR 709.713 million;]

Amendment 28

Article 4 – paragraph 1 a (new)

Text proposed by the Commission

Amendment

1a. The ITER project shall be included within the framework and funded from within the MFF in a complete and transparent way.

Or. en

Justification

The ITER project should be funded from within the MFF so as to prevent any preception of disengagement from the project, which could be seen as harmful to the Community's interest. The long-term success of the ITER would be better-ensured by continuing to fund it through the MFF.

Amendment 29

Article 4 – paragraph 1 – subparagraph 1 – point c

Text proposed by the Commission

Amendment

(c) direct actions, EUR 724.319 million.

(c) direct actions, [EUR 724.319 million.]

Or. en

Justification

The overall amount will be subject to MFF negotiations. The total figures allocated to fusion, fission and direct actions should not decrease from those stated here in the draft text, however the figure for fission does not include ITER and the figure for fission hardly seems to be sufficient.

Amendment 30

Article 4 – paragraph 1 – subparagraph 2

Text proposed by the Commission

For the implementation of indirect actions of the Euratom Programme, no more than 13.5 % shall be for the Commission's administrative expenditure.

Amendment

For the implementation of indirect actions of the Euratom Programme, no more than [13.5 %] shall be for the Commission's administrative expenditure.

Or. en

Justification

This projected expenditure is too high. For most similar proposals the Commission's administrative expenditure does not normally rise above 8%. The Commission has not produced any justification for this significantly expanded rise.

Amendment 31

Article 4 – paragraph 4 a (new)

Text proposed by the Commission

Amendment

4a. The Community shall make further use of Structural funds for nuclear research and ensure alignment of the funds with Community research priorities.

Or. en

Amendment 32

Article 8 – paragraph 2 a (new)

Text proposed by the Commission

Amendment

2a. Programmes aimed at increasing both current and planned innovative research should be opened up to allow nuclear research as part of their list of applicable research categories. The Eureka Eurostars Programme and the Marie Curie Actions should widen their rules of participation to allow SMEs involved in nuclear research to participate.

Justification

SMEs are vital to Europe's economy but are often under-represented when it comes to nuclear research. It is important that certain Union programmes designed to improve the situation of SMEs do not exclude those involved in nuclear research.

Amendment 33**Article 9***Text proposed by the Commission*

The Euratom Programme shall ensure the effective promotion of gender equality and the gender dimension in **research** and **innovation content**.

Amendment

The Euratom Programme shall ensure the effective promotion of gender equality and the gender dimension **and support the aim of Horizon 2020 to address gender as a cross-cutting issue in order to rectify imbalances between men and women**

Or. en

Justification

It is hoped that of the projected target of PhD students and post-doctorate researchers involved in Euratom fission projects and fusion programme at least 20% of them should be women.

Amendment 34**Article 11 – paragraph 3***Text proposed by the Commission*

3. The work programmes shall take account of the state of science, technology and innovation at national, Union and international level and of relevant policy, market and societal developments. They shall be updated as and where appropriate.

Amendment

3. The work programmes shall take account of the state of science, technology and innovation at national, Union and international level and of relevant policy, market and societal developments. They shall be updated as and where appropriate, **keeping in mind the aims and objectives of Horizon 2020.**

Or. en

Amendment 35

Article 14

Text proposed by the Commission

Particular attention shall be paid to ensuring the adequate participation of, and innovation impact on, small and medium-sized enterprises (SME) in the Euratom Programme. Quantitative and qualitative assessments of SME participation shall be undertaken as part of the evaluation and monitoring arrangements.

Amendment

1. Particular attention shall be paid to ensuring the adequate participation of, and innovation impact on, small and medium-sized enterprises (SME) in the Euratom Programme. Quantitative and qualitative assessments of SME participation shall be undertaken as part of the evaluation and monitoring arrangements.

2. *Given the importance of the SME sector to the European economy and current under-representation of SMEs in the nuclear industry, the framework shall support all efforts to ease the administrative burden placed on SMEs in line with the objectives of Horizon 2020.*

Or. en

Justification

The importance of SMEs should be underlined, both due to their importance to the European economy but also as they have been exposed to significant risk during the recent crisis.

Amendment 36

Article 16 – paragraph 1 – subparagraph 1 – point c a (new)

Text proposed by the Commission

Amendment

(ca) *combat all forms of nuclear proliferation and trafficking.*

Or. en

Justification

All international attempts at combating nuclear proliferation trafficking should be supported. Common international safety standards have yet to develop however the EU should continue

to support all efforts to develop common international standards similar to those which exist in the Union.

