



REPUBLIC OF SLOVENIA
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**NATIONAL ISPA STRATEGY OF THE REPUBLIC OF SLOVENIA:
ENVIRONMENT SECTOR**

October 1999 – refer to the comments of EU Commission reviewed in May 2000

1 INTRODUCTION

Environmental Accession Strategy of Slovenia is the basic programme and schedule document which will direct Slovenia's efforts to integrate with the EU in the field of the environment. The Slovene Government had adopted the document as an Appendix to the *National Programme for Adoption of the Acquis Communautaire* in March 1998. At the beginning of negotiations with the EU, the European Commission evaluated the Strategy as a very good basis for Slovenia's accession activities in the field of the environment.

The Strategy is based on relevant documents drafted by Slovenia and the European Commission, including Strategy of the Republic of Slovenia for Accession to the EU (Ljubljana, 1997), the White Paper of the European Commission (Brussels, 1995), Agenda 2000 and the Commission Opinion on Slovenia's Application for Membership of the EU (Brussels, August 1997), Guide to the Approximation of EU Environmental Legislation (Brussels, August 1997), and on numerous resolutions and agreements adopted by both the Slovene Government and the institutions of the European Commission.

In preparation for its planned accession date of January 2003, Slovenia is currently undertaking various measures to comply with the *acquis communautaire*. It is evident from the document that the MESP and other national bodies, municipalities and the economic sector are faced with exceptionally extensive tasks, which will have to be carried out in a relatively short period of time. In addition to the existing PHARE programme, support will be provided by the EU through ISPA (Instrument for Structural Policies for Pre-Accession) managed by the EU Commission (DGXVI and DGIA). ISPA, established by Regulation No. 1267/99 of 21st June 1999, covers the environment and transport sectors only and will operate for seven years (2000-2006).

This document deals with the environment sector only and sets out the strategy in Slovenia for the identification and selection of projects in the wastewater treatment, drinking water supply and waste management sectors to be proposed for financing under ISPA. The main focus for ISPA in the environment sector is for measures which enable beneficiary countries, including Slovenia, to comply with the objectives of the Accession Partnerships as well as with the priorities indicated in the *National Programmes for the Adoption of the Acquis* in relation to directives in the above sectors that are the most costly (i.e. investment-intensive) and difficult to implement. In Slovenia, the investments which should lead to gradual attainment of environmental standards required by the provisions of the EU directives mostly fall under the responsibility of the public sector (in particular the municipalities) and will create heavy burden on public finances.

The priority investments in water sector for ISPA co-financing were recognised for the implementation of the

- Urban Wastewater Directive (91/271/EEC, 98/15/EC)
and the
- Drinking Water Directive (80/778/EEC, 91/858/EEC, 90/656/EEC and 91/692/EEC)
and further determined by detailed criteria contained in the following water quality Directives within the National Programme for the Adoption of the Acquis Communautaire, MOP 1998:
 - Sewage Sludge (86/278/EEC)
 - Groundwater (80/68/EEC, 90/656/EEC, 91/692/EEC)
 - Nitrates (92/43/EEC)
 - Substances Dangerous to the Aquatic Environment (76/464/EEC, 90/656/EEC, 91/692/EEC)
 - Shellfish (79/923/EEC, 91/692/EEC)
 - Fish Water Directive (78/659/EEC)

- Surface Water for the Abstraction of Drinking Water (75/440/EEC, 79/869/EEC, 90/656/EEC, 91/692/EEC)
- Bathing Water (76/160/EEC, 90/656/EEC)
- Water Framework (COM/97) 49 - final

The priority investments in waste sector for ISPA co-financing were recognised for the implementation of the:

- Waste Framework Directive, (75/442/EEC), amended by (90/656/EEC, 91/1566/EEC and 91/692/EEC, 94/3/EC, 96/350/EEC)

and further determined by detailed criteria contained in the following waste Directives within the National Programme for the Adoption of the Acquis Communautaire, MOP 1998:

- Hazardous Waste Directive, (91/689/EEC), replacing (78/319/EEC), amended by (94/31/EC, 96/302/EC, 94/904/EC)
- Directive on Hazardous Waste Incineration, (94/67/EEC)
- Directive on the Reduction of Air Pollution from Existing Municipal Waste Incineration Plants 89/429/EEC and Directive on the Reduction of Air Pollution from New Municipal Waste Incineration Plants, (89/369/EEC)
- Integral Pollution Prevention Control (96/61/EC, 90/656/EEC, 91/692/EEC)
- Directive on Landfill of Waste, (99/31/EC)

2 BRIEF OVERVIEW OF STATE OF ENVIRONMENT

General

Slovenia's territory is a meeting-point of Central European and Mediterranean natural features. Slovenia is open in all directions: towards Central Europe and the Balkans, the Po Valley and the West, and towards Eastern Europe. All this endows Slovenia with exceptional biological and landscape diversity, which in turn results in considerable sensitivity of its environment.

Environmental problems have accumulated during the process of industrialisation and urbanisation, particularly in the second half of this century. The bulk of problems concentrated on the fifth of the territory, due to its landscape characteristics. These problems can only be addressed gradually, within the limits of material capacities and technological achievements, and by taking into account the experience of more developed countries and Slovenia's advantages.

Expectations regarding positive changes in the environment are high. Since independence the quality of surface waters and air has improved, while the quality of groundwater in certain areas has been declining. The management of urban and industrial waste remains a problem. The reduction in the physical volume of production (the closure of a number of major polluters) is the main reason for improvement in the quality of surface waters. In the field of air quality the positive results reflect the stepped-up transition to the use of more environment-friendly fuels and heating systems and the already completed desulphurisation projects in thermal power plants (TPP).

Water supply

An important factor affecting water supply is the scattered supply system. 85 % of the water is distributed from public networks, 6% from private wells, 5% from rainwater reservoirs, and 4%

from other sources. Approximately 47% of the total amount of piped drinking-water is used by households, 39% by industry and the manufacturing sector, while 8% are supplied to livestock farms, 5% to the tourist industry, and 1% to all other purposes. Statistical data on water supply indicate a gradual increase in water losses along the supply network over time. The extent and physical distribution of this phenomenon is not fully described. However, most of the losses can probably be ascribed to the technical conditions of the mains and distribution network.

Present state and identification of problems:

- shortage of drinking water in the dry season in areas deficient in water
- losses due to not proper maintenance of water-supply networks - reduction of losses to an economically acceptable level is often equivalent to an additional water source
- protection of the water sources: more than half the public water-supply systems have no specific water-source protective zones with corresponding regimes of operation, nor do they carry out supervision of those zones
- quality of drinking water: the quality of groundwater and springs is not improving, the most endangered being the Karst wells; both chemical and microbiological pollution is present; Karst wells often get muddy since the self-purifying capacity of Karst groundwater is incomparably weaker than that of alluvial groundwater
- securing permanent and proper measurement in water collection areas
- water supply exploits groundwater sources alone and does not utilise surface waters for processing activities, e.g. in industry.

Wastewater

The sources of water pollution are industry, agriculture and urbanisation. Measurements of the quantity of wastewater generated by the different polluting sources and its material composition are not fully controlled by municipalities. Pollution from urbanised areas along the rivers is especially severe, while pollution caused by industry has decreased over recent years - partly as a result of reduced economic activity in certain key sectors. For example, many of the polluting heavy metal industrial companies have disappeared since 1990.

Present state and identification of problems:

- only 53% of inhabitants are connected to the public sewage system
- sewers are not watertight, which caused the dispersal of pollution of groundwater occurs
- only 30% of inhabitants are connected to sewage works, and only 15% of wastewater is treated biologically
- sewage systems are not equipped with the necessary flood protection facilities and the inflow of wastewater from hinterland areas poses a special problem
- narrow local attitude to problems of wastewater collection and treatment
- acute eutrophication of natural and artificial lakes, and latent eutrophication of watercourses during the building of reservoirs
- lack of an integral approach to the reduction of sources of pollution and lack of cooperation between sectors (e.g. industry, agriculture with livestock-breeding farms)

Air quality

Air quality has generally improved in recent years in Slovenia. The most evident is the reduction of pollution caused by SO₂ emissions, especially in urban areas (introduction of gas pipeline network, district heating systems, etc.). Improvements have been noticed in the vicinity of power plants (Šoštanj, Ljubljana). Between 1980 (used as a reference year) and 1995 total SO₂ emissions in Slovenia decreased by more than 50% (from more than 250,000 to 120,000 tonnes a year). According to assumed international obligations, SO₂ concentrations should have been reduced by 30% as early as by the end of 1993. In very unfavourable weather conditions the concentrations of harmful substances still exceed the critical concentrations at a number of exposed locations within the areas affected by TPPs, and may even increase the rate of mortality of the exposed population.

The Kyoto Protocol to the UN Framework Convention on Climate Change binds Slovenia to reduce its greenhouse gases by 8% with respect to the reference year of 1986.

