1. Basic Information

1.1 Project Number  CZ 01.12.04

1.2 Project Title  Litomerice – Sewage System in a Micro-region

1.3 Sector  Environment

1.4 Project Location

Euroregion:  Labe - Elbe
Cross-border region:  Czech Republic – Germany (Saxony)
District:  Litomerice
Municipality:  Litomerice (town), Mlékojedy, Píštany, Trnovany, Velké Žernoseky, Vchynice, Žalhostice, Krešice (villages)
Cadastral territory:  Litomerice, Pokratice, Mirejovice, Mlékojedy, Píštany, Trnovany, Velké Žernoseky, Vchynice, Lovosice, Radostice u Vchynice, Žalhostice, Treboutice, Zahorany, Nucnice a Krešice.

2. Objectives

2.1 Overall Objective(s)

The project is in compliance with the Joint Programming Document (JPD), Czech Republic – Germany medium-term strategy and priorities for the Interreg III A - Phare CBC programmes. It fits within the priority of developing the area and its environment. The project is targeted at:

- Reduction in environmental loads and risks aimed at a sustainable and environment-friendly development of border regions;
- Creation of better infrastructure conditions for economic development in the cross-border area.

2.2 Project Purpose

Reduced pollution of surface and ground waters

The project implementation will reduce pollution of the Elbe in the border area and improve conditions in the protected ground water catchment area of the North Bohemian Cretaceous System.

Reduced pollution of waste waters
During the project implementation 8 locations, amounting to 5699 equivalent units, will be connected to the WWTPs at Litomerice and Zahorany [Litomerice (town), Mlékojedy, Píštany, Trnovany, Velké Žernoseky, Vchynice, Žalhostice, Krešice (villages)].

When connecting 4504 equivalent units to the WWTP at Litomerice the following quantitative reduction in waste water pollutants will be achieved:

<table>
<thead>
<tr>
<th>Unit (mg/l)</th>
<th>Before project implementation</th>
<th>After project implementation</th>
<th>Norms CR 82/199 Coll.</th>
<th>Norms EU 91/271/EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD</td>
<td>600</td>
<td>3.17</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>COD</td>
<td>1 200</td>
<td>23.51</td>
<td>90</td>
<td>125</td>
</tr>
<tr>
<td>NL</td>
<td>550</td>
<td>2.94</td>
<td>20</td>
<td>35</td>
</tr>
<tr>
<td>N-total</td>
<td>110</td>
<td>7.48</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>P-total</td>
<td>25</td>
<td>1.88</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

When connecting 1195 equivalent units to the WWTP at Zahorany the following quantitative reduction in waste water pollutants will be achieved:

<table>
<thead>
<tr>
<th>Unit (mg/l)</th>
<th>Before project implementation</th>
<th>After project implementation</th>
<th>Norms CR 82/199 Coll.</th>
<th>Norms EU 91/271/EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD</td>
<td>600</td>
<td>3.41</td>
<td>30</td>
<td>Not specified</td>
</tr>
<tr>
<td>COD</td>
<td>1 200</td>
<td>24.87</td>
<td>120</td>
<td>Not specified</td>
</tr>
<tr>
<td>NL</td>
<td>550</td>
<td>5.63</td>
<td>30</td>
<td>Not specified</td>
</tr>
<tr>
<td>N-total</td>
<td>110</td>
<td>16.02</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
<tr>
<td>P-total</td>
<td>25</td>
<td>1.95</td>
<td>Not specified</td>
<td>Not specified</td>
</tr>
</tbody>
</table>

**Enhanced attractiveness of the border region for business and tourism**

The construction of technical infrastructure of sufficient capacity will contribute to environmental improvements and to the creation of favourable infrastructure conditions for local economic development and housing.

**2.3 Accession Partnership and NPAA Priority**

Enhanced environmental quality and partial achievement of the EU standards in the environmental sphere, together with support to economic development, are among the priority tasks of the pre-accession period.

