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# **Operational programme of environmental and transport infrastructure development for the period 2007 - 2013**

**UNOFFICIAL TRANSLATION!!!**

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## ABBREVIATIONS

GDP	Gross domestic product
MCRS	Motorway Company of the Republic of Slovenia
NDP	National Development Programme
DRRS	Roads Directorate of the RS
EAFRD	European Agricultural Fund for Rural Development
EASA	European Aviation Safety Agency
EIB	European Investment Bank
EC	European Commission
SPD	Single Programming Document 2004- 2006
ERDF	European Regional Development Fund
ESF	European Social Fund
EU	European Union
FFP	Phytopharmaceutical products
ICAO	International Civil Aviation Organization
IFR	Instrumental Flight Rules
ISPA	Instrument for Structural Policies for Pre-accession
JAA	Joint Aviation Authorities
PPT	Public passenger Transport
NEP	National Energy Programme
NMCP	National Motorway Construction Programme
NEAP	National Environmental Action Programme
NSRF	National Strategic Reference Framework
CF	Cohesion Fund
OP	Operational programme
OP DHR	Operational Programme for Development of Human Resources 2007-2013
OP SRDP 2007-2013	Operational Programme for Strengthening Regional Development Potential 2007-2013
OP ETID	Operational Programme of Environmental and Transport Infrastructure Development for the period 2007 - 2013
RES	Renewable energy sources
TIRS	Transport Inspectorate of the RS
AARDT	Average annual rate of daily traffic
SORS	Statistical Office of the RS
SDS	Strategy for development of Slovenia
GOSP	Government Office for Local Self- Government and Regional Policy
SWOT	Analysis of strengths, weaknesses, opportunities and threats
TEN	Trans – European Network
GG	Greenhouse gases
TOC	Total organic carbon
BSO	Budget Supervisory Office of RS
EUFE	Efficient use of final energy
WFD	Water Framework Directive

# 1. INTRODUCTION

## 1.1. Platforms for preparation of the operational programme

The Operational Programme of Environmental and Transport Infrastructure Development for the period 2007-2013 (hereinafter OP ETID) represents an implementation document of the Republic of Slovenia for the period between 2007-2013, determining legal obligations and rights in relation with implementation of the cohesion policy of the European Union (hereinafter EU) in Slovenia. It is a joint Slovenian/EU programming document, adopted upon a proposal of a member state after being reviewed and approved by the European Commission (hereinafter EC); then it is jointly financed and implemented by the two partners. Slovenia will put the available funds from the Cohesion Fund (hereinafter CF) and the European Regional Development Fund (hereinafter ERDF), the funds from other financial sources and own co-financing funds into economic convergence of the state, the main objectives of which are to improve the conditions for growth and employment by investing into physical and human resources as well as innovations, to improve the ability to adapt to economic and social changes, to improve environmental protection and management efficiency. In this way Slovenia wishes to fulfil a long-term vision and objectives of development of Slovenia. So in short, **the main goal of OP ETID is to provide conditions for growth by providing sustainable mobility, by improving quality of the environment and by constructing suitable infrastructure.**

In the broadest sense the OP ETID is based on the Strategy of the Development of Slovenia (hereinafter SDS), which was adopted by the Government of the Republic of Slovenia (hereinafter the Government)<sup>1</sup> in the first half of 2005. In 2004 the Government adopted the Plan for Preparation of National Development Programme 2007-2013 (hereinafter NDP), which then served as an expert groundwork for preparation of National Strategic Reference Framework (hereinafter NSRF). The NSRF includes all those programmes and projects, which will be co-financed with the funds from European budget and which will meet the criteria of new EU regulations referring to the cohesion policy for the period 2007 – 2013. NSRF is therefore an essential document on the basis of which the operational programmes were prepared.

The cohesion policy as introduced into the reviewed Lisbon Strategy is a part of the *Community Strategic Guidelines, 2007–2013*<sup>2</sup>. The primary objective of these Guidelines is to determine the priorities of the Community which will receive support of the cohesion policy – from both structural funds, ERDF, the European Social Fund (hereinafter ESF) and the Cohesion Fund; its purpose is to promote the synergy with the Lisbon Strategy, as laid down in the comprehensive guidelines for growth and new jobs and to help the implementation. The Community Strategic Guidelines represents one of the strategic platforms on the basis of which the member states must prepare their NSRF and the OPs and in particular for the formulation of the development priorities<sup>3</sup>.

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<sup>1</sup> Government of the RS; 30000-2/2005/2004, 23.6.2005.

<sup>2</sup> Cohesion policy for promotion of growth and new jobs: Strategic guidelines of the Community, 2007–2013 Brussels, 7. 5 2005, COM(2005) 0299.

<sup>3</sup> Terms “development priority” and “priority axis” are used as synonymous in the OP.

In continuation the legal status of the OP ETID is defined within the Regulation of the EU Council regulating implementation of ERDF, ESF and CF. On the basis of this the OP is defined as:

*“...a document submitted by a Member State and adopted by EC setting out a development strategy a coherent set of priorities to be carried out with the aid of a Fund, or, in the case of the Convergence objective, with the aid of the Cohesion Fund and the ERDF..”*

In planning of the OP ETID all the other adequate normative bases at the EU level and at the National level were taken into consideration.

## **1.2. Partnership principle**

Being aware of the European<sup>4</sup> and National normative bases concerning the role of the partnership, when preparing OP ETID GOSP put a lot of emphasis on setting up networks for establishing close cooperation between partners - the state and European Commission on one side and other authorities and bodies on the other side (competent regional, local and other public bodies, economic and social partners and other relevant bodies representing civil society, environmental partners, non-government organizations and bodies responsible for promotion of equality between men and women,...). Environmental non-governmental organisations were involved in the process of partnership and in line with the Article 11 of the Regulation (EC) 1083/2006 they will also be actively involved in the implementation, monitoring and evaluation of the OP ETID.

Considering the principles of European governance<sup>5</sup> in the formation of cooperation networks (openness, participation, responsibility, efficiency, coherence) a successful implementation of efforts for the preparation of OP ETID and later on also a successful implementation of the OP ETID is ensured. Within this framework the implementation of partnership is necessarily associated with the consideration of subsidiary and proportionality. Everything aforementioned builds on experience to date and knowledge in programming and implementing of the National Development and Cohesion Policy of the EU in Slovenia in the past (pre-accession times and since Slovenia became a full member of EU).

Implementation of the principle of partnership includes informing of the partners (forwarding data and presentation of key issues in the form of messages to the partners) as well as communicating with the partners (setting up and establishing of networks). Where necessary, new instruments were established (interactive forms). The activities related to the partnership were carried out by the GOSP and, with regard to specific sectors and competences, by other government bodies.

The procedure for preparing of the OP ETID was announced in the framework of “The Plan of Preparations of the National Development Programme 2007 – 2013”, which was adopted by the Government in the middle of 2004 and supplemented in the middle of 2005. The Plan of Preparation of the NDP provides that the document can serve as an expert groundwork for preparation of the NSRF, where the latter represents the deepening of the NDP in the specific field of the Cohesion Policy of the EU. As said above the NSFR represents the strategic

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<sup>4</sup> Council regulation on general provisions on the European Regional Development Fund, , European Social Fund and the Cohesion Fund (Article 11.).

<sup>5</sup> European Governance, White Book; European Commission, Brussels, 25.7.2001, COM(2001) 428 final.

framework for the preparation of the Operational Programmes, so that the introduction of the active cooperation nets between partners was being carried out already from the beginning of the preparation of the NDP and until the announcement of the Draft OP ETID.

On July 4. 2006 the GOSP prepared a draft of OP ETID, which featured all key issues and therefore represented the base for intensive exchange of views between the partners. In continuation a summary of key activities within the framework of information and communication exchange between the partners before and after publishing of draft OP ETID is presented. The chapter ends with a presentation of key issues, which arose within the frame of the implementation of the principle of partnership.

### ***Cooperation between the partners before publishing of draft OP ETID***

A milestone in the beginning of a cooperation cycle with the broadest circle of partners was the public presentation in the Centre of Europe (Ljubljana, June 22, 2005), with the title ‘‘The Programming of the Development and Cohesion Assets in Slovenia for the period 2007 – 2013’’, where the assistants of the GOSP among other things also presented the preparation of the programming documents, in which Slovenia will define the contents, for which the development assets of the EU will be granted up to 2013. The mentioned event – after the negotiations involving the new EU financial perspective having been concluded and the draft OP ETID having been published – was followed by other events, which involved even a broader circle of partners. Also, during the cycle of cooperation with partners, a more focused implementation of the principle of partnership was carried out. We have to mention two consultations, which were headed by the minister in charge the Government office for local self-government and regional policy and his associates. In this way a consultation was organized with the representatives of broadest circle of non-government organizations: with the help of Centre for Information, Cooperation and Development of Non-Government Organizations, and with the representatives of economic and research spheres in with the help of the Chamber of Commerce of the Republic of Slovenia. Within the frame of this consultation the importance of environment protection and sustainable development of infrastructure was emphasized as well as the promotion of environmentally friendly transport (PPT, railway transport). Satisfaction was expressed about preparedness of the above mentioned contents; there was also expressed the opinion, that within the OP ETID the principles of environment protection should be respected (partly also through a suitable allocation of financial assets). With regard to determination and implementation of environment protection the opinion was expressed that GOSP should cooperate with the representatives of relevant non-government organizations. The cooperation with the representatives of non-government organizations was assessed as generally good especially in comparison with past practice when preparing developmental documents, but still not optimal. The consultation with the representatives of industry and research sectors showed that there is a need to concentrate the development financing and to promote the preparation of quality projects within the frame of implementation of OP ETID. Within the frame of the implementation of the principle of partnership the 4<sup>th</sup> meeting of the Sustainable Development Council took place (Ljubljana, June 22. 2006); the Council is the main government consultation body, which has the purpose to engage in a dialogue with civil society about all basic questions concerning the sustainable development. During the mentioned meeting the partners took note of the preparation of OP ETID - just before the draft was published – and they assessed that it gives adequate solutions to the issues of sustainable development, but that these solutions have to be ensured also when implementing the document. The above event concluded the cycle of cooperation with broadest circle of partners.



The implementation of the principle of partnership with the cooperation of representatives of regional and local bodies (regional development agencies, municipalities...) was done on common level as well as separately. In the former case we want to mention workshops during which the aspects of preparation of OP ETID were discussed (for instance in Kranj, on January 19. 2006,...), and when the latter is concerned, we would like to mention the meeting between separate representatives of regional and local bodies and the representatives of GOSP (visits to regions that began in July 2005 or meetings that took place in the offices of GOSP - for instance the visit of the representatives from BSC Kranj on July 4. 2006). During these meetings mostly the consistency between the content of OP ETID and regional developmental programmes was assessed as well as the inclusion of local developmental requirements into this frame.

In the framework of preparation of the NSRF (NDP) and the operational programmes based on it an official internet site was designed which offers information to all the interested parties on the events and preparation of OP ETID (<http://www.svlsrcp.gov.si/index.php?id=1182>); such information is available also on the EU Funds site (<http://www.gov.si/euskladi/>). In the frame of informing press conferences were also held by the Minister without portfolio in responsible for local self-government and regional policy, where, among other, OP ETID was presented (in the frame of general press conferences). In the frame of the internet site two e-addresses were listed for placing suggestions, comments or questions ([drp.svlr@gov.si](mailto:drp.svlr@gov.si), [jernejsaksida@gov.si](mailto:jernejsaksida@gov.si) ). In the phase of the preparation of draft OP ETID we received some suggestions from regional and local bodies, and from separate companies. The comments were directed mostly towards the possibility of inclusion of certain projects related to transport and environmental infrastructure and towards the possibility of allocation of considerably more funds to certain priorities than priority planned in the OP ETID. One of the first broader partnership meeting (consultation) with the representatives of the government bodies took place in Brdo pri Kranju, on June 27 2005. In this way the government bodies were informed on the platforms for the preparation of the OP ETID and invited to actively participate in the preparation of the OP ETID. In addition to several bi-lateral meetings with the representatives of the government bodies, prior to the publication of the draft OP ETID two broader consultations were organized. The government bodies identified as key for preparation of OP ETID were the Ministry of Transport, the Ministry of Environment and Spatial Planning, the Ministry of Finance, the Government Office of the RS for macroeconomic Policy and Development, the Government Office of the RS for growth and the Administrative Office of the Prime Minister. These government bodies contributed grounds for preparation of the OP ETID.

### ***Cooperation between the partners in publishing of draft OP ETID***

After publishing of draft OP ETID the activities of cooperation between the partners intensified. One of the key events was the 5<sup>th</sup> meeting of the Council for Sustainable Development, which is the main government counselling body in charge of the dialogue with civil society and social partners on all basic questions of sustainable development; it discussed the draft of the OP ETID. At the mentioned meeting the partners were familiarized with further preparation of OP ETID and other OPs; they found that the recommendations of strategic evaluations of environmental aspects should be observed, which was adopted.

Within the frame of broader approach exchange of opinions and suggestions took place between the representatives of NGOs and the representatives of GOSP. In one of such discussions representatives of E-forum were involved (Ljubljana, July 11. 2006). At the above

mentioned meetings proper guidelines for the preparation of OP ETID were set, as were the guidelines for further preparation of the development priority «Sustainable Energy» and for focusing on the implementation of OP ETID and its content (projects) in order for the environmental effects to be as positive as possible. Despite all this the prevailing opinion was that much more funds should be allocated for the implementation of projects within OP ETID than initially planned.

Partnership with the representatives of regional and local bodies (regional development agencies, municipalities,...) also falls under this framework of focused cooperation. One of the partnership-oriented consultations was the one headed by the Minister responsible for local self-government and regional policy and his associates (Celje, July 21. 2006). Here the most of the comments expressed by the representatives of local and regional bodies referred to sustainable energy and road infrastructure. It was suggested to increase the allocation of funds for the project titled »3rd Development Axis«, which will contribute to better connectedness of certain less developed and economically weaker regions and for the field of public passenger transport, which will diminish demographic risks in order to. The focus was also on the field of sustainable use of energy, which will be, in the new financial perspective, one of the priorities of OP ETID. Another thing that was brought to attention was also the question of the criteria used for the determination of the priorities of the OP ETID.

On bilateral partner level special meetings were organized between separate representatives of regional and local bodies and the representatives of GOSP (visits to regions in July of 2005 or meetings in the offices of GOSP, for instance the visit of BSC Kranj on July 4. 2006). In these cases most often the compliance of possible contents of OP ETID and other OPs and regional development programmes was discussed and possible inclusion of local development needs within this frame. The common conclusion, arrived during these meetings was, that in order to meet this kind of development needs special development orientations have to be included which reflects regional and local needs. The partnership meetings with the representatives of regional and local bodies followed one another at different time intervals from mid-January 2007 (Regional agency of Koroška region, Dravograd, January 12. 2007). The meetings that took place in the final phase of the preparation of OP ETID and other programme documents mostly brought concrete contents of future implementation of OP ETID and suggestions for further preparation of implementing documents. On certain levels the suggestions were very concrete and referred to the programme level; they were observed in preparation of the OPs (placing of indicative projects – collection and treatment of urban waste water in the upstream of the Sava river and potable water supply within the area of Sora river basin.

Where informing is concerned press conferences were also organized. One of them was a specific press conference at which operational programmes were presented as grounds for obtaining European Cohesion Policy funds available for the period 2007-2013 (Ljubljana, July 11. 2006). The representatives of GOSP presented the OP ETID also at other specific events, where also discussions were possible (gala opening of Slovenian-European Natural Sciences Research Centre, Maribor, December 15. 2006, Expert Conference at Days of People's Universes of Slovenia 2006, December 4. and 5. 2006,...).

After publication of draft OP ETID, on the basis of contents of internet sites several different partners responded and sent their suggestions, comments and questions to the addresses, listed for this purpose. In view of these contributions what needs to be pointed out is a contribution of the Regional Centre for Environment for Central and Easter Europe, which discussed mostly striving for more active inclusion of local communities, because national standards of

provision of public transport do not meet the needs of the population. In the continuation of preparation the mentioned issue was suitably appreciated. At the same time we point out the contribution, which mostly refers to the possibility of inclusion of projects related to natural gas transmission network and the possibilities for financing construction of natural gas distribution networks; but, due to other financing sources, these investments are not planned in the framework of OP ETID.

The partnership events, which involved the representatives of government bodies and took place during the phase of preparation of OP ETID, were focused on the developmental priorities of the OP ETID. The government bodies provided supplements and corrections of received materials for preparation of OP ETID. Here we would like to point out the work of the Ministry of Public Administration which, within the frame of its activities of cooperation with the representatives of non-government sector provided special material, which included comments and opinions on drafts of different development documents, and indirectly also on OP ETID. The key finding is that that the simplest possible system of implementation of OP ETID needs to be provided (de-beaurocratization). The opinion was shared that the system of implementation of OP ETID will be as simple as possible but at the same time in accordance with all relevant normative platforms. One of the more important events in this phase was the operational meeting with representatives of all sectors involved in the implementation of EU cohesion policy in Slovenia, where the last draft of OP ETID was presented and, on this basis, the guidelines for its implementation (Ljubljana, December 11, 2006). But because the GOSP was of the opinion that the partnership principle needs to be continuously implemented also in the phase of OP ETID implementation, this sort of activities went on also in the beginning of the year 2007, when bilateral meetings with representatives of all sectors, involved in future implementation of OP ETID, took place; at these meetings the last uncertainties in the proposed OP ETID were eliminated and the guidelines for preparation of implementing documents were set. Among the bilateral content-specific events was also the meeting with the representatives of the Office of the Government of the RS for growth, during which coordination was done and demarcation between the Resolution on National Development Projects 2007-2023 and OP ETID, as well as with other strategic documents referring to implementation of EU cohesion policy in Slovenia. There was one more important event that took place in this phase - a presentation took place and discussion in the relevant committee of the National Assembly of the RS about the NSRF and programmes for implementation of cohesion policy, based on it (Ljubljana, December 15. 2007). The relevant committee gave a favourable assessment of the proposed draft documents. Before this event the parliament group GLOBE Slovenia and Environment Protection Council carried out a discussion in the national Assembly of the RS on NDP and on NSRF and the programmes based on the latter (Ljubljana, November 14. 2006). The key issues of the event referred to the area of sustainable development. The opinions were taken into consideration.

### **1.3. Ex-ante evaluation**

The purpose of ex-ante evaluation is to optimize the use of available funds with regard to OPs and to improve the quality of programming. With the evaluation medium-term and long-term needs are assessed as well as the objectives that need to be met, the expected results, the need to coordinate proposed regional strategies, the Community Added Value, the scope of the priority tasks of the Community, knowledge acquired through past programming and the quality of implementation procedures, monitoring, assessing and financial management<sup>6</sup>. The

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<sup>6</sup> Council regulation on general provisions on the European Regional Development Fund, , European Social Fund and the Cohesion Fund (Article 47).

implementation of Strategic environmental assessment also belongs to the framework of the ex – ante evaluation. The purpose of the Strategic environment assessment is to ensure high level of environment protection and to contribute to inclusion of the environmental aspects into the preparation and monitoring of plans and programmes; in this way that sustainable development is promoted by way of assessing of certain plans and programmes which will have a significant impact on the environment.<sup>7</sup>

With the beginning of the preparation procedures for OP ETID, within the scope of the responsibility of GOSP for preparation and coordination of OP ETID with the EC, the prescribed procedures of ex-ante evaluation of OP ETID began and as a part of this the comprehensive assessment of environmental impact of OP ETID<sup>8</sup>.

The ex-ante evaluation of the OP ETID is divided into two substantive sets:

- The ex-ante evaluation is a process of assessment of adequacy of programmes with regard to the needs and the programme frameworks of each separate programme. Its purpose is to make clear the issues of process efficiency of individual programme proposals and of the efficiency of the results brought about by the implementation of the programmes. This evaluation will especially review the applicability and durability of the results. The result of this part of the project is: The Report on the Ex-ante Evaluation of the OP ETID.
- The purpose of the Strategic environmental assessment is to assess the conformity of the programme with the environmental objectives of the legislation and strategic documents at appropriate level, to assess the environmental impact, impact on nature, human health and cultural heritage and to create effective measures for mitigation of effects, the measures that are to be included in the programme so that the effects of it will be acceptable. The results of the comprehensive assessment of the environmental impact are: The Environmental Report on OP ETID and an adjusted programme. The Environmental Report is a document in which the entire process and key findings are described, as well as the possible alternatives, the impact assessment and the mitigation measures. The procedure of the comprehensive environmental impact assessment at the same time promotes involvement of public in the process of decision making when adopting the programmes.

In this phase the performer of the ex-ante evaluation of the OP ETID (including the comprehensive environmental impact assessment) provided and was susceptible to on-line substantive and organizational coordination and assistance of GOSP and other relevant bodies – the Ministries and Government Offices. So in this phase the performer cooperated with the representatives of GOSP and other bodies involved in the preparation of the OP ETID and, at the organized bilateral meetings, with relevant regional, local and other public bodies, with economic and social partners and other relevant bodies representing civil society, environmental partners, non-government organizations and bodies responsible for promotion of equality between men and women. In this part the suggested subjects and other procedural and substantive advice and suggestions were included in the proposed content of the OP ETID. Here we would like to emphasize that the suggestions were observed in the analytical, strategic and implementation part of the proposed content of the OP ETID.

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<sup>7</sup> Guideline 2001/42/EC of the European Parliament and Council, adopted on June 27. 2001 on environmental impact assessment

<sup>8</sup> New programming periode, 2007-2013: Methodologic working documents, Working document for the field of ex-ante evaluation (2.3.)

### ***Implementation of ex-ante evaluation of OP ETID***

When preparing the ex-ante evaluation of OP ETID the provider of the evaluation submitted two reports on the ex-ante evaluation of the OP ETID. The key emphases of the first report on ex ante evaluation are the following:

- In the original proposal of OP ETID not all areas of potential interventions laid down in the Directive Establishing the Cohesion Fund were analyzed; the platform of this material was that the analysis of all the areas of possible interventions in the frame of the EU cohesion policy was covered by the NSRF and that the analytical part of the OP ETID rested only on those areas of activities covered by the NSRF. At the same time it was found that the findings of the analysis were sometimes only partly present in the SWOT analyses; those who were preparing the OP ETID remedied this.
- The set objectives of the OP ETID had to be rethought - this was taken into account in further preparation of the OP ETID by once again determining and sorting of the objectives.
- The ex-ante evaluation of the OP ETID shows that the programme supports concentration of development guidelines within six priorities; it also gives certain specific comments which were in the later preparation of the OP ETID included in the programme.
- It was suggested that the approach to policy management be more holistic - the importance of transport interoperability was emphasized, which was also more clearly defined in the OP.
- The evaluation showed that the objectives and guidelines of national and European documents were observed in the OP ETID and that the priorities of the OP ETID comply with them; the preparers of the OP ETID will complete the suggested system of monitoring properly so that equal opportunities will be ensured and discrimination will be prevented.

The key emphasis of the second report and of the measures of the preparer of OP ETID, based on this report, is the following:

- The performer of the ex-ante evaluation suggested that, at the level of OP ETID area of indicators be suitably corrected, which was observed,
- The performer of the ex-ante evaluation suggested that in case of the planned activity Construction of regional waste management centres it has to be defined, on the basis of the analysis of situation, which centres need to be constructed – the suggestion was fully observed by the preparer of the OP ETID, the chapter was corrected or supplemented,
- The ex-ante evaluation showed that in the OP ETID goals and orientations of national and European documents are observed and that the development priorities of the OP ETID comply with them,
- The ex-ante evaluation showed deficiencies also in the financial part and in the part of the implementation of OP ETID, which the preparer fully observed.

Independent external implementor of the ex-ante evaluation concluded that with the implementation of proposed recommendations, the proposal of the Operational Programme of the Environmental Transport Infrastructure Development for the period 2007-2013 is acceptable. The ex-ante evaluation of the OP ETID is available on the web sites of the Government Office of Self-government and Regional Policy. ([http://www.svlr.gov.si/si/delovna\\_podrocja/podrocje\\_evropske\\_kohezijske\\_politike/](http://www.svlr.gov.si/si/delovna_podrocja/podrocje_evropske_kohezijske_politike/)).

### *Comprehensive assessment of environmental impact*

On the basis of normative groundwork for the implementation of the comprehensive assessment of environmental impact of the OPs of the structural funds and the Cohesion Fund and on the basis of regulations of the Guideline 2001/42 of the European Parliament and Council on the Comprehensive Assessment of Environmental Impact of Certain Plans and Programmes, which were transplanted into Slovenian legislation<sup>9</sup>, the Ministry of Environment and Spatial Planning decided, that in the procedure of preparation of the OP ETID it was necessary to implement the procedure of the environmental assessment of environmental impact, but it was not necessary to implement the assessment of acceptability of impacts of the plan on the protected areas.

In the framework of the ex – ante evaluation of the OP ETID the performer prepared a separate environmental report for the OP ETID. In accordance with the procedure rules the mentioned material was forwarded to the Ministry of the Environment and Spatial Planning for further consideration. The abovementioned Ministry implemented the adequate activities for adopting the environmental report of the OP ETID (interministerial coordination, public discussion, checking and confirmation of adequacy of the environmental report, confirmation of adequacy of the plan).

The environmental report on OP ETID suggests some alternatives with which, by combining preference directions, which have positive impact on environmental goals of separate segment, we would achieve synergy effect of allocation of assets within the operational programme. The basic alternative is the so-called “zero alternative” – therefore the state of the environment without implementation of the plan; apart from this the report suggests for the Strategy in the transport part also the following:

- an alternative at the level of goals – new goal “Sustainable accessibility of people and products and support of development of the economy”,
- an alternative at the level of development priorities – instead of the priorities “Railway infrastructure within the frame of the CF” and “Road and Maritime infrastructure within the frame of the CF” it suggest the development priorities “Infrastructure for Interoperability” and “Management of Transport and Transport Infrastructure”.

The suggested alternatives can be combined with the activities within the frame of the preference directions of the OP of the European Regional Development Fund. Besides this the environmental report lists the changes in the content of the OP ETID, done in the period from preparation of draft environmental report (June 2006) until when it was completed, which resulted from consultations with the European Commission, adoption of regulations on cohesion policy and consultations related to the results of the environmental report and can be considered an alternative to the initial OP ETID. The key changes or alternatives are the following:

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<sup>9</sup> Environment Protection Act Official Gazette of the RS No. 41/04, 20/06; Regulation on Environmental Report and Detailed Procedure of Ex-Ante Evaluation of Environmental Impact of the Plans, Official Gazette of the RS No. 73/05; Regulation on the Type of Interventions into Environment for which the Environmental Impact Assessment is Mandatory, Official Gazette of the RS No. . 66/96, 12/00, 83/02; Regulation on Special Preservation Areas (areas Natura 2000), Official Gazette of the RS No. 49/04, 110/04; Rules on Assessment of Acceptability of the Impacts of Implementation of Plans and Interventions on the Preservation Areas, Official Gazette of the RS No. 130/04, 53/06.

- greater stress on the development of railway infrastructure,
- inclusion of reduction of loss of water in the existing water distribution systems and rehabilitation of old burdens within water preservation areas,
- emphasis on sustainable mobility.

The impacts of the implementation of OP ETID on the environment were assessed by comparing the estimated impacts of the planned activities on the environmental goals of the programme; special attention was given to assessment of cumulative impacts. The environmental goals of the OP ETID were derived from the following segments: quality of air and climate changes, energy, water, population, waste, cultural heritage, landscape and visible quality of environment, nature and biodiversity and ground/soil.

