1. **Basic Information**
   1.1. **Desire:** PL01.06.07.03
   1.2. **Title:** Tourism development for the town of Sandomierz
   1.3. **Sector:** ESC
   1.4. **Project Location:** Poland, Świętokrzyskie Voivodship, Sandomierz town

2. **Objectives**
   2.1. **Wider Objective:**
   To create conditions for achieving economic and social cohesion in Świętokrzyskie Voivodship, by upgrading environmental protection infrastructure.

   2.2. **Immediate Objectives:**
   To improve economic and investment attractiveness of Sandomierz. To protect cultural heritage and to create conditions for the development of tourism, sports and recreation. To improve the condition of the local, regional and national environment.

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

   2.4. **Contribution to the Preliminary National Development Plan:**
   As environmental infrastructure is both a contributor to economic activity and a factor ensuring quality of life in a region. One of the priorities for the country’s cohesion policy as identified in the PNPD is “Creation of conditions for balanced and sustainable development of environmental infrastructure”. These projects shall be complemented and enhanced by activities undertaken in the regions under the priority “Strengthening development potential of regions and counteracting marginalisation of certain areas”. One of the proposed measures under the priority is “Development and modernisation of infrastructure serving to strengthen competitiveness of the regions”. It will be implemented in line with the priorities of the state environmental policy. Regional projects in waste management, protection against water and air pollution and water management shall take priority as those contributing to the achievement of economic and social cohesion of the country. The project is also in line with the operational programme for Świętokrzyskie Voivodship. The latter identifies Priority 2 “Creation of the conditions for sustainable development and the protection of cultural resources.” as one of the priorities. The present project, owing to its significant environmental and economic (tourism) impact, would be effected under this priority.

   2.5. **Cross Border Impact:** Not applicable

3. **Project Description**
   3.1. **Background and Justification:**
   Sandomierz is among the most valuable historical, urban and landscape complexes in Poland, so project implementation would further increase the tourist and investment attractiveness of the city contributing to the development of job opportunities and visits by tourists. This would stimulate the construction of new hotels and other accommodation. A concept of a main sewer for the left-bank and right-bank parts of Sandomierz was drafted in 1996. The districts of Zarzeczkowice, Nadbrzezie, Wielowiejska, Lwowska and Kozmierzów, located on right bank of the Vistula River, were not furnished with such a main and it is an assumption of the Project that the implementation of same would contribute to both the social and economic development of Sandomierz. This would improve living conditions of the inhabitants of the right-bank part of the city, as will a boost in the number of newly established companies providing new job opportunities. Inhabitants of the districts covered by the Project will make their own contribution by co-financing domestic drains and adjacent pumping stations. Some 500 households (2100 inhabitants) in areas not furnished with sewers draw direct benefit from the Project. Moreover, 700 apartments (2600 inhabitants) in multi-apartment buildings from which wastewater is discharged to a small waste water treatment plant (WWTP) not complying with EC standards will also be beneficiaries of the Project. In total, some 4700 inhabitants shall use the sewers on completion of the investment. The 1998 start up of an up-to-date WWTP left a reserve of rated capacity allowing for the connection of the scheduled main sewer discharging wastewater from the right-bank part of the city. This new WWTP meets all requirements of Polish standards and EU directives 91/271 and its amendment
98/15, e.g. BOD5 equal 1.6 mg/dm$^3$, total nitrogen equal 4.71 mg/dm$^3$. The construction of the main sewer in Sandomierz is of importance to the social and economic development of the town, and was thus taken into account in the Świetokrzyskie Voivodship and Sandomierz Town Strategies of Economic Development.

3.2. **Linked activities:** n.a.

3.3. **Results:**
Fitting out areas scheduled for services and industrial development with a main sewer – 80 ha of new investment sites; creation of 250 new jobs, 5 medium size and 20 small scale enterprises; increase the number of tourists of 10%; supply of a WWTP of rated capacity of 7,500 m$^3$/day, at present operating at only 50 per cent of capacity with some 610 m$^3$/day of wastewater from areas not furnished with a main sewer; improvement of the living conditions - 4700 immediate beneficiaries of the Project will decreasing a costs of sewer discharge from 12 PLN/cu.m (transport by septic tanks) to 2,8 PLN/cu.m for businesses and 1,8 PLN/cu.m for households; dismantling of up to 1000 septic tanks; facilitating of the transfer and collection of domestic wastewater from adjoining localities in Tarnobrzeg and Gorzyce gminas.

