1. Basic Information

1.1 CIRCA Number: CZ2003/005-077.02

1.2 Title
Mosty u Jablunkova – Construction of WWTP and Sewage System, Stage I

1.3 Sector
Environment

1.4 Location
Euroregion: Těšínské Slezsko
Cross-border region: Czech Republic - Poland
District: Frýdek-Místek
Municipality: Mosty u Jablunkova
Cadastral territory: Mosty u Jablunkova

2. Objectives

2.1 Overall Objective(s)
The project is in compliance with the medium-term strategy and priorities of the Joint Programming Document (JPD), Czech Republic - Poland for the Phare CBC programmes 2000 - 2006. The project meets the objectives of the Priority - Protection of Environment. The project aims at:

- Improvement of the quality of surface water feeding into border rivers and protection of cross-border watercourses.

2.2 Project Purpose
Reduced pollution of watercourses flowing to Poland
The implemented project shall reduce the pollution of the Ošetnice river. The Ošetnice river is an important tributary of the Lomná river flowing into the border river of Olšé at Jablunkov. The Olšé river then flows into the Odra river which crosses entire Poland. Immediately after the project completion there will be a reduction in water pollution of the Ošetnice and Lomná rivers. The reduced pollution of the Olšé and Odra rivers will become obvious in the mid-term horizon due to the completion of other projects in the area aimed at the Olšé river clean-up at both sides of the border. After these projects are completed (in 2008) it is expected that the water pollution in the Olšé river will be reduced approx. by 30% (the last measurements provided in 2002: BOD - 6,2 mg/I, COD - 12,8 mg/I) and of the Odra river approx. by 2% (the
last measurements provided in 2002: BOD - 8.1 mg/l, COD - 20.2 mg/l). The following table shows the reduced quantities of pollutants in the Ošetnice river.

<table>
<thead>
<tr>
<th>Unit (mg/l)</th>
<th>Before the project implementation*</th>
<th>After the project implementation**</th>
<th>Reduction in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD</td>
<td>3.2</td>
<td>2.2</td>
<td>31</td>
</tr>
<tr>
<td>COD</td>
<td>13</td>
<td>10</td>
<td>23</td>
</tr>
</tbody>
</table>

* Pollution of the Ošetnice river measured 200 m downstream of the last sewage discharge.
** Pollution of the Ošetnice river measured 200 m downstream of the discharge from the WWTP (sampling and analyses will be carried out quarterly by - Aquatis a.s., a company contracted by the owner).

Reduced Pollution of waste water

After the project implementation about 50% of households and business premises (2100 equivalent units) at Mosty u Jablunkova will be connected to the new WWTP. The quantity of pollutants in waste water will be reduced as stated in the table bellow.

<table>
<thead>
<tr>
<th>Unit (mg/l)</th>
<th>Before the project implementation*</th>
<th>After the project implementation **</th>
<th>Czech standards</th>
<th>EU standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD</td>
<td>352</td>
<td>25</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>COD</td>
<td>704</td>
<td>120</td>
<td>120</td>
<td>125</td>
</tr>
<tr>
<td>NL</td>
<td>323</td>
<td>30</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>N - total</td>
<td>65</td>
<td>15</td>
<td>-</td>
<td>15</td>
</tr>
<tr>
<td>P - total</td>
<td>15</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>

* Current pollution of waste water discharged directly into the Ošetnice river (average for three discharges of the existing sewage system).
** Values at the discharge from the WWTP (sampling and analyses will be carried out by Aquatis a.s., sampling frequency: 12 samples in the first year, 4 samples in the following years).

The project implementation will also contribute to reduction of the soil contamination in the area thus protecting the ground water (CHOPAV) in Jablunkov.

2.3 Accession Partnership and NPAA Priority

The project is in compliance with the Accession Partnership Document and the objectives of the National Programme for Adoption of Acquis related to the protection of environment. Better quality of the environment and compliance with the EU environmental standards is one of the priorities of the pre-accession period. The protection of water courses is in line with the goals of the EU integration process.

