

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.