NUCLEAR SPECIAL PROJECT FICHE

1. Basic Information
1.1 CRIS Number: 632.04.03
1.2 Title:
  Providing free storage/disposal space in the Püspökszilágy repository
1.3 Sector: 23064
1.4 Location: Püspökszilágy (Hungary)

2. Objectives

2.1 Overall Objective(s)

The overall objective of the project is to contribute to the improvement of the safe management of radioactive waste in line with the recommendations of the Council Report on Nuclear Safety in the context of Enlargement.

2.2 Project purpose

The purpose of the project is volume reduction of radioactive waste through

- providing free capacity for further operation of the Püspökszilágy repository
- providing a volume reduction capability and, by doing so, producing a more stable waste form for the waste to be retrieved in the safety upgrading programme

2.3 Accession Partnership and NPAA priority

The project reflects the following short-term AP priorities:

- Implement the recommendations contained in the Council report on “Nuclear Safety in the Context of Enlargement” with due regard to the priorities assigned in the report

2.4 Contribution to National Development Plan

A comprehensive safety upgrading project has been launched in 2002 with an aim to ensure an acceptable post-closure safety level for Püspökszilágy repository as well as to provide additional waste disposal space. Part of this project is to consider to recover certain waste streams and to recondition them. To achieve this dual purpose an effective waste volume reduction technology can contribute a great deal.

3. Description

3.1 Background and justification

Disposal of institutional radioactive waste in Hungary is performed at the Püspökszilágy facility.

The remaining capacity of the disposal facility has been reduced to approximately 100 m³. Given that annually about 15-20 m³ of institutional waste are transported to the Püspökszilágy facility, this means that there would be space for disposal operations for only a few more years. It is therefore becoming urgent to undertake actions to free disposal space in this facility, otherwise institutional radioactive waste would need to be stored at user's premises which is far from being ideal from the safety point of view.

In the beginning, for disposal purposes plastic bags of 50 l, metal drums of 200 l and boxes made of paper or wood were equally used. Consequently, the packages within the vaults got positioned fairly loosely. This observation was confirmed during the vault opening operation in
March 2000 when two vaults were opened in order to study the conditions of the structural materials of the cells and of the packages disposed.

Loose waste having not or only partly backfilled in the vaults, may be subject to retrieval. Following the volume reduction which is envisaged to be made by use by a state-of-the-art compactor, the packages can be re-emplaced to their original location.

To provide an immediate remedy to the shortage of disposal volume, in one alternative, it is suggested to retrieve the old institutional wastes and the sealed radioactive sources, emplaced in the surface vaults, and use the existing free space for further waste disposal.

3.2 Linked activities

Phare project programmed in 2001 (reference HU01.11.02): Detailed study of waste retrieval and disposal options at the Püspökszilágy Radioactive Waste Treatment and Disposal Facility.

3.3 Results

Purchase of a supercompactor to reduce the volumes of radioactive waste so that the storage/disposal capacity of the Püspökszilágy repository is increased by several hundreds of m³.

3.4 Activities

The project should consist in purchasing a high force compactor. This compactor will be then used to reduce the volumes of radioactive wastes currently stored/disposed of in the Püspökszilágy repository according to the work plan established within the framework of the Phare project under reference HU01.11.02 above-mentioned.

4. Institutional Framework

The beneficiary of the project will be the Public Agency for Radioactive Waste Management (PURAM), which will be responsible for the technical implementation of the project.

The Hungarian Atomic Energy Authority (HAEA) will be responsible for co-ordination of the project. The super -compactor will be located at the Püspökszilágy repository. Trustee of the property will be the Public Agency for Radioactive Waste Management. The HAEA will ensure the full co-ordination with other ministries and institutions. Specialists of the HAEA and the PURAM will prepare the Technical Specification. They will also co-ordinate and supervise the implementation of the project.

5. Detailed Budget

<table>
<thead>
<tr>
<th>Phare</th>
<th>Support</th>
<th>Total Phare (=A+B)</th>
<th>National Cofinancing*</th>
<th>FI*</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant allocation</td>
<td>200,000</td>
<td>50,000</td>
<td>250,000</td>
<td></td>
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<tr>
<td>Total</td>
<td>200,000</td>
<td>200,000</td>
<td>50,000</td>
<td>250,000 Euro</td>
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</tbody>
</table>

6. Implementation Arrangements

6.1 Implementing Agency

The Implementing Agency of the project is the Central Finance and Contracting Unit (CFCU). The CFCU will be the Contracting Authority. The Director General of the CFCU will act as PAO of the project. Her contacts are:

**PAO:**
Ms. Judit Rózsa, director
CFCU, Ministry of Finance
The Hungarian Atomic Energy Authority will be responsible for the technical part of the project in terms of design, evaluation follow up and monitoring. Dr. Lux will act as Senior Programme Officer. His contacts are:

**SPO:**
Dr. Iván Lux  
Head of Department, Nuclear Safety Directorate  
Hungarian Atomic Energy Authority  
1026 Budapest, Margit krt. 85.  
Tel: +36 1 356-3691, Fax: +36 1 356-3846  
E-mail: lux@haea.gov.hu

The project co-ordinator from the beneficiary side will be:

Dr. Péter Ormai  
Chief Engineer  
Public Agency for Radioactive Waste Management  
2040, Budaörs, Puskás Tivadar u. 11  
Tel: +36-23/423-184

**6.2 Twinning**
Not applicable

**6.3 Non-standard aspects**
The rules of the PRAG will be strictly followed.

**6.4 Contracts**
The project will consist of one supply contract in the value of 200 000 Euro (PHARE + 50,000 Euro co-financing)

**7. Implementation Schedule**

<table>
<thead>
<tr>
<th>Contract</th>
<th>Start of Tendering</th>
<th>Start of Project Activity</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiations with the supplier of the compactor</td>
<td>March 2003</td>
<td>January 2004</td>
<td>May 2004</td>
</tr>
</tbody>
</table>

**8. Equal Opportunity**
No discrimination whatsoever will be applied during the operation phases of the project.

**9. Environment**

**10. Rates of return**
Financial rates of return are not applicable

**10. Investment Criteria**
10.1. Catalytic effect: The Phare contribution will act as a catalyst for a priority Accession driven action in the field of radioactive waste management. Without Phare support, the volume reduction of radioactive waste would take place much later.

