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### **COMMISSION DECISION**

### C(2007)4093 of 06/09/2007

adopting Part I of the horizontal programme on nuclear safety and radiation protection under the IPA-Transition Assistance and Institution Building 2007,

### THE COMMISSION OF THE EUROPEAN COMMUNITIES.

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation (EC) No 1085/2006 of 17 July 2006 establishing an Instrument for Pre-Accession Assistance (IPA)<sup>1</sup>, and in particular Article 14(2) thereof,

### Whereas:

- (1) Regulation (EC) No 1085/2006 lays down the objectives and main principles for preaccession assistance to candidate and potential candidate countries;
- (2) Serbia is listed as a potential candidate country in Annex II to Regulation (EC) No 1085/2006;
- (3) The Commission has adopted the Multi Beneficiary Multi-annual Indicative Planning Document 2007-2009 for the beneficiary countries which identifies the major areas of interventions and main priorities that are expected to be developed in detail;
- (4) The objectives pursued by the programme described in the Annex to this Decision are to improve nuclear safety in Serbia through repatriation of Russian-origin spent nuclear fuel containing highly enriched uranium to the Russian Federation and the supply of equipment for operating radioactive waste processing facilities;
- (5) This decision meets the requirements of Article 90 of Commission Regulation (EC, Euratom) No 2342/2002 of 23 December 2002 laying down detailed rules for the implementation of Council Regulation No 1605/2002<sup>2</sup> and constitutes thus a financing decision within the meaning of Article 75 of Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities<sup>3</sup>;
- (6) It is appropriate to implement this programme in joint management with the International Atomic Energy Agency;
- (7) The measures provided for by this Decision are in accordance with the opinion of the IPA Committee.

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OJ L210, 31.7.2006 p. 82

OJ L 357, 31.12.2002, p. 1 Regulation as last amended by Regulation (EC, Euratom) No 478/2007 (OJ L 111, 28.4.2007, p.13).

OJ L 248, 16.9.2002, p.1. Regulation as amended by Regulation (EC, Euratom) No 1995/2006 (OJ L 390, 30.12.2006, p.1).

### HAS DECIDED AS FOLLOWS:

### Article 1

The programme described in the Annex to the present decision is hereby adopted.

This programme shall be implemented by joint management with the International Atomic Energy Agency.

### Article 2

The maximum amount of Community assistance shall be €5,460,000 representing 100% of the total eligible expenditure to be financed through Item 22.02.07.01 – Regional and horizontal programmes of the General Budget of the European Communities for 2007.

Done at Brussels, [...]

For the Commission
[...]
Member of the Commission

ANNEX: FINANCING PROPOSAL OF PART I OF THE HORIZONTAL PROGRAMME ON NUCLEAR SAFETY AND RADIATION PROTECTION UNDER THE IPA-TRANSITION ASSISTANCE AND INSTITUTION BUILDING COMPONENT IN 2007

### 1. **IDENTIFICATION**

Beneficiary	Serbia				
Programme	Part I of the horizontal programme on nuclear safety and				
_	radiation protection under the IPA-Transition Assistance				
	and Institution Building component in 2007				
CRIS number	2007/019-038				
Year	2007				
Cost	€5,460,000				
Implementing Authority	European Commission on behalf of Serbia in Joint				
	Management with the International Atomic Energy Agency				
	(IAEA).				
Final date for concluding the	At the latest by 31 December 2008				
financing agreements					
Final dates for contracting	Two years following the date of conclusion of the				
	Financing Agreement				
Final dates for execution	Two years following the end date for contracting				
Sector Code	06.64 - Nuclear Safety				
Budget lines	22.02.07.01 –Regional and horizontal programmes				
Programming Task Manager	DG ELARG, Unit D3, Regional Programmes				
Implementation Task Manager	DG ELARG, Unit D3, Regional Programmes				

### 2. PRIORITY AXES/ (MEASURES) / PROJECTS

### 2. A PRIORITY AXES

In the field of nuclear safety and radiation protection, the Multi-Beneficiary Multi-annual Indicative Planning Document (MIPD) addresses both regional and horizontal issues. Section 2.2.9 of the MIPD clearly mentions that:

- (1) there are specific problems connected with the management of <u>radioactive waste and</u> spent fuel in Serbia;
- (2) support can be provided through multibeneficiary and <u>national projects</u>;
- (3) further alignment of <u>management practices of radioactive materials</u> with EU best practices is needed.

