1. Basic Information
1.1. Désirée Number: PL0008.02.04
1.2. Title: Podlaskie - Road tunnel on bypass of Bialystok.
1.3. Sector: Transport
1.4. Location: Podlaskie Voivodship, Poland

2. Objectives
2.1. Wider objective:
The wider objective is the creation of conditions conducive towards achieving greater economic and social cohesion of the Podlaskie Voivodship, through the development of regional level infrastructure necessary to reach growth targets through increased access in selected regional priority areas.

2.2. Immediate objectives:
The immediate objectives include:
- the development of regional level transport infrastructure, of priority from the point of view of overcoming existing barriers and upgrading access to areas and locations which impact on the competitiveness of the region;
- increasing the attractiveness of the region as a location for investments, leading to increased volumes of investments in services and production;
- increased safety of travel;
- increased tourism related income in the region.

2.3. Accession Partnership and NPAA Priority
The project responds to the 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 corresponds also with the NPAA priority “Regional and cohesion policy”.

2.4. Contribution to the Preliminary National Development Plan
Transport infrastructure plays a key role in efforts to reduce regional disparities in economic performance. Therefore one of the priorities for the country’s cohesion policy identified in the Preliminary National Development Plan (to be annexed to NPAA) is “Integration of the Polish economy through modernisation and enlargement of transport networks”. They have been described under the priority “Strengthening development potential of regions and countering 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 defines co-financing of regional transport infrastructure, including that located in the cities, as a principal element of building endogenous potential development and metropolitan functions of the cities.
The project is therefore in line with both the PNDP and the operational programme for the Podlaskie voivodship. It will be implemented under the OP priority “Support for endogenous potential of development of the region – technical infrastructure”.

3. Description
3.1. Background and justification:
As only limited resources are available, some of the most urgent projects were selected for implementation, including the project in Bialystok. The city is the major regional level investment location. The modernisation of the road system in this area will:
- increase accessibility for businesses, influencing the competitiveness ratios of this location as compared to other regions;
- increase transport capacity;
- decrease bottlenecks and shorten transport times and costs;
- enhance safety on roads;
- increase accessibility to some of the major tourism spots in the Voivodship.
These considerations affected the selection of this project for priority action.
The project will provide an access to the “Via Baltica” highway for the southern and eastern town outlet roads, thus providing connection, lacking at present, of a large part of Bialystok itself as well as the southern and eastern part of the region with this important transport route.
It has been decided to create the inner city bypass of Bialystok town centre, through modernisation of the existing town road layout. The tunnel will form a very important element of this plan, and thus will help channelling the traffic flows from NW directions to the southern direction (to national road No. 19 to Bielsk
Podlaski and Lublin) and eastern direction (to road No. 66 in the direction of the road border-crossing in Bobrowniki).
The inner city bypass will cross through:
- Jana Pawła II Street (two-lanes),
- Sikorskiego Street – to be modernised in August 2000 - June 2001 (construction of the second carriageway),
- Ksiedza Jerzego Popieluszki Street – to be modernised in 2001 - 2003 (construction of the second carriageway),
- tunnel under the railway tracks - to be financed under the present project in 2001 – 2002,
- Kopernika Street (two-lanes),
- Zwirzyńiecka Street (two-lanes),
- planned street linking Zwirzyńiecka and Piastowska Streets - the last element of Białystok town ring lane - to be constructed in 2001 – 2003,
- Branickiego Street linking road No. 19 to Lublin and road No. 66 to Bobrowniki (two-lanes).
The cost of the whole project is ca. 26 MEURO. The modernisation of the roads will be realised in 2000 – 2003, simultaneously to the tunnel construction process, and will be financed from the City Office budget. The task under the project was included as a significant effort in the “Strategy of Białystok City Development“ prepared in the year 1996. The investment is in compliance with the results of the “Study of Area Development of Białystok Voivodship“ The project as a whole consists of construction of a tunnel under the railway tracks along the extension of Ksiedza Popieluszki Street in the direction of Składowa Street and Mikolaja Kopernika Street (parts 1, 2 and 3) and modernisation of the road layout in the area of the tunnel (part 4):
Further description of this documentation concentrates on the Phare part of the whole project

