

**Project Fiche – 2008 IPA horizontal programme  
on nuclear safety and radiation protection**

**1. Basic information**

- 1.1 CRIS Number:** 2008/020-350
- 1.2 Title:** Characterisation and conditioning of radioactive waste
- 1.3 ELARG Statistical code:** 03.64 - Nuclear safety
- 1.4 Location:** Vinča Institute in Serbia

**Implementing arrangements:****1.5 Contracting Authority:**

The European Community represented by the Commission of the European Communities for and on behalf of Serbia in joint management with the International Atomic Energy Agency (IAEA).

**1.6 Implementing Agency:**

The International Atomic Energy Agency (IAEA), Technical Co-operation Department

**1.7 Beneficiary:**

The Republic of Serbia  
Institute of Nuclear Sciences  
11001, Belgrade, P.O Box 522  
Dr. Jovan Nedeljkovic, Director General

**Financing:**

- 1.8 Overall cost (VAT excluded):** EUR 641 000
- 1.9 EU contribution:** EUR 611 000
- 1.10 Final date for contracting:** 2 years following the date of conclusion of the Financing Agreement.
- 1.11 Final date for execution of contracts:** 2 years following the end date for contracting.
- 1.12 Final date for disbursements:** 3 years following the end date for contracting.

**2. Overall Objective and Project Purpose****2.1 Overall Objective:**

To improve radioactive waste management at the Vinča Institute in line with best EU practices.

**2.2 Project purpose:**

To contribute to the implementation of the Vinča Nuclear Institute Decommissioning project (VIND) that is coordinated and partly supported by the IAEA through the characterisation, treatment and conditioning of radioactive waste at the Vinča Institute.

### **2.3 Link with AP/NPAA/EP/SAA**

Article 110 of the draft SAA with the Republic of Serbia explicitly mentions nuclear safety as one of the cooperation topics.

The Serbia 2007 progress report mentions that "little progress has been made in the area of nuclear safety and radiation protection. The dismantling operations and removal of spent fuel from the Vinča research reactor are in progress, but faces numerous difficulties. However Serbia has not yet acceded to the Convention on Nuclear Safety and to the Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management".

### **2.4 Link with MIPD**

The MIPD action entitled "Nuclear Safety and Radiation Protection" mentions that there are "specific problems posed by the management of radioactive waste and spent nuclear fuel in Serbia". In this context, the MIPD intends to support "further alignment of the management practices of radioactive materials with EU best practices".

### **2.5 Link with National/Sectoral Investment Plan**

- Decision of the Serbian government to decommission the RA research reactor located at the Vinča Institute and approval of the VIND programme (2002 and 2004)
- Activity framework in the field of nuclear safety and radiation protection for the period 2008-2010 decided by the government of Serbia.

## **3. Description of project**

### **3.1 Background and justification:**

Operation of the RA nuclear research reactor at Vinča until 1983 has generated spent nuclear fuel and many types of radioactive waste that need to be properly managed. This is the main aim of the VIND programme that was established in 2002 based on a decision of the Serbian government to decommission the Vinča RA research reactor. The VIND programme comprises a number of successive phases of implementation that are covering the period 2006-2013.

Management of spent nuclear fuel is considered as the most urgent problem to be solved and therefore the three first phases addressed the characterisation, repackaging, transport to the Russian Federation and reprocessing operations. It is important to note that phase 2 (transport of spent nuclear fuel to the Russian Federation) will be funded by the 2007 IPA horizontal programme on nuclear safety and radiation protection.

Management of radioactive waste to be generated during the decommissioning and dismantling of the RA research reactor constitutes also an important radiological issue and phases 4 and 5 of the VIND programme are devoted to the transformation of an old building into a waste treatment and conditioning facility. Funding of the equipment (phase 5) to be installed into this facility is also part of the 2007 IPA horizontal programme on nuclear safety and radiation protection.