In this context, this Financing proposal focuses on a specific radiological problem that is occurring in the Republic of Serbia.

At present the spent nuclear fuel and radioactive waste storage situation at the Vinča Institute in Serbia represents a nuclear security, proliferation, environmental and human health hazard. The facility contains substantial quantities of high and low enriched uranium, refined yellow cake of uranium, more than 1200 sealed radioactive sources, unprocessed radioactive liquid waste tanks, and thousands of unconditioned radioactive waste containers.

It is important to underline that the implementation of the EU/IAEA Joint Action<sup>1</sup> has identified Serbia as one of the prioritised countries for support in the field of nuclear security and notably concerning:

- Improvement of the physical protection of nuclear material and facilities;
- Enhancing the control and protection of sealed radioactive sources;
- Prevention of illicit trafficking of nuclear materials and radiation sources.

The international community is well aware of the radiological risks that are posed by the presence of highly enriched uranium in spent nuclear fuel currently in store in Serbia, as well as by the poor management of radioactive waste in this country. Therefore, under the coordination and with the support of the IAEA, several donor countries i.e. the USA, Slovenia, Hungary, the United Kingdom, and Germany are providing funding in order to contribute to solving these issues. In this context the Vinča Institute Nuclear Decommissioning (VIND) programme has been established in 2002 based on a decision by the Serbian government to decommission the Vinča RA research reactor and ancillary facilities, including processing and storage of radioactive waste as well as repatriation of all new and spent nuclear fuel to the Russian Federation.

The importance of the VIND programme has been described several times by the Serbian Minister for Science and Protection of the Environment notably through several requests for funding that were addressed to DG ELARG and to the Commissioner Olli Rehn in 2006 and 2007. The IAEA which is contributing to and coordinating the implementation of the VIND programme has organised a pledging conference in September 2006 in order to secure funding for that programme. Requests for funding by the EU were also addressed to DG ELARG in February 2007. DG ELARG and the Commissioner Olli Rehn favourably responded considering that the VIND programme constitute an important radiological issue.

Improvement of nuclear safety is also part (under article 110) of the current draft of the Stabilisation and Association Agreement (SAA) with Serbia.

Finally, Serbia has to take provisions in order to accede soon to the "Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management". EURATOM has been a contracting party to the Joint Convention since January 2006 and thereby all provisions of the Joint Convention can be considered as part of the acquis. For Serbia the implementation of the VIND programme will constitute a step forward towards accession to the Convention and the acquis in the field of nuclear safety.

This programme represents "Part I" of a wider programme for the Western Balkans on nuclear safety and radiation protection under IPA 2007. This programme represents the first time that the EC gives a financial contribution to the IAEA for the implementation of nuclear safety and radiation protection activities in Serbia.

### 2. B DESCRIPTION OF PROJECTS GROUPED PER PRIORITY AXIS

### General context

At present the VIND programme comprises five main phases, where the present financing proposal covers phases 2 and 5:

Phase 1: Removal, characterisation and repackaging of spent nuclear fuel in store at the Vinča Institute

<sup>&</sup>lt;sup>1</sup> Council Joint Action 2004/495/CFSP of 17 May 2004 on support for IAEA activities under its Nuclear Security Programme and in the framework of the implementation of the EU Strategy against Proliferation of Weapons of Mass Destruction.

This activity has already been contracted by the IAEA for a total amount of about €3,330,000 and is fully funded by other donors, notably the USA. This activity has already started.

Phase 2: Preparations for and transport of Russian-origin spent nuclear fuel from the Vinča Institute to the Russian Federation

These activities have been contracted by the IAEA for a total amount of €4,300,000 and are expected to be funded by the European Community through a contribution agreement with the IAEA (see hereafter project 1). This activity has not started. It is worth noting that the cost of Phase 2 results from an international call for tenders organised by the IAEA in 2005. It is therefore based on reliable figures.

