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# COMMISSION STAFF WORKING PAPER

# ANNUAL REPORT OF THE INSTRUMENT FOR STRUCTURAL POLICY FOR PRE-ACCESSION (ISPA) 2000

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# ANNUAL REPORT OF THE INSTRUMENT FOR STRUCTURAL POLICY FOR PRE-ACCESSION (ISPA) 2000

# TABLE OF CONTENTS

1.	Annex 1	5
1.1.	ISPA in Bulgaria	5
1.1.1.	Environment	5
1.1.2.	Transport	6
1.2.	ISPA in Czech Republic	7
1.2.1.	Environment	7
1.2.2.	Transport	9
1.3.	ISPA in Estonia	11
1.3.1.	Environment	11
1.3.2.	Transport	12
1.4.	ISPA in Hungary	13
1.4.1.	Environment	13
1.4.2.	Transport	15
1.5.	ISPA in Latvia	17
1.5.1.	Environment	17
1.5.2.	Transport	
1.6.	ISPA in Lithuania	19
1.6.1.	Environment	19
1.6.2.	Transport	20
1.7.	ISPA in Poland	21
1.7.1.	Environment	21
1.7.2.	Transport	
1.8.	ISPA in Romania	24
1.8.1.	Environment	24
1.8.2.	Transport	

1.9.	ISPA in Slovakia	27
1.9.1.	Environment	27
1.9.2.	Transport	28
1.10.	ISPA in Slovenia	29
1.10.1.	Environment	29
1.10.2.	Transport	30
2.	Annex 2	31
2.1.	Bulgaria	31
2.1.1.	Environment	31
2.1.2.	Transport	32
2.2.	Czech Republic	34
2.2.1.	Environment	34
2.2.2.	Transport	35
2.2.3.	Technical assistance	37
2.3.	Estonia	38
2.3.1.	Environment	38
2.3.2.	Transport	41
2.3.3.	Technical assistance	41
2.4.	Hungary	42
2.4.1.	Environment	42
2.4.2.	Transport	44
2.4.3.	Technical assistance	46
2.5.	Latvia	48
2.5.1.	Environment	48
2.5.2.	Transport	51
2.5.3.	Technical assistance	54
2.6.	Lithuania	54
2.6.1.	Environment	54
2.6.2.	Transport	56
2.7.	Poland	58
2.7.1.	Environment	58

2.7.2.	Transport	63
2.7.3.	Technical assistance	66
2.8.	Romania	69
2.8.1.	Environment	69
2.8.2.	Transport	72
2.9.	Slovakia	74
2.9.1.	Environment	74
2.9.2.	Transport	76
2.10.	Slovenia	76
2.10.1.	Environment	76
2.10.2.	Transport	78
2.10.3.	Technical assistance	78

# **ANNEXES**

### 1. ANNEX 1

### **1.1.** ISPA in Bulgaria

#### 1.1.1. Environment

#### Strategic Objectives

**Water quality** improvement is a priority given the widespread discharge of untreated or partially treated wastewater from the main population centres. The Government's National Programme for Priority Urban Wastewater Treatment Plants is being implemented with the help of ISPA. The upgrading of sewerage networks and water supply systems are also envisaged.

The disposal of **Urban Waste** is another serious challenge. The Government's National Waste Management Programme lays down the strategic guidelines for tackling problems, such as selective collection, organised recycling, and the construction of landfills to EC standards.

A third environmental concern relates to **Air Pollution**. Although emissions have decreased due to the decline of heavy industry, there are still serious problems in 14 identified regional "hotspots". Power generation facilities and heating plants based on low-quality coal are the major source of  $SO_2$  and  $NO_x$  emissions.

#### Investment needs and Co-financing

Estimated costs for achieving compliance with 'investment-heavy' EC Directives in Bulgaria in the water, air quality and waste sectors are of the order of  $\notin$  3.1 billion.

As ISPA can only finance up to 75% of eligible costs, and the financing capacity of municipalities is extremely limited, a number of projects is co-financed with support from IFIs or bilateral aid from different EU Member States.

#### ISPA Assistance

The Bulgarian Government has defined the following priorities for ISPA financing:

- **Priority 1:** *Wastewater treatment* ISPA projects focuses on large agglomerations, on sensitive areas and on projects with significant national or trans-national impacts.
- **Priority 2:** *Waste management* Priority is given to projects in areas where existing waste disposal facilities are inadequate or have reached capacity, as well as to specific problems caused by hazardous waste and waste from uranium mines.
- **Priority 3:** *Air quality improvement* Population centres in the regions identified as "hotspots" are given priority, with emphasis on restricting the emissions of SO<sub>2</sub>, harmful gases, heavy metals and dust particles from thermal power plants and heavy industry.

# *Implementation*

As most municipalities do not yet have the capacity to carry out large-scale infrastructure projects, the Ministry of Environment, and a specially set up joint department of this Ministry and the Ministry of Regional Development, are appointed as the two environment implementing agencies to take responsibility for implementation of all of the projects, including tendering and contracting functions.

In particular, the recently reinforced Ministry of Environment plays a important role in the co-ordination, implementation and monitoring of most of the environment projects.

The Commission provides the Bulgarian authorities with some assistance to ensure effective project management and implementation in line with EU requirements.

### 1.1.2. Transport

### Strategic Objectives

Existing infrastructure is generally in a poor condition due to inadequate construction methods in the past and lack of sufficient resources for maintenance. A high proportion of main roads is very poor, while railway infrastructure is in need of substantial modernisation. There are inadequate links to neighbouring countries, especially Greece, Turkey and Romania.

Despite these problems, Bulgaria occupies a strategic location in the Balkans: it provides overland routes from Greece to Central and Eastern Europe, and is crossed by 5 out of the 10 Pan-European Transport Corridors.

The Bulgarian Government's transport strategy highlights the following main objectives:

- Further opening of Bulgaria to its neighbours and the rest of Europe development of main Corridors, border infrastructure and Sofia airport.
- Maintain a balance between transport modes.
- Develop railway connections and electrification of all main railway lines.
- Continue programme of road rehabilitation and construction of new motorways.
- Ensure compliance of transport infrastructure with environmental concerns.

#### Investment needs and Co-financing

The cost of aligning the principal "backbone" network in Bulgaria to EC standards has been estimated in the TINA report at  $\notin$  4 095 million, of which the road network accounts for  $\notin$  2 165 million and the railway network  $\notin$  1 930 million. The cost of aligning the "additional network components" for both road and rail, as well as the costs of developing to EC standards of Bulgarian airports, seaports, inland waterways and combined transport terminals, will require additional funding.

In general, ISPA projects are to be co-financed with the IFIs, in particular the EIB.

# ISPA Assistance

The Bulgarian Government has defined the following principal criteria for the selection of projects for ISPA financing based on the recommendations of a recent study entitled "Development of Accession Related Transport Infrastructure Investment Projects":

- Economic return
- Maturity
- Environmental impact
- Costs and co-financing
- Completion of missing links
- Pan-European Transport Corridors
- Coherence with neighbouring country plans

#### **Implementation**

The Ministry of Transport plays a central role in the co-ordination and monitoring of several major transport infrastructure projects. The implementing agency for roads and motorway projects is the newly reorganised Roads Executive Agency, which comes under the responsibility of the Ministry of Regional Development and Public Works. The Commission provides some assistance to ensure effective project management and implementation in line with EC requirements for tendering, contracting, monitoring and financial control.

# **1.2.** ISPA in Czech Republic

#### 1.2.1. Environment

#### Strategic Objectives

In recent years, the country has made substantial progress in harmonising its environmental laws and regulations with those of the EU. Nevertheless, there are some gaps in national legislation relating to water, waste, IPPC (integrated pollution prevention and control) and GMOs (genetically modified organisms).

The government plans to update the State Environmental Policy, including full transposition of the EU framework directives on air, waste and water, and closing the legislative gaps between 1999 and 2003. This requires large investment and the participation both of the public and the private sector. This update may, however take longer than anticipated, especially given widespread concern over the ability of the parliament to process the large number of new acts.

The main concerns are **water** (including drinking water and wastewater collection and treatment), **waste management** (including solid waste) and improvement of **air quality**.

**Drinking water** quality is monitored in public piped-water systems that correspond to 40% of the population supplied with piped water, and many samples exceed the limits for parameters such as free chlorine, hardness, calcium, aluminium and iron. In

addition, part of the **sewerage** system is not connected to wastewater treatment plants. Approximately 10% of the wastewater discharged into the public system is not treated at all. The major challenge to the system remains the adequate treatment all wastewater collected and the extension of coverage and the upgrading of treatment for those 650 communities with over 2000 inhabitants still lacking facilities.

Despite the positive trends in the **waste management** sector during recent years, there are some significant risks associated with the absence of a comprehensive strategy for waste management at the national, regional and local levels. The hazardous waste infrastructure built by the private sector is having problems securing waste because nearby public landfills sites have much lower fees. At present, these landfills are exceeding capacity and a shortage exists of recycling facilities. The new approach towards packaging waste aims to encourage adoption of more environmentally friendly products and packaging. However, the new legislation is not fully compatible with EC directives.

Much of the recent decrease in **air pollution** resulted from pollution control effects, retrofitting of large coal and lignite-fired power plants with desulphurisation equipment, partial switching of fuels from lignite and heavy fuel oil to natural gas and other similar measures. The Czech Repbulic aims at stabilising the current emissions levels throughout the period of further economic growth and addressing mobile source emissions (transport-related pollution). It is expected that further rehabilitation and renovation of current technology, as well as reduction of energy subsidies, will have a positive impact on the reduction of energy consumption and emission of greenhouse gases.

# Investment needs and Co-financing

Since the 1990s, there has been a sharp increase in investment expenditures for environmental protection in the Czech Republic. In the recent years the level of environmental expenditures has stabilised at around 2.4 % of GDP, which exceeds that of most EU countries.

Environmental investment expenditures grew in real terms between 1990 - 96, from  $\notin$  0.6 billion in 1990 to  $\notin$  1.2 billion in 1996 (1996 prices). Overall, the share of central government expenditure has declined since 1992. New environmental legislation has induced considerable investment in the private sector, particularly in power.

Recent government estimates have put the capital cost of fully implementing all the EU environmental directives around  $\notin$  6.6-9.0 billion (1998 prices). During the past years, environmental expenditures have focused on air and water pollution, accounting for an average of 84% of overall environmental expenditures during the period 1990-96. Since 1995, more than half of the expenditure has gone to air protection (desulphurisation of combustion gas, fluidised-bed boilers and fly-ash precipitators).

### ISPA Assistance

The Czech Government has defined the following priorities for ISPA financing:

### • **Priority 1:** *Water Quality (starting in year 2000)*

ISPA projects focus on:

- Equipping existing large waste water treatment plants (equivalent to a population of over 10, 000) with facilities for removing nitrogen compounds and phosphorus;
- Reconstruction of existing sewer networks through connection to technically suitable waste water treatment plants with adequate capacities;
- Extension of sewer networks to the existing technically suitable waste water treatment plants with adequate capacities;
- Elimination of the previous environmental burdens on state and municipal property that constitute a risk in relation to contamination of ground water;
- Monitoring and assessment of water quality.
- **Priority 2:** *Air quality and Climate protection (starting in year 2001)*

Projects focus on measures to:

- Support the use of waste as a secondary raw material;
- Create systems for the re-use of packaging and packaging waste;
- Support the collection and re-use of selected waste commodities, especially used mineral oils and batteries;
- Support the construction of incinerators for hazardous and communal waste.
- **Priority 3:** *Waste management (starting in year 2001)*

Priority is given to:

- Supplement the air quality monitoring system;
- Conversion to gas furnaces and heating plants in the public sector;
- Energy supply infrastructure in villages and towns (general conversion to gas and extension of the network of central heat supplies);
- Support the use of alternative and renewable energy sources in the public sector.

#### Implementation

As most of the municipalities do not yet have the capacity to carry out successfully large-scale infrastructure projects, the Centre of Regional Development (CRD) in the Ministry of Regional Development, set up in the framework of the PHARE programme, should assume tendering and technical implementation contracting functions for the two projects approved in 2000. For the next several years, the Czech authorities intend to transfer this role to the State Environmental Fund (SEF) in the Ministry of Environment.

1.2.2. Transport

#### Strategic objectives

The objectives of the ISPA transport strategy in the roads sector include the elimination of major bottlenecks and environmental black-spots, by filling in gaps in uncompleted expressways and motorways. Construction of a ring-road around the

capital city, Prague, which will have a radial function for the national motorway network, will also ease congestion.

For railways, the main strategic objective is completion of modernisation and upgrading of the main international Corridors identified in the TINA report. In addition to improvements in the interconnection of the network with that of neighbouring countries, time savings in both national and international journeys will increase competitiveness in both freight and passenger traffic, resulting in increased revenues.

### Investment needs and co-financing

The investment needs in the TINA report equalled  $\in 202.56$  million. Of this amount, backbone railway and road networks accounted for  $\in 1$  904.43 million and  $\in 2$  387 08 million respectively. In 1999, investment in transport infrastructure by the Czech government accounted for only 1.2% of GDP.

The main national instrument for financing these needs is the State Transport Infrastructure Fund, with resources estimated at between  $\in 830$  and  $\in 890$  million. IFI loans of about  $\in 400$  million are being considered for state guarantee for the period of 2002 to 2006. Therefore, the ISPA contribution in financial terms to overall transport infrastructure expenditure in the Czech Republic is thus relatively modest.

### ISPA Assistance

The Czech Government has defined the following main priorities for ISPA financing:

- In the **roads sector**, (i) completion of missing sections of the R 48 expressway linking Czech Republic with Poland, (ii) construction of certain sections of D8 motorway linking Prague to Dresden, (iii) completion of the Pilsen by-pass, (iv) and certain sections of the Prague Ring Road.
- In the **rail sector**, priority is given to TEN Corridor IV, which links the country to Berlin and Vienna/Bratislava. This modernisation work is scheduled to be completed by end 2002.
- For **inland waterways**, priority is given to improvement of navigation conditions on the Labe river.

#### *Implementation*

The Ministry of Transport and Communications acts as the Implementing Agency for the sector, where it plays a central role in project monitoring and reporting to the Ministry of Finance, which is responsible for submitting declarations of expenditure to the Commission.

The Roads and Motorways Directorate and Czech Railways acts as final beneficiaries for the respective sub-sectors. As contracting authority for the projects, these bodies are responsible for tendering and technical supervision, subject to the supervision of the Ministry.

# **1.3.** ISPA in Estonia

### 1.3.1. Environment

### Strategic Objectives

Estonia faces problems concerning air and water pollution concentrated in the Tallinn region and the north-eastern part of the country, which requires large investment mainly from the public sector.

The major environmental impact relates to the **low standard of wastewater treatment** (low connection rates to municipal sewerage systems and unsatisfactory functioning of the treatment plants). Furthermore, there are **no wastewater plants with tertiary treatment**. This creates a risk of eutrophication in many lakes, rivers and the Baltic Sea. The situation regarding the discharge of untreated wastewater is particularly serious in the north-east of Estonia. The water supply is generally unsatisfactory, mainly due to a large extent to water losses caused by leakage, approximately 30-35%, but as much as 60% in north-east Estonia.

The second cause of environmental damage relates to the **air pollution** caused by the oil-shale burning power plants, chemical and cement factories. The main problems in the air sector are connected with energy production, which produces high amounts of  $SO_2$ . Around 75% of the main air pollutants come from north-east Estonia.

The third cause of environmental concerns relates to the upward trend in the generation of **hazardous wastes** created by oil shale mining, oil shale chemistry and power production. As there are currently 252 landfills, the goal is to reduce this number to 10 - 15, involving the closure of many existing landfills and the construction of regional landfills meeting EC requirements.

# Investment needs and Co-financing

The total estimated cost of full compliance with the environmental aspects of the *acquis* is  $\in$  4 billion. Domestic funds for environment derive from 4 main sources: the central budget (the public investment programme); local budgets (municipalities); the Estonian Environment Fund, and private capital. Bilateral donor support to the environment sector in Estonia equalled  $\notin$  64 million over the period 1991-1998. Most of the projects receive parallel co-funding from international financial institutions such as EBRD, EIB, NIB or NEFCO.

#### ISPA Assistance

The Estonian Government has defined the following priorities for ISPA financing:

- **Priority 1:** *Wastewater projects* These projects are located in the capital, Estonia's second city (Tartu) in the industrial north-east, and in the major river catchment areas.
- **Priority 2:** *Solid waste* Seven projects are already identified, referring to municipal waste (Tallinn) or a combination of municipal and hazardous waste (Parnu, south-east Estonia, and Vaivaa).

• **Priority 3:** *Air pollution* - Two projects are identified, referring to a private and large-scale heavily polluting power plant in the north-east of the country.

# *Implementation*

The Ministry of Environment and the newly created Environmental Investment Centre play a central role in co-ordination and monitoring in connection with the municipalities concerned. The Commission provides assistance to ensure effective project management and implementation in line with EC requirements for tendering, contracting, monitoring and financial control.

For water projects, tendering and contracting functions are mainly delegated to the water companies. The Environmental Investment Centre, acting as IA, supervises the tender and contracting process.

