

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 22.4.2009
COM(2009) 198 final

Proposal for a

COUNCIL DECISION

on the adoption of a supplementary research programme to be implemented by the Joint Research Centre for the European Atomic Energy Community

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

On 19 February 2004, the Council adopted a three-year supplementary research programme to be implemented by the Joint Research Centre for the European Atomic Energy Community (2004-2006) concerning the operation of the Community's High Flux Reactor (HFR) in Petten (The Netherlands). On 26 November 2007, the Council adopted an extension of one year (2007) to this supplementary programme. This programme therefore expired on 31 December 2007. The operation of the HFR continued throughout 2008 without a supplementary research programme while efforts were made to base its operation and exploitation on an independent and more durable legal regime. Since these efforts failed, it will now be necessary to provide for continued financial support under a new supplementary research programme.

The present communication concerns thus a new three-year programme for the HFR operation (2009-2011).

The HFR is used by the Commission in accordance with the agreement between Euratom and The Netherlands of 25 July 1961. Under this agreement, the Commission on behalf of the Community has committed itself to build the necessary facilities and to provide additional equipment in order to make “optimum use” of these facilities (including the HFR). This agreement was signed for a period of 99 years. In order to execute it, the two parties concluded a long lease for 99 years conferring a right *in rem* ("bail emphytéotique") on 31 October 1962.

HFR plays an important role in the European Union, in support to safe nuclear technologies, in materials research for thermonuclear fusion, in fundamental research and in medical applications:

- Despite the decrease in R&D resources in the nuclear fission field, HFR remains very active in the safety of the existing and future reactors. HFR contributes to the following programmes: reactor ageing and life management, improvement of nuclear fuel safety, transmutation of nuclear waste in view of improving the conditions for the final waste disposal, fuel safety studies for a new generation of nuclear reactors (Generation IV).

- Fundamental research makes use of neutron beams for the study of the structure of materials. This activity is under permanent development and contributes to the understanding of degradation mechanisms and their mitigation relevant to the safety of existing nuclear power plants. Methods under study are non-destructive evaluation techniques using neutron beams and neutron properties. The co-ordination of efforts, dissemination of results and support to harmonisation are carried out through a European network.

- The reactor is also used for the commercial production of radio-isotopes for more than 60% of the 10 million medical diagnoses executed each year in Europe. Its performance makes it an important device for European pharmaceutical companies in this field. Moreover, through its location in Europe, the production of the reactor is rapidly directed to the European medical centres. This is essential for the most currently used short-life isotopes.

- The HFR is also a training facility hosting doctoral and post-doctoral fellows performing their research activities through national or European Programmes.

2. CONSULTATION OF INTERESTED PARTIES AND IMPACT ASSESSMENT

Among the Member States consulted in view of their research activities in the nuclear field, three Member States (NL, FR and BE) agreed to contribute to the financing of the HFR.

3. LEGAL ELEMENTS OF THE PROPOSAL

The proposal is based on Article 7 of the Euratom Treaty.

4. BUDGETARY IMPLICATIONS

In its financial statement, this new supplementary programme shows the contribution to come from three participating Member States, namely The Netherlands, France and Belgium. The contributions from these three Member States amount to about EUR 35 million. This amount includes provisions for the decommissioning of the reactor. A part of the contributions under the present supplementary programme will cover expenditures (including the provisions for the decommissioning) incurred for the operation of the HFR during 2008, i.e. the period when there was no supplementary programme or other mechanism in place for this funding.

The Commission confirms the declaration recorded in the minutes of the Council meeting of 27 June 1996, by which it stated that "the HFR can contribute, on the basis of adequate financing, to the execution of Community programmes, whether or not in the context of the Framework Programmes. This participation will take place either on a competitive basis or by means of irradiation services to JRC Institutes during the implementation of their respective activities". This means that the Commission will not contribute to the operational cost of the HFR with funds from its institutional budget, including any cost for maintenance or repair of the reactor.