3.2. Linked activities:
A number of infrastructure projects have been carried out within the borders of Podlaskie voivodship under previous Phare programmes. Waste water treatment plants in Sejny and Stare Juchy were built within the framework of Phare Baltic Sea Region 96 and 97 (360 000 EUR). Small infrastructure projects related to environment, transport, development of business sites and tourist infrastructure were carried out under:
- PL9207 STRUDER - 10 projects, totalling 2.7 mln EUR, of which 1.4 mln EUR from Phare,
- PL 9609 STRUDER 2 – 14 projects, totalling 2.9 mln EUR, of which 0.79 mln EUR from Phare
- PL 9509 RAPID – 8 projects, totalling 1.7 mln EUR, of which 0.72 mln EUR from Phare

Under the regional development programmes, the Podlaskie voivodship is a beneficiary of Phare Special Preparatory Programme for Structural Funds (PL9808), supporting the preparation of regional development strategies. Regional Objective 1-type operational programme will be drawn up under Phare 99 “Regional development in Mazury and Podkarpacie regions”.

3.3. Results:
- 106,4 m of the tunnel under the railway track constructed
- Shortening of travel time for passengers and freight traffic of Białystok city. Time saving – 15 min (time of journey between the roads No 18 to Warsaw and No 19 to Lublin decrease from 24 minutes before to 9 minutes after tunnel construction)
- ESS (access increase) increase from 28,75 before investment to 46 after investment
- 26% increase of traffic flow after 1 year – transport flows increased without decreases in the quality of life in the adjacent local communities and not detrimental to environment
- Increased number of investors seeking investment opportunities in locations whose accessibility has been upgraded through project
- 1500 new jobs created in trade and service related businesses located in the area of the investment
- Increased flow of tourists to region, travelling on upgraded road to tourist destinations.
- Numbers of accidents lowered

3.4. Activities:
For Phare 2000 funding the first two parts of the whole project are proposed, that is stages I, II, III of the tunnel construction under the railway track, with reinforced concrete structure on length of 106,40 m:
- Passage gauge width comprises: two carriageways 2x10.5 m, with three traffic lanes each; two reserved lanes for fast urban transport 2x3.95 m; two sidewalks each 6.0 m wide designed for pedestrian and cycling traffic.
- The height of tunnel gauge in traffic part is 5.25 – 5.69 m and in pedestrians and cycling part 3.75–4.40 m.
- Under the sidewalks conductors of telecommunication, sewage pipes and two channels in which the Bazantarka Brook will flow, will be placed.
- The viaduct superstructure will consist of two strips of reinforced concrete slabs. These slabs will be in...
continuous arrangement over supports dividing the carriageway and sidewalks and with expansion joints longitudinally arranged over the central support located at the passage axis.

- The slabs will be supported with neopren bearings on reinforced concrete abutment walls and on rows of pillars – middle supports with reinforced concrete top-plates. All the supports will be founded on large diameter piles, 1.50m /or l. 20 m/.

4. Institutional framework
The Municipal Board of Białystok (acting on behalf of Białystok gmina) will be the owner of the asset after the project completion (construction of the tunnel), as the owner of the road, with full authorisation to proceed with the construction; Polish railways (PKP) is the owner of the site of the construction. The Municipal Board of Białystok will act as 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 a competitive procedure.

5. Detailed Budget:

<table>
<thead>
<tr>
<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>Part 1 of the tunnel construction</td>
<td>2,620,000</td>
<td>-</td>
<td>2,620,000</td>
<td>3,180,000</td>
<td>-</td>
</tr>
<tr>
<td>Part 2 of the tunnel construction</td>
<td>1,700,000</td>
<td>-</td>
<td>1,700,000</td>
<td>1,300,000</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4,320,000</td>
<td>-</td>
<td>4,320,000</td>
<td>4,480,000</td>
<td>-</td>
</tr>
</tbody>
</table>

* Polish co-financing includes administrative costs related to the management of the project; the amount of 360,000 Euro form the Polish co-financing is estimated as administrative costs of the project including costs of tender documentation and costs of the contract with the 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
All works will be tendered and contracted according to DIS and FIDIC rules. One contract is foreseen.