Solid waste

Waste management is one environmental protection area, which is being addressed most inadequately in Slovenia. The disposal of waste at local (municipal) dumps is practically the only possibility of handling urban and also industrial waste; these dumps are often inappropriately located and technically inadequate (unsealed, no gas drainage, exposed to floods or close to groundwater, etc.); on top of this they are mostly full.

The population covered by the regular removal of municipal wastes, lump wastes and household wastes containing hazardous substances continuously increase (approximately 76% of the total population was covered by the service of waste removal in 1995 and the current situation is up to 85%). The removal and management of municipal waste is predominantly performed by the existing municipal service companies. Among 60 registered landfills some of them operate without proper documentation or have no legal status. Some of them have already been closed down, some of them will have to be adopted or to be closed according to new waste disposal national legislation (and EU directive) in next few years. The separate collection of urban waste from households is organised only in some municipalities. In most part discarded cars end up in unregulated and inappropriately located car scrap yards. The problem of processing waste collected separately has not been solved in a suitable manner. There are also between 50,000 and 60,000 illegal waste dumps in Slovenia. One of the consequences of inappropriate waste management is the excessive release of methane from waste dumps, which contributes approx. 5% of the overall emission of greenhouse gases in Slovenia.

Industry frequently disposes its waste together with urban waste, with the exception of isolated cases in which companies have their own disposal sites for specific types of hazardous waste or individual mono-disposal sites, e.g. sites for disposal of tailings, slag and cinders. The export of specific types of hazardous waste (e.g. waste paints, varnishes, solvents, etc.) in accordance with the procedures of the Basle Convention is the sole option for many industrial branches. Some companies have their own incineration plants which are a part of their technological processes. Due to public opposition waste is rarely incinerated in industrial facilities, although there are many environmentally sound possibilities (e.g. cement kilns).

The collection of specific secondary raw materials in industry and municipalities has a relatively long tradition of success although trade in secondary raw materials decreased due to the loss of

former Yugoslav markets (the 1994/89 index is 65). The collection of iron, steel, non-ferrous metals, glass, paper, textiles and plastic is the most successful. The bulk of these materials is generated and collected in industry, the municipal share being fairly small.

The collection of certain types of urban waste which are collected and recycled very effectively in the EU has not yet been regulated in Slovenia, e.g. aluminium cans and PET bottles (beverage bottling), packaging styrofoam, wooden crates for fruit and vegetables, old clothes, household appliances, apparatuses containing electronic circuits, old cars, etc. Packaging waste will have to be reduced radically in the near future due to the enforcement of the new EU directive on packaging and packaging waste (94/62/EC).

The collection and sorting of hazardous components mixed with urban waste (car and other batteries, waste pesticides, waste paints and organic solvents, discarded medicines, etc.) are in the initial phase. The system of managing collected materials until final destruction or recycling has not yet been defined.

3 KEY FEATURES OF ENVIRONMENTAL POLICY

General

Institutions

The Ministry of Environment and Spatial Planning (MESP) is responsible for the overall water and waste management in Slovenia, and consequently, for establishing regional plans on all water and waste aspects. The MESP acts to solve wider water and waste problems, not only at the national but also at the river-basin level for water issues and regional level for waste issues. The Ministry has seven institutes, including the Nature Protection Authority and the Hydrometeorological Institute. The monitoring of groundwater sources, springs and surface waters is done by the Hydrometeorological Institute. However, according to the Environmental Protection Act, polluters are obliged to monitor the quality and quantity of their effluents, but not many do so.

Regarding water management, the Slovene territory is divided into eight subdivisions. They do not constitute a separate 'regional' level of administration. Refer waste management, Slovene territory is planned to be covered by 8-10 regional waste management centres. The inspectorates of the MESP are responsible for the implementation of water protection and waste management laws and serve as coordinators between the municipalities and the Nature Protection Authority.

Refer the Environmental Protection Act the municipal authorities are responsible for organisation, management and maintaining of water supply and sewer networks, water treatment facilities and waste management facilities.

The following measures could help to assuage and more efficiently solve the accumulated problems:

- coordination of professional and administrative institutions at the national and local levels in the planning and supervision of the implementation of investments in the water, wastewater and waste infrastructure facilities
- coordination of local-level administrative institutions (municipalities) and public utility companies in the planning, execution and management of investments

- coordination of investment plans for the water and wastewater infrastructure facilities and physical plans and water management plans within a river basin and investment plans for the waste management within the regions
- support and professional assistance in the preparation of the investment programmes competing for national and foreign funds
- regular supervision and maintenance by managers of the municipal infrastructures in water and waste sectors

Legislation

The Environmental Protection Act (EPA; 32/93) of 1993 and the National Environmental Action Programme (NEAP) are the two fundamental statements of objectives for environmental policy and management. The preparation of the NEAP and Action plans for individual sectors are provided for by the EPA.

A new Water act is currently under preparation. Regulations required by the EPA focus on emission limits for wastewater discharges and all aspects of monitoring. They were adopted in 1996. The intention is to regulate discharges along rivers in agreement with the EC water quality directive. Regulations on the amounts and calculations of charges and fees and on EIA are also required.

The Action Plan for Urban Wastewater Drainage and Treatment With the Programme of Water Supply Projects is a sectoral plan of the NEAP, which is designed to implement, i.e. determine, the method and timetable of the implementation of measures (programmes and investments), which the NEAP provides at the strategic level within the framework of the overall management of waters.

The Action Plan for the first phase (up to 2006) will focus on the building of wastewater treatment plants required by Slovene legislation and EU guidelines, and in the second phase on the construction of treatment plants for settlements with less than 2,000 and between 2,000 and 15,000 inhabitants. The first-phase Action Plan also provides for the comprehensive solution of water supply problems in areas deficient in water. The second phase will be devoted to the extension of water supply systems according to EU guidelines so that the entire population will be connected to public water supply systems.

Waste Management Strategy of the Republic of Slovenia – Problems and Specific Issues in Approximation to the EU adopted by the Government of the Republic of Slovenia in 1996 sets the basic guidelines and objectives in the area of waste management and the hierarchy of possible methods of waste management, taking into account economic development and inclusion in European integration processes. Legal framework has been established in 1998 by the Rules on Waste Management that is harmonised to the EU Waste Framework Directive.

Water supply and wastewater

The activities under the Action Plan focus on the implementation of technical measures (programmes, investments) for reducing discharges into waters from municipal sources of pollution, and protecting the quality and quantity of waters earmarked for drinking water and the supply of the population in water-deficient areas. In determining the mode and pace of the implementation of measures, it is important to adopt a broad-based approach to problems of water pollution and water protection in the River Basins, as unique nature area. Strict observance of the criteria laid down in the legislative and programme documents enables the adoption of an all-inclusive approach to water

supply and wastewater drainage and treatment within individual River Basins as ecological units, i.e. the introduction of the sustainable use and protection of the quantity and quality of waters while respecting the functioning of aquatic ecosystems and the irreplaceability and limits of water reserves, with an emphasis on the protection of drinking water and the ecological balance of the basin.

Solid waste

In accordance with the Waste Management Strategy, National Environmental Action Programme and National Development Programme of the Republic of Slovenia the activities focus on the implementation of technical measures (programmes, investments) for reduction in generation of waste and their danger potential at source, increase in the material and energy recovery of waste, and reductions in emissions of greenhouse gases, establishment of an effective waste management system and gradual elimination of old burdens.

It will be possible to reduce the quantities of municipal waste by collecting individual types of waste in an appropriate manner and by ensuring their material and energy recovery. The separate collection of hazardous components will reduce the danger potential. In construction, a part of the waste produced can be recovered. Some sorts of waste from the energy and metallurgy sector can also serve as construction material. In the area of industrial waste and waste from energy sectors emphasis will be placed on the introduction of measures for setting up a system of waste management at the level of EU practice.

Measures will be accompanied by the measures based on market mechanisms (e.g. introduction of EMS, introduction of taxes for waste holders/generators, higher costs for waste disposal, tax reliefs for those who introduce appropriate solutions, etc.), which will promote the material and energy recovery of waste and reductions in the level of their harmfulness by detoxification, chemical/thermal/biological stabilisation, etc.

From that point of view the collection of the maximum practical share of wastes, and the establishment of a rational network of specific and other waste management facilities, are inevitable in order to preserve and improve the quality of the environment, and to preserve the available space. The network of waste management plants and facilities (regional centres) within the space management plan of the Republic of Slovenia will be integrated in the environment in a rational way, on the basis of harmonised development directions of the nation, local communities and businesses, and observing high environmental protection, technical and other standards.

New landfills for the residues of various phases of waste treatment are inevitable, however, their locations need to be rationally distributed, considering all characteristics of the Slovenian territory, and their construction and operation need to utilise the latest technology.

Historical legacies, most of all the abandoned landfills, older parts of the still active industrial waste tips, contaminated soils in some areas within factory boundaries, and abandoned industrial plants, will be rehabilitated based on the analyses of risks and identified impacts on the environment, applying such technical measures so as to prevent or sufficiently reduce further loads to the environment, and to guarantee a new, more environment friendly utilisation of space.

