

Basic information	
<p><b>2011/0043(NLE)</b></p> <p>NLE - Non-legislative enactments Decision</p>	Procedure completed
<p>Euratom Framework Programme 2012-2013: fusion energy, nuclear fission and radiation protection; specific programme for indirect actions</p> <p>Repealed by <a href="#">2011/0400(NLE)</a></p> <p><b>Subject</b></p> <p>3.50.02.02 Euratom framework programme, research and training programmes 3.60.04 Nuclear energy, industry and safety 3.60.05 Alternative and renewable energies</p>	

Key players				
European Parliament	<b>Committee responsible</b>		<b>Rapporteur</b>	<b>Appointed</b>
	<a href="#">ITRE</a> Industry, Research and Energy		BŘEZINA Jan (PPE)	11/05/2011
			Shadow rapporteur HERCZOG Edit (S&D) VÁLEAN Adina (ALDE) RIVASI Michèle (Verts/ALE) TOŠENOVSKÝ Evžen (ECR) REMEK Vladimír (GUE/NGL) TZAVELA Niki (EFD)	
	<b>Committee for opinion</b>		<b>Rapporteur for opinion</b>	<b>Appointed</b>
	<a href="#">BUDG</a> Budgets		The committee decided not to give an opinion.	
Council of the European Union	<b>Council configuration</b>		<b>Meetings</b>	<b>Date</b>
	Environment		3139	2011-12-19
European Commission	<b>Commission DG</b>		<b>Commissioner</b>	
	Research and Innovation		GEOGHEGAN-QUINN Máire	

Key events			
Date	Event	Reference	Summary
07/03/2011	Legislative proposal published	COM(2011)0073 	Summary
24/03/2011	Committee referral announced in Parliament		
06/10/2011	Vote in committee		Summary
17/10/2011	Committee report tabled for plenary, 1st reading/single reading	A7-0358/2011	
15/11/2011	Decision by Parliament	T7-0483/2011	Summary
15/11/2011	Results of vote in Parliament		
19/12/2011	Act adopted by Council after consultation of Parliament		
19/12/2011	End of procedure in Parliament		
18/02/2012	Final act published in Official Journal		

Technical information	
Procedure reference	2011/0043(NLE)
Procedure type	NLE - Non-legislative enactments
Procedure subtype	Consultation of Parliament
Legislative instrument	Decision
Amendments and repeals	Repealed by <a href="#">2011/0400(NLE)</a>
Legal basis	Euratom Treaty A 007
Other legal basis	Rules of Procedure EP 165
Stage reached in procedure	Procedure completed
Committee dossier	ITRE/7/05607

Documentation gateway				
<b>European Parliament</b>				
Document type	Committee	Reference	Date	Summary
Committee draft report		<a href="#">PE469.876</a>	17/08/2011	
Amendments tabled in committee		<a href="#">PE472.082</a>	19/09/2011	
Committee report tabled for plenary, 1st reading/single reading		<a href="#">A7-0358/2011</a>	17/10/2011	
Text adopted by Parliament, 1st reading/single reading		<a href="#">T7-0483/2011</a>	15/11/2011	Summary
<b>European Commission</b>				
Document type	Reference	Date	Summary	
	<a href="#">COM(2011)0073</a>			

Legislative proposal		07/03/2011	<a href="#">Summary</a>
Document attached to the procedure	SEC(2011)0204 	07/03/2011	<a href="#">Summary</a>
Commission response to text adopted in plenary	SP(2012)29	11/01/2012	

Additional information		
Source	Document	Date
National parliaments	<a href="#">IPEX</a>	
European Commission	<a href="#">EUR-Lex</a>	

Final act	
<a href="#">Decision 2012/0094</a> <a href="#">OJ L 047 18.02.2012, p. 0033</a>	<a href="#">Summary</a>

## Euratom Framework Programme 2012-2013: fusion energy, nuclear fission and radiation protection; specific programme for indirect actions

2011/0043(NLE) - 07/03/2011 - Legislative proposal

PURPOSE: to adopt 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).

