1. **Basic Information**
   1.1. CRIS number: 2002/000-606.03
   1.2. Title: WWTP Zawidow & Sulikow
   1.3. Sector: Cross border Co-operation / Environment
   1.4. Location: Poland, Lower Silesia, Zgorzelec Poviat, Community of Zawidow

2. **Objectives:**
   2.1. **Wider objective**
   • Water quality improvement of the Nysa Luzycka River, which indirectly positively influence the reduction of the health risks of “Black Triangle” inhabitants, the tourism and recreation development in region, equalization of habitant’s life standards by providing access to water supply and sewer collection services at the project’s area
   2.2. **Project purpose**
   • Koci Potok River water quality improvement
   • Protection of the water intake sources for Towns of Zgorzelec, Bogatynia, Zawidów and the Sulikow and Habartice Communities, through reduction of the pollutants infiltration to the underground water reservoir.
   2.3. **Priorities (Accession Partnership and NPAA Priorities)**
   Presented project is on line with the priorities stipulated in the “Accession Partnership” (AP) and “National Program for the Adoption of Acquis” (NPAA) related to environment protection (EU no. 91/271 Directive).
   The mid-term directions for the environmental protection assume as follows: “…the environmental protection requirement have to integrate with each national sector policy through the structure development, the monitoring and controlling of water, sewage and wastes technologies implementation”.
   2.4. **Input to the Draft National Development Plan and Joint Programming Document Phare**
   CBC Poland-Germany/Interreg IIIA.
   The Project objectives are in line with the Priority C – Environment – comprised in the Joint Programming Document Lower Silesia – Sachsen PHARE CBC II/INTERREG IIIA”. The instrument C1 assumes “the reduction of the environmental hazards in order to support the long term and ecological development of the cross border area”.
   The priority activities in the environmental protection are: “activities in the sewerage and water management infrastructure that create the basics for increasing the surface and underground water quality being at the same time the stimulants for economic growth and tourist attractiveness of the border region”(…) protection of the trans-border water bearing areas (…) we should pay the special attention to the water quality of the border rivers and to the water bearing areas protection (…) the lessening of the waste water discharge should be reached by special supporting activities. The present situation is caused by unsatisfactory wastewater treatment degree in the Lower Silesia region”.
   The Project corresponds with the Draft National Development Plan and its socio-economic development axis in terms of “creating of the conditions for the persistent and sustainable development by construction and modernisation of the environmental protection infrastructure”.
   2.5. **Cross Border Impact**
   The Project has been supported by the NYSA Euroregion German Authorities in Goerlitz on the 18th of September 2001, the Czech Authorities in Liberec on the 19th of January 2001 and the Polish Authorities.
   There has been signed an agreement between Zawidow and Sulikow Communities, between Zawidow and Habartice Communities a cooperation pre-agreement has been signed.
   The Project will bring the following effects:
   • Modernisation and development of the wastewater treatment plant will improve the water quality of the border river Nysa Luzycka between Poland and Germany – Priority C JPD.
   • Sewer system construction in the border communities: Zawidow, Sulikow, and Czech Community of Habartice will improve the water quality of the Koci Potok border river between Poland and Czech Republic. That will influence the upgrading the Nysa Luzycka River to the II class of water quality.
• Protection of the water intake of the borderlands – Towns of Zgorzelec, Bogatynia, Zawidow as well as the Sulikow and Habartice Communities.
• Environmental protection of the border areas and the environmental hazards reduction on both sides of the border.
• Improvement of region’s tourist, ecological and investment attractiveness.

3. Description
3.1. Background and justification
Direct reasons for the activities are:
• Modernization and development of the existing WWTP in Zawidow in order to collect the sewage from the Zawidow, Sulikow, and Habartice Communities.
• Significant overloading of the existing plant.
• Improvement of the water/wastewater management on the Zawidow Community area and the wastewater management improvement in two neighboring communities.
• Outdated and inefficient treatment processes need modernization in order to meet the EU regulatory requirements.
• Sewerage system development without WTP modernization is irrational due to their close connection.

3.2. Activities related to the Project
• This project is an element of the complementary “Black Triangle Programme” in terms of the environmental protection as well as the element of the “Clean Nysa Programme”. There have been three wastewater treatment plants constructed within frames of those two programmes: in Piensk, Bogatynia and Jedrzychowice. The next expected step within the Nysa Luzycka cleaning programme is to develop and modernize the Wastewater Treatment Plant in Zawidow.
• The Municipality of Zawidow has been implementing the wastewater management programme for the last few years. One of the realized projects was the sanitation of the areas desired for construction. Those previous initiatives were co-financed by the Regional and National Funds for the Environmental Protection and Water Management.