# 1.3.2. Transport

# <u>Objectives</u>

The Transport Infrastructure Needs Assessment (TINA) network development is the main focus for large-scale investments. The immediate strategic objectives are achieved through infrastructure investments, the key figures of which are:

- Reconstruction of main roads and highways, carrying the main traffic flows, specifically construction and modernisation of the connections Tallinn-Tartu, Tallinn-Narva (West-East), and Tallinn-Ikla (North-South), and the development of the regional road network;
- Modernisation of railway infrastructure in east-west Corridor, specifically the reconstruction of Tallinn-Tapa-Narva and Tapa-Tartu-Petseri railway tracks, and the construction and extension of border stations;
- Renovation and maintenance of international and coastal waterways and navigable inland waterways, as well as the development of port and harbour infrastructure and the realisation of a modern vessel traffic system.

# Investment needs and Co-financing

For ISPA projects identified within the period 2000-2003, the funding needs are estimated at  $\in$  124 million. 47 % of this amount is required for roads and 53 % for railway infrastructure. This distribution does not take into account the current process of rail privatisation; the impact of this on ISPA funding must still be carefully examined. The rail privatisation may lead to some substantial changes in the transport strategy, in connection with projects related to ports and waterways.

As the financing capacity of the State budget is extremely limited, the maximum ISPA intervention rate of up to 75 % of eligible costs often has to be applied, with the exception of rail projects.

# ISPA Assistance

The Estonian authorities focus on the implementation of project in the roads and railways sectors, as projects in the other two sectors (waterways and airports) are more likely to attract loans from IFI and commercial banks. This statement does not take into consideration the current rail privatisation, which was not decided at the time the ISPA transport strategy was drafted.

- **Priority 1:** *Upgrading of Road Corridor I (Via Baltica)* As defined by the TINA exercise, ISPA projects focus on Road Corridor I. The main sections are located on the Tallinn Parnu Ikla Road (Via Baltica) and on the connecting eastwest link between Corridors I and IX (in Russia). Other road projects are located along Lake Peipsi and in the south-eastern region of Estonia.
- **Priority 2:** *Upgrading of the Railway Link* ISPA projects emphasise the modernisation of the transit traffic and the regional development of the Tallinn Tapa Narva St. Petersburg railway line. Other projects relate to a south-eastern rail border station, the upgrading of the rail Corridor I and the bypass of the railway line around Tallinn towards Paldiski.

### *Implementation*

The Ministry of Transport and Communication plays a central role in co-ordination and monitoring of projects. Planning, procurement, contracting and supervision of the works are delegated to two implementing agencies, the Estonian National Road Administration and the Estonian Railways Ltd, both of which have a sound expertise in these issues. The European Commission is providing assistance to ensure effective project management and implementation in line with EU requirements for tendering, contracting, monitoring and financial control.

# **1.4.** ISPA in Hungary

1.4.1. Environment

#### Strategic Objectives

The policy framework is defined in the Environmental Act, the National Environmental Programme and Sectoral implementation Programmes, which cover legislative reform, institutional restructuring, strategic tasks, intervention programmes and evaluation measures.

Three areas for national priority intervention have been retained:

• wastewater treatment - given the widespread discharge of untreated or partially treated municipal and industrial waste water from the main population centres which affects the quality of surface and groundwater, such as the river basins of the Danube and Tisza rivers. This priority is emphasised in the National Environmental Protection Programme, based on the EC regulations requiring that the direct discharge of insufficiently treated wastewater from large-scale sources has to be stopped as soon as possible. To meet this goal, the National Sewage Management Programme establishes that the upgrading/extension of existing

treatment plants and the construction of new plants should gradually ensure full secondary treatment of all wastewater.

- **solid waste disposal** because the majority of the municipal and industrial/institutional waste is still deposited in landfills not conforming to EC standards and having no adequate technical protection. Hazardous waste is often not collected or treated separately. As a result, the National Waste Management Plan provides for the establishment of a network of high-capacity regional deposition sites and waste management systems, as well as for the closure and rehabilitation of old, non-standard waste dumps and the separate collection and reuse of recyclable waste components.
- **air pollution** is governed by the Air Quality Protection Inter-sectoral Action Programme which is aimed at improving the air quality of highly polluted settlements and regions.

### Investment needs and co-financing

For the period 2000-2005, estimated costs for achieving compliance with investmentheavy EC directives in Hungary in the water and waste sectors (no data available for air quality) are as follows:  $\in$  86 million per year for municipal solid wastewater,  $\in$  1020 million per year for municipal waste water treatment and  $\in$  216 million per year for urban waste water treatment.

With the assumption that average ISPA assistance would amount to 50% of eligible costs and considering that the financing capacity of the municipalities is limited, most projects will be co-financed by the central government and with support from IFIs, notably the EIB.

# ISPA Assistance

The Hungarian Government has defined the following priorities for ISPA financing:

- **Priority 1:** *Wastewater treatment* ISPA projects focus on large agglomerations, on sensitive areas, and on projects with significant national or trans-national components. Projects are selected according to effluent and recipient conditions.
- **Priority 2:** *Waste management* Priority is given to projects consisting of integrated regional systems for the treatment of municipal waste, new landfills, selective collection, composting, recycling, re-cultivation of old landfills and, if necessary, transfer stations. Generally, such systems should serve a population of a minimum of 250 000 inhabitants. Waste incinerators for the disposal of non-recyclable waste, serving a population of a minimum of 500 000 inhabitants, could be built.
- **Priority 3:** *Air quality improvement* Primary goals are the reduction of emissions from transport, industry, power plants and communal heating. The development of an air quality protection information system is also scheduled. Air quality ISPA projects are initiated from the year 2002 onwards and will target large cities and industrial settlements.

#### Implementation

The Ministries of Environment and of Transport and Water Management (as the implementing agencies) play a central role in the co-ordination, supervision and monitoring of environment projects, in co-operation with the municipalities involved. The Commission provides some assistance to ensure effective project management and implementation in line with EC requirements in the field of tendering, contracting, monitoring and financial control.

### 1.4.2. Transport

### Strategic Objectives

The **rail network** has suffered the detrimental effects of insufficient maintenance and lack of necessary repair for many years. As a result, traffic is often delayed, the quality of services is inadequate, and travelling conditions are poor.

The same was true for **road infrastructure**, but since the early 1990s, the development of road network has been the new focus of transport infrastructure financing, particularly from international sources. With rising road transport demand and a rather sparse network of major motorways, substantial resources are being allocated to increase highway capacity. Many parts of the national road networks need urgent pavement strengthening operations, the cost of which could be much higher if very harsh winter weather conditions occur.

The medium term infrastructure **development plans mainly concentrate on the elements of the TINA network**. For railways, upgrading of the so-called trunk network is the priority, while for national roads the implementation of the expressway development plan is the priority. However, it is also important to strengthen the existing network of national roads in compliance with Community standards.

For the **inland navigation** sector, the main objectives are the improvement of navigation conditions on sections of the Danube upstream of Budapest, and to develop an appropriate port network.

As for **civil aviation**, top priority is given to the further development of the Budapest-Feryhegy International Airport; the improvement of regional airports providing direct access to European hubs (one in East and one in West-Hungary) should begin simultaneously. **Multi-modal services** are using a network of ten (of which, four are major) logistic centres.

#### Investment needs and Co-financing

ISPA assistance for Hungary in the transport sector can be estimated to be approximately 0.125% of the expected Hungarian GDP.

The global needs estimation to update the TINA network in Hungary is approximately  $\in$  6.5 million. Total investment costs of the Hungarian transport projects initially proposed for ISPA funding amount to approximately  $\in$  1.30 billion. ISPA grants would cover 30 - 35% of the overall financing needs. Complementary resources should be raised from the national budget and other national sources, as

well as private sources in the cases of infrastructure projects being developed under public-private partnership schemes. Co-financing strategies are developed with EIB and other IFIs and implemented in due time, step-by-step, at sub-sector and project level.

### ISPA Assistance

The Hungarian Government has defined the following priorities for ISPA financing:

- **Priority 1:** *Railways* ISPA projects focus on rehabilitation of the two main rail TINA Corridors linking Hungary with Austria, Slovenia and Romania. The growing potential and demand for freight and combined transport services (international and transit) make it increasingly urgent to remove traffic bottlenecks, reduce travel times, improve the safety and other conditions of rail transport in those Corridors.
- **Priority 2:** *Roads* After cancellation of the ISPA application of M3 and M7 motorway projects, the Hungarian development policy placed a prime emphasis on the strengthening of the main transit roads. For the expressway network, the main aim of the Government is to accelerate the ten-year programme supporting domestic enterprises and achieving lower construction costs.
- **Priority 3:** *Combined Transport* The development of combined transport is important in Hungary and IPSA projects focus to meet the growing demand for accompanying the combined rail-road transport.
- **Priority 4:** *Inland navigation* In the medium term, priority must be given to the smooth development of upper Danube navigation, especially for the ports of Budapest and Győr-Gönyű, near the Austrian border. Further projects could be considered for the Southern sections, when Danube navigation through the Yugoslav territory is reopened.
- **Priority 5:** *Civil aviation*

The infrastructure investment strategy for the TINA civil aviation network, must be centred on the development of Feryhegy International Airport (FIA); the perspectives for growth of international air traffic could require the construction of a third passenger terminal and other investments at FIA over the 2000-2006 period.

#### Implementation

The Ministries of Transport and Water Management, as the formal implementing agencies, play a central role for co-ordination and monitoring of the different beneficiaries (like the national railway company MAV, or the national road administration UKIG). The Commission provides some assistance to ensure effective project management and implementation, in line with EC requirements for tendering, contracting, monitoring and financial control.

# 1.5. ISPA in Latvia

### 1.5.1. Environment

### Strategic Objectives

The major environmental challenges relate to the **low level of wastewater treatment**. Furthermore, there are **no wastewater plants with tertiary treatment**, which creates a risk of eutrophication in many lakes and rivers. The water supply systems need to be upgraded in order to extend population coverage, to increase the quality of drinking water and, at the same time, to reduce significant leakages.

The second cause of environmental damages is the **uncontrolled disposal of mainly urban waste**. The 558 known landfills in Latvia do not meet EU standards, waste is not collected selectively, and there is no organised recycling.

### Investment needs and Co-financing

Estimated costs for achieving compliance with investment-heavy EU Directives are of the order of  $\notin$  1.4-2.3 billion. Almost 2/3 would be required for water and wastewater facilities, and about 1/4 for waste management and hazardous waste. Most of the projects are co-financed with support of EBRD, EIB, NIB or NEFCO.

### ISPA Assistance

The Latvian Government has defined the following priorities for ISPA financing:

- **Priority 1:** *Wastewater and drinking water* ISPA projects focus on the seven largest cities and on the most important river basins, those of the Salaca, Gauja and Daugava rivers.
- **Priority 2:** *Waste management* Projects focus on measures to minimise the disposal of waste, through selective collection and the promotion of waste recycling, as well as through the closure of old landfills that pose severe health hazards and the creation of new landfills that meet EU standards.

#### Implementation

The Ministry of Environmental Protection and Regional Development plays a central role in co-ordination and monitoring. The Commission provides assistance to ensure effective project management and implementation in line with EC requirements for tendering, contracting, monitoring and financial control.

As most of the municipalities do not yet have the capacity to carry out successfully large-scale infrastructure projects, the Implementing Agency of the Ministry of Environment will assume tendering and contracting functions for most of the projects, as well as responsibility for the technical implementation of the projects.

### 1.5.2. Transport

### Strategic Objectives

The Transport Infrastructure Needs Assessment (TINA) network is the main focus for large-scale investments. Due to the lack of financing for regular and periodic maintenance, it will be necessary to rehabilitate the network by strengthening the pavements, in order to meet the axle load capacity requirements of the EC.

The existing rail infrastructure is sufficient for the current traffic flows and for an increase in volume. **Rehabilitation and upgrading of the existing infrastructure** and **safety improvements** are priorities in the medium term. Modern signalling systems and traffic control will be introduced.

# Investment needs and Co-financing

Estimated costs for the Latvian TINA network development till 2015 equal  $\notin$  2 billion. Almost one half would be required for railway infrastructures, and about one quarter each for roads and seaports. As the financing capacity of the State budget is extremely limited, the maximum ISPA intervention rate of up to 75 % of eligible costs must often be applied.

### ISPA Assistance

The Latvian National ISPA Strategy in the field of transport focuses the implementation on the roads and railways sector, as projects in the two other sectors (ports and airports) are more likely to attract loans from IFIs and commercial banks:

- **Priority 1:** *Upgrading of Road Corridor I (Via Baltica)* ISPA projects focus on the Road Corridor I, which currently demonstrates high accident rates.
- **Priority 2:** *Upgrading of the East-West railway link* ISPA projects focus on the modernisation of the East-West railway link, which is of major importance for the transit freight.

#### *Implementation*

The Ministry of Transport plays a central role in co-ordination and monitoring of projects. The Commission provides assistance to ensure effective project management and implementation in line with EC requirements for tendering, contracting, monitoring and financial control.

As the Road and the Rail Administrations do not have the capacity to carry out successfully large-scale infrastructure projects, the Implementing Agency of the Ministry of Transport will assume tendering and contracting functions for most of the projects.

# **1.6.** ISPA in Lithuania

### 1.6.1. Environment

### Strategic Objectives

Lithuania faces challenges in the provision of healthy drinking water, in efficient and sustainable treatment of waste water, in the provision of facilities for solid waste and, to a lesser extent, in the reconciliation of expected economic growth with the improvement of air quality. Moreover, in the medium term, the closure of the Ignalina Nuclear Power Plant requires alternative energy sources whose pollution burden will need to be mitigated.

Priorities are closely linked to the EC Directives on the environment. While the two major cities, Vilnius and Kaunas absorb much of the available funds, the majority of the population, which lives in much smaller localities, cannot be ignored.

### Investment needs and Co-financing

The National ISPA Strategy for the environment sector identifies the main elements of the cost of compliance with the key groups of directives for each main category. Thus, for drinking water, the cost is estimated at  $\in$  170 million, for urban waste water treatment  $\notin$  460 million and for solid waste,  $\notin$  370 million (a total of  $\notin$  1 billion).

Since environmental projects are normally revenue-generating, and must respect the polluter pays principle, the Ministry of normally seeks funding for 50% of the cost of the project with the rest financed from internal sources and loans from IFIs.

#### ISPA Assistance

The Lithuanian Government has defined the following priorities for ISPA financing:

- projects which comply with EU environmental policy objectives and principles:
- projects which are a priority in the National Programme for the Adoption of the Acquis (NPAA) and help the country to comply with the most investment-intensive Directives.

Projects must be technically, financially and environmentally viable. For each of the major sectors, specific criteria have been further identified.

#### *Implementation*

The Ministry of the Environmental plays a central role for co-ordination and monitoring. The Commission provides assistance to ensure effective project management and implementation in line with EC requirements for tendering, contracting, monitoring and financial control.

As most of the municipalities do not yet have the capacity to carry out successfully large-scale infrastructure projects, the Central Finance and Contracts Unit (CFCU) in the Ministry of Finance which has been set up in the framework of the PHARE programme, will at first assume tendering and contracting functions for most of the projects. The unit is also responsible for the technical implementation of the projects.

However, it is a priority of the Ministry of Environment and ISPA to develop project implementation capacity within the Ministry.

### 1.6.2. Transport

### Strategic Objectives

Priorities are closely linked to the European networks identified by the Transport Infrastructure Needs Assessment process. Lithuania is at the intersection of the Helsinki-Crete Corridor I (Via Baltica) and Corridor IXB (Minsk – Klaipėda). In addition, Corridor IA (Via Hanseatica) is almost entirely in Lithuanian territory. It is anticipated that all proposals for ISPA support will be related to the improvement of, or enabling access to, one of these Corridors.

#### Investment needs and Co-financing

The National ISPA Strategy for the transport sector identifies 55 infrastructure investment projects to be implemented in the period to 2005. The vast majority – 43 in all – are directly related to the development of the Pan-European Transport Corridors.

A particularly significant project is the proposed European gauge railway link between the Polish border and Kaunas, with possible extensions along the route of the Via Baltica to Tallinn.

The Lithuanian government intends to allocate up to 1.5 % of GDP to transport infrastructure investment but ISPA and IFI funds are essential to bring the major Pan-European Transport Corridors up to European standards. In the longer term – until 2015 – it is estimated that a total of  $\notin$  1400 million is needed. Of this, 58 % is destined for railway modernisation, 24 % to roads, 13 % to maritime infrastructure, specifically in the Port of Klaipėda, and 5 % to the modernisation and reconstruction of airports.

#### ISPA Assistance

Funds are concentrated on bottlenecks and necessary interconnections rather than new routes. Safety and environmental acceptability are priorities in the selection and design of projects.

Three road projects have already been approved for funding – the upgrading of the Corridors I, IA (for funding in 2001 and later) and IXB, and the construction of a connection between the Port of Klaipėda and Corridor IXB is anticipated.

So far, one rail project has been approved – the first stage of the modernisation of the telecommunications and signalling for the rail route of Corridor IXB. Further projects to upgrade sectors of this line are expected in the near future, in addition to a major project to improve the physical structures of the line. Finally, considerable work has already been financed on the preparation of the European gauge link from the Polish border to Kaunas. Projects to improve the Port of Klaipėda, and the physical infrastructure of Vilnius airport are planned but may not be approved for financing until 2002 - 2003.

### Implementation

The Ministry of Transport and Communications is responsible for co-ordination, implementation and monitoring. A Monitoring Committee has been established, at which both the project management and financing bodies are represented.