7. Implementation schedule:
7.2. Start of project of activity: April - June 2001
7.3 Project Completion: June 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:
The Feasibility Study for the investment project entitled “Construction of tunnel and modernisation of road layout of Białystok city” prepared by the BCEOM under framework contract in transport area between PHARE and Consortium of LOWI, WS ATKINS, BCEOM, GOPA and SECOFISA, contains an environmental impact assessment. The analysis concludes that the designed investment does not unfavourably influence any of the natural environment components. Its realisation will contribute to improvement of atmospheric air quality through liquidation of arduous congestion along the access roads to (future) tunnel and cleanliness condition of the Bazantarka Brook waters in effect of dredging of its nominal total length.
In general, construction of the tunnel together with modernisation of access streets should be treated as a pro-ecological investment.
A separating facility of “overfall well” type expected in the project for purification of water sewage and the Bazantarka Brook waters are adequate and guarantee effective operation.
10. Rates of return:
The Economic Appraisal is included in the above-mentioned Feasibility Study of investment entitled “Construction of tunnel and modernisation of road layout of Bialystok town”.
The internal return rate (IRR), equal to 33%, was calculated for a period of 1999 to 2017. Net Present Value, at the discount rate 12% amounts to 53.7 million EURO (228.4 million PLN). Full documentation of Economic Appraisal will be presented.

11. Investment criteria:
11.1. Catalytic effect
Phare support will be conducive to achieving economic and social cohesion goals in the Podlaskie Voivodship, which otherwise could be attained only after a much more extended period of time and on a more modest and less efficient scale. Project realisation is an accelerating factor for regional development and it will improve transit traffic through Bialystok town. It will shorten travelling time of passengers and freight traffic. Achieved improvement of traffic flow conditions will result in increase of traffic safety and beneficially influence the environmental condition.

11.2. Cofinancing
The project demonstrates clear co-financing by the Polish partners. The project will be co-financed from the budget of Bialystok city in the amount of 3.94 MEURO and the National budget in the amount 0.54 MEURO.

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. The following documents have been prepared: technical documentation (construction final design); Feasibility Study, together with Environmental Impact Assessment and Economic Analysis. The construction permission is obtained and the project is ready for realisation.

11.5. Sustainability
The project will contribute to the long term sustainable development of the region, as described in the Podlaskie Voivodship Operational Programme. On completion of whole project funds will be provided for the modernised transport layout from the budget of Bialystok gmina. After execution of project the state budget will provide necessary funds for maintenance of modernised section of national road.

11.6. Compliance with state aids provisions
All aspects of the project will be developed with respect to the competition state aids 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 increase of economic and social cohesion of the country and region.

12. Conditionality and sequencing:
Co-funding will be conditional on:
- co-financing of project by the beneficiary;
- maintaining timetable set in the programme;
- all contracting, reporting and monitoring conditions are met;
### Annex 1: LOGFRAME PLANNING MATRIX FOR PROJECT