Therefore the aim of this project is to implement phase 5 of the VIND programme providing the Vinča personnel with technical assistance on how to use the equipment for waste characterisation, treatment and conditioning.

### **3.2 Assessment of project impact, catalytic effect, sustainability and cross border impact**

The project will reduce the risks of both radioactive pollution of the environment and occupational exposure since radioactive waste in store in old facilities at the Vinča Institute will be processed and stored according to best EU practices.

It has a catalytic effect in the sense that providing funding to phase 5 of the VIND programme will enable the whole sequence of operations leading to a safer and more secure Vinča nuclear site to become effective.

### **3.3 Results and measurable indicators:**

- a) Full implementation of all waste conditioning equipment, waste storage facility, waste processing facility, and waste processing programme.
- b) Characterisation, conditioning and storage of at least 500 drums (200 L or larger) of radioactive waste removed from existing old storage facilities.
- c) All remaining wastes and sources from old storage facility H2 removed to the new safe, secure storage facilities.
- d) All waste characterisation and inventory data for all wastes addressed under this project uploaded to the Common Waste Information Database (CWID); all source inventory data from this project uploaded to the source inventory established for the Source Conditioning Facility.
- e) A final project report, including a listing of all drums characterised and conditioned under this project; delivered to the appropriate regulatory body and other stakeholders.

### **3.4 Activities:**

1. Provide EU experts to work with Serbian waste management personnel to establish waste characterization and processing procedures.
2. Provide EU experts to work with Serbian waste management personnel to learn routine waste segregation, characterisation and processing practices using equipment currently installed at Vinča.
3. Provide expert, experienced waste processing personnel to work alongside Serbian waste management personnel to segregate and process at least 500 waste drums currently in storages.
4. Provide expert, experienced waste processing personnel to work alongside Serbian waste management personnel to remove all remaining wastes and sources from old storage facility H2 to the new safe, secure storage facilities.
5. Assist in uploading to the Common Waste Information Database all waste characterisation and inventory data for all wastes addressed under this project; upload all source inventory data from this project to the source inventory established for the Source Conditioning Facility.
6. Assist in developing a final project report, including a listing of all drums characterised and conditioned under this project; deliver the report to the appropriate regulatory body and other stakeholders.
7. Provide additional experts as needed for progress assessment, on site assistance, problem resolution, verification of achievement of performance indicators.

All these activities will be supported through a European Community Contribution Agreement with the IAEA (see Annex V).

### 3.5 Conditionality and sequencing:

Not applicable

### 3.6 Linked activities:

All the other phases of the VIND programme

### 3.7 Lessons learned

Since 2004 the implementation of the VIND programme under the coordination of the IAEA is proceeding according to the time schedule. However, the latest developments of this programme showed that supplementary technical expertise would be required for the monitoring taking into account the increasing number of projects being implemented and their high technical complexity.

## 4. Indicative Budget (amounts in €)

Activities	TOTAL COST	SOURCES OF FUNDING										
		EU CONTRIBUTION				NATIONAL PUBLIC CONTRIBUTION					PRIVATE	
		Total	% *	IB	INV	Total	% *	Central	Regional	IFIs	Total	% *
<u>Activity 1</u>												
<u>contract 1</u>	618 000	588 000	95		588 000	30 000	5				0	0
<u>Contingencies (~4%)</u>	23 000	23 000	100		23 000	0	0				0	0
<b><u>TOTAL</u></b>	<b>641 000</b>	<b>611 000</b>	<b>95</b>		<b>611 000</b>	<b>30 000</b>	<b>5</b>				<b>0</b>	<b>0</b>

Amounts net of VAT

\* expressed in % of the Total Cost

### Additional Funding from Government, IAEA and Other Contributors

As discussed in preceding paragraphs, this project is intended to support the Vinča Institute Nuclear Decommissioning (VIND) programme, which is Serbia's priority nuclear safety and radiation protection support programme. For more than 40 years, Serbia was the central collection centre for all disused sealed sources and radioactive waste from the former Yugoslavia, including countries which are now EU Member States. These sealed sources and wastes are found in rooms and degraded storage facilities located all over Vinča. Only a few of the thousands of disused sealed sources and the thousands of waste containers have ever been conditioned, and the conditioning methods for those few items does not meet current international standards. Construction of proper waste processing facilities, secure storage facilities, and source conditioning facility, as well as conditioning and storage of the resultant wastes and sources, is estimated to cost more than EUR 8 million.

