1. Basic Information
1.1. Désirée Number: PL0008.04.04
1.2. Title: Podkarpacie – Environmental protection in Rzeszow
1.3. Sector: Environment
1.4. Location: Podkarpackie Voivodship, Poland.

2. Objectives
2.1. Wider objective:
The wider objective of the project is developing the metropolitan functions of the capital city in the area of environmental protection.

2.2. Immediate objectives:
• Increase in environment protection regime in the tributary area of Wislok;
• establishing coherent sewage treatment and water networks for the entire Rzeszów area;
• providing the basic public infrastructure to create favourable conditions for setting up new businesses;

2.3. Accession Partnership and NPAA Priority:
The project responds to the medium term priority identified in the AP: developing national policy for economic and social cohesion and preparing for the implementation of regional development programmes as well as Community Initiatives. It corresponds also with the NPAA priority “Regional and cohesion policy”.

2.4. Contribution to the Preliminary National Development Plan
Environmental infrastructure is both a contributor to economic activity and a factor ensuring quality of life in the region. Therefore one of the priorities for the country’s cohesion policy identified in the Preliminary NDP is “Creation of conditions for balanced and sustainable development of environmental infrastructure”. One of the proposed measures under the priority is “Development and modernisation of infrastructure serving to strengthen competitiveness of the regions”. The instruments employed will include enlargement and modernisation of technical infrastructure in voivodship capitals in order to increase their role as centres of regional, national and European significance and enable them to participate in cultural and economic exchange with cities of the EU. The project is therefore in line with both the Preliminary NDP and the operational programme for Podkarpackie Voivodship, which identifies “Development of metropolitan functions of voivodship’s capital city” as one of its priorities.

3. Description
3.1 Background and justification
The Podkarpackie Voivodship Outline of Operational Programme has identified the development of the regional capital as an important element of the overall strategy for achieving regional cohesion targets in the long term. Development of a regional centre, capable of competing with other areas for investments, human resources and other growth stimulating resources, is seen as an important pre-condition for attaining development which will lead to the eventual bridging of the existing disparities with other Polish regions, and in the long term with the regions of the EU. This development is necessary in order to attract investors and develop new businesses, create jobs and diversify the economic base of the region and also ensuring that such growth does upgrade the levels and standards of environment protection. Since available resources are limited, it has been decided to concentrate on a priority project with direct impact on the quality of a key element of the natural environment in its relationship to economic development: the regional water resources, and indirectly influencing the business development potential of the area. It should be emphasised that, in the integrated approach developed under the operational programme, this project is related to the goals of the other future projects in the region, especially developing the endogenous potential of the Podkarpackie Voivodship. This project will develop the infrastructure for environmental protection in a large area concentrating on the Rzeszów agglomeration and will include the protection of the source of potable water for the Rzeszów metropolitan area and the protection of the Main Reservoir of the Underground Waters (Debica - Stalowa Wola - Rzeszów). Thanks to linking the construction of the sanitary collectors to the existing sewage network, it will be possible in the future to extend the network to other adjacent cities and villages. The sewage-treatment facility built in 1998 with the capacity of 75,000 m³/day is capable of treating the sewage from the entire metropolitan area. The sewage system of the Rzeszów area has been systematically improved since 1996. The project implementation constitutes the final stage of the programme which is to be finished in 2002. 35 M€ has been spent for the project implementation.

3.2. Linked activities:
A number of infrastructure projects have been carried out within the borders of Podkarpackie voivodship under the previous PHARE programmes. These included:
• PL9207 STRUDER – 50 projects, totalling 7.5 mln EUR, of which 3.5 mln EUR from Phare,
• PL9509 RAPID – 30 projects, totalling 6 mln EUR, of which 2.3 mln EUR from Phare,
• PL9609 STRUDER 2 – 8 projects, totalling 1.5 mln EUR, of which 0.58 mln EUR from Phare,
• PL 9706 INRED – 49 projects, totalling 15.4 mln EUR, of which 4.1 mln EUR from Phare.

“Regional development in Mazury and Podkarpacie regions” under Phare 99, starting this year, will finance investment projects in the voivodship.