### **1.7.** ISPA in Poland

### 1.7.1. Environment

### Strategic Objectives

**Water** - The requirements for an adequate water supply are an extension of the network, as well as construction and modernisation of water purification stations. Waste water treatment is a priority, since most large cities have a very high rate of untreated waste water. The treatment of the waste water in six big agglomerations (Warsaw, Łòdź, Krakow, Bydgoszcz, Torun and Szczecin), would reduce the total municipal discharge at national level by approximately 50%. There are ISPA projects in the last four out of these six cities and projects in the remaining two, Warsaw and Lodz, are scheduled to begin in 2001.

**Solid waste -** Solid waste production has been growing in the past years and, up to now, almost all solid waste has been land-filled, with very low rate of recycling, sorting and composting. The waste is sometimes taken very long distances for disposal (up to 200 km) because, under Polish law, landfill management is totally liberalised and there is no obligation for a city to deposit its waste in a nearby location. A significant number of installations (sorting stations, composting stations, etc) have to be upgraded or built.

**Air pollution -** The main sources of pollution are power, district heating plants and particularly car transport, which has increased rapidly in the past years.

#### Investment needs and Co-financing

Although insufficient, all investments in environmental infrastructures since 1997 amounts to approximately  $\notin 2$  billion a year, which represents about 8% of the overall investment in the Polish economy. The funds come primarily from the National Fund for Environmental Protection and Water Management, the municipalities and the investors' own resources, and loans. According to the estimations, the implementation of the *acquis* will require a minimum of  $\notin$  20 billion in the coming years. The major costs relate to waste water management and air quality.

Most of the projects financed by ISPA are also co-financed by IFIs or bilateral funds from EU member states. In 2000, six of the ten ISPA projects approved were co-financed with IFIs.

# ISPA Assistance

The Polish Authorities have defined the following priorities for ISPA environmental measures:

- **Priority 1:** *Water and wastewater management* ISPA projects focus on large agglomerations, cities with no or insufficient treatment facilities, and urban areas with high wastewater discharges. The major cities are located in the Vistula and Odra river basins. It is expected that this priority will take up the largest part of the ISPA budget.
- **Priority 2:** *Solid waste management* Projects focus on measures to minimise the disposal of waste through selective collection in large agglomerations and the promotion of waste recycling. Old landfills that are health risks will be rehabilitated and new landfills that meet EC standards will be opened. If needed, waste incinerators based on EC regulations may be built.
- **Priority 3:** *Air quality protection* Priority is given to projects in the largest agglomerations, to measures with cross-border impact and which maximise pollution reduction.

# *Implementation*

The Ministry of Environment, together with the National Fund for Environmental Protection and Water Management, plays a central role in co-ordination and monitoring. The Commission provides assistance to ensure effective project management and implementation in line with EC requirements for tendering, contracting, monitoring and financial control.

# 1.7.2. Transport

# <u>Objectives</u>

Poland has a spatially well-developed network, although the quality of infrastructure had created a bottleneck in the efficient operation of the transport network.

- **Roads** Of very high importance is the network of international roads crossing Poland, currently consisting of 13 routes totalling 5 800 km in length. These roads connect the country with a network of the most important trans-European connections, the majority of which are components of the TINA network.
- **Railways**: the current operating rail network consists of 23 210 km of rail lines, which are mainly standard gauge lines. Half of the network is electrified.
- Seaports: there are four seaports of significant importance for Poland's national economy: Gdansk, Gdynia, Szczecin, and Swinoujscie. These ports handle 93% of maritime cargo. There is a need to modernise the seaport facilities especially cargo trans-shipment facilities.
- Airports: the airport transport infrastructure consists of 12 airports, of which Warsaw Airport has the dominant share (approximately 90%) of 2.62 million international passengers in 1998.

• **Inland waterways**: there are 3 800 km of navigable inland waterways, of which only a small part is currently used for transport of goods. Less than 10 million tonnes of cargo was transported last year by inland waterways, representing only 0.3% of the overall goods transported in the country.

# Investment Needs and Co-financing

Between 1990 and 1998 expenditure allocated to the modernisation of the transport network amounted to  $\notin$  4 352 million, of which 50% was funded from the Polish state budget and 50% by means of Community grants ( $\notin$  416 million) loans from International Financial Institutions ( $\notin$  1 785 million).

The cost of modernisation or construction of transport infrastructure located on the TINA network is estimated at  $\notin$  36.3 billion until the year 2015. It is estimated that, between 2000 - 2006, the total amount of state budget expenditure for transport infrastructure will increase from  $\notin$  1.5 billion in 2000 to  $\notin$  3 billion in 2006, i.e. from 0.8% of GDP in 2000 to 1% of GDP in 2006.

A wider participation of the private sector in financing transport projects is expected through public-private partnerships. The private sector is favoured by an amendment to the law on toll motorways and by the privatisation of Polish State Railways (PKP), ownership of the rolling stock and management of the rail infrastructure. The restructuring programme for the rail sector assumes that investment in the rail infrastructure network is first financed by the state and then later privatised.

The National ISPA Strategy on Transport has identified a list of 19 indicative projects, from which terminal infrastructure such as airports, river and seaports, combined transport terminals, are not foreseen as priorities for ISPA funds. From that list, the total cost of projects is estimated at  $\notin 2.741$  million, of which  $\notin 1.655$  million are road projects (60%) and  $\notin 1.088$  million are railway projects.

# ISPA Assistance

The Pan-European Transport Corridors crossing Poland include Corridor I (joining Poland with the Baltic States), Corridor II (connecting Poland with Germany and Belarus), Corridor III (connecting Poland with Germany and the Ukraine), and Corridor VI (a north-south Corridor connecting Poland with the Slovakia and the Czech Republic).

The ISPA programme has identified the following projects:

- Corridor II: the continuation and completion of the modernisation of the E-20 railway line east of Warsaw and on the border section with Germany. These projects aim to complete the first stage of modernisation of the whole E-20 line between the border section with Germany and Belarus;
- Corridor III: the continuation of the A4 motorway construction between Wroclaw and Gliwice as well as between Wroclaw and the German border, and the construction of the modernised railway E-30 between Legnica and the German border;

 Corridor VI: the improvement of road access to the ports of Gdynia and Gdansk, and improvement of the road connection with the Czech Republic and Slovakia in order to improve the traffic on the north-south axis.

Apart from the above-mentioned projects, other important issues include the strengthening of road pavement and bridges on the TINA network, as well as the rehabilitation and modernisation of infrastructure nodes to improve traffic safety and protect users of the environment.

### Implementation

The Ministry of Transport and Maritime Economy plays a central role as regards coordination and monitoring, acting as ISPA Sectoral Authorising Officer (SAO). Planning, procurement, contracting and supervision of the works are delegated to the implementing agencies, i.e. the General Directorate of Public Roads (GDDP) or to the Polish State Railways (PKP), which have sound expertise on these issues. The Commission provides assistance to ensure effective project management and implementation in line with EC requirements for tendering, contracting, monitoring and financial control.

### **1.8.** ISPA in Romania

1.8.1. Environment

#### Strategic Objectives

The major environmental challenges relate to the poor quality of water, which is the result of discharge of untreated or partially treated wastewater. This is a substantial health risk and stresses the ecosystem.

The second cause of environmental damages and related health hazards is the uncontrolled disposal of mainly urban waste. Landfills do not meet EC standards, waste incinerators are inadequate, waste is not collected selectively, and there is no organised recycling. To enforce both Romanian law and recently transposed EC legislation on waste management, municipalities need to undertake major investment for the treatment of urban waste.

The third environmental concern relates to air pollution. Poor power generation facilities and heating plants based on low-quality coal are the major source of  $SO_2$  and  $NO_x$  emissions. Replacement of current facilities by alternative generation sources is urgently needed. Significant efforts must be made to meet EC air quality standards in hot-spot areas.

# Investment needs and Co-financing

The poor state of the environment is notably caused by a substantial decline of public investment in the sector in recent years: between 1995 and 1998, investment contracted from 0.6% of GDP to a mere 0.1%. Estimated costs for achieving compliance with 'investment-heavy' EC Directives are equal  $\in$  15 billion. Almost two-thirds would be required for water and wastewater facilities, and about  $\notin$  2.5 billion each for waste management and air pollution measures.

As ISPA can only finance up to 75% of eligible costs and as the financing capacity of municipalities is extremely limited, most of the projects are co-financed with the support of EBRD and EIB, as well as with bilateral aid from different Member States.

### ISPA Assistance

The Romanian Government has defined the following priorities for ISPA financing:

- **Priority 1:** *Wastewater and drinking water* ISPA projects focus on the largest urban agglomerations (in general of more than 100 000 inhabitants), on cities with no or insufficient treatment facilities, on urban areas with high wastewater discharges and on measures that mitigate the impact on environmental sensitive zones.
- **Priority 2:** *Waste management* Projects focus on measures that minimise the disposal of waste through selective collection in large agglomerations and the promotion of waste recycling. Old landfills that cause severe health hazards will be rehabilitated and new landfills that meet EC standards will be opened. If needed, waste incinerators based on EC regulations will be built.
- **Priority 3:** *Air quality protection* Priority is given to projects in agglomerations, to measures with cross-border impact and that maximise reduction, and to clean technologies (as opposed to end-of-pipe solutions), and is addressed from 2002 onward.

For the purpose of ISPA, the Commission favours an integrated basin-approach for water and waste management priority projects which are located in the beds of the Danube and its main tributaries.

#### Implementation

The Ministry of Water and Environmental Protection plays an active role in the coordination, supervision and monitoring of environment projects. The Commission provides some assistance to ensure effective project management and implementation in line with EC requirements for tendering, contracting, monitoring and financial control.

As most of the municipalities do not yet have the capacity to successfully carry out large-scale infrastructure projects, the Central Finance and Contracts Unit (CFCU) in the Ministry of Finance, set up in the framework of the PHARE programme, assumes the tendering and contracting functions for most of the projects. The unit will also be responsible for the technical implementation of the projects.

Partnerships between the public and the private sector may also help to overcome the lack of financial and institutional capacity of Romanian public bodies. In case the operation of environmental utilities is delegated to a concessionaire, the Commission seeks to ensure that the award of the concession is governed by the principles of transparency, competition and equal access.

### 1.8.2. Transport

### Strategic Objectives

Due to lack of maintenance in the past 20 years, most components of the transport network are currently in a deteriorated condition. At the same time, there is a necessity of upgrading to European standards and of increased traffic capacity around urban areas.

More specifically, road traffic is affected by a low quality of pavement. Bearing capacity of 11.5 T/axle is achieved only on recently rehabilitated sections. Poor separation of traffic induces a great mix that leads to a high accident rate: over 8 000 serious per year with 2 800 casualties. Road safety has also to be improved taking into account the lack of by-passes in the vicinity of urban areas and the excessive number of railway level crossings (400 on national roads).

Due to safety problems, speed restrictions apply on 1300 km of rail track. Major repairs have been delayed on 2 600 km of tracks, 1 164 bridges and 24 tunnels.

Regarding waterways, besides the blockade of the Danube in Serbia (which is currently being resolved), a number of black spots restrict navigation, including sandbanks in the Belene area, and wrecks in the delta.

### Investment needs and co-financing

It should be noted that since 1993, through PHARE, IFI contributions and the national budget,  $\in 1$  100 million have been invested in road infrastructure with the modernisation of 2 143 km. In addition, since 1998, the national railways company has reorganised and split into 5 different entities and with rehabilitation programmes in excess of  $\notin$  400 million.

The needs assessment provided by the TINA process (1999) based on expenditure worth 1.5% of GDP on the period 2000 - 2015  $\in$  728 million is necessary for the modernisation of the backbone networks (Pan-European Transport Corridors).

As the ISPA transport allocation amounts to about  $\in$  850 million on 2000-2006, it allows for less then 10% of these backbone needs to be covered. The ISPA cofinancing limit of 75% of the eligible costs implies that support from the IFIs including EIB, EBRD, IBRD and JBIC (Japanese Bank for International Cooperation) is needed to complement national budget contributions.

#### ISPA Assistance

The Romanian Government has defined, as a priority for ISPA financing, the modernisation of well-travelled sections of the three Pan-European Transport Corridors crossing the country while maintaining a reasonable balance between road, rail and waterways, namely Corridor IV, VII, and XI.

### Implementation

A central role for co-ordination and monitoring being played by the Ministry of Public Works, Transport and Housing. Two implementing agencies have been designated: National Administration of Roads (N.A.R.), for the road projects and National Railway Company/Infrastructure (C.F.R.-SA) for the rail projects. The Commission provides some technical assistance to these agencies in order to ensure effective project management and implementation in line with EC requirements for tendering, contracting, monitoring and financial control.

# **1.9.** ISPA in Slovakia

### 1.9.1. Environment

### Strategic Objectives

**Water quality -** improvement is a priority, given the widespread discharge of untreated or partially treated wastewater from the main population centres. The total number of inhabitants connected to a water supply network reached only 83% in 1998 and there are strong variations between regions. The main objective of the Government's National Environmental Action Programme II (NEAP) in the area of protection and rational use of waters is reduction of amount of pollutants in discharged waste waters, which requires, first of all, construction and re-construction of sewerage networks and waste water treatment plants as well as further measures oriented on selected industries.

**Waste Management -** the measures defined in NEAP II are oriented to building a network of regional waste landfills and incinerators for disposal of hazardous and non-hazardous wastes, systematic re-cultivation of landfill locations, reduction of production of hazardous wastes, intensification of separated waste collection and increased of use of separated elements of municipal waste.

Air Pollution - there are serious problems in some 20 identified regional "hotspots". Industrial power plants, refineries and municipal energy generation facilities are the major source of  $SO_2$  and  $NO_x$  emissions.

# Investment needs and Co-financing

Estimated costs for achieving compliance with investment-heavy EC Directives in Slovakia in the water, air quality and waste sectors are of the order of  $\notin$  2.9 billion.

#### ISPA Assistance

The Slovak Government has defined the following priorities for ISPA financing:

• **Priority 1:** *Wastewater and drinking water* - ISPA projects focus on construction and re-construction of drinking water treatment plants, re-construction and intensification of existing waste water treatment plants in areas with a population of more than 2 000 inhabitants, equipping the existing large waste water treatment plants with installations for removal of nitrogen compounds and phosphorus, reconstruction and construction of existing sewerage networks connected to waste water treatment plants, complying with EU requirements.

- **Priority 2:** *Air quality improvement* Priority is given to reducing the emissions from large combustion plants, reducing the emissions of SO<sub>2</sub>, NO<sub>X</sub>, volatile organic compounds, heavy metals and persistent organic compounds, supporting investments oriented to fulfilment of emission limits and general conditions of operation of hazardous waste and other incinerators.
- **Priority 3:** *Waste management* Priority is given to measures that reduce the production of wastes, encourage the disposal of wastes in environmentally proper manner, landfill of wastes only at technically appropriate landfills, reduce the risks of old waste landfills, and construction of regional incinerators of hazardous and medical wastes, in accordance with the EC Framework Directive on Wastes.

# Implementation

The Ministry of Environment plays a central role in the co-ordination and monitoring of environment projects. As most municipalities do not yet have all the necessary capacity to carry out large-scale infrastructure projects, the Ministry of Environment (and in particular a specially set-up Implementation Agency within the Ministry), will take overall responsibility of implementing most of the projects, including tendering and contracting functions. The Commission provides assistance to ensure effective project management and implementation in line with EC requirements.

1.9.2. Transport

### Strategic Objectives

In the **roads** sector there has been slow development of motorways and express routes in TINA Corridors, and there are severe problems of traffic congestion in the towns. The **rail** sector suffers from a lack of competitiveness and loss of traffic to the road sector. Withdrawal of State subsidies for bulk **water** transport has made it not competitive with other transport sectors. There are inadequate links to neighbouring countries, especially Poland, and in general with the European road and rail networks.

The Slovak Government's transport strategy highlights the following main objectives:

- Build-up and modernisation of transport infrastructure in the multi-modal Pan-European Transport Corridors in line with European norms;
- Development of international roads and their interconnection with the European Roads network;
- Integration of passenger transportation systems;
- Promotion of combined road/rail transport;
- Compliance of transport infrastructure with environmental concerns.

# Investment needs and Co-financing

The cost of aligning the principal "backbone" network (Corridor V) in Slovakia to EC standards has been estimated in the TINA report at  $\notin$  4 091 million, of which the road network accounts for  $\notin$  2 949 million and the railway network  $\notin$  1 142 million.

### ISPA Assistance

The Slovak Government has defined the following priorities for ISPA financing.

**Rail** sector - upgrading of the system to European norms especially track renewal and track speed, restructuring of ZSR Railways on more commercial lines, renewal of rolling stock, and attraction of new investment to specific areas of the network.

**Roads** sector - strategic investments in the TINA Corridors especially Va Bratislava-Zilina; in other roads, improvement of operational efficiency by funding improved programmes of repair and maintenance, and reduction of traffic intensity at strategic points in the network.

**Waterways** - investment in the Slovak elements of transport Corridors to boost capacity and efficiency, and improvement of navigation conditions on the rivers Danube and Váh.

Aviation - development of Bratislava and Kosice airports in line with expected economic progress.

### **Implementation**

The Ministry of Transport, Posts and Telecommunications plays a central role in coordination and monitoring of transport projects. The Commission provides some assistance to ensure effective project management and implementation in line with EC requirements for tendering, contracting, monitoring and financial control.