5. ADDITIONAL INFORMATION

Non applicable

Proposal for a

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on the adoption of a supplementary research programme to be implemented by the Joint Research Centre for the European Atomic Energy Community

THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty establishing the European Atomic Energy Community, and in particular Article 7 thereof,

Having regard to the proposal from the Commission,

After consultation of the Scientific and Technical Committee[1]

Whereas:

(1) Within the framework of the European Research Area, the high flux reactor at Petten (hereinafter "HFR") has been, and continues to be for some time, an important means available to the Community to contribute to materials sciences and testing, to nuclear medicine and to safety research in the field of nuclear energy.

(2) The operation of the HFR has been supported by a series of supplementary research programmes the last of which, Council Decision No 2007/773/Euratom of 26 November 2007 on a one year extension of the supplementary research programme to be implemented by the Joint Research Centre for the European Atomic Energy Community, expired on 31 December 2007[2].

(3) The operation of the HFR continued throughout 2008 without a supplementary research programme, while efforts were made to base its operation and exploitation on an independent and more durable legal regime. Since those efforts failed, it is necessary to provide for continued financial support under a new supplementary research programme.

(4) The HFR is able to operate at least until 2015 with its present operating licence.

(5) Given the continued need for the HFR as an irreplaceable infrastructure for Community research in the fields of improvement of safety of existing nuclear reactors, health including the development of medical isotopes to answer questions of medical research, nuclear fusion, fundamental research and training and waste management including the possibility to study the safety behaviour of nuclear fuels for

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1 Opinion of 1 April 2009.

2 OJ L 312, 30.11.2007, p. 29.

the new generation of reactor systems, its operation should continue under this supplementary research programme until 2011.

(6) Due to their special interest in the continued operation of the HFR, The Netherlands, France and Belgium should, as indicated by them, finance this programme through financial contributions made to the general budget of the European Communities by way of assigned revenue.

(7) The contributions under the present supplementary programme should also cover expenditure made during the year 2008,

HAS ADOPTED THIS DECISION:

Article 1

The supplementary research programme on the operation of the high flux reactor at Petten (HFR), (hereinafter referred to as "the programme"), the objectives of which are set out in Annex I, is adopted for a period of three years, starting on 1 January 2009.

Article 2

The financial contribution estimated as necessary for the execution of the programme amounts to EUR 34.992 million. The breakdown of this amount is set out in Annex II. This contribution shall be considered as assigned revenue in accordance with Article 18(2) of Council Regulation 1605/2002[3].

Article 3

1. The Commission shall be in charge of the management of the programme. To this end, it shall call upon the services of the Joint Research Centre.

2. The Board of Governors of the Joint Research Centre shall be kept informed of the implementation of the programme.

Article 4

The Commission shall each year, before 15 September, submit to the European Parliament and to the Council, a report on the implementation of this Decision.

Article 5

This Decision shall enter into force on the day of its publication in the *Official Journal of the European Union*.

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[3] Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities, OJ L 248, 16.09.2002, p.1

It shall apply from 1 January 2009.

Article 6

This Decision is addressed to the Member States.

Done at Brussels,

For the Council
The President

ANNEX I

SCIENTIFIC AND TECHNICAL OBJECTIVES

The main objectives of the programme are the following:

1. To ensure the safe and reliable operation of the high flux reactor (HFR), in order to guarantee the availability of the neutron flux for experimental purposes.

2. To allow an efficient use of HFR by research institutes in a broad range of disciplines: improvement of safety of existing nuclear reactors, health including the development of medical isotopes to answer questions of medical research, nuclear fusion, fundamental research and training and waste management including the possibility to study the safety behaviour of nuclear fuels for the new generation of reactor systems.

ANNEX II

BREAKDOWN OF THE CONTRIBUTIONS

The contributions to the programme come from The Netherlands, France and Belgium.

The breakdown of those contributions is as follows:

The Netherlands: EUR 32.892 million;

France: EUR 0.9 million

Belgium: EUR 1.2 million

Total: EUR 34.992 million.

Those contributions shall be made to the general budget of the European Communities and shall be assigned to this programme. The contributions under the present supplementary programme may also cover expenditure made to the operation of the HFR during the year 2008.