The environmental report also lists mitigation measures for reduction of impacts of the implementation of the OP ETID on the environment. The mitigation measures are based on the goals of the OP ETID and on the basis of cumulative effects, for in this way it will be possible to ensure biggest efficiency at their implementation; they are designed so that the co-financed projects will contribute as much as possible to protection of the environment or that their possible negative impact will be reduced as much as possible or eliminated. The mitigation measures will be implemented by the preparer of the OP ETID and by the end-users – carriers of separate projects; they must also be implemented within the frame of programme period. The control over implementation of the mitigation measures will be performed within the frame of the control over the implementation of projects and over use of the assets for implementation of products.

The implementation of the mitigation measures will also be ensured in the way that some of them will be defined as a condition for implementation of project, as horizontal mitigation measures included into criteria for choosing of projects. The mandatory horizontal mitigation measures for separate projects are: energy efficiency, efficient use of raw materials, environmental efficiency, use of best available techniques, use of reference documents (BREF), monitoring emissions and risks, efficient water management, reduction of quantity of waste and separate collection of waste, sustainable accessibility and mandatory expert evaluation of environmental impacts. The following mitigation measures were suggested:

- planning of infrastructure for accessibility and multimodality when constructing and modernizing of railway connections, motorway sections and, roads,
- planning infrastructure for public passenger transport and connections with it,
- setting up of a passenger terminal for short-distance maritime transport,
- connecting airports with public transport,
- priority elimination of black road sections,
- systems for informing passengers,
- mobility plans,
- optimization of timetables,
- con-generation of energy from waste and waste water (bio gas),
- innovative calculation of costs for treatment of urban waste,
- precise calculation of water supply costs,
- spatial planning for prevention of floods and promotion of flood safety,
- sustainable construction of flood safety structures.

After the procedures necessary for carrying out the comprehensive assessment of environmental impacts having been implemented, the findings of the final report were

integrated into the OP ETID. The findings of the environmental report on OP ETID show, that the proposed OP ETID is acceptable from the aspect of its impact on environment, humans, cultural heritage and nature, provided that the proposed mitigation measures are implemented.

In the continuation the organisations that participated in the procedures of environmental impact assessment gave their opinions on the adequacy of the environmental report and its revision. The opinion was also provided by the Ministry of Culture, the Institute of the Republic of Slovenia for Nature Conservation, the Ministry of Agriculture, Forestry and Food. The opinions by the Ministry of Culture mainly referred to the definition of the indicators revealing the conditions of cultural heritage and it was underpinned that indicators do not need to cover all the aspects of cultural heritage protection and that the base exposed at international conventions on the integration of the cultural heritage protection should be integrated into development planning in the widest sense. The preparer of the environmental report was of the opinion that the integration of the cultural heritage protection into development planning in the widest sense in general is not a task of the OP ETID since it is a task covered by national strategic documents from the field of culture. In addition, the preparer also stressed that the international conventions had already been integrated into Slovene legislation and programmes of cultural heritage protection. The opinions by the Institute of the Republic of Slovenia for Nature Conservation and the Ministry of Agriculture, Forestry and Food referred to the inclusion of protected areas, natural values and areas that are ecologically significant into cartographic schemes and they also emphasized a need that spatial arrangements defined in the operational programme implementation should be located outside the areas with the best agricultural land. Their remarks were taken into consideration.

Between 6 February and 8 March, 2007, the environmental reports on the operational programmes were publicly displayed and public had an opportunity to express the opinion on the documents concerned. In addition there was a special public discussion on environmental reports organised on 12 February, 2007, at the Ministry of Culture. In addition to the general public also environmental non-governmental organisations were invited (a special invitation of the minister responsible for local self-government and regional policy). The discussion was mainly related to the assessment and monitoring of environmental impact within the energy part of the OP ETID and the problem of a lack of coordination between transport planning and transport infrastructure at the national and local level since Ljubljana as the capital of Slovenia and the main transport crossing is heavily burdened.

This public discussion generated a document that was signed by the following non-governmental organisations: Umanotera, Slovenian Foundation for Sustainable Development, CIPRA Slovenia – the Society for the Protection of the Alps, Slovene e-Forum – the Society for Energy Economics and Ecology and FOCUS – the Society for sustainable development. A group of non-governmental organisations in its comments regarded the environmental reports as “extremely complex and quality” but at the same time doubt was expressed that the Government would actually take these comments and proposals into consideration. This was clear from the operational programmes that were too general in their definitions. Based on these conclusions the organisations required that mitigation measures had to be included in the programmes through concrete, prepared and measurable measures and alternative solutions in transport had to be considered. We assessed these standpoints as unsubstantiated. On the contrary, the joint remarks of all four NGOs have been regarded as a very useful contribution since they exposed the aspects that in their opinion would additionally contribute to the achievement of the strategic goals of the Republic of Slovenia in the field of Cohesion.



In the operational programmes the area of environment and the environmental dimension of sustainable development respectively were determined as horizontal orientation since the aspect of environmental sustainability as well as intergenerational sustainability need to be considered with all activities that will be co-financed on the basis of the operational programmes of the Structural Funds and the Cohesion Fund. Concrete proposals on the method of observing the sustainable dimension of development were added to the implementing chapter. A great deal of the OP ETID is thus aimed at ensuring sustainable development since priority orientations and envisaged activities will promote sustainable energy use, the reduction of the impact on water and with the Operational Programme of Strengthening Regional Development Potentials the utilisation of public passenger transport will also be stimulated.

The monitoring of the state of environment is based on the national monitoring ARSO, the statistical data of the Statistical Office of the RS and on the system of monitoring the state of qualification species and habitat types, protected by the Natura 2000 network set up by the Institute of the RS for Environment Protection. The state of environment will be monitored with the help of indicators, defined in the environmental report – in the beginning of the implementation of the OP ETID their initial value will be assessed and than again at the completion of the implementation.

## 2. ANALYSIS OF THE SOCIO-ECONOMIC SITUATION

### Internal development disparities in Slovenia

The concentration of economic activities and inhabitants in only some areas in the past caused heterogeneous conditions for life and work (significant differences in the spatial distribution of jobs, unemployment rate and educational structure of inhabitants), poor transport connections between regions and unequal access to social infrastructure inside regions. The problems are especially distinctive in structurally underdeveloped areas with weak economy and with mainly agrarian characteristics, in areas with demographic problems and low income level per capita and in economically and socially unstable areas. With the accession of Slovenia to the EU such structural problems were clearly indicated and in some areas even intensified.

*Table 1: Basic statistical data and socio-economic indicators for the cohesion regions and for the whole of Slovenia*

<b>INDICATORS</b>	<b>Western<sup>1)</sup> Slovenia</b>	<b>Eastern<sup>2)</sup> Slovenia</b>	<b>Slovenia</b>
Surface area (in km <sup>2</sup> )	8.061	8.061	8.061
Number of inhabitants; year 2006 (31 December)	929.476	929.476	929.476
GDP according to purchasing power (in million PPS – purchasing power standards); in 2004	19.750	19.750	19.750
GDP per capita according to purchasing power (in million PPS – purchasing power standards); in 2004	21.501	21.501	21.501
GDP per capita according to purchasing power (in %; EU-25=100); in 2004	99,9	99,9	99,9
Employment rate; 2004-2006, in %	56,6	56,6	56,6
Employment rate; 2006, in %	57,0	57,0	57,0
Share of the employed in service activities (G to O) <sup>3)</sup> (in % of all the employees in individual territorial units) year 2005	62,3	62,3	62,3
Average years of schooling; year 2005 <sup>4)</sup>	11,43	11,43	11,43
Dependency ratio; 2004-2006 (as of 30 June)	110,0	107,4	108,6
Unemployment (in %); year 2006	4,7	7,1	6,0
Share of young people among the unemployed (in %); year 2006; young people up to 25 years of age	22,7	24,9	24,1
Share of the unemployed with educational level 1 and 2 <sup>5)</sup> Among all the unemployed (in %); in 2006	19,6	20,6	20,2
Share of women among the unemployed (in %); in 2006	51,8	58,0	55,7
Life expectancy at birth (in years), 1999-2003 <sup>7)</sup>	77,6	75,0	76,2
Connection to public sewage system; in 2002; v % <sup>8)</sup>	60,4	41,0	49,9
Share of the Natura 2000 areas; in %	38,4	33,6	35,5
Synthesis development indicator: Development risk index <sup>9)</sup>	73,0	127,0	100,0

- 1) Western Slovenia: Gorenjska, Goriška, Coastal-Karst, Central Slovenia (all NUTS 3)
- 2) Eastern Slovenia: Pomurska, Podravska, Koroška, Savinjska, south-eastern Slovenia, Zasavska, Spodnje Posavska, Notranjsko-kraška (all NUTS 3)
- 3) NACE classification of activities, persons in employment
- 4) Source: SORS, the calculation is the assessment based on the Labour Force Survey and weights calculated on the basis of Census 2002.
- 5) Unfinished or finished primary school
- 6) Datum from the Census 2002
- 7) Development risk index is a synthesis indicator calculated from the indicators of economic development, labour market, population, education and environment for all 12 regions.
- 8) Sources:
  - SORS
  - All the data on labour market arise from the Labour Force Survey
  - Eurostat, New Cronos for GDP (as of 23 May, 2007)

Problems are concentrated in the Eastern Slovenia cohesion region, which according to the latest data available for 2004 only reached 69.1% of the average EU-25 development level (GDP per capita according to purchasing power), whereas they are less present in the Western Slovenia cohesion region that this year reached 99.9% of the average EU-27 development level.

In directing funds into less developed areas, the regional policy uses a synthetic indicator, development risk index (see Table 3), calculated for 12 development regions (NUTS III) and both cohesion regions.<sup>10</sup>

*Table 2: Development risk index*

<b>(NUTS-III) development regions and (NUTS-II)* cohesion regions</b>	<b>Index</b> (Index, SLO = 100)
<b>EAST SLOVENIA</b>	<b>127.0</b>
of this	
POMURSKA	159.5
NOTRANJSKO-KRAŠKA	127.0
PODRAVSKA	116.8
SPODNJEPOSavska	116.8
ZASAVSKA	113.9
KOROŠKA	103.9
SOUTHEAST SLOVENIA	101.7
SAVINJSKA	92.3
 <b>WEST SLOVENIA</b>	 <b>73.0</b>
of this	
GORIŠKA	93.8
GORENJSKA	83.1
OBALNO-KRAŠKA	82.4
CENTRAL SLOVENIA	8.7

Source: GORP

\* the proposal sent by Slovenia to the European Commission for notification in November 2005

The calculation of the development risk index indicates a much better situation in the regions in western Slovenia, with a special stress on the Central Slovenia region. Eastern Slovenia is

<sup>10</sup> Development risk index is calculated by weighting the indicators of economic development (GDP per capita, gross basis for income tax per capita, a number of jobs according to persons in employment in the region and gross added value of companies per an employee), labour market (rate of registered employment and the registered employment rate), population (population ageing index), education (average years of schooling) and the environment (a share of population connected to public sewage systems, a share of the Natura 2000 areas and the indicator of settlement).

marked by higher values of development risk index, the highest being in Pomurje, which is also according to the GDP per capita (PPP) indicator the least developed Slovene region at the NUTS III level (index of 69). On the other hand the Central Slovenia region stands out (index of 142) and according to this indicator the development of all other regions is below the average.

Table 3: Gross Domestic Product per capita, indices; Slovenia = 100

Tabela: Bruto domači proizvod na prebivalca, indeksi, Slovenija = 100

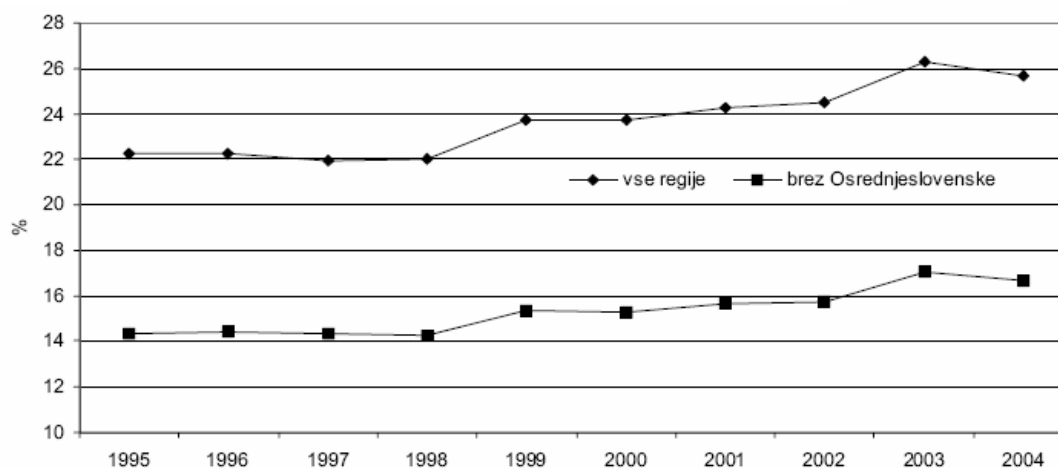
Statistična regija	1995	2000	2001	2002	2003	2004
SLOVENIJA	100,0	100,0	100,0	100,0	100,0	100,0
Osrednjeslovenska	137,1	139,7	140,6	140,9	144,1	142,9
Obalno-kraška	108,4	104,9	103,9	103,7	103,4	103,2
Gorenjska	88,6	87,4	88,3	88,0	86,9	86,1
Goriška	97,1	98,2	98,7	97,1	95,4	95,8
Savinjska	93,9	90,3	88,5	89,3	88,8	89,2
Jugovzhodna Slovenija	90,0	91,6	91,9	90,5	90,2	90,9
Pomurska	77,7	70,6	70,6	69,5	68,5	69,0
Notranjsko-kraška	76,4	79,4	78,2	78,6	76,4	77,0
Podravska	81,8	82,8	82,9	84,1	83,3	84,5
Koroška	79,3	81,8	81,5	80,4	78,0	77,5
Spodnjeposavska	83,5	84,5	85,4	84,4	79,9	79,6
Zasavska	83,6	79,3	75,1	72,8	71,7	71,8

Vir: Nacionalni računi, Regionalni bruto domači proizvod (SORS), 2006.

In table: Gross domestic product per inhabitant, indexes, Slovenia=100;  
Statistical regions  
Source: National Accounts, Regional Gross Domestic product (SORS), 2006.

In the period 1995-2003 the development gap between the two extremes even increased whereas in 2004 (last year with the data available) the trend turned into more favourable.

Table 4: Coefficient of variation of the regional GDP; Slovenia, 1995-2004



Source: Report on development; IMAR, 2006; In the graph: all regions, without Osrednjeslovenska region

The disparities between regions are big but they have been decreasing since 2002. Despite the reduction of the registered unemployment rate, in 2006, the structural problems in some regions even increased even in those that are not facing high unemployment rate. The regions with the unemployment rate above the average one are mainly in the eastern part of the country (Pomurje, Podravje, Savinjska region, Zasavje, Koroška).

Table 5: Registered unemployment rate by regions in the period 2000-2006, in %

Tabela: Stopnja registrirane brezposelnosti po regijah v obdobju 2000–2006, v%

	2000	2001	2002	2003	2004	2005	2006
SLOVENIJA	11,8	11,2	11,3	10,9	10,3	10,2	9,4
Osrednjeslovenska	8,8	8,0	7,7	7,5	7,5	7,6	7,2
Obalno-kraška	8,8	8,7	8,3	8,0	7,9	7,5	7,2
Gorenjska	9,7	8,7	8,2	8,0	7,6	7,3	6,4
Goriška	5,9	5,6	6,1	6,3	6,7	6,5	6,2
Savinjska	13,1	13,1	13,6	13,1	12,5	12,7	11,6
Jugovzhodna Slovenija	10,4	9,6	9,7	8,4	8,2	8,8	8,6
Pomurska	16,7	16,3	17,7	17,6	16,8	17,1	15,7
Notranjsko-kraška	10,4	9,4	8,8	8,6	8,1	7,9	7,0
Podravska	18,1	17,4	17,1	15,8	14,2	13,5	12,7
Koroška	9,9	9,9	11,3	12,2	11,4	10,6	10,1
Spodnjeposavska	13,4	13,9	14,1	14,6	12,7	11,5	10,5
Zasavska	14,9	14,3	14,8	15,6	14,4	13,8	12,0

Vir: SURS.

Source: SORS

## 2.1. Transport

In the Republic of Slovenia (hereinafter Slovenia) we are aware that we live in times of globalization, with distances becoming shorter and shorter, with mobility of people, goods and capital increasing, with borders disappearing and integration blossoming. The White Paper of the European Union (hereinafter the Union) on the Transport (European Transport Policy for 2010: Time to Make a Decision; Brussels, 9.12.2001) responds to the requirements of current times with the European policy of modernization, liberalization and integration of the existing transport systems and their processes into one functioning entity. The national transport policy is aware of the macroeconomic importance of transport and therefore continues its modernization, deregulation and internationalization, for all these factors promote the quality of services in passenger and freight transport.

### 2.1.1. Situation in traffic

Road traffic is one of the biggest sources of air pollution, for it contributes the majority share of emission of carbon monoxide (CO), nitrogen oxide (NO<sub>x</sub>), solid particles and non-methane volatile organic compounds (NMVOC).

The maintenance work on the state roads is expanding more quickly than the transport infrastructure, which causes increased density of traffic flow and bottlenecks on more burdened road sectors. Due to this emissions of greenhouse gases are increased (hereinafter GG).

In reducing the emissions of air pollutants and GG an active transport policy promoting the use of public transport and adequate modern public transport services is of extreme importance. Further implementation of technical and non-technical measures will be needed to reverse this increasing environmental pressure. Daily migrations of inhabitants should be

directed as much as possible to the means of public transport which should be competitive in the department of prices, timetable and comfort. By limiting the individual road traffic more infrastructure areas for public transport and other sustainable forms of transport will be made available (for instance cycling tracks).

With the purpose of optimization of the road infrastructure capacities, increase of safety in road traffic, reduction of negative environmental impacts, promotion of harmonization and simultaneous development and introduction of intelligent transport systems in all trans-European network (TEN) in Slovenia the preparation for setting up of system architecture for later introduction of National Centre for control, Management and informing on road transport (NCMT) on national roads is in progress as well as preparation of investment and technical documentation and concrete introduction of NCUP/PIKC. The project of preparation of the plan of architecture of ITS, which will be the basis for preparation of the plan for setting-up NCMT or the basis for preparation of additional documents for implementation and preparation of investment documents, will be included into the project Sustainable mobility, that is one of the 35 development investment projects in the frame of the Resolution on national projects of the RS 2007-2023.

### **2.1.1.1. Passenger traffic**

#### ***Situation in passenger traffic***

In the passenger motor traffic in Slovenia the use of private cars prevails; 76% (693 million trips) of transport is done this way. The remaining 24% (220 million trips per year) of traffic is done by public means of transport - of these 75 million trips by long-distance and suburban public buses, 130 million by urban public buses and 15 million by railway.

The legal basis is laid down in the Road Transport Act (ZPCP-UPB3, Off. Journal of RS, No 26/05). It is implemented in the concessionary act Decree on Concessions for Performing a Public Utility Service of Providing National Road Public Passenger Transport Services (Off. Journal of the RS, No 88/04).

In this regard the problem are uncoordinated timetables and railway transfer stops, high prices, small number of passengers and inadequate financing (the difference between income and costs is not paid in full). The solution to these problems lies in the system of concessions and in the system of uniform ticket.

According to the forecasts by the European experts in the coming decade the passenger transport will increase with an annual growth rate of 2%.

#### ***Possibilities in the passenger traffic***

Unfavourable ratio in choosing of transport means can only be changed by long-term planning of clear and realisable objectives. In order to encourage passengers to use public means of transport the quality of services and information must be provided (timetables, ticket prices) so that passengers can prepare well for the trip. The timetables of various public transport means should be coordinated and timeliness should be ensured.

For transfer from one type of transport to another the system of unified tickets should be supported. In this case it is the question of connections between bus and railway transport as

well as these two and the air transport. This can be accommodated by means of urban and suburban public transport, which should also connect the airports. The network of services of various transport providers within the same price class should be established, and an unified ticket should be introduced.

Cycling is an excellent alternative for short trips – up to 5 km. – and, in combination with other public transport means, it can be competitive in comparison to motor transport even when longer distances are in question. A cyclist is an important and equal participant in traffic and needs to be given attention when planning and forming transport infrastructure. Areas for cyclists must be designed in the way, which will reduce the risk to the cyclists and increase the respect for them by other participants in traffic.

The share of travel by bike in Slovenia ranges between 8 % and 10 %; with construction of a suitable infrastructure it could be doubled. The European Cyclists' Federation prepared a proposal for development of cycling track network throughout Europe. It suggests construction of cycling connections leading through several European countries, including Slovenia. The tracks are planned to run alongside existing forest roads and field paths or abandoned infrastructure alignments. Connections to the public transport stops and car parking should be provided.

In order to promote cycling good condition of the tracks should be ensured as well as good traffic safety and bike-storing conditions. The main task is to reduce the number of sources of conflict between the cyclists and the motor vehicle drivers. In practice this means separation of cycling and motor traffic, wherever circumstances permit this

### **2.1.1.2. Freight traffic**

In 2004 Slovenian roads and railways carried 114.3 million tons of goods. Within this, the share of inland transport was 59 % (67.9 million tons), the share of transit was 24 % (27.6 million tons) and the share of import/export was 16 % (18,8 million tons).

In 2005 in the port of Koper 13,066 million tons of goods were trans-shipped; of these 9,261 million tons were unloaded and 3,804 million tons were loaded.

Fright traffic in the coming decade is projected to increase at an annual rate of 4 %. With regard to existing and planned transport system in the Union this increase will be hard to handle, therefore new organizational, technological and management approaches are being explored as well as new transport routes where free capacities are available - and Slovenia can offer them.

When searching for new fright traffic options or when encouraging the change of the chosen transport means, it is important to ensure the continuous stability of the transport system.

Railway represents a huge potential, despite current negative trends and stagnation in recent years. The development of railway system in Slovenia needs to be directed towards re-structuring and preparing for open market (inter-operability, cabotage, international transport) for only in this way new, international needs related to freight transport can be met. Opening of the all-European railway network will make possible for foreign railway operators to operate in Slovenia; at the same time our national operator will have an opportunity to operate on foreign markets.

On short distances, where there is no alternative mode of transport that can be adapted to the demands of the industry, the truck traffic is irreplaceable. Due to the diversity of road network in Slovenia and the geographic features of our country there is a need for truck transport to the main motorways or at least to the transfer points - the terminals. For the sake of the environment road freight transport should not increase much. In the future additional demands - especially international - should be covered by rail transport.

### **2.1.1.3. The road traffic burden**

One of the expert groundwork for the National Motorway Construction Programme (resolution adopted by the National Assembly in 2005) was the analysis of the current road capacity in the directions of future motorways. The analysis shows that even in the base year the traffic conditions are critical on 8% of the network, when on 5% of the network the conditions are close to critical. This picture would have been significantly worse, if the analysis included also road sectors passing through settlements. On these roads the majority of the bottlenecks cannot be eliminated in any other way but by building new roads. In case the motorways will not be build in next 20 years, the conditions on half of the road network will become critical.

Current traffic burden proves that the most important roads are those running in the directions of the motorway cross. The most intensive traffic in these directions is the inland transport running between the most important economic centres of the state. The inter-state and transit transport represents 10 to 15% of total traffic. In the recent years the southwest/northeast bound inter-state and transit transport has been increasing constantly; after a considerable decrease of the southeast bound traffic between the years 1992 – 1995, due to the war on the territory of former Yugoslavia, the traffic in this direction has again increased considerably. We expect that in the future years the inland traffic will increase with a similar intensity as in the past decade (average annual increase being 3%), and that the international (transit) southeast bound traffic will increase with the enlargement of the Union to the east and the Balkans or after the normalization of conditions and reviving of economic currents; we also expect the international southwest/northeast bound traffic to further increase.

### **2.1.1.4. The toll system**

The toll system in Slovenia is comparable to the toll systems in classical toll system countries, where the toll is paid directly at toll stations (France, Italy, Spain, Portugal, Greece). Like here also in other European countries there is no uniform toll system, which would apply for the entire state. The system is the mixture of open and closed systems of toll paying. Despite the fact, that some states have the system of flat-rate toll, the tendency exists to utilize classical or electronic systems.

It is considered, that the optimal toll system would be the one fair and acceptable for the users of the motorways and at the same time efficient and economical for the entire society. Unfortunately these two principles can prove to be exclusive of each other. Most users support the »totally fair« toll system. Closest to such a system is the totally closed one, where toll stations are at all entry/exit points, so that the user pays with regard to the actual distance he/she covered on the motorway. But even such a system can not be entirely fair, for the conditions on different motorway sections can differ considerably - there are sections where there's not much traffic so the flow is smooth, when on the other hand on some sections the



traffic is extremely dense, so bottlenecks occur – the result is that the cost of travel increases and that the users don't save time they expected to save by using the motorway. In Slovenia motorways with such closed system are A1, Ljubljana - Srmin (length 93.6 km) and A3, Divača (Gabrk)- Fernetiči (length 11.3 km).

On the open system motorway the toll stations are at the same time entry and exit stations and the toll is paid on the basis of calculated distance and not the actual travelled distance. The user pays toll only if he/she passes the toll station. In Slovenia there are 276,45 km of motorways applying open toll system.

Based on the findings of a study researching possibilities for installing a free flow electronic toll charging system, the implementation of two pilot projects of free flow toll charging (GNSS/CN - Global Navigation Satellite System) started in January 2007. The conclusion of the projects is expected in January 2008. The results of these projects will serve as the basis for the decision on the electronic free flow toll charging system when two main directions of the motorway network (MMP Karavanke – MMP Obrežje in MMP Šentilj – Koper).

## **2.1.2. Situation in infrastructure**

### **2.1.2.1. Situation in railway infrastructure**

The situation in public railway infrastructure is getting worse and worse due to insufficient funds for its development, maintenance and modernization. Only 25% of the National programme of Slovenian railway infrastructure development, adopted by the Slovenian Parliament in 1996, has been implemented to date. Bad conditions show in the form of extensive damage and defects occurring on rails, contact wires, signalling/safety devices and points; bad conditions are reflected also in the fact that trains had to be slowed down and in the below listed data on the state of separate infrastructure elements which demand immediate action:

- massive wear of more than 90 km of rails,
- massive wear of contact wires – in the length of more than 40 km,
- decrepit contact wires bearing and anchoring structures, due to which the damages in 2004 increased by 58% in comparison to the previous year – some sections are still the same as they were in the 30s of the previous century when they were built,
- due to delay in modernization and reconstruction of rails 26.000 new sleepers need to be installed,
- on 70 sections, their total length being 39 km, speed limits lower than those planned in the timetables had to be introduced due to bad state of infrastructure; the result of this are train delays and dissatisfaction of the users of railway services, which can cause the decrease in use of these services,
- 18 landslide risk areas and other risk areas have been identified, the total length of them being more than 8 km,
- modernization of platforms and crossings at stations and stops is needed,
- the number of unsolved decisions issued by the Transport Inspectorate of the RS is increasing.

Inadequate maintenance and slow modernization of the railway infrastructure, together with increasing burdening of rails due to the increase of the scope of the maintenance work in transport, reflects in the increased number of decisions by TIRS (Transport Inspectorate of the

RS), limiting speeds and axle loads, which additionally affects the quality of transport services. Due to this situation the already barely competitive transport services are becoming even less so and the users are getting discouraged to use them. If these negative trends continue, it will be impossible to achieve one of the basic goals of the transport policy relating to the scope of transport, which is to increase the share of railway transport; in the worst case this situation can lead to closedown of certain sections of the railway.