# 1.10. ISPA in Slovenia

1.10.1. Environment

#### Strategic Objectives

The major environmental impact relates to the **poor quality of water**, which is the result of the discharge of untreated or partially treated wastewater. This is a substantial health risk and stresses the ecosystem. Furthermore, there are **no wastewater plants with tertiary treatment** which has resulted in eutrophication of many lakes and reservoirs.

The second cause of environmental damages and related health hazards is the **uncontrolled disposal of mainly urban waste**. Landfills do not meet EC standards, waste incinerators are inadequate, waste is not collected selectively and there is no organised recycling.

#### ISPA Assistance

The Slovenian Government has defined the following main priorities for ISPA financing:

- **Priority 1:** *Wastewater and drinking water*
- **Priority 2:** Waste management

# • **Priority 3:** *Air quality protection*

#### *Implementation*

The Ministry of Environment plays an important role in co-ordination and monitoring of projects. Regarding the responsibility for the technical implementation of the project, the CFCU acts as Implementing Agency and is assisted by the Ministry of Environment.

### 1.10.2. Transport

### Strategic Objectives for ISPA Assistance

In 2000, over  $\in$  10 million were mainly dedicated to a railway project in the framework of ISPA. Making use of the limited ISPA financing, Slovenia concentrates all its efforts on the **railways** which, considering their poor state of repair, require the maximum of renovation works. Both Corridors V and X cross Slovenia.

#### Investment needs and Co-financing

Considering the state of the financed network, investments of the amount of  $\notin 850$  million -  $\notin 2500$  million are necessary to raise it to EU standards, whereas the ISPA allocation will not exceed  $\notin 70$  million for the 2000-2006 period.

#### ISPA Assistance

ISPA insists on the importance of the financial support from the IFIs, and the strategic importance of Slovenia within the Pan-European Corridors V and X, when considering projects.

#### **Implementation**

The Ministry of Transport plays an important role in co-ordination and monitoring of projects. Regarding the responsibility for the technical implementation of the project, the CFCU acts as the Implementing Agency, and is assisted by the Ministry of Transport.

# 2. **ANNEX 2**

# 2.1. Bulgaria

### 2.1.1. Environment

### 2.1.1.1. 2000/BG/16/P/PE/002

Waste management: Set of 6 regional waste disposal sites located in Montana, Ruse, Pernik, Sevlievo, Silistra and Sozopol in Bulgaria

The measure concerns the construction of 6 new regional landfills which are intended to replace 113 existing disposal sites serving the target areas. The measure is an essential part of the Bulgarian National Waste Management Programme. One of the axes of this programme aims at building or reconstructing 37 regional landfills and reducing the solid waste network from the existing 700 sites down to approximately 50 new disposal sites.

Four of the new landfills deal with non-hazardous waste only. In Sevlievo and Ruse, on the other hand, separate disposal cells for hazardous waste are included. These new landfills provide the capacity for disposal and storage of hazardous, construction and production waste which is currently unavailable in the target areas.

### Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
62 775 837	-	2 198 324	60 577 513	45 433 135	75

The measure forms part of the Bulgarian National Waste Management Programme (1999-2002), which cost approximately € 340 million.

#### 2.1.1.2. 2000/BG/16/P/PE/003

Construction of Wastewater Treatment Plants located in the Maritsa Basin (Stara Zagora, Dimitrovgrad) in Bulgaria

The measure concerns the construction of new wastewater treatment plants and related infrastructure to serve the cities of Stara Zagora and Dimitrovgrad which are located in South-central Bulgaria on the Maritsa River or its tributaries. It is aimed at tackling the pollution of the receiving waters of the Maritsa River and ultimately of the Aegean Sea, as well as improving the environment of the cities concerned and their surrounding region.

The measure is consistent with Bulgarian "National Priority Investment Programme for Construction of Wastewater Treatment Plants in Settlements with a Population Equivalent of over 10,000", whose principles are in line with the priorities of the Accession Partnership 1999 and the National Programme for the Adoption of the Acquis.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
43 399 688	-	-	43 399 688	32 549 766	75

The measure forms part of the Maritsa basin group of projects which includes a third wastewater treatment plant for the city of Haskovo. The total estimated cost of this group is  $\notin$  61.4 million. A loan agreement has been signed by the Bulgarian authorities and the European Investment Bank to cofinance the Maritsa basin projects.

# 2.1.2. Transport

# 2.1.2.1. 2000/BG/16/P/PT/001

Transit Roads Rehabilitation Project III – sections on the Pan-European Transport Corridors in Bulgaria

The project concerns the rehabilitation and upgrading of sections of main trunk roads in Bulgaria along the Corridors IV, VIII and IX. It represents the continuation of the successful Transit Roads I and II programmes, financed by the EIB, PHARE and the Bulgarian authorities, under which some 1 500 km of main highways in Bulgaria have already been rehabilitated.

The objectives of the project are to upgrade Bulgarian road infrastructure to EC standards (load-bearing capacity of 11.5 tonnes axle weight and design speeds of 80 km/hr), and thereby improve traffic flows, reduce vehicle operating costs, and enhance safety. The development of fast and efficient road connections form an essential part of Bulgaria's efforts to promote trade and economic development.

The particular sections selected for ISPA financing - organised into four Lots for management purposes – account for some 250 km of main highway. They represent sections with the heaviest traffic and/or worst conditions.

Lot N°	Road N°	Туре	Pan- European Corridor	Section	km (equiv. to 7.5 m)
3	I-5 II-66	2 lanes	IX	Kazanlak-Stara Zagora Stara Zagora bypass	63
4	A-2	4 lanes	IV	Hemus motorway	39
8	I-6 & I-9	2 lanes	VIII	Sliven-Burgas-Varna	77
9	I-1	2 lanes	IV	Vidin-Montana	71
Total					250

Table: Sections proposed for ISPA financing

# Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
40 000 000	-	-	40 000 000	30 000 000	75

The project forms part of the Transit Roads III Rehabilitation programme which has a total estimated cost of  $\notin$ 133.0 million and is co-financed by the EIB (loan of  $\notin$  60.0 million).

# 2.1.2.2. 2000/BG/16/P/PT/002

Sofia Airport Reconstruction, Development and Extension: Lot B1 – New Terminal and Related Infrastructure

The project concerns the construction of a new passenger terminal and related infrastructure for the airport of Sofia, Bulgaria. It forms part of a wider development, comprising the extension and realignment of the runway to cater for larger aircraft and to reduce noise disturbance to the residents of Sofia. The airport is the only one in Bulgaria with a year-round schedule of international flights.

The project allows the airport to cater for the growth in air traffic expected once the reform and restructuring of the Bulgarian economy takes full effect. More specifically, the project's main objectives are:

- to provide airport facilities that correspond with the recommendations of the International Civil Aviation Organisation (ICAO);
- to ensure capacity is available to handle 2.0 million passengers by 2010 and 2.6 million passengers by 2018;
- to help Bulgaria meet its international obligations as regards aviation safety, security, competition, and customs and border controls.
- to help Bulgaria fulfil the objectives of the Accession Partnership and National programme for the Adoption of the Acquis (NPAA);
- to promote air transport links between Bulgaria and the EU and other candidate countries.

The works proposed comprise the following main components: New passenger terminal (56 500 m<sup>2</sup>); new aircraft parking aprons (50 000 m<sup>2</sup>); new taxiways and taxi-lanes (13 000 m<sup>2</sup>); access road (1500-2000 m); and car parking (28 000 m<sup>2</sup>). The terminal building has a modular structure allowing for future expansion if required.

# Cost and assistance (in €)

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
148 756 000	-	13 620 865	135 135 135	50 000 000	37

The above figures relate to the construction of the new terminal and related infrastructure. The total development of Sofia airport, including the construction of a new runway, is expected to cost approximately  $\notin$  216.0 million.

# 2.2. Czech Republic

### 2.2.1. Environment

### 1.1.1.1. 2000/CZ/16/P/PE/001

Extension of the Sewerage System in the City of Ostrava

The project comprise the three following components:

- (1) Completion of sewers within the system of trunk sewer "D" comprising
  - Completion of Sewer D VI
  - Completion of Sewers D and D XIII
  - Sewer D-stage 6 and Sewer Z-section b and Sewer Z-section c
- (2) Pumping station and sewerage Muglinov District
- (3) Extension of the integrated multi-services duct system (Collector) including drainage from the termination of the recently constructed section in Podebradova into the historical core of the City. (In 1991 "The Study of Ducts Ostrava Centre" was published, followed in 1995 by the construction of approximately 1 000 m of a multi-purpose duct in Pedebradova Street. The study proposes a total length of about 6 860 m. Subject of this Application is the construction of 1 535 m for the next stage).

#### Cost and assistance (in €)

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
40 720 168	-	15 877 359	24 842 810	16 644 682	67

# 2.2.1.2. 2000/CZ/16/P/PE/002

Sewer System of the City of Brno

The project comprise the three following components:

(1) <u>Reconstruction of the sewerage system in the area of Lisen</u> – reconstruction is designed in areas where the existing storm sewer is of unsatisfactory capacity or structural condition. Storm sewers are being constructed in places where these have not yet been provided. After completion of the sewerage network (21 450 m) in the district of old Lisen, additional 9 200 people will be connected to the sewerage system, the sewer "FII" will be more effectively used and all wastewater will then be discharged to the Modrice WWTP;

- (2) <u>Completion of the basic system of the main and trunk sewers</u> there are three main sewers with severe defects in both structural condition and capacity:
  - Tkalcovská street: Implementation of the missing trunk sewer D in Tkalcovská street completes the reconstruction of a major part of trunk sewer;
  - Merhautova street: The 2nd section of Merhautova street deals with the completion of the main sewer reconstruction and elimination of breakdowns;
  - Táborská street: Completion of the reconstruction of the 2nd section resolves the persisting problems of tunnel maintenance in Táborská Street.
- (3) <u>Draining of the historic centre of the city</u> the construction of a secondary collector (duct) network in the historical centre of the city is caused by the need to reconstruct the sewer system (1887 1905), which is in a very poor structural condition. The proposed sections to be constructed (1 885 m) are connected to the secondary collectors already completed and operated in Masarykova Street, Kapucinské Sq., Květinářská, Panská, Radnická, Jánská Streets and Malinovského Square.

# Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
39 273 300	-	10 953 660	28 319 640	17 841 373	63

# 2.2.2. Transport

# 2.2.2.1. 2000/CZ/16/P/PT/002

Optimisation of the Ústi nad Orlicí –Ceská Trebová railway section

The project consists of a railway line section with a total length of 6.3 km .The project aims at the upgrading of the section, which forms part of the National Railway Corridor I and the TEN-T multi –modal Corridor IV.

The works consist of the reconstruction of the railway superstructure and the catenary; reconstruction and construction of bridges; construction of a passenger subway; reconstruction of a station building; reconstruction of signalling devices; realignment of the track over a length of 1.1 km.

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
38 154 000	-	1 885 000	36 269 000	14 300 080	39

# 2.2.2.2. 2000/CZ/16/P/PT/003

Expressway: Section of R48 Expressway Frýdek-Místek-Dobrá

The project is part of the R 48 expressway which is an 86 km long road and the continuation of the main Czech West-East route from Prague to the Polish border. The R48 is a four lane expressway, except in six missing two lane sections; this project addresses one of these missing sections. The project is located on European Intermodal Transport Corridor VI.

The project consists of construction of a new dual carriageway road of 5.24 km in length. The scheme also includes two intersections as well as bridge objects, a footbridge and pedestrian subway and diversions of roads and services that are a necessary consequence of construction of the new road. The demolition of 20 objects and the construction of 10 sections of anti-noise barriers are required.

Average annual daily traffic amounts to more than 21,000 vehicles, of which heavy vehicles represent 25%. A significant part of present traffic (15 - 20%) is international traffic.

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
36 341 990	-	2 355 862	33 986 128	20 391 677	60

#### Cost and assistance (in €)

#### 2.2.2.3. 2000/CZ/16/P/PT/006

Railway: Modernisation of the Záborí-Prelouc railway section

The project consists of a railway line section with a total length of 18.5 km. The project aims at the upgrading of the section , which forms part of the national Railway Corridor I and the TEN Multi-modal Corridor IV.

The national Corridor extends from the German border (linking to Dresden and Berlin) at Decín, through Prague, Ceská Trebová, Brno to Breclav (linking to Vienna and Bratislava). The total length of the Corridor is 455 km. The section in question is located between Prague and Ceská Trebová.

The works consist of the reconstruction of the railway superstructure and the catenary; reconstruction and construction of bridges; extension of station buildings at Záborí and Recany related to the track improvement; replacement of signalling equipment; erection of anti-noise walls; realignment of the track over a length of 1.18 km.

Cost and assistance (in €)

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
65 560 339	-	3 754 500	61 814 840	30 907 420	50

# 2.2.3. Technical assistance

# 2.2.3.1. 2000/CZ/16/P/PA/001

Project preparation in the field of transport

# (1) ROADS

**D8 motorway**: This route is intended to link Prague to the German border leading to Dresden. Project preparation assistance is requested for 4 sections.

**R48 expressway**: This route is a four-lane expressway linking the Czech republic to Poland. Project preparation assistance is requested for 3 sections.

# (2) RAILWAYS

## Railway line Ceska Trebova-Prerov (Central Moravia region)

The line is identified as an additional network component in the TINA report and serves as a connection between Corridors IV and VI.

The basic projects documents exist for these projects (economic and financial analysis, environment impact studies, technical design), but a review of this documentation is necessary for preparation of an application for support from ISPA. Assistance is also required for the preparation of tender documentation.

The above-mentioned list of projects is indicative and thus new projects may be added to the list with the written consent of the Commission, including whenever changes are made to the strategy paper.

The terms of reference for consultants include an element of capacity building within the contracting authority in order that the latter is able to prepare future project applications autonomously and on a sustainable basis.

## Cost and assistance (in €)

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
833 333	-	-	833 333	625 000	75

## 2.2.3.2. 2000/CZ/16/P/PA/002

Technical Assistance for Project Preparation in the Environment Sector

The basic project documents exist for these projects (economic and financial analysis, environment impact studies, technical design). A review of this documentation and of its insertion and link with the integrated water plans designed for these regions is necessary for preparation of an application for support from ISPA. Assistance is also required for the preparation of tender documentation after acceptance of the proposed projects.

## Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
380 000	-	-	380 000	285 000	75

## 2.3. Estonia

- 2.3.1. Environment
- 2.3.1.1. 2000/EE/16/P/PE/001

Tartu Tunnel Collector (K2)

Tartu is a city of 100 000 people in south-east Estonia, located in the catchment area of the Baltic Sea (Gulf of Finland).

The tunnel collector K2 is a 2.5 km long interceptor sewer along the western bank of the Emajögi in prolongement of an existing 4.2 km long and 2.3 meters diameter tunnel collector K1 commissioned in 1999 and completed with a terminal pumping station discharging to a treatment plant. The extension of this collector sewer eliminates pollution to the river by raw domestic sewage and industrial effluents from 11 of the 17 remaining outfalls. In addition, 40 sewer chambers and one emergency overflow chamber are being built.

Cost and	assistance	(in €)
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Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
7 760 000	-	60 000	7 700 000	5 467 000	71

# 2.3.1.2. 2000/EE/16/P/PE/002

Central Municipal Wastewater Treatment Plant in Viljandi

The town of Viljandi is situated in South Estonia, some 160 km from Tallinn. The town is the major centre of Viljandi County, which has a population of about 46 000. The population of the town itself is around 21 500.

Currently about 80% of the collected wastewater undergoes treatment at the Tüma and Männimäe treatment plants whereas 20% is discharged untreated at Kösti to a large wetland (Mädajärve Swamp).

A creation of the new wastewater treatment plant at Kösti is deemed environmentally and economically superior to those facilities. This single plant would have sufficient capacity for domestic, commercial and industrial wastewater. The measure consists of four components:

- Construction of a 30 000 p.e. new WWTP in Kösti including sludge dewatering;
- Reconstruction of the main sewer (diameter 450 mm/length 500 m) between Loikuse Street and Hariduse pumping station;
- Construction of the new pumping station (2 x 40 l/s) and pressure main to the vicinity of Tüma;
- Construction of new pumping station (2 x 15 l/s), pressure main to M\u00e4nnim\u00e4e and retrofitting the existing basins to serve as retention basins.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
6 361 150	-	-	6 361 150	4 707 251	74

## Cost and assistance (in €)

## 2.3.1.3. 2000/EE/16/P/PE/003

Narva City Sewage Treatment Plant Rehabilitation

The existing wastewater treatment plant is placed in Narva, a city of 73 000 inhabitants located in the north-eastern part of Estonia on the western bank of the River Narva which forms the border between Estonia and the Russian Federation. Municipal wastewater (35 000  $m^3/d$ ) is treated in combination with industrial water

(5 000 m<sup>3</sup>/d) and, as a consequence of that, the sludge produced is unsuitable for reuse.

The purpose of the project is to proceed to the rehabilitation of the plant by separating the existing treatment facilities via a "municipal line" and an "industrial line", and by providing for biological and chemical phosphorous removal. The two treatment lines require the rehabilitation of existing tanks combined with new piping and installations.

The plant rehabilitation includes installation of a completely computerised control and supervision system for all plant functions and processes. Electrical installations are being renewed and sampling facilities are being installed.

## Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
10 395 000	-	1 460 000	8 935 000	5 003 600	56

# 2.3.1.4. 2000/EE/16/P/PE/004

Tallinn Waste Management – Phase I

The project, Tallinn Waste Management - Phase I, concerns two separate investments within the ongoing establishment of the new landfill and the new waste treatment plant:

- Construction of an access road from Peterburi Road to the landfill site (5.5 km). The access road consists of a traffic junction of 2 km and of a four lines two ways asphalt road of 3.5 km. The design and the construction is in accordance with the EU standards.
- Connecting the landfill area with the sewage system of Tallinn City by means of a new pipeline (11 km) and pumping stations thus providing for the treatment of the leachate from the landfill. The leachate has to be pumped into the Tallinn sewage system together with sewage water of Maardu, Loo and Iru settlements.

In addition, Tallinn Waste Management-Phase I also includes two components for which no ISPA assistance is required. Those two components, for a total investment cost of approximately  $\notin$  37.4 million, are:

- construction of the first phase of the landfill;
- construction of the first part of the infiltration water system.

Cost and a	assistance	(in €)
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Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
7 150 000	-	1 040 000	6 110 000	4 582 500	75

#### 2.3.2. Transport

## 2.3.2.1. 2000/EE/16/P/PT/001

Via Baltica: Rehabilitation of Ikla-Tallinn-Narva Road

The project refers to a package of road rehabilitation sections located along the following roads:

Tallinn-Ikla (E67), running 192 km north-south from the capital city to the Latvian border at Ikla, – of which 83.4 km are being rehabilitated within the ISPA measure. This is the Estonian part of Corridor I that forms part of the TINA network. Corridor I links Helsinki to Warsaw, via Tallinn, Riga and Kaunas;

Tallinn-Narva (E20), running 209 km east-west from the capital city to the Russian border at Narva – of which 37.2 km are being rehabilitated within the ISPA measure. This is the connecting link between Corridor I and Corridor IX (linking Helsinki to Saint Petersburg to Moscow, Kiev, Odessa, Bucharest and Dimitrovgrad).

This package consists of the renovation of 9 sections amounting to 120.6 km of the Tallinn-Ikla (E67) and Tallinn-Narva (E20) roads, which is about 30% of the total length of the roads.

## Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
19 095 210	-	210 000	18 885 210	14 163 908	75

## 2.3.3. Technical assistance

## 2.3.3.1. 2000/EE/16/P/PA/001

Technical Assistance in the rail sector (detailed design, tender documents and detailed environmental impact assessment for South-East Railway Border Station)

This technical assistance application refers to the following elements of the South-East Railway Border Station project preparation:

- Environmental impact analysis including public hearings, information and awareness campaigns. The mitigation measures and the costs involved should also be specified. The consultant should identify any training needs, if necessary;
- Technical studies; and
- Preparation of tender documentation.

## Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
1 800 000	-	-	1 800 000	1 350 000	75

## 2.4. Hungary

## 2.4.1. Environment

## 2.4.1.1. 2000/HU/16/P/PE/001

Upgrading of Sewage Treatment Plant at Györ

The city of Györ and 10 surrounding settlements are currently served by a wastewater treatment plant with partial biological sewage treatment. The project is aimed at upgrading this plant to a full two-phase biological wastewater treatment with nutrient removal and sludge processing.

## Cost and assistance (in €)

Major cost components are works (6.25 M€) and plant and machinery (7.33 M€). The central government bears 39.7 % of the eligible expenditure, whereas the contribution from the local authority will amount to 10.3 %.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
18 400 000	-	3 900 000	14 500 000	7 250 000	50

## $2.4.1.2.\ 2000/HU/16/P/PE/002$

Selective Waste Collection and Management System for Hajdú-Bíhar County

The integrated waste management system for the Hajdú-Bíhar county will operate on the basis of three sub-regional environmentally safe waste deposit and treatment sites which will serve a population of 520 000 inhabitants and treat a loose waste volume of 620 000 cubic metres per annum. The integrated feature of the system is manifested by the joint utilisation (e.g. selling) of reusable waste and compost, as well as the transferability of operations in case of unforeseen circumstances.

# Cost and assistance (in €)

The main cost items are works (8.02 M $\in$ ) and plant and machinery (9.36 M $\in$ ). 17 % of the eligible investment cost is borne by the central government and 8 % by the local authorities.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
23 810 000	-	5 072 000	18 738 000	14 053 500	75

## 2.4.1.3. 2000/HU/16/P/PE/003

Szeged Municipal Wastewater Treatment and Collection Development in Hungary

This measure consists of a group of two projects:

Project 1 concerns the construction of the wastewater treatment plant and of a new sewer main to this plant. It includes the completion of the existing mechanical treatment as well as the achievement of full biological treatment comprising N & P removal by activated sludge technology. The sludge is further processed at the solid waste facility of Szeged, which also receives support from ISPA. The treatment plant will have the capacity to serve the equivalent of 230 000 inhabitants. The new sewer main to the treatment plant is to replace the two existing direct wastewater discharges into the Tisza.

Project 2 comprises two sewer developments totalling 308 km, one for Szeged city and one for the district of Dél Újszeged, the population of which is presently not connected to the sewer system.

#### Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
84 051 250	-	17 401 250	66 650 000	33 325 000	50

The central government bears 35% of the investment cost, whereas the contribution from the municipality will amount to 15%.

#### 2.4.1.4. 2000/HU/16/P/PE/005

Szeged regional waste management programme in Hungary

The regional waste management programme covers an area which comprises 29 settlements belonging to Csongrád county and representing a population of 259 000 inhabitants. The annual volume of waste produced amounts to some 168 000 tons, all of which is not entirely collected or deposited in an environmentally safe manner. Accordingly, the programme is to establish a regional waste disposal plant along with biogas production, selective collection, recycling and composting.

Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
15 997 546	-	3 199 616	12 797 930	8 318 654	65

The central government bears 25 % of the eligible programme expenditure, whereas the contribution from the local authority will amount to 10 %.

## 2.4.1.5. 2000/HU/16/P/PE/007

Waste Management System for the Szolnok Area in Hungary

The Szolnok area, as proposed for the waste management system, represents a population of ca. 202 000 inhabitants and comprises 28 settlements. The present waste management in this area is not sustainable as the residents often dispose of the waste themselves, mostly at designated sites, which however lack proper insulation and maintenance and do not comply with the required technical standards. The proposed system, which must be able to treat an annual volume of waste of 70 000 tonnes and a major part of which originates from industry and institutions, consists of :

- (1) a waste transfer facility plus a waste treatment site at Kétpó including all auxiliary and service facilities (composting, sorting, storage, etc.), with a planned life-time of 20 years,
- (2) a waste deposition area (as part of the waste treatment site in Kétpó) which provides deposition capacity for 10 years (the extension of the deposit area after this first phase is funded from other sources).

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
14 522 000	-	4 242 000	10 280 000	7 196 000	70

The central government bears 20% of the investment cost, whereas 10% of this cost is borne by the municipal authority.

2.4.2. Transport

## 2.4.2.1. 2000/HU/16/P/PT/001

Railway: Rehabilitation of the Budapest-Cegled-Szolnok-Lököskáza line (Stage 1: Vecsés-Szolnok Section)

The rehabilitation of the Budapest-Cegled-Szolnok-Lököskáza railway line (Stage 1: Vecsés-Szolnok Section 74 km) is the first stage of the project for the rehabilitation of the line from Budapest to Lökösháza, near the Romanian border, via Cegled. This line is a part of Corridor IV. This Corridor is now an established transit route towards

the Balkans and the Black Sea and, therefore, a continuation of the Vienna-Budapest transit Corridor.

The project covers track works, rehabilitation of the electrical power system, the signalling improvements and telecommunications.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
126 850 437	-	850 437	126 000 000	63 000 000	50

Cost and assistance (in €)

# 2.4.2.2. 2000/HU/16/P/PT/002

Railway: Rehabilitation of the Budapest-Györ-Hegyeshalom line (stage II)

The rehabilitation of the Budapest-Györ-Hegyeshalom is a second phase of a modernisation programme for the Budapest railway line (part of Corridor IV) that started in the early 1990s.

The line between Budapest and Vienna via the Austrian/Hungarian border at Hegyeshalom is the most important railway connection between the EU and the accession countries in this part of Europe.

It lies on Corridor IV, which connects Berlin, Prague and Vienna to Budapest. Budapest is the major regional hub, connecting, via Corridors IV, V and X, the Balkan countries and Greece. Strategically, the Budapest – Hegyeshalom line is the most important on the Hungarian trans-European network. It currently carries around 1.2 billion tonnes km of freight, representing about 16% of the national railway company (MAV) total.

The project covers track works and extension and rehabilitation of the electrical power system, signalling improvements and European Train Control System (ETCS) installations.

Cost and assistance (in €)

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
87 662 000	-	1 674 000	85 988 000	42 994 000	50

#### 2.4.2.3. 2000/HU/16/P/PT/003

Railway: Rehabilitation of the Zalalövö-Zalaegerszeg-Boba line

The rehabilitated Railway line (83 km) forms part of Corridor V, main branch (Venice-Trieste/Koper-Ljubljana-Budapest-Uzhgorod-Lvov line), and is a connecting line for the direct railway link between Hungary and Slovenia.

The measure comprises reconstruction and upgrading of the railway line from Zalalövõ via Zalaegerszeg to Boba. The measure also includes the electrification and implementation of ETCS (European Train Control System) on the railway line including (for electrification) the section presently under construction from the Slovenian State Border, Bajánsenye - Zalalövõ. Electrification and implementation of ETCS will then extend from the Slovenian border to Boba.

The measure comprises totally 101 km railway line, of which 65 km is to be rehabilitated, 17 km shall be reconstructed in a new alignment, 3.4 km is completely new construction as bypasses near Zalaegerszeg and Boba, and the ECTS is implemented along the entire 101 km.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
169 399 301	-	2 009 301	167 390 000	83 695 000	50

#### Cost and assistance (in €)

## 2.4.3. Technical assistance

#### 2.4.3.1. 2000/HU/16/P/PA/001

Technical assistance relating to the Budapest Municipal Wastewater Treatment and Collection Development – Central Wastewater Treatment Plant and its components

The project consists of the technical appraisal of existing studies and tender documents against EC legislation requirements as well as the completion of additional technical and economic preparatory studies and tender documents. Appraisal and studies relate to the development of the Central Wastewater Treatment Plant of Budapest and its components. It comprises:

- a feasibility study
- a financial and economic analysis
- an environmental impact assessment
- the elaboration of the ISPA application
- the preparation of procurement documentation
- the wastewater analysis and the supply of measuring equipment

The development of the Central Budapest Wastewater Treatment Plant and its components is a major element of the Budapest municipal wastewater treatment and collection development and is presented for ISPA assistance at a later stage. Only 34 % of the municipal wastewater of Budapest is treated at present. The catchment

area of the planned Central Wastewater Treatment Plant covers nearly half of the capital's population of 2 million inhabitants and 58% of the city's wastewater.

Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
2 096 200	-	-	2 096 200	1 572 150	75

# 2.4.3.2. 2000/HU/16/P/PA/002

Railway: Technical assistance for the tendering procedure of the railway projects

- (1) Vecsés Szolnok railway line (2000/HU/16/P/PT/001)
- (2) Budapest Győr Hegyeshalom railway line (2000/HU/16/P/PT/002)
- (3) Zalalövő Zalaegerszeg Boba railway line (2000/HU/16/P/PT/003)

The technical assistance project oversees the tender documentation of the following construction works before the tendering procedure:

- Vecsés-Szolnok railway line: reconstruction of the track and platforms at stations Vecsés and Üllő
- Budapest-Győr-Hegyeshalom railway line
  - Implementation of the ETCS between Kimle and Komárom
    - Installation of ETCS system between Budapest-Komárom

## Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
158 100	-	-	158 100	118 575	75

## 2.4.3.3. 2000/HU/16/P/PA/003

Railway: Technical assistance for the preparation of the project "Rehabilitation of the Szolnok -Lökösháza railway line."

The preparatory works for the "Rehabilitation of the Szolnok-Lökösháza railway line" would include the following items:

- Overview of the technical description
- Preparation of the Environmental Study
- Overview of the Cost-Benefit analysis
- Preparation of the Application form

## Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
200 000	-	-	200 000	150 000	75

# 2.4.3.4. 2000/HU/16/P/PA/004

Road: Technical assistance for the preparation of the project "Road Rehabilitation Programme for achieving the 11.5 tons load bearing capacity

The target of the road rehabilitation programme is to achieve the 11.5 tonnes load bearing capacity on various sections of national roads, on the TINA network, according to the EC directive.

The following tasks are included:

- (1) Review of the technical, economic and financial feasibility studies;
- (2) Review of the environmental impact analysis;
- (3) Review of ISPA application;
- (4) Assist in the preparation of the public procurement documentation for part of the project.

## Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
200 000	-	-	200 000	150 000	75

## 2.5. Latvia

## 2.5.1. Environment

## 2.5.1.1. 2000/LV/16/P/PE/001

Development of water services in Rīga (Phase II)

This measure aims at improving the water and wastewater collection, at improving the drinking water quality and at ensuring a wastewater treatment according to the EC requirements in Rīga, which is the main Latvian city (791 000 inhabitants) and a major port in the Baltic Sea. The measure comprises the following components:

 <u>Drinking water quality</u>: extension of the drinking water production (groundwater from 9 new artesian wells from Zakumuiža-D wellfield), extension of the water supply network (32 km) in Marupe and Vecāki (2% of Rīga's population or 14 000 p.e.). - <u>Wastewater</u>: extension of the sewerage network (64 km including design, network and 8 pumping stations) in Mežaparks, Marupe and Vecāķi (about 3% of Rīga's population or 25 000 p.e.); replacement of a pressure line and 2 wastewater pumping stations by a gravity sewage main (2 km from Vairoga iela to Gaujas iela); extension of a sludge deposit in Daugavgriva (including composting area and weighing machine).

Compliance of the relevant infrastructure with the EC directives will be reached before 2010 by improving the drinking water quality (the new amount of water complies with EC directives without requiring any treatment), by increasing the treated wastewater in 3 areas of Rīga (thus preventing groundwater pollution) and by the extension of a sludge deposit, allowing thanks to a new drainage a reduced level of discharge of Phosphorus (P: - 50%) in the treated wastewater reaching EC standards for phosphorus removal.

## Cost and assistance (in €)

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
28 000 000	-	3 700 000	24 300 000	17 010 000	70

The ISPA rate of intervention as of total cost is 60.75%. The involvement of the EIB with  $\notin$  5 million (extension of the water and sewerage network) as well as of the EBRD with  $\notin$  2 million (extension of a sludge deposit, excluded from the eligible costs) is foreseen.

## 2.5.1.2. 2000/LV/16/P/PE/002

Development of water services in Jelgava

The project aims at improving the service level of water and wastewater collection, at improving the drinking water quality and at reducing pollution loads and leakage of drinking water in Jelgava, which is the 4th Latvian city (70 000 inhabitants). The project comprises 3 components:

- <u>Drinking water quality</u>: network modelling and development of a leakage reduction programme, reconstruction of the water laboratory (with equipment), rehabilitation (14.4 km) and extension (7.8 km) of the water supply network (transmission and distribution mains);
- <u>Sewerage network</u>: rehabilitation (12 km) and extension (6.5 km) of the sewerage network (reduced leakage, infiltration and discharge of untreated sewage) and rehabilitation of 7 sewage pumping stations (14 pumps);
- <u>Wastewater treatment</u>: rehabilitation of the wastewater treatment plant (renewing of inlet, pre-treatment, primary and secondary clarifiers, aeration system and tank, equipment of the wastewater laboratory and rehabilitation of the sludge pumps; installation of Nitrogen and Phosphorus removal process).

Cost and assistance (in €)	Cost and	assistance	(in €)
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Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
15 556 000	-	563 000	14 993 000	11 244 750	75

The involvement of the Nordic Investment Bank (NIB) with  $\notin$  1 818 000 (water transmission and sewerage pumping stations) as well as of the Nordic Environment Finance Corporation (NEFCO) with  $\notin$  544 000 (network modelling and leakage reduction programme) is foreseen.

# 2.5.1.3. 2000/LV/16/P/PE/003

Development of water services in Ventspils

This project aims at improving the water and wastewater collection, at improving the drinking water quality and at reducing pollution loads and drinking water losses in Ventspils, which is the 6th Latvian city (46 600 inhabitants) and a major port of the Baltic Sea. It comprises 3 components:

- Drinking water quality: extension of the groundwater abstraction from two well fields (4 wells), rehabilitation of the groundwater transmission mains (10.8 km), extension of well headers (8 km), rehabilitation (7.5 km) and extension of branches of the network, network modelling, development of a leakage reduction programme in the drinking water distribution network and transmission pipeline, construction of a new water treatment facility (especially for iron removal) and rehabilitation of the laboratory.
- <u>Sewerage network</u>: network modelling and infiltration management system, rehabilitation (9.8 km) and extension of branches of the sewerage network, network equipment and rehabilitation of 5 wastewater pumping stations.
- <u>Wastewater treatment</u>: reconstruction of a new pre-treatment block and of a new biological block in the wastewater treatment plant (including the installation of a nitrogen and chemical phosphate removal process), modernisation of the sludge treatment process (installation of a sludge pumping station and of a dewatering section) and extension of the handling facilities.