VIND is also intended to repatriate more than 8000 highly enriched and low enriched spent fuel elements to Russia from the RA Research Reactor. The total cost of the repackaging, transport, spent fuel reprocessing, and disposition of the resultant waste will exceed EUR 25 million.

Finally, decommissioning of the RA Research Reactor and degraded support facilities, including site-wide radiological characterization, remediation or resolution of identified sources of radiation

and contamination, and upgrading the capabilities of the radiation protection programme, is estimated to cost an additional EUR 25 million or more.

The VIND programme has been in progress since 2004 and has received more than EUR 16 million in contributions through 2008 from sources other than the EC; this includes nearly EUR 9 million in support from the Serbian Ministry of Science. An additional EUR 14 million is currently approved for 2009-11, including EUR 10 million from the Serbian Ministry of Science. The EC has committed to a EUR 5.46 million through a 2007 Contribution Agreement.

A summary of the VIND funding approvals is included in the following table. It should be noted that funding for decommissioning activities, sealed sources, and waste management decline sharply in 2009-11, as the government, IAEA, and other contributors are shifting their financial resources toward spent fuel repatriation. However, it is still anticipated that the Ministry of Science will contribute more than €1M annually to waste management and decommissioning activities, mostly in terms of local labour resources.

## Existing VIND Funding Approvals

<b>Spent Fuel Repatriation Project (€) Phases 1, 2 and 3 of the programme</b>			
	2004-08 Funding	2009-11 Funding	<b>Total</b>
European Commission	885 000	3 545 000	<b>4 430 000<sup>1</sup></b>
IAEA	1 910 152	526 667	<b>2 436 819</b>
Nuclear Threat Initiative (NGO)	2 578 820	-	<b>2 578 820</b>
USA *	550 000	2 666 667	<b>3 216 667</b>
Russia *	-	-	-
<b>Total</b>	<b>5 923 972</b>	<b>6 738 333</b>	<b>12 662 305</b>

\* IAEA is negotiating with USA and Russia additional funding of more than €6M each.

<b>Sealed Sources and Waste Management (including Nuclear Security) (€)/ Phases 4 to 7 of the programme</b>			
	2004-08 Funding	2009-11 Funding	<b>Total</b>
European Commission	715 000	315 000	<b>1 030 000<sup>2</sup></b>
IAEA	1 065 724	200 000	<b>1 265 724</b>
Nuclear Threat Initiative (NGO)	334 333	-	<b>334 333</b>
USA	566 667	300 000	<b>866 667</b>
UK	40 000	40 000	<b>80 000</b>
Slovenia	30 000	40 000	<b>70 000</b>
<b>Total</b>	<b>2 751 724</b>	<b>895 000</b>	<b>3 646 724</b>

<b>Decommissioning (€)/ Phases 8 to 10 of the programme</b>			
	2004-08 Funding	2009-11 Funding	<b>Total</b>
European Commission	-	-	-
Nuclear Threat Initiative (NGO)	125 671	-	<b>125 671</b>
IAEA	314 618	-	<b>314 618</b>
USA	6 833	-	<b>6 833</b>
<b>Total</b>	<b>447 122</b>	-	<b>447 122</b>

<b>Serbia Funding from Ministry of Science (€)</b>	
	2004-08 Funding
2004	500 000
2005	800 000
2006	1 100 000
2007	2 500 000
2008	4 000 000
2009-2011*	10 200 000
<b>Total</b>	<b>19 100 000</b>