Phase 3: Reprocessing and disposal of the Russian-origin spent nuclear fuel in the Russian Federation

This phase - the cost of which is estimated to be maximum €14,500,000 - is being subject to a foreign trade agreement between the Serbian government and the Russian Federation. Potential donors are being solicited to provide funding for that phase. This activity has not yet started

Phase 4: Design and construction of a waste processing and storage facility at the Vinča Institute for all types of radioactive waste to be generated during decommissioning operations of the RA nuclear research reactor

This phase has already been contracted by the Serbian government. Serbia has provided funding for three new radioactive waste storage and processing facilities to be constructed. Two radioactive waste storage facilities (traditionally called "hangars") have been fully designed and are in process of receiving a license for construction. US funding has already been committed to support Serbia for that investment. The total cost of phase 4 is estimated to about €2,850,000.

Phase 5: Provisions of equipment for a waste processing facility at the Vinča Institute

It is expected that the funding of this phase is provided by the European Community through a contribution agreement with the IAEA (see hereafter project 2). This activity has not started. The maximum amount that the EC intends to finance for project 2 is € 1,030,000.

### Description of the projects

<u>Project No 1</u>: "Preparation for and transportation of spent nuclear fuel from the Vinča institute to the Russian Federation" comprises the following activities:

- Design and fabrication of baskets for transport packages of spent fuel;
- Preparation of certificates and unified project documents (environmental impact assessments) for the subsequent transport operations;
- Authorisation procedures for transport package design and shipment in Serbia and in transit countries;
- Loading of canisters into transport packages and delivery of casks to the carrier;
- Transport/transfer of packages of spent nuclear fuel to the consignee.

The transport should be performed by the end of 2010. Therefore the estimated duration of project 1 is 36 months.

<u>Project no 2:</u> "Equipment for the radioactive waste processing facility at the Vinča Institute" is part of the action plan aiming to create a safe and modern infrastructure in order to safely manage and store radioactive wastes generated at the Vinča Institute, notably those to be generated during spent fuel removal operations for the subsequent transport to the Russian Federation. Project 2 will mainly consist of supplying equipment for waste treatment and conditioning: compactor for solid compressible waste, ion-exchangers for the treatment of the radioactive pond waters, evaporator for the processing of radioactive liquid waste, cementation unit for the immobilisation of radioactive solid waste and sludges, etc.

The project is expected to last 24 months since all technical specifications for each piece of equipment to be supplied have already been determined.

The IAEA will be entrusted with the implementation of projects 1&2. The spent nuclear fuel transport preparations and transport will be performed following the Safety Requirements set forth in the IAEA Safety Standards No TS-R-1, *Regulations for the Safe Transport of Radioactive Material*, and will be carried out by IAEA Member Countries' experts. The design, testing, installation and commissioning of the equipment for the waste processing facility will also be performed consistent with the IAEA standards. The implementation of the two projects will be done directly by the IAEA staff and/or IAEA Member Countries selected experts or contractors.

One specific contribution agreement will be concluded with the IAEA for the implementation of projects 1&2, in accordance with the terms of the Financial and Administrative Framework Agreement (FAFA) between the European Community and the United Nations, signed on 29 April 2003, to which the IAEA has adhered on 17 September 2004.

# **2.** C OVERVIEW OF PAST AND ON GOING ASSISTANCE INCLUDING LESSON LEARNED AND DONOR COORDINATION

For already several years the IAEA, the USA and other countries are supporting Serbia to solve a number of radiological issues. In 2002, the US government and the US organisation "Nuclear Threat Initiative/NTI" allocated a grant of €7 million to help Serbia to remove and transport fresh highly enriched uranium fuel from the Vinča Institute to the Russian Federation. This fuel is currently stored at the Dimitrovgrad nuclear centre in the Ulyanovsk region of the Russian Federation submitted to process of conversion into low enriched uranium fuel. This action showed that transport of nuclear fuel from Serbia to the Russian Federation is possible, although complex procedures for authorisations had to be fulfilled.

The current situation regarding the implementation of the five priority phases of the VIND programme - in which the two projects to be funded are integrated - has already been outlined together with the level of funding provided by donors and by Serbia.

In addition the IAEA is providing support to the VIND programme through technical expertise and coordination of the whole action plan. In this context three technical assistance projects have been launched:

- Safe removal of spent fuel of the Vinča RA Research Reactor" (cumulated budget of about €500,000 over the years 2005-2008);
- Safe Management of Waste at the Vinča Institute Project (cumulated budget of about €500,000 over the years 2005-2008);

• Decommissioning of the Vinca RA Research Reactor" (cumulated budget of about €500,000 over the years 2005-2008).