4 BRIEF OVERVIEW OF ENVIRONMENTAL INFRASTRUCTURE

General

Refer to the EPA, organisation, planning, management and maintaining of municipal infrastructure facilities (water supply systems, sewer network, treatment facilities, waste management facilities) is in domain of Municipalities. Public utility services ensure the basic material conditions for life and work in settlements. In other words, public utility services have distinct characteristics that are partly due to the fact that they are concerned with settlements. Spatial and other diversity, the pattern of distribution, and other characteristics of settlements in Slovenia exert a powerful influence on the scope, structure and organisation of municipal services. Thus utility services differ to a fair extent in many aspects - by the number of activities performed in individual areas, the amount of products and services provided, the concentration (or diffusion) of networks, facilities and equipment, the forms of organisation of activities, and the sources and amount of available funds. Water supply, the drainage and treatment of urban wastewater and waste management are no exception to this. More than other community supply systems, sewer, treatment and waste management facilities are characterised by the underdevelopment and fragmentation of the systems, to which the given topographic conditions additionally contribute.

Water supply

An important factor affecting water supply is the scattered supply system. 85 % of the water is distributed from public networks, 6% from private wells, 5% from rainwater reservoirs, and 4% from other sources. Approximately 47% of the total amount of piped drinking-water is used by households, 39% by industry and the manufacturing sector, while 8% are supplied to livestock farms, 5% to the tourist industry, and 1% to all other purposes.

Statistical data on water supply indicate a gradual increase in water losses along the supply network over time. The extent and physical distribution of this phenomenon is not fully described. However, most of the losses can probably be ascribed to the technical conditions of the mains and distribution network.

Wastewater

Because of the given natural conditions (relief) and the specific pattern of population distribution, Slovenia has a relatively large number of sewage systems, of which only a few include a sewage treatment plant. They are administered by 59 managers (companies, operating units, local communities). The total length of the sewage network is 3,973 km, of which the primary network is 736 km and the secondary network 3,237 km, with 12,336 connections. On average, one manager administers 76 km of the network (12 km of the primary network and 55 km of the secondary network, with 209 connections), and supplies 16,000 inhabitants. Sewage systems are relatively small. In many instances a single company manages more than one wastewater collection, drainage and dumping system.

Present state of sewer and waste water treatment facilities:

- only 53% of inhabitants are connected to the public sewage system
- sewers are not watertight – dispersal of pollution of groundwater occurs

- only 30% of inhabitants are connected to sewage works, and only 15% of wastewater is treated biologically

Solid waste

The population covered by the regular removal of municipal wastes, lump wastes and household wastes containing hazardous substances continuously increase (approximately 76% of the total population was covered by the service of waste removal in 1995 and the current situation is up to 85%). The removal and management of municipal waste is predominantly performed by the existing municipal service companies. Among 60 registered landfills some of them have already been closed down, most of them will have to be according to new waste disposal national legislation (and EU directive) adopted or to be closed in next few years.

Systems for separate collection of paper and glass in part systems for separate collection of metals have been set up in few municipalities and in some major shopping centres. Material recovery is only possible for paper and partly for metal. Slovenia still does not have any municipal waste incineration plant, therefore energy recovery is not possible.

Similar situation is expected in the industry and energy waste sectors where waste disposal sites will have to be reconstructed according to the requirements of new legislation. Both these economic sectors deposit the major part of their wastes at single waste type tips or mixed industrial tips. Such yards are situated in 27 locations in Slovenia, including the yard at Barje for deposition of slag and ash generated in the district heating and power plant of Ljubljana, and the tip for selected hazardous wastes from local industrial plants, situated in Metava. Some of these waste deposits, as well as the abandoned landfills, have been inadequately managed. The technical solutions of the resulting problems require considerable investments. Two incineration plants for special industrial wastes (pharmaceutical and phytopharmaceutical wastes) are in operation.

5 FINANCING ENVIRONMENTAL PROJECTS

The available sources of funding for the implementation of programmes and investments for water and waste sectors are the following:

- budgetary subsidies for municipal infrastructure building
- waste water taxes
- waste taxes (introduced in 1999)
- municipal budgetary funds
- loans from the Eco Fund (non-commercial loans granted according to the selected priorities of the National Environmental Protection Programme)
- long-term provisions for solving environmental problems reserved by enterprises under the Privatisation Act
- EU grants to associate members for the implementation of the Acquis Communautaire
 - PHARE Cross-Border Cooperation Programme (CBC)
 - PHARE Large Scale Infrastructure Facility Programme (LSIF)
 - PHARE National Programme
 - resources from pre-accession funds as of 2000 (ISPA fund for higher-cost infrastructure projects)

- loans from multilateral creditors (WB, EBRD, EIB)
- private sector investments: mainly under concession contracts, and especially for wastewater treatment projects, which enables higher-quality and cost-effective services (B.O.T. models).

Budgetary funds include funds earmarked for the building of municipal infrastructure, allocated annually by the MESP on the basis of public tenders for projects of urban wastewater treatment, drinking-water supply and waste management.

Taxpayers liable to a water burden tax are, under legal regulations, exempt from payment of that tax if they submit an investment programme and invest funds in wastewater drainage and treatment projects. The funds so collected represent a significant direct source of funding of infrastructure facilities for water protection.

Taxpayers liable to a waste tax will be also, under legal regulations, exempt from payment of that tax if they will submit and implement an adoption programme according to the requirements of new waste disposal legislation or they will implement or collaborate in waste treatment projects reducing impacts of the waste disposed of on environment.

Since 1994 the European Commission has, through the PHARE programme, co-financed lower-cost infrastructure projects in the field of environmental protection, and in 1998 it launched the LSIF programme, whose non-repayable funds are earmarked for the implementation of European environmental legislation in the field of water supply and wastewater drainage and treatment. For the 2000-2006 period the European Commission has earmarked non-repayable funds for associate members through the ISPA programme (Instrument for Structural Policies for Accession).

Projects applying for non-repayable budgetary funds, loans from the Eco Fund, and foreign grants or loans from multilateral creditors must, in terms of their content, follow the implementation guidelines contained in European legislation, and must be included on the NEAP priority list and the priority lists of the corresponding protection action plans.

General

Cost estimate of approximation to EU environmental legislation by individual areas

Areas	Cost estimate in million (SIT, (EURO))	Percentage	Percentage of budget funds
Horizontal measures	1860 (10)	0.37%	50%
Air quality	44,826 (241)	8.85%	70%
Waste management	207,948 (1118)	41.06%	68%
Water protection	220,038 (1183)	43.44%	73%
Nature protection	22,320 (120)	4.40%	100%
Control of emissions in industry and reduction of risks	9300 (50)	1.84%	0%
Nuclear safety	186 (1)	0.04%	100%
Total	506,478 (2,723)	100.00%	

Source: Development of a Costing Assessment for the Slovenian Environmental Approximation Strategy, 1998

Water supply

The cost estimate for all investments in water supply (except of the Šaleška valley and Trnovsko-Banjški plateau) will only be known after investment programmes is drawn up. In view of the time needed for the preparation of the investment documentation, the implementation of individual investments cannot be expected to start before 2002.

<i>Priority investments by basin</i>	<i>Present state of investment documentation</i>	<i>Financial sources for the preparation of investment documentation</i>
<i>Sava River Basin – Ljubljana-Sava Sub-River Basin</i>		
Extension of the Kravevec water-supply system	In progress	Municipal budget
Extension of the water-supply system in thinly-populated parts of the Zasavje area	By 2002	Municipal and State budgets
<i>Sava River Basin – Spodnja Sava Sub-River Basin (tributaries: Savinja, Krka, Sotla)</i>		
Extension of the water-supply system to cover the total Kozjansko area (Sotla sub-basin)	By 2003	State and municipal budgets
Extension of the Šaleška valley water-supply system (Savinja-Paka sub-basin)	Investment documentation prepared, investment valued (EURO 7,5 million)	Municipal budget
Extension of the water-supply system in thinly-populated parts of the Posavje area	Investment documentation in preparation	State and municipal budgets
<i>Kolpa River Basin</i>		
Investment in an additional source of water supply and the building of a complete water-supply system for Bela Krajina	By 2002	state and municipal budgets
<i>Priority investments by basin</i>	<i>Present state of investment documentation</i>	<i>Financial sources for the preparation of investment documentation</i>
<i>Soča River Basin</i>		
Extension of the water-supply system in thinly-populated parts of the Trnovsko-Banjški plateau	Investment documentation prepared, investment valued (EURO 12 million)	municipal budget
<i>Coastal sea River Basin</i>		
Investment in an additional source of water supply for the coast and coastal Karst area	By 2001	EU LSIF technical assistance funds, state and municipal budgets