The project is in compliance with the Accession Partnership document and the objectives of the National Programme for the Adoption of Acquis (NPAA).
2.4 Cross-border Impact of the Project

Untreated wastewater is discharged by 6 of the above mentioned municipalities directly into the Elbe and by the remaining 2 municipalities into its tributaries, and pollution is thus transmitted thus to Germany.

The project implementation will contribute significantly both to the re-vitalisation of water flows and the protection of nature and landscape. The environmental cleanup will lead to improvement of the living conditions of population on both sides of the border, and increased attractiveness of the area for tourism.

3. Description

3.1 Background and Justification

The town of Litomerice a and villages Mlékojedy, Pištany, Trnovany, Velké Žernoseky, Vchynice, Žalhostice, Krešice, are situated along the border course of the Elbe river on a territory of about 49,03 km² with the total population of 28 733. These municipalities have not yet solved, or have solved only partially, their waste water treatment. In the villages and in a part of Litomerice there are 5 699 equivalent units where water treatment is not provided. Some wastewater is channelled through rain water sewers directly into the Elbe and some is accumulated in septic-plant tanks unfit for use with 80 % leakage into the ground water. Most of the settlements in these locations are connected to water supply systems.

The current state in wastewater management is harmful to the environment and contradicts thus both the Czech legislation and the EU requirements and standards. The development of technical infrastructure, especially in the sphere of wastewater management, is among the basic pre-requisites for the economic development of the region.

The draft project is based on studies which have already been prepared and on background documents used to compare the efficiency of potential local waste water treatment plants in the municipalities to the option using free capacities in the current mechanical and biological WWTPs Litomerice and Zahorany and of the discharge system, which has already been constructed in the area of Lovosice – Litomerice. The assessment proved higher efficiency of the central WWTP at Litomerice compared to the local treatment plants.

Joint interests and high project costs have resulted in the establishment of the "Association of Municipalities for the construction of sewage in the Litomerice microregion".

3.2 Linked Activities

In respect of the technical infrastructure the project will be linked to capacities already in place in the municipalities, which are members of the Association, but also to systems constructed in the neighbouring settlements and aimed mainly at reducing pollution in the part of the Elbe close to the border. It will also use the available capacities of the current WWTPs.
3.3 Results
The project is targeted at the completion of sewage networks in the above municipalities in the Litomerice microregion connected to the current WWTP at Litomerice and Zahorany. Through the project implementation the following results will be achieved:

Litomerice - a new gravity sewage system in Žernosecká and Na Mýte streets and the Mirejovická strán town quarter connected to the existing municipal sewage system and WWTP at Litomerice (about 2251 equivalent units connected).

Mlékojedy - a new gravity sewage system in the village connected to the existing WWTP at Litomerice (about 320 equivalent units connected).

Píštany - a new gravity sewage system in the village connected to the existing WWTP at Litomerice (179 equivalent units connected).

Trnovany - a new gravity sewage system connected to the existing network and WWTP at Litomerice (about 350 equivalent units connected).

Velké Žernoseky - a new sewage system in a part of the village and modification of the existing sewage system – both connected to the WWTP at Litomerice (about 510 equivalent units connected).

Vchynice - a new municipal sewage system connected WWTP at Litomerice. (about 294 equivalent units connected)

Žalhostice - a new municipal gravity sewage system connected to the WWTP at Litomerice (about 600 equivalent units connected).

Krešice - a new depression sewage system connected to the existing WWTP at Zahorany (about 1195 equivalent units connected).