3.3. Results
• Water/sewage management arrangement in the Zawidow Municipality area
• Treatment of ca. 1100 m³/d sewage to the European standards
• Connection to the water supply and sewage system 100 % of the Zawidow Community inhabitants and ca. 1000 inhabitants from the other communities to the sewage system.

3.4. Outputs
• Construction of the WWTP (buildings and equipment)
  number of citizens covered by the new WWTP: 6260
  WWTP capacity – 1100 m³/d
Pollutants Limits Emission planned for the new WWTP: pollutants indicators values in the treated wastewater emitted to the Koci Potok River from the WWTP in Zawidow (after extension and modernisation) will not exceed the limits given in Annex 2, Decree of Ministry of the Environmental Protection, Natural Resources and Forestry, dated the 5th of November 1991 on the water classification and conditions of the wastewater discharged to waters or grounds (Dz. U. 91.116.503 from 16.12.1991), including among other things:
  o total suspended solids = 50 g/m³
  o BOD₅ < 30 g/O₂/m³
  o Ammonium nitrogen = 6 g N₁₁₄/m³
  o Total nitrogen = 30 g N/m³
  o total phosphorus = 5 g P/m³
The projected pollutants limits from the new WWTP meet the EU standards according to the EU Directive 271/91.
There will be no industrial wastewater treatment in the projected WWTP
The wastewater remains (waste mud, dewatered and treated sewage sludge) will be deposited on the landfill site.
• Construction of:
- ca. 16 000 m of sewerage system
- ca. 4 600 water supply system
i) the water supply system of 6000 m. in total will be constructed. Besides the water treatment plant modernisation is planned in terms of:
ii) construction of another documented well with efficiency of 50 m³/h and fitting it with water supply system
iii) replacement of the pumps and filters; installation of the water extraction and service control facilities
iv) modernisation of the water compensation reservoir
The service will be according to the parameters mentioned in Directive 98/83. Therefore the water parameters reached “in tap” will be also consistent with the above Directive.
- ca. 1 100 drainage system
Within the frame of the Project the construction of the rainfall drainage system of 2600 m. in total is planned. After construction of the planned sewage system (within frame of the Project) the existing combined sewage system will be separated and retrained into rainfall drainage system
• WWTP conservation and operation equipment purchase
• System conservation and operation equipment purchase

3.5 Lessons learned
The Beneficiary has not realized the PHARE financed Projects or Programmes in the previous years.

4. Administrative frames:
Municipality of Zawidow is the beneficiary as well as the administrative body, responsible for the project realization. On the higher supervisory level the Marshal’s Office of the Lower Silesia Voivodship is also engaged.

The following institutions are responsible for the Project realization:
Contracting:
- Municipality of Zawidow
- Implementing Authority CBC Phare
Supervision of the project’s implementation
- Municipality of Zawidow
- IA CBC Phare
- Project Engineer
- European Commission representative
Acceptance of activities:
- Municipality of Zawidow
- IA CBC Phare
- Project Engineer
- European Commission representative
Monitoring and assessment:
- Municipality of Zawidow
- IA CBC Phare
- Project Engineer
- European Commission representative
Project realization reporting:
- Municipality of Zawidow
- Project Engineer
Project’s co-ordination:
- IA CBC Phare

The elected project Engineer would hold an independent position between the Employer and the Contractor. His duties would include project management and supervision over the implementation. The body responsible for purchasing and ordering tenders is the Municipality of Zawidow. After the project
completion the fixed assets ownership would be resumed by the Communal Utility Co. in Zawidow (PUK Sp. z o.o.). The Gmina of Zawidow holds 100% shares in the Utility Co.

5. Budget in MEUR

<table>
<thead>
<tr>
<th>PHARE CBC 2002</th>
<th>Investment</th>
<th>Institutional Backing</th>
<th>Total Phare</th>
<th>National Co-Financing</th>
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<td>2.40</td>
<td>0.80</td>
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<td>3.20</td>
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</table>

Co-financing will be available.

6. Implementation arrangements:

6.1. Implementing Agency

Implementing agency:
Phare CBC Implementing Authority
Ministry of Internal Affairs and Administration
00-522 Warsaw, 36 Krucza Street, Poland
Phone: +48 22 695 9910/11
Telefax: +48 22 695 9912/13
E-mail: Phare@wwpwp.it.pl
www.wwpwp.it.pl

PAO:
Mr Zenon Kosiniak – Kamysz
Under-secretary of State
Ministry of Internal Affairs and Administration
02-591 Warsaw, 5 Batorego Street, Poland

6.2. Twinning
Not applicable

6.3. Nonstandard aspects
This project will be managed in accordance with the principles of Phare Decentralized Implementation System (DIS) procedures and the Practical Guide to the PHARE, ISPA and SAPARD Contract Procedures.