Wastewater

<i>Costs of investments in wastewater sector for implementation period of 6 years</i>		
<i>Sources of funding</i>	<i>Total (EURO millions)</i>	<i>Share in the financial structure (%)</i>
<i>Wastewater tax</i>	181	40.0
<i>state budget fund</i>	14	3.5
<i>Municipal budget funds</i>	46	10.0
<i>Foreign grants</i>	56	12.5
<i>other sources</i>	159	34.0
TOTAL	456	100.0

Sources of funding in individual years cumulative until the year of completion of individual investments (in EURO millions)

<i>year of completion</i>	2001	2002	2003	2004	2005	2006
Sources of funding						
<i>total costs</i>	13,03	20,5	44,69	168,28	70,1	103,99
<i>Tax</i>	0,59	6,11	11,39	98,79	2,56	39,47
<i>state budget</i>	-	0,75	3,07	3,6	3,0	4,0
<i>Municipal budget</i>	1,3	5,2	3,62	16,83	7,03	10,43
<i>International sources</i>	-	6,5	19,5	10	20,0	10,0
<i>other foreseen sources (private sector, loans)</i>	11,14 (private sector - LEK)	1,94	7,06	39,06	25,02	40,09

Solid waste

Sources of funding in individual years cumulative until the year of completion of individual investments (in EURO millions)

municipal waste and similar waste

<i>year of completion</i>	2001	2002	2003	2004	2005	2006
Sources of funding						
<i>total costs</i>	47,78	136,28	237,55	346,16	460,66	580,26
<i>state budget *</i>	9,34	34,05	62,04	92,57	125,65	161,27
<i>Municipal budget</i>	14,88	44,18	77,26	112,89	151,05	189,22
<i>International sources</i>	7,05	14,11	21,23	25,52	28,06	30,61
<i>other foreseen sources (private sector, loans)</i>	16,51	43,94	77,02	115,19	155,90	199,16

* in state budget foreseen waste tax are included

waste from industry and energy sectors

<i>year of completion</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
<i>Sources of founding</i>						
<i>total costs</i>	5,04	10,58	22,29	33,99	45,70	57,40
<i>state budget *</i>	0,99	1,98	4,02	6,05	8,09	10,12
<i>Municipal budget</i>	0,60	1,21	2,22	3,24	4,26	5,28
<i>International sources</i>	-	0,51	1,53	2,55	3,56	4,58
<i>other foreseen sources (private sector, loans)</i>	3,44	6,89	14,52	22,16	29,79	37,42

municipal waste and waste from industry and energy sectors

<i>year of completion</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
<i>Sources of founding</i>						
<i>total costs</i>	52,82	146,86	259,84	380,15	500,47	631,77
<i>state budget *</i>	10,33	36,03	66,05	98,62	131,19	168,85
<i>Municipal budget</i>	15,48	45,39	79,49	116,13	152,77	191,95
<i>International sources</i>	7,05	14,62	22,76	28,06	33,36	36,93
<i>other foreseen sources (private sector, loans)</i>	19,95	50,83	91,54	137,34	183,14	234,03

6 RATIONALE FOR SELECTION OF PROJECTS FOR ISPA FINANCING

General

The criteria for selecting priority areas for investment is as follows:

- projects which comply with EU environmental policy objectives
 - preserving, protecting and improving the quality of the environment,
 - protecting human health,
 - prudent and rational utilization of natural resources.
- projects which comply with EU environmental principles
 - the polluter pays principle - inextricably linked to producer responsibility,
 - precautionary principle- agreeing criteria to encourage safe manufacturing, use and disposal of products,
 - policy integration - linking environmental measures to those on energy, transport, industry and agriculture,
 - participation - and openness in developing policy, and
 - review - of practical experience; ensuring that policy goals are met.
- projects which are a priority in the National Programme for the Adoption of the *Acquis* (NPAA) and will help the country to comply with the most investment-intensive Directives;
- projects designed to comply with EU technical specifications and quality standards and will operate within an adequate legal and administrative framework;
- projects which can demonstrate quantitative reductions in pollution for a maximum number of people (thus producing an effect of scale);
- projects which best serve the protection of human health;

- projects which will support the implementation of the new National Environmental Policy in those areas where it is compatible with the AP, NPAA and the provisions of the ISPA regulation;
- projects which have the potential to stimulate strong partnership between central government and regional and local authorities;
- projects situated in environmentally sensitive areas, supporting the protection of ecosystems of extraordinary value from the point of view of nature protection and biodiversity;
- projects which have the best potential to contribute to gradual achievement of economic and social cohesion of Slovenia with the EU (showing the highest net economic and social benefits).

The projects co-financed from ISPA and realised on regional level will be placed in broader legal and institutional frameworks enabling implementation of sustainable development in the regions.

Water supply and wastewater

Based on Environmental act and on the criteria, defined by the National Environmental Action Programme, National Programme for the Adoption of the Acquis Communautaire and the long terms goal of compliance with EU legislative requirements, the Ministry of Environment and Spatial Planning of the Republic of Slovenia has elaborated the *Action Plan for Urban Wastewater Drainage and Treatment With the Programme of Water-Supply Projects*.

The operational *Action Plan* defines detail measures of implementation of all legislative and strategic documents in municipal water sector. One of the most important final goal of the Action Plan is the list of investment projects as a final measure of reduction of pollution caused by the municipal point sources of emission into environment in compliance with the Urban Waste Water Directive and other relevant EU Directives in water sector, including the Water Framework Directive (COM/97) 49-final. The next final goal of the Action Plan is to provide refer to the Drinking Water Directive the safe water supply to all inhabitants of the Republic of Slovenia, taking into account the sustainable use and protection of water resources.

Programme measures

- to prepare the programmes for reducing discharges from urban sources of pollution and for the optimum utilisation of water supply sources in the territories of larger local communities within the River Basin
- to prepare the expert basis for determining the zones of protection of drinking-water sources
- to prepare the sanitation programmes for potentially endangered sources of water (the groundwater of Dravsko polje, Ptujsko polje, Mursko polje, Apaško polje, Sorško polje, Celjsko polje and Krško-Brežiško polje)
- to set the technical polluters' parameters for cadastral purposes
- to train the municipal infrastructure management and maintenance personnel for the preparation, management, supervision and maintenance of investments

Implementation of investments - determination of the priority list for a six-year period

- to prepare the technical designs and the corresponding investment documentation for the implementation of the following investments:
 - the renewal and extension of the sewage network

- the extension and building of municipal treatment plants
- the rehabilitation of septic tanks
- the renewal and extension of water supply systems in areas deficient in water
- to implement the investments according to the priority list
- to manage and maintain the investments

In determining the mode and pace of the implementation of measures, it is important to adopt a broad-based approach to problems of water pollution and water protection in the River Basins, as nature units. It is necessary, therefore, in addition to the criteria defined by the Urban Waste Water Directive and the Drinking Water Directive, to also take into consideration the criteria defined by other legislative and programme documents (effective national legislation, EU guidelines, adopted national programmes and signed international agreements). The degree of vulnerability or potential sensitive areas within individual River Basins as defined by the above mentioned criteria is the criterion for determining both the priority areas and the timetable for the implementation of individual measures (programmes, investments) in those areas.

SENSITIVE AREAS
Eutrophication areas (all natural lakes, coastal sea)
Areas with water sources for water supply (alluvial and Karst aquifers)
Wetlands and biodiverse areas (1, 4, 6, 7)
Areas of watercourses proclaimed for bathing water (1, 5, 6)
POTENTIALLY SENSITIVE AREAS
Prospective eutrophication areas (artificial lakes)
Cross-border watercourses
Areas with intensive industrial and agricultural production (livestock-breeding farms, heavy industry, etc.)
Poor-discharging capacity watercourses (low self-purifying capacity)
NON-SENSITIVE AREAS
Large-discharging capacity watercourses (high self-purifying capacity)

The priority list of investments in water sector for ISPA co-financing was identified refer to the criteria of the Urban Waste Water Directive and Drinking Water Directive, combined with the criteria of the other corresponding EU Directives required by the National Programme for the Adoption of the Acquis Communautaire, signed Conventions and International Agreements in the scope of Water Framework.

Based on this criteria, *ISPA priority projects in water sector* were identified in the scope of 8 main River Basins of Slovenia. A River Basin approach introduces an integral sustainable water management on the River Basin level as a nature unit of a water cycle, defined by the Water Framework Directive (COM/97) 49-final.