3.4. **Outputs:**
The main result is the extending of the Sandomierz main sewer on the right bank of the Vistula river by 40,5 kilometres.

3.5. **Inputs:**
The achievement of project aims will entail the following works: the “Lwowska 1” main pumping station and seven downstream pumping stations, a pressure main sewer network of total length 19.14 km, main sewer of total length 11.17 km. Total input into the project 3 500 000 Euro. The Phare support amounts to 2 200 000 Euro.

4. **Institutional Frameworks**
The main beneficiary of the Project is the Municipal Gmina of Sandomierz as represented by the Sandomierz City Board (Employer). An independent Project manager, in charge of supervising compliance with contractual regulations (Engineer) shall be appointed by tendering. On Project completion, the Gmina of Sandomierz shall become the owner of the investment while the management of the completed project will be handed to the Municipal and Housing Development Company. The city board is responsible for setting the price for discharged sewer, which should assure full coverage of operational costs and maintenance.

5. **Budget, in Euro**

<table>
<thead>
<tr>
<th></th>
<th>Phare Support</th>
<th></th>
<th></th>
<th></th>
<th>IFIs</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment</td>
<td>IB</td>
<td>Total Phare</td>
<td>National co-financing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>2 200 000</td>
<td>2 200 000</td>
<td>1 300 000</td>
<td>3 500 000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2 200 000</td>
<td>2 200 000</td>
<td>1 300 000</td>
<td>3 500 000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Funds for the hiring of the Engineer (200 000 Euro) are included in the National co-financing, which will be available.

6. **Implementation arrangements**

6.1. **Implementing Agency:**
PAO: Vice - Minister in the Ministry of Regional Development and Construction
Wspolna 4 St., 00-926 Warsaw, phone: + 48 22 661 91 19, fax: + 48 22 661 91 45
Implementing Agency: Polish Agency for Regional Development, Zurawia 4a St., 00-503 Warsaw, Phone:+48 22 629 28 88, Fax: + 48 22 627 22 46

6.2. **Twinning:** Not applicable

6.3. **Non-standard aspects:** Not applicable. DIS regulations of the ‘Practical Guide to Phare, Ispa & Sapard contract procedures’ will be closely followed.

6.4. **Contracts:**
The total value of the project is 3 500 000 Euro. The project will be implemented under works contract, expected value of the works contract is 3 300 000 EURO, including PHARE resources 2 200 000 EURO. Additionally the contract with Engineer which total value is 200 000 EUR financed by Polish side will be signed.

7. **Time schedule for the implementation**
7.1. Start of tendering / call for proposals:

7.2. Start of the Project Activity:
Contracts are expected to be concluded in 1st quarter 2002.

7.3. Project Completion:
Final payment in favour of the contract is expected to be made in 2nd quarter 2003.

8. Equal Opportunities
Implementation of the Project will entail equal opportunities for women and men. Construction of the main sewer shall service households and single-family houses, thereby serving both men and women living in the involved areas. As far as possible investors are concerned, encouragement and servicing will proceed irrespective of gender.

9. Environment
To meet the EU regulation for the planned investment has been prepared a complete Environmental Impact Assessment Study, which is available at the beneficiary’s office. The study concerns the issues related to spatial planning, economical strategy for city development, impact of the project on water, soil, air, and acoustic problems. The investment meets EU Urban Waste Water Treatment Directive (91/271/EEC as it amended by Directive 98/15/EEC). All sewer mains constructed under this project will be connected to modern Waste Water Treatment Unit also working according to relevant EU Directives.

10. Rates of return
A feasibility study for the investment, together with economic and financial examination, was drafted by the Centre for Business Promotion, Sandomierz, and is available at the beneficiary’s office. Financial examination of the Sandomierz right-bank main sewer shows implementation of the project to be justified from the economic point of view. Rate of return= 858,952 PLN (214 738 EUR). Period of return= 16.3 years. NPV= 106,806 PLN (26 701 EUR). IRR= 3.15 per cent. NPV (2.0%) = 2.004.986 PLN. NPV (3.0%) = 243.696 PLN. NPV (3.15%) = 0. NPV (4.0%) = -1.221.300 PLN. NPV (5.0%) = -2.444.407 PLN. Rather low IRR for this project is a result of quite high investment costs related to the specific technology which have to be applied (hermetic sewer main and costs of crossing the Vistula river). The sewer system in Sandomierz operates on the cost bases and is not subsidise from the city budget. The prices for sewage discharge at Sandomierz City are one of the highest in the region. In the same time the operator is obligated to keep the prices for discharge of sewer from households on the lowest possible level. The price for households is 1,8 PLN/m$^3$ and for businesses is 2,8 PLN/m$^3$.