\* 2.5M/year + estimated 2.7M for fuel repatriation contract

<b>Total Known Funding to VIND, excluding EC Funding (€)</b>			
	2004-08 Funding	2009-11 Funding	<b>Total</b>

<sup>1</sup> Under the 2007 IPA horizontal programme on nuclear safety and radiation protection

<sup>2</sup> Idem

<b>Total</b>	<b>16 422 818</b>	<b>13 973 333</b>	<b>30 396 151</b>
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### **5. Indicative Implementation Schedule (periods broken down per quarter)**

Contracts	Start of Tendering	Signature of contract	Project Completion
Contract 1	N/A	1Q 2009	4Q 2011

### **6. Cross cutting issues**

#### **6.1 Equal Opportunity**

The project will benefit both women and men through improvements in environmental protection and safety. On all activities, both men and women will have equal opportunities to compete for contracts and to work on any related activities.

#### **6.2 Environment**

This project will improve radiological conditions within the Vinča site and the surrounding environments by reducing the potential for release of radioactivity via groundwater, airborne activity, or malicious intent. All radioactive materials, sources, etc. will be removed from areas of little control and placed in proper storage, including extensive radiological characterization and conditioning; this will ensure graded levels of security and radiological controls so as to reduce the impact on the environment, workers and the general public.

#### **6.3 Minorities**

On all activities, minorities will have equal opportunities to compete for contracts and to work on any related activities.

### **ANNEXES**

- 1- Log frame in Standard Format
- 2- Amounts contracted and Disbursed per Quarter over the full duration of Programme
- 3- Description of Institutional Framework
- 4 - Related laws, regulations and strategic documents:
- 5- Details per EU funded contract

**ANNEX 1: Logical framework matrix in standard format**

LOGFRAME PLANNING MATRIX FOR Project Fiche	Programme name and number – 2008 IPA Horizontal Programme on Nuclear Safety and Radiation Protection	2008/020-350
Characterisation and conditioning of radioactive waste at Vinča Institute	Contracting period expires – 2 years following the date of the conclusion of the Financing Agreement.	Disbursement period expires – 3 years following the end date for contracting
	Total budget including 5% contingencies: EUR 641 000	IPA budget: EUR 611 000

<b>Overall objective</b>	<b>Objectively verifiable indicators</b>	<b>Sources of Verification</b>	
All radioactive waste has been removed from old storage hangar H2 and associated shed C2 and safely and securely stored; a comprehensive program has been initiated for characterisation, treatment and conditioning of radioactive waste using the new Serbian National Waste Processing Facility.	<p>a - Characterisation, conditioning and storage of at least 500 drums (200 L or larger) of radioactive waste removed from existing old storage facilities.</p> <p>b - All remaining wastes and sources from old storage facility H2 removed to the new safe, secure storage facilities.</p> <p>c - All waste characterisation and inventory data for all wastes addressed under this project uploaded to the Common Waste Information Database (CWID); all source inventory data from this project uploaded to the source inventory established for the Source Conditioning Facility.</p>	<p>a - Final project report, including a listing of all drums characterised and conditioned under this project, delivered to the appropriate regulatory body and other stakeholders.</p> <p>b - Final project report; CWID database; physical inspection of Hangar H2.</p> <p>c - CWID and Source Inventory databases.</p>	
<b>Project purpose</b>	<b>Objectively verifiable indicators</b>	<b>Sources of Verification</b>	<b>Assumptions</b>
To contribute to the implementation of the Vinča Nuclear Institute Decommissioning project (VIND) that is coordinated and partly supported by the IAEA through the characterisation, treatment and conditioning of radioactive waste at the Vinča Institute.	At least 500 waste drums characterized, conditioned and stored; H2 decontaminated and released for industrial or other use.	End of project report; removal of license for H2 by regulatory commission	Construction of waste processing and storage facilities commissioned. Regulator may choose to leave license in place but accept end of project report as sufficient. (Commissioning scheduled in 2008.)
<b>Results</b>	<b>Objectively verifiable indicators</b>	<b>Sources of Verification</b>	<b>Assumptions</b>
4.1 - Procedures for waste characterization and processing completed; all waste management personnel trained appropriate to their function.	4.1 - Procedures in place.	4.1 – Procedures available.	4.1 – None
4.2 - Processing (treatment, conditioning) completed for at least 500 drums of radioactive waste currently in old storage facilities; processed waste stored in new Waste Storage Facility.	4.2 – 500 waste drums conditioned, processed and stored.	4.2 – Waste inventory record/database	4.2 – Waste containers available. (Will order in 2008.) Vinča labour available to work alongside contractors.
4.3 - All waste and sources removed from old storage hangar H2 and adjacent shed C2 and either conditioned or placed in safe, secure storage; H2 decontaminated and released for subsequent industrial use.	4.3 – H2 released for industrial or other use.	4.3 – Release authorization from regulator.	4.3 – Vinča labour available to work alongside contractors.
4.4 - All waste inventoried and recorded in National Common Waste Information Database (CWID); all source data recorded in the Source Conditioning Facility source inventory database; final project report completed and issued to stakeholders.	4.4 – All waste containers from H2 captured in database; all sources from H2 captured in database.	4.4 - Waste inventory record/database; source inventory database.	4.4 – CWID in service; source inventory database in service.
<b>Activities</b>	<b>Means</b>	<b>Costs</b>	<b>Assumptions</b>
<b>All the following activities should be contracted through a Contribution Agreement with the International Atomic Energy Agency. At this stage, the number of contracts or sub-contracts identified so far for each beneficiary country is only indicative.</b>			