Due to permitted axle loads, which are insufficient, certain freight transports have already been redirected to avoid Slovenia; this means loss of freight transport or - even on main railroad lines such as Zidani Most - Šentilj and Pragersko - Murska Sobota - the freight wagons are loaded 15 % less than their full and permitted capacity. On the mentioned sections of these main railroads of the Public Railway Infrastructure (PRI) the permitted axle loads are smaller than those declared within the international frame and for Slovenia as well (D3; 225 kN/axle and 72 kN/m).

Because the safety of the traffic is of paramount importance and because the current situation in the infrastructure warrants speed-limiting measures, the delays in railroad transport are increasing.

The described state of the railway infrastructure also affects intermodal transport, which is, in public railway infrastructure, mostly carried out in the form of combined transport (transport of containers, of changeable carriers, trailers, saddle-shaped semi-trailers, road freight transporters). The transported quantities are limited by permitted axle loads; the scope of the transport is limited by the profile of the line. The main lines of public railway infrastructure allow the transport of vehicles and freight in accordance with the SŽ I loading gauge and with the loading gauge for the combined transport UIC-GB. For smooth transportation of combined cargo and for ensuring the safety, codification of railways exists, which defines, for each line, the permitted size of the containers. All the limits on the lines (bridges, tunnels,...) are included in the codification.

For the implementation of the combined transport there are two terminals on the public railway infrastructure:

- Ljubljana-Moste,
- Maribor-Tezno.

and the following container terminals:

- Celje freight terminal,
- Port of Koper,
- Ljubljana container terminal,
- Maribor Tezno,
- Novo Mesto.

For the period from January through May 2005, the average delay of passenger trains was 4.1 minutes per 100 train km, while the average delay in the same period of 2000 was 2,3 minutes per 100 train km. Still more critical is the situation in freight transport, where in the mentioned period of year 2006 the average delay was 50,3 minutes per 100-train km, while in the year 2000 this delay was 22,9 minutes. The fact that only about 500 km of railways are electrified contributes to the problem.

The analysis conducted indicates that investments in railway infrastructure are indispensable since deteriorated railway system reduces competitiveness of Slovenia. This in particular applies to the Slovene part of the 6<sup>th</sup> priority project in the trans-European transport network (TEN-T) defined in the Decision No 884/2004/EC of the European Parliament and of the Council of 29 April 2004 since Slovenia committed itself to construct high-capacity railway connection. On tracks that in the Republic of Slovenia are included in the 6<sup>th</sup> priority project some other projects that are not a part of the operational programme will be carried out and will be financed with own resources or on the basis of public-private partnership.

### 2.1.2.2. Conditions in road infrastructure

The state road network, managed by the Roads Directorate of the RS (RDRS), consists of 5,884 km of roads, the structure of which is shown in the table below:

*Table 6: Length of the state road network, managed by the RDRS, with regard to categories*

Category	HC high speed	G2 main roads	R1 regional	R3 regional	G1 main	R2 regional	RT Reg.tourist	Total
km	75	460	953	2.084	493	1.224	595	5.884

Source: Roads Directorate of the RS

In connection with state roads, managed by RDRS, it is concluded that:

- the condition of road network and constructions: the MSI measurements in the years 2003 and 2004 show poor condition of road surfaces (bad, very bad) of 43% of the network, that is of 2.524 km of roads
- 15% of the constructions, that is 224 constructions, are in a critical or bad state.(data from 2003),
- state of the vicinity area: on the network 267 landslide areas and unsuitable slopes are evidenced,
- the state of road safety of the network: there are 58 black spots (data apply for years 2002-2004),
- traffic: average daily traffic on all national roads rose at the average annual rate of 2,6% in 2001 – 2004, while on regional roads it rose at an average annual rate of 3 %,
- initiatives and opinions of users: in the period between 1997 – 2004 RDRS received 507 initiatives from the municipalities. The poll answered by the users suggests that in their opinion the largest part of the funds should be invested into the improvement of road safety (planning of junctions - also in settlements – non-level railway crossings, partly also bypasses); next are the investments into maintenance (maintenance of hubs and facilities); in the opinion of the user the least should go for the increase of national road capacity (new constructions, reconstructions, bypasses).
- the manager of national roads, the RDRS, does not generate its own income from the management of the roads. The financial sources for development and maintenance of national roads are the budget funds and the investments of the co-financers. The majority of the funds come from annual public road users' charges and charges for exceptional road transports; budgetary transfer which comes from other budgetary income represents the other part of the funds.
- in the period from 1997-2003 the co-financers contributed 12.9% of funds for investment maintenance of the state roads..
- during the monitored period the share of the RDRS in the gross national product oscillated between 0.42% and 0.54% - on the average it was 0.5%.

In connection with motorways and high-speed roads managed by DARS (Motorway Company of the RS), the following is concluded:

- a) In the period before NMCP (from 1970 through 1994) 198.8 km of roads were built, of these:
  - 139.5 km of four lane motorways
  - 59.3 km of two lane motorways,
- b) In the period from 1994 through 16.12.2005 360.3 km of motorways were built, of these:
  - 257.9 km of four lane motorways and high-speed roads
  - 102.4 km of two lane roads (completion of four lane roads, motorway access/exits, bypasses)
- c) Situation as at 12 December, 2004, shows that the total length of roads that DARS d.d. maintained was 497.508 km of roads, of these 421.991 km motorways and high-speed roads, 8.181 km of bifurcations, 5.147 km of connecting sections 34.841 km of accesses and 27.348 km of tunnels.

If we want to achieve safe and smooth traffic within the network of state, main and regional roads and if we want to significantly improve the state of the hubs, certain measures will have to be implemented on almost 70% of the length of the network, which means about 4.000 kilometres of roads. 1.500 km of roads need resurfacing, almost 400 km of macadam roads need modernization and 1.300 km of roads need reconstruction. In order to increase the flow, 92 km of bypasses need to be constructed to bypass the urban centres as well as 140 km of new roads.

### **2.1.2.3. Situation in maritime infrastructure**

The port of Koper is a cargo port of general and open nature; it has different specialized terminals for general cargo, fruits, livestock, timber, vehicles, containers, minerals and ore, alumina, cereals, fodder, liquid bulk cargo, coal and other energy products.

Annually 2000 ships visit the port of Koper; where more than 13 million tons of cargo is trans-shipped – of these 332 thousand cars and 180 thousand containers; this cargo is loaded onto 164 thousand wagons and 155 thousand trucks.

The port of Koper occupies 173 ha of sea area, with 3134 m of operative quays, 25 moorings; on land it occupies 255 ha, with 30 ha of closed storage and 95 ha of open storage platforms. The storage and transshipment capacities are pushed to the limit. Taking into account the increase in transshipment of separate groups of goods, market opportunities and customer demands, serious interventions into the infrastructure are needed to extend the capacities of the port; the capacities of the terminals need to be increased by means of new constructions and the optimum use of these terminals has to be ensured.

Current connections of the port to the motorway and railroad networks are inadequate. A new road access needs to be built, with border crossing point and direct connection to the motorway at Sermin. Especially critical connection is the existing one rail line between Koper and Divača. Modernization to of this line is paramount, in the first phase with reconstruction, which will increase the flow-through by 30%; later a new 2-rail line needs to be built between Koper and Divača, which is possible by means of joint public and private financing and with the help of the Cohesion Fund.

#### **2.1.2.4. Situation in air and airport infrastructure**

The air traffic navigation services are carried out on four permanent locations – the three control towers at the public airports and the regional air traffic control centre, which is based in the centre of Ljubljana, in a building not built for this purpose. When the Slovenian air traffic control was established – when Slovenia gained independence – a temporary solution was found in the form of a renovated basement in a house in the centre of Ljubljana serving as the centre for regional air traffic control; the house is in a resident area, which is the cause of huge logistic problem due to poor access and transport links as well as due to inability to react quickly. That the building is not suitable for use as the regional air traffic control centre became obvious when the problems with air conditioning, existing electrical installations and communication installation maintenance occurred. One of the problems is also that the premises cannot be extended - such extension is needed due to continuous increase in the air traffic. This lack of space in the regional air traffic control centre does not permit establishment of new sectors which will be needed due to the forecasts referring to the increase of traffic in the phase of over flight in the lower and upper airspace, new sectors needed for military aviation control when the planned development of the airport Cerklje ob Krki is completed and additional sectors in case of introduction of radar air traffic control in the phase of approach/departure at the Maribor and Portorož airports. This lack of space also does not permit the installation of a new air traffic control system; the existing system is outdated, so the installation of a new one was planned for the beginning of 2008. The European legislation provides for interoperability of air traffic control systems, which should be introduced by 2012 – this also calls for additional space.

In 2004 the increase in over flights was 16%, in 2005 almost 18%; the expected increase in 2006 is 7% and in 2007 9%; it is expected that in the years to come the annual traffic increase will be between 4 and 6 %. Taking into account the analyses of traffic increase in the years to come and the need for a new technical air traffic control system, the efficient performance of the regional air control centre after 2008 can be ensured only by building of a new centre for air traffic control in Slovenia.

Slovenia has 15 airports and 41 airfields. The airport/heliport network is within the scope of three public international airports, intended for international traffic: Airport Ljubljana, d.d., Airport Maribor, d.o.o and Airport Portorož, d.o.o.; other public airports are Ajdovščina, Bovec, Celje, Cerklje ob Krki, Lesce, Murska Sobota, Maribor, Novo mesto, Postojna, Ptuj, Slovenj Gradec and Velenje. In 2005 the public international airports hosted 33.867 operations (take-offs/landings) performed by implementing instrumental flight rules (IFR). Of these operations 30.996 were performed at the Ljubljana Airport, 1.621 at the Maribor Airport and 1.250 at the Portorož Airport. In total this means 16,4 % more operations than in 2004 – when the number was 29.105.

In 2005 at the Ljubljana Airport 37767 plane operations were performed (of these 30.996 IFR operations); 1.218.896 passengers were transported and 11.560 tons of cargo. At the Maribor Airport 3106 operations were performed (of these 1.621 IFR operations); 35108 passengers were transported and 1296 tons of cargo. Safety is in the hands of authorized services that ensure implementation of all the air safety regulations and standards (national, European, international). The forecasts are good - it is estimated, that the air traffic will annually increase by 4-6%.

It can be expected that in the next 10 years the air traffic in Slovenia will, in quantity, rise to the European Union level of today – this means quadrupling current amount of passengers and doubling air transport capacities in European Union by 2015.

The passenger air traffic is continuously increasing and, due to opening of Slovenia to broader Europe and due to ever stronger competition among the aircraft operators in Europe. This trend can be expected to continue. It is expected that low fare air operators will appear and that the fares will drop, which will also bring more passengers and the number of charter flights will increase.

Due to the expected air traffic increase in the coming decade it is necessary to ensure sufficient airport capacities as well as sufficient capacities of air traffic navigation and control system. Passenger air traffic at the airports need to be connected to suburban public transport to make it more user or passenger friendly. Due to the development of logistic transport centres cargo air traffic will significantly increase as well.

In order for these needs to be met we have to modernize and upgrade the existing navigation and airport devices. This goes for practically all areas of infrastructure.

The Ljubljana Airport as the main airport in Slovenia is not integrated into public transport network. The users of the airport's services in particular miss a railway connection with the capital. The possibilities will be explored and presented with a study that the Ministry of Transport is planning and has applied for co-financing of the TEN-T financial instrument "The main solution of the Ljubljana Airport with the inclusion of railway connections with Ljubljana and Kranj".

### ***Key emphases***

The key problems in the area of railway infrastructure are the following:

- in the period after gaining the independence – except for the construction of new railway connection between Slovenia and Hungary – reconstruction and modernization of rails were carried out; with this the already existing situation was maintained, therefore it was possible to ensure railway transport safety only by means of speed limiting measures,
- as a result of slow modernization of infrastructure the current situation is bad; Therefore investments are suggested for the period 2007-2013 which would significantly contribute to the quality of the railway infrastructure and to meeting technical standards; this in turn will ensure higher level of safety and reliability of railway transport and will rise the quality of transport service.

In the area of road infrastructure the problems we encounter are the following:

- insufficient capacity of existing roads running in the directions of future motorways. In case the motorways are not constructed, in twenty years the traffic situation will be critical on half of the length of the network,
- the expected increase in the international (transit) transport, bound south-east, when the Union is enlarged to the Balkans, when the situation is normalized and when the economy is revived,
- expected increase of southwest/northeast bound international (transit) transport,

- bottlenecks on roads running through settlements and resulting poor safety. Most bottlenecks on these roads cannot be eliminated in any other way than by constructing new ones,
- bad state of road network and facilities,
- poor connection between marginal areas and central Slovenia and poor connectedness of these marginal areas to international long-distance roads (TEN network),
- inadequate crossings of different roads and resulting poor safety,

Key problems of maritime infrastructure are mostly related to the need to extend operative quays, due to expected increase in traffic (1 million TEU).

Key problems in the area of air infrastructure are following:

- ensuring higher level of air traffic safety and at the same time providing required capacities,
- unsuitable location and state of the building hosting regional air traffic control,
- limited space capacities not meeting the needs of air traffic navigation and control,
- installation of new air traffic navigation and control system, which would ensure interoperability of air traffic control systems, is not possible in the existing building,
- outdated equipment, systems and devices for air traffic control,
- outdated supervisory systems,
- insufficient coverage of Slovenian territory with supervisory systems,
- ensuring predictability of events in the process of transport, carried out on “door to door” principal,
- ensuring compatibility of air traffic flow monitoring system databases, airport slots and data systems relating to boarder and customs formalities,
- providing necessary data on flights (flight plans and actual flight situation) and reliable transfer of these data,
- the airports not being linked to information system providing flight data,
- insufficient airport capacities and insufficient capacity of the air traffic navigation and control system.

Key problems on the area of public passenger transport are mainly the following:

- decreasing quantity and quality in the offer of public passenger transport,
- absence of links within public passenger transport network (buses and railways),
- public financial funds not being properly defined (no transparency),
- poor exchange of information.

### **Analysis of strengths, weaknesses, opportunities and threats (SWOT analysis)**

The Analysis of strength, weaknesses, opportunities and threats (SWOT analysis) shows that in Slovenia, in the field of transport infrastructure, there are many advantages and challenges which are worth exploiting; it draws attention to certain weaknesses and risks, which we wish to eliminate by means of traffic policy measures – or if we cannot eliminate them, we can at least reduce their impact and consequences. The results of the analysis are the following:

a) Strengths:

- integration into European mainland transport network,
- favourable geographical position of Slovenia from the aspect of corridors, optimal for air traffic,
- exit to open seas with a well developed port,
- relatively strong transport sector, especially road sector,
- high income of European freight transport contractors,
- tradition in transport.

b) Weaknesses:

- lack of connection between different transport services and between different transport infrastructures (intermodality, multimodality), absence of logistic centres,
- dispersed settlements and resulting expensive infrastructure which would cover the needs,
- slow introduction of intelligent transport systems,
- poorly developed and unlinked public passenger transport,
- not very competitive railway network and (compared to roads) poor organisation of railway transports,
- outdated and worn railway means of transport,
- outdated railway information system and dispatch of passengers,
- unfinished motorway system,
- unfinished railway infrastructure system,
- not optimal toll charging system,
- non-charging of user charge for the use of railway infrastructure,
- poor state of railway infrastructure,
- poor state of state roads feeding the motorway network and linking regions where there are no motorways,
- poor excess to airports,
- insufficient and inadequate space capacities of the air traffic, navigation and control centre,
- outdated infrastructure facilities, devices and systems of air traffic navigation services,
- insufficient airport capacities,
- risk to which cyclists on public road surfaces are exposed,
- insufficient surfaces intended for cyclists.

c) Opportunities:

- geographical position,
- unification and harmonization of traffic systems,
- development of new transport technologies,
- further specialization of industrial production – increasing freight transport,
- transfer of technologically less demanding products production to eastern Asia – with this northern Adriatic gains value,
- unification of existing infrastructure operation – Slovenian service providers would provide integral and not partial logistic services,
- further stabilization of eastern Balkans and Turkey's joining the Union will bring increase of transport flows, especially railway transit,
- by finishing the motorway system Slovenia will be internally linked and integrated into the European system, which will promote new connections and development,



- development of modern high capacity railways within the corridors running through Slovenia,
- V and X corridors running through Slovenia,
- development of third transport axis, which will link regional centres in Austria, Slovenia and Croatia and will provide traffic linkage of these regions to main European traffic corridors,
- capacities and infrastructure of Slovenian international airports sufficient to transport much larger number of passengers (up to 6 million; 1 million in 2005),
- increase in the use of the capacities and facilities at the Slovenian international airports, of the capacities of individual facilities within infrastructure units, of intermodal systems (airport- railway – road),
- expected increase in air traffic over the Slovenian air space due to successful integration of Slovenia into EU, regulation of political situation on the Balkans and opening of Kosovo air space and flourishing of tourism in the Adriatic (Egypt, Turkey, Greece),
- the key opportunity for the Slovenian infrastructure is its favourable geographical position, which is important also from the European point of view and which is reflected in the V junction and X pan European corridor,
- development of short distance maritime transport and motorways of sea,
- improved safety of cyclists,
- with the modernisation of existing and the construction of new cycle tracks, support to recreational and tourist cycling will be granted.

d) Threats:

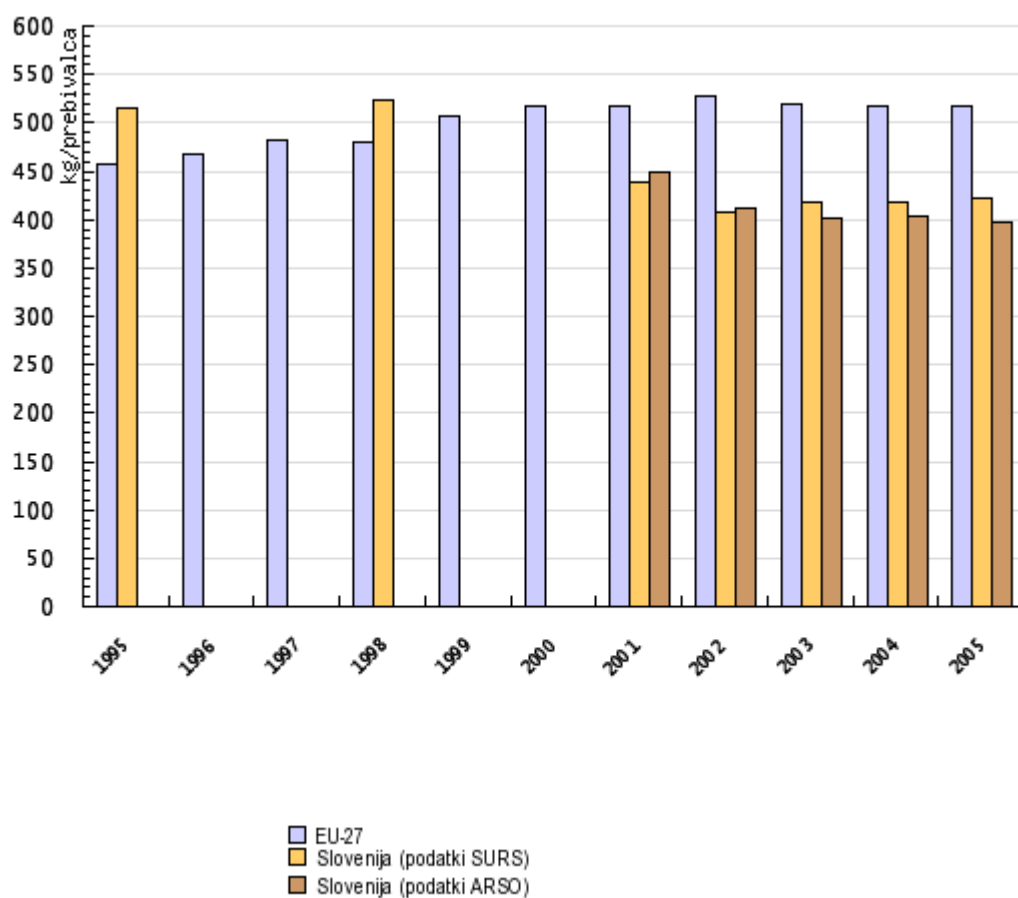
- redirection of transit transport flows to the parallel network running through Italy, Austria, Hungary and Croatia due to slow development of public railway infrastructure,
- redirection of port freight transit to northern ports due to poor links between northern Adriatic ports and redirection of port freight transit to the neighbouring ports of Venice, Trieste and Rijeka due to inadequate railway connections with the mainland,
- increase in the number of bottleneck and decrease in safety of freight and passenger transport due to slow modernization of the network and inadequate charging for the use of transport infrastructure,
- increase in dispersal of settlements,
- ongoing lack of connection between public passenger transport providers,
- deterioration of state road network which will not be able to accommodate transport flows,
- socially unacceptable degradation of (living) environment,
- where civil air transport is concerned the threats lie in rapidly developing competitive airport networks in areas near Slovenian border (Trieste (Ronke), Venice (Treviso), Klagenfurt, Graz, Zagreb, Pula, Rijeka...),
- decrease in air traffic over Slovenia due to untimely provision of adequate air traffic navigation and control infrastructure,
- redirection of air traffic flows to parallel – not optimal – air corridors due to inadequate capacities of air traffic space,
- untimely adjustment of national transport provider to market conditions and competition,
- non-compliance with demands of Community standards on air quality and Kyoto protocol.

## 2.2. Environment

Slovenia is characterized by stability of the population and its environmental and spatial impact as well as by dispersal, number and smallness of settlements and well preserved nature (compared to the situation elsewhere in Europe), exceptional landscape diversity and biodiversity, and also by overuse of natural resources and generation of different forms of spatial and environmental burdens. In view of environmental globalization, Slovenia acknowledged the principle of planetary and intergenerational environmental responsibility, therefore sustained global acceptability of the extent of use of natural resources and the extent of burdening per inhabitant. One of the most important areas relates to potable water. In modern world potable water is becoming more and more valuable strategic good; by managing waters cleverly Slovenia could exploit this opportunity. Development reports show that in Slovenia the principle of sustainable development is being gradually implemented, but within all the sectors of this development (economic, social and environmental) there are still weaknesses and discrepancies. There is also great energy intensity and poor integration of environmental, social and economic aspects of development.

Within the frame of EU Slovenia is one of the countries with exceptionally well preserved nature, flora and fauna. It has great landscape and biodiversity and quality living environment. However there are some smaller areas of intensive and multilevel landscape degradation; they are usually industrial/mining areas, thus poorly developed areas. There are cases of uneconomical use of space, different human and industrial environmental impacts and great energy and material intensity. The quality of water flows has been slowly improving since 1992; purification plants being constructed in accordance with the adopted program will additionally contribute to the quality. Content of nitrates and pesticides in groundwater has been in decrease for the last ten years, but in some places the values are still too high, due to which severe restrictive measures have been adopted. As recognized also in the Strategic environmental Assessment for OP ETID, Community standards on air quality are frequently exceeded in Slovenia, in particular with the pollutants most damaging to human health such as particulate matter, ozone and nitrogen dioxide. Trends of deteriorating air quality are detected in a number of areas and comprehensive air quality plans on how to address the issue on a national or local/regional level still have to be put in place. An efficient system of waste management has been set up; gradually many problems concerning communal waste management are being solved (implementation of separate collection of waste, involvement of the population in regular public collection of waste is increasing). Yearly increase in separate collection of communal waste has been noticed; but its total quantity per person, which is still below European average, is still rising.

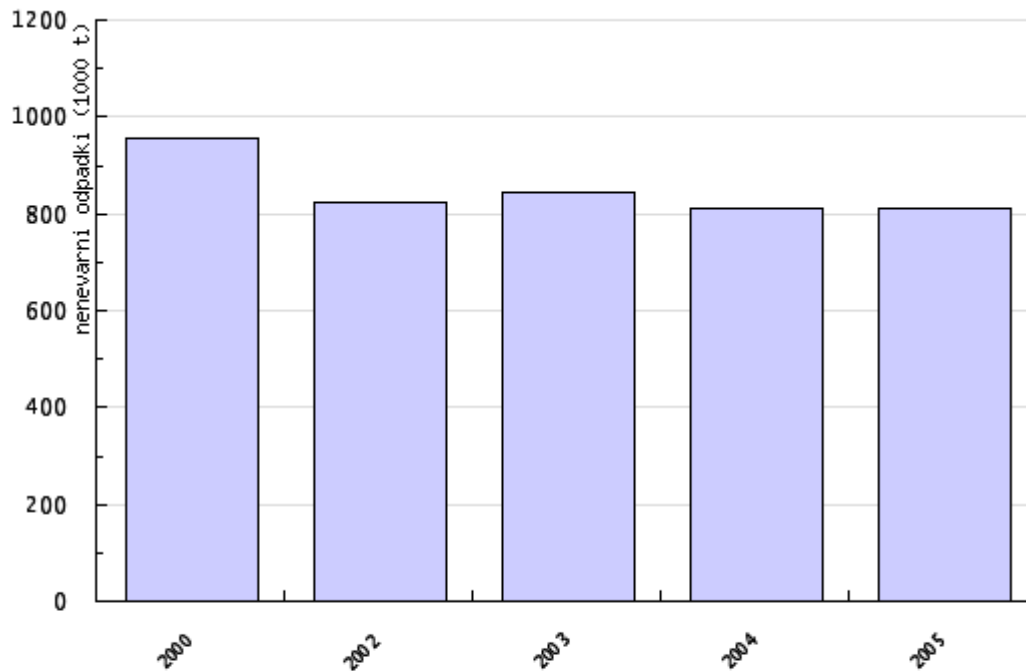
Picture 1: Quantity of urban waste per capita in Slovenia and in the EU-27



In picture: EU27; Slovenia (SORS data), Slovenia (ARSO - Slovene Environmental Agency - data)

After 2002, total quantity of non-hazardous waste slightly reduced but it is still too high. The majority of dumped non-hazardous waste is represented by municipal waste (85%) and this is why separate waste collection should be motivated in centres for waste management.

