STANDARD SUMMARY PROJECT FICHE

1. Basic information
   1.1. Number: RO0003.02.01
   1.2. Title: Flood prevention: Suplacu de Barcau permanent accumulation
   1.3. Sector: Environment
   1.4. Location: Romania, Romania – Hungary Cross-Border region.

2. Objectives
   2.1. Wider objective
       - Improvement of the social-economic development of the area by reducing the consequences of the floods.
       - Reduction of the effects of the natural calamities for localities situated in the flood meadow of the Barcau River, avoiding losses of human life and material damages.
       - During period of low water, it will allow the localities in Suplacu de Barcau – Marghita to be supplied with the necessary water.

   2.2. Immediate objective
       - Construction of a permanent accumulation basin at Suplacu de Barcau in order to limit the effect of possible floods.

   2.3. Accession Partnership and NPAA priority

This project will enable the economical development of the previously flooded regions, and will therefore have a positive impact on the Romanian economical criteria for accession

   2.4. Cross Border Impact

As the hydrographic basin of the Barcau River is at the frontier on the territory of the two neighbouring countries Romania and Hungary, the previous floods affected the Hungarian territory as well.

Moreover, during the drought periods some problems may appear concerning the servitude water flow that must provide the minimum dilution level of the substances that come from different impure sources. Therefore, a protocol was signed as concerns the water flows and levels on the main watercourse of the Barcau River. Through the achievement of the accumulation basin, the two countries will be able to control much better that servitude water flow.

3. Description

3.1. Background and justification

On 14-16 June 1997, very important precipitation were registered (90 – 120 l/m²) on the area limited by the Tisa Valley and Marca village and Marghita town, which caused very quick
and high water flows on the middle watercourse of the river (the valleys: Borumblaca, Frumoasa, Bistra, Tisa).

The consequences of this meteorological phenomenon were the following: 12 people died in Suplacu de Barcau, 370 farms were affected out of which 33 were destroyed, 310 were flooded, 27 damaged; 3 Km railways; 3 economic units; 5,500 ha agricultural fields; more than 20 oil wells were flooded and the pollution with mineral oil products overflow from the catch pit of the oilfield Suplacu de Barcau.

The construction of the accumulation Suplacu de Barcau was foreseen in order to take over the volume of the high water flood and to improve protection against the floods. It will also assure the localities in Suplacu de Barcau – Marghita area to be supplied with the necessary water during period of low water. The minimum water flow of 130 l/s in the frontier section, established by agreement with Hungary will be respected.

3.2. Linked activities

- In 1998, thanks to PHARE Funds, works of watercourse regulation were done on the Barcau river (70,280 Euro) and its tributaries: Inot Valley (61,180 Euro), Eger (33,530 Euro), Fancica (87,420 Euro), Faneata Mare (114,540 Euro) and Bistra (60,000 Euro). The flowing of the main watercourse of the Barcau river was improved through the partial watercourse regulation of the above mentioned rivers.

- In 1997 the financing of the following project was opened through Governmental decision “Works in order to eliminate the natural calamities caused in B.H. Barcau in June 14 – 16 1997” in Bihor and Salaj judets at the value of 14,855,000 Euro with the participation of the Romanian government with 9,982,000 Euro and of the European Community trough Funds of Social Development of the European Community with 2,973,000 Euro

3.3. Results

Trough the completion of these works the following immediate effects are expected:
- Reduction of the flood consequences for the localities, the lines of communication, the social-economic facilities, the agricultural fields in the flooded meadow of the Barcau River.
- During period of low water, it will allow the localities in Suplacu de Barcau – Marghita to be supplied with the necessary water.