LEGISLATIVE FINANCIAL STATEMENT

1. NAME OF THE PROPOSAL:

Supplementary research programme to be implemented by the Joint Research Centre for the European Atomic Energy Community

2. ABM / ABB FRAMEWORK

Policy Area(s) concerned and associated Activity/Activities:

Policy Area: Title 10 – Direct Research

Activity: 10 04 Completion of previous framework programmes and other activities

3. BUDGET LINES

3.1. Budget lines (operational lines and related technical and administrative assistance lines (ex- B..A lines)) including headings:

10 04 04 Operation of the high-flux reactor (HFR)

Item 10 04 04 02[4] — Supplementary Programme HFR (2009 to 2011)

Item 6 2 2 1 — Revenue from the operation of the HFR to be used to provide additional appropriations — Assigned revenue

3.2. Duration of the action and of the financial impact:

1/1/2009 – 31/12/2011 (the contributions under the present supplementary programme may also cover expenditure made during the year 2008)

3.3. Budgetary characteristics:

Budget line	Type of expenditure		New	EFTA contribution	Contributions from applicant countries	Heading in financial perspective
	Non-comp	Non-diff[5]	YES	NO	NO	**No** 1a

[4] A new budgetary line has to be created

[5] Non-differentiated appropriations hereafter referred to as NDA

4. SUMMARY OF RESOURCES

4.1. Financial Resources

4.1.1. Summary of commitment appropriations (CA) and payment appropriations (PA)

EUR million (to 3 decimal places)

Expenditure type	Section no.		2009	2010	2011				Total
Operational expenditure[6]									
Commitment Appropriations (CA)	8.1.	a	pm	pm	pm				Pm
Payment Appropriations (PA)		b	pm	pm	pm	pm	pm		pm
Administrative expenditure within reference amount[7]									
Technical & administrative assistance (NDA)	8.2.4.	c	pm	pm	pm				
TOTAL REFERENCE AMOUNT									
Commitment Appropriations		a+c	**pm**	**pm**	**pm**				
Payment Appropriations		b+c	**pm**	**pm**	**pm**	**pm**	**pm**	**pm**	
Administrative expenditure <u>not</u> included in reference amount[8]									
Human resources and associated expenditure (NDA)	8.2.5.	d	pm	pm	pm				
Administrative costs, other than human resources and associated costs, not included in reference amount (NDA)	8.2.6.	e	pm	pm	pm				
Total indicative financial cost of intervention									
TOTAL CA including cost of Human Resources		a+c +d +e	pm	pm	pm				
TOTAL PA including cost of Human Resources		b+c +d +e	pm	pm	pm	pm	pm	pm	

6 Expenditure that does not fall under Chapter xx 01 of the Title xx concerned.

7 Expenditure within article xx 01 04 of Title xx.

8 Expenditure within chapter xx 01 other than articles xx 01 04 or xx 01 05.

Co-financing details

EUR million (to 3 decimal places)

Co-financing body		2009	2010	2011				Total
The Netherlands	f	16.446	8.223	8.223				32.892
France		0.300	0.300	0.300				0.900
Belgium	g	0.600	0.300	0.300				1.200
TOTAL CA including co-financing	a+c+d +e+f	17.346	8.823	8823				34.992

** 2008 expenses will be covered by the 2009 contributions. The contributions are assigned revenues.*

This amount has been calculated by the concerned Member States in order to balance the forecasted costs of the reactor on the period 2008-2011 taking into account an expected level of commercial incomes. In no case will the Commission cover any operational deficit, including potential costs for maintenance or repair.

4.1.2. Compatibility with Financial Programming

x Proposal is compatible with existing financial programming.

☐ Proposal will entail reprogramming of the relevant heading in the financial perspective.

☐ Proposal may require application of the provisions of the Interinstitutional Agreement[9] (i.e. flexibility instrument or revision of the financial perspective).

4.1.3. Financial impact on Revenue

☐ Proposal has no financial implications on revenue

x Proposal has financial impact – the effect on revenue is as follows:

The three Member States, The Netherlands, France and Belgium will fund this Supplementary Programme.

[9] See points 19 and 24 of the Interinstitutional agreement.