2.4 Contribution to National Development Plan

The project respects short-term and medium-term priorities of the National Development Plan aimed at the harmonisation of the economic and environmental standards in the cross-border regions with the EU countries. The Project is in compliance with regional priorities and measures set for the cross-border regional development strategy in the Joint Programming Document (JPD) Czech Republic – Poland 2000-2006 for the CBC Phare programmes.
2.5 Cross Border Impact

The implemented project will improve the quality of water in the Ošetnice, Lomná and Olše rivers located in the Odra river basin that serves as a source of potable water for the Polish population, industry and agriculture. The proposed project is one of the actions envisaged in the joint Czech-Polish Clean-up Programme for the Olše river, the objective of which is to deal with the water quality, repair of banks and elimination of old environmental burdens in the entire basin of the Olše river at both sides of the border. The proposed project has an obvious cross-border impact and its implementation will improve the Czech-Polish cooperation in the environmental clean-up of the shared water courses.

3. Description

3.1 Background and Justification

Mosty u Jablunkova is a community with 4,000 of population located close to the Moravskoslezské Beskydy mountains in the elevation of 400 - 500 m above the sea level. The town is located about 10 km from the Polish border. It is not an industrial area, however, it is very attractive for tourism and it has a great development potential in this respect. The unemployment rate is 15.5% at the moment which is by 6% more than the national average.

The community spreads on both sides of the Jablunkov pass for about 8 km. The houses are scattered on slopes along the pass. The only industry in the community is food processing and agriculture production. The community has a water pipeline and gas pipeline, but no WWTP neither an adequate sewage system.

At present some waste water and sewage is transported via a short sewage system suffering from high leakage rates and without any treatment and discharged at several points directly into the Ošetnice river or its tributaries. Remaining waste water and sewage is collected in sumps. The existing waste water management system pollutes the environment and is therefore unable to meet neither Czech nor the EU standards.

The local council intends to have all buildings in the village connected to the sewage system by 2010. This intention will be implemented in three stages. The project submitted represents the first stage that includes the construction of a new mechanical and biological WWTP with a capacity equal to 2 100 equivalent units and a construction of a separate sewage system 8 400 m long in the central part of the village, designed for 2,100 equivalent units. The industrial waste water before entering the WWTP will be pre-treated in line with Czech law and EU Directive 91/271/EEC. Stable and dry sludge will be used in agriculture. The sludge will be treated in line with Czech law and EU Directive 86/278/EEC.

In Stage II a sewage system (about 500 equivalent units) consisting of a local mechanical and biological WWTP with a capacity of 550 equivalent units and a separate sewage system 3,000 m long will be built at Šance, located in the southern part of the village. In Stage III the northern part of the village will be provided with a new sewage system 5,000 m long (about 500 equivalent units) connected to the existing sewage system in Jablunkov. The existing Jablunkov sewage system is connected to the mechanical and biological WWTP at Návsi (which belongs to the town district of Jablunkov). This WWTP has sufficient capacity (8,000 equivalent units) and the quality of treatment meets the EU requirements and standards.
Remaining waste water produced by population living in houses scattered at the outskirts of the village (about 800 equivalent units) will not be collected in a sewage system due to the high capital costs. The waste water will be collected in sumps and in line with the new Czech law on waste water management will be transported to the WWTP built in Stage I to be treated there as required by the EU standards.

After Stage I completion about 50% of waste water generated at Mosty u Jablunkova will be treated in the WWTP in compliance with the EU standards.

### 3.2 Linked Activities

A long-term objective of Mosty u Jablunkova municipality is to build and improve the infrastructure as this is an important prerequisite for economic development. The most important issue in this context is the waste water management. The table shows the activities that are directly or indirectly linked with the project proposal.

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
<th>Owner’s share of co-financing (MEUR)</th>
<th>Other sources of co-financing (MEUR)</th>
<th>Other sources of co-financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>By-pass road</td>
<td>33,000</td>
<td>6,600</td>
<td>Phare, SFDI ČR*</td>
</tr>
<tr>
<td>1997</td>
<td>Gas penetration project, Stage I</td>
<td>0,719</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>Gas penetration project, Stage II</td>
<td>0,347</td>
<td>0,260</td>
<td>SFŽP ČR**</td>
</tr>
<tr>
<td>2006</td>
<td>WWTP and sewage system, Stage II</td>
<td>0,50</td>
<td>0,70</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>WWTP and sewage system Stage III</td>
<td>1,00</td>
<td>1,40</td>
<td></td>
</tr>
</tbody>
</table>

* Transport Infrastructure Fund  
** State Environmental Fund

### 3.3 Results

The result of the project will be

- A new mechanical and biological WWTP with the capacity of 2,100 equivalent units and
- A new separate sewage system at the central part of Mosty u Jablunkova (2,100 equivalent units) about 8,400 long with about 550 access lines.