Picture 2: Quantities of landfilled non-hazardous waste



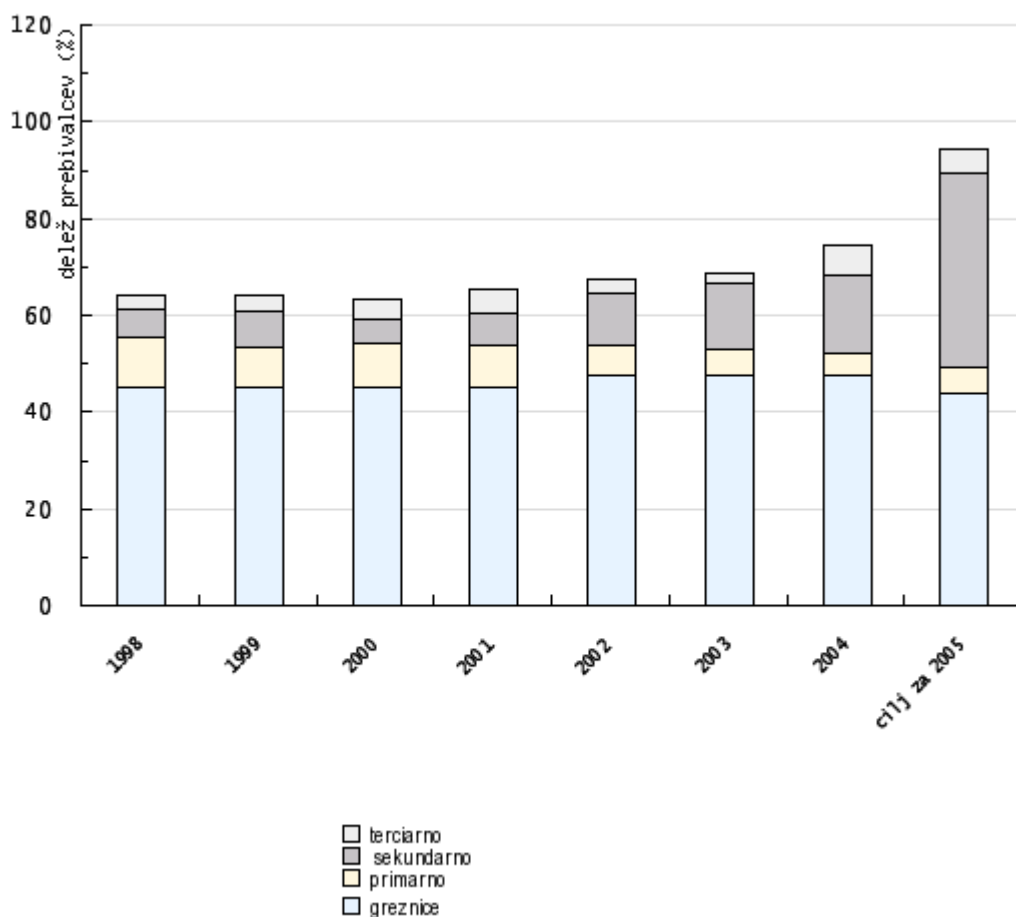
The legal basis for the quality of potable water is the Rules on drinking water that is harmonised with the EU Directive on drinking water (Council Directive 98/83/EC). In Slovenia, a number of hydric epidemic is relatively low (since 1998, 1 to 3 a year) and the same applies to the number of people getting ill. To ensure compliance with the requirements and health and hygiene safety of potable water as well as the compliance with the new legislation of 2004, the operator need to perform internal control and the Minister competent for health issues ensures monitoring of the situation. In addition, official control is performed. In 2003, in line with the regulations regulating health and hygiene safety of foodstuffs internal control was determined that needs to be ensured by operators and needs to be based on the HACCP system.

From microbiological aspect in particular small systems and supply areas with 500 or 1,000 inhabitants are problematic. Most of them have no operator, they are inadequately arranged in without any equipment. They also lack maintenance, protected areas and a suitable regime. A long-term solution is to connect such users to bog systems with an operator, regular maintaining and control. Among substances that most frequently exceed limit values determined on the basis of direct threat to people, were pesticides and their metabolites in particular atrazine and desetilatrazine and in 2004 also dimethenamide and nitrates.

The Operational Programme for urban waste water treatment (in this field the Operational Programme reflects the requirements of the Urban Wastewater Directive and the transitional

periods for the implementation of this directive having been agreed in the pre-accession period) set a goal according to which by the end of 2005 waste water treatment plants needed to be built with a secondary phase of treatment in agglomerations exceeding 100,000 PE. In Slovenia there are two such agglomerations, Ljubljana and Maribor, where a quarter of the entire population live. The plants have been completed. According to the share of inhabitants who live in areas where waste water is treated in treatment plants, the situation in various parts of Slovenia can be classified according to the level of treatment by using the methodology from the Directive on Wastewater Treatment. This is illustrated in the picture below.

*Picture 3: Share of population whose waste water was treated in individual parts of a year in urban waste water treatment plants or joint waste water treatment plants with a certain degree of treatment or cesspit.*



In picture: tertiary, secondary, primary, cesspit

More detailed environmental indicators for the entire Slovenia are published on the website of the Environmental Agency of the RS (<http://kazalci.arso.gov.si>).

The official assessment in the National Environmental Protection Programme establishes that in most areas (waste water treatment, potable water supply, waste management, renewable energy sources, agricultural and environmental measures) the measures in place indicate

progress and ensure the achievement of the goals. However, huge investments are still necessary to grant the attainment of the EU environmental standards.

### **2.2.1. Management of municipal waste**

The key problem of the Republic of Slovenia in the area of municipal waste are full landfills and insufficient new regional waste management centres that could - with their infrastructure – reduce the quantity of waste as well as it would enable the separation of the fractions of waste that can be recycled, the energy recovery of waste and preliminary processing of waste and their residues as well as adequate waste and residue disposal.

The quantity of generated waste is constantly increasing and the waste source separation does not meet the requirements of the set objectives. Because not every landfill is equipped in accordance with the regulations, the implementation of the Rules on waste disposal and the Regulation on the landfill of waste made the managers of those landfills that did not comply with the technical requirements concerning landfill operation to decide to shut them down (35, of these 24 municipal landfills), those managers, who assessed, that they could meet the requirements of rules/regulation by 2008, decided on adjustment and acquirement of environmental permits for operation of landfills (29, of these 28 municipal landfills). Thus the Republic of Slovenia decided to direct the investments into so called large regional projects that can integrally solve the problems concerning waste disposal in certain areas.

The share of population involved in the system of regular collection and disposal of municipal waste has increased from 76% in 1995 to 95.5% in 2004. Separate collection of waste is being implemented by all the public municipal waste management service contractors. According to official evidence of the Environmental Agency of the Republic of Slovenia, by the end of 2005 44 landfills dealing with non - hazardous waste were in operation, 2 new ones were being constructed. It is estimated, that after 2006 40 landfills dealing with non-hazardous waste will still be in operation. Data on the quantity of disposed non- hazardous waste, that is comparable, for the year of 2002, with the data of The statistical office of Republic of Slovenia, show that the quantity of waste in 2002 compared to that in 2000 decreased by about 14%. In 2002 from the total quantity of non-hazardous waste around 85% share belongs to municipal waste, of which the majority share (81%) belongs to mixed municipal waste, the rest is from gardens and separately collected waste. Total share of other disposed waste (construction waste, packaging waste, waste generated by waste processing equipment, inorganic waste from thermal processes, waste generated by organic chemical processes, waste from wood and paper processing industry and other waste), which due to its properties is considered non - hazardous is around 13 %. Although in Slovenia separate collection has already been introduced and separate fractions are not disposed any more, the situation is still unsatisfactory. In particular, this refers to the quantities of landfilled waste that are still too high due to a low share of separately collected fractions. This is the consequence of collection centres that have not been constructed yet and a lack of trust in new environmental technologies and efficient use of waste or its components that mainly involves waste recycling so that waste can be processed in raw materials that can be re-used. Waste can also be used as fuel in a combustion plant or industrial furnace or it can be used for the production of fuel. Another shortcoming is that the polluter-pays principle has not yet been covered by incentives that would raise the interest of inhabitants to collect points for separate waste collection. A relatively high quantity of landfilled waste is due to the fact that 86% of mixed

urban waste is not treated before landfilling. Funds will need to be directed to ensure infrastructure for separate waste collection and the treatment of other waste before disposal.

With the analysis of costs regarding the current and future situation it was estimated that by implementation of the program on separate waste collection level of annual environmental costs will decrease by 34 %. The table below illustrates annual environmental costs in 2009 caused by separate collection of fractions if these fractions are not recycled and are dumped without being processed in comparison to anticipated reduction of these costs if the planned level of recycling or energy recovery is ensured.

*Table 7: Estimated recycling rate or energy recovery of separately collected fractions*

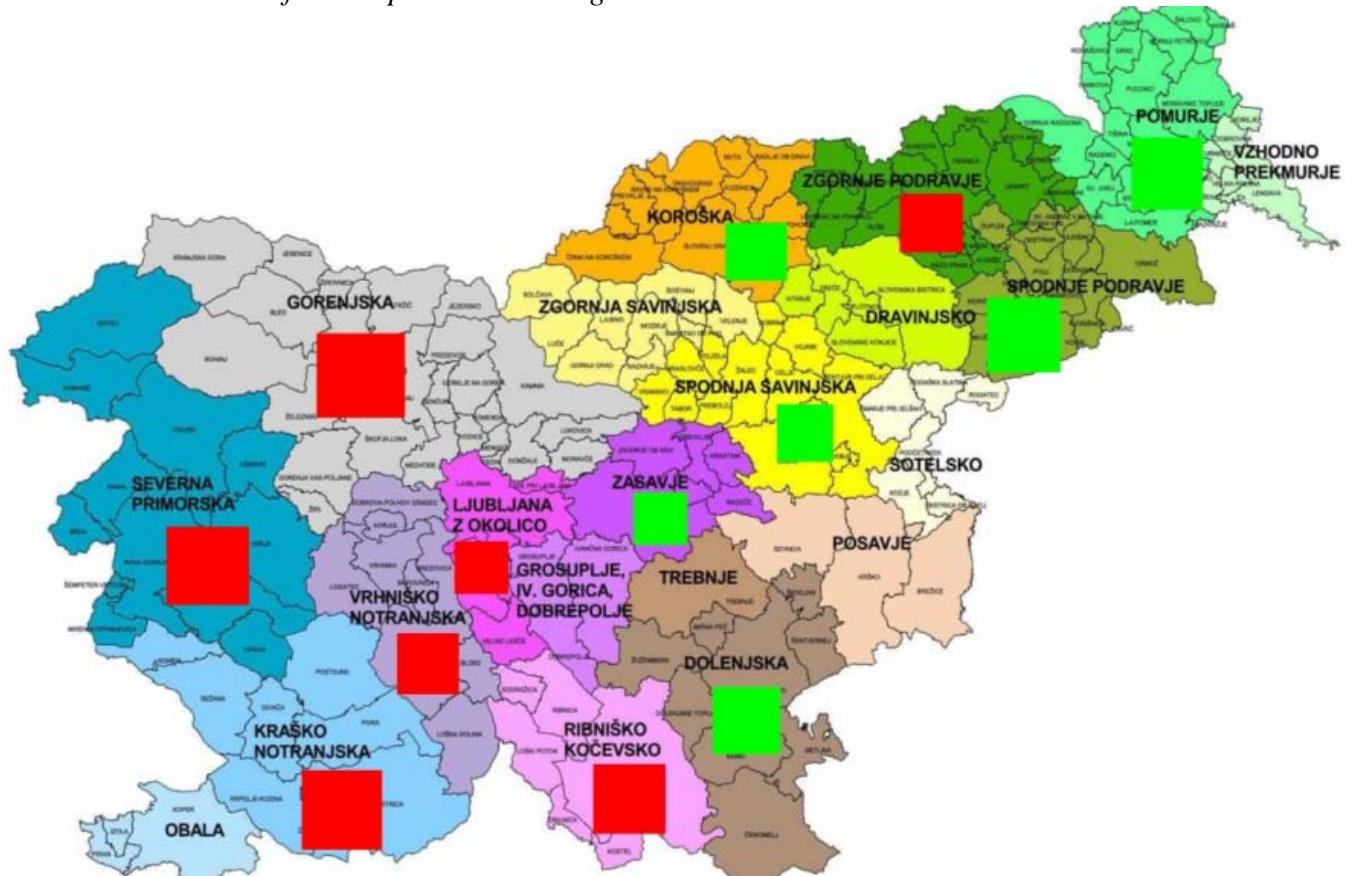
Type of separately collected fractions	Estimated annual fraction generation quantity (t)	Estimated Highest level of environmental costs (EUR)	Anticipated annual quantity of processed fraction in 2009 (t)	Anticipated annual decrease in environmental costs in 2009 (EUR)
Paper and fibreboard	80.000	6.900.000	55.000	3.500.000
Glass	35.000	390.000	35.000	595.000
Organic kitchen waste	180.000	37.200.000	110.000	23.600.000
Cloths and fabrics	10.000	1.530.000	6.000	1.220.000
Solvents, coatings, glue	1.000	960.000	1.000	900.300
Pesticides	70	210.000	50	150.000
Electric and electronic equipment	20.000	1.590.000	10.000	990.000
Plastic	35.000	4.100.000	30.000	3.300.000
Metal	20.000	2.960.000	18.000	2.850.000
Timber	15.000	2.025.000	14.000	1.870.000
<b>Total</b>	<b>396.000</b>	<b>57.865.000</b>	<b>279.000</b>	<b>38.975.000</b>

The following environmental costs caused by generation of various separately collected fractions and determined on the bases of costs for prevention of the following adverse effects of generation of separately collected fractions on the environment are being taken in consideration:

1. emission of greenhouse gasses, generated by production of materials for production of products processed from primary raw materials; the criterion for determination of environmental costs of this adverse effect on environment being the mean cost for reduction of emission of greenhouse gasses for 1 tone CO<sub>2</sub> equivalent, in 2005 estimated being 15 EUR/t CO<sub>2</sub>,
2. emission of substances with adverse effect on ozone, generated by uncontrolled waste management of separately collected fractions, which contain substances, that have adverse effect on ozone, the criterion for determination of environmental costs of this adverse effect on ozone being the mean cost for reduction of emission of substances with adverse effect on ozone for 1 tone of equivalent of substances with adverse effect on ozone, in 2005 estimated at 30 EUR/t of equivalent of substances with adverse effect on ozone,
3. preparation of disposal space in landfills reserved for disposal of separately collected fractions the criterion for determination of environmental costs of this adverse effect on environment being the mean cost for preparation of 1 m<sup>3</sup> in the landfill in 2005 being estimated at 60 EUR/ m<sup>3</sup> of disposed separately collected fractions.
4. emission of greenhouse gasses, generated by disposed biodegradable separately collected fractions; the criterion for determination of environmental costs of this adverse effect on environment being the mean cost for reduction of emission of greenhouse gasses for 1 tone CO<sub>2</sub> equivalent, in 2005 estimated at 15 EUR/t CO<sub>2</sub>,

5. prevention of pollution of environment because of the danger potential of landfill leachate from disposed separately collected fractions, the criterion for determination of environmental costs of this adverse effect on environment being the mean cost for purification of 1 m<sup>3</sup> of leachate, which is formed or is polluted due to the decomposition of disposed separately collected fractions in 2005 estimated at 15 EUR/m<sup>3</sup> of leachate.

Picture 4: Problems of municipal waste management



The picture above shows the areas in which regional waste management centres still need to be built (red or darker squares).

To satisfy basic needs of separate waste collection an assessment was made according to which 200-250 collection centres should be constructed, which means one collection centre in a municipality because some municipalities are rather small.



*Table 8: The effects of separate collection and basic utilization, applying linear dynamics of establishment of the system in the period between 2001 and 2005:*

	2001	2002	2003	2004	2005
Increase in quantity of disposed waste, no measures taken	895000	910000	930000	940000	960000
Utilised separate collected fractions	75000	110000	150000	175000	210000
Quantity of disposed waste	820000	800000	780000	765000	750000
Separately collected biodegradable waste	26000	57000	80000	108000	135000
biodegradable waste for basic utilization	22000	48000	68000	92000	115000
Quantity of disposed waste	873000	862000	862000	848000	845000

Slovenia has been faced with the problem of old landfills of industrial waste and with some the polluter can no longer be identified and in some cases polluters are in a bad economic situation. The following cases have been identified: landfills with soil contaminated with PCB, illegal landfill sites with pesticides and unsuitable landfills with hard metals or galvanic waste. A more detailed analysis of other such landfills is planned. The remediation of old burdens some of which are owned by municipalities and some by companies is necessary due to significant impacts on environment. In addition to this in industrial facilities PCB or similar compounds have to be replaced by environmentally friendly substances by 2010. This is the requirement of the EU legislation. To achieve this, companies should be additionally motivated so that the process would be accelerated and proper removal or processing of these substances would be ensured. As for hazardous waste treatment, the existing hazardous waste landfills will have to be remediated. Remediation is urgent due to increased emissions of leachate into ground water. With these activities the polluter-pays principle will be observed as well as the legislation regulating the field of state aid. The identification of polluters in illegal dumping sites is not completely satisfactory: This is mainly waste from smaller companies and the waste generated in construction business and a consequence of demolition. Adequate studies are in preparation to establish the situation.

## **2.2.2. Collecting and treatment of urban waste water**

The 2002 report on environmental situation shows, that the pollution of surface waterways by organic compounds is decreasing - the exception being again the river basin of Mura, where the values of COD rose in past three years. It needs to be emphasized that pollution by organic compounds of river basin of Mura is the highest in Slovenia. The ammonium content is decreasing in most hydrographical areas of Slovenia, with the exception of the Sava river basin - therefore it was decided that this area needs priority treatment.

In general pollution by nitrates is more problematic due to point source pollution - but this is a subject of agricultural environmental programs and not the subject of infrastructure construction.

The source of worries is also pollution by orthophosphates, which is increasing again after having decreased in the period 1986–1997. The attention has to be drawn also to the increase in content of phosphates in the Sava river basin, particularly downstream off the measuring point at Hrastnik (the source of pollution is industry discharging waste water into Boben) which can cause problems in the energy level-effective areas in the downstream part of the Sava River.

The construction of the channel network and simple purification plants in the Republic of Slovenia began in 1970. These activities were especially lively in the period 1970 - 1980, when the purification plants were built in major industrial centres such as Kranj, Škofja Loka, Jesenice. Towards the late 1980s smaller purification plants were built, especially in tourist centres. During the late 1990s the building of the purification plants flourished again, because there were available the environment tax funds, state budget funds and funds from EU funds.

With regard to the year 2004 the analysis of the agglomerations with regard to density shows the following:

- 10 % of Slovenian population lives in settlements inhabited by less than 50 people.
- 10 % of Slovenian population lives in settlements or settlement parts inhabited by 50 or more people where the population density is less than 10 people per hectare,
- 20 % of Slovenian population lives in settlements or settlement parts where the population density is 10 to 20 people per hectare,
- 60 % of Slovenian population lives in settlements or part of a settlement where the population density exceeds 20 people per hectare.

The agglomeration analysis shows that, in order for the regulations regulating collection and treatment of wastewater to be complied with, the following should be connected to the public sewage system:

- minimum 1.200.000 of population, because they live in settlements or in parts of the settlements inhabited by more than 50 people where the waste water load exceeds 20 PE/ha, in
- additionally, maximum 350.000 people, because they reside in settlements, where the total waste water load exceeds 2.000 PE.

To eliminate the differences in a level of equipment for waste water collection and treatment and to be in compliance with the standards of the EU and with the pre-accession treaty that requires to implement the tasks by 2015 at the latest, the Government of the Republic of Slovenia adopted the Operational Programme of Collecting and Treatment of Urban Waste Water and Drainage Water. It is programme of coordinated measures adopted by the state and the municipalities for the purpose of gradual achievement of the environmental protection objectives concerning reduction of the burden caused by waste water.

The programme also represents a system of integrated water management in accordance with the WFD and the UWWD Directives.

Currently, none of the waste water purification plants has the facility for the removal of sewage sludge and since the properties of sewage sludge do not permit disposal into land (regulations) and because in Slovenia there are huge regions with a status of water protection area or Nature 2000 area or special protected area (SPA), it is necessary to regulate the management of sludge from the treatment plants. The Operational Programme of Collecting and Treatment of Urban Waste Water and Drainage Water stipulates that the sludge from treatment plants that cannot be landfilled is incinerated. The priority areas for the incineration of sludge are urban areas where there are no other possibilities to use this sludge.

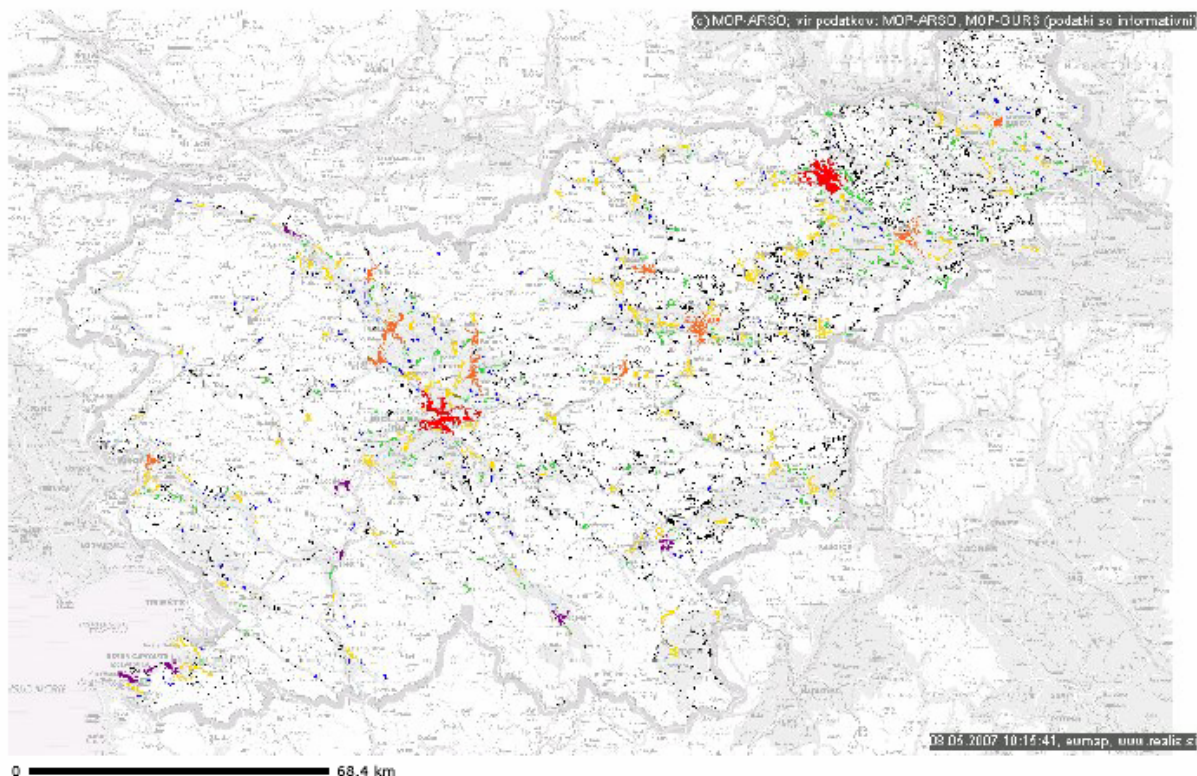
Where collection and treatment of wastewater is concerned we have, in recent years, reduced the emission of compounds into water by 450 000 PE - this was done by construction of new treatment plants. In the field of treatment plants great progress can be noticed. The situation is not so good when construction of sewage system is concerned, for the construction progress is slow due to difficulties related to obtaining consents from the landowners. Because the

municipalities were in favour of building water treatment plants rather than sewage systems, we decided to centralize the preparation and financing of investments from environmental dues, so that this trend would be changed and that the municipalities would go for construction of both, sewage system and water treatment plants. To date the Republic of Slovenia put 13.5 billion SIT into construction of water collection and treatment infrastructure; only a small part was directed towards the construction of sewage system. If the financing of the water treatment plants and sewage system were equal we would have, by now, built between 800-1000 km of primary sewer pipes; instead of this the municipalities for the most part directed their money into rehabilitation of old sewage systems and into construction of water treatment plants and far less into construction of new sewage systems. Therefore the financial assistance of EU and centralized approach are necessary, if we want to meet, by 2015, all the requirements related to collecting and treatment of wastewater – which we (Slovenia) undertook to do by signing the accession agreement. The centralized approach simplifies the solving of problems encountered, when obtaining approval from authorized services.

After the implementation of all measures in line with the Operational Programme of urban waste water and precipitation water collection and treatment, more than 1,500,000 people will be connected to the sewage system between 2004 and 2015. At the national level the national operational programme defined 3260 agglomerations that in accordance with the criteria and provisions need to be connected to sewage systems that are completed with waste water treatment plants. 159 agglomerations were identified that need to be equipped with suitable infrastructure. They are presented below. In line with Article 17 of the UWWD Slovenia already reported to the European Commission on these agglomerations in December 2006.

*Picture 5: Overview of agglomerations in the field of waste water collection and treatment*

**Okolje: Aglomeracije-UWWT**



### **2.2.3. Drinking water supply**

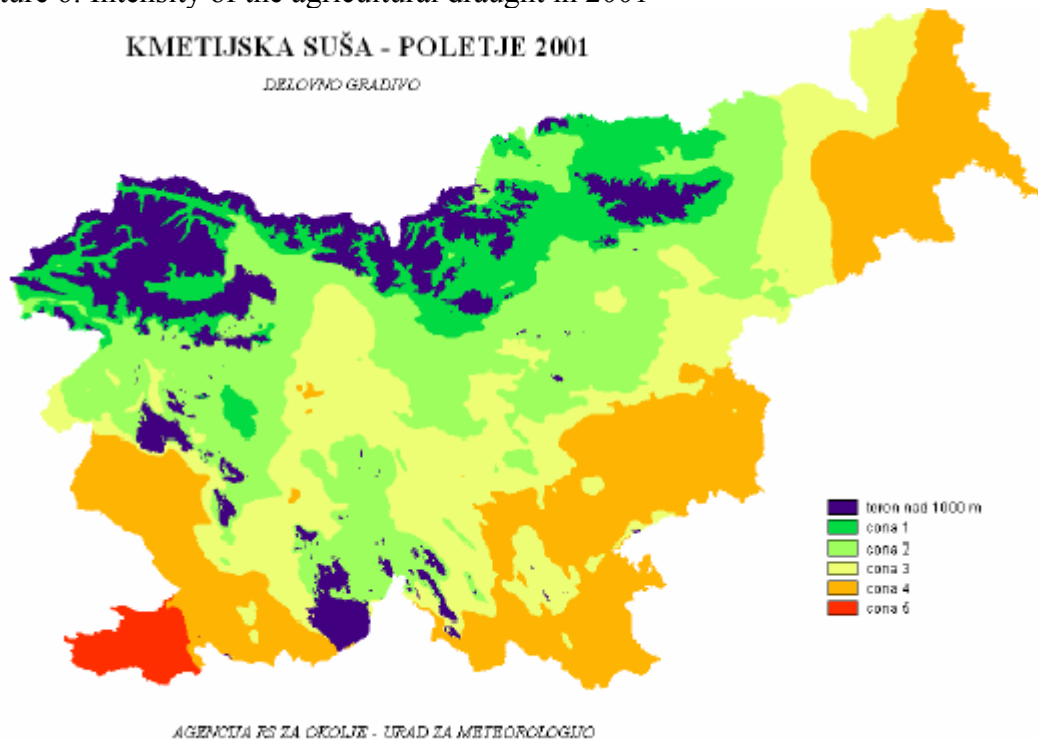
Due to huge quantity of precipitation Slovenia is relatively rich with waters. The quantities of water, which appear in Slovenia, as a part of the water circle, are above European average. But when availability of water is concerned the problem is uneven timing and spatial distribution of surface water reserves and considerable oscillations in the ground water reserves.

The biggest ground water reserves can be found in the central part of Slovenia, while the extreme north-eastern part and the extreme south-western part have the poorest reserves – they are the parts that get the least precipitation. The areas with karst porosity represent a special problem – they are a reach source of groundwater, but it is hard to protect this groundwater against antropogenous pollution load. In Slovenia groundwater is the main source of potable water, while surface water mostly cover the needs for non-portable water supply.

Human interventions into the hydrological circle in the past decades reflect also in water level fluctuations or fluctuations of reserves and in the change of flow-patterns of ground waters. Lowering of the underground water level is the result of spatial changes and related regulation of surface water regime as well as of the use of water. Rising of water level can be related to discontinued industrial use of underground water, building of hydro-electrical power facilities on surface waters, enrichment of waterbeds and discontinued maintenance of meliorated land. On the basis of these data we selected some priority areas for construction of larger water supply systems.

Almost the same areas are prone to experience agricultural draught and in recent times even hydrological draught. The spatial analysis of the assessment of the intensity of the agricultural draught was carried out on the basis of the data provided by most meteorology stations in Slovenia. On the basis of the obtained spot values a map of spatial distribution of the agricultural draught was designed. With regard to the data obtained for the year 2001 Slovenia is divided into 5 classes of the agricultural draught areas.