PROPOSED ACT: Council Decision.

BACKGROUND: joint national and European efforts in the area of research and training are essential to promote and ensure economic growth and the well-being of citizens in Europe. Under Article 7 of the Euratom Treaty, the Euratom Framework Programme is the Community's main instrument for supporting and complementing Member States' activities in nuclear research and development (R&D). The existing provisions are contained in Council Decision 2006/970/Euratom on the Euratom Framework Programme and they will expire at the end of 2011.

The principal aim of this proposal is to **ensure the continuation of EU-funded research in these fields for a further two years** in line with the activities carried out successfully during 2007-2011.

In accordance with the Council Decision concerning the Framework Programme of the European Atomic Energy Community for nuclear research and training activities (2012-2013), the Framework Programme (2012-2013) is to be implemented through **specific programmes** that define detailed rules for their implementation, fix their duration and provide for the means deemed necessary. The Framework Programme (2012 - 2013) comprises two types of activities: **indirect actions** in fusion energy research and research on nuclear fission and radiation protection, and **direct actions** for activities of the Joint Research Centre in the field of nuclear energy. The indirect actions should be implemented by this specific programme.

It should be noted that this proposal is closely linked to the proposal on the [Framework Programme](#) of the European Atomic Energy Community for nuclear research (2012 -2013), the proposal on the [rules for the participation](#) of undertakings, research centres and universities in indirect actions under the Framework Programme (see [NLE/2011/0045](#)) and the specific programme, to be carried out by means of [direct actions](#), implementing the Framework Programme.

IMPACT ASSESSMENT: in accordance with Article 21 of the Implementing Rules for the Financial Regulation (Commission Regulation N° 2342/2002), the Commission has prepared an ex ante evaluation. Since this proposal aims to continue the activities of the Euratom Framework Programme for 2012-13 under the same financial perspectives, the requirement for an Impact Assessment has been waived.

LEGAL BASIS: Article 7 of the Treaty establishing the European Atomic Energy Community (Euratom).

CONTENT: this proposal concerns the adoption of the specific programme, to be **carried out by means of indirect actions**, implementing the Framework Programme (2012 - 2013). The programme is to be adopted for the period from 1 January 2012 to 31 December 2013.

This Specific Programme for indirect actions covers the following **two thematic priorities**: a) fusion energy research (including ITER); and b) research on nuclear fission and radiation protection.

**Fusion energy research**: the objective of this thematic priority is to develop the knowledge base for, and to realise ITER as the major step towards, the creation of prototype reactors for power stations that are safe, sustainable, environmentally responsible and economically viable. This thematic priority includes the following areas of activity:

- realisation of ITER;
- R&D to prepare for ITER operation;
- activities to prepare for DEMO;
- R&D activities for the longer term;
- human resources, education and training;
- infrastructures;
- technology transfer, industry involvement and innovation.

**Nuclear fission and radiation protection**: the objectives of this thematic priority are to establish a sound scientific and technical basis in order to accelerate practical developments for the safer management of long-lived radioactive waste, to enhance in particular the safety, resource efficiency and cost-effectiveness of nuclear energy and to ensure a robust and socially acceptable system of protection of man and the environment against the effects of ionising radiation. This thematic priority includes the following areas of activity:

- geological disposal;
- reactor systems and safety;
- radiation protection;
- support for and access to research infrastructures;
- human resources and training.

The main aims of the specific programme are to:

- provide continuing support for activities under the [Strategic Energy Technology Plan \(SET-Plan\)](#);
- support and complement national research programmes in nuclear fission and radiation protection through collaborative research and networking activities, thereby maximising EU added value in line with overall Union's policy on energy and health protection;
- improve the implementation of the fusion research activities carried under the European Fusion Development Agreement (EFDA);
- foster international cooperation through specific actions on both fusion and fission, complementing the strategic approach of the programme;
- ensure adequate ITER and F4E governance and management, including cost containment and risk management (technical, industrial, financial, legal).