3.4 Activities
The project implementation includes completion of all the necessary construction works and supplies of technologies needed for the reduction in the surface and ground water pollution. The following activities will be implemented within the project:

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Sewers (approx. m)</th>
<th>Pump stations (pcs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Litomerice</td>
<td>5 880</td>
<td>2</td>
</tr>
<tr>
<td>Mlékojedy</td>
<td>2 113</td>
<td>6</td>
</tr>
<tr>
<td>Píštany</td>
<td>1 464</td>
<td>2</td>
</tr>
<tr>
<td>Trnovany</td>
<td>6 341</td>
<td>1</td>
</tr>
<tr>
<td>Velké Žernoseky</td>
<td>5 574</td>
<td>2</td>
</tr>
<tr>
<td>Vchynice</td>
<td>4 464</td>
<td>1</td>
</tr>
<tr>
<td>Žalhostice</td>
<td>4 385</td>
<td>4</td>
</tr>
<tr>
<td>Krešice</td>
<td>9 362</td>
<td>1</td>
</tr>
<tr>
<td><strong>Celkem</strong></td>
<td><strong>39 583 m</strong></td>
<td><strong>19 pcs</strong></td>
</tr>
</tbody>
</table>
The works will include the construction of pump stations, excavations, demolitions and reconstruction of the relevant roads, culverts, repairs of sidewalks and low-voltage service lines.

4. Institutional Framework

The National Aid Coordinator (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 cooperation with the Centre for Regional Development, is the programme Implementing Agency (IA) with the overall responsibility for the 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 contribution to co-financing, for acquiring a land-use decision and a building permit, for preparing and launching the tender for a contractor, preparing a contract, supervising the works and for the final acceptance.

Investor: Association of Municipalities for the construction of sewage in the Litomerice microregion
Mírové námestí 15/7, 412 33 Litomerice

Represented by: Mr. Jirí Landa
Mayor of Litomerice
phone: +420-416 732443
fax: +420-416 732442
E-mail j.landa@mulitom.cz

Litomerice participates in the Phare CBC 2000 project: “Gas distribution in the Elbe river basin – 1”, which will be implemented by an association of 16 municipalities and currently is at the stage of preparation of the tender dossier. The municipality will therefore gain experience from the preparation of a similar integrated project.

The investment implemented will remain in the ownership of the Association of municipalities. It will be operated by an organisation specializing in this sphere - ScVaK Teplice a.s. Engineering supervision will be executed by Investservis s.r.o. Teplice, the author of the above CBC Phare 2000 projects “Gas distribution in the Elbe river basin – 1”.

5. Detailed Budget (MEUR)

<table>
<thead>
<tr>
<th></th>
<th>Phare</th>
<th>National co-financing share</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>Construction works</td>
<td>2,000</td>
<td>0,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Total</td>
<td>2,000</td>
<td>0,000</td>
<td>2,000</td>
</tr>
</tbody>
</table>

The co-financing share of the Czech party will be covered by a contribution from the State Environmental Fund (SFŽP CR) amounting to 0,823 MEUR and from own resources of the municipalities’ own resources amounting to 0,985 MEUR.

6. Implementation Arrangements

6.1 Implementing Agency

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

PAO: RNDr. Jirí Horácek, director, Department of EU programmes, MRD CR
Address: Staromestské 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 21 580 285
Fax: + 420-2 21 580 229

6.2 Non-standard Aspects

The project will be managed using the methodology specified for Candidate Countries in the manual for the management of programmes supported from the EU sources – "Practical Guide for Phare, Ispa and SAPARD".

6.3 Contracts (MEUR)

<table>
<thead>
<tr>
<th>No.</th>
<th>Type of contract</th>
<th>Description</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Works contract</td>
<td>Construction and reconstruction of sewage networks and pump stations</td>
<td>3,808</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>3,808</td>
</tr>
</tbody>
</table>
7. Implementation Schedule

<table>
<thead>
<tr>
<th>Start of tendering:</th>
<th>09/2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start of project activities:</td>
<td>03/2003</td>
</tr>
<tr>
<td>Project completion:</td>
<td>10/2004</td>
</tr>
</tbody>
</table>

8. Equal Opportunity

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

9. Environment

The project implementation will reduce pollution in the Elbe by 752 t/year, the danger of polluting ground-waters in the protected North Bohemian Cretaceous area will be removed.