The priority investments in water sector for ISPA co-financing were recognised for the implementation of the

- Urban Wastewater Directive (91/271/EEC, 98/15/EC)

and the

- Drinking Water Directive (80/778/EEC, 91/858/EEC, 90/656/EEC and 91/692/EEC)

and further determined by detailed criteria contained in the following water quality Directives within the National Programme for the Adoption of the Acquis Communautaire, MOP 1998:

- Sewage Sludge (86/278/EEC)
- Groundwater (80/68/EEC, 90/656/EEC, 91/692/EEC)
- Nitrates (92/43/EEC)
- Substances Dangerous to the Aquatic Environment (76/464/EEC, 90/656/EEC, 91/692/EEC)
- Shellfish (79/923/EEC, 91/692/EEC)
- Fish Water Directive (78/659/EEC)
- Surface Water for the Abstraction of Drinking Water (75/440/EEC, 79/869/EEC, 90/656/EEC, 91/692/EEC)
- Bathing Water (76/160/EEC, 90/656/EEC)
- Water Framework Directive (COM/97) 49 - final

Solid waste

Based on Environmental act and on the criteria, defined by the National Environmental Action Programme, National Programme for the Adoption of the Acquis Communautaire and the long terms goal of compliance with EU legislative requirements and Waste Management Strategy of the Republic of Slovenia and National Development Programme of the Republic of Slovenia - Waste Sector the Ministry of Environment and Spatial Planning of the Republic of Slovenia is elaborating several operational plans considering waste management. These plans define detail measures of implementation of all legislative and strategic documents in waste management.

Programme measures

- to prepare the programmes for municipal waste management especially for reducing the biodegradable waste going to landfills, programmes for the discarded car (end of life vehicles) management, programmes for wastes from construction, industry and energy sectors
- design of plans for the management of individual types of waste at the national, local and economic sector level
- to train the municipal infrastructure management and maintenance personnel for the preparation, management, supervision and maintenance of investments

Implementation of investments - determination of the priority list for a six-year period

- to prepare the technical designs and the corresponding investment documentation for the implementation of the following investments:
 - municipal waste and similar waste
 - construction of new waste disposal sites - regional centres (including systems for the collection, sorting, pre-treatment and incineration of waste)
 - construction of new municipal landfills, reconstruction and expansion of current municipal landfills
 - construction of discarded car dismantling centres
 - construction of regional centres for waste from construction
 - waste from industry and energy sectors

- remediation, reconstruction and expansion of current waste disposal site (including for hazardous waste)
- to implement the investments according to the priority list
- to test-operating of the facilities
- to manage and maintain the investments

The priority list of investments in waste sector for ISPA co-financing was identified refer to the criteria of the above mentioned documents. Therefore ISPA priority projects in waste sector were identified among previous mentioned construction of new waste disposal sites - regional centres, construction of new municipal landfills, reconstruction and extension of current municipal landfills, construction of discarded car dismantling centres, construction of regional centres for waste from construction and reconstruction and extension of current waste disposal sites for waste from industry and energy sectors (including for hazardous waste).

The priority investments in waste sector for ISPA co-financing were recognised for the implementation of the:

- Waste Framework Directive, 75/442/EEC, amended by 90/656/EEC, 91/1566/EEC and 91/692/EEC, 94/3/EC, 96/350/EEC

and further determined by detailed criteria contained in the following waste Directives within the National Programme for the Adoption of the Acquis Communautaire, MOP 1998:

- Hazardous Waste Directive, 91/689/EEC, replacing 78/319/EEC, amended by 94/31/EC, 96/302/EC, 94/904/EC
- Directive on Hazardous Waste Incineration, 94/67/EEC
- Directive on the Reduction of Air Pollution from Existing Municipal Waste Incineration Plants 89/429/EEC and Directive on the Reduction of Air Pollution from New Municipal Waste Incineration Plants, 89/369/EEC
- Integral Pollution Prevention Control (96/61/EC, 90/656/EEC, 91/692/EEC)
- Directive on Landfill of Waste, 99/31/EC

7 PRIORITY PROJECTS FOR ISPA FUNDING

Water Supply/Wastewater

Since the majority of the population of Slovenia (85%) are normally supplied with water from public water supply systems, the Action Plan for the 1st phase (six years) of implementation of the NEAP in the field of water supply provides only for priority investments in water-deficient areas. As regards priority NEAP measures, the 1st phase focuses rather on the building of systems of wastewater drainage and treatment, since only 53% of the population are connected to the public sewers and only 30% (percentage relative to the number of inhabitants - PU) to treatment plants, whereas 47% are still connected to septic tanks.

The following tables show the list of priority investments in water sector, refer to the above defined criteria, comprising the Water Framework Directive, located in sensitive and potentially sensitive areas of the main River Basins of Slovenia.

THE SAVA RIVER BASIN	
The Sava-Gorenjska Sub-River Basin	
Investments	Explanation by criteria
Investment programme for Bohinj, Bohinjska Bistrica, Bled and Radovljica comprises: <ul style="list-style-type: none"> extension of the sewage network building of the Bled-Radovljica collector building of Bohinjska Bistrica UWWTP – 11,000 PE building of Radovljica UWWTP - 30,000 PE 	Sensitive area according to criteria : <ul style="list-style-type: none"> Urban Waste Water Directive eutrophication area – natural lakes bathing water (Bohinj, Bled) protected area of Triglav National Park (Bohinj) refer to Water Framework Directive, the programme provides integral measures of sustainable water supply and wastewater management of Sava Bohinjka River Basin <i>concept of the investment programme for co-financing by the EU ISPA 2002 is prepared</i>
Investment programme for Kranjska Gora comprises: <ul style="list-style-type: none"> construction of the secondary sewage system construction of the main reservoir construction of Kranjska Gora UWWTP (in progress) - 6,500 PE 	Potentially sensitive area according to criteria : <ul style="list-style-type: none"> Urban Waste Water Directive protected area of Triglav National Park tourist area <i>investment in progress, co-financed by the EU PHARE LSIF 1999</i>
Investment programme for Tržič comprises: <ul style="list-style-type: none"> extension of the sewage network construction of Tržič UWWTP – 20,000 PE 	Non-sensitive area , priority justified by criterion : <ul style="list-style-type: none"> Urban Waste Water Directive
The Ljubljana-Sava Sub-River Basin:	
Investments	Explanation by criteria
Investment programme comprises: <ul style="list-style-type: none"> introduction of suitable sources of water extension of the Krvavec water supply system 	Water-deficient area according to the criteria : <ul style="list-style-type: none"> Drinking Water Directive thinly populated sensitive area influent by non point sources of pollution
Investment programme for Ljubljana comprises: <ul style="list-style-type: none"> extension of the sewage network building of Ljubljana UWWTP – 420,000 PE 	Sensitive area according to the criteria : <ul style="list-style-type: none"> Urban Waste Water Directive protected area of water supply sources (alluvial aquifer – Ljubljansko polje)
Investment programme for Vrhnika comprises: <ul style="list-style-type: none"> extension of the sewage network building of the Vrhnika UWWTP- 20,000 PE 	Potentially sensitive area according to criteria : <ul style="list-style-type: none"> Urban Waste Water Directive Ljubljana River nature protected area
Investment programme for Litija, Zagorje, Trbovlje and Hrastnik comprises: <ul style="list-style-type: none"> extension of the sewage network building of Litija UWWTP – 19,000 PE building of Zagorje UWWTP – 17,000 PE building of Trbovlje UWWTP - 18,000 PE building of Hrastnik UWWTP - 11,000 PE extension of the water supply system in the thinly-populated Zasavje areas 	Potentially sensitive and water-deficient area according to criteria : <ul style="list-style-type: none"> Urban Waste Water Directive Drinking Water Directive potential eutrophication area – artificial lakes of the future chain of hydroelectric power plants on the Sava refer to Water Framework Directive, the programme provides integral measures for sustainable water supply and wastewater management in Ljubljana-Sava River Basin <i>concept of the programme of co-financing TA by the EU ISPA 2000, planned investment for ISPA co-financing 2002</i>

THE SAVA RIVER BASIN	
The Down Stream Sava Sub-River Basin	
Investments	Explanation by criteria
<p>Investment programme for Šoštanj and Velenje comprises:</p> <ul style="list-style-type: none"> • extension of the sewage network • extension of Velenje UWWTP - 50,000 PE • extension of the Šaleška Dolina water supply system 	<p>Potentially sensitive and water-deficient area according to criteria:</p> <ul style="list-style-type: none"> • Urban Waste Water Directive • Drinking Water Directive • area with intensive mining production – joint treatment of mining effluent • refer to the Water Framework Directive, the programme provides integral measures for sustainable water supply and wastewater management in Paka River Basin • <i>concept of the programme of co-financing by EU ISPA 2000 prepared</i>
<p>Investment programme for Celje comprises:</p> <ul style="list-style-type: none"> • extension of the sewage network • building of Celje UWWTP – 70,000 PE 	<p>Potentially sensitive area according to the criteria:</p> <ul style="list-style-type: none"> • Urban Waste Water Directive • protected area of water-supply sources (alluvial aquifer – Celjsko polje) • potential eutrophication area – artificial lakes of the future chain of hydroelectric power plants on the Sava • <i>concept of the programme of co-financing by EU ISPA 2000 prepared</i>
<p>Investment programme for Sevnica comprises:</p> <ul style="list-style-type: none"> • extension of the sewage network • building of Sevnica UWWTP- 10,000 PE • extension of the water supply system in thinly-populated areas <p>Investment programme for Krško comprises:</p> <ul style="list-style-type: none"> • extension of the sewage network • building of Krško UWWTP – 20,000 PE • building of treatment plants in settlements at the Krško-Brežiško polje groundwater area • extension of the water supply system in thinly-populated areas <p>Investment programme for Brežice (Sava) comprises:</p> <ul style="list-style-type: none"> • extension of the sewage network • building of Brežice UWWTP - 10,000 PE • extension of the water supply system in thinly-populated areas 	<p>Potentially sensitive and water-deficient area according to criteria of:</p> <ul style="list-style-type: none"> • Urban Waste Water Directive • Drinking Water Directive • potential eutrophication area – artificial lakes of the future chain of hydroelectric power plants on the Sava • protected area of water-supply sources (alluvial aquifer – the Krško-Brežiško polje) • reduction of discharges to watercourses with cross-border impact (border area) • refer to the Water Framework Directive, the programme provides integral measures for sustainable water supply and wastewater management in Down Stream Sava River Basin • <i>concept of the programme of co-financing TA by EU LSIF for ISPA 2000 prepared, planned investment for ISPA co-financing 2003</i>