### 3.4 Activities

The implementation of the project assumes the necessary construction works and supplies of the equipment needed for the WWTP project and sewage system. The project will include the following activities:

- Construction of mechanical and biological WWTP with capacity of 2,100 equivalent units;
- Installation of the main sewer about 2,800 m long, ID DN 300, made of PVC

Phare CBC 2003, Czech Republic - Poland
- Installation of sewage pipelines in total length of 5,600 m ID DN 100 - 250, made of stoneware, PVC
- Construction of access lines in the total length of about 1,700 m ID DN 150 - 200, made of stoneware
- Construction of a pump station with a discharge line
- Five times tunnelling under road I/11
- Installation of steel sleeves in total length of 300 m, DN 600 - 800
- Excavation work
- Road resurfacing in total length of about 9,100 m
- Relaying of the existing networks
- Landscaping around the WWTP.

3.5 Lessons Learned
The project proposal takes into considerations the conclusions and recommendations of the evaluation and progress monitoring reports of EMS consortium on the previous Phare CBC Programmes and the experience of the IA Phare CBC with major infrastructural projects in the area of environmental protection implemented under the Phare CBC Programme.

4. Institutional Framework
The National Aid Co-ordinator (NAC) has an overall responsibility for programming, monitoring and implementation of the Phare programme. The National Fund (NF), managed by the National Authorising Officer (NAO), will supervise financial management of the programme and will be responsible for reporting to the European Commission.

The Ministry for Regional Development, in co-operation with the Centre for Regional Development, is the programme Implementing Agency (IA) with overall responsibility for project implementation. The NF will be transferring funds from the Phare resources to accounts managed by IA as authorised by the Financing Agreement signed between the MF/NF and IA.

The IA is managed by the Programme Authorising Officer (PAO) nominated by the Ministry for Regional Development and approved by the NAO and agreed by NAC. The PAO is responsible for all activities of the IA.

The investor is responsible for the Czech share of co-financing, for acquiring the planning consent and building permit, for preparing and launching the tender for a contractor, contract development, supervision of the works and for the final acceptance.

Investor/ beneficiary: Mosty u Jablunkova Municipality
Mosty u Jablunkova, č.p. 800
739 98 Mosty u Jablunkova

Represented by: Ing. Milan Procházka, Mayor
Phone: +420 558 368 049
fax. +420 558 967 666
e-mail: obec@mostyujablunkova.cz
5. Detailed Budget (MEUR)

<table>
<thead>
<tr>
<th>Phare Support</th>
<th>National co-financing*</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Support</td>
<td>Institution Building</td>
<td>Total Phare (=I+IB)</td>
</tr>
<tr>
<td>Works</td>
<td>1.700</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1.700</td>
<td>0</td>
</tr>
</tbody>
</table>

*The national share of co-financing will be guaranteed by the beneficiary.

6. Implementation Arrangements

6.1 Implementing Agency

The Ministry for Regional Development CR in conjunction with the Centre for Regional Development CR.

PAO: RNDr. Jiří Horáček, director, Department of EU programmes, MRD CR
Address: Staroměstské nám. 6, 110 15 Praha 1
Phone: + 420 2 2486 1398
Fax: + 420 2 2486 1415

Implementing Agency:

Director: RNDr. Ivo Ryšlavý
Address: Centre for Regional Development CR, Vinohradská 46, 120 00 Praha 2
Phone: + 420 2 21580 200
Fax: + 420 2 21580 229

6.2 Non-standard Aspects

The project will be managed in line with the methodology specified for Candidate Countries in the manual for the management of programmes supported from the EU sources – „Practical Guide to Phare, ISPA and SAPARD Contract Procedures” (PRAG).
6.3 Contracts (MEUR)

<table>
<thead>
<tr>
<th>No.</th>
<th>Type of Contracts</th>
<th>Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Works</td>
<td>Construction of the sewage system and WWTP</td>
<td>2.675</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>2.675</strong></td>
</tr>
</tbody>
</table>

7. Implementation Schedule

- Start of tendering*: 01/2004
- Start of project activity: 05/2004
- Project completion: 04/2006

* The tender dossier shall be submitted to the European Commission within four months after the signature of the Financing Memorandum at the latest.