3.4. Activities

The complex accumulation Suplacu de Barcau will be located near the Barcau river at about 400-m upstream the national road DN 19B which connects the localities Suplacu de Barcau and Port. The accumulation Suplacu de Barcau is of second class importance (conf. STAS4273/83), which means that it is dimensioned to normal conditions of operation at a maximum flow with 1% probability of exceeding and for special conditions of operation the works are verified with the flow with 0.1% probability of exceeding + safety increase. The accumulation will have a total volume of 11.9 mil. m³.
4. Institutional Framework

- The institutions that will take part in the implementation of the project are:
  - the Ministry of Waters, Forests and Environment Protection
  - the Bihor County Council
  - the National Company of the Romanian Waters Authority (RWA)

- The following institutions will take part in the achievement of the investment project:
  S.C. AQUAPROJECT S.A. Bucuresti – General “Engineer”
  S.C. REPCON S.A. Oradea – the “Employer”

- After project completion the owner of the asset will be the Ministry of Waters, Forests and Environment Protection, the asset becomes public ownership in administration of the National Company of Romanian Waters Authority S.A. Bucuresti – Cris Waters Authority Oradea.

5. Detailed Budget

<table>
<thead>
<tr>
<th></th>
<th>Phare Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>In MEUR</td>
<td>Investment Support</td>
</tr>
<tr>
<td>Design of the accumulation basin</td>
<td>0.7</td>
</tr>
<tr>
<td>Works</td>
<td>1.8</td>
</tr>
<tr>
<td>Total</td>
<td>1.8</td>
</tr>
</tbody>
</table>

(*) From the government budget (Ministry of Waters, Forests and Environment Protection)

6. Implementation Arrangements

6.1. Implementing Agency

The project will be managed under the Decentralised Implementation System (DIS). The Implementing Agency is the Central Finance and Contracts Unit (CFCU) in the Ministry of Finance. The Implementing Authority is the National Agency for Regional Development (NARD), within which a CBC Programme Co-ordination Unit has been established (CBC PCU).

Co-financing will be provided by the Ministry of Waters, Forests and Environment Protection.

6.2. Non-standard aspect

The DIS Manual will strictly be followed.

6.3. Contracts

One investment contract of a total value of about 1,8 MEUR is expected (Phare funds).

7. Implementation Schedule
<table>
<thead>
<tr>
<th>Start of tendering</th>
<th>Start of project activities</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>September, 2000</td>
<td>January, 2001</td>
<td>December 31, 2002</td>
</tr>
</tbody>
</table>

The feasibility studies and the executing documentation have been made by S.C. ”AQUAPROIECT” S.A. Bucuresti according to the contract nr.3450/1998.

8. **Equal opportunity.**

Equal opportunity for men and women to participate in the project will be ensured.

9. **Environment Protection**

The purpose of this project is to prevent from new environmental disaster. The impact upon environment is executed by AQUAPROIECT S.A.

Funds necessary to reconstruction and rehabilitation of the natural environment are presented in the project. During the period exploitation the social impact is achieved through:

- number of people protected their frames localities, social-economic objectives
- Km lines of communication,
- increase of safety and stability in the area.
- the superior revaluation of the fields and of the acquired goods.

In general this kind of works improves considerably the hydraulics flowing conditions, creating a civilised and hygienic climate for the development of area.

10. **Rates of return**

The feasibility studies is performed by S.C. AQUAPROIECT S.A. Bucuresti.

The IRR = P*/CT* = 1.08 > 1, it results that the investment is efficient for an economic point of view.

11. **Investment criteria**

11.1. **Catalytic effect**

Phare financing in this circumstance allows a faster completion of the works strictly necessary in B.H. Barcău.

11.2. **Co-financing**

5.2 MEUR of co-financing is available for this project, which is far more than the 25% needed.

11.3. **Additionality**

Phare grants will not displace other financiers.

11.4. **Project readiness and size**
The feasibility studies of the project “Works in order to eliminate the natural calamities caused in B.H. Barcău in June 14-16, 1997” in Bihor and Sălaj judets have been prepared by S.C. AQUAPROİEKT S.A. Bucureşti. The total cost of the project is 7 MEUR.