In the area of regional development, the Podkarpackie voivodship is a beneficiary of INRED programme (PL9706) and Special Preparatory Program for Structural Funds (PL9808) under the action “Elaboration of an Objective-1 type Operational Programme for Rzeszów”.

3.3. Results:
As a result of the project:
• the disproportion between the higher level of accessibility to waterworks and lower level of accessibility to the sewage system will be eliminated;
• all sewage in the Rzeszów area will be removed and treated;
• conditions for the locations of new businesses (access to sewage system) as well as the competitive position of already existing companies (approx. 650), will improve;
• approximately 3000 employment opportunities in businesses located in the newly developed areas will be created;
• conditions for tourism development will be improved;
• the source of potable water for the Rzeszów area will be under protection;
• 53 thousand inhabitants and existing businesses in the area will gain access to the newly constructed sewers system;
• additional 6.850 m³ of sewage per day will be treated and therefore approximately: 28 tons of phosphorus a year, 90 tons nitrogen a year, 662 tons of BOD a year, 1.323 tons COD a year and 709 tons of suspension a year will be removed.
• the amount of infiltrating water (seepage water) will be reduced by approx. 8 000 m³ per year;
• the treated sewage will be congruent with the standards of the following EU directives: Urban Waste Water Treatment Directive No. 91/271/EEC; Dangerous Substances Directive No 76/464/EEC; Ground Water Directive No 80/68/EEC; Directive on Surface for Drinking Water Abstraction 75/440/EEC.

Approximately 290 hectares of land will be developed as locations for new businesses. In accordance with local planning and current initiatives the following enterprises will be located in the area of the project:
• in the area of the Krasne gmina: the Centre of Commerce and Exhibitions (30 hectares) and the Radio Station "Radio VIA”.
• in the area of the Swilcza gmina: the Centre of Commerce and Exhibitions - 12 hectares (serving the purpose of promoting the industry and the region, located in the most industrialised part of the gmina)
• in the area of the Głogów gmina: the centre of training and education for the Department of Tourism and Recreation of the University of Management and Information in Rzeszów (30 hectares, the technical documents are being processed); the recreational buildings in the area of the reservoir in Rudna Mala (20 hectares); two car service stations (Ford, Hyundai - 4 hectares); gas station; developing the windows factory "Widok" and the wood processing plant; the Centre of Commerce and Exhibitions (15 hectares)
• in the area of the Tyczyn gmina: developing the recreational terrain (50 hectares) "on the Strug river" and on the hills of £any Tyczynskie; making the necessary preparations for erecting one-family (detached) houses - 150 building lots.
• in the area of the Boguchwala gmina: the technical and service centre of TP S.A. (the road transportation base and the centre of instruction and recreation for the employees)

The following institutions in Rzeszów (the most industrialised area) will gain access to the newly constructed sanitary gutter system: the Communication Equipment Plant, the medical clinic of the Communication Equipment Plant, the complex of Technical Schools, offices located in Techniczna St., Podkarpacka St. and Hetmanska St., the buildings of the Rzeszów Institute of Technology (Department of Constructive Arts, Department of the Engineering of the Environment, Department of Marketing and Management), university campus (2200 students), two restaurants, the representative of "Shell Polska", the supermarket, the stadium and buildings of sport club "Stal Rzeszów", Mechanical School of the Communication Equipment Plant, the complex of Mechanical Schools, the High School, the military garrison, the Police Headquarters, the medical clinic;

3.4. Activities:
The following activities are to be carried out during the project implementation:
• The construction of 63 km of the sewage system, the construction of 15 sewage pumping stations, a drainage station and the modernisation of the sewage treatment plant;

• Building of the sewer in ul. Hetmanska in Rzeszów (Osiedle Grota Roweckiego); The sewer in ul. Jazowa in Rzeszów (Osiedle Drabinianka); The sewage collector in ul. Strazacka and ul. Graniczna (Osiedle Drabinianka); The sewage system in the Boguchwala gmina; The sewage system in the Swilcza gmina; The sewage system in the Głogów Malopolski gmina; The sewage system in the Krasne gmina; The sewage system in the Tyczyn gmina.

• Enlargement of the sewage treatment plant in Nowa Wies.

• Expansion of the sewage treatment plant output from 780m³/day to 1800 m³/day.