8. Equal Opportunity

Principles and procedures applied during the project implementation will ensure equal opportunities for all participants of the project.

9. Environment

The Environmental Impact Assessment was carried out in line with the applicable Act 100/2001 Coll., on EIA and the relevant EU regulations. The Environmental Impact Assessment documentation was developed in December 2002 by a competent certified person: Ing. Michal Damek, GHE, a.s., Brandlova 6, 702 00 Ostrava, tel.: + 420 596 101 811, fax: + 420 596 126 248, e-mail: damek@ghe.cz and it is filed at the final beneficiary: Mosty u Jablunkova Municipality.

The project will contribute to improvement of the quality of environment in the border region and it is recommended for implementation. A summary of the EIA documentation is in Annex 4.

10. Rates of Return

The financial and economic rates of return of the proposed project are based on results of a Feasibility Study and the project expected service life of 23 years.

The result of the financial analysis is:

\[ \text{FRR} = 1.3\% \]

The result of the economic analysis is:

\[ \text{ERR} = 5.4\% \]

A summary of Feasibility Study results is in Annex 4.

The Feasibility Study was developed by the Economic Development Agency of Třinecko, Podnikatelské centrum, s.r.o.,Náměstí TGM 383, 739 61 Třinec, contact person Mr David Sventek. The document is filed with the investor, contact person Mr. Milan Procházka, the Mayor of Mosty u Jablůnkova.
11. Investment Criteria
The following evaluation criteria are in line with the project feasibility study outcome.

11.1 Catalytic Effect
The project is of a public nature and complies with the regional priorities. In the years to come, the action could not be implemented without support from the EU sources.

11.2 Co-financing
The co-financing share of the Czech party equals to 36.45% of the total project costs. The co-financing will be guaranteed by the investor from its own resources in the amount of MEUR 0.975. The co-financing commitment is documented by the written consent of the local council.

11.3 Additionality
The project is of a public nature and is not suitable for funding from public sources due to the low financial rate of return of the funds invested. Should the co-financing be provided from a bank loan covering 64% of the total project costs, the implemented project would not generate enough resources for the renewal after its lifetime expires.

11.4 Project Readiness and Size
The project has already received the planning consent and meets the required technical standards. Both the Feasibility Study and Environmental Impact Assessment (EIA) have been developed and the Czech share of co-financing for the project implementation has been arranged. The tender documentation including all attachments will be developed prior to the start of tendering expected in 4 month at the latest after the signature of the Financial Memorandum.

11.5 Sustainability
Results of the feasibility study proved that the proposed project is sustainable because it has a positive impact on the environment and meets all the European norms and standards and complies with the relevant EU regulations.

All operating and maintenance costs of the WWTP and sewage system will be borne by the owner and operator: Mosty u Jablunkova municipality. The costs will be fully covered by the payments for sewage charges the amount of which will allow the municipality to generate sufficient resources for the project renewal after its lifetime expires.

11.6 Compliance with State Aid Provisions
The project and the award of the Phare subsidy are in compliance with the relevant rules on state aids as defined in the European Agreement; its implementation is not going to harm the market environment or the competition rules.
11.7 Contribution to NDP

The project respects short-term and medium-term priorities of the National Development Plan aimed at the harmonisation of the economic and environmental standards in the cross-border regions with the EU countries. The Project is in compliance with regional priorities and measures set for the cross-border regional development strategy in the Joint Programming Document (JPD) Czech Republic – Poland 2000-2006 for the CBC Phare programmes.

Priority: Environment

12. Conditionality and Sequencing

The beneficiary is responsible for the development of studies and project dossiers necessary for the execution of the works and for the development of tender documentation for the selection of a contractor for the works. The investor/beneficiary must meet the commitment of project co-financing and he is responsible for the quality of the works executed including necessary arrangements in case of the activities the contractor is not qualified to execute. In course of the project implementation and operation the beneficiary will follow relevant Czech and EU laws and regulations.

After project completion the beneficiary must ensure its full operation and use and provide regular maintenance and repairs in line with international standards. The beneficiary is also responsible for the WWTP and sewage system staffing.