11.5. Sustainability

When the project is completed, it will become a public property of the Ministry of Waters, Forests and Environment Protection. It will be managed by the National Company of the “Romanian Waters Authority” S.A. Bucureşti through Criş Waters Authority Oradea branch which will support financially the future maintenance and operating costs.

11.6. Compliance with state aids provisions

For this project, the DIS Manual will be strictly followed.

12. Conditionality and sequencing

In order to achieve in good conditions the subproject “Permanent Accumulation Suplacu de Barcău ” in Bihor County the following steps must be completed:

- The feasibility studies and the executing technical documentation of the subproject “Permanent Accumulation Suplacu de Barcău ” Bihor judets were finalised by S.C. AQUAPROİEKT S.A. Bucureşti through the contract Nr 3450/1998.
- The building licence was obtained by the National Company of the “Romanian Waters Authority” S.A. Bucureşti and Criş Waters Authority-Oradea Branch.
- S.C. REPÇON S.A Oradea will end the works by the end of 2001 according to the future contracts.

Annexes to Project Fiche

1. Logical framework matrix
2. Detailed implementation chart
3. Contracting and disbursement schedule by quarter
4. List of relevant laws and regulations
5. Reference to feasibility/ pre-feasibility studies
Annex 1: Logframe matrix

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>Total budget 7,000,000 Euro</td>
<td>Phare contribution 1,800,000 Euro</td>
</tr>
</tbody>
</table>

1. **Wider objectives**
The achievement of the substructures for protection against the natural calamities in B.H. Barcau. The population living in a major risky area will benefit from it. 
The recovery of the agricultural fields that are unproductive at present. 
Providing water supply to the localities and objectives in the area Suplacu de Barcau –Marghita.

2. **Immediate objectives**
The achievement of the substructures for protection against the natural calamities in B.H. Barcau. The population living in a major risky area will benefit from it. Protection against the floods on the agricultural fields
Protection of the Localities
Protection of the socio-economic objectives

## 1. Indicators of achievement

<table>
<thead>
<tr>
<th>Total damages</th>
<th>Recovered area ground</th>
<th>Lowering deficit water</th>
</tr>
</thead>
<tbody>
<tr>
<td>391,260,000,000 lei</td>
<td>5,500 ha</td>
<td>105 l/s</td>
</tr>
</tbody>
</table>

## 1. How, when and by whom indicators will be measured

- Inspections reports of auditing committee
- Monitoring and reporting progress and final conclusions
- the control is executed by Ministry of Waters, Woods and Environmental Protection and Cris Waters Authority Oradea

## 2. Indicators of achievement

<table>
<thead>
<tr>
<th>Total damages</th>
<th>Recovered area ground</th>
<th>Protected Localities</th>
<th>Protected socio-economic Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>391,260,000,000 lei</td>
<td>5,500 ha</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

## 2. How, when and by whom indicators will be measured

- Inspections reports of auditing committee
- Monitoring and reporting progress and final conclusions
- the control is executed by Ministry of Waters, Woods and Environmental Protection and Cris Waters Authority Oradea

## 1. Assumptions and Risks
- Stopping the co-financing of civil works by Ministry of Waters, Woods and Environmental Protection
- Stopping the financing of works exploitation by Cris Water Authority

## 2. Assumptions and Risks
- Stopping the co-financing of civil works by Ministry of Waters, Woods and Environmental Protection
### 3. Outputs
Through the achievement of this project the works will be operated to protect the population, the socio-economic objectives, the agricultural fields and the localities against the floods in B.H. Barcău.

### 4. Inputs
The achievement of the feasibility studies and of the executing documentation 3 months (2000.10.31). The financial opening and getting the constructing licences: (one month 2001.08.30).

The execution of the project according to the contract will be ended by the constructor-beneficiary 2001.30.08.

The reception of the works by the Ministry of Waters, Woods and Environment Protection and giving funds for the maintenance and operating costs of the works.

