

Euratom research and training programme 2014-2018

2011/0400(NLE) - 30/11/2011 - Legislative proposal

PURPOSE: to establish the Euratom Research and Training Programme for the period from 1 January 2014 to 31 December 2018, complementing the Horizon 2020 – The Framework Programme for Research and Innovation.

PROPOSED ACT: Council Regulation.

BACKGROUND: designed to support the Europe 2020 Flagship Initiative "[Innovation Union](#)", the basic principle of "Horizon 2020" is to adopt a much more strategic approach to research and innovation. All policy instruments and measures are designed to contribute to research and innovation and to develop further the European Research Area whereby knowledge, researchers and technology circulate freely, and to accelerate the commercialisation and diffusion of innovation across the Single Market.

The set consists of the proposals for:

- a [Framework Programme](#) for Horizon 2020;
- a single set of Rules for [Participation and Dissemination](#);
- a [single specific programme](#) to implement Horizon 2020;
- a **single proposal** for the parts of Horizon 2020 corresponding to the Euratom Treaty.

Horizon 2020 will bring together all existing EU research and innovation funding currently provided through the Framework Programme for Research and Technological Development (FP), the Competitiveness and Innovation Framework Programme (CIP) and the European Institute of Innovation and Technology (EIT). The different types of funding provided by the existing programmes will be brought together into a single coherent, flexible framework, which will run from 2014 to 2020. It will provide funding for every stage of the innovation process from basic research to market uptake, in line with the EU's commitments under the "Innovation Union".

This proposal takes the form of a single regulation and the new approach is in contrast with the previous programming periods, where the content of the present Regulation used to be covered by four different legislative acts.

IMPACT ASSESSMENT: the proposal relies on an in-depth impact assessment, drawing on stakeholder consultations and internal and external evaluations. The assessment found that the challenges of nuclear safety and diminishing nuclear skills in Europe can be tackled effectively by exploiting synergies between the research efforts of Member States and the private sector, and between scientific disciplines and technological sectors. Action at Union-level can 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 to best effect. An Union-level programme can also undertake the high risk and long-term R&D programme in fusion energy, thereby sharing the risk and generating a breadth of scope and economies of scale that could not otherwise be achieved.

LEGAL BASIS: Article 7 of the Euratom Treaty.

CONTENT: this proposal is an integral part of Horizon 2020. It determines the overall budget for direct and indirect actions, sets the objectives of R&D activities and specifies the instruments for supporting them.

The Euratom Programme (2014-2018) is implemented through a single Regulation, laying down all the necessary provisions for the implementation of nuclear research activities. The Euratom Programme concerns research activities in nuclear energy (fusion and fission) and radiation protection.

The proposal takes the form of a **single Regulation** covering all relevant aspects for the implementation of research activities in the above fields, setting the scientific and technological objectives and laying down appropriate rules for the participation of research organisations, universities and industry. It will cover the **fusion energy research and development programme, the fission and radiation protection research activities, and the JRC direct actions in nuclear security and safety.**

The proposal will therefore ensure that Union-funded research and training activities in nuclear science and technology are continued over the years 2014-18, thereby maintaining the effective and efficient programmes that currently catalyse and coordinate activities in Member States, in order to maximise Union added value.

By supporting the above priorities, the Euratom Programme (2014-2018) will contribute to the **three strategic objectives** outlined in the Horizon 2020 Framework Programme for Research and Innovation, namely: excellent science, industrial leadership and societal challenges. Accordingly, appropriate links and interfaces between the Euratom Programme and the Horizon 2020 Framework Programme will be maintained.

General objective: this 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 below.

Specific objectives of indirect actions: these are

- support safe operation of nuclear systems;
- contribute to the development of solutions for the management of ultimate nuclear waste;
- support the development and sustainability of nuclear competences at Union level
- foster radiation protection;
- move toward demonstration of feasibility of fusion as a power source by exploiting existing and future fusion facilities;
- lay the foundations for future fusion power plants by developing materials, technologies and conceptual design;
- promote innovation and industrial competitiveness;
- ensure availability and use of research infrastructures of pan-European relevance;

Specific objectives for direct actions: these are:

- improve nuclear safety including: fuel and reactor safety, waste management and decommissioning, and emergency preparedness;
- improve nuclear security including: nuclear safeguards, non-proliferation, combating illicit trafficking and nuclear forensics;
- raising excellence in the nuclear science base for standardisation;
- foster knowledge management, education and training;
- support the policy of the Union on nuclear safety and security and the related evolving Union legislation.

Within these specific objectives, account may be taken of new and unforeseen needs that arise during the period of implementation of the Euratom Programme, including responses to emerging opportunities, crises and threats, to needs relating to the development of new Union policies, and to the steering of actions envisaged for support under future programmes.

The Regulation also addresses the objective of **simplification** by referring to the same **participant guarantee fund** as in the Horizon 2020 Framework Programme.

Lastly, the Euratom Programme (2014-2018) puts forward a **major simplification of funding rules as well as a revised control strategy**, thereby supporting the overall simplification objective.

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

- indirect actions for the fusion research and development programme, EUR 709.713 million;
- indirect actions for nuclear fission, safety and radiation protection, EUR 354.857 million;
- direct actions, EUR 724.319 million.

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