ANNEXES TO PROJECT FICHE

1. Logical Framework Matrix in standard format
2. Detailed Implementation Schedule
3. Contracting and Disbursement Schedule by quarters for the entire course of the Programme (including disbursement period)
4. Reference to Feasibility Study and Environmental Impact Assessment
### Phare Log frame

<table>
<thead>
<tr>
<th>13 Overall Objective</th>
<th>14 Objectively Verifiable Indicators</th>
<th>15 Sources of Verification</th>
</tr>
</thead>
</table>
| - Contribute to improvement of the quality of surface water feeding into border rivers and protection of cross-border watercourses. | - Reduction of pollution of the Odra river after implementation of the “Clean-up Programme for the Ołě river” in 2008 approx. by 2%. The recent pollution is: BOD - 8,1 mg/l, COD - 20,2 mg/l.  
- Reduction of pollution of the Ołě river in 2008 approx. by 30%. The recent pollution is: BOD - 6,2 mg/l, COD - 12,8 mg/l.  
- Reduction of pollution of the Ošťnice river before/after the project completion: BOD - 3,2/2,2 mg/l; COD - 13/10 mg/l. | - Analyses of samples taken from the Ołě and Odra rivers.  
Sampling and analyses will be carried out by a river authority: Povodí Odry a.s., Varenšká 49, 701 26 Ostrava. Sampling frequency - every three months.  
- Analyses of samples taken from the Ošťnice river: before project completion - 200 m downstream from the last sewage discharge, after project completion - 200 m from the discharge pipe from the WWTP.  
Sampling and analyses will be carried out by Aquatis a.s., Botanická 56, 656 32 Brno, a company contracted by the beneficiary. Sampling frequency - every three months. |

<table>
<thead>
<tr>
<th>9 Project Purpose</th>
<th>10 Objectively Verifiable Indicators</th>
<th>11 Sources of Verification</th>
<th>12 Assumptions</th>
</tr>
</thead>
</table>
| - Improve treatment of municipal waste water (2100 equivalent units that is about 50% of the community population) | - Indicators of municipal waste water pollution before/after the project completion: BOD - 352/25; COD - 704/120; NL - 323/30; N - 65/15; P - 15/2 | - Analyses of samples taken at the discharge from the WWTP: sampling frequency -12 samples in the first year, 4 samples in the following years.  
Sampling and analyses will be carried out by Aquatis a.s. Random checks carried out | - Stimulating price policy in favour of those connected to the sewage system  
- Systematic monitoring of compliance with the applicable Czech and EU regulations on municipal waste water carried out by the municipality  
- New/other sources of pollution in |
<table>
<thead>
<tr>
<th>5 Results</th>
<th>6 Objectively Verifiable Indicators</th>
<th>7 Sources of Verification</th>
<th>8 Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• New mechanical and biological WWTP and fully operational</td>
<td>• Technology of treatment and capacity of 2100 equivalent units</td>
<td>• Project monitoring reports</td>
<td>• Implementation of the project in line with the design and in the required quality</td>
</tr>
<tr>
<td>• New sewage system and fully operational</td>
<td>• Total length of sewage pipeline of about 8,400 m to serve 2,100 equivalent units</td>
<td>• Project Final Report</td>
<td>• Connection of at least 50% of the population to the new sewage system</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2 Activities</th>
<th>3 Means</th>
<th></th>
<th>4 Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Construction of the WWTP with the capacity of 2,100 equivalent units</td>
<td>• Project documentation</td>
<td></td>
<td>• Successful tender for contractor</td>
</tr>
<tr>
<td>• Construction of the main sewer about 2,800 m long, DN 300</td>
<td>• 1 contract for works based on detailed project documentation</td>
<td></td>
<td>• Effective co-ordination between the investor, sub-contractors and IA</td>
</tr>
<tr>
<td>• Construction of the sewage pipeline about 5,600 m long, DN 100 - 250</td>
<td></td>
<td></td>
<td>• Co-financing by the beneficiary available (0.975 MEUR)</td>
</tr>
<tr>
<td>• Construction of the access lines about 1,700 m, DN 150 - 200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Installation of the one pump station and construction of the five mini tunnelling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Excavation work, road resurfacing, relaying of the existing networks</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Implementation Time Chart

<table>
<thead>
<tr>
<th>YEAR</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tender Dossier preparation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tendering</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Implementation/Disbursement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Cumulative Quarterly Contracting and Disbursement Schedule