11. Investment criteria
11.1. Catalytic Effect:
Phare support will be conducive to the achievement of economic and social cohesion goals in Swietokrzyskie Voivodship - goals that could otherwise only be attained after a much more extended period of time and on a more modest and less efficient scale.

11.2. Co-financing:
The project is co-financed by the Polish partners.

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 will be ready for contracting and disbursement (by the 4th quarter of 2001), as it will meet all conditions for co-financing by the start of project implementation;

11.5. Sustainability:
The project will contribute to the long-term sustainable development of the region, as described in the Swietokrzyskie Voivodship Operational Programme. After implementation, the users will cover all maintenance costs related to investments. The city board is responsible for setting the price for discharged sewer, which should assure full coverage of operational costs and maintenance.

11.6. Compliance with State Aid Provisions:
All aspects of the project will be developed with respect to the state aid provisions of the Europe Agreement

11.7. Contribution to the Preliminary National Development Plan:
The project is in line with the Preliminary National Development Plan and as such will contribute to the increased economic and social cohesion of the country and region.

12. **Conditioning and sequencing**
The Project is partly prepared for implementation, with the following components having been completed or in progress:
- complete building permit documentation (M&E and civil works),
- obtained decision on legal permit for spanning of the Vistula River by a pressure pipe with suspension to the structure of the existing bridge,
- building permit for the construction of a main sewer within the location of stage 1 as per technical specifications,
- administrative proceedings with the Sandomierz authorities on issuing a building permit for stage 2 of the main sewer, scheduled for October 2000.

The Project may be implemented on condition that there is:
- the granting of resources from Voivodship (or National) Funds for Environmental Protection and Water Management (the decision is expected to be made by the end of 2001).
<table>
<thead>
<tr>
<th>Annex 1: Logframe planning matrix for project</th>
<th>Date of drafting: 31 August 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>End Contracting:</strong> 15/12/2003 - <strong>End Disbursement:</strong> 15/12/2004</td>
<td><strong>Planning period:</strong> 2002 - 2004</td>
</tr>
<tr>
<td><strong>Project number:</strong></td>
<td><strong>Total 3.5 MEURO</strong></td>
</tr>
<tr>
<td><strong>Project title:</strong> Construction of sewage main in the town of Sandomierz</td>
<td><strong>Phare 2.2 MEURO</strong></td>
</tr>
</tbody>
</table>

<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 conditions for the achievement of economic and social cohesion in Swietokrzyskie Voivodship by upgrading environmental protection infrastructure.</td>
<td>− Increase of regional GDP per capita</td>
<td>− Main Statistical Office,</td>
<td>− Fast track growth of Polish economy,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>− City Office of Sandomierz.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Immediate 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>− To improve economic and investment attractiveness of Sandomierz.</td>
<td>− 5 new medium size enterprises within 3 years since the investment is finished,</td>
<td>− Voivodship Statistical Office, Kielce,</td>
<td>− Approval of the Economic Development Strategy for the City of Sandomierz by the City Board,</td>
</tr>
<tr>
<td>− To protect cultural heritage and to create conditions for the development of tourism, sports and recreation,</td>
<td>− 20 new small scale enterprises,</td>
<td>− City Office of Sandomierz,</td>
<td>− Well operating and fulfilling technical requirement WWTP and main sewers,</td>
</tr>
<tr>
<td>− To improve the condition of the local, regional and national environment.</td>
<td>− 250 new jobs.</td>
<td>− Municipal and Housing Development Company of Sandomierz,</td>
<td>− Interest of investors in establishing new enterprises within Sandomierz,</td>
</tr>
<tr>
<td></td>
<td>− Increase the number of tourists of 10%,</td>
<td>− Sandomierz WWTP.</td>
<td>− Promotion of Sandomierz as tourist interesting city.</td>
</tr>
<tr>
<td></td>
<td>− Improvement of water quality of Vistula River.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Results/Outputs</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>− Extending main sewer on the right bank of the Vistula river</td>
<td>− 40,5 km increase in length of main sewers,</td>
<td>− Municipal and Housing Development Company of Sandomierz,</td>
<td>− Funding from National (or Voivodship) Funds for Environment Protection and Water Management,</td>
</tr>
<tr>
<td>− Fitting out areas scheduled for services and industrial development,</td>
<td>− 80 ha of new investment sites,</td>
<td></td>
<td>− Efficient project implementation,</td>
</tr>
<tr>
<td>− Supply of a WWTP of capacity 7,500 m$^3$/day, at present operating at only 50%</td>
<td>− 610 m$^3$/day of sewage supplied to WWTP,</td>
<td></td>
<td>− Significant growth of prices for treatment of sewer waters.</td>
</tr>
<tr>
<td>− Facilitating the transfer of domestic wastewater from adjoining gminas of Tarnobrzeg and Gorzyce</td>
<td>− achieving parameters of sewage water - BOD$_5$ equal 1.6 mg/dm$^3$, total nitrogen equal 4.71 mg/dm$^3$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>− Up to 1000 septic tanks liquidated,</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>− 4700-entities increase in the number of main-sewer users.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Activities / Inputs</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The Project involves the construction of pressure main sewers with 8 downstream pumping stations within area not furnished with sewers. The length of main sewers shall be some 40.5 km.</td>
</tr>
<tr>
<td>Total Project cost shall amount to 3,500,000 Euro (including 2,000,000 Euro from Phare)</td>
</tr>
</tbody>
</table>