Picture 6: Intensity of the agricultural draught in 2001



The basis for the analysis of trends of characteristic flows at representative water measuring stations of separate river basins was the performed analysis of trends for water measuring stations with longest-running list (1981-2000) of flow data for the entire representative measuring stations. The selected comparable period 1955–2000 has similar characteristics that apply for the previously mentioned period. The results of the analysis indicate similar timing changes in all the river basins. While the big rivers are rising in most part of Slovenia (the extent of rising depends on the anti-flood measures and keeping the flood weaves in the upstream part of the river), medium and small rivers are falling significantly.

Additional problem in supplying sufficient quantities of water is that in recent years there has been a change in timing of runoffs, for the period of huge runoffs of rivers with rain or snow/rain regime is moving towards winter while the period of low flow rates in summer months is getting longer. With this the probability, that long lasting draughts will occur is increasing. If we add to this the decrease in annually available water in Slovenia, we can predict that water will become scarce even in areas where today it is abundant.

Beside climatic changes, which reflect in the change in the runoff regimes and draught, the quality and quantity of potable water is also greatly affected by human activities.

It was also found that for great majority of water distribution systems no reserve water sources were defined – the sources necessary in order for the system to operate in case of a shortfall. We find that for more harmonious development the municipalities need additional funds for construction of new water distribution systems, for ensuring reserve water sources and for long-term reduction of vulnerability of Slovenia brought about by the climatic changes.

The key measures planned in order to change the current situation are the following:

- construction of water mains in areas where the centralized solution proves economical,
- providing of reserve water sources for the existing water systems,
- providing long-term supply of potable water despite climate changes,
- long-term providing of water of better quality – in chemical and biological sense.

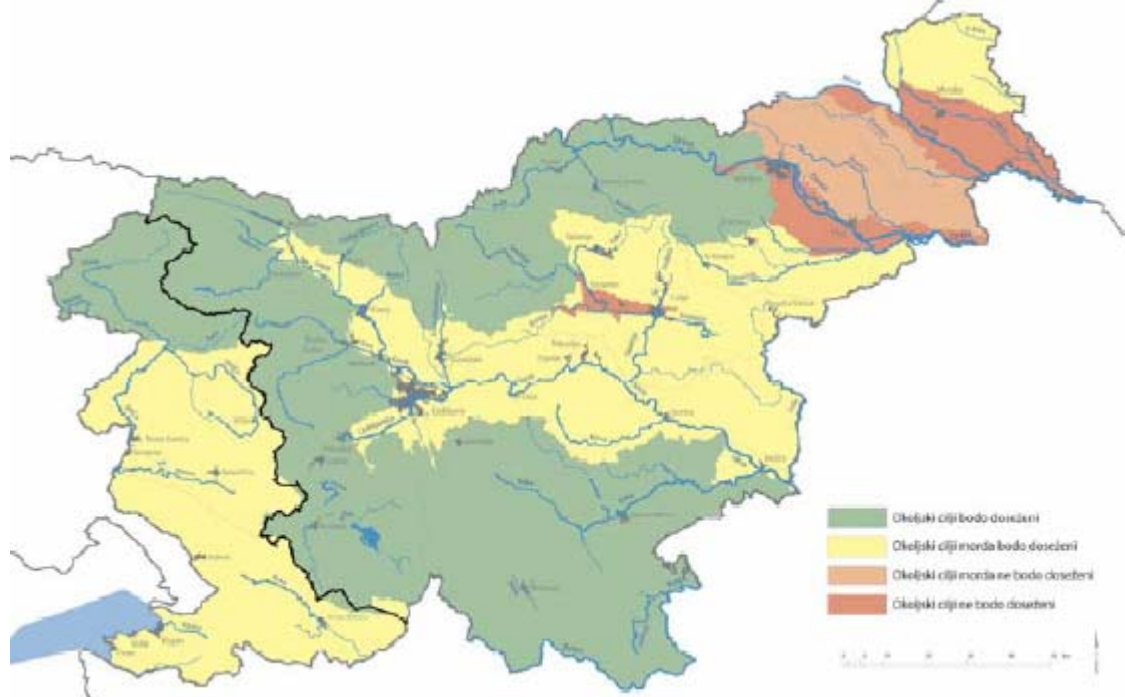
The wholesomeness of water greatly depends on the raw water, which depends on the potable water source. The manner and procedure of preparation also depend on the properties of raw water.

Long years of measuring the nitrate content in groundwater generally show the decrease; despite this, the mean nitrate content in the three-year period 1998–2000 still exceeded the permitted value - 25 mg NO<sub>3</sub>/l - in Prekmurje, the fields of Mura, Apače, Drava, Ptuj, Sora and Karst, in lower Savinja valley, in the valleys of Bolska, Kamniška Bistrica and Soča river.

Pollution by pesticides is a result of overuse and misuse of phytopharmaceuticals used for extermination of weeds, pests and moulds on agricultural surfaces, parks, playgrounds, roads and railways. The peak permitted content of atrazine and its metabolite desethylatrazine is 0,1 µg/l, while for other pesticides and their metabolites it is 0,06 µg/l; the total permitted content of pesticides is 0,5 µg/l. The groundwater most polluted by pesticide is that of the fields of Apače, Prekmurje, Drava, Ptuj and the valley of Bolska; in these parts the pesticide content exceeded the permitted value 0,5 µg/l throughout the period 1997–2000. Pesticides most often – and in highest concentrations - found in groundwater are atrazine and its metabolite desethylatrazine. Because the use of atrazine is prohibited substitutes are used, especially metolachlor which, in some areas, amounts to twenty times the permitted value – for instance in Sorško polje, Sobotinca and Ptujsko polje.

The initial determination of good chemical state of groundwater bodies shows, that it can be expected that in certain areas the environmental goals will not be achieved by 2015 and that certain agricultural environmental measures will have to be applied – some of them are already being implemented. In order to be able to supply the water we have to construct water distribution systems which will provide us with wholesome potable water of controlled quality; we must also see to the development of less developed regions. We must not forget the water protection measures.

Picture 7: Distribution of possibilities for achieving environmental goals



In picture: Environmental objectives will be fulfilled / might be fulfilled / might not be fulfilled / will not be fulfilled

The key environmental problems are linked to the following elements:

- dispersed pollution of groundwater with nitrates and pesticides coming from various sources,
- climate changes and changes in water regimes,
- the point source pollution in the urban settlements (leaking sewage pipes, industrial emissions),
- high vulnerability of water sources,
- inadequate balances of water quantities and quantities of water sources (long-term fall of groundwater level in certain areas).

Because the potable water supplied to most Slovenian towns mostly comes from groundwater sources, the protection and the use are especially important, for the potable water supply is one of the conditions for development of a region..

On 6/30/2004 the Republic of Slovenia had 1.997.004 inhabitants (source: Ministry of the Interior, Statistical Service of the RS). In the database on potable water supply systems 977 supply areas were recorded in the year 2004 which supplied 1.840.135 inhabitants, that is 92% of inhabitants of Slovenia. Therefore these data tell us that 156.869 inhabitants were not supplied the water included in the monitoring of 2004. The inhabitants used potable water from their own sources and systems supplying less than 50 people and from the supply areas, which eluded the database and were therefore not included in the monitoring 2004. The estimated number non-included areas were 70, mostly supplying 50-500 inhabitants – so they supplied about 20.000 people.

On the basis of potable water monitoring data we can assume that in 2005 the potable water related health situation improved a little.

In 2004 12.243 inhabitants within three different supply areas were exposed to nitrates, while in 2005 this number was reduced to 4.046 - within four smaller supply areas in the vicinity of Murska Sobota.

In 2004 the pesticides that exceeded the permitted value were atrazine, its metabolite desethylatrazine and dimethenamide. In 25 samples the concentrations of pesticides exceeded the permitted value – these samples were taken from 15 different supply areas, which supplied the total of 183.881 inhabitants. The data show that in 2005 less people were exposed to pesticides - 151.297 people.

The number of people supplied with the water of which at least one sample showed the presence of E.coli was 554,477, which means 30 % of the inhabitants. All the supply areas are included, together with all regular and periodical testing. In 2005 this share was by 1% smaller than in the year 2004.

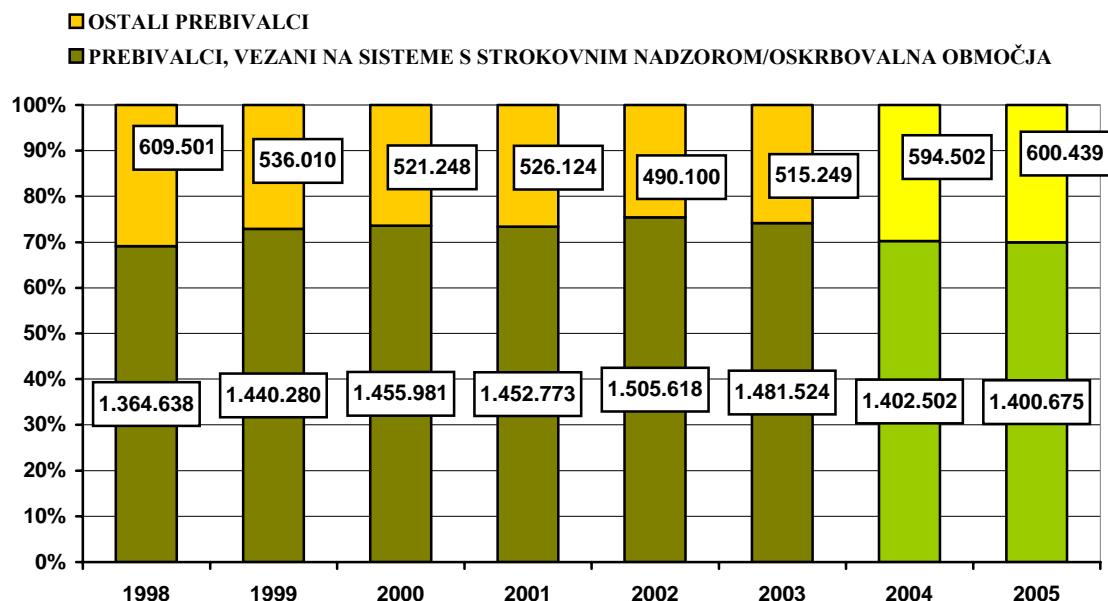
In the year 2005 the water that needs boiling comes from 264 (27 %) supply areas – the most problematic being the area of Nova Gorica, where the percentage is 85%. Therefore 700 000 inhabitants are periodically exposed to chemically or microbiologically non-conforming supply of potable water.

According to the Database on the systems of potable water supply and conformity of potable water, there were 75 supply areas in Slovenia in 2005 each supplying more than 5.000 inhabitants; they supplied the total of 1,400,675 or 70 % of the inhabitants of Slovenia. The number of inhabitants included in the systems with professional supervision in the 2004 and 2005 is smaller, because till the year 2003, there were whole systems included in the potable water supply, which were, in the 2004 and 2005, divided in many smaller supplied areas, which supplied less inhabitants, than the whole system did before.

In 2003, 187 million of m<sup>3</sup> fresh water was pumped into the public water supply system. Most of this water came from groundwater, which is the fact that makes efforts to preserve enough quantities of groundwater and to keep it wholesome even more important. Loss of water due to decrepit water distribution networks is slowly being reduced. It is characteristic, that groundwater is a less problematic source of potable water, especially from the microbiological aspect. Surface waters, when they flow, pick up all kinds of pollutants, so they are often of poor microbiological quality.

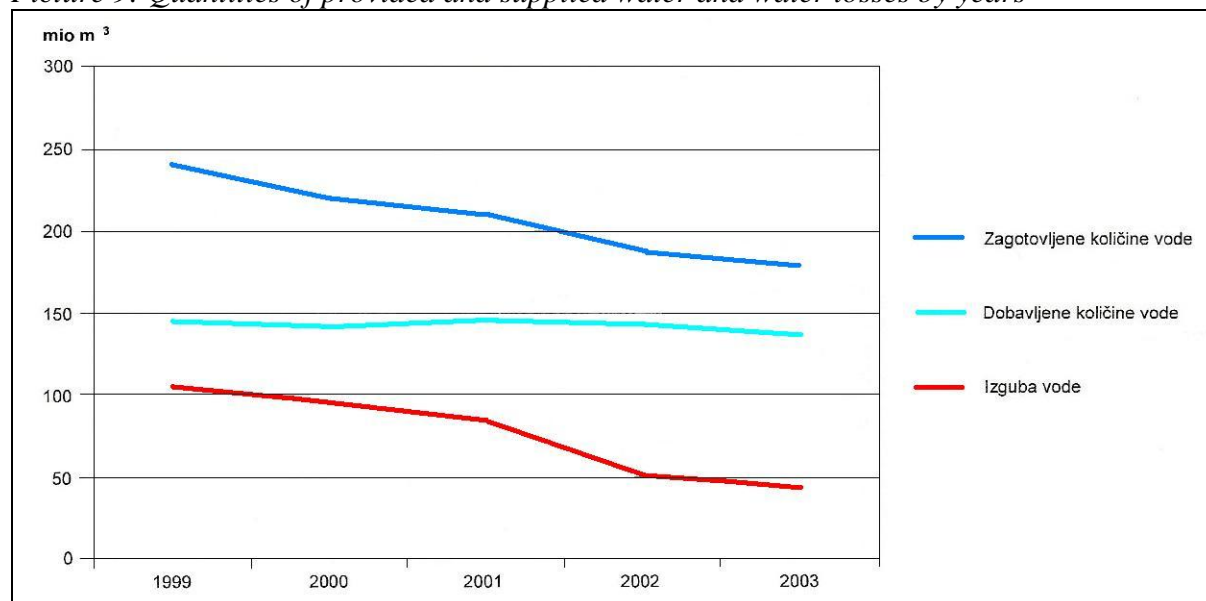


Picture 8: and share of people, connected, in the period 1998-2003, to expertly monitored water supply systems or supply areas in years 2004 and 2005, supplying more than 5000 inhabitants and the number and share of other inhabitants of Slovenia.



In the picture: other inhabitants; inhabitants connected to the system expertly monitored/supply areas

Picture 9: Quantities of provided and supplied water and water losses by years



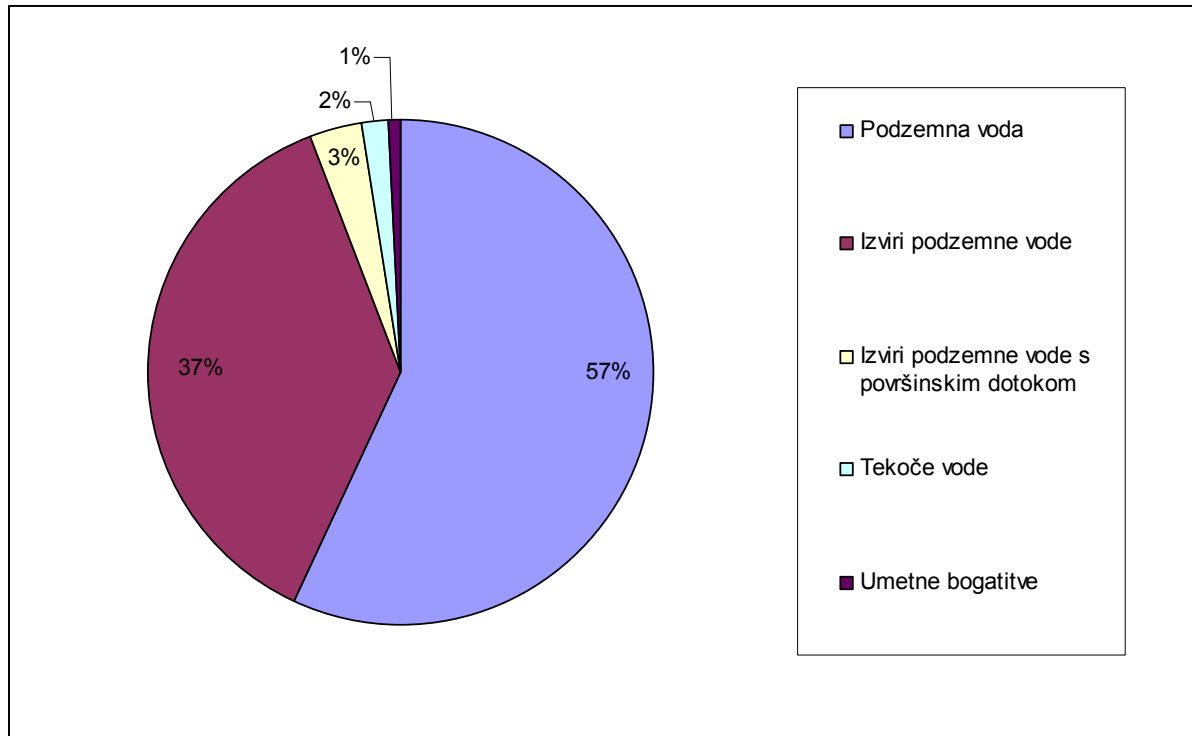
In picture: Quantities of provided / supplied water / water losses

With regard to many years of positive experience with the above water sources and with regard to comparable foreign systems, the Operational programme of potable water supply provides for the use of the methods of artificial enrichment of groundwater with the goal to protect it and increase its quantity.

In the past it often happened, that the organized potable water supply, that is, public water distribution system slowly covered the supply areas, which were before supplied from own water sources. These sources were often of poor quality. In order to reduce water use the users

often constructed their own, internal water supply systems - to cover the tasks that do not demand potable water (toilet washing and such) – as a parallel system feeding from a groundwater body, surface waters or rainwater-filled tanks.

Picture 10: Structure of waters in the RS



In the picture: Groundwater / Groundwater springs / Running waters / Artificial enrichment

In view of the fact, that the environment protection law defines water supply as mandatory municipal public utility service, the municipality is a very important subject, where performing of tasks related to efficient and successful potable water supply as well as economic development are concerned.

The priority of supplying as many inhabitants of the RS as possible with quality potable water is one of the permanent priorities of the responsible institutions within the field of environment protection. The role of potable water is very important, because it arises from the fact, that it is necessary for our survival and for the development of economy. Apart from all this, the above mentioned investments represent a system of integrated water management, which is in accordance with the WFD Directive.

#### 2.2.4. Reduction of water damages

The key task of the Republic of Slovenia is to adopt plans and provide flood safety in flood risk areas and thus reduce the risks for at least 100 years, and this will decrease the vulnerability of the economy and reduce damages generated due to floods or climate changes. All the measures will be implemented in accordance with the Water Framework directive; with this the sustainable water management will be achieved. Within the frame of OP ETID building of constructions for ensuring flood safety in currently most flood-endangered areas, which are also inhabited and where the greater damages may occur, will be co-financed.

Due to natural characteristics in Slovenia the scope and frequency of floods, as well as the damage they do, are quite extensive; it can be expected, that the climate changes will worsen this further. Floods threaten more than 300,000 ha of land. The biggest flooding area is valley-bottom area (237,000 ha); it consists of 30 fairly extensive flooding areas. Smaller are the areas near the sea and at the bottom of karst fields (70,403 ha). Heavy downpours and rapid melting of snow most often cause the disastrous floods. Local characteristics play an important role – especially the prevalence of a very mountainous landscape and waterlogged layers, which promote rapid runoff of water into valleys and depressions. By deforestation, melioration of land, building of more than 6000 settlements, construction of road and railway networks and other buildings we have significantly changed the water regime and thus also flood conditions.

The programme Reduction of water damages is based on introduction of sustainability-oriented measures, which encompass the entire scope of problems in this field and include the following guidelines:

- the use of space within flooding areas must be adapted to floods – do that the impact of human intervention into natural processes is reduced,
- building of counter-flood constructions – they are still one of the important flood fighting elements – should be limited to protection of life and more important material goods; what also has to be taken into account is nature and landscape protection,
- in the flooding areas measures have to be implemented preventing pollution of waters, water ecosystems and soil resulting from floods,
- counter-flood measures must include containing excess quantities of water, keeping this water in the area of their origin and gradual channelling into waterways when this no longer causes damage.

The floods represent a complex problem, because they cause huge material damage as well as loss of lives. Rivers and sea are dynamic systems; therefore flood protection cannot be dealt with by applying partial or sectoral measures. The flood threat is our common problem and has to be dealt with on the level of all the water basins. The counter-flood measures in one region can affect other regions, upstream or downstream; so when introducing measures the impact on the entire water basin has to be thoroughly reviewed.

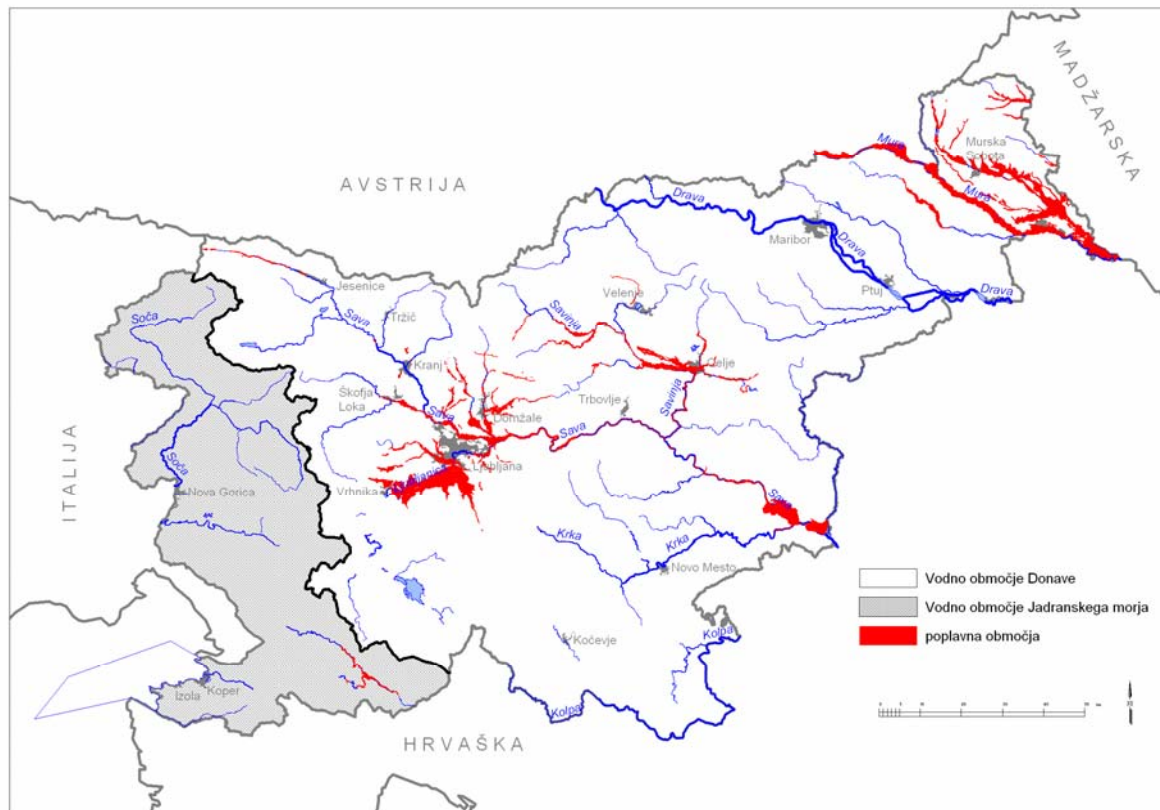
Reduction of damaging requires a comprehensive treatment of natural processes, their characteristics and threat potentials as well as adaptation of people to these processes. The regulation of waters also has to include economic, administrative and control measures.

In order to reduce damaging effects of water a detailed water management plan for the reduction of water damages in water basins of the Danube and Adriatic rivers will be prepared in accordance with the Water Management Plan; it will include the following:

- maps of flooding areas, prepared on the basis of assessment of flood threats,
- programme of activities and measures for separate important areas, together with the initiative for preparation of detailed plans for introduction of construction measures,
- beginning of implementation of construction measures within the frame of Water Fund programme,
- other instruments for reduction of flood consequences (use of space, construction standards, insurance).

The preparation of a water management plan needs to be prepared by the Ministry of Environment and Spatial Planning in line with the WFD Directive and the Act on Water.

Picture 11: Flooding areas (red)



The problems encountered in individual river basins:

- Drava, the water regime of which has been significantly changed, for during most of the year only the ecologically acceptable water flows in its stream,
- Mura, which represents, when the water is high, potential threat to settlements along the river and its effluents, for the existent embankments do not suffice or are old,
- Ljubljana, which represents, when the water is high, potential threat to suburban and urban area of southern part of Ljubljana. In the sense of potential damages Ljubljana is at severe risk in case of a catastrophic flood – it would affect about 8,000 ha, of these over 400 ha of urbanized area and about 20,000 people.
- Savinja, which represents, when the water is high, potential threat to urbanized areas along Savinja. With deepening of the waterbed the flow-through capacity increased and the possibility of flooding the area of Lower Savinja Valley decreased. Also included are downstream and mid part of Sava, which represents, when the water is high, potential threat to settlements along Sava. The planned counter-flood measures will be implemented parallel with the construction of hydroelectric power plant chain.

In the years to come, like other member states Slovenia will be facing climate changes that can cause economic damage. This is why preventive arrangement of protection against floods is crucial in Slovenia. The polluter-pays principle should also be pointed out because resources in the budget are acquired on the basis of the water rights funds collected. Various water users (from households to energy) have to pay for the use of water.

## ***Key emphasis***

In the area of waste management the key problems are the following:

- constant increase of waste intended for disposal,
- poor separation at source,
- small market for processing of waste into raw materials and recycling,
- insufficient number of collection centres,
- instability of investment reference frames,
- lack of facilities and equipment for waste management,
- lack of dumping space.

The problems encountered in the area of collecting and treatment of wastewater:

- high vulnerability of water sources,
- inconsistent system of investment financing at municipal level,
- lack of facilities and equipment – especially sewage system.

In the area of potable water supply we encounter the following problems:

- dispersed pollution of groundwater by nitrates and pesticides of agricultural origin; groundwater is the main source of potable water with high vulnerability,
- climate changes and changes of water regimes,
- drinking water unsuitable to be drunk,
- inadequate balances of water quantities of water sources (long-term lowering of groundwater levels in some areas),
- wear of existing water distribution systems,
- huge water losses due to leaking distribution pipes,
- undefined reserve water sources and high vulnerability of supply.

Key problems encountered in the field of water damage reduction are the following:

- High vulnerability of urbanized surfaces,
- Outdated and worn water infrastructure,
- Unfinished system of flood protection structures,
- Inconsistent system of functioning and operation of anti-flood constructions,
- Poor awareness relating to building on areas liable to floods
- Insufficient available state budget funds for construction and maintenance of anti-flood constructions.

Reduction of water damages is a priority measure, which will be achieved on the basis of a Detailed Plan for Reducing Water Damages in the river basin area of the Danube where the following measures are planned:

- construction of high water level embankments,
- reconstruction of dams and walls,
- retaining basins,
- regulation of riverbeds.