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Title</th>
<th>Wider Objective</th>
<th>Indicators of Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Podlaskie – Road tunnel Bialystok</td>
<td>Creation of the conditions for achieving economic and social cohesion of the Podlaskie Voivodship through upgrading the regional capacity for endogenous and sustainable growth</td>
<td>the level of GDP and GDP per capita in the region moving towards the national average</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date of drafting</th>
<th>13.03.2000</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Total Budget of the Project</th>
<th>4.32 million EURO</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Period</th>
<th>2001-2003</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Sources of Information</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>experts reports</td>
<td>continuing growth in the national economy</td>
</tr>
<tr>
<td>statistical data on the level of economic development in the region</td>
<td>continuing process of the integration with the EU</td>
</tr>
<tr>
<td>statistical data</td>
<td>ongoing financing of the project from the Polish side</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Immediate Objectives</th>
<th>Indicators of Achievement</th>
<th>Sources of Information</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>The development of regional level transport infrastructure, of priority from the point of view of overcoming existing barriers and upgrading access to areas and locations which impact on the competitiveness of the region; Increasing the attractiveness of the region as a location for investments, leading to increased volumes of investments in services and production; Increasing levels of foreign trade activities based in region; Creation of new jobs related to improved transport channels; Increased safety of travel; Increased tourism related income in the region</td>
<td>lengths and density of modernised (of good quality) roads number and value of new investments number of new work places created number of car accidents number of tourists visiting the area</td>
<td>statistical data experts reports project monitoring</td>
<td>feasibility studies and environment impact assessments accepted as basis for project co-financing by Phare; co-financing of project by the beneficiary; maintaining timetable set in the programme; all contracting, reporting and monitoring conditions are met</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Results of Project</th>
<th>Indicators of Achievement</th>
<th>Sources of Information</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three stages of the tunnel under the railway track constructed Shortening of travelling time for passengers and freight traffic on important transit route in the directions of Lithuania and other Baltic countries Increased flow of users without decreases in the quality of life in the adjacent local communities and not detrimental to environment Increased number of investors seeking investment opportunities in locations whose accessibility has been upgraded through project. Ratio of new jobs created and stemming from developed transport infrastructure in supported area higher than in non-supported comparative areas. Increased flow of tourists travelling upgraded road to tourist destinations. Numbers of accidents lowered Improvement of domestic and international transit conditions in the direction of Baltic countries. Access road to the Customs Office from the western and northern directions avoiding the town centre.</td>
<td>length of the tunnel constructed density of roads of good quality number of people / value of goods passing the border using the destined area number of tourists arriving to the region number of car accidents number of new work places created</td>
<td>statistical data experts reports project monitoring</td>
<td>changes in the policy towards the foreign investments</td>
</tr>
</tbody>
</table>

| Inputs | |
|--------| |
| The construction of a tunnel under the railway tracks along the extension of Ksiedza Popieluszki Street in the direction of Skladowa Street and Mikolaja Kopernika Street. | |
Annex 2: Cumulative implementation, contracting and disbursement schedule

<table>
<thead>
<tr>
<th>Subprojects</th>
<th>Date of drafting</th>
<th>Planning period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Podlaskie – Road tunnel Bialystok</td>
<td>10.03.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subprojects</th>
<th>Budget allocation Phare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning period</td>
<td>cost estimate Phare</td>
</tr>
<tr>
<td>PLANNED</td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td>D</td>
</tr>
<tr>
<td>4,32</td>
<td>4,32</td>
</tr>
<tr>
<td>Disbursement</td>
<td>0,393</td>
</tr>
</tbody>
</table>

Annex 3

The Feasibility Study of investment entitled “Construction of tunnel and modernisation of road layout of Bialystok town” prepared by the BCEOM under framework contract in transport area between PHARE and Consortium of LOWI, WS ATKINS, BCEOM, GOPA and SECOFISA, estimates the following key indicators:

- The internal return rate (IRR), equal to 33%, which was calculated for the period of 1999 to 2017.
- Net Present Value, at the discount rate 12% amounts to 53,7 million EURO (228,4 million PLN).

The feasibility study includes an analyses of the socio-economic impact, cost-benefit analysis (with comparative calculations under “new tunnel” and “do minimum” scenarios) and sensitivity analysis.

The Feasibility Study contains an environmental impact assessment. The analysis concludes that the designed investment does not unfavourably influence any of the natural environment components, and fits with the needs arising from the regulatory framework.

Its realisation will contribute to improvement of quality through liquidation of arduous congestion along the access roads to (future) tunnel and cleanliness condition of the Bazantarka Brook waters in effect of dredging of its nominal total length.

In general, construction of the tunnel together with modernisation of access streets should be treated as a pro-ecological investment.

A separating facility of “overfall well” type expected in the project for purification of water sewage and the Bazantarka Brook waters are adequate and guarantee effective operation.