1. Basic Information
   1.1. Project Number: PL01.08.12
   1.2. Title: Cross border protection of underground water resources in Police community.
   1.3. Sector: environment
   1.4. Location: the Republic of Poland, West Pomerania Province, Police Community bordering directly on the Federal Republic of Germany.

2. Objectives
   2.1. Wider/Strategic Objective
   Improved living standards of the residents on both sides of the border.

   2.2. Immediate Objectives
   Improved cleanness of underground and superficial waters which are the assets shared by the communities on both sides of the border – according to art.5 clause 1 letter “c” of the European Commission Decree No 2760/98 of 18 December 1998 about implementation of cross border cooperation programme within the framework of Phare programme.

   2.3. Priority of Accession Partnership (AP) and National Program of Administrative Adaptation (NPAA)
   The project is consistent with one of the key accession priorities defined in Accession Partnership, namely development of activities in the area of environmental protection, in particular adaptation of standards to be applied to air and water pollution and waste management to the European Union requirements.
   Development of programs and creation of favourable conditions for introduction of the European Union water quality improvement law (22.2 - NPAA)

   2.4. Contribution to National Development Plan and Joint Programme Document (JPD)
   Establishment of efficient waste management and sewage and water management system.
   Establishment of a water and sewage management system on a local and regional scale (section 2.6.3. of the West Pomerania Province Development Strategy).
   Activities aimed at improvement of water quality in inland and coastal reservoirs as specified in JPD – Joint Programme Document 2000 to 2006 – Joint Partial Program of Poland-Germany Borderland in federal lands of Mecklenburg-Vorpommern/ Brandenburg and West Pomerania Province - Interreg IIIA/Phare CBC Program – 5.3.2.3. priority C 1.1.1.1.1.12. Environment, C – 2 group of projects.
   Sustainable development principles in the area of environmental protection included into conception and implementation of all other sector policies.
   Creation of favourable conditions for sustainable development through modernisation and development of the environmental protection infrastructure.

   2.5. Cross Border Impact
   Protection of underground and superficial waters shared by Polish and German communities. According to international agreements the German party have carried out similar scope of activities.
   Participation of partners: Landkreis Uecker - Randow and Stadt Pasewalk to the following extent: providing opinions about technical aspects of the projects in terms of their compliance with the European Union regulations, counselling in project financing in the implementation period, management optimisation.
   Please find enclosed letters from the mayor of Stadt Pasewalk and the head of Landkreis Uecker – Randow administration.

   The project is strictly related to the JPD priority: environment.

3. Description
   3.1 Background and Justification
   In 1998 efforts made by the Community authorities led to completed modernisation of Police sewage treatment plant in its part located on the premises of “Police” Chemical Plant. The goal of the project was to receive and treat municipal sewage in the facility. An intercepting sewer was build, connecting the municipal sewerage system with the sewage treatment plant for the total amount of 1.10 MPLN. The planned construction of sanitary sewerage system in the community is a continuation of the sewage
treatment plant modernisation process and sewerage system development. The entire project is worth 10.20 MEUR. But due to complexity of the entire task and given the need to take decisive actions to protect underground waters it was decided to divide the whole task into stages. Hence, the next stage anticipates implementation of the tasks which will have a direct effect on achieved improvement of the underground water protection against pollution. The task worth at this stage is 4.87 MEUR and this is an autonomous project from a technical point of view. The remaining part of the project will be implemented in the following years.

3.2. Linked Activities
In recent years the PHARE CBC Programme financed, under projects number PL 9701.02.01.03 and PL 9913.2.2., investments related to protection of „Swidwie – Gottesheide” International Bird Sanctuary ecosystem shared with the adjacent Dobra Community.

3.3. Results
Project implementation will have a direct impact on reduction of environmental pollution and substantial improvement of sanitary standards of over 8,000 residents of the community, and will prevent the hazard of polluted underground waters shared by the communities on both sides of the border.

3.4 Outputs
The project output will be construction of sanitary gravitational/pressure sewerage system 28 km long along with necessary infrastructure (pumping stations with power supply), connection of 5 locations, including a part of the Police town (“Old Police”) to the sewerage system.

3.5 Inputs
The key input necessary for launching the project implementation is provision of funds totalling 4.87 MEUR, including: EC input – 2.0 MEUR and Police Community input – 2.87 MEUR. All the procedures necessary for the project commencement and completion are being successfully followed. The planned wider and immediate objectives – given the absence of any risks – should be achieved without any problems.

One construction work contract is anticipated for the total amount of 4.87 MEUR.