ITER and F4E will require a more flexible organisational structure to enable the resulting innovation and technological progress to be swiftly transferred to industry, thus enabling European industry to become more competitive. This will be addressed by:

- promotion of innovation and exchange of know-how with related universities, research institutes and industry;
- encouragement for the generation of patents;
- promotion of the Fusion Industry Innovation Forum, which will develop a fusion technology roadmap and human resource development initiatives, with an emphasis on innovation and potential for providing new products and services.

**BUDGETARY IMPLICATION**: the proposal states that 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: a) fusion energy research EUR 2 208 809 000; b) nuclear fission and radiation protection EUR 118 245 000.

## **Euratom Framework Programme 2012-2013: fusion energy, nuclear fission and radiation protection; specific programme for indirect actions**

2011/0043(NLE) - 15/11/2011 - Text adopted by Parliament, 1st reading/single reading

The European Parliament adopted by 501 votes to 106, with 26 abstentions, a resolution amending 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).

The main amendments are as follows:

**Implementation of the Framework Programme (2012 - 2013)**: this 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 [resolution](#) on simplifying the implementation of the Research Framework Programmes.

**Work programme**: Members consider that the work programme shall take account of relevant research activities carried out by as industry as well as the Member States, associated states and European and international organisations. The work programme shall specify the criteria on which proposals for indirect actions under the funding schemes are to be evaluated and projects selected. The criteria shall be those of excellence, impact and implementation. Additional requirements, weightings and thresholds that are clearly justified may be further specified or complemented in the work programme.

**Consultative committee:** the composition of the committee 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.

**Annex - Fusion energy Research:** the resolution states that the **R&D activities in support of ITER construction** will include the development, testing, validation and reliability verification of components and dependable systems.

With regard to **R&D in preparation of ITER operation**, Members add that the focused physics and technology programme must include the planning of a new satellite experiment under the 8th Framework Programme 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.

**On R&D activities for the longer term**, particular attention will be given to ensuring that the right information is communicated to the public, and specific actions will be used for communication and outreach programme efficiency.

With regard to **infrastructure**, Parliament states that the realisation of ITER in Europe, within the international framework provided by the ITER Organisation, will entail, in the context of the complementary European programme, the creation of a new research infrastructure in support of the ITER experiment.

**Annex - Nuclear fission and radiation protection:** Parliament states that the typical design lifetime of the current generation of nuclear plants in operation in Europe is 40 years, and possible additional life extensions are envisaged. Gen III and future-safe Gen IV aim for 60 years or a longer lifetime while minimising operation and maintenance costs due to ageing.

In addition, there is a clear need to enhance the collaboration with IAEA on Safety Standards applicable to all nuclear facilities and activities. These standards should be broadly applied by designers, manufacturers, operators in power generation, medicine, industry, research and education.

With regard to **geological disposal**, Members state that 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.

On **nuclear installation safety**, Members add that 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.

**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) 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.

Lastly, a new recital states that 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.

## Euratom Framework Programme 2012-2013: fusion energy, nuclear fission and radiation protection; specific programme for indirect actions

2011/0043(NLE) - 07/03/2011

This ex-ante evaluation accompanies the legislative package of Commission's proposals for the Euratom nuclear research and training activities (2012-13).

The legislative package consists of:

- the draft Council Decisions for the [Framework Programme](#);
- specific Programmes for [direct](#) and indirect actions;
- [rules for the participation](#) of undertakings, research centres and universities in actions under the framework programme and for the dissemination of research results.

The legislative package aims to continue supporting R&D actions in the nuclear field carried out under the 7th Euratom Framework Programme (2007-2011). The proposals will only cover two years (2012-13), in accordance with the current financial perspectives (2007-2013) and in line with the timeframe of the EU 7th Framework Programme (2007-2013).