6.4. Contracts
One contract, 3.2M€, - joint co-financing

7. Implementation schedule:

7.1. Tender announcement 1 I 2003.
7.2 Work initiation III quarter of 2003
7.3 Project completion 30 IX 2005

8. Equal Opportunity:
Neither gender preference among the workers nor any type of discrimination can be tolerated. The only valid recruitment criteria are based on work experience and professional qualification.

9. Environmental Impact
The environment impact assessment for this project has been made in February 2000 by the professor of environmental sciences Mr. Krzysztof Bartoszewski. He holds a professional license in water protection granted by the Ministry of Environmental Protection Natural Resources and Forestry.
WWTP modernization and the construction of an integrated water/sewerage system would have no negative impact to the environment considering obligatory laws and regulations. The project's impact would result in reducing the amount of pollutants being directly discharged to Koci Potok river that will limit the contamination of Witka Reservoir and the Nysa Luzycka border river. Another impact is to reduce the population's health risk exposure, due to the uncontrolled sewage discharge. The proper wastewater management would contribute to the quality of underground water reservoir, ground water and soil. The operation of modernized WTP would not have an oversize impact to the atmosphere.
10. Financial indicators
The financial and economical analysis has been done for this project. The calculated indicators are presented below:

**IRR** -5,00 %

**NPV** -1 434 EUR

**EIRR** -13,39 %

**ENPV** -2 894 191 EUR

The financial analysis has indicated the feasibility of the project.

The project's Feasibility Study was prepared by the consulting engineers –BEG Sp. z o.o. Wroclaw. All financial indicators were calculated based on FS data gathered at the performance of the market research and social cost benefit analysis.

11. Investment Criteria

11.1. Catalytic effect
The Project will be a catalytic factor for the activities consistent with all accession priorities and will arouse other activities of the integration policy:

- border regions close cooperation,
- economic and tourist exchange,
- new workplaces creation,
- improvement of hygiene and health standards

11.2. Co-financing
- PHARE funds should cover 75 % of the investment costs.
- Zawidow Municipality’s financial resources would cover 25 % of the investment. The funds come from the subsidy from the Voivodship Fund for Environmental Protection and Water Management – 0.8 MEUR (see appendix 7)

11.3 Additionality
Each of the co-financing institution allocates the investment funds with no condition related to the level of financing and participation of other potential sources. The Phare assistance is treated as supplementary source of financing to the Gmina's limited budgetary possibilities. In case of the Phare financing approval the Gmina will not revoke their funds.

11.4 Project size and readiness
- The Project is complete and ready for implementation. Each of the project's tasks is equipped with all required documentation e.g. technical design, water permit, construction permit and other permits and agreements. The environmental impact and feasibility study was prepared and the minutes are attached to this project fiche. There are signed agreements for the WTP construction in respect of extended service area - including the Gmina of Zawidow and the Gmina of Habartice. The sewer collection agreement co-signed by the Gmina of Sulikow that includes the following villages: Stary Zawidow, Wrocliszow Gorny and Skrzydlice
- The project's estimated total cost amounts to 3.2 MEUR, that size meets the programme's criteria.

11.5 Duration and sustainability
The WWTP in Zawidow as well as the water/sewer system shall be in operation for at least 30 years. The project will be sustainable, in line with the EU policy and standards. Any maintenance and operation cost shall be covered by its operating revenues.

11.6 Accordance with State Assistance Rules
So far the project promoters have not applied for any State or Phare assistance. In case of Phare approval all operation and maintenance shall be covered through the generated incomes. Any action to be taken under the project shall respect the EU rules of competitiveness and no discrimination policy. All Contractors shall be selected through a tender procedure open to the EU member states and Phare participants with no prejudice or preferences.

11.7 Participation in the Joint Programming Document CBC Phare and the Preliminary National Development Plan
The Project objectives are in line with the Priority C – Environment – comprised in the Joint Programming Document Lower Silesia – Sachsen PHARE CBC II/INTERREG IIIA”. The instrument C1 assumes “the reduction of the environmental hazards in order to support the long term and ecological development of the cross border area”.

The priority activities in the environmental protection are: “activities in the sewerage and water management infrastructure that create the basics for increasing the surface and underground water quality being at the same time the stimulants for economic growth and tourist
attractiveness of the border region”(...) protection of the trans-border water bearing areas (...) we should pay the special attention to the water quality of the border rivers and to the water bearing areas protection (...) the lessening of the waste water discharge should be reached by special supporting activities. The present situation is caused by unsatisfactory wastewater treatment degree in the Lower Silesia region”.

The Project corresponds with the Draft National Development Plan and its socio-economic development axis in terms of “creating of the conditions for the persistent and sustainable development by construction and modernisation of the environmental protection infrastructure”.