4. Institutional Framework
4.1. The mover and investor is the Town and Community Office of Police.
4.2. The infrastructure to be built within the framework of the project will be managed by Water Supply and Sewerage Enterprise, Ltd. (owned in 100 % by the Police Community).
4.3. Project outputs will not cause any changes in the existing institutional structure, but they may lead to increased employment within the structure.
4.4. (a) „Engineer“ will be appointed through a public tender procedure.
(b) „Employer“ will be the Town and Community Office of Police.
(c) The property will be owned by the Police Community (public ownership).

5. Detailed Budget (M€)

<table>
<thead>
<tr>
<th>PHARE CBC 2001 financing</th>
<th>Investment</th>
<th>IB</th>
<th>Total PHARE</th>
<th>National cofinancing</th>
<th>IFIs</th>
<th>TOTAL</th>
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<td>Contract</td>
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</table>

National cofinancing was determined at 2.87 MEUR. It is assumed that work related to construction of sewerage system sections and connections to buildings, and investment service will remain to be financed by the community. National cofinancing will be provided by Community Budget, Provincial Environmental Protection and Water Management Fund and National Environmental Protection and Water Management Fund.

6. Implementation Arrangements
6.1 Implementing Agency: The Implementing Authority for Phare Cross Border Co-operation Programme
Krucza 36 Street; 00-522 Warsaw
e-mail: Phare@wwpwp.it.pl
6.2 Twinning Project
Not applicable

6.3 Non-standard Aspects
Practical Guide procedures will be strictly followed in the course of project implementation

6.4 Contracts
It is expected that there will be 1 contract for works related to construction of sanitary gravitational/pressure sewerage system 28 km long along with necessary infrastructure (pumping stations with power supply) and connection of 5 locations to the sewerage system, and construction of individual building connections plus investment service totalling 4.87 MEUR.

7. Implementation Schedule
7.1 Start of Tendering Procedure
Tender specifications will be finalised by the 1st half of 2002.

7.2 Start of Project Activity
Planned date of contract implementation commencement – 2nd half of 2002.

7.3 Project Completion
Planned date of the last payment under the contract – the end of 2nd half of 2004.

8. Equal Opportunities
Since valid Polish laws and general regulations will be abided by, the project will be accessible for women and men on equal terms.
Women participation in the discussed project will be measured on the basis of results of statistic research conducted in the project impact area.

9. Environmental Impact
Initial project environmental impact analysis has already been made. Due to its character the project will have a positive impact on the environmental status. The most important positive environmental effect of the project is protection of underground waters shared by the communities on both sides of the border.

10. Rates of Return
Financial rate of return FIRR is 2.51 %.
Internal economic rate of return ERR is 25.10 %.
Net present value (rate of 8 %) NPV is 2,991,000 EUR
Economic analysis and feasibility study was produced in October 2000.

11. Investment Criteria
11.1 Catalytic Effect
Project implementation will lead to substantial acceleration of the community eco-development strategy implementation. It will contribute to improvement of the water/sewage management technical status as a basis for business expansion and improvement of social conditions in the community. It will speed up introduction of the EU law and standards applying to task implementation by public service entities.

11.2 Cofinancing
The PHARE assistance funds will attract necessary financing for implementation of the auxiliary infrastructure. Applications for cofinancing have been submitted to Provincial Environmental Protection and Water Management Fund and National Environmental Protection and Water Management Fund.

11.3 Additionality
Grants from the Phare Programme do not exclude contributions from other financing parties, especially the private sector.

11.4 Project readiness and size
The project is ready for the contract – technical designs have been produced, positive construction permit decisions have been obtained, and economic/technical analyses have been made.
Total project cost is 4.87 MEUR including PHARE grants amounting to 2.00 MEUR. Thus the investment meets the minimum requirements concerning the project size.
11.5 Sustainability
The life of the project exceeds 30 years and meets the EU norms and standards. The project does not
have an adverse impact on the environment and is autonomous. The operation and maintenance costs
will be financed from water and sewage charges and guaranteed by the Community Budget.

11.6 Compliance with state aid provisions
The facility will remain the property of the Police Community.
Public expenditures will be incurred according to valid law and relevant procedures established in this
area.

11.7 Contribution to National Development Plan and Joint Programme Document
Establishment of efficient waste management and sewage and water management system.
Establishment of a water and sewage management system on a local and regional scale (section 2.6.3.
of the West Pomerania Province Development Strategy).
Activities aimed at improvement of water quality in inland and coastal reservoirs as specified in JPD –
Joint Programme Document 2000 to 2006 – Joint Partial Program of Poland-Germany Borderland in
federal lands of Mecklemburg-Vorpommern/ Brandenburg and West Pomerania Province - Interreg
IIIA/Phare CBC Program – 5.3.2.3. priority C 1.1.1.1.1.12. Environment, C – 2 group of projects.