4.1.1 - Provide EU experts to work with Serbian waste management personnel to establish waste characterization and processing procedures.	4.1.1- Contract for procedure development.	4.1.1 = 17,000	4.1.1 - None
4.1.2 - Provide EU experts to work with Serbian waste management personnel to learn routine waste segregation, characterisation and processing practices using equipment currently installed at Vinča .	4.1.2- OJT contract.	4.1.2 = 27,000	4.1.2 – Space available in H2 for segregation activities.
4.1.3 - Provide expert, experienced waste processing personnel to assist in developing a waste segregation plan linked to the waste processing plan (i.e., what wastes should be processed by what method).	4.1.3- Contract for waste segregation & processing plan.	4.1.3 = 10,000	4.1.3 – Vinča labour available to work alongside contractors.
4.1.4 - Fellowships and training in support of waste characterization and processing activities.	4.1.4- Waste characterization & processing; 2x24 mos.	4.1.4 = 20,000	4.1.4 - None
4.2.1 - Provide expert, experienced waste processing personnel to work alongside Serbian waste management personnel to segregate and process at least 500 waste drums (minimum size 200L) currently in storage; must be based on a production schedule.	4.2.1- Contract for waste processing.	4.2.1 = 272,000	4.2.1 – Waste processing and storage facilities commissioned.
4.3.1 - Provide expert, experienced waste processing personnel to work alongside Serbian waste management personnel to remove all remaining wastes and sources from old storage facilities H2 and C2 to the new safe, secure storage facilities.	4.3.1- Contract for waste removal and storage.	4.3.1 = 102,000	4.3.1 - Vinča labour available to work alongside contractors.
4.3.2 - Tender offer to perform radiological surveys and decontaminate hangar H2 and adjacent shed C2 and release for further industrial use.	4.3.2- Contract for rad survey & decontamination of H2/C2.	4.3.2 = 68,000	4.3.2 - None
4.3.3 - Submit final radiological report on H2 and C2 to the regulatory authority, which will remove H2 from licensing control.	4.3.3- Contract for development of final radiological report on H2/C2.	4.3.3 = 17,000	4.3.3 - Approval by regulatory authority required to release for industrial use.
	4.3.3- License for radioactive storage in H2/C2 terminated.	4.3.3 - Funded by MoS	4.3.3 - None
4.4.1 - Assist in uploading to the Common Waste Information Database (CWID) all waste characterisation and inventory data for all wastes addressed under this project; upload all source inventory data from this project to the source inventory established for the Source Conditioning Facility; transmit a copy of all source inventory data to the IAEA.	4.4.1- Contract upload data to inventory databases.	4.4.1 = 10,000	4.4.1 – CWID fully operational; source inventory database operational.
4.4.2 - Assist in developing a final project report, including a listing of all drums characterised and conditioned under this project, a summary listing of all waste removed from H2/C2 to the new Waste Storage Facility, and a summary listing of all Sources removed to the Secure Storage Facility or the Source Conditioning Facility (summarizing sources by nuclide and activity); deliver the report to the appropriate regulatory body and other stakeholders.	4.4.2- Contract for development of final project report.	4.4.2 = 14,000	4.4.2 - None
4.4.3 - Other expert and staff travel for progress assessment, on site assistance, problem resolution, verification of achievement of performance indicators. (Applies to all activities.)	4.4.3- Expert or staff assistance.	4.4.3 = 31,000	4.4.3 - None