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
20 517 000	-	437 000	20 080 000	9 437 600	47

## Cost and assistance (in €)

The involvement of the EIB with  $\notin$  4 738 000 (water treatment facility, rehabilitation of water laboratory, water distribution and sewerage network, sewerage network maintenance) as well as of the NEFCO with  $\notin$  1 750 000 (network modelling, water production and transmission, leakage reduction, water distribution and sewerage network, sewerage network maintenance) is foreseen.

#### 2.5.2. Transport

#### 2.5.2.1. 2000/LV/16/P/PT/001

Improvement of Via Baltica road (Pan European Corridor I) from km 13.0 (Gauja) to km 21.2 (Lilaste) in Latvia (north of Rīga)

This single project is part of the improvements of the Via Baltica road (state main road A1 between Rīga and Ainaži). Via Baltica is a road part of Corridor I, running from Tallinn to Warsaw, in the network identified by the TINA exercise. The Latvian stretch runs for 240 km through the centre of the country.

The improvements on the section Gauja-Lilaste (8.2 km), comprises widening the existing road (from 8.2 m to 11.5 m pavement width); rebuilding existing 10 road junctions; adjusting road alignment; providing/upgrading parking lots, picnic sites and toilets; replacing an existing two span bridge at Lilaste river with a single span concrete bridge; and laying new pavement. The road is being designed in accordance with EU Directive 96/53/EC (maximum axle load of 11.5 tonnes). The section Gauja-Lilaste begins just north of the Gauja bridge, which is currently under reconstruction in the framework of PHARE and terminates with the Lilaste bridge, which is rebuilt within this project.

This project aims at improving the traffic and pedestrian safety as well as the traffic fluidity by bringing this road section in compliance with European road standards and norms. The road section is part of an access road to a popular recreational area. The improvements embodied in the project are expected to reduce vehicle operating costs, road and bridge maintenance costs, travel time during peak hours and also the number of accidents (around 3 accidents a year).

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
6 530 000	-	280 000	6 250 000	4 687 500	75

Cost and assistance (in €)

#### 2.5.2.2. 2000/LV/16/P/PT/002

Improvements of links to Via Baltica (Airport Access Road (P133) and a related section on A10)

This project consists of a group of two projects aiming at improving the traffic safety for Rīga airport's access by bringing the road sections in compliance with European road standards and norms. The first project is located on the east-west Rīga-Ventspils main road A10 (with three lanes per direction), which is part of the TINA network. The second project is located on the link (P133, with two lanes per direction) between this road and Rīga Airport.

The first project consists of the rehabilitation and safety improvements on a 3.5 km section of the A10 main road on both sides of the intersection with P133, including the extension of P133 (0.4 km) towards the east (including a short bridge on

Zolitudes iela), the reconstruction of the junction A10-Lielirbes iela, the closure of the existing six openings in the median lane and the building of two new access ramps in order to give access to the residential area. The second project consists of the rehabilitation and upgrading of the 2.1 km long road P133 from Rīga Airport to the interchange at A10 (upgrading of pavement), including repairs on two bridges at the interchange as well as improvements of alignment of acceleration/deceleration lanes from P133 onto A10.

Cost and assistance (in €)

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
5 902 500	-	110 000	5 792 500	4 344 375	75

# 2.5.2.3. /LV/16/P/PT/003

Replacement of track turnouts (Latvian East-West rail Corridor)

The project consists of the replacement of 780 turnouts on the East-West rail Corridor, defined as a priority Corridor in the framework of TINA. This Corridor is 1095 km long (with a total of 3 023 turnouts) and comprises four sections: Zilupe-Rēzekne-Krustpils-Jelgava-Ventspils, Indra-Daugavpils-Krustpils-Rīga, Karsava-Rēzekne-Daugavpils and Rīga-Jelgava-Liepāja. There is an important backlog of maintenance on the rail lines, which has to be recovered if Latvia wants to consolidate its strategic position for freight transport (33 million tonnes were transported on the East-West Corridor in 1999).

The sets of turnouts (comprising the fabricated rail components, bearers, baseplates and fastenings) are supplied in two lots for 390 turnouts each. The turnouts are installed by the Latvian Railways Company according to the supply schedule. During the 1st phase 2001-2003, 171 turnouts are replaced on the Zilupe-Ventspils section, 187 on the Indra-Rīga section, 16 on the Karsava-Daugavpils section and 16 on the Rīga-Liepāja section. The exact locations for the second lot (2004-2006) will be identified by 2002 and will depend on the infrastructure's condition as well as on the traffic demand.

It aims at upgrading the Latvian east-west railway Corridor in order to cope with the growing freight traffic (estimation of 259 million tonnes/km additional goods until 2006 if the measure is implemented): maintaining and improving the capacity of the rail lines, increasing the traffic safety (reducing the risk of derailments) and reducing the noise. The 780 turnouts to be replaced constitute 26% of the total turnouts on the East-West rail Corridor.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
43 640 000	-	8 400 000	35 240 000	26 430 000	75

Cost and assistance (in €)

# 2.5.2.4. 2000/LV/16/P/PT/004

Rēzekne II reception yard (Latvian East-West rail Corridor)

This project consists of the construction of a new rail reception yard in Rēzekne, located near the Russian border at the junction of the 2 main Latvian railway lines: east-west line from Moscow to the Latvian ports and north-south line from St Petersburg to Vilnius. These rail lines are vital for the transport of transit freight, which is one of the major sectors of the Latvian economy. At present, the Rēzekne station includes a marshalling yard assigned to the sorting of trains (with a capacity of 90 trains/day), a reception-departure yard (where the technical, commercial and customs inspections are carried out) and a passenger area. The experience shows that the marshalling yard tracks are too short, that the junction area is not well designed for parallel train movements and that the expected growth of traffic will require additional capacities. The congestion has been reached in 1997 with a yearly turnover of 22 million tonnes leading to delays and lack of reliability of operations (28 million tonnes/year being the level of complete saturation).

The works foreseen include site and embankment preparation works (157 000 m<sup>3</sup> in soil and stone movement), the construction of a new reception yard with six full-length tracks (length of 1038 to 1165 meters, using new rails UIC 60) plus one 106-meter-long track (in total 8.68 km railway tracks and 27 sets of turnouts), switches and signal centralisation (25 track signals), construction of an administration building (528 m<sup>2</sup>) and extension of a technical building (with the new remote-control installations), water treatment facility and atmospheric pollution control system. This measure aims at improving the operations of international transit freight in Rēzekne according to modern logistics requirements (especially in terms of flexibility and reliability); after completion of the measure, the maximum capacity of the marshalling yard will be 40 million tonnes/year (congestion level at 37 million tonnes/year), the stay of trains and wagons will be shortened and the access for trains to the humps improved.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
10 544 715	-	331 368	10 213 347	7 660 010	75

## 2.5.3. Technical assistance

#### 2.5.3.1. 2000/LV/16/P/PA/005

Technical Assistance in the rail sector (signalling and safety control systems)

It comprises 2 project preparations in the rail sector:

- project preparation for the modernisation of the safety control system;
- and project preparation for the modernisation of the signalling system.

Both projects are located on the on the Latvian East-West rail Corridor or on the additional network components related, defined as a priority Corridor in the framework of TINA. This Corridor is 1 095 km long and comprises four sections:

- Zilupe-Rēzekne-Krustpils-Jelgava-Ventspils;
- Indra-Daugavpils-Krustpils-Rīga;
- Karsava-Rēzekne-Daugavpils;
- and Rīga-Jelgava-Liepāja;

The project preparation consists of:

- review of the existing feasibility studies, cost-benefit analysis for each technical alternative, and design/technical specifications;
- review of the financial analysis;
- environmental impact assessment (only for the signalling system project, if needed);
- preparation of the ISPA application form for the investment project based on the reviewed financial and economic appraisal;
- and assistance during procurement (advice on procurement strategy, assistance during pre-qualification, preparation of tender documentation, tendering, tender evaluation and contracting).

#### Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
425 000	-	-	425 000	318 750	75

#### 2.6. Lithuania

2.6.1. Environment

#### 2.6.1.1. 2000/LT/16/P/PE/001

Rehabilitation and Extension of Water Supply and Sewage Collection Systems in Vilnius (Stages 1 and 2)

Vilnius is the capital of Lithuania with a population of 580 000. The main drinking water and sewage networks date from the beginning of the 20th century and are in

need of immediate repair. The expansion of the drinking water supply networks, as well as replacement of the worn out pipelines and the construction of iron removal plants (within separate complementary projects), contribute to compliance with the EU standards for drinking water by reducing the iron content from 0.25 - 1.2 to 0.05mg/litre. Also, some 99 % of the Vilnius inhabitants and industries will be connected to the water supply networks.

# (1) Component 1

Rehabilitation of a total of approximately 80 km of water mains in the districts of Antakalnis, Baltupiai, Fabijoniškes, Justiniskes, Kirtimai, Lazdynai, Paneriai, Pasilaiciai, Virsuliskes, Zirmunai and the Old Town by relining of approximately 73 km of pipes ranging from less than 200 mm to 1000 mm diameter and the replacement of some 7 km of pipes that are in the utility Corridors.

# (2) Component 2

Extension of the water supply and sewerage networks to serve the outlying areas of Gineitiskes, Traku Voke, Tarande, Bajorai, Balsiai, Kairenai, Naujoji Vilnia and Riese. Rehabilitation of 11 pumping stations within Vilnius by the replacement of worn out and inefficient pumps, the replacement of outdated control equipment, and functional repair of the station structures. Reconstruction of one additional dilapidated pumping station. Rehabilitation of 29 km of sewers and six km of sewage pumping mains, using trenchless technology methods or relaying.

# Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
43 284 500	-	3 284 500	40 000 000	20 000 000	50

The EIB is contributing a loan of 30% of the total cost ( $\notin$  12,000,000).

## 2.6.1.2. 2000/LT/16/P/PE/002

Druskininkai Wastewater Treatment System, Upgrading and Extension

The Druskininkai waste water treatment plant (WWTP) construction (upgrade to biological treatment) and sewerage network system development project incorporates an upgrading of the existing mechanical treatment plant and the construction of biological treatment plant including nutrients removal. In addition, an extension of the existing sewerage network includes the necessary pumping stations and pressure pipelines in living areas not yet connected. The upgraded and extended treatment plant is, at this stage, designed for 26 400 PE (people equivalents) and 6 500 m<sup>3</sup>/day of hydraulic capacity.

After construction of sewerage network and two local pumping stations, an additional ca. 1 200 inhabitants of the city will be connected to the municipal network. The future wastewater plant is designed enabling to treat wastewater from the Druskininkai city and near district with total population of 25 500 inhabitants.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
5 500 000	-	-	5 500 000	2 750 000	50

The EIB is contributing a loan of 30% of the total cost (€ 1,650,000).

- 2.6.2. Transport
- 2.6.2.1. 2000/LT/16/P/PT/001

Upgrading of IXB Transport Corridor

This is an upgrading of sections of road on Corridor IXB to increase the design strength of the pavement to EC standards – in particular enabling it to support axle loads of 11.5 tonnes. It includes strengthening and widening of 86.8 km of existing motorway, pavement strengthening of 315 km of road between Vilnius and Klaipėda, in addition to the implementation of traffic safety measures (barriers and illuminating equipment).

The present measure is for the first package of the contract, with 37.2 km of widening and strengthening and 135 km of strengthening only.

Cost and	assistance	(in €)
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Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
27 059 227	-	976827	26 082 400	19 561 800	75

#### 2.6.2.2. 2000/LT/16/P/PT/002

Development of Via Baltica road in 2000 – 2003 (Pan European Corridor I)

Project is part of the second stage of the long term programme for the construction and upgrading of the Via Baltica road. It includes four sub-projects: new intersections at Marijampolė, Garliava (Kaunas), and Nausodė (Panevėžys), and the upgrading of Kaunas Western by-pass. The aim is to eliminate current bottlenecks and reduce accidents on the road by increasing the overall capacity.

The Via Baltica is the road mode of Corridor I, running from Tallinn to Warsaw. The objective is to create a European quality route thus facilitating trade and communications between Finland, the Baltic States and Poland, and thence the other applicant countries and the Union. The Lithuanian stretch runs for 274 km through the centre of the country, intersecting Corridor IXB at Kaunas.

Some 70 km has already been built or upgraded using loans from amounting to approximately  $\notin$  53 million. This project, part of the second stage, costs  $\notin$ 15.9

million, of which  $\in 11.6$  million is requested from the ISPA facility and  $\in 4.3$  million is met from central government resources.

Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
15 900	-	461051	15 439 000	11 579 000	75

# 2.6.2.3. 2000/LT/16/P/PT/004

Modernisation of Telecommunications, Power Supply and Signalling on Crete Corridor IX B

The full modernisation project aims at increasing safety, railway infrastructure reliability and capacity (without investments in new tracks); reducing the operating and maintenance costs in the railway sector; ensuring that the quality of the rail infrastructure will not decompose to a situation where present operation cannot be performed, and fulfilling demands for interoperability.

The projects included in the Component are for the modernisation of the remaining telecommunications on sections 2, 4 and 5 at Corridor IXB, where the existing telecommunication systems, most of which have no remaining lifetime expectancy, cannot be functionally upgraded nor can they cope with the bandwidth requirements of modern railway business systems.

Signalling systems of sections 3 and 5 need to be upgraded. The project includes the modernisation of signalling of section 3, co-financed from EIB loan funds. Application for the modernisation of signalling systems of section 5 will be prepared in the coming year(s). On section 1, 2 and 4, it is foreseen that the upgrading of signalling will not be necessary before 2005.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
31 701 000	-	-	31 701 000	11 412 360	36

# 2.7. Poland

- 2.7.1. Environment
- 2.7.1.1. 2000/PL/16/P/PE/001

Bydgoszcz water supply and sewerage project

Bydgoszcz is the eight largest city in Poland with a population of 390 000. The city's waste water is a major source of pollution of the Brda and Vistula rivers and of the Baltic Sea, 150 km away. The Polish environment strategy for ISPA identifies Bydgoszcz as one of the priority centres for pollution abatement in the Vistula basin. Accordingly, the proposed project should be seen in the context of the ISPA priority of ensuring that waste water treatment in compliance with the Urban Waste Water Directive.

The city has already made significant investments in two major waste water treatment plants that are currently close to completion. At present, only 25% of all waste water is treated, but this will rise to 95% after the completion of the treatment plants and the implementation of the waste water part of the project. These consist of the provision for a main collector and associated pumping stations to intercept the outfalls to the Brda river and to transport effluent to the new treatment plants, replacement of the main pumping station K1, renovation of the existing sewer network and extension of the network into six area of the city currently without sewers.

At present, drinking water in the city does not fully comply with EC standards. The parts of the project related to improving drinking water quality include up-grading the two existing drinking water treatment plants, improving the testing laboratory to enable measurement of all parameters specified in EC directives, pipe replacement in ageing parts of the network to reduce leakage, safeguarding the water supply to the Fordon district through installation of a second water main and improving water pressure in the area south-east of the Brda.

#### Cost and assistance (in €)

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
75 700 000	-	9 460 000	66 240 000	32 457 600	49

## 2.7.1.2. 2000/PL/16/P/PE/005

Krakow : solid waste treatment, stage I

The City of Krakow is one of the largest cities in Poland, with a population of 800 000 people. At present, the city has a landfill at Barycz which is close to the full capacity. About 234 000 tonnes are landfilled at the site each year.

The city has prepared a waste management programme which includes the extension of the existing site, part of which was once a salt mine, to create a new landfill with a capacity of 2 million cubic metres. In addition the site will have:

- the construction of a container composting plant of 6 000 tonnes per year capacity;
- extension of existing recycling collection services for paper, glass, metal and plastics including a comprehensive information campaign;
- construction at Barycz of a plant for sorting and segregating waste with a capacity of 2 000 tonnes per year.

Even with extension of the site and waste minimisation, the site at Baryck will be fully utilised in about ten years. Accordingly, the project cost includes a detailed feasibility study to investigate future options for waste treatment in Krakow, including incineration.

Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
23 560 000	-	830 000	22 730 000	14 092 600	62

## 2.7.1.3. 2000/PL/16/P/PE/008

Pila Drinking Water Supply

The city of Pila has a population of 76 800. All drinking water for the city is supplied from ground water sources. Drinking water supply is characterised by three main problems; serious contamination of one of the main sources, water that does not meet Polish or EC standards and a shortage of water at times of peak demand.

Part of the water supply was contaminated by leaking fuel tanks at the nearby military air base. An estimate of the contamination in 1984 showed that an area of 10 ha was affected to varying degrees by approximately 300 tonnes of fuel. A detailed soil rehabilitation plan has been prepared but this will take approximately ten years to implement and there is no guarantee that it will be sufficient to protect the water supply for the city. At present, only 30% of the drinking water supply is adequately treated and, at times, iron concentration in the water can be twelve times higher than the recommended limits in the EC directives, with manganese concentration sometimes five times higher. In addition to these quality problems, the city cannot meet peak demand for water and the annual deficit is estimated at 5% of total demand. This is despite a sharp drop in water consumption per capita throughout the nineties, down to the current level of 124 litres/capita/day.

The project includes the following works:

- a new water intake at Dobrzyca consisting of nine deep wells;
- a new water main 7 km in length;

- a drinking water treatment plant;
- water mains connecting the treatment plant to the water distribution system.