PL01.06.07.03 Sewage main Sandomierz – p.5
### Annex 2-4: Cumulative implementation, contracting and disbursement schedule

**Date of drafting:** 31 August 2000  
**Planning period:** 2002-2004

<table>
<thead>
<tr>
<th>Implementation schedule</th>
<th>PLANNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV’01</td>
<td>I’02</td>
</tr>
<tr>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>D/C</td>
<td>C</td>
</tr>
<tr>
<td>Contracting schedule</td>
<td>2.20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disbursement schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.30</td>
</tr>
</tbody>
</table>

**Legend:**  
- **D** = design of sub-project  
- **C** = tendering and contracting  
- **I** = contact implementation and payment
One of the largest rivers in Poland, Wisla, flows across the city of Sandomierz, which divides the town into right- and left-bank parts. Left-bank part is furnished with waste water main. Municipal sewage is discharged to the existing mechanical and biological waste water treatment plant located on left bank of Wisla. Presently, some 3.500 m$^3$/d of sewage is discharged the WWTP of the capacity of 7.500 m$^3$/d (in target 15.000 m$^3$/d). This makes the extension of the waste water main possible to discharge sewage from the part of city which is still not furnished with waste water main. The existing spare capacity of the plant secures treatment of additional volume of sewage meeting the parameters provided by laws.

With regard to the territory formation, a pressure and natural sewage main was designed with transferring of sewage via pipe suspended to the road bridge over Wisla River down to the existing sewer discharging wastewater to the municipal WWTP. Sewage main pipes shall be designed of plastic pipes: pressure pipes of PE tubes of 0.05 through 0.315 m dia., and sections of natural flow pipes of PVC tubes of 0.20 m dia. The designed materials provide tightness and high quality of the project. The designed pumping stations shall be furnished with systems to inform on emergency situations to be transferred to operator. Developed comparative analysis for employed pump units provides selection of the facilities of the best parameters thus establishing optimum operation conditions. The conditions to be met by sewage discharged to sewage main from industrial plants shall be stipulated by main and WWTP user.

The City Board applies for co-financing of the project from Phare 2001 pre-accession fund. The City Board of Sandomierz is an Investor for the scheduled investment whereas Municipal Company, Sandomierz Water and Sewage Works Sp. z o.o. (Limited liability company) shall be in charge of the main operation. The EU regulations require the infrastructure projects - waste water main projects to be supported with environmental impact appraisal (Directive No. 85/337/EC dated 27th June 1985). According to local Polish laws, the waste water main is not included among projects particularly harmful to natural environment and health, neither to projects likely to deteriorate the natural environment condition (Official Legislation Gazette No. 93, item 589, the Regulation of the Minister of Environment Protection, Natural Resources and Forestry dated 14th July 1998) thus environmental impact appraisal is not required.

Discussions on the needs and possibilities of sewage main establishing were conducted with the inhabitants of left-bank part of the town. The inhabitants demanded the City Board to commence with producing the documentation for sewage mains as fast as possible. This social pressure resulted from the fact of substantial difference in costs born by those inhabitants who used sewage main in a direct way and by those who were forced to discharge their sewage to WWTP with septic tanks. The costs related with discharging the sewage comparing to the fees for discharging it to sewage main are several times higher. The inhabitant expressed their opinions, which had been further allowed for in the building permit design.