12. Conditions and Sequence:
The project is complete in terms of the required documents preparation. The Municipality of Zawidow has adopted the following schedule of events:
- personnel’s training,
- preparation of the contract documents and tender procedure announcement for the Project Engineer selection,
- the WTP, water supply and sewerage system construction contract specification,

The project milestones are presented below:
- Project’s financial closing,
- Tender announcement, selection of the contractor,
- Startup of the new WWTP and reconnection of the old plant,
- Connection of the new system servicing Zawidow Community area,
- Connection of the new system servicing the Habartice and Sulikow Community areas.

Appendices to Project Fiche
1. Logical matrix – LogFrame.
2. Implementation schedule.
3. Quarter schedule of contracts and payments for the entire project duration.
### LogFrame

#### PROTECTION OF NYSA LUZYCKA RIVER – CONSTRUCTION OF AN INTEGRATED WATER SUPPLY/SEWER COLLECTION SYSTEM INCLUDING WTP REHABILITATION SERVICING THE GMINAS OF ZAWIDOW, SULIKOW AND HABARTICE (CZECH REPUBLIC)

<table>
<thead>
<tr>
<th>Wider objective</th>
<th>Indicators of Achievement</th>
<th>Verification sources</th>
</tr>
</thead>
</table>
| Nysa Luzycka River water quality improvement | Nysa Luzycka water quality upgrading to the II purity class | How: Reports  
When: 2 years after the Project's completion  
By whom: Environmental Protection Inspectorate in Jelenia Gora |

<table>
<thead>
<tr>
<th>Immediate Objectives</th>
<th>Indicators of Achievement</th>
<th>Verification sources</th>
<th>Assumptions</th>
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</table>
| Koci Potok River water quality improvement  
Reduction of the pollutants infiltration to the underground water reservoirs. | Koci Potok water quality upgrading to the II purity class | How: direct measures of the water quality on both sides of the border  
When: just after the Project's completion  
By whom: Sanitary and Epidemiological Station in Zgorzelec, PUK Zawidow (Communal Services Co.) | Construction of the new and modernization of the old wastewater treatment plants along Nysa Luzycka River (i.a. realization of the “Red Water Programme”)  
Common monitoring system of the environmental hazards through the periodical water quality measures on both sides of the border |

<table>
<thead>
<tr>
<th>Results</th>
<th>Indicators of Achievement</th>
<th>Verification sources</th>
<th>Assumptions</th>
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</table>
| Water/sewage management arrangement in the Zawidow Municipality area  
Treatment of ca. 1100 m$^3$/d sewage to the European standards  
Connection to the water supply and sewage system 100 % of the Zawidow Community inhabitants and ca. 1000 inhabitants from the other communities to the sewage system. | Covering 100% of the inhabitants that use the water/sewage services ca. 1100 m$^3$/d of the collecting sewage removal of:  
112 Mg BODs/a  
9 Mg N/a  
1,6 Mg P/a | how: direct measures on the WWTP  
when: just after the Project’s realisation completion  
by whom: PUK Zawidow clients | elimination of the illegal sewage discharges to the Koci Potok River  
elimination of the septic tanks on the Municipality of Zawidow area |

<table>
<thead>
<tr>
<th>Activities</th>
<th>Inputs</th>
<th>Costs</th>
<th>Assumptions</th>
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**Appendix 1:** LogFrame

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<th>Project's title</th>
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<th>End Date of disbursement</th>
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<th>Phare EUR: 2.4 MEUR</th>
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</table>
Construction of the WWTP (buildings and equipment)
Construction of:
ca. 16 000 m of sewerage system
ca. 4 600 water supply system
ca. 1 100 drainage system
WWTP conservation and operation equipment purchase
System conservation and operation equipment purchase

Construction of all objects included in the Project (1 contract)

EC: MEUR 2.40
OWN: MEUR 0.8
TOTAL: MEUR 3.2

A prompt completion of the sewage system construction in Sulikow and Habartice Communities
Trainings of the WWTP maintenance staff

Preliminary conditions
The agreement between Municipality of Zawidow and Sulikow Community on modernization and development of the Wastewater Treatment Plant and collection and treatment of the sewage from the Sulikow Community area
Preliminary agreement on the common wastewater treatment signed between Municipality of Zawidow and Habartice Community (Czech Republic)

Appendix 2-3: Implementation, contracting and disbursement schedules

“PROTECTION OF NYSA LUZYCKA RIVER – CONSTRUCTION OF AN INTEGRATED WATER SUPPLY/SEWER COLLECTION SYSTEM INCLUDING WTP REHABILITATION SERVICING THE GMINAS OF ZAWIDOW, SULIKOW AND HABARTICE (CZECH REPUBLIC)”

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Legend: D = design of sub-projects / C = tendering and contracting / I = contract implementation and payment