STANDARD SUMMARY PROJECT FICHE

1. Basic Information

1.1 Désirée Number: HU0108-02

1.2 Title: Cross Border Waste-Water Canalisation

1.3 Sector: Environment

1.4 Location: Micro-region of Szentgotthárd, (villages of Csörötnek, Magyarlak, Rátót, Szakonyfalú, Alsószölnök, Rönök, Gasztony) in Hungary and the region of Jennersdorf, Austria

2. Objectives

2.1 Overall objective:
Reduction of environmental pollution in the involved bilateral border regions facilitating sustainable development as well as EU accession.

2.2 Project Purpose:
Improved groundwater quality in the micro-region of Szentgotthárd and surrounding settlements including the Austrian side of the border served by a wastewater disposal and treatment system conform to relevant EU requirements.

2.3 Accession Partnership and NPAA priority
The objectives of the project are in line with the medium-term objectives of the Accession Partnership, chapter 3.2 on balanced harmonisation of the protection of the environment. The same applies to the relation of the project to the NPAA, which covers the water protection objectives in its chapter 6.1.4.

2.4 Contribution to National Development Plan:
According to the revised PNDP (2001), based on the regional development strategies, the project reflects to one of the most important priorities of the region: Priority 4: “Development of the quality of living” measure 1 of “Our living space – Environmental Management Innovation Programme” (PNDP 2001, Chapter 5.5.6, priority 4).

2.5 Cross Border impact:
This project belongs to the priority “Sustainable Spatial and Environmental Development” defined by the Joint Programming Document (JPD) Austria-Hungary 2000-2006 for INTERREG IIIA-Phare CBC. It belongs to measure “Resource management, Technical infrastructure and renewable energy“.

After project completion, Hungarian settlements in the involved region will connect their sewage network system to the biological sewage plant of Jennersdorf, Burgenland Austria. The largest joint sewage water management programme of Western Transdanubia region and Burgenland will be realized within this project. The programme is the basis of a long term cross-border regional co-operation, which has an influence on the common development of the involved Hungarian and Austrian region.
The area affected by the project belongs to the water basin of the rivers Rába (Raab) and Lapincs (Lafnitz). This basin is the same on both sides of the border, the project will contribute to the harmonisation of wastewater treatment standards on the Hungarian side of the border with those standards already existing on the Austrian side and thereby improve the quality of the common set of groundwater.

3. **Description**

3.1 **Background and justification**

The present environmental contamination is both a constraint on economic development and a cause of deteriorating quality of life.

To raise the potential of the target areas for development and diversification into tourism and other new economic activities requires the sufficient infrastructural systems.

Common Austrian Hungarian wastewater management activities started many years ago in this micro-region. In the frame of this project the participated Hungarian settlements connect their sewage network system to the biological sewage plant of Jennersdorf, Burgenland Austria. This plant’s capacity will be more utilised and also it will provide a modern and efficient way to tackle of the waste water problems of the region. There is an agreement between the project beneficiary and the management of the Jennersdorf WWTP to receive the wastewater from the hungarian settlements. The plant has a capacity of 130,000 population equivalents and is working currently at 60%. The additional wastewater amount coming from Hungary that will be purified in Jennersdorf will be approximately 5,000 population equivalents.

The wastewater to be purified contents household origin sewage only. The daily sewage discharge of the settlements participating in the project, being not canalised up to this time is as follows:

- **Alsószőlnök** 47.6 m$^3$/day
- **Szakonyfalú** 43.9 m$^3$/day
- **Rönök** 48.4 m$^3$/day
- **Rátót** 28.0 m$^3$/day
- **Gasztency** 52.7 m$^3$/day
- **Magyarlak** 83.5 m$^3$/day
- **Csörötnök** 98.0 m$^3$/day

This area belongs to the Orség-Raab-Goricko Trilateral Naturpark and its development is based on the beneficially good quality of the flora and fauna. This environmental system is very much depending on the quality of soil and underground water basis. It is essential to improve this quality and expanding the waste water management infrastructure contributes to that.