## **Analysis of strengths, weaknesses, opportunities and threats (SWOT)**

*Table 9: Analysis of strengths, weaknesses, opportunities and threats for the field of environment*

	Description
Strengths	<ul style="list-style-type: none"> <li>– low consumption of water per inhabitant</li> <li>– known number of threatened urbanized areas</li> <li>– availability of water sources</li> <li>– multi-annual trend of secondary raw material collection</li> <li>– sufficient quantities of water sources</li> <li>– well developed system for promotion of eco agriculture</li> <li>– well developed system of payment for water use</li> <li>– well developed system of environmental dues for collection and treatment of waste water</li> <li>– well developed system of dues for waste management</li> <li>– systems are smaller and more manageable</li> <li>– we use long years of experience of other bigger systems</li> <li>– we are able to use currently best technology</li> <li>– Slovenia lies in the area of river sources, therefore floods are not limited to smaller areas and the water can flow off quickly</li> <li>– experience and tradition in water regulation</li> </ul>
Weaknesses	<ul style="list-style-type: none"> <li>– increased health hazard posed to population</li> <li>– lower quality of life and services accessibility</li> <li>– negative impact on economic development, withdrawal of capital,</li> <li>– constant increase in quantities of waste intended for disposal</li> <li>– poor separation at source</li> <li>– small market for waste processing and recycling</li> <li>– lack of collection centres</li> <li>– insufficient dumping space</li> <li>– poor awareness of inhabitants</li> <li>– inconsistent system of investment financing on municipal level</li> <li>– differences in the quality of purification using different purification plants</li> <li>– lack of facilities and equipment</li> <li>– differences in the quality of potable water supply (village systems, individual supply)</li> <li>– wear of water distribution systems</li> <li>– huge water losses</li> <li>– undefined reserve water sources</li> <li>– small seasonal water reserves in case of longer hydrological draughts (climate changing)</li> <li>– outdated and worn water infrastructure,</li> <li>– high vulnerability of urbanized areas due to flood threats,</li> <li>– poor maintenance in high cost of maintenance of water facilities,</li> <li>– inconsistent system of functioning and operation of the counter-</li> </ul>

	flood facilities, – due to floods, the use of land for other purposes being not possible
Opportunities	– development of new jobs – organization of infrastructure as a competitive advantage of the RS – positive impact on economic and touristy development and new technologies development – preservation of water sources as strategic property of the state in the times of climate changes – positive impact on population's health – reduction of threats to human life, environment, economic assets on flooded territories, – better use of flood-safe surfaces
Threats	– migrations of people (within Slovenia) – decay of potable water supply infrastructure systems – extreme rise of water supply charges – increased vulnerability due to climate changes – building within flood-prone areas, – lower value of buildings in flood-prone areas – expansion of flood-prone areas, – poor awareness of people regarding building in flood-prone areas – great threat of natural disasters due to high water level and high costs of elimination of the consequences

### 2.3. Sustainable use of energy

Taking into account constant growth of economy and growing attention paid to the environmental protection, a reliable energy supply is a key component of current energy supply and use programmes in most countries. Separate sectors of energy industry (coal industry, petroleum and gas industry, electrical power industry), which were developing separately in the past, are today forced to make joint development plans - for more and more frequently the option of replacing one energy form with another has to be considered. Joint planning of energy policy is based on taking into consideration restructuring of economy, on adjustment to higher prices of energy and on preparation of strategies for intensifying efficient use of energy and better use of renewable energy sources.

In Slovenia, energy supply and consumption are characterised by a relatively high-energy intensity which is still about 90 % above the European (EU-15) and 2,6 times higher than in Denmark. This is partly due to the structure of Slovenian processing industry, which still includes a considerable number of energy-intensive sectors, such as the production of aluminium, steel, stone, pulp and paper, with a relatively low value added; energy efficiency is also not sufficient in all the sectors of final energy use.

In 2003, the share of renewable energy accounted for 10.8 % in the total energy supply (11.9 % in 2000; only 5.5 % in EU-15), and for 23.2 % in the total electricity generation (28.6 % in 2000). In this context the tendency of decreasing of the share of renewable energy sources, where the electrical energy is generated, is very alarming. Renewable energy is an important source of primary energy in Slovenia, and increasing the share thereof represents a priority of the energy and environmental policies of the country. Compared to other EU Member States, Slovenia has similar or even better natural potentials for exploiting renewable energy. The use of renewable energy and their several advantages over conventional energy sources may significantly contribute to reducing energy import dependency.

The average annual growth of primary energy consumption in Slovenia between 1992 and 2001 accounted for 1,9 %. In the 2004 primary energy balance, the largest share was recorded by liquid fuels (35,2 %) and solid fuels - coal (21,6 %). The share of renewable energy was divided among hydro energy (4.5%) and wood and scrap wood (4.1%), while new sources accounted for only 0.1 % of the primary energy balance. For district and local heating, wood biomass (scrap wood from the wood industry and wood from the forest) is the increasingly used local energy source, particularly on locations with outstanding natural conditions (forest cover, agriculture, industry, crafts, tourism).

The average annual growth of final energy between 1992 and 2001 accounted for 2.2%. Economic growth is the most important reason of energy consumption, which rose for 4% annually in the last seven years. In 2001 the final energy consumption accounted for 183.7 PJ. The consumption of solid fuels decreased drastically, however the consumption of liquid fuels increased, which remain the most important energy product with the share of 51%. In the past years a trend of a faster increase of finale energy consumption is present.

Like other EU countries Slovenia is encountering two big challenges: how to keep energy dependence on current level and how to reduce air pollution and greenhouse gas emissions. Not taking into account the fuel imported for the nuclear power plant Krško, Slovenia's dependence on energy import is about 50 % (in 2004 energy dependence of Slovenia was 52 %, which is for 4 percentage points more than in 2001) – like elsewhere in EU. Especially problematic are fuel and gas supplies, for here the dependence is 100 %; when electrical energy is concerned, the import/export levels are approximately the same. EU is aware that only by implementation of intensive energy management measures the expected increase of dependence on energy import can be prevented – it is forecast that, if the mentioned measures are not applied, the dependence on energy import will rise from present 50% to 70% by the year 2030.

Where the environment protection is concerned the greatest challenges, also in the face of continuous exceedance of Community air quality standards, is to reduce air pollution and greenhouse gas emissions; the latter became our obligation also in the view of international law, when the Kyoto Protocol entered into force on February 18, 2005. 80% of these emissions are generated by energy industry. So, in order to meet the demands of the Kyoto Protocol – to reduce the greenhouse gas emissions by 8% by 2010 – it is of key importance, that we use clean fossile fuels with low carbon content, that we efficiently manage the entire energy chain and that we increase the use of renewable energy sources as much as possible; when decisions on investments are adopted, the latter must be given priority over the use of fissile fuels.



## ***Key emphasis***

The key problems, which could have negative impact on national development - provided that the programmes for promotion of the efficient use of energy and use of renewable sources of energy stay on present level – are the following:

- with continuation of current energy use growth trends the threat exists that Slovenia's dependence on energy imports will significantly rise in next decades (in EU - if special measures are not implemented the dependence will rise from 50% to 70% by 2030);
- in future we will not be able to meet our obligations provided for in the Kyoto Protocol and the EU directives (for instance annual proof of 1% final energy saving, as required according to the directive on efficient use of final energy and energy services);
- decreased competitiveness of economy, especially of energy-intensive sectors in which energy costs represent huge financial burden;
- steep growth of electrical energy use;
- uneconomical energy management in public sector;
- associating EFEU and RES only with positive environmental impacts and not also with impacts on the increase of competitiveness, regional development and employment;
- insufficient scope of studies and of technological development of energy equipment and services related to EFEU and RES;
- insufficient available state budget funds for financial stimulation;
- big energy supply companies focusing on big investment in the energy sector;
- poor coordination between the ministries.

## **Analysis of strengths, weaknesses, opportunities and threats**

*Table 10: Analysis of strengths, weaknesses, opportunities and threats for the field of sustainable use of energy*

<b>STRENGTHS</b>	<b>WEAKNESSES</b>
<p>Huge unused potential for EFEU (buildings, industry) and RES (biomass, geothermal energy, sun) and potential for reduction of GG, improvement of quality of local air, increasing energy efficiency and economic efficiency</p> <p>Compliance of NEP and other programmes with the EU environmental and energy policies, Kyoto Protocol and other international obligations of Slovenia</p> <p>In EU, high priority in development and research programmes, good connections with EU and great capacity of knowledge exchange and further development of knowledge in Slovenia</p>	<p>Growing dependence on energy import</p> <p>High growth of electrical energy use.</p> <p>Growth of primary energy consumption.</p> <p>Uneconomical energy management, especially in the public sector.</p> <p>Institutional framework which gives preference to traditional energy sources</p> <p>Insufficient state budget funds and from other sources for implementation of promotion programmes</p> <p>Too few demonstration projects, non-inclusion of EFEU and RES into public tenders</p>

<p>Existence of financial sources (CO<sub>2</sub> charge, supplement to the cost of electro energy network use, reduction of excise duties)</p> <p>Existence of promotion programmes, institutions (Ecology Fund) and methodologies of introduction, application, monitoring and evaluation of programmes</p> <p>Knowledge, natural characteristics and tradition (biomass)</p> <p>Developed manufacturing of devices, equipment and services (construction materials, heating and air conditioning technology, information technology...), capable of rapid development</p> <p>Trend of reduction of investment costs due to economy of scale and maturity of technologies</p>	<p>Lack of qualified investors, lack of existing infrastructure for certain technologies</p> <p>Narrow scope of research and technological development of energy equipment and services related to EFEU and RES</p> <p>Big energy companies do not see EFEU and RES as development opportunities but rather as a competitive option</p> <p>High costs of project preparation, especially in times of development of these markets</p> <p>Higher transaction costs due to smaller scope of projects</p>
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<b>OPPORTUNITIES</b>	<b>THREATS</b>
<p>Possibility to increase the reliability of energy supply (source diversification, reduced dependence on fissile fuels, dispersed local supply)</p> <p>Delay in construction of new big energy facilities and networks</p> <p>Promotion of balanced regional development of Slovenia, including creation of new jobs</p> <p>Promotion of local economy in the fields of agriculture and forestry, establishment of links with eco agriculture and tourism</p> <p>Ensuring better cost effectiveness of energy supply and thus increase of competitiveness of economy</p> <p>Promotion of competitiveness in providing energy services and promotion of additional development of technologies (construction and other materials, energy equipment, IT....)</p> <p>Improvement of living and working conditions and reduction of health care and environment protection costs</p>	<p>Financial stimulations directed only towards the use of technologies in Slovenia, without promotion of technological and economic development in this area, can reduce economic efficiency</p> <p>Poor activity coordination between various operators, lack of vision, higher risk due to new technologies</p> <p>Poor awareness of users in connection with economic and other</p> <p>Non-implementation of measures due to poor liquidity of customers and owners (for instance when building or rebuilding of buildings and when investing into energy equipment</p> <p>Additional obstacles for development of medium and small decentralized energy supply systems, due to badly organized wood biomass market and rise of the price of this biomass</p> <p>Conflict with wood processing industry (use of biomass as a raw material but not for energy production).</p> <p>Rising dependence on import.</p>

Reduction of poverty with so called programmes of reduction of »fuel poverty« by means of EFEU and RES	
Activation of private capital for EFEU and RES and with this long-term reduction of budget funds participation	

### 3. STRATEGY FOR DEVELOPMENT

When deciding which areas will be co-financed by the EU funds, Slovenia took into account the tendency towards sustainable balanced development and towards providing the environmental and transport infrastructures enabling promotion of economic development, creation of new jobs and promotion of sustainable development, ensuring high quality of life of the inhabitants of the Republic of Slovenia.

The first priority is railway transport – together with important economic impact it also contributes reduction of negative environmental impacts due to mobility; therefore it is a key factor for success in more and more open market and competition space. In the frame of transport investments this sector will get over 43% of assets, not taking into account those transport investments arising from the principle of balanced regional development – if we take these into account, than this sector gets over 57%. Also, special emphasis was laid on sustainable use of energy, which contributes to reduction of energy intensity and emission of CO<sub>2</sub> and air pollutants, to the use of renewable energy sources and to better living conditions. No special The Cohesion Fund funds have been allocated to this sector to date, but in the future it will receive 160 million euros, which represents one fourth of all investments in environment and more than 11% of the Cohesion Fund resources.

Where road infrastructure is concerned the priority involves mainly investments into completion of the motorway cross on the pan-European transport network and the development axes, which will enable development and developmental integration of sources of weaker and border regions with central Slovenia and provide adequate accessibility and linkage with international flows. The latter will be mostly financed by the European Regional Development Fund; the allocated funds will amount to more than 220 million euros. Where the aviation infrastructure is concerned most investments will be directed towards air safety due to the fact that air traffic is constantly increasing.

Where air traffic is concerned the main priority involves thorough modernization of buildings, systems, navigation and control devices - bringing them to the level, which will ensure safe and financially effective providing of services rendered by the air traffic navigation and control services. Another objective is to meet the requirements laid down in the EU regulations as soon as possible and to set up systems, which will enable interoperability of systems of different regional European centres for air traffic navigation and control.

Despite the »polluter-pays« principle the environment protection area will be allocated considerable funds – in view of comparative advantages and potentials of Slovenia - in total over 37% of The Cohesion Fund's assets. The priority areas are based on the guidelines of the National environment protection programme, operational programmes for various

environment protection areas and EU thematic strategies and directives. The priority is to provide as much population of the RS as possible with quality services rendered by public environment protection providers.

In accordance with the analysis of the field of environmental protection proposals for individual development priorities were prepared. Two development priorities were formed and within limited financial resources and by taking into consideration the investment needs, they were allocated resources from the Cohesion Fund. These priorities are:

- development priority Urban Waste Management that is allocated 15% of the Cohesion Fund resources (EUR 206 million),
- development priority Environment Protection – Water Sector that is allocated 23% of the Cohesion Fund resources.

The development priority Urban Waste Management was determined on the basis of:

- constant increase in the quantity of waste to be landfilled,
- small market for processing waste into raw materials and re-use of waste,
- insufficient number of collection centres,
- lack of constructed facilities and devices for waste management,
- insufficient landfill space.

The development priority Environment Protection – Water Sector was determined on the basis of:

- lack of constructed facilities and devices; sewage systems stand out,
- climate changes and necessary adjustments,
- inadequate quantities of water sources and long-term drop of the water level in some areas,
- use of inadequate water as potable water in certain parts of Slovenia,
- used existing water supply systems,
- big losses with bigger and older water supply systems,
- operations of the majority of water supply systems without a definition of reserve water sources,
- high vulnerability of urban surfaces due to floods,
- obsolete and used water infrastructure,
- unfinished systems of the facilities to protect against floods.

Climate changes were crucial for selecting and determining the development priorities of the Operational Programme of Environment and Transport Infrastructure development. The construction of adequate infrastructure from this Operational Programme the vulnerability of Slovene economy will be lower, greenhouse gas emissions will reduce, the safety of population will increase as well as the use of renewable energy source. Since the biggest problem of the EU and the world is facing climate changes and the adaptation to them, the emphasis was placed on the development priority Environment Protection – Water Sector. As air quality has been identified as one of the priorities by the SEA, special attention will be given to this objective in all priority axes as transport infrastructure development, sustainable mobility, specific environmental programmes, balanced regional development and energy efficiency improvements should all contribute to this objective.

At the aggregate level 50% of the Cohesion Fund assets will be allocated to transport area and the other 50% to environmental areas and the area of sustainable use of energy; 1,4 billion euros and additional 224 millions, contributed by the European Regional Development Fund, will be contributed mainly for the purpose of achieving the fourth objective of the NSRF, which is to

**Ensure conditions for growth by providing sustainable mobility, better quality of the environment and suitable infrastructure**

At the same time also fifth objective of the NSRF will be pursued, which is

**a balanced regional development.**

Of all the available operational programme funds over 50% are related to »Lisbon« programmes as provided for in Article 9.3 of the Council regulation on structural funds and the Cohesion fund. The detailed definition of the objectives by development priorities and their connection with the Lisbon objectives is presented in the development context of each priority.

The common denominator of all development is sustainable development that also represents the base of all strategic and implementing documents of the Republic of Slovenia whereas the environmental dimension is dealt with in the National Environment Protection Programme. This orientation implies the commitment to ensure development that will strike balance between economic, social and environmental aspects. In addition to the activities that within the OP ETID directly refer to the environmental dimension, the environmental dimension of sustainable development is also included in the document horizontally through a set of high environmental criteria for the evaluation of projects and determination of priorities to all the contents with positive environmental impact in accordance with Slovene and EU legislation. In the continuation there are some criteria listed that will be taken into account with individual dimensions of sustainable development. When selecting projects the following environmental criteria will be applied: coordination with the operational programme, reduction of environmental pollution, preservation of the identity of landscape, cultural and natural heritage preservation, reduction of the damage to the structure or quality of soil, optimisation of sustainable use of natural resources, water regime management and preservation and the reduction of the impact of the climate changes. The economic criteria that will be applied are: the criterion of compliance with the norms and standards of costs per unit, data from the cost- benefit analysis, the influence of price on the service after the completion of the public infrastructure construction: Socio-economic criteria are: increased employment, contribution to balanced regional development, increased quality of public service operations and improved life quality in general.

So within the OP ETID Slovenia wishes to achieve the following goals:

Table 11: Objectives of OP ETID

OP for development of environmental and transport infrastructure quantified targets		Baseline (last available data)	2013 target	Source
<b>Output</b>				
1	Km of new and reconstructed roads		215	CIS
	of which TEN		65	
2	Km of new and modernised railways (all on TEN)		428	CIS
<b>Result</b>				
3	Increase in railway freight transport (in million tonnes-km)	3.750	4.804	SORS
4	Value for time savings in Euro/year stemming from investments in roads including highways (in mio €)		83	MT
5	Increase in air traffic control capacity (aircraft movements per hour)	80	102	MT
6	Non-hazardous waste in tonnes / year	845.000	550.000	State of environment report
7	Increased population share served by water supply systems (in %)	91,4%	96%	Monitoring of drinking water, MH
8	Percentage of communally equipped agglomerations	50%	95%	MESP
9	Flood endangered area (ha)	300.000	220.000	MESP
<b>Impact</b>				
10	Savings of final energy (in GWh)	46.000	decrease by 621	MESP
11	Additional capacity of renewable energy production (in GWh)	8.978	increase by 510	MESP
CIS: central information system; SORS: Statistical Office of the Republic of Slovenia; MESP: Ministry of the environment and spatial planning; MT: Ministry of transport; MH: Ministry of health				

CIS: central information system; SORS: Statistical Office of the Republic of Slovenia; MESP: Ministry of the environment and spatial planning; MT: Ministry of transport; MH: Ministry of health

In the phase of the preparations of applications and other accompanying documentation in the programming period 2007-2013 Slovenia will use the assistance provided by the JASPERS initiative. The JASPERS initiative will assist the bodies involved in the implementation of the cohesion policy so that they will be able to efficiently absorb the resources from the Cohesion Fund and the European Regional Development Fund.

What follows is a detailed presentation of goals and development priorities by separate fields.

## 3.1. Transport

### 3.1.1. Past experience

Efficiency and success of past investments were analyzed within the frame of the National motorway construction programme (NMCP), which represents the major cost in Slovenia's transport financing.

On the basis of the performed analysis of the NMCP implementation until 12 December, 2002, it was established that main reasons for derogations from planned physical and financial implementation of NMCP are mainly the following:

- lengthy procedures of sitting the motorway sections – even if the situation in this department in the period 1999 – 2002 was much better (with regard to the number of adopted regulations referring to a detailed plan) than it was in the period between 1994 - 1998,
- rising of investment value of road sections due to typical internal and external reasons (introduction of VAT, costs of the change of intended use of agricultural land, additional works, higher level of processing of technical project documentation, change in the course and the length of the alignment, legal and ownership issues, environmental protection measures, the price of products and services, demands and requirements of consent givers, planned and implemented archaeological research), even, if the situation in the period 2000-2002 was much better, than it was in the period 1994 – 1999, due to less pronounced trend of investment value increase.
- reduction of financial sources allocated for the implementation of NMCP, even if the situation in this department the period 1998 – 2002 was much worse, than it was in 1994 – 1997, which is due to strong financial sources reduction trend.

The analysis of past investments in the state roads sector shows that in the years between 1997-2003 40% of the annual construction investment funds were invested into reduction of costs of the users, 23% into improvement of accessibility, 21% into road safety and 16% into road network maintenance. The analysis of time sequence of allocation of funds dedicated to separate goals shows the trend of decrease of relative share of funds intended for the reduction of costs of the users, improving accessibility and maintaining the network and increase in relative share of funds intended for improvement of road safety and living conditions.

By investing into railway network within the V and X pan-European corridors in 2003 and 2004 the following was achieved on road sectors where the investments were carried out:

- travelling time was reduced and consequently the costs of transport,
- accessibility to separate regions was improved as were the inter-region connections,
- by strict implementation of measures laid down in Articles 18, 21 and 25 of the Law on railway transport safety, referring to road/railway level crossings and non-level accesses to the platforms, the traffic safety was improved,
- the permitted axel load of at least category D3 (225 kN/axel and 72 kN/m) was ensured,
- harmonization and/or interoperability between public railway network and EU network, As provided for in the EU Directives 2001/16 and 50/2004.

Results of investments into maritime infrastructure:

- in the field of traffic control and safety a concession for maintenance of navigational safety facilities was assigned and the automatic identification system (AIS) was set up; maintenance work on vessels was performed,
- the seabed in the port of Koper was deepened (pier II at the mouth of river Rižana), the depth now being -13 or -14 m.

The National programme for the development of civil aviation is a development document in which strategic frameworks for the future development of air infrastructures (airports, buildings, devices and systems of air traffic navigation and control services) are defined as are the frameworks for development of aeronautical industry necessary to accommodate growing needs; the document provides for measures, which will improve safety and ensure control and protection against unlawful and harmful interventions into air traffic.

The document defines the adjustments that have to be made by the state bodies; these bodies are obliged to implement activities related to issuing of papers in accordance with standards and recommendations of the International Civil Aviation Organization (ICAO), in accordance with EU Regulations, the recommendations of the European Aviation Safety Agency and of the Joint Aviation Authorities (JAA), as well as in accordance with Act on Aviation of the RS; they are also obliged to make sure, that the users observe the regulations in force.

The above mentioned changes are necessary and are called for by technical development in civil aviation, by development of air traffic, by market and economic development, by the European trends related to civil aviation development and, last but not least, by safety condition in the world, especially in Europe.

With the adoption of this document the development of civil aviation in 5 year period will be defined as will the development guidelines for a long term period, up to the year 2030.

Currently the European development trends and the European legislation promote three basic development directions, reflecting mainly in the following:

- transfer of authority in the broadest sense from national to European level,
- clear and precise separation of civil aviation authorities as holders of control over services and activities within civil aviation (airports, air carriers, air traffic navigation and control service providers, aeronautical industry),
- harmonization of legislation and rules in civil aviation and implementation of control in practice.

In order to adopt to this trends most European countries are reforming their aviation authority structure; this is aimed at two objectives – to achieve better functional organization and, consequently, better economic effect.

In the table bellow total value of investments into transport infrastructure in the years 2003 and 2004 is shown (investment and maintenance) by transport type.



Table 12: Investments into transport infrastructure, current prices in 1000 SIT, VAT included

	2003	2004
Motorways *	99.502.614	116.255.408
State roads **	16.229.014	17.816.050
Railway ***	11.614.866	20.302.156
Air infrastructure ****	814	557.630
Maritime infrastructure ****	366	0
<b>Investment into transport infrastructure</b>	<b>127.347.674</b>	<b>154.931.244</b>

\* source: Annual report by DARS (Motorway Company)

\*\* source: Plan RDRS, including co-financing, all network construction measures except for regular maintenance

\*\*\* source: Public Agency for Railway Transport of the RS

\*\*\*\* source: State Budget of the RS

In the pre-accession years the Ministry of Transport obtained funds through EU pre-accession assistance programmes: the FARE programme and the Instrument for Structural Policies for Pre-Accession (ISPA) programme.

Within the frame of ISPA programme the European Commission approved, for the period 2000 through 2004, co-financing of four major railway related investment projects:

- Restoration of the cut Križni vrh with the rebuilt of the railway section Zidani most - Maribor(Phases 1 and 2),
- Modernisation of signalling and safety devices on the railway line Divača – Koper
- Upgrading the railway line Ljubljana - Zidani most - Maribor,
- Upgrading signalling and safety devices and telecommunications system on the railway line Pragersko - Ormož.

The estimated total value of all four-investment projects amounts to 91.19 million EUR, of which the share of EU-approved funds amounts to 37,93 million EUR. With Slovenia's accession to the EU all the projects, approved within the frame of the ISPA programme, became cohesion projects.

By becoming an EU member state Slovenia became entitled to the funds of the structural funds and the Cohesion Fund. Within the frame of the Cohesion Fund we submitted four projects, which were all approved. The submitted programmes are:

- railway project: Modernisation of the railway line Pragersko - Ormož– Project A (construction works);
- railway project: Remote management of the system of electric drive of Slovene railway network;
- motorway project: construction of Motorway Smednik - Krška vas;
- motorway project: construction of Motorway section Vrba – Peračica.

The estimated total value of all four-investment projects co-financed by the CF amounts to 295.65 million EUR of which the share of the EU funds amounts to 85 million EUR.

In the current financial perspective one project is being co-financed by the European Regional Development Fund – the project Modernization of airport infrastructure of the Maribor airport.

Through the implementation of railway projects in the past, some initial experience was gained related to the employment of the EU funds and the procedures of project and

application preparation as well as of implementation and in particular control procedures at all project phases. Initial problems reflected in slow preparation of projects and in complex procedures. In further phases of implementation more problems concerned public procurement procedures due to numerous complaints of potential bidders at all phases of public procurement. Consequently, the selection of a bidder and signing of a contract was not timely and therefore the employment of the EU funds was at risk.

In the implementation of motorway projects from the Cohesion Fund delays were mainly caused in the procedure of awarding a contract due to the complaints of bidders in the phase of opening the bids and the selection of the most favourable bidder, purchase of land and real estate because of a lack of clarity in ownership relations and exaggerated expectations of some land and real estate owners and delays were also caused in searching for the best location of the route (alignment) also because of different opinions of local communities concerning the location of individual sections.

During the current financial perspective the European Regional Development Fund is financing a project of the modernisation of the Maribor Airport Infrastructure. Within the Technical Assistance ERDF project in 2006 a project of the spatial documentation for the construction of the northern part of the 3<sup>rd</sup> development Axis was registered.

The implementation of these two projects can be assessed as successful since initial problems mainly related to administrative capacities were gradually overcome and bodies in the system of the Structural Funds and the Cohesion Fund in Slovenia learned a lot and examples of best practise will be transferred into the next period. In the beginning, the specificity of the airport project caused delays in the implementation. The selection of a company with necessary expertise and references in a tendering procedure was an extremely demanding task. The field of airport and airport building design requires good knowledge and observance of a very wide range of regulations and compliance with the Aviation Act, the Chicago Convention on Civil Aviation to which Slovenia is a signatory. Standards and recommendation of ICAO (International Civil Aviation Organisation), the EU (regulations, directives, recommendations), EASA (European Aviation Safety Agency), JAA (Joint Aviation Authorities), Eurocontrol (European organisation for safe air traffic) as well as the recommendation of other aviation organisations and institutions need to be taken into account depending on the complexity of an individual task.

### **3.1.2. Key orientations and goals**

On the basis of general goals of the OP for the development of environmental and transport infrastructure the strategy of transport part of the programme is set up, the purpose of which is the following:

**to promote and develop different possibilities for mobility of the population and for economy supply, with the emphasis on sustainable mobility,**

by means of

**improvement of reliability of the transport system, improvement of economic efficiency, improvement of transport safety and further development of and building awareness of users of transport services**

The goals of this part of OP ETID are based on strategic guidelines related to transport and transport infrastructure defined in the Transport Policy of the Republic of Slovenia; they are the following:

- achievement of social optimum in labour referring to transport sector,
- improvement of transport safety and protection,
- efficient use of energy, clean environment,
- expanding the scope and the quality of public passenger road and railway transport,
- harmonised functioning of the whole transport system,
- establishment of intelligent transport system architecture by implementing regional, national and European specifics,
- ensuring the necessary transport infrastructure for land and sea and air transport that will follow the principles of sustainable and balanced regional development
- ensuring reliable, safe, cost competitive and environment friendly freight and passenger transport.,
- ensuring highest possible level of safety, protection, reliability and financial efficiency in implementation of air traffic navigation services,
- optimum utilisation of the sources available,
- the establishment of the effects of market economy,
- the sale of shares owned by the state and deregulation where private bidders following the principle of market economy can ensure more competitive and quality services whereas the level of safety should be retained,
- precise directing of fiscal measures to provide those measures that can not be ensured on the basis of the market economy principle,
- ensuring the highest level of safety, protection, reliability and financial efficiency in the implementation of air traffic navigation services.

