

**Framework programme of the European Atomic Energy Community for nuclear research and training activities (direct actions) \***

**European Parliament legislative resolution of 15 November 2011 on the proposal for a Council decision concerning the specific programme, to be carried out by means of direct actions by the Joint Research Centre, implementing the Framework Programme of the European Atomic Energy Community for nuclear research and training activities (2012 to 2013) (COM(2011)0074 – C7-0078/2011 – 2011/0044(NLE))**

**(Consultation)**

*The European Parliament,*

- having regard to the Commission proposal to the Council (COM(2011)0074),
  - having regard to Article 7 of the Euratom Treaty, pursuant to which the Council consulted Parliament (C7-0078/2011),
  - having regard to Rule 55 of its Rules of Procedure,
  - having regard to the report of the Committee on Industry, Research and Energy (A7-0340/2011),
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**

**Proposal for a decision**

**Recital 5**

*Text proposed by the Commission*

(5) In implementing this specific programme, emphasis should be given to promoting the mobility and training of

*Amendment*

(5) In implementing this specific programme, emphasis should be given to promoting the mobility and training of

researchers and promoting innovation, in the European Union. In particular, the JRC should provide appropriate training in nuclear safety and security.

researchers and promoting innovation, in the European Union. In particular, the JRC should provide appropriate training in nuclear safety and security. ***Furthermore, the JRC should aid in the supervision of the quality and efficiency of training, as well as the coordination of existing educational programmes in the field of nuclear energy within the Union, and within candidate and neighbouring countries.***

## **Amendment 2**

### **Proposal for a decision**

#### **Recital 5 a (new)**

*Text proposed by the Commission*

*Amendment*

***(5a) Increased attention and budget spending are needed for initiatives ancillary to core nuclear research, in particular as regards investment in human capital and actions aimed at addressing the risk of skills shortages in the coming years (e.g. grants to researchers in the nuclear field) and the consequent loss of leadership for the Union.***

## **Amendment 3**

### **Proposal for a decision**

#### **Recital 6 a (new)**

*Text proposed by the Commission*

*Amendment*

***(6a) The 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 resolution of 11 November 2010 on simplifying the implementation of the Research Framework Programmes<sup>1</sup>.***

<sup>1</sup> *Texts adopted, P7\_TA(2010)0401.*

## Amendment 4

### Proposal for a decision

#### Recital 10 a (new)

*Text proposed by the Commission*

*Amendment*

***(10a) The management of Union research funding should be more trust-based and risk-tolerant at all stages of the projects, while ensuring accountability, with flexible Union rules.***

## Amendment 5

### Proposal for a decision

#### Recital 11

*Text proposed by the Commission*

*Amendment*

(11) Appropriate measures - proportionate to the European 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 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, Council Regulation (EC, Euratom) 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 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) .

(11) Appropriate measures - proportionate to the European 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 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, 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 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 6

### Proposal for a decision

#### Article 2 – paragraph 1 – point c a (new)

*Text proposed by the Commission*

*Amendment*

**(ca) decommissioning**

## Amendment 7

### Proposal for a decision

#### Article 6 – paragraph 1

*Text proposed by the Commission*

*Amendment*

1. The Commission shall draw up a multi-annual work programme for the implementation of the specific programme, setting out in greater detail the objectives and scientific and technological priorities set out in the Annex, and the timetable for implementation.

1. The Commission shall draw up a multi-annual work programme for the implementation of the specific programme, setting out in greater detail the objectives and scientific and technological priorities set out in the Annex, **together with the necessary funds**, and the timetable for implementation.

## Amendment 8

### Proposal for a decision

#### Annex – section 3 – point 3.1 – point 3.1.1

*Text proposed by the Commission*

*Amendment*

The management of spent fuel and nuclear high-level waste involves their processing, conditioning, transport, interim storage and geological disposal. The ultimate goal is to prevent the release of radio-nuclides into the biosphere during all these stages over their very long decay time scale. The design, assessment and functioning of engineered and natural containment barrier systems over the relevant time scales are key to achieving these objectives and depend among other things on fuel and/or waste behaviour in the geological environment. Such studies are covered by this specific programme.

The management of spent fuel and nuclear high-level waste involves their processing, conditioning, transport, interim storage and geological disposal. The ultimate goal is to prevent the release of radio-nuclides into the biosphere during all these stages over their very long decay time scale. The design, assessment, **monitoring** and functioning of engineered and natural containment barrier systems over the relevant time scales are key to achieving these objectives and depend among other things on fuel and/or waste behaviour in the geological environment. Such studies are covered by this specific programme.