Amendment 37

Article 16 – paragraph 1 – subparagraph 1 – point c b (new)

Text proposed by the Commission

Amendment

(cb) support international efforts in respect of developing common international safety standards.

Or. en

Justification

Common international safety standards have yet to develop however the EU should continue to support all efforts to develop common international standards similar to those which exist in the Union.

Amendment 38

Article 16 – paragraph 1 – subparagraph 1 – point c c (new)

Text proposed by the Commission

Amendment

(cc) contribute to the improvement of knowledge exchange.

Or. en

Justification

Common international safety standards have yet to develop however the EU should continue to support all efforts to develop common international standards similar to those which exist in the Union.

Amendment 39

Article 16 – paragraph 2 – subparagraph 3 a (new)

Text proposed by the Commission

Amendment

Particular attention shall be paid to all reactors and nuclear installations located in third countries but which are geographically very close to Member State territory, especially when located close to hazardous geographical and geological locations.

Or. en

Amendment 40

Article 17 – paragraph 2 – point a

Text proposed by the Commission

(a) initiatives aimed at widening awareness and facilitating access to funding under the Euratom Programme, in particular for those regions or types of participant that are underrepresented;

Amendment

(a) initiatives aimed at widening awareness and facilitating access to funding under the Euratom Programme, in particular for those regions or types of participant that are underrepresented ***and in particular for SMEs to increase their uptake of available funding and participation in appropriate programmes.***

Or. en

Amendment 41

Article 17 – paragraph 2 – subparagraph 1 a (new)

Text proposed by the Commission

Amendment

The attempts at increased simplification in terms of participation shall be communicated to all participants, including SMEs and academic institutions.

Or. en

Amendment 42

Annex I – part 1 – paragraph 2

Text proposed by the Commission

The Euratom Programme shall strengthen the research and innovation framework in the nuclear field and coordinate Member States' research efforts, thereby avoiding duplication, retaining critical mass in key areas and ensuring that public funding is used in an optimal way.

Amendment

The Euratom Programme shall strengthen the research and innovation framework in the nuclear field and coordinate Member States' research efforts, thereby avoiding duplication, ***providing the Union's added value***, retaining ***key skills and*** critical mass in key areas and ensuring that public funding is used in an optimal way.

Or. en

Amendment 43

Annex I – part 1 – paragraph 3

Text proposed by the Commission

The strategy to develop fusion as a credible option for commercial carbon-free energy production shall follow a roadmap with milestones towards the goal of electricity production by 2050. To implement that strategy, a ***radical*** restructuring of fusion-related work in the Union, including governance, ***funding*** and management, shall be carried out to ensure a shift of emphasis from pure research to designing, building and operating future facilities such as ITER, DEMO and beyond. That shall require a close cooperation between the entire Union fusion community, the Commission and ***the national funding agencies***.

Amendment

The strategy to develop fusion as a credible option for commercial carbon-free energy production shall follow a roadmap with milestones towards the goal of electricity production by 2050. To implement that strategy, a restructuring of fusion-related work in the Union, including governance, and management, shall be carried out to ensure a shift of emphasis from pure research to designing, building and operating future facilities such as ITER, DEMO and beyond. That shall require a close cooperation between the entire Union fusion community, the Commission and ***Member States***.

Or. en

Amendment 44

Annex I – part 2 – point 2.1 – point e – introductory part

Text proposed by the Commission

(e) Move toward demonstration of feasibility of fusion as a power source by exploiting existing and future fusion facilities (Industrial leadership; Societal challenges)

Amendment

(e) Move toward demonstration of feasibility of fusion as a power source by exploiting existing and future fusion facilities (Industrial leadership; Societal challenges)

Support activities for the joint realisation of ITER as an international research infrastructure. The Community will have a special responsibility within the ITER Organisation as the host of the project and will assume a leading role, in particular regarding site preparation, establishing the ITER Organisation, management and staffing, plus general technical and administrative support;

Support activities agreed upon in XXXX/XXX/EU to manage the project.

Or. en

Amendment 45

Annex I – part 2 – point 2.1 – point i – subparagraph 1 a (new)

Text proposed by the Commission

Amendment

Support all efforts to continue the work of JET beyond its 2015 end of experimental phase, and supporting where possible all efforts aimed at attracting international partners to help provide additional funding. These efforts should include reciprocal agreements for future EU involvement in DEMO and other planned fusion reactors.