12. Conditionality and sequencing of key activities:
Decisions by Police Municipality
Preparation of tendering documentation and selection of the best bids.
Construction of sanitary pressure/gravitational sewerage system, construction of pumping station (total
of 28 km).
Connection of 5 locations to the intercepting sewer (including „Old Police“)
Completed project acceptance by the Town and Community Office of Police
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<th>Annex 1: LogFrame</th>
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<td>Phare EUR: 2,000,000</td>
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<td>Wider objective</td>
<td>Indicators of Achievement</td>
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<td>Improved living standards of residents on both sides of the border</td>
<td>Raised living standards of the residents</td>
<td>Social research (questionnaires) 5 years after completion of project implementation</td>
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<td>Reduced epidemiological threat to about 41,000 people</td>
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</tr>
<tr>
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<td>The target of reaching good quality of underground waters</td>
<td></td>
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<tr>
<td></td>
<td>Reduced contamination of the Zalew Szczecinski basin and the border Odra river</td>
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</tr>
<tr>
<td>Immediate Objectives</td>
<td>Indicators of Achievement</td>
<td>Sources of information</td>
</tr>
<tr>
<td>Improved cleanliness of underground waters which are assets shared by the communities on both sides of the border.</td>
<td>Treated sewage quality consistent with European Union and domestic standards</td>
<td>Data from National (Provincial) Environmental Protection Institute + monitoring</td>
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<td>Increased number of households benefiting from sewerage system (8,000 residents)</td>
<td>Data from Central and Provincial Office of Statistics</td>
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<td>The area of investment grounds</td>
<td>Sewage treatment plant laboratory</td>
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<tr>
<td>Results/Outputs</td>
<td>Indicators of Achievement</td>
<td>Sources of information</td>
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<tr>
<td>Construction of sanitary sewerage system 28 km long. Construction of individual building connections.</td>
<td>1. Number of people using the network</td>
<td>Work acceptance protocol by Police Town and Community Office</td>
</tr>
<tr>
<td></td>
<td>2. Achieved ecological impact - lowered water environment pollution ratios in the community</td>
<td>Post-execution geodesic stock-taking and decision about permission to put the system into operation</td>
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<tr>
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<td>3. Compatibility with Contract Documents, including action plan and implementation schedule</td>
<td>Proper operation of the sanitary sewerage system and sewage treatment plant.</td>
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<tr>
<td>Activities</td>
<td>Indicators of Achievement</td>
<td>Sources of information</td>
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<td>Construction of sanitary gravitational/pressure sewerage system</td>
<td>Costs:</td>
<td>Implementation of the material project scope on the basis of construction work contract, as documented in construction work daily register</td>
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<td>Construction of pumping station and power supply infrastructure</td>
<td>PHARE: 2.00 MEUR</td>
<td>Technical acceptances</td>
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<td>Own funds: 2.87 MEUR</td>
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##Annex 2-4: Implementation, contracting and disbursement schedules (M€)

**CROSS BORDER PROTECTION OF UNDERGROUND WATER RESOURCES IN POLICE COMMUNITY**

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###Contracting schedule
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###Disbursement schedule
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**Legend:** D = design of sub-projects / C = tendering and contracting / I = contract implementation and payment
Appendix 5

Summarised results of financial/economic analysis made for the project called “Cross Border Protection of Underground Water Resources in Police Community”
(a complete analysis produced by a team headed by Prof. Dr Krzysztof Chwesiuk, Reader is available at the Mover’s premises).

A widely used World Bank methodology called UNIDO method was applied to make a financial analysis of the discussed project economic effectiveness. Key benefits of the project implementation, apart from obvious effects consisting in actions aimed at potable water intake protection, cross border co-operation in the area of underground water cleanliness improvement, implementation of arrangements concerning water quality improvement contained in JPD – Interreg IIIA/Phare CBC Programme – 5.2.2.4./IV-2 and considerable impact of the project on region and community strategy implementation, result from increased community attractiveness to tourists, elimination of water pollution hazard and increased attractiveness of land in the community. All that, in financial terms, generates higher revenues from real property (land) sales and development of catering and accommodation infrastructure resulting from increased number of tourist visits.

Apart from calculating traditional project effectiveness evaluation parameters (NPV, IRR, B/C Ratio, Tz), the same calculations were made taking into consideration also external benefits for the local community residents (e.g. revenues from tourism development). Sensitivity of financial internal rate of return (FIRR) and economic rate of return (ERR) to changes in effect flows, operating costs and capital expenditures was analysed, as well. The analysis shows the following economic profile of the project:

1) There is no chance to recover capital expenditures from financial receipts related directly to the facility operation, since the facility is a typical public one. It is proved by financial internal rate of return calculated at the level ($FIRR = 2.51\%$), net present value ($NPV = 2,991$ thousand EUR at the discount rate of 8%), and a short period of return calculated for non-discounted expenditure and effect flows (the period is almost 7 years).