EUR million (to one decimal place)

		Prior to action [Year n-1]	Situation following action					
Budget line	Revenue		2009	2010	2011			
	a) Revenue in absolute terms	p.m.	17.4	8.8	8.8			
	b) Change in revenue	Δ						

4.2. Human Resources FTE (including officials, temporary and external staff) – see detail under point 8.2.1.

Annual requirements	Year n	n + 1	n + 2	n + 3	n + 4	n + 5 and later
Total number of human resources	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.

5. CHARACTERISTICS AND OBJECTIVES

5.1. Need to be met in the short or long term

HFR plays an important role, in the European Union, in support to safe nuclear technologies, in the research fields of nuclear plants ageing and life extension, transmutation of long-lived actinides in view of a better safety of waste storage, improvement of the fuel safety, fuel safety studies for the new generation of reactors (Generation IV). Moreover, fundamental research makes use of neutron beams for the study of the structure of materials. This activity is under permanent development and contributes to the understanding of degradation mechanisms and their mitigation relevant to the safety of existing plants. In the framework of the thermonuclear fusion, several projects are implemented to test structural and breeding materials for future fusion reactors.

5.2. Value-added of Community involvement and coherence of the proposal with other financial instruments and possible synergy

The Commission is the owner of HFR. This Supplementary Programme is required to pursue its operation, taking into account that the set up of the foreseen Joint Undertaking was not possible due to a lack of support by potential partners for such legal construction. It should be noted that further to its scientific use, the reactor is very important for the medical sector (production of medical radio-isotopes).

5.3. Objectives, expected results and related indicators of the proposal in the context of the ABM framework

The main objectives of the Supplementary Programmes HFR are:

1. The safe and reliable operation of the HFR at Petten; this activity involves the normal use of the installation for a maximum operational period, and the delivery of the neutron flux for the experiments;

2. The rational use of this reactor will be developed in a broad range of disciplines; the major research an development themes involving the use of HFR are illustrated by the following examples: improvement of safety of existing and new generation of nuclear reactor, health including the development of medical isotopes to answer the questions of medical research, fusion reactor materials research, fundamental research and training, and waste management including the possibility to study the safety of nuclear fuels for new generation of reactors.

5.4. Method of Implementation (indicative)

x ***Centralised Management***

- ☐ directly by the Commission
- ☐ indirectly by delegation to:
  - ☐ executive Agencies
  - ☐ bodies set up by the Communities as referred to in art. 185 of the Financial Regulation
  - ☐ national public-sector bodies/bodies with public-service mission

☐ ***Shared or decentralised management***

- ☐ with Member states
- ☐ with Third countries

☐ ***Joint management with international organisations (please specify)***

Relevant comments:

6. MONITORING AND EVALUATION

6.1. Monitoring system

The obligations of the Commission consist in managing the Supplementary Programme and consequently in reporting on (i) the technical status of the reactor operation, (ii) its scientific use, (iii) its budgetary situation as regard the financial income from Member States and (iv) the payments made.

The programme is included in the ABM planning cycle of the JRC and in the Annual Management Plan. As a consequence the monitoring of stated objectives will be included in the JRC Annual Activity Report.

In addition an annual report will be prepared by JRC (Institute for Energy). It will be dedicated to the management of the Supplementary Programme, and will cover the following items:

- Technical reporting providing the HFR operational data;
- Summary description of the main scientific achievements;
- Status of the repair and maintenance activities;
- Budgetary status as far as the income from Member States and the use of the Supplementary Programme budget is concerned (including provisions for dismantling, management fees, payment to the operator, etc).
- The report will be addressed to the European Parliament, to the Council, and to the Board of Governors of JRC.

6.2. Evaluation

6.2.1. Ex-ante evaluation

This is the renewal of previous Supplementary Programmes. The preparation of this new Supplementary Programme was the subject of an internal assessment by the participating Member States.

6.2.2. Measures taken following an intermediate/ex-post evaluation (lessons learned from similar experiences in the past)

The content of the reporting will be improved as indicated above, in line with the obligations stated in the Council Decision.

6.2.3. Terms and frequency of future evaluation

The participating Member States shall carry out an internal assessment upon completion of the Supplementary Programme.

7. ANTI-FRAUD MEASURES

Audit and internal control of the reporting mentioned above are carried out by Joint Research Centre officers, covering both the technical and budgetary aspects. Access of all audits and internal controls will be provided to the Court of Auditors.