Or. en

Justification

As the ITER project is not due to be operational until 2020 at the earliest there is no point in finishing the work of JET five years in advance of ITER's earliest operational date.

Amendment 46

Annex I – part 2 – point 2.2 – paragraph 1

Text proposed by the Commission

The nuclear activities of the JRC shall aim to support the implementation of Council Directives 2009/71/Euratom²⁸ and 2011/70/Euratom²⁹, as well as Council Conclusions giving priority to the highest standards for nuclear safety and security in the Union and internationally. The JRC shall notably mobilise the necessary capacity and expertise in order to contribute to assess and improve the safety of nuclear installations and the peaceful use of nuclear energy and other non fission applications, to provide a scientific basis to relevant Union legislation and, where necessary, to react within the limits of its mission and competence to nuclear incidents and accidents. To that effect, the JRC shall carry out research and assessments, provide references and standards and deliver dedicated training and education. Synergies with the Sustainable Nuclear Energy Technology Platform (SNETP) and other cross-cutting initiatives will be sought as appropriate.

Amendment

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Or. en

Justification

This should also be in-line with Union regulations currently being discussed such as the Instrument for Nuclear Safety Cooperation 2007-2013 XXXXX/XXXX/EU

Amendment 47

Annex I – part 2 – point 2.2 – point a – introductory part

Text proposed by the Commission

Amendment

(a) Improve nuclear safety including: fuel and reactor safety, waste management and decommissioning, and emergency preparedness

(a) Improve nuclear safety including: fuel and reactor safety, waste management and decommissioning, ***improve working conditions of those working with nuclear materials*** and emergency preparedness

Or. en

Amendment 48

Annex I – part 2 – point 2.2 – point c – paragraph 1

Text proposed by the Commission

Amendment

The JRC shall further develop the scientific basis for nuclear safety and security. Emphasis shall be given to research on fundamental properties and behaviour of actinides, structural and nuclear materials. In support to Union standardisation, the JRC shall provide state-of-the-art nuclear standards, reference data and measurements, including the development and implementation of relevant databases and assessment tools. The JRC shall support the further development of medical applications, namely new cancer therapies based on alpha irradiation.

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Or. en

Amendment 49

Annex I – part 2 – point 2.2 – point e – paragraph 1

Text proposed by the Commission

Amendment

JRC shall foster its competence in order to provide the independent scientific and

JRC shall foster its competence in order to provide the independent scientific and

technical evidence necessary to support the evolving Union legislation on nuclear safety and security.

technical evidence necessary to support the evolving Union legislation on nuclear safety and security *and support higher standards internationally.*

Or. en

Amendment 50

Annex I – part 2 – point 2.2 – point e – paragraph 2

Text proposed by the Commission

As the Euratom Implementing Agent for the Generation IV International Forum (GIF), the JRC shall continue to coordinate the Community contribution to GIF. The JRC shall pursue and further develop international research cooperation with key partner countries and international organizations (IAEA, OECD/NEA) in order to promote Union's nuclear safety and security policies.

Amendment

As the Euratom Implementing Agent for the Generation IV International Forum (GIF), the JRC shall continue to coordinate the Community contribution to GIF. The JRC shall pursue and further develop international research cooperation with key partner countries and international organizations (IAEA, OECD/NEA) in order to promote Union's nuclear safety and security policies *and support international efforts to develop higher standards.*

Or. en

Amendment 51

Annex I – part 3 – paragraph 1

Text proposed by the Commission

In order to achieve its general objectives, the Euratom Programme shall support complementary activities (direct and indirect, coordination and stimulating joint programming) that ensure synergy of research efforts in solving common challenges (such as materials, coolant technology, reference nuclear data, modelling and simulation, remote handling, waste management, radiation protection).

Amendment

In order to achieve its general objectives, the Euratom Programme shall support complementary activities (direct and indirect, *worker protection*, coordination and stimulating joint programming) that ensure synergy of research efforts in solving common challenges (such as materials, coolant technology, reference nuclear data, modelling and simulation, remote handling, waste management, radiation protection).

Amendment 52

Annex I – part 4 – paragraph 2

Text proposed by the Commission

The Euratom Programme may contribute to the Debt facility and Equity facility developed under the ‘Horizon 2020’ Framework Programme that shall be widened to cover the objectives referred to in Article 3.