Research co-funded by Euratom plays an important role in enhancing the safety, resource efficiency and cost-effectiveness of nuclear fission and other uses of radiation in industry and medicine, and some of the research project are playing a key initiating role in the recently launched European Sustainable Nuclear Industrial Initiative (ESNII), one of the six European industrial initiatives launched under the European [Strategic Energy Technology Plan](#) (SET-plan) in 2010.

The proposals for the Euratom Framework Programme are clearly linked to the objectives of the [Europe 2020](#) and [Energy 2020](#) strategies. The programme will contribute to the Innovation Union flagship by supporting pre-commercial research and facilitating technology transfer process between academia and industry and to the Resource efficient Europe flagship by greatly increasing the overall sustainability of nuclear energy. By putting emphasis on training in all its activities, boosting competitiveness in the current nuclear industry and creating a new sector of high-tech industry for **fusion energy** in particular, the Euratom programme will lead to growth and new jobs in a wide range of disciplines. Proposals for the Euratom Framework Programme follow up the conclusions of the European Council (4 February 2011) which agreed that the EU and its Member States will promote investment in renewables, safe and sustainable low carbon technologies and focus on implementing the technology priorities established in the SET-plan. Both nuclear fission and fusion are identified in the SET-Plan as energy technologies which Europe must maintain, develop and deploy in order to meet its short and longer term energy objectives.

Lastly, proposals for the Euratom Framework Programme (2012-2013) take account of the **simplification** process, launched by the Commission in 2010, which makes current and future research programme more attractive and more accessible to the best researchers and most innovative companies. Simplification measures for the Euratom Framework Programme (2012-2013) will be implemented through the Commission decision C (2011)174 of 24 January 2011.

## Euratom Framework Programme 2012-2013: fusion energy, nuclear fission and radiation protection; specific programme for indirect actions

2011/0043(NLE) - 19/12/2011 - Final act

**PURPOSE:** to adopt 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).

**NON-LEGISLATIVE ACT:** Council Decision 2012/94/Euratom 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).

**CONTENT:** the Council extended, for a two-year period, the European Atomic Energy Community (Euratom) framework programme for nuclear research. The Euratom programme, which expires at the end of 2011, has been extended in order to align it with the end of the EU's current financial cycle in 2013. Euratom programmes are limited by the Euratom treaty to five years, whereas the general 7th framework programme for research, which runs until the end of 2013, lasts for seven years.

It should be noted that this Decision is closely linked to the proposal on the [Framework Programme](#) of the European Atomic Energy Community for nuclear research (2012 -2013), the proposal on the [rules for the participation](#) of undertakings, research centres and universities in indirect actions under the Framework Programme and the specific programme, to be carried out by means of [direct actions](#), implementing the Framework Programme.

**Main themes:** the specific programme covers the following issues:

**(1) Fusion energy research:** the objective of this thematic priority is to develop the knowledge base for, and to realise ITER as the major step towards, the creation of prototype reactors for power stations that are safe, sustainable, environmentally responsible and economically viable. This thematic priority includes the following areas of activity:

- realisation of ITER;
- R&D to prepare for ITER operation;
- activities to prepare for DEMO;
- R&D activities for the longer term;
- human resources, education and training;
- infrastructures;
- technology transfer, industry involvement and innovation.

**(2) Nuclear fission and radiation protection:** the objectives of this thematic priority are to establish a sound scientific and technical basis in order to accelerate practical developments for the safer management of long-lived radioactive waste, to enhance in particular the safety, resource efficiency and cost-effectiveness of nuclear energy and to ensure a robust and socially acceptable system of protection of man and the environment against the effects of ionising radiation. This thematic priority includes the following areas of activity:

- management of ultimate radioactive waste;
- reactor systems;
- radiation protection;
- infrastructures;
- human resources and training.

**Ethical aspects:** research activities carried out within this specific programme should respect fundamental ethical principles, including those reflected in the Charter of Fundamental Rights of the European Union.

**Financial envelope:** the maximum amount 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: (a) fusion energy research: EUR 2 208 809 000; (b) nuclear fission, safety and radiation protection: EUR 118 245 000.

ENTRY INTO FORCE: 21/02/2012.