Control of the circulation of fissile materials is covered by Euratom and the IAEA.

8. DETAILS OF RESOURCES

8.1. Objectives of the proposal in terms of their financial cost

Commitment appropriations in EUR million (to 3 decimal places)

(Headings of Objectives, actions and outputs should be provided)	Type of output	Av. cost	Year 2009		Year 2010		Year 2011								TOTAL	
			No. outputs	Total cost	No. outputs	Total cost	No. outputs	Total cost							No. outputs	Total cost
OPERATIONAL OBJECTIVE No.1 [10]……	Full-power operation days	p.m.	170	p.m	250	p.m.	250	p.m.							670	p.m.
TOTAL COST		p.m:		p.m.		p.m.		p.m.								p.m.

[10] As described under Section 5.3

8.2. Administrative Expenditure

8.2.1. Number and type of human resources

Types of post		Staff to be assigned to management of the action using existing and/or additional resources (**number of posts/FTEs**)					
		Year n	Year n+1	Year n+2	Year n+3	Year n+4	Year n+5
Officials or temporary staff[11] (XX 01 01)	A*/AD						
	B*, C*/AST						
Staff financed[12] by art. XX 01 02							
Other staff[13] financed by art. XX 01 04/05							
TOTAL							

8.2.2. Description of tasks deriving from the action

The only task performed by the Joint Research Centre is the management of the Supplementary Programme. This Joint Research Centre staff (1 AD and 1 AST) is fully financed by the Supplementary Programme.

8.2.3. Sources of human resources (statutory)

x Posts currently allocated to the management of the programme to be replaced or extended

☐ Posts pre-allocated within the APS/PDB exercise for year n

☐ Posts to be requested in the next APS/PDB procedure

☐ Posts to be redeployed using existing resources within the managing service (internal redeployment)

☐ Posts required for year n although not foreseen in the APS/PDB exercise of the year in question

[11] Cost of which is NOT covered by the reference amount
[12] Cost of which is NOT covered by the reference amount
[13] Cost of which is included within the reference amount

8.2.4. Other Administrative expenditure included in reference amount (XX 01 04/05 – Expenditure on administrative management)N.A.

EUR million (to 3 decimal places)

Budget line (number and heading)	Year n	Year n+1	Year n+2	Year n+3	Year n+4	Year n+5 and later	TOTAL
1 Technical and administrative assistance (including related staff costs)							
Executive agencies[14]							
Other technical and administrative assistance							
- *intra muros*							
- *extra muros*							
Total Technical and administrative assistance							

8.2.5. Financial cost of human resources and associated costs <u>not</u> included in the reference amount

EUR million (to 3 decimal places)

Type of human resources	Year n	Year n+1	Year n+2	Year n+3	Year n+4	Year n+5 and later
Officials and temporary staff (XX 01 01)						
Staff financed by Art XX 01 02 (auxiliary, END, contract staff, etc.) (specify budget line)						
Total cost of Human Resources and associated costs (NOT in reference amount)						

[14] Reference should be made to the specific legislative financial statement for the Executive Agency(ies) concerned.

Calculation– ***Officials and Temporary agents***

1 AD and 1 AST are covered by earmarked revenue coming directly from this Supplementary Programme

Calculation– ***Staff financed under art. XX 01 02***

p.m.

8.2.6. Other administrative expenditure <u>not</u> included in reference amount

EUR million (to 3 decimal places)

	Year n	Year n+1	Year n+2	Year n+3	Year n+4	Year n+5 and later	TOTAL
XX 01 02 11 01 – Missions							
XX 01 02 11 02 – Meetings & Conferences							
XX 01 02 11 03 – Committees[15]							
XX 01 02 11 04 – Studies & consultations							
XX 01 02 11 05 - Information systems							
2 Total Other Management Expenditure (XX 01 02 11)							
3 Other expenditure of an administrative nature (specify including reference to budget line)							
Total Administrative expenditure, other than human resources and associated costs (NOT included in reference amount)							

Calculation - ***Other administrative expenditure <u>not</u> included in reference amount***

p.m.

[15] Specify the type of committee and the group to which it belongs.