Due to geographical position of Slovenia - on the crossing of the V and X corridors - the freight traffic increased significantly after Slovenia's accession to EU. Therefore the redirection of major part of the freight (transit) transport as well as the passengers to railway transport is of great importance if we want to reduce the emissions of greenhouse gas. (As stated in the IV State report (UNFCCC - United Nations Framework Convention on Climate Change, December 2005) the redirection of 50% of current foreign traffic on state roads to railway, the emissions of CO<sub>2</sub> would annually drop by 50 Gg). So when investments into railway infrastructures are discussed, the environmental aspect has to be emphasized, for the share of sustainable forms of transport will increase. In comparison with road transport railway transport contributes significantly smaller emissions of toxic and greenhouse gases; its transport also needs less space and energy, it generates less noise and is generally safer.

Improvement of road traffic safety will be achieved by means of accelerated construction of motorway network and bypasses, by bettering the car pool, by educating the drivers and rising their awareness and by stricter monitoring of traffic violations. The Resolution on National Programme of Road Traffic Safety for the period 2007-2011 will also contribute to higher level of safety (Unite for better safety); the motto of this resolution is »No casualties on Slovenian roads«. The national programme gives vision and goal and defines measures for priority areas, which need to be implemented in order for better safety to be ensured. The primary objective of the programme is to reduce the incidence of severe, fatal traffic accidents (people killed or severely injured); this objective will be met by efficient implementation of measures laid down in the programme and by showing political will and public support. With regard to the state of traffic safety in some of the EU member states and in Slovenia,

national programme provides for most suitable measures, which need to be implemented in the area of human actions, traffic environment, vehicles and institutions.

Railway transport safety has been constantly improving in past decade – in respect to extraordinary events and inconveniences as well as to the extent of damages. Unfortunately this is not true, where events at railway level crossings are concerned or in cases of people walking along the railroad. These events are the result of relatively poor traffic culture of the participants in the traffic and of relatively small investments into protection or elimination of level crossings. In future railway traffic safety will have to be given more attention - investments into technical protection of traffic will have to be implemented, as well as modernization of vehicles and harmonization of our traffic system with the European system. The air traffic safety has to be ensured by constant training and strict professional supervision and by means of additional investments into air traffic navigation and control infrastructure.

Intermodality of the freight transport will be optimized with the projects proposed for co-financing from CF and ERDF, because the investment in infrastructure will be conducted in a way, that optimal implementation of road-railway and road-maritime transport will be enabled. Also in the Resolution on the transport policy is stated, that in parallel with the establishment of transport infrastructure, education of passengers to set up a passenger transport system on a intermodal way will be necessary (bicycle-car-taxi-ship-bus-train-plane).

Public interest in the area of public passenger transport is linked to social and ecological reasons. Due to increasing rate of motorization the number of users of public passenger transport is decreasing, therefore it is becoming more and more expensive – both, for users and for the state, which are indirectly or directly subvention it. Long-term price-acceptable solution is in attracting greater number of passengers, which will possibly rise the quality of passenger transport services. Promotion of public passenger transport is called for also for the reason of reducing use of energy and greenhouse gas emissions.

Changed market conditions - huge supply of different products with short life span, meeting the needs of consumers, the concept of no-inventories production - force the suppliers to provide smaller quantities in shorter time intervals. The result is that transport services grow more quickly than other services. Where road transport is concerned, the industry supply will profit most from elimination of bottlenecks, which will be achieved by completing the motorway network and by linking it to pan European transport corridors. Road transport system has to strengthen its role in short and medium-distance transport; in this respect the importance of development of intermodal hubs at regional and inter-regional level needs to be emphasized. With the development of Slovenian port and completion of its infrastructure (operative quay, storage facilities), together with modernization of its inland backbone transport infrastructure (railroads, motorways), more even distribution of cargo among different transport means will be possible. By establishing the system of sea motorways the possibility of opening new sea lines connecting the port of Koper with other European ports will present itself.

### 3.1.3. Compliance with European and Slovenian development documents

Conformity of traffic and traffic infrastructure development guidelines with the Strategy for the Development of Slovenia, with the Slovenian National Development Programme 2007 – 2013, with the Lisbon Strategy and with the EU Strategic Guidelines 2007 – 2013 is reflected in the tables below.

Table 13: Cohesion between the transport policy and the SDS goals

SDS goals	Transport sector goals	
1. To improve the quality of life and welfare of all individuals	4. to increase in the scope and quality of public road and rail passenger transport	3. Transport infrastructure – ERDF
2. To increase the chances of every individual to live a long, healthy and active life by investing into learning, education, health, culture, living conditions, and other sources for realization of personal potentials		
3. To create a more dynamic and adaptable society, capable to quickly respond to challenges of globalization and united European market	5. Coordinated functioning of entire transport system	3. Transport infrastructure – ERDF
4. To persistently increase economic growth and employment on the basis of principles of sustained development and long-term maintenance of economic, social and environmental equilibrium	8. ensuring reliable, safe, cost-competitive and environment friendly freight and passenger transport 9. optimal use of available sources	3. Transport infrastructure – ERDF
5. to increase global competitiveness by promoting innovativeness, entrepreneurship, use of information/communication technology and by efficient modernization and investing into learning, education, training and development and research	6. establishment of intelligent transport system architecture by implementing regional, national and European specifics orientations and interests	3. Transport infrastructure – ERDF
6. To increase the efficiency of state and to decrease its direct involvement in the economy;	10. establishment of the effects of market economy,  11. the sale of shares owned by the state and deregulation where private bidders following the principle of market economy can ensure more competitive and quality services whereas the level of safety should be retained 12. precise directing of fiscal measures to provide those measures that can not be ensured on the basis of the market economy principle	
7. To decrease social risks for the most vulnerable groups, to decrease poverty and social exclusion		
8. To create conditions for sustainable growth of population		
9. To speed up the development of all regions and to decrease the backwardness of least developed regions	7. Ensuring the necessary transport infrastructure for land and sea and air transport that will follow the principles of sustainable and balanced regional development	1. Railway infrastructure – CF 2. Road and maritime infrastructure – CF 3. Transport infrastructure – ERDF

10. sustainable environmental and spatial development	3. efficient use of energy and clean environment	1. Railway infrastructure – CF 2. Road and maritime infrastructure – CF 3. Transport infrastructure – ERDF
11. to increase all forms of safety, to fully respect human rights, to prevent discrimination and to actively participate in providing equal possibilities	2. increasing safety and protection	1. Railway infrastructure – CF 2. Road and maritime infrastructure – CF

Table 14: Cohesion between the transport policy and the SDS economic/development priorities

Priority of NDP RS	Transport sector goals	Development priorities of OP ETID
<b>Priority 1: Global competitiveness</b>		
1. Competitive capability companies – development of economy	1. achieving social optimum in work related to transport sector 5. Coordinated functioning of entire transport system 7. ensuring transport infrastructure for land and sea and air transport that will follow the principles of sustainable and balanced regional development 8. ensuring reliable, safe, cost-competitive and environment friendly freight and passenger transport	1. Railway infrastructure – CF 2. Road and maritime infrastructure – CF 3. Transport infrastructure – ERDF
2. Promotion of entrepreneurship – supportive environment 4. Promoting of domestic and foreign developmental investments and internationalization of Slovenian economy	6. establishment of intelligent transport system architecture by implementing regional, national and European specific orientations and interests 7. ensuring transport infrastructure for land and sea and air transport that will follow the principles of sustainable and balanced regional development 8. ensuring reliable, safe, cost-competitive and environment friendly freight and passenger transport	1. Railway infrastructure – CF 2. Road and maritime infrastructure – CF 3. Transport infrastructure – ERDF
3. To promote development of tourism	4. increasing in the scope and quality of public road and rail passenger transport 5. Coordinated functioning of entire transport system 8. ensuring reliable, safe, cost-competitive and environment friendly freight and passenger transport	1. Railway infrastructure – CF 2. Road and maritime infrastructure – CF 3. Transport infrastructure – ERDF
9. Development and promotion of active policy of work market – increasing employment rate in young people	4. increasing in the scope and quality of public road and rail passenger transport 5. Coordinated functioning of entire transport system 6. establishment of intelligent transport system architecture by implementing regional, national and European specific orientations and interests 8. ensuring reliable, safe, cost-competitive and environment friendly freight and passenger transport	1. Railway infrastructure – CF 2. Road and maritime infrastructure – CF 3. Transport infrastructure – ERDF

10. Development of rural areas – competitiveness of agro food and forestry	7. ensuring transport infrastructure for land and sea and air transport that will follow the principles of sustainable and balanced regional development 12 precise directing of fiscal measures to provide those measures that can not be ensured on the basis of the market economy principle	1. Railway infrastructure – CF 2. Road and maritime infrastructure – CF 3. Transport infrastructure – ERDF
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<b>Priority 2: High quality of life</b>		
1. . Development and promotion of active policy of work market 3. Promotion of regional development 8. Housing 11. Development of rural areas – improvement of quality of life in rural areas and promotion of diversification	4. increasing in the scope and quality of public road and rail passenger transport 5. Coordinated functioning of entire transport system 6. establishment of intelligent transport system architecture by implementing regional, national and European specific orientations and interests 7. ensuring transport infrastructure for land and sea and air transport that will follow the principles of sustainable and balanced regional development 8. ensuring reliable, safe, cost-competitive and environment friendly freight and passenger transport 12. precise directing of fiscal measures to provide those measures that can not be ensured on the basis of the market economy principle	1. Railway infrastructure – CF 2. Road and maritime infrastructure – CF 3. Transport infrastructure – ERDF
4. Territorial cooperation	6. establishment of intelligent transport system architecture by implementing regional, national and European specific orientations and interests	3. Transport infrastructure – ERDF
7. Improving health of the population	5. Coordinated functioning of entire transport system 6. establishment of intelligent transport system architecture by implementing regional, national and European specific orientations and interests 7. ensuring transport infrastructure for land and sea and air transport that will follow the principles of sustainable and balanced regional development	1. Railway infrastructure – CF 2. Road and maritime infrastructure – CF 3. Transport infrastructure – ERDF
10. Development of rural areas – improving rural environment	3. Efficient energy use and clean environment 7. ensuring transport infrastructure for land and sea and air transport that will follow the principles of sustainable and balanced regional development 9. optimal use of available sources	1. Railway infrastructure – CF 2. Road and maritime infrastructure – CF 3. Transport infrastructure – ERDF

<b>Priority 3: Good availability of support services</b>		
1. Efficient transport infrastructure	All goals of sectoral NDP	1. Railway infrastructure – CF 2. Road and maritime infrastructure – CF 3. Transport infrastructure – ERDF
4. Sustainable energy	3. Efficient energy use and clean environment 4. increasing in the scope and quality of public road and rail passenger transport 8. ensuring reliable, safe, cost-competitive and environment friendly freight and passenger transport	1. Railway infrastructure – CF 2. Road and maritime infrastructure – CF 3. Transport infrastructure – ERDF

Table 15: Cohesion between the transport policy and the priority measures of the Lisbon strategy

Priority of Lisbon strategy	Goals of the transport sector	Development priorities of OP ETID
<b>Guideline 13: Ensuring open and competitive markets</b>		
1. Establishing integrated system of public passenger transport (single tariff system, uniform tickets, coordinated timetables and unified information system, intermodal terminals).	4. increase the scope and quality of public passenger road and rail transport	3. Transport infrastructure – ERDF
2. Promoting integral logistic services by establishment of intelligent transport system architecture by implementing regional, national and European specific orientations and interests.	6. establishment of intelligent transport system architecture by implementing regional, national and European specific orientations and interests	3. Transport infrastructure – ERDF
3. the sale of shares owned by the state and deregulation when applicable	11. the sale of shares owned by the state and deregulation where private bidders following the principle of market economy can ensure more competitive and quality services whereas the level of safety should be retained	
4. Changing internal legislation applying for railway, in accordance with railway package II.	10. establishment of the effects of market economy	
5. Adopting new law on Ports which will define legal conditions for management of ports , for performing port-related activities and the use of maritime.	9. optimal use of available sources . establishment of the effects of market economy	
6. Unification of transport/ethnological and safety regulations referring to air transport and introduction of more liberal procedures related to commercial aspects of transport.	8. ensuring reliable, safe, cost-competitive and environment friendly freight and passenger transport	
<b>Guideline 16: Expanding, improving and connecting the European infrastructure and completion of cross-border priority projects</b>		
1. Railway infrastructure: investment activities on TEN-T network, upgrading of rails and construction of new lines and required devices with the intension to increase speed and axle loads, reconstruction of existing rails and building of passenger centres.	7. ensuring transport infrastructure for land and sea and air transport that will follow the principles of sustainable and balanced regional development	1. Railway infrastructure- CF
2. Road infrastructure: Completion of motorway network by 2010, implementation of national programme for development and maintenance of state roads.	7. ensuring transport infrastructure for land and sea and air transport that will follow the principles of sustainable and balanced regional development	2. Road and maritime infrastructure – CF 3. Road infrastructure – ERDF
3. Maritime infrastructure: increasing capacities of maritime freight transport in the port of Koper and connecting the port to road and railway infrastructure.	7. ensuring transport infrastructure for land and sea and air transport that will follow the principles of sustainable and balanced regional development	1. Railway infrastructure- CF 2. Road and maritime infrastructure – CF
4. Air transport infrastructure: modernization of international airports and air traffic navigation and control	7 ensuring transport infrastructure for land and sea and air transport that will follow the principles of sustainable and balanced regional development	2. Road and maritime infrastructure – CF 3. Road infrastructure – ERDF

In the “Lisbon” programmes, as defined by Article 9.3 of the Decree of the Council on General Provisions on the European Regional Development Fund, the Social Fund and the Cohesion Fund, the development priorities »Railway Infrastructure« (codes 16, 17) and



»Road and Maritime transport infrastructure - CF« (codes 21, 30), while only part of the third development priority dealing with airports and multimodal transport (codes 26 and 29) were taken into account.

Table 16: Links between the goals of the OP and Strategic guidelines of the Community for the periodic, 2007 – 2013

Strategic guidelines of the EC	Goal of the transport sector	Development priorities of OP ETID
Priority to 30 projects of EU interest, located in the EU member states and regions, which are beneficiaries in accordance with the convergence goal (decision No. 884/2004/EC) and with other projects of EU networks	List of projects, suitable for co-financing from the CF includes all railway projects from the mentioned decision of EU, as well as the motorway projects on TEN	1.Railway infrastructure-CF
Investments into secondary connections	Construction of third development axis is planned which represents increase of accessibility and connectedness and thus development of weaker and border areas of Slovenia	3.Transport infrastructure-ERDF
Support to railway infrastructure – strengthening of interoperability network building	All modernizations will be implemented in accordance with prescribed technical specifications of EU for ensuring interoperability.	1.1.Railway infrastructure-CF
Promotion of environmentally sustainable transport networks	Construction of 85 km of state roads is planned as well as reconstruction of 130 km of state roads and 500 km of cycling tracks and setting up of single ticket system	1.Railway infrastructure-CF 2.Road and maritime infrastructure – CF 3..Transport infrastructure - ERDF
Improvement of connectedness of non-coastal areas with trans-European network	Construction of second rail on the line Divača-Koper is planned, with which the capacity of the line which links port with the mainland	1.Railway infrastructure – CF 2.Road and maritime infrastructure – CF 3.Transport infrastructure – ERDF
Development of »motorways of sea«	construction of 1.800 m of quay is planned in order to ensure annual additional transshipment in the quantity of 7,5 million tons	2.Road and maritime infrastructure – CF

### 3.1.4. Development priority »Railway Infrastructure – CF«

The projects belonging to the field of railway infrastructure and presented in the continuation represent a priority, because their implementation is necessary for balanced regional, economic and sustainable development of the state. The proposed investments mean reduction of negative environmental impacts, which consequently means, that they promote nature-friendly railway transport, which is the main factor for success on more and more open area of market and competition. Modernization and additional construction of railway network are the basis for improvement of transport services and for ensuring sufficient capacity of the network to meet future needs. By introducing new technologies the required level of technical standards will be achieved; this will contribute to interoperability and competitiveness of railway freight transport in comparison with other forms of transport. Also, safety, punctuality and reliability of railway transport will be ensured. With this, the conditions for gradual redirecting of transport to the railway infrastructure will be met, as well as the conditions for greater mobility by using railway services. In the future, by investing into technical protection of traffic and for the purpose of harmonization of our transport system with the European, special attention has to be given to the safety of railway transport.

### *Description with rationale*

All the proposed projects the implementation of which is planned in the new financial perspective, involve modernization or construction of new railway infrastructure in the Republic of Slovenia which is, through corridors V and X, integrating into the TEN transport network.

Modernization and construction of railway infrastructure in corridors V and X represent a priority arising from the European strategic documents as well as from the National Programme for the Development of the Slovenian Railway Infrastructure, defining the operative development goals. The decision on modernization and construction of Slovenian railway network is based on the need to improve transport services and the need to ensure sufficient capacity of the network to meet future needs in corridors V and X. With a gradual modernization of the Slovene railway network and with the introduction of new technologies, a requested level of technical standard will be established, which will contribute to achieve interoperability of the whole TEN network.

Rapid development of railway axis Lyon –Trieste - Divača/Koper – Divača – Ljubljana – Budapest – Ukrainian border – with Slovenian network being also a part of this axis - is defined as a priority also in the Decision of the EU Parliament and Counsel No. 884/2004/EC of April 29 2004, supplementing the Decision No. 1692/96/EC on the Guidelines of the Community for the development of trans-European transport network. Slovenia also regards it as priority in its plans whereas in the OP ETID only a part of projects is included due to limited financial resources.

The railway lines (Trieste-South) – Divača, Koper- Divača - Ljubljana and Ljubljana - (Budapest), running through the territory of Slovenia, are defined in the Decision No. 884/2004/EC, Annex III, Section, an integral part of Trans-European transport network; it is planned that they will be modernized by 2015. For the line “Trieste-Divača” two studies are being prepared within the frame of Interreg III A, which will set the grounds for definition of optimal line of the railway; this is of utter importance due to high estimated investment value; for construction of this line the exploitation of TEN-T funds is envisaged. On the other hand for the line "Divača-Koper" 5.47 million EUR of technical assistance for the preparation of the “Technical study for the construction of the 2nd railway track on the line Divača-Koper” have already been approved. The funds for construction are planned in the frame of this OP. This approach is in coordination with Italian partners, which reflects in the Statement on intent to build railway connection, in accordance with the Decision 884/2004/EC Trieste-Divača/Koper/Divača, signed by Italian and Slovenian Ministers on 28 February, 2006.

In line with the Declaration of intent to construct the railway connection Trieste – Divača and according to the timeline for the implementation of a study within the Interreg IIIA Programme, the Decision of the European Commission that approved funds for the technical study was amended on 10 November, 2006:

- the deadline for the implementation of the project was prolonged by 31 December, 2008, and
- the subject of the Decision on studying a possibility of potential introduction of a new double-track line Divača – Koper.

The Interreg IIIA study will be completed in June 2008.

Despite the possibility of building a new connection, the modernisation of the existing track is necessary. And after the new track has been constructed, most of the investments within the project of the modernisation of the existing track (power station, the reconstruction of devices on this line in Koper and Divača and partly at Hrpelje-Kozina station; safety and telecommunication devices including the protection of eight unprotected level railway crossings on the Divača-Prešnice section) will also serve the new track irrespective of the number of tracks. This is an important justification of the necessary modernisation and the connection with Croatia secures long-term soundness of the investments. This will be clearly stated in the application of this project that will be submitted to the Commission for its approval. Via the railway diversion at Prešnica this track is connected with the Croatian railway network (Istria) and is the only connection between this geographical area and the rest of Croatia. This also enables a connection between Istria and Italy, which will gain importance when Croatia becomes an EU member state. These measures will safeguard interoperability of this section of the international connection.

With the project GSM-R digital radio connections on the 5th and 10th trans-European corridors will be introduced. It is planned for the period 2007-2009. In 2007 the preparation of documentation will start. The introduction of GSM-R on the 5<sup>th</sup> corridor means the modernisation of a track that is a part of the 6<sup>th</sup> priority project. This will coincide with the introduction of the ERTMS system and these activities have already started at the European level within the implementation of the ERTMS on the D Corridor (Valencia - Lyon – Torino – Venezia – Ljubljana – Budapest).

Within the frame of TEN-T financial instrument studies will be proposed (preparation of project documents) for which co-financing is possible up to 50%. There is also possible to finance partner projects with other member states from the donations of the Community on TEN-T network, which is not possible to finance from the EU funds. Slovenia will, together with member states on the corridor D, submit joint application for obtaining TEN-T funds for implementation of project »Introduction of system ERTM/ECTS in Slovenian railway system«

### **Goals and indicators**

*Table 17: Indicators DP Railway infrastructure - CF*

DP Railway infrastructure-CF quantified targets		Baseline (last available data)	2013 target	Source
<b>Output</b>				
1	Number of projects		5	CIS
2	Km of new railways located on TEN	1.227	increase by 28	CIS
	Km of reconstructed railways located on TEN		400	CIS
3	Increase in railway freight transport (in million tonnes-km)	3.750	4.808	SORS
CIS: central information system; SORS: Statistical Office of the Republic of Slovenia				

In the planned period 28 km of new railway tracks will be constructed. This involves a new track Divača - Koper. On the existing network of 1,227 km, 400 km of railway tracks will be modernised.

The objectives of individual investments differ according to the content and can not be generalised as the results in the table above. At the general level the results of investments are defined as follows:

- increasing capacity in tonnes,
- increasing transport safety,
- more efficient management of transport,
- reduction of operational costs,
- introduction of operability.

### ***Development context***

The OP for the development of environmental and transport infrastructure – the railway sector – is based on the following transport- related strategic documents::

- Resolution on transport policy of the Republic of Slovenia, adopted by the National assembly on 5. 3. 2006;
- National programme for the development of Slovenian railway infrastructure;

All the mentioned transport-related documents comply with:

- Strategy for the Development of Slovenia, adopted by the Government of the RS on 6. 23. 2005;
- Strategy of the spatial development of Slovenia (Off. Gazette of the RS No. 76/2004);
- Strategy of the economic development of Slovenia 2001 – 2006;
- Draft National Development programme 2007 – 2013, which is being prepared.

### ***Planned activities***

Within the frame of the projects, carried out on the TEN network the following is planned:

- ensuring that the permitted axel load will be of at least of category D3 (225 kN/axel in 72 kN/m),
- electrification of the line Pragersko – Hodoš – state border, by employing necessary operations and with keeping in mind that in the future two-rail line will be constructed,
- construction of new railway connection Divača – Koper,
- upgrading the lines to the level which will ensure their interoperability, and thus compliance with the provisions of the EU Directives 2001/16 and 50/2004,
- increase the highest permitted threshold speeds on the main lines corresponding with V and X corridors to 160 km/h, with permitted justified derogations,
- further modernization of signalling and safety devices on the lines within V corridor,
- modernisation of level crossings and subways at stations.

### *Indicative list of major projects*

Proposed projects in the area of railway infrastructure to be co-financed by the CF (VAT included). Table 18 involves five projects regarded as priority ones for co-financing from the Cohesion Fund and Table 19 contains a reserve project if any of those in Table 18 is not ready for immediate implementation.

The projects covered by the definition in Article 39 of the Regulation 1083/2006 will be confirmed by the European Commission and are shadowed in the tables below:

*Table 18: Priority projects of the DP Railway infrastructure – CF*

<b>No.</b>	<b>Project title</b>	<b>Estimated value of total investment with VAT</b>
		<b>Millions of EUR</b>
1	Modernization of existing railway line Divača-Koper	105.64
2	Reconstruction, electrification and upgrading of line Pragersko-Hodoš for 160 km/h	173.42
3	Modernization of level crossings and crossings at stations	240.69
4	Introduction of GSM-R system into Slovenian railway network*	72.36
5	Construction of new railway connection Divača-Koper*	799.43
<b>Total railway infrastructure</b>		<b>1,218.46</b>

\* The project will be completed after 2013.

*Table 19: Indicative list of reserve projects of the DP Railway infrastructure – CF*

<b>No.</b>	<b>Project title</b>	<b>Estimated value of total investment with VAT</b>
		<b>In millions of EUR</b>
1	Introduction of ETCS system into Slovenian railway network	132
2	Upgrading of line Celje – Pragersko - Šentilj for speed 160 km/h	234,39
3	Introduction of traffic remote control on corridors V. and X.	255
4	Construction of second rail / New two-rail line Ljubljana-Jesenice/state border with Austria	522
5	Construction of second rail on the line Maribor-Šentilj/state border with Austria	180,2
<b>Total railway infrastructure</b>		<b>1.323,59</b>

\* Project is envisaged on the 10<sup>th</sup> Corridor.

### 3.1.5. Development priority “Road and maritime infrastructure - CF”

#### *Description and rationale*

To ensure an adequate mobility of population and economy supply it is vital to supply proper sitting of transport infrastructure and its quality, which is reflected in the maintenance quality, modernization and construction of additional or new facilities. Transport policy measures on economy supply deal manly with accelerated modernization of transport infrastructure, interstate transport linkage and linkage with international traffic flows, especially trans European network (TEN). This has to include also intermodal freight transport terminals.

Upon completion of motorways bottlenecks will be avoided, better traffic fluidity and safety will be ensured, whole Slovene motorway network will be completed, which will ensure good traffic linkage inside Slovenia and those with European region.

Where the expansion of the TEN network is concerned, special attention is given to sea motorways which serve as an intermodal transport linkage between various traffic roads, especially sea and inland waterway transport, and railway and road transport. Classic loading and unloading of ship cargoes is too time consuming and costly, which badly effects the competitiveness of above mentioned services, which gives priority to road transport, its network, unless overburdened, ensures faster delivery. Upon further standardization and automation and better logistic management – especially concerning container transport - numerous Short Sea Shipping have to be used for redirection of cargoes from overburdened roads to sea by implementation of combined road-maritime transport; this can also contribute to the scope of “door to door” services and reducing the costs, because such services cannot usually be provided by railway and maritime traffic alone. Republic of Slovenia supports the efforts of EU to establish the sea motorway system, in which port Koper plays an important role for the states of the central part of EU of a central meeting point between Adriatic – Ionic sea motorways and the transport roadways of intermodal 5<sup>th</sup> corridor of TEN-T network.

#### *Goals and indicators*

Table 20: Indicators DP Road and maritime infrastructure - CF

DP Road and maritime infrastructure – CF quantified targets		Baseline (last available data)	2013 target	Source
<b>Output</b>				
1	Number of projects		5	CIS
2	Km of new highways located on TEN	398	463	CIS
3	Metres of new operational coastline	3358	5158	CIS
<b>Result</b>				
4	Freight transshipment volume in Port of Koper (mio tonnes)	13	20,5	MT
5	Value for time savings in Euro/year stemming from investments in highways (in mio €)		36	MT

CIS: central information system; MT: Ministry of transport

In accordance with the funds available, in past five years Slovenia constructed the motorway network in individual sections. This is why main transit routes retained some of the bottlenecks. They will be eliminated by building planned sections totalling 65 km.