• Activated sludge chamber - 2777m³ capacity

• Coagulation station – slab + coagulant dosing stations - 12 m³

• Over-flow construction - 7,4 m³

• Outflow construction of the capacity of 2,88 m³

All project activities will be implemented with the use of the project impact assessment guidelines developed for the Phare 2000 Economic and Social Cohesion Programme by the Implementing Agency. These will include comparative benchmarking analyses of beneficiaries and non-beneficiaries, in order to gather statistically significant data for future programming exercises.

4. Institutional framework
The following bodies, members of The Municipal Union Wislok (Zwiazek Komunalny “Wislok”) are to be owners of the assets after project’s completion: The Rzeszów Municipality; The Głogów Malopolski Municipality; The authorities of the Swilcza gmina; The authorities of the Krasne gmina; The Tyczyn Municipality; The authorities of the Trzebownisko gmina; The authorities of the Boguchwala gmina. Municipal Union “Wislok” consists of 24 gminas associated in order to act in common in the field of environment protection. It is a self-government unit and legal person acting according to Article No 64 of the Law on Gmina Self-government registered under 108 No on 17 February 1994 in the register of the Council of Ministers. The activities of the Union are based on the regulations applicable to the gmina self-government. The Municipal Union Wislok will act as the Employer according to FIDIC rules. A clear distinction will be made between the Employer and the Engineer, the latter to be contracted on the basis of the competitive procedure.

5. Detailed Budget:

<table>
<thead>
<tr>
<th></th>
<th>Investment Support</th>
<th>Institution Building</th>
<th>Total Phare (=I+IB)</th>
<th>National Cofinancing</th>
<th>IFI</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment Protection Infrastructure Development Project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is estimated that an amount of 273.000 euro from the Polish co-financing will be assigned for administrative costs of the project including costs of tender documentation and costs of contract with independent Engineer.

6. Implementation arrangements

6.1. Implementing Agency
PAO: Undersecretary of State at the Ministry of Regional Development Implementing Agency: Polish Agency for Regional Development

6.2. Twinning: n.a.


6.4. Contracts: One contract of 2,2 M€ is foreseen for the project.

7. Implementation schedule:

7.1. Start of tendering/call for proposals: March 2001
TORs/project specifications will be ready by November 2000.

7.2. Start of project activity: September 2001

7.3 Project Completion: September 2003

8. Equal opportunity:
Procedures used in project implementation will be based on the Polish law ensuring equal opportunity for all interested entities and physical persons irrespective of their sex, race and nationality. Participation of men and
women in employment will be based on applied standards of the European Community concerning EOE (Equal Opportunity of Employment), which will be assured in the official advertisement in press at the recruitment of employees.

9. Environment:
An Environment Impact Assessment was prepared in March 2000. The draft analyses show that after the project’s completion the capacity of the sewage treatment system will be increased by 6.850 m³. It will enable to reduce the emission of the toxic substances to the environment by 28 tons of phosphorus a year, 90 tons nitrogen a year, 662 tons of BOD a year, 1.323 tons COD a year and 709 tons of suspension a year. Additionally, the amount of infiltrating water will be reduced by approx. 8000 m³ per year.
The project tasks are directly related to environmental protection. Its implementation will improve the quality of soil, surface and underground water.

10. Rates of return:
Feasibility Study was prepared in March 2000. and is available at Municipal Union “Wislok”. The project implementation has been preceded by the calculations of basic profitability rates (NPV and IRR). These are as follows: NPV = 58 000 EUR calculated for 7% discount rate for the period of 25 years; IRR = 6.8 %.
Such profitability rates are the consequence of the adopted sewage disposal fees at their minimum values, yet they allow for sustainable, long-term operation of the project.

11. Investment criteria:
11.1. Catalytic effect
Phare support will be conducive to achieving economic and social cohesion goals in the Podkarpackie Voivodship, which otherwise could be attained only after a much more extended period of time and on a more modest and less efficient scale.

11.2. Cofinancing
The project is co-financed by the Polish partners. The funds of PHARE 2000 Programme will constitute one of the several sources of project financing. The participation of each of the co-funding institutions is not dependent on the financial participation of other institutions. Phare financial aid does not eliminate other sources of financing, but it constitutes the factor which accelerates the completion of the project. Apart from Phare funding (EUR 2.2 m), the project will be financed by local authorities (EUR 2.623 m).

