1. General information
1.1 Project number 2002/000-606.11
1.2 Project title: WWTP Skwierzyna
1.3 Sector: Cross Border Co-operation / Environmental Protection
1.4 Location: Poland, Lubuski Province, county of Miedzyrzecz

2. Objectives
2.1 Broader/strategic objectives
- to improve environment through lowering the amounts of wastes in the border river of Odra from II class to I class (a direct improvement of water quality in the Warta river),
- to improve the living conditions in the Commune through providing the sewage system and getting rid of the existing leaking septic tanks with no waste-water outlets.
- to foster and enhance business activities in the region thanks to the improved waste-water management.
2.2 Project purpose
- modernization of the existing water and waste-water management
- improvement of water quality in the rivers of Warta and Odra.

2.3 Partnership Priorities for EU Membership and the Membership Preparation National Programme
The project objectives comply with the provisions in “Partnership for EU Membership” defined in the priorities and the indirect, medium-term objectives:
“Environmental protection requirements and the need to apply the policy of development, which would take into account the ecological demands, must be considered when defining and implementing national sector policies” (Partnership for EU membership i. 4.2).
Chapter 3.6 of the said document is related to environmental issues, Quality of Life 3.6.1 Natural environment protection in the Membership Preparation National Programme. “Environmental protection issues, which in EU countries comprise the process of transposition, implementation and execution of the ecological acquis communautaire is one of particularly difficult areas due the wide range of its impact on various economic sectors, relatively high capital consumption of particular projects as well as the increasing risks of both regional and global nature. This was reflected in the provisions of the European Treaty where both the Polish party and the European Union declared their close cooperation in fighting the constantly worsening condition of natural environment – implementing together several water protection programmes, such as: “Odra – 2006 Long-term Programme” which comprizes modernization of the Odra River Water System and “The Baltic Sea Protection Programme” - a joint project of Sweden, Germany, Finland and Poland.

2.4 Contribution to the National Plan for Development
The provision defined in the Initial (Preliminary) National Plan Development for the years 2000-2001 i.4.4 “Creating opportunities for a steady and continuous development through modernization and development of environmental protection infrastructure forms: ” Priority objectives of the process of adapting Poland comprise the activities related to the adaptation of relevant regulations, institutional activities and the investment support...”.

2.5 Cross border effect
Opening of the waste-water treatment plant in Skwierzyna will definitely result in improvement of the quality of water in the Warta river and at the same time in the joining Odra. As the result the pollution in the Odra river will get smaller, thus, the environment of the National Park “Ujscie Warty”, being of a great importance as far as maintaining the specific microclimate in this part of the Lubuski-Branderburg cross border region is concerned, will become more natural. Furthermore, the project will positively contribute to the protection of n the Nadnotecki Forest which occupies a large part of the
region, that is 65% of the area of the Skwierzyna commune, and which has a considerable impact on the microclimate of the region.

Apart from the above, the project will largely contribute to protecting the General Reservoir of Underground Water No 137 against pollution, which is located at the river mouth section of the Warta ice marginal valley directly joining the Odra river valley, and whose waters are in close and direct contact. The underground water resources in this area are our common property and their protection is in the interest of both neighbouring countries.

Summing up, the cross border effect can be formulated in the following ways:
- the project will have a positive impact on the natural environment of the cross border region,
- the project will largely contribute to the protection of the abyssal waters in the cross border region,
- the project will contribute to the protection of ground waters in the National Park “Ujście Warty”,
- the project will contribute to the improvement of the living conditions of people living on both sides of the border,
- the project will activate the economic and social life of the cross border region.

3. Description
3.1 The project suggests building a municipal waste-water treatment plant with a sewage system leading the unprocessed waste waters out from the commune of Skwierzyna, Przytoczna (Chelmsko) and Stary Dworek (commune of Bledzew). Thus, the suggested idea of building the municipal waste-water treatment plant is fully justified.

The present practise of directing the “initially-treated communal waste waters” to the receiver being the Warta river causes the increase in the concentration of the basic parameters in the water. Modernization of the sewage system and building of the municipal waste-water treatment plant will largely improve the water cleanness in the receiver.