A certified expert prepared the Environmental Impact Assessment: Ing. Vilémem Žákem, Okružní 636, 271 01 Nové Strašecí. The EIA is available at the investor’s office at the address: Association of Municipalities for the construction of sewage in the Litomerice microregion, Mírové nám. 15/7, 412 33 Litomerice, tel.: +420-416 732 443 fax:+420-416 732442, e-mail: j.landa@mulitom.cz

10. Rates of Return

The economic rate of return is based on a prepared feasibility study. The period assessed was 30 years based on the depreciation period of the investment.

\[ IRR = 4.7\% \]

The feasibility study was prepared by INVESTSERVIS spol. s r.o., Stará 1202/62, 400 01 Ústí nad Labem, tel. 047/5211819, fax: 047/521 1261, e-mail: investservis.tp@seznam.cz and is available at the investor’s office: Association of Municipalities for the construction of sewage in the Litomerice microregion, Mírové nám.15/7, 412 33 Litomerice, phone:0416/732443, fax: 0416/732 442, e-mail: j.landa@mulitom.cz.

11. Investment Criteria

11.1 Catalytic Effect

The project is of 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 47.48% of the total project investment costs. This will be covered:

a) by a contribution from the State Environmental Fund (SFŽP CR) amounting to 0.823 MEUR (i.e. 21.62% of total project costs)

b) from own resources of Litomerice and other municipalities participating in the project in the amount of 0.985 MEUR (i.e. 25.86% of total project costs). The funds are guaranteed by written commitments of the municipalities on co-financing the respective activities. To ensure unified administration of the Czech funds, shares of the respective municipalities will be transferred to the investor’s account as needed.

11.3 Additionality
The project is of public nature and is not suitable for funding from private sources due to the low financial rate of return of the funds invested. Should the co-financing be provided from a bank loan, the implemented works would not generate resources sufficient for their renewal after their lifetime.

11.4 Project Readiness and Size
The project has land use permits issued for the various building structures. A building permit has been issued for the construction part Krešice and Žernosecká Street - Litomerice, for the remaining parts of the project building permits will be issued by 08/2001.

The works comply with all the required technical criteria. A feasibility study and EIA are available. The project will have its tender dossier, including all its enclosures available, and will be prepared to launch the tendering procedures after the signature of Financing Memorandum.

11.5 Sustainability
Results of the feasibility study proved that the draft project is of a sustainable nature as it meets all the European norms and standards and complies with the EU legislation in the relevant area.

The operator will cover the operational and maintenance costs.

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 National Development Plan
The project respects short-term and medium-term priorities of the National Development Plan with the aim of balancing the quality of the environment in areas bordering the EU countries. The project is in compliance with regional priorities and
measures laid down in the cross-border regional development strategy defined in the Joint Programming Document (JPD) Czech Republic – Germany for the CBC Phare programmes.

**Priority:** III – Development of the area and the environment

**Measure No.:** 1 - Reduction in environmental loads and risks with the aim of supporting sustainable, environment-friendly development in border areas

### 12. Conditionality and Sequencing

The investor is responsible for the preparation of studies and project dossiers necessary for the execution of works, and for the preparation of documents for the selection of a contractor for the works. The investor must observe its commitment of financial participation in the project and is responsible for the quality of the works executed. He must also provide for the activities the contractor is not qualified to execute.

After the completion of the project the investor shall ensure the launching of full operation of the works with a view to its use. He shall ensure regular maintenance and repairs in compliance with the international standards.