11.3 Additionality
The Phare project is not displacing other financing sources, especially from the private sector and IFI system, it is co-financing identified priorities and not taking the place of national resources.

11.4. Project readiness and Size
The project is ready for contracting and disbursement, as the planned activities will meet all conditions for co-financing by the start of project implementation. All investment tasks are fully prepared for their implementation. Technical specification has been developed and all necessary construction permits have been granted. All legal issues and agreements have been completed.

11.5. Sustainability
The project will contribute to the long term sustainable development of the region, as described in the Podkarpackie Voivodship Operational Programme. The facilities constructed as the result of the project implementation will be compliant with EU standards as described in IV.3 and will be in use for a period of over 20 years. Operational costs will be covered by the investors - the beneficiaries of Phare aid. By submitting the present project, the local authorities of all participating gminas declare that they will cover all operational and maintenance costs of the facilities constructed as the result of the project implementation.

11.6. Compliance with state aids provisions
All aspects of the project will be developed with respect to the compliance with state aids provisions of the Europe Agreement.

11.7. Contribution to National Development Plan
The project is in line with the Preliminary NDP and wil as such contribute to increase of economic and social cohesion of the region.

12. Conditionality and sequencing:
Co-funding of specific activities will be conditional on:
- co-financing of project by the beneficiary;
- maintaining timetable set in the programme;
### Annex 1: LOGFRAME PLANNING MATRIX FOR PROJECT

<table>
<thead>
<tr>
<th><strong>Wider Objective</strong></th>
<th><strong>Indicators of Achievement</strong></th>
<th><strong>Sources of Information</strong></th>
<th><strong>Assumptions and Risks</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of the conditions for achieving economic and social cohesion of the Podkarpackie Voivodship through developing metropolitan functions of the capital city in the area of environmental protection.</td>
<td>the level of GDP and GDP per capita in the region moving towards the national average.</td>
<td>experts reports. statistical data on the level of economic development in the region.</td>
<td>continuing growth in the national economy. continuing process of the integration with the European Union. ongoing financing of the project from the Polish side.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Immediate Objectives</strong></th>
<th><strong>Indicators of Achievement</strong></th>
<th><strong>Sources of Information</strong></th>
<th><strong>Assumptions and Risks</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in environment protection regime in the tributary area of the Wislok; establishing coherent sewage treatment and water networks for entire Rzeszów area; providing the basic public infrastructure to create favourable conditions for setting up new businesses; increase in the investment in the region.</td>
<td>Numbers of EU directive standards met by regional facilities. Number of new facilities constructed. Volume of investments in area covered by the facilities.</td>
<td>regional level statistics reports prepared by experts monitoring data gathered under project.</td>
<td>all contracting, reporting and monitoring conditions are met. co-financing of project by the beneficiary; maintaining timetable set in the programme;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Results of Project</strong></th>
<th><strong>Indicators of Achievement</strong></th>
<th><strong>Sources of Information</strong></th>
<th><strong>Assumptions and Risks</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>additional quantity of sewage will be treated and therefore substantial amount of toxic substances (phosphorus, nitrogen, BOD, COD) and suspension a year removed. the treated sewage will be congruent with the standards presented in a decree of the Minister of Environmental Protection dated 5th Nov 1991, i.e. BZT5: 15 mg O₂/l, general suspension: 25 mg/l, general nitrogen: 30 mg N/l, general phosphorus: 1 mg P/l, which is congruent with the European Union's directive No. 271. conditions for tourism development and agriculture will be improved the source of potable water for the Rzeszów area will be under protection the amount of infiltrating water (seepage water) will be reduced inhabitants and existing businesses in the area will gain access to the newly constructed sewers system conditions for the locations of new businesses (access to sewage system) as well as the competitive position of already existing companies (approx. 650), will improve employment opportunities in businesses located in the newly developed areas will be created.</td>
<td>number of people and businesses having access to the sewers systems the amount of infiltrating water the amount of toxic substances and suspension compared to standards number and value of new investments number of new jobs created number of farms dealing with non-agricultural activities.</td>
<td>statistical data experts reports.</td>
<td>changes in the policy towards the environment protection the growth in the local economy.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Inputs</strong></th>
<th><strong>Construction works</strong></th>
</tr>
</thead>
</table>