3.2 Activities related to the project
The authorities of Skwierzyna, taking into account development of business, natural environment protection and health condition of the inhabitants in the region, have always invested their own funds in technical infrastructure. The project continues the process of modernizing and building the sewage and water supply systems in the town based on the water and waste-water management programme for the town of Skwierzyna. The following projects, being part of the above programme, have already been implemented:
- providing the sanitary sewage system in Sobieski, Runge and Marysienki Streets in Skwierzyna – 1994 and 1995,
- repairing and modernizing the combined sewage system in the Street of Jagiello in Skwierzyna – 1995
- providing sanitary sewage and rain system in Pilsudski Street (promenade) in Skwierzyna - 1996,
- providing the combined sewage system in the following Streets: Gorzowska, Parkowa, Nowa, Lakowa and Jaskółcza (I stage) in Skwierzyna – 1997 and 1998,
- sanitary sewage system in Jaskółcza Street (II stage), Zródlana and Słoneczna in Skwierzyna – 1999,
- sanitary sewage system in Jana XXIII Street (I stage) in Skwierzyna – 1999.

Within the framework of the waste and waste-water management programme it is planned to provide in the nearest future:
- sewage system to the streets of Hetmanska, Fredry, Teatralna, Nowowiejskiego, Kardynala Wyszyńskiego, Kolbego, Jana XXIII (II stage),
- the municipal waste-water treatment plant in Skwierzyna.

The activities which focus on the protection of the water in the river Warta and at the same time in the General Underground Water Reservoir can be exemplified with the projects that have been implemented with the contribution of Phare funds such as waste-water treatment plants in Sulecin, Kostrzyn, Witnica, Slonsk and the plant in Gorzów Wlkp. as well as the new project of a waste-water treatment plant in the commune of Krzeszyce the implementation of which has currently been approved of.

The Commune of Skwierzyna has never used any funds granted under Phare Programme.
3.3 Project results
- Waste-waters will flow to the waste-water treatment plant where they will be treated in order to reach the parameters required by the Directive No 91/271/EWG concerning treatment of municipal/communal wastes,
- The project will contribute to the protection of the General Underground Water Reservoir because it will stop the inflow of the waste waters into the area it occupies.
- The project of Municipal Wastewater Treatment Plant with the sewage system in the Town of Skwierzyna, including also elements financed from Polish funds shall function in accordance with the provisions of Council Directive No 91/271. Moreover, there is not planned agricultural using of post-industrial wastewater and any remainders after the process of wastewater treatment as well as a pre-treatment of industrial wastewater is not planned.

3.4 Phare aids for the commune of Skwierzyna related to the building of the MUNICIPAL WASTEWATER TREATMENT PLANT AND THE SEWAGE SYSTEM in the town of SKWIERZYNA will play the role of a factor accelerating the construction works in accordance with the priorities of joining the EU. The above project will have a positive impact on both health protection as well as on the natural environment through minimising the waste waters which are specifically hazardous to the environment.

4. Institutional framework

INSTITUTIONAL FRAMEWORK WITHIN WHICH THE PROJECT WILL FUNCTION
- Commune of Skwierzyna _ Mayor of the town and the commune
- The Municipal and Communal Office of Skwierzyna, 1 Rynek Street, 66-440 Skwierzyna, Tel. (095) 7216-510, fax (095)7216-539
  SKWIERZYNA@SUKURS.COM.PL
  - There will be no limits nor restrictions concerning the implementation of the project under analysis.
  - The project results will not cause any changes within the institutional framework.
  - The project is not a twin-project
  - Contract engineer will be appointed through tendering.

Beneficiary:
Commune of Skwierzyna – Mayor of the town and the commune
- Arkadiusz Piotrowski, MA
- Municipal Office of Skwierzyna
  Rynek 1 Street, 66-440 Skwierzyna
  Tel. (0prefix 95) 7216 – 510, fax. (0prefix 95) 7216-539

Contact persons:
Miroslaw Galik, MSc. – tel. (0prefix 95) 7216-536
Agnieszka Jamrowska, MSc. – tel. (0prefix 95) 7216-535
SKWIERZYNA@SUKURS.COM.PL

5. Budget

<table>
<thead>
<tr>
<th>PHARE CBC 2002 funds</th>
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<td>TOTAL</td>
</tr>
</tbody>
</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
6.2 Twin project – does not apply
6.3 Any non-standard procedures – the project will strictly adhere to Decentralised Implementation Standards (DIS) as well as “Practical Guide to Phare contracting procedures ISPA and SAPARD”.
6.4 Contracts – one contract, 2.7M€, - joint co-financing.