### Cumulative Quarterly Contracting Schedule

<table>
<thead>
<tr>
<th>Project</th>
<th>3Q/03</th>
<th>4Q/03</th>
<th>1Q/04</th>
<th>2Q/04</th>
<th>3Q/04</th>
<th>4Q/04</th>
<th>1Q/05</th>
<th>2Q/05</th>
<th>3Q/05</th>
<th>4Q/05</th>
<th>1Q/06</th>
<th>2Q/06</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mosty u Jablunkova – Construction of WWTP and Sewage System, Stage 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.700</td>
<td></td>
<td></td>
<td>1.700</td>
</tr>
</tbody>
</table>

### Cumulative Quarterly Disbursement Schedule

<table>
<thead>
<tr>
<th>Project</th>
<th>3Q/03</th>
<th>4Q/03</th>
<th>1Q/04</th>
<th>2Q/04</th>
<th>3Q/04</th>
<th>4Q/04</th>
<th>1Q/05</th>
<th>2Q/05</th>
<th>3Q/05</th>
<th>4Q/05</th>
<th>1Q/06</th>
<th>2Q/06</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mosty u Jablunkova – Construction of WWTP and Sewage System, Stage 1</td>
<td>0.170</td>
<td>0.374</td>
<td>0.578</td>
<td>0.782</td>
<td>0.969</td>
<td>1.156</td>
<td>1.326</td>
<td>1.530</td>
<td>1.700</td>
<td></td>
<td></td>
<td>1.700</td>
<td></td>
</tr>
</tbody>
</table>
Reference to Feasibility Study

The project is aimed at construction of a new mechanical and biological WWTP with the capacity of 2,100 equivalent units and construction of separate sewage system in the total length of about 8,400 m to serve about 50% of the population of Mosty u Jablunkova community. The proposed project is driven by the need to address the unsatisfactory waste water management. This project represents stage I of a larger project, the aim of which is to improve the quality of surface water in the border region.

Market Analysis

The target group is the population of Mosty u Jablunkova corresponding roughly to 2,100 equivalent units.

The availability of a sewage system in the entire town is in line with the municipal development plan and forms one of its major development priorities. The survey carried out demonstrated that the majority of households are interested in access to the sewage system at the prices foreseen for the sewage management. The results of the analysis demonstrated the project sustainability.

Organisation of Operations

After the project implementation the WWTP and the sewage system will be owned by Mosty u Jablunkova municipality who is the investor. The municipality will also take over the operation of the project and will be the service provider for waste water and sewage treatment. Two permanent members of staff will provide regular maintenance and minor repairs; major jobs will be contracted with an external company. Operating costs will be fully covered by the income from charges generated by waste water treatment. The price for sewage treatment is guaranteed by the municipality and the planned minimum price increase in next years prove the project sustainability.

Results of the Financial Analysis

The result of the financial analysis based on the period of 23 years is a value of the internal rate of return \( \text{FRR} = 1.3 \% \). The analysis demonstrated that the projected fees for the sewage treatment would generate sufficient funds to cover operating costs and sufficient funds for the project renewal after its life expires.

Results of the Economic Analysis

Results of the economic analysis are reflected in the internal rate of return, which is \( \text{ERR} = 5.4 \% \). The economic analysis takes into consideration savings for not paying the environmental fees for pollution, which the municipality would have to pay if the project were not implemented and savings achieved by creating two permanent jobs. As a result of the project implementation the efficiency of the waste water treatment will comply with the EU standards (reductions of BOD by 92.9 %, COD by 83.0 % and NL by 90.7 %). In this way the water quality in the rivers flowing to Poland will improve. The project is in line with the national and regional medium-term strategies to reduce environmental burden and risks with the aim to support sustainable development in the cross border region.

The results of the study proved that the project is feasible without any significant risks that could threaten its implementation.

Environmental Impact Assessment
Annex 4

The Environmental Impact Assessment was carried out in compliance with Act 100/2001Coll. on EIA and Directive 97/11/EC of 3rd March 1997.

It includes both the environmental impacts during the project construction and operation. Industrial waste water received by the WWTP and dry sludge will be treated and processed in line with the EU regulations. The assessment results proved that in case of adherence to the operating rules during the construction and operation the project will contribute to the better quality of the environment in the cross-border region. The project is part of the joint Czech-Polish Programme for Regeneration of the Olše river basin aimed at the improvement of the water quality in the Olše river and on the basis of the EIA performed it is recommended for implementation.