The necessary Economic- Financial Feasibility Study and the Environmental Impacts Study were both prepared in 2000.

3.2 **Linked activities**

The region is the core region of the Trilateral Hungarian-Slovenian-Austrian Nature Park. It has been a priority to create improved environmental conditions in the Naturpark from its outset. The activities under the Phare CBC Slovenia-
Austria-Hungary Programme 1995-1996 function as synergic initiatives with the present project. The following projects were realised:

- Preparation of the Trilateral Strategic Development Programme (1995)
- Naturpark Centres Oriszentpéter and Szécsisziget (1995)
- Sewage Treatment in Örség – Phase 1 (1997)

3.3 Results

The main project results will be

- An operating waste-water disposal and treatment system with 1479 households that is 90 percent of the households in the target area connected to it. (369 households at Csörőtnek, 318 households at Magyarlak, 102 at Rátót, 118 at Szakonyfalau, 141 at Alsószölnök, 176 at Rönök, and 255 households at Gasztony)
- A cross boarder district wastewater cleaning system will be developed.
- The Austrian modern biological waste water system will provide efficient service for the Hungarian and Austrian settlements at the bank of river Raba and Lapińca.

The project area will be disburdened from 158100 m³ sewage water per year thereby the project will result in an improved quality of bilateral groundwater basis. With the introduction of the proposed biological treatment technologies, the ammoniac and phosphorous pollution of the adjacent sensitive aquifers is expected to stop.

3.4 Activities

The following activities will be implemented in the framework of the project in the villages of Csörőtnek, Magyarlak, Rátót, Szakonyfalau, Alsószölnök, Rönök and Gasztony:

- Construction of the canalization network including 60,000 m drainage line:
  - Ground work (earth work, dehydration, surfacing, transport)
  - Superstructure work (Draining pipe laying, delivery conduits, cleaning pits, road reconstruction)
- Construction of 22 pump stations and 67 local pumps:
  - Ground work (earth work)
  - Superstructure work (Constructions, locate of pumps and fittings)
  - Electrical constructions (engineering structures, device automatics, power supply)

All studies and plans for the project have been completed. The project will be carried out in the framework of one International Works tender. The Local Government of Csörőtnek will provide the tender documentation and supervision of the construction work.

4. Institutional Framework
The beneficiaries will be the members of the Szentgotthárd and its Area Micro-regional Sewage System Construction Association that is the association founded by the local governments of Csörötnek, Magyarlak, Rátót, Szakonyfalu, Alsószölnök, Rönök and Gasztony for the purposes of this investment. These municipalities will become the owner of the assets after project completion, respectively.

The Employer will be Szentgotthárd and its Area Micro-regional Sewage System Construction Association who will be the overall co-ordinator of the investment and will appoint a firm with relevant experience to act as Supervising Engineer until the start of tendering. The Association will be assisted by the Naturpark Public Interest Company, the management organisation of the Órség-Vendvidék Naturpark that has both suitable capacity and relevant experience in the management of Phare projects.

In order to guarantee that the project is adequately managed the employer will utilise the project management services of the Managing director of Naturpark Public Interest Company, Mr László Bauer (9941 Oriszentpéter, Városszer 55.; phone: 36 94 548023, fax: 36 94 548024), whose company works in the micro-region as a regional development agency. The company is owned by the municipalities of the Órseg area including the beneficiaries of this project and has been entrusted by them with preparing project applications and with the management of development projects. There is a general agreement between the beneficiaries and the project manager for the management of development projects in the area. The project manager has gathered experience in the management of Phare CBC projects among others in those listed in chapter 3.2 Linked Activities.

The participating municipalities will ensure the operation by selecting the operator with relevant experience through an open selection process until project completion. This company will operate and maintain the network. It will also collect the service charges.