### 3. Indicators of achievement
- **Recovered area ground = 5,500 ha**
- Protected Localities = 6
- Protected socio-economic Objectives = 3
- Lowering deficit water = 105 l/s
- Protected people = 2000

### 3. How, when and by whom indicators will be measures
- Inspections reports of auditing committee
- Monitoring and reporting progress and final conclusions
- The control is executed by Ministry of Waters, Woods and Environmental Protection and Cris Waters Authority Oradea

### 4. Indicators of achievement
In order to achieve the project, 1,800,000 Euro is needed from PHARE with the co-financing from the Government budget of 5,200,000 Euro

### 4. How, when and by whom indicators will be measures
- Inspections reports of auditing committee
- Monitoring and reporting progress and final conclusions
- The control is executed by Ministry of Waters, Woods and Environmental Protection and Cris Waters Authority Oradea

### 3. Assumptions and Risks
Stopping the co-financing of civil works by Ministry of Waters, Woods and Environmental Protection
## Annex 2 - Detailed Implementation Schedule

**RO0003.02.01 - Flood prevention: Suplacu de Barcau permanent accumulation**

| **Construction Projects**|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Approval of tender documents |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Publication of tender Announcement |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tender Period |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tender Evaluation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Contract Negotiation and Preparation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Endorsement of Contract |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Signature of Contract |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Beginning of Works |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Period of Civil Works |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| **Supervision Services** |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Approval of tender Documents |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tender period |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tender Evaluation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Contract preparation |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Endorsement of Contract |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Signature of Contract |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Beginning of Services |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Control of Civil Works |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
Annex 3: CUMULATIVE QUARTERLY CONTRACTING AND DISBURSEMENT SCHEDULE in Euro

RO0003.02.01 - Flood prevention: Suplacu de Barcau permanent accumulation

<table>
<thead>
<tr>
<th>Expected Contractual Commitments (Quarters)</th>
<th>Budget Allocation (Phare Funds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>Permanent accumulation Suplacu de Barcãu – civil works</td>
<td>0</td>
</tr>
<tr>
<td>Total Phare Funds</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disbursement (Payment) Schedule (Quarters)</th>
<th>Budget Allocation (Phare Funds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>Permanent accumulation Suplacu de Barcãu – Civil works</td>
<td>0</td>
</tr>
<tr>
<td>Total Phare Funds</td>
<td>0</td>
</tr>
</tbody>
</table>
Annex 4 - List of relevant laws and regulations

*RO0003.02.01 - Flood prevention: Suplacu de Barcau permanent accumulation*

<table>
<thead>
<tr>
<th>Romanian Law</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legea Protectiei Mediului Nr 137 / 1995</td>
<td>Environment Protection Law Nr. 137/1995</td>
</tr>
<tr>
<td>Ordinul MAPPM Nr. 125 /1996</td>
<td>Order MAPPM Nr. 125 /1996</td>
</tr>
<tr>
<td>Ordinul MF-MAPPN Nr. 784 /34 / N /1998</td>
<td>Order MF-MAPPN Nr. 784 /34 / N /1998</td>
</tr>
<tr>
<td>STAS 4068 / 1 /1982</td>
<td></td>
</tr>
<tr>
<td>STAS 4273 / 1983</td>
<td></td>
</tr>
<tr>
<td>STAS 4068 / 2 /1987</td>
<td></td>
</tr>
</tbody>
</table>
Annex 5 – Reference to feasibility/ pre-feasibility studies

**RO0003.02.01 - Flood prevention: Suplacu de Barcau permanent accumulation**

- The feasibility studies “Works in order to eliminate the natural calamities caused in B.H. Barcău in June 14-16, 1997” was finalised by S.C. AQUAPROJECTS S.A. București through the contract Nr 3450/1998.

- The technical documentation of the project “Permanent Accumulation Suplacu de Barcău ” Bihor judets was realised by S.C. AQUAPROJECTS S.A. București through the same contract (Nr 3450/1998).

- The building licence was obtained by the National Company of the “Romanian Waters Authority” S.A. București and Criș Waters Authority-Oradea Branch.