**ANNEX 2: amounts (in €) Contracted and disbursed by quarter for the project**

<b>Contracted</b>	<b>Q1 2009</b>	<b>Q2 2009</b>	<b>Q3 2009</b>	<b>Q4 2009</b>	<b>Q1 2010</b>	<b>Q2 2010</b>	<b>Q3 2010</b>	<b>Q4 2010</b>	<b>Q1 2011</b>	<b>Q2 2011</b>	<b>Q3 2011</b>	<b>Q4 2011</b>
Contract 1	611 000 Including about 4 % contingencies											
<b>Cumulated</b>	<b>611 000</b> Including about 4 % contingencies	-	-	-	-	-	-	-	-	-	-	-
<b>Disbursed</b>	<b>Q1 2009</b>	<b>Q2 2009</b>	<b>Q3 2009</b>	<b>Q4 2009</b>	<b>Q1 2010</b>	<b>Q2 2010</b>	<b>Q3 2010</b>	<b>Q4 2010</b>	<b>Q1 2011</b>	<b>Q2 2011</b>	<b>Q3 2011</b>	<b>Q4 2011</b>
Contract 1	54 000	95 000	67 000	67 000	68 000	87 000	68 000	83 000	22 000			
<b>Cumulated</b>	<b>54 000</b>	<b>149 000</b>	<b>216 000</b>	<b>283 000</b>	<b>351 000</b>	<b>438 000</b>	<b>506 000</b>	<b>589 000</b>	<b>611 000</b>	-	-	-

### **ANNEX 3: Description of Institutional Framework**

The responsibilities for the fields related to the peaceful use of nuclear energy (health, the environment, science and technology, nuclear safety and radiation protection, agriculture, transport, etc) rest with several ministries.

The Ministry of Science (MS) is responsible for R&D in the nuclear sector, for nuclear safety, nuclear materials and radioactive waste management in the country. Under the Ministry's competence and financing are the R&D, including the Vinča Institute of Nuclear Sciences, the Institute of Technology of Nuclear and Other Mineral Raw Materials (ITNMS), the Institute of Geology, the Institute of Nuclear Energy Application in Agriculture (INEP) and others. The Ministry ensures that the law on the nuclear safety and the related regulations are carried out and provides the financial resources for the activities. The MS is responsible for bilateral and multilateral international scientific-technical co-operation of Serbia, including the cooperation with the IAEA.

The Ministry for Environmental Protection (MEP) is responsible and leading in radiation protection and monitoring of the environment, emergency planning etc.

In force is the Law on Protection against Ionizing Radiation that was enacted in 1996 (46/96). It establishes measures for the protection against ionising radiation, as well as nuclear safety measures, liability for nuclear damages, supervision and authorization, penalties. Based on the Law on Protection against Ionizing Radiation, there are 11 regulations related to protection against ionizing radiation and for the safety of radiation sources and 5 regulation related on nuclear safety and security.