5. Detailed budget (million €)

<table>
<thead>
<tr>
<th>Contracts</th>
<th>Phare Support</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment Support</td>
<td>Institution Building</td>
<td>Total Phare (=I+IB)</td>
</tr>
<tr>
<td>Works</td>
<td>2.0</td>
<td>-</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>2.0</td>
<td>-</td>
<td>2.0</td>
</tr>
</tbody>
</table>

National Co-financing will account for 69% of the total project budget and will be provided by the Szentgotthárd and its Area Micro-regional Sewage System Construction Association.

The Phare amount is binding as a maximum amount available for the project. The ratio between the Phare and national amount is also binding and has to be applied to the final contract price.

6. Implementation arrangements

6.1 Implementing Agency

The project will be implemented under the overall co-ordination and supervision of the Ministry of Agriculture and Regional Development, whose representative, Dr. Peter Szaló, Deputy Secretary of State, will be designated as PAO.
The Ministry for Agriculture and Regional Development, through its National Agency for Regional Development acting as Implementing Agency (H-1016 Budapest, Gellértg. u. 30-32), will be responsible for all aspects of tendering and contracting as well as administrative and financial matters of the implementation.

Address: Ministry for Agriculture and Regional Development
National Agency for Regional Development
1016 Budapest, Gellértg. u. 30-32.
Phone: 488-7171
Fax: 488-7188

6.2 Twinning
Not applicable.

6.3 Non-standard aspects
The Practical Guide to PHARE, ISPA & SAPARD contract procedures (PRAG) valid from January 2001 will strictly be followed.

6.4 Contracts
The project will be carried out in the framework of one single International Works tender, which will be awarded through open tendering according to the relevant PRAG rules.

The works contract will have an estimated value of 6.522 MEUR.

7. Implementation schedule

<table>
<thead>
<tr>
<th>Component</th>
<th>Start of Tendering</th>
<th>Start of Project Activity</th>
<th>Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Works</td>
<td>December 2001</td>
<td>June 2002</td>
<td>April 2003</td>
</tr>
</tbody>
</table>

8. Equal opportunity
Equal participation by women and men will be assured during project implementation and after project completion.

9. Environment
The whole project is aimed at the protection of the natural environment.
The colonies around Szentgotthárd located in the Hungarian side have unsolved wastewater-cleaning problems, which generates considerable effect on environment.
The Hungarian settlements are located in the Orség-Raab-Goricko Trilateral Naturpark (the Hungarian part is planned to become a National Park in the near future) around the river Raba which is a sensitive part of the Hungarian water resources.

As a result of this project the area will be disburdened from 158,100 m$^3$ sewage water per year.

Characteristics of the untreated inlet sewage:

<table>
<thead>
<tr>
<th>Environmental characteristics</th>
<th>unit</th>
<th>Untreated amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Chemical Oxygen Demand (COD)</td>
<td>mg/l</td>
<td>1016</td>
</tr>
<tr>
<td>2 Biological Oxygen Demand (BOD)</td>
<td>mg/l</td>
<td>475</td>
</tr>
<tr>
<td>3 ammonia N</td>
<td>mg/l</td>
<td>40.2</td>
</tr>
<tr>
<td>4 total P</td>
<td>mg/l</td>
<td>9.96</td>
</tr>
</tbody>
</table>
After the purification carried out at Jennersdorf, in Austria, the water quality will meet the EU regulations. The following runoff concentrations, runoff transports and minimal efficiencies have to be met according to the Austrian water licence:

<table>
<thead>
<tr>
<th>Runoff concentration</th>
<th>Runoff transport</th>
<th>Minimal efficiency %</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB5</td>
<td>15 mg/l</td>
<td>346.5 kg/d</td>
</tr>
<tr>
<td>CSB</td>
<td>75 mg/l</td>
<td>1732.5 kg/d</td>
</tr>
<tr>
<td>TOC</td>
<td>25 mg/l</td>
<td>577.5 kg/d</td>
</tr>
<tr>
<td>NH4-N</td>
<td>5 mg/l</td>
<td>115.5 kg/d</td>
</tr>
<tr>
<td>Total N</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>PO4-P</td>
<td>0.8 mg/l</td>
<td>18.5 kg/d</td>
</tr>
<tr>
<td>Total P</td>
<td>1.0 mg/l</td>
<td>23.1 kg/d</td>
</tr>
<tr>
<td>NMNO</td>
<td>3.5 mg/l</td>
<td>80 kg/d</td>
</tr>
<tr>
<td>NMM</td>
<td>1.8 mg/l</td>
<td>40 kg/d</td>
</tr>
<tr>
<td>M</td>
<td>1.0 mg/l</td>
<td>10 kg/d</td>
</tr>
<tr>
<td>NMOR</td>
<td>1.0 mg/l</td>
<td>15 kg/d</td>
</tr>
<tr>
<td>AOX</td>
<td>0.5 mg/l</td>
<td>2.25 kg/d</td>
</tr>
</tbody>
</table>

According to the Environmental Impact Study prepared in October 2000, the ammoniac and phosphorous pollution of the adjacent sensitive aquifers is expected to stop with the introduction of the proposed biological treatment technologies of the Jennersdorf purification plant.

The sewage produced in the households is now collected in sewage cesspools and periodically (when cesspools are full) transported to sewage depots. The currently utilised provisional sewage reservoir in Szentgotthárd-Zsirahegy will be closed by a technological process prescribed by the Hungarian legislation.

The environmental permit necessary for the construction permit of water structures was granted in January 2001 under the number 43/1/2001 by the Western Transdanubian Environmental Protection Inspectorate.

10. Rates of return

The calculation of the financial rate of return was examined for a 20 years period, the investment will break even (the NPV will turn positive) in the year 15, as detailed in the table above. The Economic rate of return will be 7%, the Financial Rate of Return will be 2%. The cost-benefit analysis underlines the necessity and the usefulness of the public support, because the indirect benefits generated by the project are relatively high, and due to the low financial rate of return, the investment could not take place financed by private resources.

The expected amount of incomes has been estimated on the basis of the expected amount of sewage (158,082 m3/year) and the charge to be paid by the end-user 1479 consumption units (3 euro/ m3 in 2003).

Indirect benefits are calculated using the economic analysis methodology applied in the ISPA programme. In case of a wastewater canalization and treatment investment indirect benefits of the project are calculated quantifying the favorable effects of the
project on its environment. It includes savings in avoiding technological investments, benefits of new employments etc. In this project the indirect benefits generated are benefits of the created new employments, benefits resulted from avoiding costs of new investments in wells, savings resulted from the decreased soil and groundwater pollution and from the lower costs of the less intensive treatment technology to be applied to produce drinking water.

11. Investment criteria

11.1 Catalytic effect
The project will mainly serve to harmonise the wastewater treatment in the area to the EU Standards. It is expected that the gradual adoption of EU standards in this area will have, in the medium term, a positive effects on business conditions and stimulate investment.

11.2 Co-financing
Co-financing totalling 69 percent of the project cost is ensured by Szentgotthárd and its Area Micro-regional Sewage System Construction Association. The Association will cover 4,290,000 EUR of the co-financing through a subsidy from the State Central Financial Support fund operated by the Ministry of Interior.

11.3 Additionality
The Phare intervention does not displace other financiers, neither from the private sector nor from IFIs.

11.4 Project readiness and size
The project complies with the minimum project size requirements. A detailed economic feasibility study, as well as a detailed environmental impact study have been prepared. The tender documentation will be ready by November 2001.

The project has got the final construction permit for water structures as detailed in Annex 9.