2) High economic effectiveness achieved taking into consideration the aggregate social and economic effect. The economic rate of return, calculated taking the economic effects as a whole, was $ERR = 25.10\%$), the net present value $NPV = 2,991$ thousand EUR (at the discount rate of 8%) and the period of return calculated for non-discounted expenditure and effect flows was almost 7 years.

Taking into consideration conservative calculation of direct and indirect benefits, the community’s experience in construction and operation of environmental protection infrastructure facilities, availability of appropriate managerial staff and, as a result, lack of significant risk factors, it should be said that the project demonstrates a high level of financial, organisational and technical credibility.

Since the project implementation is beneficial for residents of communities located on both sides of the border and the project economic effectiveness is satisfactory, the project – in economic, technical and organisational terms – should be recommended for implementation.

Appendix No 6

Abstract from environmental impact assessment produced for conception of cross border underground resources protection in Police Community by Jaroslaw Zienko, Ministry of Environmental Protection, Natural Resources and Forestry expert in production of environmental impact assessments.

ENVIRONMENTAL IMPACT ASSESSMENT PRODUCED FOR CONCEPTION OF CROSS BORDER UNDERGROUND RESOURCES PROTECTION IN POLICE COMMUNITY

1. The project implementation will help improve the quality of underground waters which are the assets shared by the communities on both sides of the border. Immediate objective consists in protection of soil and water environment against pollution, including protection of water intakes in Pilichowo and Przesocin used by Szczecin urban agglomeration.

2. Provisions of the local low acts, namely local general spatial development plan for Police Community, do not exclude introduction of a water/sewage management system in Police Community. Introduction and operation of the water/sewage management system in Police Community does not violate arrangements contained in decisions made by local, central and special governmental administration or arrangements contained in local law acts.
3. Hydrographic system of the analysed area will not be deformed by operation of the water/sewage management system in Police Community. Chemical mechanism of superficial waters which receive the treated sewage from the water/sewage management system in Police Community will not be deformed. The sewage treatment will improve and the amount of sewage dumped in many locations directly to melioration ditches or soil/water environment will decrease. Introduction of the water/sewage management system in Police Community is possible provided that out-of-control dumping into soil/water environment and superficial waters is ensured.

4. It is expected that the construction process will take about 3 years. It is expected that civil engineering works done at the stage of introducing the water/sewage management system in Police Community will not have any effect on atmospheric air, but have some effect on soil/water environment. The water/sewage management system can be introduced in Police Community provided that the most effective technical and technological solutions are applied in the area of soil/water environment protection.

5. The size of physical and chemical contaminant flow introduced by the water/sewage management system in Police Community into the environment will bring about a significant drop in contamination ratios in the analysed area and in housing areas. Environmental hygiene will improve radically. Noise levels generated by the water/sewage management system to be operated in Police Community will not aggravate the sound climate in the location area. During implementation process the environmental burden will increase periodically. It is impossible to reduce the noise levels generated by this source. Therefore it is necessary to limit the activities to the daytime i.e. 6:00 a.m. to 10:00 p.m. The above-standard noise will not reach housing areas. In terms of atmospheric air protection, no above-standard impact should be expected outside the boundaries of the water/sewage management system in Police Community provided that the system is introduced and operated according to the adopted technical and technological solutions.

6. In the context of the project location specificity it can be said that there are no conflicts between geomorphological, morphological, anthropogenic, hydrological, geological, hydrogeological and natural elements. There will be no significant increase in pressure on the aforementioned environmental elements. The planned water/sewage management system in Police Community does not interfere with mineral resource deposit areas or areas covered by special forms of environmental protection.

7. The water/sewage management system in Police Community will not contribute to increased traffic volume in the area of the location.

8. It results from the analysis of the planned water/sewage management system in Police Community that admissible standard concentrations will not be exceeded provided that the technological and technical assumptions presented in the environmental impact assessment are met. The aforementioned conclusions will be credible if the water/sewage management system in Police Community is executed and operated according to the technological and technical assumptions and recommendations analysed in this environmental impact assessment. Any deviation from the assumptions made requires verification.

9. The investor should be obliged to:
   - Ensure that the technological and technical design is consistent with the legal regulations in force. The design and technology shall be subject to environmental impact assessment. It is related to the fact that the project, in its part concerning sewage treatment plant, can aggravate the condition of the environment.

   **suggested boundaries of the above-standard impact area**

   1. In terms of atmospheric air protection, no above-standard impact should be expected outside the boundaries of the planned water/sewage management system in Police Community provided that the system is built and operated according to the conception adopted.
   2. The range of above-standard noise will not reach housing areas.
   3. In terms of soil/water environment protection, the impact expected in the course of appropriate operation should not reach beyond the boundaries of the area specified by valid standards for facilities of this type.