Amendment

The Euratom Programme may contribute to the Debt facility and Equity facility developed under the ‘Horizon 2020’ Framework Programme that shall be widened to cover the objectives referred to in Article 3 ***as well as increasing the visibility and participation of SMEs.***

Or. en

Amendment 53

Annex II – part 1 – point e

Text proposed by the Commission

Amendment

(e) Move toward demonstration of feasibility of fusion as a power source by exploiting existing and future fusion facilities ***and developing materials, technologies and conceptual design***

Or. en

Amendment 54

Annex II – part 2 – paragraph 1 – bullet point 1

Text proposed by the Commission

Amendment

Improve nuclear safety including: fuel and reactor safety, waste management and ***decommissioning***; and emergency preparedness;

Improve nuclear safety including: fuel and reactor safety, waste management and ***decommissioning; worker protection*** and emergency preparedness;

Amendment 55

Annex II – part 2 – paragraph 1 – bullet point 5 a (new)

Text proposed by the Commission

Amendment

***Prevent skills shortage in key scientific
and engineering fields***

EXPLANATORY STATEMENT

Introduction

The Horizon 2020 programme provides the Union many opportunities in research and innovation. This applies to nuclear research as well as to other aspects of research in the Union.

The Commission's original intent was to present Horizon 2020 as a common framework programme and therefore it is appropriate that it extends also to nuclear research. The contribution made by nuclear researchers to all aspects of Union research remains of vital importance and it is therefore appropriate that Horizon 2020 covers nuclear research as well. The three pillars of Horizon 2020 are excellence in science, industrial leadership and tackling the grand societal challenges facing the Union and its citizens, all of which are enhanced by the inclusion of nuclear research and researchers. The exclusion of nuclear research from the Horizon 2020 would therefore handicap the Union in its pursuit of these goals.

Regardless of whether a Member State chooses to use nuclear energy, all Member States can and should benefit from nuclear research and from the added European value of the Euratom framework. Euratom programme must therefore at all levels ensure the most efficient use of resources and avoid duplication of efforts in its pursuit of promoting excellence in the nuclear field.

The ambition of the Horizon 2020 framework should be incorporated into nuclear research as much as others. The European Parliament has dealt with the current Euratom framework for 2012-2013 within the last few months under procedures 2011/0046(NLE), 2011/0043(NLE), 2011/0045(NLE) and 2011/0044(NLE). The reduction of reports under Euratom framework represents a significant step in terms of simplification and should be welcomed. As regards the overall legal framework, the Rapporteur believes that following calls in reports recently adopted by the European Parliament, it is right time to revisit the legal issue in light of the European Parliament's rights in future budgetary procedures,

The Rapporteur notes that within the proposed financial envelope the proposed budget for fission represents only a small increase. Compared to the amount of Union funding that has been made available for renewable energy sources under various programmes, fission has not received similar levels of support, even though nuclear fission is an acknowledged source of low-carbon energy.

The results of the nuclear stress tests, carried out in 2011, should also be kept in mind when considering the allocated budget. The projected 13.5% budget for administrative expenditure seems unjustifiably high and needs to be revised.

ITER, JET & the future of fusion

The Commission's proposed in its initial proposal to leave ITER funding outside of the Horizon 2020 and the Multiannual Financial Framework (MFF). This is not based on any logical or scientific reasons. It is important that Europe's leadership in the field of fusion research is not threatened and the long-term viability of the ITER project, in which so much has already been invested, should not therefore be compromised by being left out of the MFF.

The inclusion of ITER within the MFF and the Horizon 2020 framework of funding will give a better and complete overview of the resources dedicated to it and reconfirm its place within the future framework of Union research and this aspect must be taken account in the Parliament's position.

The Rapporteur calls for continuing the support to existing fusion projects such as the Joint European Torus (JET), which continues to provide the most accurate information on the work of fusion energy in Europe so far. If the Union is seriously committed to transforming all ITER research into useable energy, it should support the operation of JET at least until the projected start for the ITER.

Supporting the SET plan

Nuclear research plays a significant role in the realisation of the Strategic Energy Technology Plan (SET-Plan). In order to continue with this plan and to contribute to two key pillars of Horizon 2020 (industrial leadership and grand societal challenges), the Rapporteur calls in his amendments to continue the work on the SET-Plan throughout the period 2013 - 2018 and beyond. This shall include support for the work on platforms and bodies such as the European Sustainable Nuclear Industrial Initiative, Sustainable Nuclear Energy Technology Platform and the Implementing Geological Disposal Technical Platform.