11.5 Sustainability
From 1985 on, the sewage system of the neighbouring city Szentgotthárd had also been connected to the Jennersdorf biological wastewater cleaning system in Austria. The cost of service has been regulated in contracts. The settlements involved in the current project will have the similar service costs to the existing system according to the feasibility study that will cover the costs of operation, maintenance and potential enlargement.

The municipalities will ensure the operation by selecting the operator with relevant experience through an open selection process by the time the project is completed. The operator shall have the relevant experience as well as shall comply with the legal and technical preconditions prescribed by the relevant Regulation of the Ministry for Transport and Water Management (No. 18/1992, VII.14.).

The operator contracted will be obliged to consult the local governments of Csörötnek, Magyarlak, Rátót, Szakonyfalú, Alsószölnök, Rönök, Gasztony as the owners of the facilities when defining the service charges that will ensure the representation of the beneficiaries' interests.

The charges will allow from the year 2003 a positive cash flow for the operator, who will collect the service charges. The operator contracted by the municipalities involved will have to agree with them on whether to
• Reinvest this profit into the enlargement and upgrading/modernisation of the system or
• Redistribute it between the local governments according to their ownership.

The support of the Ministry of Environment and the intent of co-ordination with other projects is ensured in two ways:

• The project has been approved by the Joint Co-operation Committee/Monitoring Committee of the HU-AU CBC programme by consensus, the Ministry of Environment is a voting member of this decision making body.

• The construction permit for water structures has been granted by the regional directorate of the Ministry for Environment, the Western Transdanubian Environmental Protection Inspectorate.

11.6 Compliance with state aids provisions
All actions financed will respect the competition provisions of the European Agreement.

12. Conditionality and sequencing
No conditionalities are foreseen.
ANNEXES TO PROJECT FICHE

1. Logical framework matrix in standard format

2. Detailed implementation chart

3. Contracting and disbursement schedule by quarter for full duration of programme

4. Reference to feasibility /pre-feasibility studies.

5. List of relevant Laws and Regulations

6. Reference to relevant Government Strategic plans and studies

7. Statement of the Szentgotthárd and its Area Micro-regional Sewage System Construction Association on the availability of the co-financing

8. Letter of intent of the Abwasserverband Bezirk Jennersdorf

9. Statement on permissions needed for construction
**LOGFRAME PLANNING MATRIX FOR**

**Project:** Cross Border Waste Water Canalisation

<table>
<thead>
<tr>
<th>Programme Name and Number</th>
<th>Contracting Period</th>
<th>Disbursement Period Expires</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>11/2003</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Budget:</th>
<th>Phare Budget:</th>
</tr>
</thead>
<tbody>
<tr>
<td>€ 6.522 million</td>
<td>€ 2.0 million</td>
</tr>
</tbody>
</table>

**Overall Objective**
Reduction of environmental pollution in the involved bilateral border regions facilitating sustainable development as well as EU accession

**Objectively Verifiable Indicators:**
- decreasing level of identified pollutants in wastewater samples from point sources

**Source of Verification**
Reports and statistics of the Central Statistical Office, Ministry of Environment and Ministry of Transport and Water Management

**Assumptions**
- Successful activities on other fields of environmental protection activities, including the reduction of air-, soil-, noise-, landscape pollution

**Project Purpose:**
Improved groundwater quality in the micro-region of Szentgotthárd and surrounding settlements including the austrian side of the border served by a wastewater disposal and treatment system conform to relevant EU requirements

**Objectively Verifiable Indicators:**
- 90% of households and businesses served by new waste-water treatment system
- increasing amount of wastewater going under primary and secondary treatment
- decreasing amount of unpurified waste-water

**Source of Verification**
- Measurement data
- Local government statistics
- Company registry
- Reports of relevant ministries

**Assumptions**
- Competent organisation for the management of the sewage system
- Local population can pay cost covering fees for the connection and use of the sewage system

**Results**
An operating waste-water disposal and treatment system with 90 percent of the households of the target region connected to it