7. Implementation schedule (chart)
7.1 Start of tendering procedures – inviting bids for the building of the waste-water treatment plant and the sewage system in the town of Skwierzyna – I quarter of 2003
7.2 Start of the project operation – works related to the project – III quarter of 2003
7.3 Project completion – IV quarter 2005.

8. Equal opportunity
The main criterion in evaluating and selecting workers will be their relevant professional qualifications and skills. Both women and men will have equal opportunities, regardless of race and religion.

9. Environmental impact
The environmental analysis impact made in 1999 and kept by the Beneficiary, namely the Town and Communal Office of Skwierzyna, accompanies the technological and building project entitled “WASTE-WATER TREATMENT PLANT AND THE SEWAGE SYSTEM IN THE TOWN OF SKWIERZYNA”. After the project has been implemented it will be found out that the water quality in the reservoir, the level of air pollution, ground waters and natural environment have significantly improved. The project will also have a positive impact on the landscape and noise emission and the natural conditions of the environment will not be interfered with.

A relevant feasibility study in relation to the project of waste-water treatment plant building has not been necessary to be worked out.

10. Rates of return
Net present value and internal rate of return (economic internal rate of return EIRR and financial rate of return FIRR)
The methods which take into account time factor, the so called discount rates were applied in evaluating the financial efficiency of the project “Building of the waste-water treatment plant and the sewage system in the town of Skwierzyna”.
There were two basic efficiency measures applied in the discount method: net present value – NPV and internal rate of return - IRR (both economic EIRR and financial FIRR).
The net present value – NPV and the internal rate of return – IRR, both economic and financial, were calculated on the grounds of the annual discount rate of 10%.
Economic internal rate of return (EIRR) amounts to 14%.
The net present value (NPV) for the project under analysis amounts to 151 546,66 PLN, whereas the financial internal rate of return (FIRR) is 10%.

The net present value NPV fixed for the project speaks for its profitability and means that the discount revenues exceed largely the project expenses and finally that during the whole period of its operation the project will bring the flow of revenues ensuring:
- recovery of initial investments,
- revenues at the expected level
and guaranteeing the safety margin in a form of the revenues “surplus”.

The economic internal rate of return (EIRR) which amounts to 14% and the financial internal rate of return (FIRR) of 10% informs that the maximum percentage the project may pay for the application and use of funds, in case all the funds necessary for the project implementation came from a loan, in
order to recover the invested capital and the operational expenses incurred during the whole time of the project operating is 10%.

The value of the determined NPV and IRR (EIRR and FIRR) ensures that the project can be thoroughly approved of.

A relevant feasibility study in relation to the project of waste-water treatment plant building has not been necessary to be worked out because the whole project has been approved of on the grounds of the environmental impact assessment and the above economic rates of return.

11. Investment criteria

11.1 Catalytic effect – Phare funds will have a catalytic effect on the project in accordance with the priorities of joining the EU countries. The above project will definitely contribute to the improvement of water quality in the rivers of Warta and Obra owing to the decrease of wastes which are specifically hazardous to natural environment.

11.2 Co-financing – the funds appropriated for the project will come from the commune budget in the amount of 25% - the Budget of the Commune of Skwierzyna.

11.3 Additionality – Phare aids will be a supporting as well as an accelerating factor in the project implementation and will not eliminate contribution of the other financial institutions, such as the contribution from the private sector.

11.4 Readiness for implementation

The project is ready to be implemented straight away. The following analyses have been made: the technical analysis, the water and waste-water study, building documentation and the permit for the project implementation (building) has been granted.

11.5 Durability – the accepted technology complies with the international standards defined in the EU Directive no 91/271 concerning municipal waste-water treatment plants. The expected period of time of the project operation – 40 years. The costs of operation and maintenance will be borne by the communal water and waste-water management company.

11.6 Compliance with the rules of the government support – the project will follow the regulations of the Association Agreement made between the Republic of Poland, European communities and EU member countries. According to art. 80 of the above Agreement the commune will develop and strengthen cooperation in the efforts to improve constantly deteriorating natural environment, and it will especially focus its activities on eliminating waste waters on the regional and cross border level.