Currently, there is no effectively independent Serbian regulatory body for radiation and nuclear safety. Law 46/96 does not make provision for the establishment of a regulatory body, although it makes reference to the 'competent Ministry'. Currently, in accordance with the *Law on Ministries*, the Ministry of Science and Ministry of Environmental Protection are identified as the competent Ministries.

A temporary regulatory body called the 'Regulatory Commission on Radiation and Nuclear Safety' has been established by the Ministry of Science to administer the decommissioning of the research reactor at the Vinča Institute, the shipment of spent nuclear fuel to the original Russian supplier, and the treatment of radioactive waste.

The Vinča Institute of Nuclear Sciences was founded in 1948. It is the main institute involved in research and applications in nuclear science (since 1968 multidisciplinary, not only nuclear) and covers a wide range of scientific and engineering fields; 800 employees, out of which 400 is research staff, organized in 16 laboratories (actually departments) from Nuclear Physics, Theoretical Physics and Physics of Condensed Matter, Radiation and Environmental Protection, Nuclear Engineering to Multidisciplinary Research and Engineering which are, to a large extent, independent.

The Radiation and Environmental Protection Laboratory covers: environmental radioactivity control, ionization radiation dosimetry, metrology analyses, radiation protection, radioactive waste arrangement and decontamination, reactor dosimetry, instrumentation servicing and operative dosimetry. The Nuclear Engineering Laboratory covers: reactor physics, safety and control of nuclear reactors, nuclear engineering and radiation protection. Together with the

Reactor Department, it is responsible for two research reactors: RA (shut down for decommissioning) and RB (zero power, requiring upgrading).

The RA research reactor went into operation in 1959 and has been shut down since 1984 due to fuel corrosion problems and for the refurbishment of the reactor control and safety system. Since the date, it stays with a partially loaded core containing 480 fuel slugs with 80% enriched uranium. In addition, 6656 spent fuel slugs with 2% enriched uranium and 884 slugs with 80% enrichment are located in a spent fuel storage pool containing about 200 tons of stagnant water of poor quality to minimize the corrosion process.

## **ANNEX 4: Related Laws, Regulations and Strategic Documents**

### Project-Specific Documents

- Decision of the Serbian government to decommission the RA research reactor located at the Vinča Institute and approval of the VIND programme (2002 and 2004)
- Draft of the Serbian new Law on ionising radiation protection and on nuclear safety (2006) and existing Serbian Law on Protection against Ionising Radiation (1996)
- Article 110 of the draft SAA
- Nuclear Safety and Radiation Protection action of the multi-country MIPD programme

### International Conventions and Treaties

Serbia is a party to the following instruments under the IAEA's auspices

- Agreement on the Privileges and Immunities of the IAEA
- Vienna Convention on Civil Liability for Nuclear Damage
- Convention on Physical Protection of Nuclear Material
- Convention on Early Notification of a Nuclear Accident
- Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency

Serbia has signed but has not yet ratified the Optional Protocol Concerning the Compulsory Settlement of Disputes to the Vienna Convention on Civil Liability for Nuclear Damage.

As a party to the Treaty on the Non-Proliferation of Nuclear Weapons, Serbia has a Comprehensive Safeguards Agreements with the IAEA for the Application of Safeguards in connection with the Treaty on Non-Proliferation of Nuclear Weapons.

## **ANNEX 5: Details per EU funded contract**

This project together with the projects:

- Conditioning and secure storage of disused sealed radioactive sources;
- Decommissioning of Degraded Waste Storage Hangar No 1;
- Radioactivity survey;
- Strengthening radiation safety capabilities and infrastructure;
- Project Management Unit for EU supported projects;

which are all part of the VIND programme, will be supported through a European Community Contribution Agreement with the IAEA.

Specific contribution agreement will be concluded 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.