## **Amendment 9**

### **Proposal for a decision**

#### **Annex – section 3 – point 3.1 – point 3.1.3**

*Text proposed by the Commission*

*Amendment*

##### **3.1.3. Basic actinide research**

*deleted*

*To maintain competence and a leading position in the field of civil nuclear technology, it is essential to foster interdisciplinary basic research on nuclear materials as a resource from which new technological innovations can emerge. In turn, this requires knowledge of the response of the so-called ‘5f electronic layer elements’ (i.e. the actinides) and compounds to (usually extreme) thermodynamic parameters. Because of the small experimental data base and the intrinsic complexity of modelling, our current knowledge of these mechanisms is limited. Basic research addressing these issues is crucial for understanding the behaviour of these elements and to remain at the forefront of contemporary condensed matter physics. Developments in advanced modelling and simulation will be leveraged to boost the impact of the experimental programmes.*

*The JRC’s basic actinide research programme will remain at the forefront of actinide physics and chemistry, the main goal being to provide world-class experimental facilities to scientists from universities and research centres. These will allow them to investigate the properties of actinide materials, in order to complete their education and to contribute to advances in nuclear sciences.*

## **Amendment 10**

### **Proposal for a decision**

#### **Annex – section 3 – point 3.1 – point 3.1.6 – paragraph 1**

*Text proposed by the Commission*

*Amendment*

Title II, Chapter 3, of the Treaty provides for the establishment of basic safety standards for the health protection of workers and the general public against the dangers arising from ionising radiation. Articles 31 to 38 of the Treaty provides rules on the role of the Member States and the Commission with regard to the protection of human health, the control of levels of radioactivity in the environment, release into the environment, **and nuclear waste management**. Under Article 39 of the Treaty, the JRC provides assistance to the Commission in carrying out this task.

Title II, Chapter 3, of the Treaty provides for the establishment of basic safety standards for the health protection of workers and the general public against the dangers arising from ionising radiation. Articles 31 to 38 of the Treaty provides rules on the role of the Member States and the Commission with regard to the protection of human health, the control of levels of radioactivity in the environment **and** release into the environment. ***The JRC will continue, in collaboration with its international partners, to develop networks for measuring radioactivity in the environment while making all findings immediately available to the public.*** Under Article 39 of the Treaty, the JRC provides assistance to the Commission in carrying out this task.

## Amendment 11

### Proposal for a decision

#### Annex – section 3 – point 3.1 – point 3.1.6 – paragraph 2

##### *Text proposed by the Commission*

In view of the new limits for radio-nuclides in drinking water and food ingredients, the JRC will develop analytical techniques and produce corresponding reference materials. Inter-laboratory comparisons will be organised with the monitoring laboratories of the Member States to assess the comparability of the reported monitoring data under Articles 35 and 36 of the Treaty, and to support the harmonisation of the radioactivity monitoring systems with reference test materials.

##### *Amendment*

In view of the new limits for radio-nuclides in drinking water and food ingredients, the JRC will develop analytical techniques and produce corresponding reference materials. Inter-laboratory comparisons will be organised with the monitoring laboratories of the Member States to assess the comparability of the reported monitoring data under Articles 35 and 36 of the Treaty, and to support the harmonisation of the radioactivity monitoring systems with reference test materials. ***This activity will take into account the Council directive, to be adopted pursuant to Article 31 of the Euratom Treaty, laying down requirements for the protection of the health of the general public with regard to radioactive substances in water intended for human consumption.***

## Amendment 12

### Proposal for a decision

### Annex – section 3 – point 3.2 – point 3.2.1

#### *Text proposed by the Commission*

Nuclear safety and the reliability of operating installations is permanently subject to optimisation in order to meet the new challenges posed by market liberalisation, extended plant operation, and the so-called nuclear industry ‘renaissance’. In order to maintain and improve the safety level of both Western and Russian-type nuclear power plants, advanced and refined safety assessment methodologies and corresponding analytical tools have to be extended and validated. Targeted experimental investigations are carried out at the JRC to improve the understanding of the underlying physical phenomena and processes in order to enable validation and verification of deterministic and probabilistic safety assessments, based on advanced modelling of plant processes (reactivity and thermal-hydraulic), of components under operational loads/ageing, and of human and organisational factors. The JRC will also continue to play a central role in the establishment and operation of the European Clearinghouse for Operational Experience Feedback for the benefit of all Member States. It will provide topical reports on specific plant issues and facilitate the efficient sharing and implementation of operational experience feedback to improve the safety of nuclear power plants, for the benefit of all European regulators.

#### *Amendment*

Nuclear safety and the reliability of operating installations is permanently subject to optimisation in order to meet the new challenges posed by market liberalisation, extended plant operation, and the so-called nuclear industry ‘renaissance’. In order to maintain and improve the safety level of both Western and Russian-type nuclear power plants, advanced and refined safety assessment methodologies and corresponding analytical tools have to be extended and validated. Targeted experimental investigations are carried out at the JRC to improve the understanding of the underlying physical phenomena and processes in order to enable validation and verification of deterministic and probabilistic safety assessments, based on advanced modelling of plant processes (reactivity and thermal-hydraulic), of components under operational loads/ageing, and of human and organisational factors. The JRC will also continue to play a central role in the establishment and operation of the European Clearinghouse for Operational Experience Feedback for the benefit of all Member States. It will provide topical reports on specific plant issues and facilitate the efficient sharing and implementation of operational experience feedback to improve the safety of nuclear power plants, for the benefit of all European regulators. ***In view of the growing importance of the decommissioning of nuclear reactors and the associated expanding market and engineering aspects, the JRC will also enhance its scientific expertise in the field. It will include in its programme key aspects on research and training of experts on decommissioning of reactors (methodologies, on-the-job training, and scientific background).***