As usual in ISPA projects, implementation is undertaken by a Project Implementation Unit (PIU) in the municipality, and technical assistance is supplied for project supervision and to support the work of the PIU.

Cost and	assistance	(in €)
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Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
9 034 712	-	533 053	8 501 659	4 335 846	51

## 2.7.1.4. 2000/PL/16/P/PE/010

Water and sewage management in Torun

Torun and its surrounding area have a total population of 242 000. A new waste water treatment plant was commissioned in 1999 with biological and tertiary treatment, but, at present, only 60 % of the population are connected to it. Also, the quality of drinking water is not to the level required by EC Directive 98/83/EC.

The project consist of three elements:

- Modernisation and upgrading of the drinking water treatment plant (12 % of the total cost of the project);
- Replacement of 17 km of asbestos cement drinking water distribution pipes (4 % of the cost);
- Extension of the sanitary and storm water sewer system of the City of Torun by 240 km. (84 % of cost).

This project forms part of a group of waste water treatment projects in the main cities on the Vistula river, including Krakow, Warsaw and Bydgoszcz, which results in a major improvement in water quality in the Vistula and the Baltic Sea.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
79 378 000	-	267 000	79 111 000	47 466 600	60

## 2.7.1.5. 2000/PL/16/P/PE/012

Krakow Plaszow II, Sewage treatment plant

Krakow is the third largest city in Poland with a population of 800 000. The city has one water treatment plant at Kujawy (51 000 m<sup>3</sup>/d capacity), which was reconstructed in 1999 and complies fully with Polish and EC legislation. The second and larger treatment plant at Plaszow (132 000 m<sup>3</sup>/d) has only mechanical and sludge treatment at present, leading to discharges which do not meet Polish and EC standards. The project comprises upgrading and extending the plant in Plaszow with the construction of a new biological and tertiary treatment plant including sludge handling and bio-gas utilisation. When completed, the capacity of the plant will be extended to 328 000 m<sup>3</sup>/d, sufficient to serve 550 000 inhabitants within the catchment area of the plant.

The project will have a major impact on water quality in the Vistula river, together with other projects in Warsaw, Torun and Bydgoszcz. Krakow was identified as a hot spot in the Polish environment strategy and in the Helsinki convention.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
80 309 000	-	333 000	79 976 000	55 983 200	70

#### Cost and assistance (in €)

## 2.7.1.6. 2000/PL/16/P/PE/016-17

Water quality improvement in Szczecin, Stage I

Szczecin is a major port city on the Odra river with a population of 420 000. At present, only 13% of the waste water generated in the city is treated at one small mechanical treatment plant on the east bank and there is no treatment at all on the west bank. In March 2000, the city completed a master plan to implement a major programme of investment, including two new waste water treatment plants on the west bank, up-grading the plant on the east bank and a major programme of sewerage extension and rehabilitation. The aim is to treat virtually all waste water at Polish and EC standards.

Drinking water quality in the city is currently not up to EU standards and the city is largely dependent on a single pipeline from one main water source at Miedwie lake south east of the city for its water supply. The rate of leakage in the distribution system is high.

The investment programme in the water sector is a major undertaking costing in excess of  $\in 250$  million. The current proposal for funding consists of a first phase of works costing  $\in 47$  million for which detailed designs are ready for water supply ( $\notin 23$  million) and water treatment ( $\notin 24$  million). Technical assistance for the preparation of the main stage of the project is also being provided.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
47 250 000	-	853 000	46 397 000	30 622 020	66

Cost and assistance (in €)

# 2.7.1.7. 2000/PL/16/P/PE/018

Wroclaw solid waste treatment (Stage I)

The city of Wroclaw has a population of 640 000. At present, the only legal waste disposal site within the city limits is at Maslice. Only part of the landfill has a liner and leachate water poses a significant risk for ground water contamination. The landfill is within 150 metres of the Odra river and has a height of over 40 metres occupying an area of about 10 ha. The slopes of the sides are steep and the 1997 flood resulted in instability of the slopes, only partially counteracted by recent remedial works. The site is considered as the third most dangerous landfill in Poland and poses a severe risk to the surrounding environment, including the Odra river.

The main elements of the city of Wroclaw's waste management programme consist of :

- immediate closure and reclamation of the Maslice site, including stabilisation measures;
- construction of a new landfill and a waste transfer station;
- implementation of waste minimisation, separation, recycling and composting in order to reduce the volume of waste disposed of in the landfill.

The programme is divided into two stages. The Commission is prepared to finance the first stage consisting of the reclamation of Maslice, and technical assistance for the design of Phase II and support for the project implementation unit. Until the new landfill is opened, waste at present being deposited in Maslice will go to three landfills meeting the standards in the EU Landfill Directive.

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
20 654 000	-	252 000	20 402 000	13 465 320	66

#### 2.7.2. Transport

## 2.7.2.1. 2000/PL/16/P/PT/001

Construction of A4 Motorway Section KA4E Kleszczów –Sośnica KM 296+600 to KM 315 + 700

The A4 Motorway is the major road axis linking Germany with the coal mining and industrialised southern Poland. It is to be extended to the Ukrainian border, thus facilitating the transit movements from Western Europe to Ukraine and southern Russia. The measure is a part of A4 Motorway Wroclaw - Katowice - Krakow which in turn is part of Corridor III (Brussels-Aachen-Koln-Dresden-Wroclaw-Katowice-Krakow-Lvov-Kiev) This part of the A4 Motorway is a section of the large infrastructure project Wroclaw - Katowice - Krakow, out of which a 126 km section between Bielany, near Wroclaw, and Nogawczyce, is already under construction. The measure is a continuation of previous construction project of a new section of A4 Motorway effectively by-passing the town of Gliwice. It will run between the Kleszczow Interchange and the Sosnica Interchange.

#### Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
120 692 000*	-	8 410 000	112 282 000	84 211 500	75

\* Polish contribution: € 28 070 500

## 2.7.2.2. 2000/PL/16/P/PT/002

Modernisation of the E-20 Railway Line on Section MINSK MAZOWIECKI – SIEDLCE

Modernisation of the E-20 Railway Line on Section MINSK MAZOWIECKI – SIEDLCE (52 km), on Corridor II, linking Berlin to Warsaw, further to Mińsk (Byelorussia) and to Moscow (Russia).

This railway line rehabilitation and upgrading to international standards facilitates the exchange of persons and goods between the EU and Poland, on one side, and Byelorussia and Russia, on the other side. The measure consists in a comprehensive renewal of the 52 km long double-track and electrified line between Minsk Mazowiecki and Siedlce.

Another target is the fulfilment of the prescription of AGC and AGTC, and to allow the speed of 160 km/h for passenger trains and 120 km/h for freight trains (instead of 120 and 60 km/h presently). The freight and admissible axle load should reach the EC standard of 225 kN.

Furthermore, other objectives consist in increasing the line capacity and traffic safety, with the aid of automatic block and improved level crossings. Reduction of maintenance and operating costs is also an important aim for the investment.

Cost and assistance (in €)	ance (in €)
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Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
132 465 914	-	7 870 289	124 595 625	93 446 719	75

# 2.7.2.3. 2000/PL/16/P/PT/003

Modernisation of the E-20 Railway Line on section Rzepin - State Border

The railway line between Rzepin and German Border (16 km) is part of the E-20 railway line, which itself forms part of Corridor II, linking Berlin to Moscow via Warsaw and Minsk.

The project facilitates the exchange of persons and goods between the EU on one side, and Poland, Belarus, Russia and Ukraine on the other side. Rehabilitation and upgrading concerns all components of the line, except for the permanent railway dating from 1995 and for which only critical parts of its subgrade will be rehabilitated. It comprises the corresponding substructure components, bridges reinforcement when necessary, signalling for ERTMS/ETCS TAP compatibility, catenaries, and sub-station, level crossings, passenger track layout simplification and platforms, with respect to the environment. The aim is to comply with the prescription of AGC<sup>1</sup> and AGTC<sup>2</sup> standards and to allow speeds of 120 km/h. Other targets include increasing the line capacity and the traffic safety, with the aid of automatic block and through the suppression of unmanned level crossings. Reduction of maintenance and operating costs is also an important target of the investment.

The project will appreciably reduce costs of maintenance of the Rzepin – German border line, despite the traffic increase. That is due to the use of modern or improved materials. Operating costs are reduced due to the automation of signalling and level crossing.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
24 788 998*	-	1 162 518	23 626 480	17 719 860	75

Cost and assistance (in €)

1

2

The project Rzepin - State Border is part of the E-20 Corridor where numerous works of rehabilitation and upgrading, financed by IFIs and PHARE, have been undertaken during the last years. The EIB co-financed a 37 km section between Warsaw and Mińsk Mazowiecki ( $\in$  40 million). PHARE programmes have

AGC : « European Agreement of Main International Railway Lines » United Nations, 31 May 1985.

AGTC : « European Agreement on Important International Combined Transport Lines and Related Installations » United Nations 1<sup>st</sup> February 1991.

contributed  $\in$  70 million to the E-20. So far Polish state budget contribution in financing of E 20 railway line modernisation amounts to almost  $\in$  230 million.

2.7.2.4. 2000/PL/16/P/PT/004

National Road N° 717 Reinforcement of the surface pavement of the section Sochaczew – Grójec

The project consists of the reinforcement of the surface pavement of the National Road N° 717, from the locality of Sochaczew to the locality of Mińsk Mazowiecki. The described road passes through Mazowieckie Voivodeship (region), and is designated as the main transit road for TIR vehicles travelling by the transport Corridor II (Berlin - Warsaw - Minsk - Moscow), bypassing Warsaw from the south.

The purpose of the investment project is to improve road safety and traffic flow efficiency on RN 717, as well as to assure a better utilisation of the existing road network infrastructure, by increasing the traffic throughput on the described sections.

The scope of works includes:

- Reinforcement of the existing pavement of RN 717 within the limits of the existing roadway, in order to attain the technical parameters required to support very heavy traffic (i.e. a per axle load of 115 kN), together with the improvement of the cross-section of the roadway
- Modernisation or construction of 5 new bridge structures on this section of RN 717, assuring the capacity to carry the loads of class A.
- The accompanying works (i.e.: the correction of the sub-standard horizontal and vertical curves, the rebuilding of crossings with other roads, the renovation of ditches and drainage installations, as well as the side shoulders, the building and rebuilding of bus stop bays and side walk pavements, the works connected with the protection of the environment, such as the planting of new trees and shrubs, the application of humus to the escarpments and the protection of local waters).

**ISPA** grant

24 570 750

Grant Rate

%

75

Total cost	Private sector	Non eligible	Total eligible			

contribution

## Cost and assistance(in €)

2.7.2.5.	2000/PL/16/P/PT/007

35 896 000\*

Pavement Strengthening of the National Road N° 7 Gdańsk-Warszawa-Chyżne (via Baltica Corridor I) section from Gdańsk' boundary to Jazowa km 6+330 to km 48+465 plus the bridge over Vistula River in Kiezmark rehabilitation

32 761 000

3 135 000

The project is the main transit road for vehicles driving from the Tri-City agglomeration, where two ports are located: Gdańsk and Gdynia, towards south-east to Warsaw, and further to the south of the country and to the country border. The section of the National Road N° 7, located in Elblag-Gdańsk, is part of the Pan-

European Transport Corridor IA that runs from Riga through Kaliningrad and the country border in Grzechotki to Elbląg, further towards the Tri-City agglomeration.

The National Road N° 7 is connecting in Tri-City to the National Road N° 6, which runs the transit traffic by Goleniów and Szczecin and country border in Kołbaskowo to the west of Europe.

Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
84 538 000*	-	1 706 000	82 832 000	62 124 000	75

# 2.7.2.6. 2000/PL/16/P/PT/008

Pavement strengthening of State Road N° 4 Kraków-Tarnów-Rzeszów-Korczowa to carry the traffic of 115 kN /axle

The project is situated on Corridor III. The measure is the continuation of the construction of the A-4 motorway between the border with Germany (Zgorzelec (Olszyna)) and Kraków. The modernisation of the section of the State Road N° 4 from Kraków to Medyka (the state border with Ukraine) will also be included in this project. This road transfers traffic from Corridor III to the countries of Central and Eastern Europe. It contributes to the improvement of trans-border co-operation between Poland and Germany, and between Poland and Ukraine.

## Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
63 322 076*	-	1 089 076	62 233 000	46 674 750	75

## 2.7.3. Technical assistance

- 2.7.3.1. 2000/PL/16/P/PA/001
  - (1) Training in Project Management for the road infrastructure services and Ministry of Transport and Maritime Economy staff
  - (2) Training in Project Management for the rail infrastructure services

The Technical Assistance aims at strengthening and improving the human resources capability of the investment management staff and project management staff of the road and rail services :

The management staff should receive training in project identification, fund management, programming and co-ordination of project aspects.

The project staff should receive training, on-the-job advice and assistance from a professional, experienced in the project management of various forms of contracts to improve their administrative capacity. The training also includes the preparation of tender documentation and tendering process, implementation of projects including payment requests, monitoring, and use of Project Management Information System (PMIS) for reporting.

The project also covers the procurement and installation of the Project Management Information System in the Ministry of Transport and Maritime Economy.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
400 000	-	-	400 000	400 000	100

## Cost and assistance (in €)

## 2.7.3.2. 2000/PL/16/P/PA/002

Pre-feasibility study for the sustainable development of the Warsaw Transport Node in connection with Pan-European Transport Corridors I, II and VI.

Pre-feasibility study for the sustainable development of the Warsaw Transport Node in connection with Corridors I, II and VI. The study concerns the compliance of various transport sectors with EC standards, the identification of problems connected to the Warsaw transport node located within Corridors I, II and VI, and the preparation of a concept to define projects and priorities.

The Warsaw transport node directly serves 2.6 million people living in the municipality of Warsaw and in the nine surrounding districts (powiats). The node is also the central hub for the national and interregional passenger and cargo air, rail and road traffic. The importance of the hub is strengthened by functions of Warsaw.

The node of Corridors I, II and VI and TINA network includes the international Warsaw Okęcie Airport, the junctions with eight national road directions, with seven national rail directions and with seven regional rail lines (43 stations, 110 km).

In order to achieve a balanced and integrated approach the study shall cover the following items:

- analysis of the present situation;
- update of the 1998 traffic data;
- review of the transport policy for the city of Warsaw;
- national and regional programs for transport development;
- environmental situation assessment including the effect of reduction/increase of air pollution and local noise problems.

## Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
940 000	-	-	940 000	705 000	75

## 2.7.3.3. 2000/PL/16/P/PA/003

Technical assistance for preparation of environmental projects

The assistance from ISPA will develop project proposals identified in the Polish environmental strategy document to the point where a draft Commission decision can be submitted to the ISPA management committee for opinion. The projects listed below are at various stages of preparation and of different sizes but in general the technical assistance to be provided, covers the following preparation work:

- review of the technical design of the project and the estimated cost;
- assistance with the preparation of the Environmental Impact Analysis (if required);
- economic analysis (cost-effectiveness analysis and description of benefits) and financial analysis (covering sustainability and affordability);
- preparation of procurement plan and tender documents.

The list of projects is indicative and thus new projects may be added to the list or removed from the list with the written consent of the Commission, including whenever changes are made to the strategy paper.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
4 550 000	-	-	4 550 000	3 412 500	75

## 2.8. Romania

2.8.1. Environment

## 2.8.1.1. 2000/RO/16/P/PE/001

Piatra Neamt Waste Management Programme in Romania

Piatra Neamt is the business, commercial and tourism center in north-eastern Romania and has a population of around 125 000. The storage and collection of household waste in Piatra Neamt is unhygienic and carrying health risks for the population. Piatra Neamt will be the first town in Romania with an integrated system for the management of solid waste. The waste management programme in Piatra Neamt includes selective waste collection (collection points for household waste including containers and igloos for organic and residual waste as well as paper, glass and plastics), waste recycling (paper, glass, plastics), composting and crushing, the rehabilitation of the old landfill and the opening of a new landfill.

In the old landfill waste was leaking through the subsoil and polluting the groundwater and the river, representing a major health risk for the population. The rehabilitation will also eliminate a major nuisance of air pollution in terms of dust, smell and smoke.

The project also helps Piatra Neamt to meet European standards in the different areas of the waste management programme.

The project is co-financed with an ISPA grant of 75%, a contribution from the DANCEE programme of the Danish Ministry of Environment and Energy of 16% and the Municipality of Piatra Neamt of 9%.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
14 575 000	-	729 000	13 846 000	10 384 500	75

Cost and assistance (in €)

## 2.8.1.2. 2000/RO/16/P/PE/002

Rehabilitation of Sewerage Network and Wastewater Treatment Facilities in order to protect the River Danube at Craiova City

The project reduces the discharge of wastewater from Craiova, a major economic and industrial centre in south-western Romania, into the Jiu River and onwards into the Danube. The upgrading of a waste water treatment plant (WWTP) and the construction of a main waste water collector provides the city's 320 000 inhabitants with a sewerage system that meets modern hygienic requirements. The reduction of the discharges into the Jiu River and the Danube will also significantly reduce transborder pollution.

Although Craiova is one of the biggest cities in Romania, it does not have an operating wastewater treatment plant. Also the sewer system in Craiova is incomplete. Domestic and industrial wastewater is discharged directly into a partly open channel – the Craiovita channel - which passes through the city, or into a minor lake – the Craiovita lake – placed in a recreational area in the city. From the lake and the channel wastewater flows without any treatment to the Jiu River.