Concerning the supply of equipment for radioactive waste treatment, conditioning, packaging and storage (project No 2) it must be underlined that in the past the Phare nuclear safety programme supported similar activities in several countries and notably in Bulgaria and Romania. The equipment supplied is of conventional nature and as for all supply contracts the technical specifications of the equipment to be purchased must be well described and the associated cost should be estimated with accuracy.

### 2. D CROSS CUTTING ISSUES, WHERE APPLICABLE

The implementation of projects 1&2 will contribute to significantly improve the protection of the environment in Serbia and reinforce preventive actions against nuclear terrorism and illicit trafficking of nuclear materials through:

- The repatriation to the Russian Federation of all spent nuclear fuel containing highly and low enriched uranium that will eliminate potential radioactive pollution of the air, since a significant part of spent fuel is leaking;
- The management of radioactive waste generated at the Vinča Institute during decommissioning of the RA research reactor according to the best EU practices and in line with the Euratom Council Directives on radiation protection;
- The safe and secure storage of disused sealed radioactive sources that may be used by terrorist groups to fabricate "dirty bombs".

### 2. E CONDITIONALITY

The implementation of projects 1&2 under this programme is subject to the following prerequisites:

- that a Foreign Trade Agreement is concluded between the Serbian government and the Russian Federation, allowing the implementation of phase 3 of the VIND programme;
- that Serbia or other donors are committed to cover all expenses for phase 3 of the VIND programme.

The implementation of project 2 under this programme is subject to the following prerequisite:

• that a successful contract is negotiated for the design and construction of the waste processing and storage facility at the Vinča Institute for all types of radioactive waste to be generated during decommissioning operations of the RA nuclear research reactor, and is covered with funds made available from other donors.

# 2. F BENCHMARKS

	N		N+1 (cumulative)		N+2 (cumulative)	
	EU	NF*	EU	NF*	EU	NF*
Contribution agreement with the IAEA to be concluded in autumn 2007	€ 5.46 M		€ 5.46 M		€ 5.46 M	
Contracting Rate (%)	100					

### 3. BUDGET (amounts in €)

#### 3.1. **Indicative budget table**

	EU – IPA assistance			Total Co- financing of Project (indicative)	Total (IPA plus Co- financing)
	Institution Building	Investment	Total (IB and INV)		
Project 1		4,430,000	4,430,000		4,430,000
		(including 3% contingencies)	(including 3% contingencies)		(including 3% contingencies)
Project 2		1,030,000	1,030,000		1,030,000
		(including 3% contingencies)	(including 3% contingencies)		(including 3% contingencies)
TOTAL		5,460,000	5,460,000		5,460,000

#### 3.2 Principle of Co-Financing applying to the projects funded under the programme

As indicated in section 2B the two projects to be funded are part of an international programme coordinated and partly funded by the IAEA. The total cost of the five phases of this programme is estimated to about €28,000,000. However, the two projects that are considered in this financing proposal will be entirely supported by the European Community (100 %).

### 4. IMPLEMENTATION ARRANGEMENTS

#### 4.1 **Method of implementation**

The programme will be implemented by the European Commission by joint management with the International Atomic Energy Agency following Article 53.1 (c) of Council Regulation (EC, Euratom) Nr. 1605/2002 of 25 June 2002 on the Financial Regulation<sup>2</sup> applicable to the general budget of the European Commission (the Financial Regulation: FR) as further detailed in the rules for the implementation of Council Regulation on the Financial Regulation applicable to the general budget of the EC<sup>3</sup> (Implementing Rules: IR)". To this end, the Commission and the IAEA will conclude one Contribution Agreement, in accordance with the FAFA.

### 4.2 General rules for procurement and grant award procedures The general rules for procurement of any goods, works or services by the IAEA in the context of the implementation of projects 1&2 shall be defined in the Contribution

OJ L 248, 16.9.2002, p.1. Regulation as amended by Regulation (EC, Euratom) No 1995/2006 (OJ L 390, 30.12.2006, p.1).

L 111, 28.4.2007, p.13).