04.04 Podkarpacie – Environmental protection in Rzeszow / 5
### Annex 2: Cumulative implementation, contracting and disbursement schedule

Podkarpacie – Environment protection Rzeszow

<table>
<thead>
<tr>
<th>Date of drafting</th>
<th>Planning period</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.03.2000</td>
<td>01-2001 - 12.2003</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation</td>
<td>D</td>
<td>D</td>
<td>C/I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>Contracting</td>
<td>2.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disbursement</td>
<td>0.33</td>
<td>0.88</td>
<td>1.43</td>
<td>1.98</td>
<td>2.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Budget allocation cost estimate Phare: 2.2
Annex 3 - Feasibility Study summary
Feasibility Study was prepared in March 2000 and is available at Municipal Union “Wislok”. Two variants were taken into consideration, of which the one presuming sewage collection into two sewage treatment plants (in Rzeszów i Nowa Wies) proved to be more profitable. Calculations of basic profitability rates (NPV and IRR) are as follows: NPV = 58 000 EUR calculated for 7% discount rate for the period of 25 years; and IRR = 6.8 %. Such profitability rates are the consequence of the adopted sewage disposal fees at their minimum values, yet they allow for sustainable, long-term operation of the project. Local authorities financial ability analysis indicates that they are able to finance its share in the project. Implementation of the tasks foreseen will proceed with utilising of the newest materials as to assure complete tightness of the constructed canalisation elements, what will result in improvement of the environment. The activities carried out during the project implementation will result in decreasing the disproportion between the water supply and sewage system infrastructure in the eligible communes.

Environment Impact Assessment summary
An Environment Impact Assessment was prepared in March 2000 and is in accordance with Directive on the assessment of the effects of certain public and private projects on environment 85/337/EEC. The activities planned were consulted with the society. When necessary, proper contracts were concluded. Constant monitoring of the results of the sewage treatment is conducted. Results of the analysis are as follows.
After the project’s completion the capacity of the sewage treatment system will be increased by 6.850 m3. It will enable to reduce the emission of the toxic substances to the environment by: 28 tons of phosphorus a year, 90 tons nitrogen a year, 662 tons of BOD a year, 1.323 tons COD a year and 709 tons of suspension a year. Additionally, the amount of infiltrating water (seepage water) will be reduced by approx. 8.000 m3 per year. As the plant has its own two-stage process of biological dephosphatising, supported by chemical decanting with the mixture of acid and alkaline coagulants, it guarantees the possibility of complete phosphorus removal. Separation of rain and sanitary sewage in the city by the implementation of a sanitary system shall protect the receiver – the Wislok river - from discharge of untreated sewage. Additionally, it shall result in more stable and effective work of the sewage treatment plant. The implementation of the Project will not significantly influence the balance of waste, i.e. screenings, sand and sludge in the plant which are digested, deodorised and removed outside the agglomeration territory. Finally, it is planned to implement a sewage treatment plant in the neighbourhood of the Municipal Waste Treatment Plant which will solve the problem of waste, including the waste from the sewage treatment plant. The influence on the environment during construction of the sewer system will be limited in time and will occur as an acoustic nuisance (noise). During exploitation, there will be no negative influence on the environment. The current range of environmental effect of the plant stays within the limits of the building lot and will not extend after implementing of the evaluated undertaking. Ecological effects of the extended sewage treatment plant in Nowa Wies are the following: increase of flow capacity of about 1020 m^3/d by adding equipment to the technologically prepared biological reactor, possibility of accepting sewage from ca 8 000 MR, and additional reduction of pollutant load from 8000 MR. Sewage treatment plants have environmental impact evaluations conducted and approved according to appropriate legal regulations. The construction of the sewage system has not been classified as having particularly negative impact on the environment and human health according to the regulations of the Ministry of Environmental Protection, Natural Resources and Forestry issued on July 14th 1998 (Dz.U. Nr 93, poz. 589), and consequently in light of Polish regulations it is not necessary to conduct the evaluation of its environmental impact. It is important to note that the project documentation allows for minimum environmental impact during its construction stage. The implementation of the investment will not cause environmental deterioration, but will result in advantageous ecological effects.