**Objectively Verifiable Indicators:**
- capacity improvement for water treatment and purification system
- 60,000 m canalisation network, 22 new pump stations, 50,000 m related road reconstructions constructed
- decreasing values of BOD and COD

**Source of Verification**
Project reports

**Assumptions**
- High quality project management
- Co-finance contributions available when required

**Activities**
construction of:
- 60,000 m canalisation network
- 22 new pump stations
- 50,000 m related road reconstruction

**Means:**
€ 2.0 million of Phare support to be matched by co-finance contributions of € 4.552 million from the central and local budgets

Completion of Tender Documentation, site preparation, tendering and conclusion of one works contract

**Source of Verification**
- Project reports of the stakeholders

**Assumptions**
- Feasibility study and other preparation studies have been completed
- All required permits have been granted
- Institutional structure to implement and operate the project is in place

**Preconditions**
- Feasibility study and other preparation studies have been completed
- All required permits have been granted
- Institutional structure to implement and operate the project is in place
## Cross Border Waste Water Canalisation

### Detailed Implementation Chart

<table>
<thead>
<tr>
<th>Year</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
</table>
| Works | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | 🟥 | �preset_cutout

- **Design**
- **Tendering and contracting**
- **Contract implementation and payments**
## Cross Border Waste Water Canalisation

**Cumulative contracting and disbursement schedule (€ Million)**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Disbursement</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.4</td>
<td>0.8</td>
<td>1.2</td>
<td>1.7</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>
Cross Border Waste Water Canalisation
Reference to feasibility/pre-feasibility studies

**Title:** Feasibility Study for the Project “Cross Border Waste Water Canalizations”

Prepared: By MÉLYÉPTERV – INFRASTRUKTÚRA KFT. 9700 Szombathely, Wesselényi u. 38, August 2000

The Study has been prepared under the request of the Municipality of Szentgotthárd.
ANNEX 5

Cross Border Waste Water Canalisation
List of relevant Laws and Regulations

1? Act XXI/1996 on Regional Development and Physical Planning;
5? 75/442/EEC on waste
8? Commission Decision No. 97/662/EC on the reports on the implementation of certain prescriptions relating to waste (91/689, 94/62)
Cross Border Waste Water Canalisation
Reference to relevant Government Strategic plans and studies

- **Title:** Comprehensive waste management information system for planning regional waste management policy.

- **Government strategic plans:** The planned work is in accordance with the targets set out in the "National Environmental Program".

Cross Border Waste Water Canalisation

Statement of the Szentgotthárd and its Area Micro-regional Sewage System Construction Association on the availability of the co-financing

Letter of Commitment

Undersigned Zsolt Kocsis, Vice Mayor of Csörötnék, appointed by and representing the municipalities of the “Szentgotthárd and its Area Micro-regional Sewage System Construction Association” hereby confirm, that the Association supports the Cross-Border Waste Water Canalisation project and that the necessary co-financing of €4.522 million on behalf of the Association is available.

Zsolt Kocsis
Vice mayor of Csörötnék
The Wastewater Association „Jennersdorf Area” expresses its intention to receive and process the wastewater of Szentgotthárd and further 11 neighbouring settlements in its central purifying plant.

The plant has the required capacity to process a further amount of 78.62 m³/h wastewater.

Heiligenkreuz, 17.08.2000

OAR: Ing. Peter Gortan
Obmann des Abwasserverbandes
The Association of the Szentgotthárd Micro-region Waste Water Canalization declares, all of the required permits have been granted for the works.

The following permit has been granted:

- **In-theory Approval of Water Rights**: 11.150/6/2000
- **Construction Permit of Water Structures**: 10.100/5/2001 modified: 10.761/1/2001 (Alsószőlnök, Szakonyfalú)
- **Environmental Permit**: 43/1/2001

Csőrötnek, 11.06.2001.

Károly Bauer
President of the Association