11.7 Contribution to the National Plan for Development and the Mutual Programme Document (Treaty) – the project will ensure a constant and steady economic growth necessary to improve the natural environment of the region. Staying in harmony with EU standards as well as meeting the requirements concerning quality of waste-water treatment and water and soil protection will be a significant element of the policy of coherence in the years 2002-2005 implemented as an element of the above National Initial Plan for Development.

12. Conditionality and sequencing

There are no conditions for the suggested project – building of the MUNICIPAL WASTE-WATER TREATMENT PLANT AND THE SEWAGE SYSTEM IN THE TOWN OF SKWIERZYNA.

Implementation stages: 1) Building permit 2) Start of tendering 3) Construction works 4) Acceptance of work and the start-up 5) Reaching the parameters of the treated wastes that meet the parameters defined in the technological project for the waste-water treatment plant.

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 (including disbursement period)
<table>
<thead>
<tr>
<th>Overall objective</th>
<th>Objectively Verifiable Indicators</th>
<th>Sources of Verification</th>
<th>Assumptions and risks</th>
</tr>
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<tbody>
<tr>
<td><strong>Strategic goals:</strong></td>
<td>- decreasing the amount of wastes in the Odra through lowering the number of wastes flowing into the receiver: BZT-96%, nitrogen max. To 77%, phosphorus max. To 93% (the average of 4 tests per year)</td>
<td>- national reports on natural environment, - statistic data concerning natural environment and health, - monitoring reports, - results of specialist analyses and testing.</td>
<td>- decrease in the involvement of the Government in environmental issues, - changes in the national legislature and policy and the relevant changes in the regulations of EU concerning water management sector.</td>
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<tr>
<td><strong>Indicators:</strong></td>
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<td><strong>Assumptions and risks:</strong></td>
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<table>
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<tr>
<th>Project purpose</th>
<th>Objectively Verifiable Indicators</th>
<th>Sources of Verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>- modernization of the existing water and waste-water management</td>
<td>- increasing the number of people using the central system and lowering the number of complaints, - compliance of the treated wastes quality with the EU standards (average 4 tests a year), - improvement of economic standing of companies dealing in water and sewage management, - compliance with the contract Documents including the work plan and the implementation schedule, - test results and the equipment take-over.</td>
<td>- contract documents, - reports from the Supervising Engineer, - reports from the local authorities in charge of environmental protection and health concerning quality of the treated water, - reports from the Town and Commune Council.</td>
<td>- delays in contract procedures, - differences in the project organisation, coordination and management</td>
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<tr>
<td><strong>Sources of Verification:</strong></td>
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<table>
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<th>Results</th>
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<th>Sources of Verification</th>
<th>Assumptions</th>
</tr>
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<tbody>
<tr>
<td>Waste-water treatment plant for the town and commune of Skwierzyna with the possibility of collecting wastes from the neighbouring communes.</td>
<td>Number and qualifications of the employed workers—10</td>
<td>- project documentation, - technical project, - minutes from meetings, reports and the documents filed by the contractor, supervising authority and the Town Council.</td>
<td>- delays in contract procedures, - differences in the project organisation, coordination and management</td>
</tr>
<tr>
<td>Activities</td>
<td>Means</td>
<td>Expenses</td>
<td>Assumptions</td>
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<tr>
<td>-building of the drainage area (collecting) elements and preliminary treatment elements (intermediate pumping station, collector, storage reservoir, grates) -building and buying treating equipment (reactor, blowers, pumping stations and the excessive sediment tanks, PIX stations, air filters) -construction of buildings, squares, roads, network and land improvement facilities (embankments).</td>
<td>1building contract: MUNICIPAL WASTE-WATER TREATMENT PLANT AND THE SEWAGE SYSTEM</td>
<td>PHARE CBC 2002 - 2,00 million EUR Recipient's own funds - 0,70 million EUR</td>
<td>-changes among the suggested workers, -all the sources are available on time</td>
</tr>
</tbody>
</table>

Preconditions

-approval of the water and waste-water concept in the resolution passed by the Town Council on Jan.29,1997 No XXIII/259/97
-approval of the Strategy for development of the town and commune of Skwierzyna in the resolution passed by the Town Council on 29.06.1999r.,VIII/74/99

Anex 2-3: Implementation, contracting and disbursement schedules)

<table>
<thead>
<tr>
<th>Date of Drafting</th>
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Captions: D = design of sub-projects / C = tendering and contracting / I = contract implementation and payment