THE SAVA BASIN	
The Sotla Sub-River Basin	
Investments	Explanation by criteria
Investment programme for the Kozjansko area water supply comprises: <ul style="list-style-type: none"> extension of the water supply system 	Water-deficient area according to criteria : <ul style="list-style-type: none"> Drinking Water Directive investment programme provides an sustainable water supply in the scope of River Basin
Investment programme for Rogaška Slatina comprises: <ul style="list-style-type: none"> extension of the sewage network building of Rogaška Slatina UWWTP - 12,000 PE 	Potentially sensitive area according to criteria : <ul style="list-style-type: none"> Urban Waste Water Directive potential eutrophication area – Lake Vonarsko artificial lake reduction of discharges into watercourses with cross-border impact (border area) concept of individual investment programmes prepared
THE KOLPA RIVER BASIN	
Investments	Explanation by criteria
Investment programme for Bela Krajina water supply comprises: <ul style="list-style-type: none"> investment in additional water-supply sources building of the water supply system 	Water-deficient area according to criteria : <ul style="list-style-type: none"> the programme provides a sustainable water supply in the scope of River Basin potential sensitive area affected by agriculture and industrial pollution sources Drinking Water Directive <i>concept of the water supply investment programme for co-financing prepared, planned investment for ISPA co-financing 2004</i>
THE MURA RIVER BASIN	
Investments	Explanation by criteria
Investment programme for Murska Sobota comprises: <ul style="list-style-type: none"> extension of the sewage network extension of Murska Sobota UWWTP - 45,000 PE 	Sensitive area according to criteria : <ul style="list-style-type: none"> Urban Waste Water Directive protected area of water-supply sources (the Mursko polje aquifer)
Investment programme for Lendava with the combined treatment of Lek factory effluent comprises: <ul style="list-style-type: none"> extension of the sewage network building of Lendava UWWTP - 45,000 PE 	Sensitive area according to criteria : <ul style="list-style-type: none"> Urban Waste Water Directive protected area of water-supply sources (alluvial aquifer – the Mursko polje) combined treatment of industrial effluent <i>concept of the programme of co-financing by the Lek factory prepared</i>

THE DRAVA RIVER BASIN	
Investments	Explanation by criteria
Investment programme for Maribor comprises: <ul style="list-style-type: none"> • extension of the sewage network • building of Maribor UWWTP - 200,000 PE (in progress) 	Sensitive area according to criteria : <ul style="list-style-type: none"> • Urban Waste Water Directive • protected area of water-supply sources (alluvial aquifer – the Vrbanški plateau) • <i>implementation of the programme is underway, co-financed by PHARE LSIF 1998</i>
Investment programme for Dravograd, Mislinja, and Slovenj Gradec comprises: <ul style="list-style-type: none"> • extension of the sewage network • building of Dravograd UWWTP - 9,000 PE • building of Mislinja UWWTP - 2,500 PE • building of Slovenj Gradec UWWTP - 20,000 PE 	Potentially sensitive area according to criteria : <ul style="list-style-type: none"> • Urban Waste Water Directive • reduction of discharges into watercourses with poor self-purifying capacity (Mislinja) • protected area of bathing waters • refer to the Water Framework Directive, the programme provides integral measures for wastewater management of Mislinja River Basin • <i>concept of investment programme for UWWTPs Dravograd and Mislinja for co-financing TA by Phare LSIF 1999 prepared, the investment programme for Slovenj Gradec UWWTP for co-financing by ISPA 2001 prepared</i>
Investment programme for Ptuj comprises: <ul style="list-style-type: none"> • extension of the sewage network • extension of Ptuj CČN – 105,000 PE 	Sensitive area according to criteria : <ul style="list-style-type: none"> • Urban Waste Water Directive • protected area of water supply sources (alluvial aquifer – Ptujsko polje groundwater)
THE SOČA RIVER BASIN	
Investments	Explanation by criteria
Investment programme for Bovec, Kobarid and Most na Soči comprises: <ul style="list-style-type: none"> • extension of the sewage network • building of Bovec UWWTP - 6,500 PE • building of Kobarid UWWTP - 4,100 PE • building of Most na Soči UWWTP – 1,000 PE 	Potentially sensitive area according to criteria : <ul style="list-style-type: none"> • Urban Waste Water Directive • protected area of the Soča River (Soča trout) • the programme provides integral measures for wastewater management in River Basin • reduction of discharges into watercourses with cross-border impact • <i>programme of co-financing by PHARE NP 1999 prepared</i>
Investment programme for Nova Gorica comprises: <ul style="list-style-type: none"> • extension of the sewage network • building of Nova Gorica UWWTP – 45,000 PE 	Potentially sensitive area according to criteria : <ul style="list-style-type: none"> • Urban Waste Water Directive • reduction of discharges into watercourses with cross-border impact • concept of the investment programme prepared
Investment programme for Ajdovščina comprises: <ul style="list-style-type: none"> • extension of the sewage network • extension of Ajdovščina UWWTP – 20,000 PE 	Potentially sensitive area according to criteria : <ul style="list-style-type: none"> • Urban Waste Water Directive • reduction of discharges into watercourses with cross-border impact • <i>programme of co-financing by PHARE CBC 1999 prepared</i>

THE SOČA RIVER BASIN	
Investments	Explanation by criteria
Investment programme for the Trnovsko-Banjški plateau comprises: <ul style="list-style-type: none"> • extension of the water supply system in thinly-populated areas 	Water-deficient area according to criteria : <ul style="list-style-type: none"> • the programme provides integral measures for sustainable water supply in River Basin • Drinking Water Directive • <i>planned investment for ISPA co-financing 2000</i>
COASTAL SEA RIVER BASIN	
Investments	Explanation by criteria
Investment programme for Koper, Izola and Piran comprises: <ul style="list-style-type: none"> • extension of the sewage network • building of Koper UWWTP - 50,000 PE • building of Izola UWWTP - 30,000 PE • building of Piran UWWTP - 30,000 PE • investment in the additional source of water supply for the coast and coastal Karst area 	Sensitive and Water-deficient area according to the criteria : <ul style="list-style-type: none"> • Urban Waste Water Directive • Drinking Water Directive • coastal sea eutrophication area • protected area for bathing water • protected area of water quality for fish and shellfish • refer to Water Framework Directive, the programme provides integral measures for sustainable water supply and wastewater management in Coastal Sea River Basin • <i>concept of the co-financing TA for water supply investment programme by Phare LSIF 1999 prepared</i> • <i>concept programme of water supply, wastewater drainage and treatment for the co-financing TA by Phare LSIF 1999 prepared, planned investment for ISPA co-financing 2003</i>
Investment programme for the Ilirska Bistrica municipalities comprises: <ul style="list-style-type: none"> • extension of the sewage network • building of Ilirska Bistrica UWWTP – 9,500 PE 	Potentially sensitive area according to criteria : <ul style="list-style-type: none"> • Urban Waste Water Directive • protection of the Notranjska river protected area • <i>investment programme to be co-financed by PHARE CBC 1999 prepared</i>

Priority ISPA investments in the water/wastewater sectors are wastewater collection, treatment and disposal projects defined by NEAP and the Action Plan for the 1st phase (six years) of implementation of the NEAP:

- implemented in agglomerations with a population equivalent of between 10,000 and 70,000;
- protecting surface water and groundwater aquifers serving as sources for drinking water; in this respect projects aiming at rehabilitation of contaminated land polluting groundwater resources should be considered;
- protecting waters especially sensitive to eutrophication (e.g. lakes and reservoirs, Coastal Adriatic Sea – Triest Golf);
- limiting discharges of wastewater directly to nature lakes, wetlands and other nature and biodiverse protected aquatic environment;
- protection of bathing waters;
- protection of fish and shellfish waters;
- protection of transboundary waters.

Tables 7.1.1 and 7.1.2. identify priority areas for investment in water sector, located in sensitive and potentially sensitive areas of the main River Basins of Slovenia. The priority investments were recognised refer to the criteria comprising the *Water Framework Directive* and are described in detail under the **Chapter 6** of this Document.