10.2. Co-financing: The beneficiary will contribute 25% to the project's cost.

10.3. Additionality The Phare intervention will displace no other financiers.

10.4. Project readiness and Size: Technical specification of the equipment supply are under preparation, and will be available by the time of the negotiation procedure

10.5. Sustainability: The equipment purchased will be in accordance with European Union norms and standards. They will respect the principles of sustainable and environmentally sound development enshrined in Article 2 of the Amsterdam Treaty.

The HA EA and the PURAM is in a position to maintain and operate the equipment effectively in the long run. Funds for the operation and maintenance will be provided by them.

10.6. Compliance with state Not applicable aids provisions:

10.7. Contribution to National Not applicable. Development Plan

11. Conditionality and sequencing

The PURAM will provide the necessary facilities and human resources to operate the compactor. Hungarian co-financing is secured. All preparatory work, including the detailed technical specification will be ready by the time of the negotiation procedure.
1. Logical framework matrix in standard format (compulsory)
2. Detailed implementation chart (compulsory)
3. Contracting and disbursement schedule by quarter for full duration of programme (including disbursement period) (compulsory)
4. Reference to feasibility /pre-feasibility studies. For all investment projects, the executive summary of the economic and financial appraisals should be attached (compulsory)
5. List of relevant Laws and Regulations (optional)
6. Reference to relevant Government Strategic plans and studies (may include Institution Development Plan, Business plans, Sector studies etc) (optional)
### Phare log frame

<table>
<thead>
<tr>
<th>LOGFRAME PLANNING MATRIX FOR</th>
<th>Programme: 632.04.03</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project</strong></td>
<td></td>
</tr>
<tr>
<td>Capacity building of the Püspökszilágy repository</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td><strong>Overall objective</strong></td>
<td><strong>Objectively verifiable indicators</strong></td>
</tr>
<tr>
<td>To contribute to the improvement of the safe management of radioactive waste in line with the recommendations of The Council Report on Nuclear Safety in the Context of Enlargement.</td>
<td>Management of radioactive waste is in line with the recommendations of The Council Report on Nuclear Safety in the Context of Enlargement.</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Project purpose</strong></td>
<td><strong>Objectively verifiable indicators</strong></td>
</tr>
<tr>
<td>Volume reduction of radioactive waste through providing free capacity for further operation of the Püspökszilágy repository providing free interim storage space for solid I/LLW of NPP origin, and, by doing so, producing a more stable waste form.</td>
<td>Volume reduction factor of radioactive waste is 5-7</td>
</tr>
<tr>
<td></td>
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<tr>
<td><strong>Results</strong></td>
<td><strong>Objectively verifiable indicators</strong></td>
</tr>
<tr>
<td>Compactor unit at Püspökszilágy repository set up</td>
<td>Requested instrument installed Equipment fully operational</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td><strong>Means</strong></td>
</tr>
<tr>
<td>Purchase of compactor</td>
<td>One supply contract in the value 250,000 Euro</td>
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### Annex 2

021001-020830-HU.03-PF pusposilag
Capacity building of the Püspökszilágy repository

DETAILED IMPLEMENTATION TIME CHART

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<th>Components</th>
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<th>2004</th>
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<tr>
<td>Supply</td>
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<tr>
<td>Tender</td>
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Design

- Tendering and Contracting
- Implementation
Annex 3

Capacity building of the Püspökszilágy repository

CUMULATIVE CONTRACTING AND DISBURSEMENT SCHEDULE*)

(Million Euro)

<table>
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<tbody>
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<tr>
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<td>0.20</td>
<td>0.20</td>
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</tbody>
</table>

*) Only for the Phare funded components of the project.
Annex 4

Capacity building of the Püspökszlágy repository

Reference to Feasibility/Pre-feasibility Studies

The technical specifications of the equipment supply are under preparation, and will be available by the time of starting the negotiation procedure tendering.
Annex 5

Capacity building of the Püspökszilágy repository

List of Relevant Laws and Regulations of Hungary

- Act No. CXVI. of 1996 on Atomic Energy

- Governmental Decree No. 124/1997. (VII. 18.) Korm., on radioactive materials as well as equipment generating ionising radiation, exempted from the scope of the Atomic Energy Act No. CXVI of 1996.

• Order of the Minister of Health and Social Affairs No. 7/1988 (VII. 20) SZEM regarding the enforcement of the Enacting Clause of the Council of Ministers No. 12/1980 (IV.5)MT to Act No. 1. of 1980 on Atomic Energy (its regulations on radioactive waste are still in force until the new order in preparation on radioactive waste management enters into force).

• Order of the Minister of Environment Protection No. 15/2001 (VI.6) on discharges and control of radioactive materials into air and waters during nuclear applications

• Act No. LIII. of 1995 on the general rules of protection of the environment