This project is in accordance with the Study of Conditions and Directions of Sandomierz City Spatial Development.

Completion of the designed sewage mains shall contribute to improving the surface waters, Wisla River and Trzesniówka River purity. Sewage collected and discharged to the existing WWTP shall not jeopardise the surface water quality. Blind sewage pits shall be eliminated which, misoperated and often untight, made a threat for water quality. Past problems related with discharging sewage by septic tanks shall be eliminated.

Completed sewage main shall improve the standard of inhabitants living and make further economic development of the town possible.

The production has been developed on the basis of the following legal acts:

- the Regulation of the Minister of Environment Protection, Natural Resources and Forestry dated 14th July 1998 on the requirements to be met by environment impact appraisals for the project not included among particularly harmful for natural environment and health of people or projects likely to deteriorate the natural environment condition, or works to modify water relations (Official Legislation Gazette No. 93, item 590),
- the Council Directive No. 85/337/EC dated 27th June 1985 on evaluating the environmental effects of some public and private undertakings,
• the Regulation of the Cabinet dated 19th May 1999 (Official Legislation Gazette No. 50, item 501) on the conditions of waste water discharging to waste water facilities being municipal ownership.

*The pressure sewage main designed in left-bank part of Sandomierz will not influence the natural environment in a negative manner.*

**Annex 5.2 Summary of the Feasibility study**

**Subject**
The aim of the investment project under the name “Sewage system in right-bank part of Sandomierz” is to build a sewage system in the part of the town of Sandomierz located on the right side of the Vistula on the area not provided till now with a sewer system.

**Institutions involved**
**Applicant:**
Gmina Sandomierz
Commune of Sandomierz

Administrator of the sewage system when the investment is completed:
Przedsiebiorstwo Gospodarki Komunalnej i Mieszkaniowej
Enterprise for Communal and Housing Economics
ul. Przemysłowa 12
27-600 Sandomierz
phone: (015) 832-28-44
fax: (015) 832-28-76

**Project description**
The project covers sewerage system together with both close-to-house and system intermediate pump stations to be built in the area of the following town’s districts: Zarzecze, Wielowiejska Str., Lwowska Str., Kocmierzów. These districts show single family house building and have not been provided with a sewage system yet. Total length of the sewage pipelines will after the project realisation be 40.5 km (including existing sections of the length of 7,128 m). Residents of these town’s districts will contribute to the investment in form of co-financing of terminals and close-to house pump stations enabling connection to the sewage system. It is assumed that about 4,800 people living in over 500 households and 700 apartments in multi-family buildings placed in the right-bank part of the town will use the projected sewerage system.

**Project target**
Social and economical development
Protection of culture inheritance and development of tourism, sport and recreation
Improvement of ecological situation
Existence conditions improvement
Load-up of the Municipal Wastes Treatment Plant in Sandomierz

**Project effects**
To the most important effects of the project completion belong:
- increase in length of sewerage system in right-bank part of the town covered by the project by 40.5 km
- number of direct beneficiaries of the investment will amount to 4,758 persons and in the future will be increased up to over 5,100 persons
- quantity of not treated wastewater fed to the wastes treatment plant otherwise than from sewerage system will be decreased from 20m$^3$/day till 4 m$^3$/day
- elimination of septic tanks being sources of uncontrolled environment pollution
- preparation of provided with sewerage system grounds for housing and industrial building
- adjusting of treated and disposed to environment wastewater to EC requirements

**Finance analysis**
IRR = 3.15%
NPV (2.0%) = PLN 2,004,986
NPV (2.7%) = PLN 738,164
NPV (3.0%) = PLN 243,696
NPV (3.15%) = 0
NPV (4.0%) = PLN –1,221,300

Economical development

On the area of right-bank part of the town there are grounds of surface of over 50 ha destined for industrial building. These grounds are completely electrified and provided with water and gas supply systems.

It is estimated that due to improvement of infrastructure in the right-bank part of the town number of businesses existing in this area will increase by 5 firms offering about 250 jobs. Establishment of new, middle businesses will positively influence small business development. It is estimated that there will be established 20 small businesses offering jobs for almost 100 persons and located in the environment of newly established industrial businesses.