It consists of three components:

- Rehabilitation and upgrading of the WWTP (approximately € 51.1 million);
- Extension of the sewer system (approximately € 17.6 million); and
- Project management assistance and institutional strengthening.

#### Cost and assistance (in €)

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
70 578 000	-	200 000	70 378 000	52 783 500	75

The European Investment Bank (EIB) is expected to co-finance the project.

## 2.8.1.3. 2000/RO/16/P/PE/003

Constanta Sewerage and Wastewater Treatment Rehabilitation

Pollution of the Black Sea and coastal areas near Constanta, a major international seaport and Romania's second largest town causes serious environmental problems. The coastal region covering the County of Constanta, with a population of some 425 000, suffers from a lack of wastewater treatment capacity. At present, all waste from the existing sewer system is either discharged to local surface water or dumped into the Black Sea. This situation has resulted in a high level of coastal zone pollution. Many of the littoral lakes are heavily eutrophicated, biologically dead and chemically contaminated.

The project allows Constanta to modernise the majority of its wastewater facilities and to put a wastewater system in place that meets the basic hygienic and environmental requirements of modern cities and European standards. It also helps to promote tourism by making coastal waters cleaner.

The project is co-financed with EBRD which provide about 20% of the total project costs of  $\notin$  96.6 million.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
96 556 653	-	-	96 556 653	72 417 490	75

#### 2.8.1.4. 2000/RO/16/P/PE/006

Iaşi: upgrading the water and wastewater system

The project provides the 345 000 inhabitants of Iasi, the regional centre in eastern Romania (bordering Moldova) with water supply and waste water treatment facilities that meet European standards.

The refurbishment and upgrading of the Iasi Wastewater Treatment Works (WWTW) provides secondary treatment capacity, thereby improving the water quality of the Bahlui river. The effluent from the Iaşi WWTW eventually flows into the Black Sea through the Danube delta.

The modernisation of the Chirita water treatment plant ensures that about 20% of the water supplied in Iasi will meet EU quality requirements.

The refurbishment of three strategic pumping stations enhances the quality of drinking water supply, and increase the security of water supply from the Timisesti source. This source provides about half of the water consumed in Iasi.

The Measure consists of four components:

- Extension of the Iaşi Wastewater Treatment Works (approx. € 31.1 million);
- Modernisation of the Chirita Water Treatment Plant (approx. € 13.2 million);
- Refurbishment of three pumping stations (approx. € 5.4 million); and
- Technical Assistance for project management.

#### Cost and assistance (in €)

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
51 700 000	-	322 000	51 378 000	38 533 500	75

The project is co-financed EBRD.

#### 2.8.1.5. 2000/RO/16/P/PE/009

Danutoni Wastewater Treatment Plant Extension – Biological Stage located in Jiu Valley

The project - the extension of the Danutoni wastewater treatment plant in the Jiu Valley with a biological stage - ensures the environmentally sound treatment and disposal of the urban wastewater of the towns of Petrosani, Petrila, Aninoasa, Vulcan, Lupeni, Uricani in the Jiu Valley, with a population of 162 000. At the same time the project protects the water quality of the Jiu River and the downstream Danube River and Black Sea as the finally receiving water bodies.

For the rehabilitation and modernisation of the Danutoni WWTP, two stages were defined: the rehabilitation of the existing primary treatments (stage 1), and the extension with a biological stage (stage 2). The second stage is co-financed under ISPA. The mechanical stage was commissioned in August 2000. The first stage was jointly financed with PHARE funds and the Government of Romania.

Cost and assistance (in €)

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
9 680 000	-	-	9 680 000	7 260 000	75

#### 2.8.2. Transport

## 2.8.2.1. 2000/RO/16/P/PT/001

Railway: Rehabilitation of the Bucharest - Baneasa - Fetesti sections on the Bucharest - Constanta railway line in Romania

The Bucharest Baneasa – Fetesti railway section, with a length of 141 km, has 18 stations (including Bucharest Baneasa and Fetesti stations).

It is located on railway Corridor IV, which is the main railway route in Romania, both for international and national traffic. Specifically, it is also the major part of the Bucharest - Constanta railway line which links the capital, Bucharest, to the main port on the Black Sea as well as the main tourism, entertainment and health resort of Romania, Constanta.

Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
322 528 168	-	13 555 580	308 972 608	231 729 441	75

## 2.8.2.2. 2000/RO/16/P/PT/002

Road: Widening to four lanes of sections of National Road  $N^{\circ}$  5 from Bucharest to Giurgiu

The National Road N° 5 starts south of Bucharest towards Giurgiu, which is the only existing bridge border crossing with Bulgaria. It is part of Corridor IX included in the road connection with Bulgaria and further with Albania, Greece and Turkey.

The widening to four lanes is performed by following the existing alignment of DN 5 between km 19+600 - km 59+100 (Adunatii Copaceni – Giurgiu). The geometrical elements of the alignment is for V=80 km/h and if such is the case, for V=60 km/h.

The design of the road structure complies with the requirements of the EC Directive 96/53 on weights and dimensions and particularly allow for a maximal axle load of 11.5 tonnes per axle. In addition, design of the structures complies with the relevant EU standards.

Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
66 085 981	-	8 173 153	57 912 828	43 434 621	75

# 2.8.2.3. 2000/RO/16/P/PT/003

Motorway: Construction and rehabilitation of sections 4 and 5 of the Bucharest – Cernavoda Motorway in Romania

The project is the phase 1 completion of the construction of the motorway Bucharest - Cernavoda, in five sections, as follows:

Section number		Length (km)	Type of works
1	Bucharest – Fundulea	26.5	Construction 2 x 2 lanes
2	Fundulea – Lehliu	29.2	Construction 2 x 2 lanes
3	Lehliu – Drajna	41.6	Construction 1 x 2 lanes
4	Drajna – Fetesti	36.8	Construction 1 x 2 lanes
5	Fetesti – Cernavoda	17.2	Rehabilitation 2 x 2 lanes
	Bucharest – Cernavoda	151.2	

Out of this project, the proposed measure, to be co-financed by ISPA and the Romanian Government, is the first construction phase of the motorway comprising section 4 (Drajna - Fetesti) and rehabilitation of section 5 (Fetesti - Cernavoda).

Under this scheme, the EIB focuses on the sections 2 and 3 (Fundulea - Lehliu and Lehliu - Drajna), providing parallel financing of the project, but no direct co-financing of the measure. In addition, the costs of section 1 (Bucharest - Fundulea) are mostly supported by the Romanian Government.

## Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
124 216 000	-	28 600 000	95 616 000	71 712 000	75

Note: If the ISPA co-financing rate of the measure is 75% for sections 4 and 5, the actual co-financing rate on the route Bucharest-Cernavoda is 17.3% of the eligible costs.

## 2.9. Slovakia

- 2.9.1. Environment
- 2.9.1.1. 2000/SK/16/P/PE/001 Trenčín Right Bank Wastewater Treatment

The project eliminates one of the few remaining untreated discharges of municipal wastewater in the River Vah, Slovakia's largest river and an important tributary of the River Danube. The project comprises:

- A combined sewer/storm water overflow at the outlet of the trunk sewer, incorporating storage to comply with Slovak standards for storm overflow performance;
- A pumping station and twin pumping mains, 1.5 km in length, to deliver flows to the WWTP site;
- A new wastewater treatment plant designed to serve a population equivalent of 30 143 inhabitants (year 2015), which is served when the sewerage network is extended in the future, and to meet both current Slovakian and EC effluent norms, including nutrient (N & P) removal. The initial population equivalent served on completion of the project will be 21 953 inhabitants;
- A new (separate) foul sewerage system for the village of Kostolna-Zariecie (present population of approx. 700), which is situated about a kilometre from the WWTP site;
- 631 m of sewer to Brnianska Street draining to the existing trunk sewer, to enable connections from industrial premises not presently served.

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
8 880 405	-	943 673	7 936 732	3 968 366	50

## Cost and assistance (in €)

#### 2.9.1.2. 2000/SK/16/P/PE/002

Extension of Wastewater Treatment Plant for Urban Agglomeration of Nitra

Nitra is an important regional centre in the western part of Slovakia, located along the Nitra River, which flows into the Danube. Currently the city has a population of about 87 000 inhabitants.

The extension of the WWTP is expected to replace the existing WWTP, which is in poor state of repair and is heavily overloaded. Due to these overloading conditions, only about 50 % of the influent (180 l/s) is treated in the biological system, whereas the remaining 50 % of the incoming waste water is discharged, after primary

sedimentation, into the Nitra River. The extension of the WWTP will be completed according to a revised design, ensuring that the final effluent quality will comply with the EC directive for urban waste water, on the basis of new insights as to design parameters and criteria.

The WWTP is composed of an intake sewer, pumping station, mechanical screens, grit chambers, primary sedimentation tanks, aeration tanks (carrousel type), sludge regeneration tank, anaerobic contact tank, secondary clarifies and sludge treatment consists of thickening, anaerobic digestion tanks, digested sludge thickeners, and mechanical sludge dewatering.

## Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
13 252 275	-	2 898 075	10 354 200	5 177 100	50

## 2.9.1.3. 2000/SK/16/P/PE/003

Wastewater Disposal System in Banská Bystrica

Banská Bystrica is the regional capital of the Banská Bystrica region and the third largest city in Slovakia. The capacities of its current sewerage system and current waste water treatment plant are not sufficient. The outlets of untreated waste water to the river and the lack of proper sewerage in parts of the town threaten public health and environment. Main components of the project are:

- New main sewer from the centre of the town to the waste water treatment plant. A part of the existing interceptor \$\op\$ 1200 mm, with a length of about 4 700 m in the industrial area, will be replaced;
- Approximately 58 km of new or renovated/replaced sewers for the inclusion of unserviced areas and for connection of former villages to the main sewer;
- Waste water treatment plant: completion of the extension of the waste water treatment plant to a total capacity of 163 000 p.e. (2030); the existing load of the waste water treatment plant is 138 000 PE. The hydraulic capacity of the WWTP is to be about 2 m<sup>3</sup>/s. The effluent from the WWTP will meet the both the current Slovakian as well as the EC effluent norms.

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
45 468 667	-	9 312 372	36 156 295	18 078 147	50

2.9.2. Transport

#### 2.9.2.1. 2000/SK/16/P/PT/001

Railway: Modernisation of the Rail Track Bratislava Rača – Trnava (Section: Bratislava Rača - Šenkvice)

The section Bratislava Rača – Šenkvice forms part of European Corridor VA from Bratislava to Žilina, Košice and Čierna nad Tisou (Ukraine) and connects in Žilina with Corridor VI running from Žilina through Warsaw to Gdansk on the Baltic Sea coast.

The overall objectives of the measure are to provide adequate access to the Trans-European Transport Network, to provide good links with the neighbouring countries, and to comply with the international standards agreed upon in the AGC (Accord Général Chemins de Fer) and AGTC (Accord Général Transport Combiné). This rehabilitation and upgrading measure raises the maximum speed from 110 km/h to 160 km/h and ensures that the railway sector in Slovakia can develop its facilities, technologies, operations and organisational structures to reach the level of the modern, well developed railway systems of Western Europe, and to be capable of efficient operation.

The first stage of the project starts with the modernisation of the section Bratislava Rača to Šenkvice, some 20 km of double-line electrified track. The following works is being carried out:

- Modernisation of the line tracks;
- Repair, reconstruction or construction of road and railway bridges;
- Modernisation of overhead line and signalling system.

#### Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
57 363 000	-	5 941 000	51 422 000	38 566 500	75

#### 2.10. Slovenia

#### 2.10.1. Environment

#### 2.10.1.1. 2000/SI/16/P/PE/001

Waste Water Treatment Plant located in Celje in the Republic of Slovenia

The municipality of Celje has prepared an investment programme for the construction of new waste treatment facilities, upgrading the primary and secondary collector, and upgrading the water supply network to meet the requirements of the EC Urban Waste Water Directive and the National Environmental Action Programme.

The works concerning this project and which are part of the larger investment programme, consist of the construction of the following infrastructure facilities:

- an upgraded primary collector (3.6 km);
- replacement of pipes;
- an upgraded water supply system;
- closure of septic tanks;
- construction of a new central wastewater treatment plant to ultimately provide tertiary treatment — 70 000 p.e.

## Cost and assistance (in €)

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
18 276 532	-	3 535 853	14 740 680	8 844 407	60

## 2.10.1.2. 2000/SI/16/P/PE/002

Sewerage System and Central Waste Water Treatment Plant in Lendava in the Republic of Slovenia

## Description

The geographical area concerned by the project consists of the major part of the urbanised area of the Municipality of Lendava, including the industrial zone. The municipality of Lendava has 11 467 inhabitants. Some parts of the drainage system are already functioning, but they do not meet the EC standards and should be substantially adapted and upgraded. Thus, the majority of the sewer system does not exist and has to be constructed.

The investment includes the building of :

- 56.3 km of sewer;
- 3 retention tanks;
- 37 pumping sites;
- 1 overflow chamber with a pumping site for overflow wastewater.

The investment project for the sewer system construction is closely linked to the project of the construction of the waste water treatment plant in Lendava, which is financed by private funds.

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
14 392 000	-	2 744 986	11 647 010	5 124 686	44

#### 2.10.2. Transport

#### 2.10.2.1. 2000/SI/16/P/PT/001

Railway line: Modernisation of the "Krizni vrh" stretch of the line (from 563+346 km to 564+860 km), as part of the renewal of the section between Poljcane and Slovenska Bistrica, which forms part of the Zidani Most-Maribor line.

The project is located in the Poljcane-Slovenska Bistrica section, from 563+346 km to 564+860 Km, and forms part of the Zidani Most-Maribor line.

The Poljcane-Slovenska Bistrica section is part of both:

- railway corridor V, as defined by the TINA trans-European transport network, which forms the link between Italy (Venice, Trieste), Slovenia, Hungary and Ukraine;
- railway corridor X, which links Slovenia to Austria and, further south, to the Federal Republic of Yugoslavia.

In view of the strategic importance of these corridors, the project is justified by the serious deterioration of the track in this section and the problems it generates. The track was last renewed in 1971.

#### Cost and assistance (in €)

Total cost	Private sector contribution	Non eligible expenditure	Total eligible cost	ISPA grant	Grant Rate %
12 500 000	3 125 000	-	12 500 000	9 375 000	75

#### 2.10.3. Technical assistance

#### 2.10.3.1. 2000/SI/16/P/PA/001

Technical assistance: carrying out of studies on sewerage and water treatment in the basin of the Sava river in Slovenia.

The ISPA funding covers not investments, but preliminary studies relating to investments involving the construction of water treatment plants and sewerage networks in the basin of the Sava river in Slovenia.

The municipalities concerned are: Litija, Zagorje ob Savi, Kizovec, Izlake, Trbovlje and Hrastnik.

The preparatory work falls within the scope of the investment priorities set by the Slovenian Government for the water sector. These priorities take account of the potentially sensitive character of the areas under consideration, particularly in view of the risk of a shortage of drinking water.

# Cost and assistance (in €)

Total cost	Private sector contribution	expenditure	Total eligible cost	ISPA grant	Grant Rate %
400 000	-	100 000	300 000	225 000	75

## 2.10.3.2. 2000/SI/16/P/PA/002

Technical aassistance in the railway sector in Slovenia : Preparatory studies for the introduction of the GSM-R system, the ERTMS/ETCS system and a system for the remote monitoring of the electric traction system's fixed installations

The study concerns the introduction of :

- (1) the GSM-R system (Global System for Mobile communication-Railways);
- (2) the ERTMS/ETCS system (European Rail Traffic Management System/European train Control System);
- (3) a system for the remote monitoring of the electric traction system's fixed installations;

The study comprises the following parts :

- preparatory studies and feasibility studies involving :
  - an analysis of possible alternatives ;
  - ground studies and geological studies ;
- a cost/benefit analysis and a financial analysis involving :
  - an analysis of the market and the charging system ;
  - a legal and economic analysis in connection with financial engineering ;
- an environmental impact analysis comprising survey, information and public awareness campaigns;
- technical studies ;
- the preparation of tender documents.

Total cost	Private sector contribution	Ineligible expenditure	Total eligible cost	ISPA aid	Rate of aid %
1 300 000	-	-	1 300 000	975 000	75

# Abbreviations

CEEC	Central and Eastern European Countries
CFCU	Central Financing and Contracting Unit
EBRD	European Bank for Reconstruction and Development
EDIS	Extended Decentralised Implementation System
EIA	Environmental Impact Assessment
EIB	European Investment Bank
ERDF	European Regional Development Fund
ETCS	European Train Control System
FIDIC	International Confederation of Consulting Engineers
IA	Implementing Agency
IFI	International Financial Institution
ISPA	Instrument for Structural Policy for Pre-Accession
NAO	National Authorising Officer
NEFCO	Nordic Environment Finance Corporation
NF	National Fund
NIB	Nordic Investment Bank
NIC	National ISPA Representative
NPAA	National Programmes for the Adoption of the Acquis
РРР	Private-Public Partnership
SAPARD	Special Accession Programme for Agriculture and Rural Development
SAO	Sectoral Authorising Officer (Environment or Transport)
SIDA	Swedish International Development Agency
TEN-T	Trans-European Transport Network
TINA	Transport Infrastructure Needs Assessment