Table 7.1.1. Presentation of investments in wastewater sector

City	Population equivalent	Investment comprise	Investment planned for ISPA co-financing in year	Degree of vulnerability or potential sensitive areas within individual River Basins
<i>Savinja River Basin</i> • Celje	70,000	<ul style="list-style-type: none"> • Construction of main collector • Construction of UWWTP 	2000	<ul style="list-style-type: none"> • potential sensitive area of Celjsko polje aquifer • Savinja river is one the main and most polluted tributary of Down Stream Sava, potential sensitive area of accumulations of future hydropower chain
<i>Paka River Basin</i> • Velenje, Šoštanj	45,000	<ul style="list-style-type: none"> • Construction of main collector • upgrading of water supply network • construction of UWWTP 	2000	<ul style="list-style-type: none"> • potential sensitive area of Šaleško polje aquifer • Paka is the main tributary of Savinja river with high influence to Down Stream Sava, potential sensitive area of accumulations of future hydropower chain
<i>Mislinja River Basin</i> • Slovenj Gradec • Dravograd • Mislinja	20,000 9,000 2,500	<ul style="list-style-type: none"> • upgrading sewer network • construction of main collectors • construction of UWWTPs 	2001	<ul style="list-style-type: none"> • potential sensitive area of bathing waters • Mislinja is one of the main and most polluted tributary of Drava river, potential sensitive area of accumulations of hydropower chain
<i>Ledava River Basin</i>	15,000	<ul style="list-style-type: none"> • Construction of sewer net work and main collector 	2001	<ul style="list-style-type: none"> • potential sensitive area of Mursko polje aquifer

City	Population equivalent	Investment comprise	Investment planned for ISPA co-financing in year	Degree of vulnerability or potential sensitive areas within individual River Basins
<i>Drava River Basin</i> • Ptuj	105,000	<ul style="list-style-type: none"> • Construction of main collector • Upgrading of UWWTP 	2003	<ul style="list-style-type: none"> • potential sensitive area of Dravsko polje aquifer
<i>Sava Bohinjka River Basin</i> • Bohinj • Bled, • Radovljica	11,000 30,000	<ul style="list-style-type: none"> • Construction of main collectors • construction of UWWTPs 	2002	<ul style="list-style-type: none"> • sensitive area of nature lakes Bohinj and Bled • sensitive area of nature protected Triglav National Park • sensitive area of bathing waters
<i>Ljubljana-Sava River Basin</i> • Litija • Zagorje • Trbovlje • Hrastnik	19,000 17,000 18,000 11,000	<ul style="list-style-type: none"> • upgrading sewer network • construction of main collectors • construction of UWWTPs 	2002	<ul style="list-style-type: none"> • potential sensitive area of concentrated industry and coal mining influent • Down Stream Sava is potential sensitive area of accumulations of future hydropower chain • potential sensitive area of transboundary impact
<i>Coastal River Basin</i> • Koper • Izola • Piran	50,000 30,000 30,000	<ul style="list-style-type: none"> • upgrading sewer network • construction of main collectors • construction of UWWTPs 	2003	<ul style="list-style-type: none"> • sensitive area of coastal sea of Triest Golf • sensitive area of waters for fish and shellfish quality requirement • sensitive area of bathing water • potential sensitive area of transboundary impact
<i>Down Stream Sava River Basin</i> • Sevnica • Krško • Brežice	10,000 20,000 10,000	<ul style="list-style-type: none"> • construction of main collectors • construction of UWWTPs • sanitation of landfill, situated on protected groundwater area 	2003	<ul style="list-style-type: none"> • potential sensitive area of aquifer Krško-Brežiško polje • Down Stream Sava is potential sensitive area of accumulations of future hydropower chain • potential sensitive area of transboundary impact
<i>Upper Stream Sava River Basin</i> • Tržič		<ul style="list-style-type: none"> • construction of main collectors • construction of UWWTP 	2006	<ul style="list-style-type: none"> • Upper Stream Sava is potential sensitive area of accumulations of future hydropower chain

Table 7.1.2. Presentation of investments in water supply sector

	Investment comprise	Investment planned for ISPA co-financing in year	Degree of potential risk to corresponding quality or quantity of drinking water sources
Sustainable water supply of Trnovsko Banjški plateau	<ul style="list-style-type: none"> • upgrading of water supply primary network • construction of corresponding facilities for protection of water sources 	2000	<ul style="list-style-type: none"> • potential risk to quality of drinking water caused by karstic configuration of Trnovsko Banjški plateau • potential risk to quantity of drinking water during dry season water-deficient area • thinly populated rural area
Sustainable water supply of Bela Krajina	<ul style="list-style-type: none"> • upgrading of water supply primary network • construction of corresponding facilities for protection of water sources 	2004	<ul style="list-style-type: none"> • potential risk to quality of drinking water caused by industry and agriculture pollution • potential risk to quantity of drinking water during dry season in water-deficient area • thinly populated rural area
Sustainable water supply of Down Stream Sava River Basin (Posavje area)	<ul style="list-style-type: none"> • upgrading of water supply primary network • construction of corresponding facilities for protection of water sources 	2005	<ul style="list-style-type: none"> • potential risk to quantity of drinking water during dry season water-deficient area • thinly populated rural area • potential risk to quality of drinking water because of disbursed sources, not controlled by public operator
Sustainable water supply of Sotla River Basin (Kozjansko area)	<ul style="list-style-type: none"> • upgrading of water supply primary network • construction of corresponding facilities for protection of water sources 	2005	<ul style="list-style-type: none"> • potential risk to quantity of drinking water during dry season water-deficient area • thinly populated rural area • potential risk to quality of drinking water because of disbursed sources, not controlled by public operator

Solid waste

In determining the mode and pace of the implementation of measures it is taken into consideration the requirements defined by other legislative and programme documents (effective national legislation, directives especially by Directive on Landfill of Waste, adopted national programmes).

Inventory of tips and other historical legacies and the development of a priority list of rehabilitation according to criteria that will particularly take into account adverse impacts on environment, risks to environment, future utilisation of physical space, costs of rehabilitation, and acceptability of rehabilitation by the population, serves as the basis for the resolutions regarding the priority improvement measures, their scope and dynamics, along with the observation of the legal inheritance problems, technical demands and the amounts to be invested.

The following tables show the list of priority investments in waste sector, refer to the above mentioned documents.

Construction of regional centres for municipal waste
Investments
<ul style="list-style-type: none"> • Incinerator for waste for North-east part of Slovenia • Regional waste management centre Dolenjska • Regional waste management centre Gorenjska (CERO) • Regional waste management centre for Central Slovenia • Regional waste management centre Zasavje • Regional waste management centre Štajerska (CEGOR) • Regional waste management centre Posavje • Regional waste management centre Puconci • Regional waste management centre Ptuj

Construction of new municipal landfills, reconstruction and extension of current municipal landfills
Investments
<ul style="list-style-type: none"> • Celje - municipal landfill Bukovžlak • Ribnica - municipal landfill Mala gora • Maribor - municipal landfill Pobrežje • Novo mesto – municipal landfill Leskovec • Grosuplje - waste management centre Špaja dolina • Lendava - municipal landfill Dolga vas • Slovenske Konjice - municipal landfill Graščak • Trbovlje - municipal landfill Neža • Trebnje - municipal landfill Globoko • Ljutomer – municipal landfill Veržej • Ljutomer – municipal landfill Ljutomer • Slovenska Bistrica - municipal landfill Pragersko • Hrastnik - municipal landfill Unično • Ormož - municipal landfill Dobrava

Construction of discarded car (end of life vehicles) dismantling centres
Investments
<ul style="list-style-type: none"> • demonstrative dismantling centre for discarded car (end of life vehicles) Cankova • dismantling centre for discarded car (end of life vehicles) Maribor • dismantling centre for discarded car (end of life vehicles) Celje • dismantling centre for discarded car (end of life vehicles) Ljubljana • dismantling centre for discarded car (end of life vehicles) Radovljica

Construction of regional centres for waste from construction
Investments
<ul style="list-style-type: none"> • Regional waste management centre Gorenjska (CERO) • Regional waste management centre for waste from construction Obala

Construction of centres for waste from industry and energy sectors
Investments
<ul style="list-style-type: none"> • landfill for hazardous waste Metava • landfill of organic sour substance, manufactory Globovnik, Ilirska Bistrica • landfill of sour substance "<i>gudron</i>" Pesniški dvor, Studenci and Bogova by Maribor • landfill of red slim Kidričevo

Priority ISPA investments in the municipal waste sectors direct the activities aimed at a gradual decrease of the quantities of wastes and of their hazard potential at their source, at a separated collection of the purest fractions of wastes, at the increase of the rate of the utilisation of the mass and energy content of the wastes, and in the industry and energy waste sectors reconstruction and expansion of hazardous waste landfill in accordance with the European standards:

- construction of new long-term prospective landfill to cover one or more regions, located and constructed according to the EU standards (regional centres); including collecting - transport depots and intermediate storage, objects for sorting and composting of organic and green wastes
- construction of facilities for heat treatment of wastes including the utilisation of their energy content, for the remaining mixed solid wastes from settlement, and residual wastes after classification and other procedures for the preparation of secondary raw materials and introduction of optimal logistics between the transport depots and the waste heat treatment facilities
- reconstruction and expansion of existing hazardous waste landfill

Tables 7.2 identify priority locations for investment in municipal waste sector and industry and energy waste sector

Table 7.2. Presentation of investments in solid waste sector

Object	Population	Investment comprise	Investment planned for ISPA co-financing in year
<i>Regional waste management centre Dolenjska – Novo Mesto</i>	160.000	<ul style="list-style-type: none"> • construction of objects for sorting and composting • construction of new landfill • remediation of existing landfill 	2000
<i>Regional waste management centre Gorenjska (CERO)</i>	280.000	<ul style="list-style-type: none"> • construction of objects for sorting and composting • construction of incinerator • construction of new landfill • construction of waste from construction center 	2001
<i>Regional waste management centre Puconci</i>	125.000	<ul style="list-style-type: none"> • construction of objects for sorting and composting • construction of new landfill 	2000
<i>Waste Management Center and Incinerator for Central Slovenia</i>	550.000	<ul style="list-style-type: none"> • construction of objects for sorting and composting • construction of new landfill • construction of waste from construction center • construction of incinerator 	2003
<i>Construction of incinerator for municipal waste for North-east part of Slovenia</i>	830.000	<ul style="list-style-type: none"> • construction of incinerator 	2002
<i>Reconstruction and expansion of hazardous waste landfill at Metava</i>	regional/state landfill	<ul style="list-style-type: none"> • reconstruction and expansion of the existing landfill 	2003

Table 7.3.1. Proposed priority investment projects for ISPA financing - Wastewater

No. □	Title of project□	Financing Sources	Forecast cost breakdown (Euro million)							
			Total	2000	2001	2002	2003	2004	2005	2006
1	UWWTP Celje	ISPA	10	5	2,5	2,5				
		S.B.	8,51	2,84	2,84	2,84				
		M. B.	2,08	0,69	0,69	0,69				
		O.S.	0,21	0,07	0,07	0,07				
2	UWWTP Velenje	ISPA	5	2,5	2,5					
		S.B.	6,47	2,16	2,16	2,16				
		M. B.	1,65	0,55	0,55	0,55				
		O.S.	3,38	1,13	1,13	1,13				
3	UWWTPs in Mislinja River Basin (Slovenj Gradec, Dravograd, Mislinja)	ISPA	5		2,5	2,5				
		S.B.	4,32		1,44	1,44	1,44			
		M. B.	1,69		0,56	0,56	0,56			
		O.S.	5,88		1,96	1,96	1,96			
4	UWWTP in Drava River Basin (Ptuj)	ISPA	5		2,5	2,5				
		S.B.	4,8		1,63	1,63	1,63			
		M. B.	2,43		0,81	0,81	0,81			
		O.S.	16,24		5,12	5,12	5,12			
5	Drainage Waste Water System in Lendava and Neighboring Villages	ISPA	5		2,5	2,5				
		S.B.	4,8		2,4	2,4				
		M. B.	1,8		0,9	0,9				
6	UWWTPs in Sava Bohinjka River Basin (Bohinj, Bled, Radovljica)	ISPA	5			2,5	2,5			
		S.B.	7,66			2,55	2,55	2,55		
		M. B.	1,5			0,5	0,5	0,5		
		O.S.	0,84			0,28	0,28	0,28		
7	UWWTPs in Ljubljana-Sava River Basin (Litija, Zagorje, Trbovlje, Hrastnik)	ISPA	5			2,5	2,5			
		S.B.	17,33			5,78	5,78	5,78		
		M. B.	2,55			0,85	0,85	0,85		
		O.S.	0,62			0,21	0,21	0,21		

Legend:

S.B. State Budget

M.B. Municipal Budget

O.S. Other Sources (private sector, loans)

No. □	Title of project□	Financing Sources	Forecast cost breakdown (Euro million)							
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			Total	2000	2001	2002	2003	2004	2005	2006
8	UWWTPs in Coastal River Basin (Koper, Izola, Piran)	ISPA	5				2,5	2,5		
		S.B.	17,74				5,91	5,91	5,91	
		M. B.	3,91				1,3	1,3	1,3	
		O.S.	12,45				4,15	4,15	4,15	
9	UWWTPs in Down Stream Sava River Basin (Sevnica, Krško, Brežice)	ISPA	5				2,5	2,5		
		S.B.	9,9				3,3	3,3	3,3	
		M. B.	2,2				0,73	0,73	0,73	
		O.S.	4,95				1,65	1,65	1,65	
10	UWWTP in Ljubljana-Sava River Basin (Tržič)	ISPA	5					2,5	2,5	
		S.B.	4,9					1,63	1,63	1,63
		M. B.	1,18					0,39	0,39	0,39
		O.S.	5,72					1,91	1,91	1,91
	Total values of projects from Table 7.1.1.		211,66	14,94	34,76	49,93	60,09	36,14	23,47	3,93

Legend:

S.B. State Budget

M.B. Municipal Budget

O.S. Other Sources (private sector, loans)

Table 7.3.2. Proposed priority investment projects for ISPA financing – Water supply

No. □	Title of project□	Financing Sources	Forecast cost breakdown (Euro million)							
			Total	2000	2001	2002	2003	2004	2005	2006
1	Sustainable water supply of Trnovsko Banjški plateau	ISPA	5	2,5	2,5					
		S.B.	1	0,33	0,33	0,33				
		M. B.	2	0,66	0,66	0,66				
		O.S.	12	4	4	4				
2	Sustainable water supply of Bela Krajina	ISPA	5					2,5	2,5	
		S.B.	1					0,33	0,33	0,33
		M. B.	3					1	1	1
		O.S.	21					7	7	7
3	Sustainable water supply of Down Stream Sava River Basin (Posavje Area)	ISPA	5						2,5	2,5
		S.B.	1						0,33	0,33
		M. B.	1,5						0,5	0,5
		O.S.	7,5						2,5	2,5
4	Sustainable water supply of Sotla River Basin (Kozjansko Area)	ISPA	5						2,5	2,5
		S.B.	1						0,33	0,33
		M. B.	1,5						0,5	0,5
		O.S.	7,5						2,5	2,5
	Total values of projects from Table 7.1.2.		80					18,32	29,98	24,98

Legend:

S.B. State Budget

M.B. Municipal Budget

O.S. Other Sources (private sector, loans)

Table 7.4. Proposed priority investment projects for ISPA financing - Solid Waste

No. □	Title of project□	Financing Sources	Forecast cost breakdown (Euro million)							
			Total	2000	2001	2002	2003	2004	2005	2006
1	<i>Waste Management Center of Dolenjska Region – Novo Mesto</i>	ISPA	4,00	1,50	1,50	0,50	0,50			
		S.B.	0,60	0,15	0,15	0,15	0,15			
		M. B.	0,60	0,15	0,15	0,15	0,15			
		O.S.	11,15	2,80	2,80	3,80	1,75			
2	<i>Regional waste management centre Puconci</i>	ISPA	3,00	1,00	1,00	1,00				
		S.B.	1,50	0,50	0,50	0,50				
		M. B.	1,50	0,50	0,50	0,50				
		O.S.	9,00	3,00	3,00	3,00				
3	<i>Regional waste management centre Gorenjska (CERO)</i>	ISPA	6,00		1,00	2,00	2,00	1,00		
		S.B.	1,50		0,25	0,50	0,50	0,25		
		M. B.	12,20		2,00	4,10	4,10	2,00		
		O.S.	44,20		7,00	15,10	15,10	7,00		
4	<i>Waste Management Center and Incinerator for Central Slovenia</i>	ISPA	6,00				1,50	1,50	1,50	1,50
		S.B.	2,00				0,50	0,50	0,50	0,50
		M. B.	6,00				1,50	1,50	1,50	1,50
		O.S.	46,0				11,50	11,50	11,50	11,50
5	<i>Construction of incinerator for municipal waste for North-east part of Slovenia</i>	ISPA	10,00			3,40	3,40	3,20		
		S.B.	1,65			0,55	0,55	0,55		
		M. B.	4,05			1,35	1,35	1,35		
		O.S.	86,90			28,97	28,97	28,97		
6	<i>Reconstruction and expansion of hazardous waste landfill at Metava</i>	ISPA	5,00				1,5	1,50	1,00	1,00
		S.B.	0,80				0,20	0,20	0,20	0,20
		M. B.	4,00				1,00	1,00	1,00	1,00
		O.S.	2,60				0,65	0,65	0,65	0,65
	Total values of projects from Table 7.2.		270,25	9,60	20,15	65,20	76,25	62,85	18,10	18,10

Legend:

S.B. State Budget

M.B. Municipal Budget

O.S. Other Sources (private sector, loans)