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**Annexes:**

1. Phare Log Frame
2. Implementation Time Chart
3. Commitment and disbursement schedule
4. Reference to feasibility study
## ANNEX 1

### LOGFRAME PLANNING MATRIX FOR Project

<table>
<thead>
<tr>
<th>Programme name and number</th>
<th>Phare CBC 2001</th>
<th>Czech Republic / Germany</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contracting period expires</td>
<td>Disbursement period expires</td>
<td></td>
</tr>
<tr>
<td>Total budget : 3,808 MEUR</td>
<td>Phare budget : 2,000 MEUR</td>
<td></td>
</tr>
</tbody>
</table>

### Overall objective

- Reduction of environmental loads and risks aimed at the sustainable and environment-friendly development of border regions
- Creation of better infrastructure conditions for economic development in the cross-border area

### Objectively verifiable indicators

- Environmental parameters of the area monitored
- Higher tax revenues and increased purchasing power of local residents, higher number of businesses in both communities

### Sources of Verification

- Government bodies and environment agencies at both sides of the border
- Statistic records, data of tax authorities and municipalities.
- Economic surveys

### Project purpose

- Reduced cross-border pollution of the Elbe river
- Protection of ground water resources in the Cretaceous System in North Bohemia
- Waste water management in compliance with the EU standards
- Enhanced attractiveness of the border region for business and tourism

### Objectively verifiable indicators

- Water quality of the Elbe river
- Water quality of drinking water from the Cretaceous System water resources
- Concentrations of pollutants in discharges from the WWTP will exceed neither EU nor Czech limits

### Sources of Verification

- Laboratory analyses carried out by the WWTP operator, owner and by regulators (Public Health Authority, Czech Environment Inspectorate)
- Measurements and analyses
- Amount of waste water at the inlet to the WWTP will correspond to the calculated amount
- Stable price of waste water treatment
- Stable and reasonable regional economy development
<table>
<thead>
<tr>
<th>Results</th>
<th>Objectively verifiable indicators</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Litomerice municipality – a new gravity sewage system in a town quarter connected to the existing WWTP at Litomerice (2251 equivalent units connected)</td>
<td>• 39.6 km of sewage pipeline</td>
<td>• Project Final Evaluation Report</td>
<td>• Work delivered by an experienced, reliable and well performing contractor</td>
</tr>
<tr>
<td>• Mlékojedy municipality – a new gravity sewage system in the village connected to the existing WWTP at Litomerice (320 equivalent units connected)</td>
<td>• 19 pc of pump stations</td>
<td>• As-built documentation provided as part of the project acceptance procedure</td>
<td>• Efficient co-ordination between the project funder, sub-contractors and IA</td>
</tr>
<tr>
<td>• Pištany municipality – a new gravity sewage system in the village connected to the existing WWTP at Litomerice (179 equivalent units connected)</td>
<td>• 5 699 equivalent units connected</td>
<td>• Turn-over and acceptance documents</td>
<td>• Appropriate monitoring and supervision of civil work progress</td>
</tr>
<tr>
<td>• Trnovany municipality – a new gravity sewage system connected to the existing WWTP at (350 equivalent units connected)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Velké Žernoseky municipality – a new sewage system in a part of the village and modification of the existing sewage system – both connected to the existing WWTP at Litomerice (510 equivalent units connected)</td>
<td></td>
<td></td>
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<tr>
<td>• Vchynice municipality – a new sewage system connected to the existing WWTP at Litomerice (294 equivalent units connected)</td>
<td></td>
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</tr>
</tbody>
</table>
- Žalhostice municipality – a new gravity sewage system connected to the existing WWTP at Litomerice (600 equivalent units connected)
- Krešice municipality – a new depression sewage system connected to the existing WWTP at Zahorany (1195 equivalent units connected)

<table>
<thead>
<tr>
<th>Activities</th>
<th>Means</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction work and delivery of equipment needed for the following implementation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39.6 km of sewage pipeline</td>
<td>Available funds</td>
<td></td>
</tr>
<tr>
<td>19 pc of pump stations</td>
<td>Construction resources</td>
<td></td>
</tr>
<tr>
<td>and connections of 5 699 equivalent units</td>
<td>Materials and equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Design documentation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Engineering supervision</td>
<td></td>
</tr>
</tbody>
</table>

- Existence and interest of building companies with required experience and qualified staff
- Efficient co-ordination between the project funded, sub-contractors and IA
- Smooth and timely funding