Cross-cutting measures

The Rapporteur would like to re-emphasize the need for simplification at all levels and therefore welcomes respective proposals included in the Commission proposal. The European Parliament has already addressed the issue of simplification in its previous reports on research framework - on the FP7 Midterm Review (2011/2043(INI)), on Simplifying the implementation of Research Framework Programmes (2010/2079(INI)) and on the Green Paper "From Challenges to Opportunities" (2011/2107(INI)) - all of which were broadly supported within the Parliament and reflected general feeling with businesses and academia. It is vital that the Commission takes seriously the need for greater simplification and that the new approach reflects a change in Commission thinking in particular with regards to the administrative burden. A more user-friendly approach that rewards excellence shall be preferred instead of rewarding solely administrative capabilities.

A consistent approach should be maintained across all different parts of the framework. The creation of central mediation service, open to beneficiaries and Commission officials to provide clarity in cases of differing interpretation, should be considered. The proposed reduction in the audit threshold from €75.000 in FP7 to €325.000 in Horizon 2020 would likely further increase costs on bureaucracy and should be reconsidered. The option for institutions to use full economic costing methodology to claim real costs should be retained.

While many of the improved reimbursement methods are welcome, it is important that further clarity is provided on different forms of reimbursement in order to prevent further confusion.

The societal aims of Horizon 2020, promoting a greater gender balance in researchers and enhancing mobility of researchers, must be maintained throughout in this programme and should be matched by direct and indirect actions.

Widening participation and SMEs

The Commission has sought to address the concerns of SMEs throughout the Horizon 2020 framework. This is appropriate when considering their importance to the European economy and their vulnerability in the wake of the financial crisis. The underrepresentation of SMEs in many areas of the chain of nuclear research needs to be addressed.

Existing programmes for funding SMEs, such as the Eureka Star programme and parts of the Marie Curie actions, should be open to nuclear researchers.

In terms of funding, SMEs must not only have access to the targeted SME instruments but all innovative financing instruments that should be available for SMEs involved in nuclear research.

Appropriate measures should be taken at all levels to ensure an adequate balance between industry, SMEs and academia when appointing groups of independent experts.

Making use of innovative financial instruments will be of crucial importance throughout the Horizon 2020 framework and accessing them should not be made difficult for SMEs. In its communications role the JRC should consider it as a direct action to increase the uptake by SMEs of Euratom and develop communications strategies to do so.

Preventing a 'Skills gap' or 'Brain drain'

In terms of the second pillar of Horizon 2020 (industrial leadership), it is crucial to avoid a 'skills shortage' in nuclear skills. It should be necessary for all aspects of fission and fusion that they are kept within the Union. To address this risk of 'brain drain', the Rapporteur proposes in his amendments the improvement of working conditions for researchers.

The role of the (European Research Council) ERC will be important in attracting and retaining excellent research in Europe and its role should be recognised. The budget for the ERC should not go below the proposed 77% increase.

International Co-operation

It is important to emphasize the importance of international cooperation for the agreeing and promoting of safety measures, both current and future. International co-operation is also important in promoting the access of Union researchers to countries with less developed nuclear industries.

In general the Horizon 2020 proposals lack the clarity relating to international co-operation and there is a need for greater clarification in this respect. There is also a need for collaboration

with non-Union partners that could result in internationally targeted calls as a result of a transparent process.

Among many of the reactors being built and planned for the next three decades, many of them are in non-Union and non-OECD countries, offering therefore a great opportunity for European safety standards to be exported. This also presents opportunities for Union-trained scientists and Union-based companies to help bridge any lack of expertise in emerging nuclear states. This should be seen as a great opportunity for many non-Union and non-OECD countries to become familiar with high Union safety standards and levels of excellence prevalent in the Union.

The Rapporteur has in his amendments highlighted several aspects that need to be taken into account in this matter, such as the potential impact of nuclear energy on nuclear proliferation and nuclear terrorism, as well as cross-border aspects of nuclear safety.

Further Union funds

It is important to recognise and promote the role that Structural Funds can play in helping to fund nuclear research projects, such as SUSEN in the Czech Republic. Regions should also be encouraged to use ERDF funding to develop smart specialisation strategies to develop regional clusters for nuclear research.