OJ L 357, 31.12.2002, p. 1 Regulation as last amended by Regulation (EC, Euratom) No 478/2007 (OJ

### Agreement between the Commission and the IAEA.

### 4.3 Environmental Impact Assessment and Nature Conservation

The procedures for environmental impact assessment as set down in the EIA-directive<sup>4</sup> fully apply to all investment projects under IPA. If a project falls within the scope of annex 1 or annex 2 of the EIA-directive, the implementation of the EIA-procedure must be documented<sup>5</sup>.

If a project is likely to affect sites of nature conservation importance, an appropriate assessment according to Art. 6 of the Habitats Directive must be documented<sup>6</sup>.

All investments will be carried out in compliance with the relevant Community environmental legislation.

### 5. Monitoring and evaluation

## 5.1 Monitoring

In the case of joint management with international organisations the Commission may undertake any actions it deems necessary to monitor the programmes concerned. These actions may be carried out jointly with the IAEA. This could consist of visits on the spot, discussions with the beneficiaries of the projects, production of dedicated reports, and participation of the Commission services in progress meetings and technical seminars.

### 5.2 Evaluation

Programmes shall be subject to *ex ante* evaluations, as well as interim and, where relevant, *ex post* evaluations in accordance with Articles 57 and 82 of the IPA Implementing Rules, with the aim of improving the quality, effectiveness and consistency of the assistance from Community funds and the strategy and implementation of the programmes.

The results of *ex ante* and interim evaluation shall be taken into account in the programming and implementation cycle.

The Commission may also carry out strategic evaluations.

### 6. AUDIT AND FINANCIAL CONTROL, AUDIT TRAIL, ANTI-FRAUD MEASURES

### 6.1 Audit, Financial control and anti-fraud measures

The accounts and operations of all parties involved in the implementation of this programme, as well as all contracts and agreements implementing this programme, are subject to, on the one hand, the supervision and financial control by the Commission (including the European Anti-Fraud Office), which may carry out checks at its discretion, either by itself or through an outside auditor and, on the other hand, audits by the European Court of Auditors. This includes measures such as ex-ante verification of tendering and contracting carried out by the Delegation in the Beneficiary Country.

In order to ensure the efficient protection of the financial interests of the Community, the Commission (including the European Anti-Fraud Office) may conduct on-the-spot checks and

in Annex EIA to the corresponding investment project fiche.

<sup>&</sup>lt;sup>4</sup> DIR 85/337/EEC; OJ L 175/40; 5.7.1985, as amended

in Annex Nature Conservation to the corresponding investment project fiche

inspections in accordance with the procedures foreseen in Council Regulation (EC, Euratom) 2185/96<sup>7</sup>.

The controls and audits described above are applicable to all contractors, subcontractors and grant beneficiaries who have received Community funds.

### 6.2 Audit trail

The Commission shall ensure that all the relevant information is available to ensure at all times a sufficiently detailed audit trail. This information shall include documentary evidence of the authorisation of payment applications, of the accounting and payment of such applications, and of the treatment of advances, guarantees and debts.

### 7. VISIBILITY AND PUBLICITY

### 7.1 Publicity

Information on programmes and operations shall be provided by the Commission, with the assistance of the national IPA co-ordinator as appropriate

In accordance with Article 90 of Regulation (EC, Euratom) No 1605/2002, the Commission shall publish the relevant information on the contracts. The Commission shall publish the results of the tender procedure in the *Official Journal of the European Union*, on the EuropeAid website and in any other appropriate media, in accordance with the applicable contract procedures for Community external actions.

### 7.2 Visibility

The Commission and the IAEA will agree in the Contribution Agreement on visibility activities to make available and publicize in the beneficiary country information about IPA assistance.

### 8. LIMITED CHANGES

Limited changes in the implementation of this programme affecting essential elements listed under Article 90 of the Implementing Rules to the Financial Regulation, which are of an indicative nature<sup>8</sup>, may be undertaken by the authorising officer by delegation (AOD), or by the authorising officer by sub-delegation (AOSD), in line with the delegation of powers conferred upon him by the AOD, in accordance with the principles of sound financial management without an amending financing decision being necessary.

Council Regulation (EC,Euratom) 2185/96 of 11. November 1996, OJ L 292; 15.11.1996; p. 2

These essential elements of an indicative nature are, for grants, the indicative amount of the call for proposals and, for procurement, the indicative number and type of contracts envisaged and the indicative time frame for launching the procurement procedures.