<table>
<thead>
<tr>
<th>Preconditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature of the Financial Memorandum</td>
</tr>
</tbody>
</table>
Annex 2

Implementation Time Chart

|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|

T: Tendering  
C: Contracting  
I: Implementation  
D: Disbursement
### Commitment Schedule

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Construction works</td>
<td>2,000,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2,000,000</td>
<td>0</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
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<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td>2,000,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
</tbody>
</table>

### Disbursement Schedule

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Construction works</td>
<td>2,000,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>200,000</td>
<td>410,000</td>
<td>410,000</td>
<td>380,000</td>
<td>400,000</td>
<td>200,000</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td>2,200,000</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>200,000</td>
<td>410,000</td>
<td>410,000</td>
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Annex 4

Reference to Feasibility Study

This project is aimed at the construction of a new sewage system at eight sites of Litomerice micro-region with 4,504 equivalent units connected to the existing WWTP at Litomerice and 1,195 equivalent units connected to WWTP at Zahorany. The proposed project is driven by the regional need to address inadequate waste water treatment thus reducing both surface and ground water pollution in the region situated close to the state border.

Market Analysis

The market target group is represented by 5,699 equivalent units at Litomerice micro-region.

Market analysis is based on the applicable Czech laws – Waste Management Act 125/1997 Sb. which stipulates that all waste water stored in sumps and septic tanks must be transported to WWTP for treatment and its direct discharge into the environment is strictly prohibited. The costs incurred to households due to the removal of sewage water from sumps and its transport to WWTP are almost double compared to what is normally paid if a household is connected to the public sewage system. The survey carried out in the communities involved demonstrated that about 94% households are interested in connection to the public sewage system. The analysis results demonstrated the project sustainability.

12.1.1.1.1 Organistation of Operations

After the project completion the sewage system will be turned over from the project funder - Association of Villages in Litomerice micro-region – to individual municipalities in proportion to their equity share in the project. Municipalities will lease the sewage system to Severoceské vodovody a kanalizace a.s., Teplice, a utility operating water supply and treatment facilities in the region. This arrangement will ensure a high professional level of the future operation. Operating costs will be fully covered by revenues generated from sewage treatment and therefore this does not pose any project risk.

12.1.1.1.2 Results of Financial Analysis

The result of financial analysis based on 30 years of operation is IRR = 4.7%. The analysis demonstrated that the project revenues will generate sufficient funds to cover both the operating costs and financial provisions for the necessary project renewal after the end of its life provided the price paid for sewage treatment will go up as currently planned. A certain risk could be posed by a dramatic increase of fees charged by the natural monopoly - ScVK a.s. Teplice for sewage treatment and the buy-out of land close to the petrol stations.

This is a typical public services project and therefore it is not suitable for funding by private capital because of a low rate of return on capital engaged.

12.1.1.2.1

12.1.1.2.2 Results of Economic Analysis

Waste water treatment in compliance with EU standards for 5,699 equivalent units will reduce pollutants by 508 tons annually and the pollution of the Elbe river, crossing the border to Germany, will be reduced and important ground water sources in Cretaceous System protected. The project is in line with the national and regional medium-term
strategies and it will reduce environmental loads and risks thus contributing to the sustainable regional development.

The results of the Study demonstrated the project feasibility without any significant risks which could threaten its implementation. The Project can be recommended to be included into a relevant programme supported by the EU funds.

12.1.1.1.3 Environmental Impact Assessment

Environmental Impact Assessment was carried out in compliance with Directive 97/11/EC of 3rd March 1997. It includes both environmental impacts during project construction and operation. The project construction will have no significant environmental impacts. After the project commissioning the contamination of farm land, ground water and surface water will be significantly reduced, the volume of road traffic caused by waste water transport will go down and user’s comfort of households will improve. The project will improve the quality of the environment in the border region and on the basis of performed analyses it is recommended for implementation.