The main objective of Slovenia is to complete the motorway network in the directions of both corridors running through Slovenia, the 5th trans-European Transport Corridor, Fernetiči (Italy)/Koper-Pince (Hungary) and the 10th trans-European Corridor, Karavanke (Austria) – Obrežje (Croatia) and Šentilj (Austria) – Gruškovje (Croatia). Thus faster transit flow will be enabled in the direction NW-SE and SW-NE. The reduction of time costs is assessed to amount to EUR 36 million.

In the Port of Koper the increased trans-shipment by 6 to 7 million tonnes in the period 2007-2013 is possible only by timely construction of the base part of the port infrastructure with public ownership: new operative shore of the total length of minimum 1800m. With the implementation of a project of sea motorways in the Adriatic-Ionian direction the trans-shipment of containers, transport by trucks and railway carriages with RO-RO ferries will increase. For this purpose a half of new operative shores will be constructed and the other part is the construction of operative shores on the already existing terminals on the Docks I and II of the Port of Koper intended for trans-shipment of loads such as timber, bulk and liquid load and by transferring mooring equipment for tankers from the port basin II to the top of Dock II the safety of sea transport will significantly increase.

### ***Development context***

On the basis of the following strategic documents concerning traffic section operational programme on development of spatial and traffic infrastructure is prepared:

- Resolutions on transport policy of Republic of Slovenia, adopted by the National Assembly on May 3<sup>rd</sup> 2006;
- Resolution on RS National motorway construction programme (Off. Journal of the RS, No 50/04, ReNPIA);
- Draft national programme on maritime development;

Each above mentioned development document complies with:

- Strategy for development of Slovenia, adopted by The Government of RS on June 6<sup>th</sup> 2005;
- Strategy for spatial development of Slovenia (Off. Gazz. RS no. 76/2004);
- Strategy for the development of economy of Slovenia 2001 – 2006;
- Draft National development programme 2007 – 2013, which is being prepared.

### ***Priority guidelines***

Measures of the priority Traffic infrastructure in the frame of Cohesion Fund are coherently bound in the framework of two **priority guidelines**:

- Road sector,
- Maritime sector.

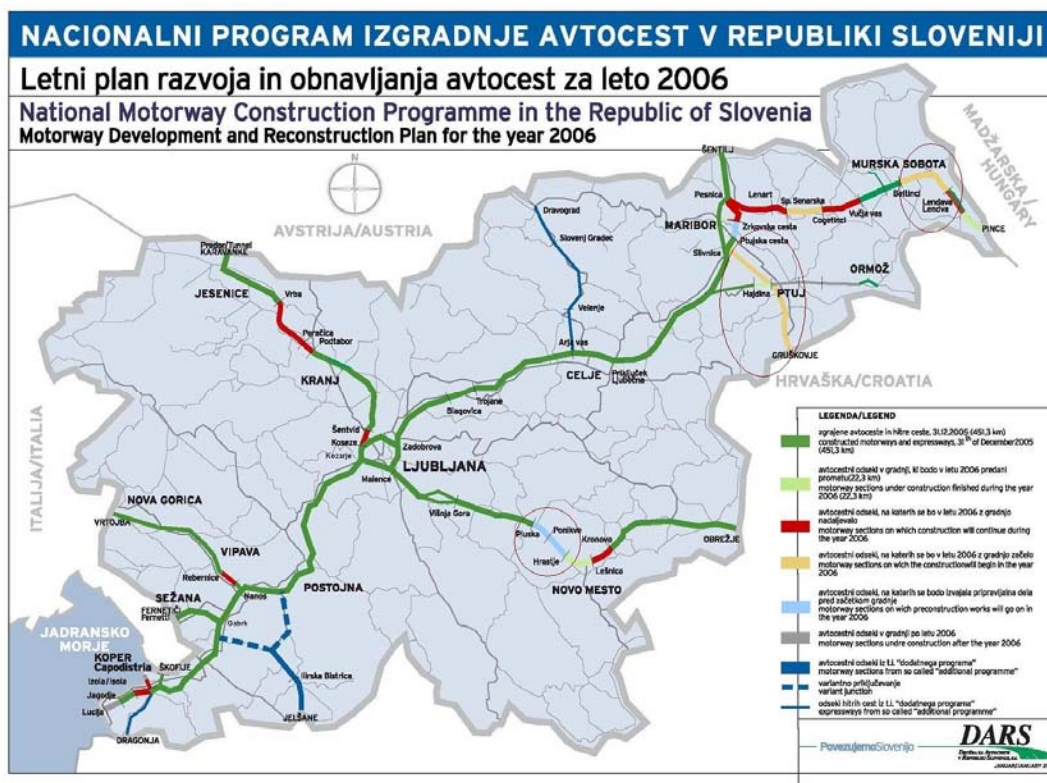
### 3.1.5.1. Road sector

#### Description and rationale

Construction of the proposed five motorway sections, 65 km in length, which represent a component part of TEN network, is required on the basis of international obligations RS towards EU. The strategic direction is specified in The strategy of spatial development of Slovenia, operational goals in Resolution on national programme on motorway construction in RS. By completion of construction of these motorway sections (except the section between Postojna and Jelšane) the Slovenian part of trans-European network will be completed, and at the same time national interest, based on the following principles, will be met:

- it has to promote harmonious and balanced regional and economical development of all the Slovenian regions, as well as the development of the state within the framework of its EU membership,
- based on EU membership conditions, it has to promote the visibility of RS in Europe and elsewhere in the world, mainly by safeguarding and promoting its cultural heritage
- it has to promote multiplicatively of its economic effects,
- the motorway construction priorities have to be based on the priority defining criteria or on criteria that define the sequence in which those sections that have not yet been built or are not currently being built will be built,
- it has to draw on economically and technically – technologically acceptable solutions harmonized with macroeconomic abilities, interests off RS concerning national economy and protection.

Picture 12: (circled) Sections planned to be co-financed from the Cohesion Fund





These projects proposed to be financed within the second development priority will contribute to a more balanced regional development. The construction of missing sections in the motorway network will allow for a more efficient flow of people, goods and services in the whole of Slovenia as well as between Slovene regions and the most important economic centres as well as in the EU since our country strongly depends on its environment due to the size of territory and population. Improved internal and external connections will have a positive impact on further polycentric development, decentralisation and more even regional and economic development.

From the point of view of sustainable mobility the completion of the motorway network will reduce standstills in both directions and because of decreased speed and number of standstills, discharge of greenhouse gases will reduce. In Slovenia, transport safety is one of the key issues. As regards the number of accidents per a unit of kilometres travelled Slovenia is, unfortunately, still at the top in Europe although the situation partly improved after the adoption of the Act on Road Transport Safety in 1999. The completion of the motorway network needs to significantly contribute to increased level of transport safety.

### ***Planned activities***

For the construction of motorway sections listed in Table 18 the implementation of a public tender for the award of works contract and then a 4-lane motorway are planned. The project activities also involve the construction of necessary motorway access and exit points, measures ensuring environmental protection, natural and cultural heritage preservation and sustainable use of natural goods and measures ensuring protection against noise as well as the measures stipulated in the Decree on the National Development Plan. Technical documentation has already been prepared.

### ***Indicative list of major projects***

Table 21 involves four projects regarded as priority ones for co-financing from the Cohesion Fund and Table 22 contains a reserve project if any of those in Table 21 is not ready for immediate implementation.

The projects covered by the definition in Article 39 of the Regulation 1083/2006 will be confirmed by the European Commission and are shadowed in the tables below:

*Table 21: Indicative list of reserve projects PO Road infrastructure*

<b>No.</b>	<b>Project title</b>	<b>Estimated value of total investment with VAT</b>
		<b>In millions of EUR</b>
1	Motorway A2; BIČ-HRASTJE: section Pluska-Ponikve	114.27
2	Motorway A2; BIČ-HRASTJE: section Ponikve-Hrastje	83.26
3	Motorway A5; BELTINCI-PINCE: Beltinci-Lendava	121.80
4	Motorway A4; SLIVNICA-GRUŠKOVJE: Slivnica-Draženci	316.77
	<b>Total motorways</b>	<b>636.10</b>
	<b>Total road infrastructure (CF)</b>	<b>527.15</b>

Table 22: Indicative list of reserve projects PO Road infrastructure

No.	Project title	Estimated value of total investment with VAT
		In millions of EUR
1	Motorway A4; SLIVNICA-GRUŠKOVJE: Draženci-Gruškovje	206,8

Within the PO co-financing from the Cohesion Fund is planned amounting to EUR 206.8 million.

### 3.1.5.2. Maritime sector

#### *Description and rationale*

International Public Transport Port of Koper (hereinafter Port of Koper) is an important junction of maritime and mainland traffic and has strategically very important central geographic position in the northernmost part of Adriatic on V. pan European corridor, which strongly attracts important international trading trends and represents competitive advantage for Slovenian importers and exporters and for providers of transport logistic services from hinterland central European countries, other UN countries and from elsewhere in the world.

In Port of Koper the development of quayside services needed in international trading depends on the growth in trade in goods in the states located in the gravitational area, on international trade in goods in Slovenia; it depends on the attractiveness of the services rendered, attractiveness of Slovenian traffic roads and status of Port of Koper within the EU policy adopted for maritime ports. Due to the undefined status on the international market of port services, the role that Port of Koper plays in the international European network of maritime roads and ports needs to be defined; mutual relations between the state as an owner of the port infrastructure and the current lessee and future concessionaire, Port of Koper d.d. have to be established. The latter will be possible after the adoption of the Ports Act, which will establish public port administration that will act as a non-profit port manager and as an independent supervisor over access to port infrastructure. In order to ensure successful and on time development it is necessary to adapt its present organisation to European legal/economical standards by awarding it an appropriate concession in one of the forms of public private partnership.

In the frame of preference directions principally the construction of crucial part of public port infrastructure, the operative quays in Port of Koper is planned, which includes the construction of new operative quays at the Pier III and upgrading of the existing ones at the Piers I and II; it is also the bases of on time enlargement of the transshipment capacities needed due to the constant increase in maritime traffic in Northern Adriatic. Parallel to extension of the piers and terminal capacities the development of road and railway connections within the port will be in progress. To ensure more efficient exploitation of coastline (the new sizes of ships taken in consideration) some of the berths will be enlarged and strengthened.

Infrastructural interventions will be in accordance with development projects both in wider local and national context. The implementation of projects concerning national infrastructure

has to be accelerated, because they play the key role in traffic connectedness between Port of Koper and TEN-T network. In this context financial sources have to be provided for construction of new port facilities and appropriate transport links (Srimina access point) to motorway and railway infrastructure (the new double rail line between Koper and Divača) in the direction of V. and X intermodal TEN corridors.

Due to a very favourable location in the vicinity of the countries of Central Europe, the Port of Koper will significantly contribute to the observance of the principle of sustainable development with the planned construction of operative shore since it will enable “Short Sea Shipping” and setting up sea motorways between the ports in the Adriatic-Ionian area and in the direction of the Eastern Mediterranean, which will contribute to disburdening of land – road and railway corridors running from the Central European countries to the South-eastern Europe.

Additional metres of operative shore in the Port of Koper will speed up the development of regular ship passenger lines and the establishment of more short sea shipments between ports, which will have a favourable impact on a more balanced development of the Adriatic area.

### ***Planned activities***

In the frame of preference directions construction of new multimodal terminal, extension of operative quays, construction of manipulation rails, marshalling, construction of direct link to the central railway station and appropriate motorway links will be set in motion. Extension of existing terminals, construction of new ferry terminal for international passenger transport will be initiated; numerous other investments will be made in order to help improve the efficacy of port, for instance reorganisation and reconstruction of manipulation areas, improvement of depot capacities, ecological upgrading of the European energy terminal, deepening of port basins and so forth.

### ***Indicative list of major projects***

The priority project for maritime infrastructure sector, co-financed from the **Cohesion Fund**, is as follows:

The project is covered by the definition in Article 39 of the Regulation 1083/2006 and will be confirmed by the European Commission:

*Table 23: Priority project PO Port infrastructure*

<b>No.</b>	<b>Project title</b>	<b>Estimated value of total investment with VAT</b>
		<b>In millions of EUR</b>
<b>1</b>	Development of port infrastructure	83,73
<b>Total maritime infrastructure</b>		<b>83,73</b>

Within this PO indicative co-financing from the Cohesion Fund is planned amounting to EUR 34.5 million.

The “Development of port infrastructure – construction of the operative shore” project will be financed within the Operational Programme of strengthening Regional Development Potentials for the period 2007-2013.

### **3.1.6. Development priority “Transport infrastructure - ERDF”**

#### *Description and rationale*

Concentration of economic activities and population in certain areas has in the past caused not only difference in living and working conditions, but also poor traffic connections between the regions. Less developed and more marginal Slovenian regions are mostly poorly connected to long distance international highways, but the main problem is poor regional traffic connection. Recommended projects are thus priority concern for each region and their implementation is vital for balanced regional, economic and sustainable state development.

General present state of the existing state road network, main and regional roads, is very poor; present data show that 42% of existing road network is in poor or very poor state; Average daily traffic on state roads has increased between 2001 and 2004 by 2.6% per year. These conditions present an obstruction in implementation of balanced regional development for those Slovenian regions, which are not located on motorway cross. Due to their location and consequent poor accessibility and high transportation costs these regions are becoming non-competitive, even although they possess other potentials necessary for development. This shows that by renovation and upgrading of state motorways bottlenecks will be eliminated and traffic fluidity and safety improved. Elimination of bottlenecks will have a direct economical impact on users (lower transportation costs), will indirectly ensure economic competitiveness (better accessibility increases industry and tourism market potential), and will have positive impact on regional development.

In the context of promoting regional development it is also vital to consider the establishment of necessary airport infrastructure, which is not only needed for assuring accessibility, but is also a necessary condition for economic zones to be established and thus faster economic growth. Except for central Ljubljana airport elsewhere the airport infrastructure is in fairly poor state, especially at the Maribor airport, where the requirements for technical and technological capacity are barely met. In the sector of airport infrastructure we expect, that in the next ten years, will air transport quantitative grow on a today’s level in the EU, which mean a four time increase of passengers and a duplication of aviation capacities in the EU till 2015; the consequence of this is, that there will be a need to upgrade air traffic control system and with this related safety in the air transport sector.

In line with Slovene spatial development strategy and ecology orientated tourism development of cycling routs network has been planned, which will also contribute to physical fitness of the population. As a means of transport a bicycle is mainly used locally for short trips, but also for longer trips for recreational and tourist purposes. So it is important to establish cycling routes and promote cycling both for economical, ecological and recreational reasons. Tourism also profits from good cycling routes. By establishing the net of main cycling routes Slovenia would offer good conditions to those who want to cross it by bicycle; this is one of the newest suggestions concerning the development of European cycling routs network.

The development of public transport brings also better accessibility of regional centres by means of public transport. The public transport system is being developed in combination with aviation, railway, road and maritime transport. Development of transportation system “train – bus” together with development of parking lots and cycling routes has the priority in order to establish the “park and ride” system.

In general, all the proposed projects within the third development priority co-financed by the ERDF will contribute most to a better mobility of the population in order to increase the competitiveness at the regional level and connect the peripheral areas with the Central Slovenia and better supply.

### **Goals and indicators**

Goals to be achieved by new construction and upgrading of transport infrastructure are the following:

*Table 24: Indicators DP Road infrastructure ERDF*

DP Road infrastructure -ERDF quantified targets		Baseline (last available data)	2013 target	Source
<b>Output</b>				
1	Number of projects		10	CIS
2	Km of new roads	5823*	increase by 20	CIS
	Km of modernised roads		130	CIS
3	Number of new nonlevel crossing		10	CIS
4	Km of new cycling lanes	263*	increase by 68	CIS
	Km of modernised cycle lanes		37	CIS
<b>Result</b>				
5	Value for time savings in Euro/year stemming from investments in roads (in mio €)		47	MT
6	Increase in air traffic control capacity (aircraft movements per hour)	80	102	MT

CIS: central information system; SORS: Statistical Office of RS; MT: Ministry of transport; \* refers to the length of existing infrastructure

With the construction in Axis 3, additional 20 km of new roads will be gained. With Axes 3 and 4, 130 kilometres of the existing roads will be modernised. The goal is the modernisation of the existing road connections that will entail more quality and faster access to the regional centres that are now still badly connected. With the construction of bypasses some bottlenecks will be eliminated and safety in urban centres will improve. Ten level crossings will be replaced by non-level ones and to enhance the safety of cyclists 105 km of newly constructed and modernised cycling routes will be gained.

The general objective of the modernisation of air and airport infrastructure is to increase the throughput capacities of the air space of the Republic of Slovenia, reduce delays in air transport and enable more efficient air transport in the EU. Taking into account the planned investments in public infrastructure at the Maribor Airport, in 2006, it was assessed that the

potential increase in the movement of aircraft can equal up to 90%, which can reflect itself also in greater number of transported passengers as well as greater weight of transported freight. Increased capacities of the air control will entail the increased number of aircraft movements, from 80 per hour to 120 per hour and higher level of air transport safety.

A single ticket project that will support the improvement of the public transport offer and an easier and simpler choice of transport means will contribute to the reduction of the use of personal vehicles (with the emphasis on daily migrations). Thus the number of trips using personal vehicles will decline by approximately 10%.

### ***Development context***

Operative programme on development of environment and transport infrastructure concerning transport sector has been prepared on the bases of the following strategic documents concerning transport sector:

- Resolution on transport policy of Republic of Slovenia, adopted by National Assembly on May 3<sup>rd</sup> 2006;
- Draft national programme on development of and maintenance of state roads;
- Draft of national programme of civil aviation development.

All above mentioned development documents concerning transport sector comply with:

- Slovenian Development strategy, approved by Government of Republic of Slovenia on June 23<sup>rd</sup> 2005;
- Strategy on spatial development of Slovenia (Off. Journal of the RS, No 76/2004)
- Strategy on economic development of Slovenia 2001 - 2006;
- Draft State development programme 2007 – 2013, which is forthcoming.

### ***Priority guidelines***

Measures of the priority Transport infrastructure in the frame of European fund for regional development are joined within the three priority guidelines:

- Road sector,
- Public transport sector,
- Aviation and airport infrastructure sector.

#### **3.1.6.1. Road sector**

##### ***Description and rationale***

In respect of financial resources the priority will be given to the so called development axes, which by construction of state roads open and connect areas, which were so far hard to access by a vehicle or by feet. Especially important are “The Third development axis” and “The Fourth development axis”, which will enable the resource development and resource development integration of more weak and border regions, Koroška and south-east part of Slovenia (Bela Krajina and Dolenjska) and Goriška (Zgornjesočka), into central Slovenian area and ensure appropriate accessibility and connection with international flows. Capacity and quality of Slovenian state road network in the direction of development axis are inadequate in light of the economy and population needs. Traffic burden amounts to average

daily between 3.000 and 20.000 vehicles, the highest burden bearing bigger economic centres (Velenje, Celje, Novo mesto, Škofja Loka and other). There is mostly need for medium and short distance transport and due to dispersed settlements the needs for this kind of transport can not be covered by other alternative measures concerning transport (for instance development of railway transport) or any other (for instance telecommunication) infrastructure, which would help to decrease the demand for road passenger transport. The construction of new cross development traffic axis is the key to the connection with regional centres in Austria, Slovenia, Croatia and Italy and enables linking of freight and personal transport of all regions located on this axis to main European traffic directions. Construction of road links of the development axis is strategically justified by Strategy for spatial development of Slovenia and is considered a highly important link with positive impact on TEN network connection. With it Koroška and Savinjsko-šaleška regions are in the north linked to V. European transport corridor, Goriška on X. European transport corridor and in the south, the key link is between Bela krajina and X. European transport corridor. Construction of the transport link of the 3rd development axis is with its northern part – Austrian border – A1 (Šentilj-Koper) already included into the additional program of National motorway construction programme, realization of which is justified by the Resolution on NMCP. Similar justification also applies for fourth development axis, which will provide considerably better linkage of central Slovenia, through Gorenjska and Goriška regions with Italy.

Several reasons are in favour of construction of road links on development axis:

- it will improve the capacity on this axis by elimination of bottlenecks on the existing state road network will have a direct economical impact on users (lower transportation costs),
- it will indirectly ensure economic competitiveness (better accessibility increases industry and tourism market potential), and will have positive impact on regional development
- better use of spatial potentials will be possible, both for settlement and infrastructure, production, supply, recreational activities, tourism, functional enclosing of the settlements and other areas.

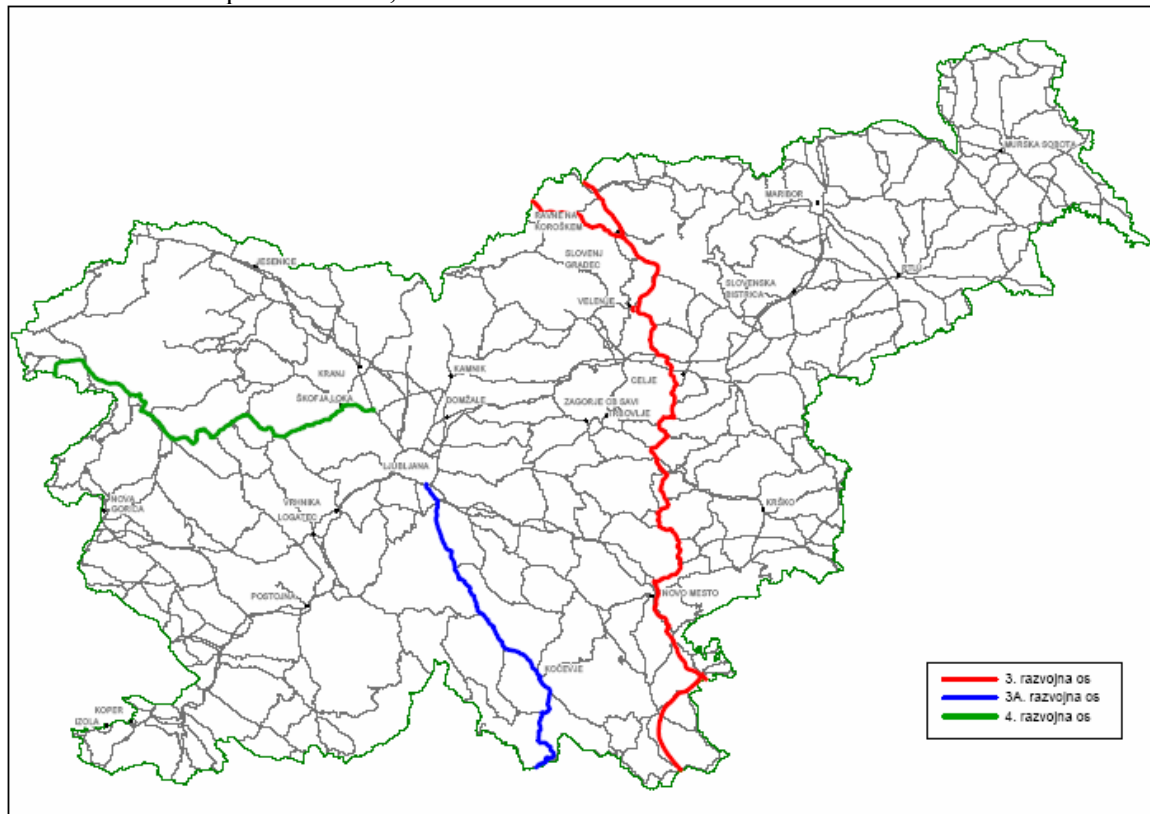
Co-financing of the development axes will contribute to the regional development and the improvement of the current situation where certain regions have lost their development potentials due to poorer transport connections. Due to the phenomena of brain drain and the flight of labour force, growth of bigger and penetrating companies is more an exception to the rule. Road connections of the development axes 3 and 4 will be intended for the internal regional transport and not international transit. As such they will promote socio-economic development of peripheral regions and cross-border regional cooperation. Development axes are also integrated in the regional development programme.

In the frame of this preference direction the development of state cycling network is also included, justified in the Strategy on spatial development of Slovenia. By construction of cycling routes, we would like to provide a choice in choosing an alternative means of transport, provide appropriate safety for bikers, reduce negative effects on environment, provide the connection with international cycling network and help in the development of tourism.

The planned construction of 15 non-level crossings of the main and regional roads with railroads aiming at increasing safety will enable rising of travelling speeds of both, road and

railway traffic. The conditions and orientations for the implementation of this project are given in the Act on safety of railroad transport. Since the project is territorially dispersed – each crossing represents a whole or a separate project. For technological reasons (traffic flow) the implementation of the project will be carried out throughout the financial period 2007-2013. The envisaged indicative value of the EU contribution in co-financing the project “the Construction of non-level crossings (10) of the main and regional roads with railway lines” is approximately EUR 33.5 million.

Picture 13: Development Axes 3, 3a and 4



### *Planned activities*

The construction of new road sections, cycling routes, the reconstruction of roads, constructions of bypasses, junctions, road resurfacing and upgrading of other roads and cycling routes are planned. Individual projects and groups of projects are at various level of preparation and this is why within these projects all necessary and missing activities will be carried out – placement into the space, preparation of technical documentation, the implementation of public tenders for the award of contracts, construction works with all necessary measures of environment protection and the preservation of cultural heritage.

Only investments in regional and national roads will be co-financed. Therefore, no potential overlapping with the activities of other operational programmes can be expected. In the case of cycling routes, only those will be co-financed that are within the national competence.



### *Indicative list of major projects*

Table 25 contains all the projects regarded as priority ones to be co-financed from the ERDF. Table 26 contains a reserve project if any of those in Table 25 is not ready for immediate implementation.

The projects covered by the definition in Article 39 of the Regulation 1083/2006 will be confirmed by the European Commission and are shadowed in the tables below:

*Table 25: Indicative list of reserve projects PO Road infrastructure – ERDF*

No.	Project title	Estimated value of total investment with VAT
		In million of EUR
1	Road connection of 3rd development axis: Austria to A1 Šentilj-Koper and A1 Šentilj-Koper to Novo mesto to Croatia *	1,380.40
	<b>Total 3rd development axis</b>	<b>1,380.40</b>
2	Modernization of road connection Jeprca - Zminec – Želin*	87.25
3	Modernization of road connection Želin - Peršeti - Kobarid – Robič	52.45
4	Modernization of road connection Ljubljana - Škofljica – Kočevje*	42.56
5	Construction of non-level crossings (15) of main and regional roads with railways*	97.93
6	Construction of road connection with tourist resort Bled – South bypass Bled	25.97
	<b>Total other state roads</b>	<b>306.16</b>
7	Construction of cycling track connections*	22.51
	<b>Total cycling tracks</b>	<b>22.51</b>
	<b>Total road infrastructure (ERDF)</b>	<b>1,709.07</b>

\*The implementation of the projects will continue after 2013.

Table 26: Indicative list of reserve projects PO Road infrastructure – ERDF

No.	Project title	Estimated value of total investment with VAT
		In million of EUR
1	Modernization of road connection Šentjakob - Zidani most – Drnovo	220,84
2	Modernization of road connection Kranjska gora - Bovec, Hrušica - Rateče	14,68
<b>Total road infrastructure (ERDF)</b>		<b>235,52</b>

### 3.1.6.2. Public passenger transport sector

#### *Description and rationale*

Cities are the key location for the economy growth and creation of jobs. Development of transport systems in major Slovenian cities and urban areas, in which the existing transport already exceeds the capacities of transport infrastructure, spatial and environmental capacities, is crucial. Efficient public transport system thus provides the attainment of critical mass and the development of regional centres; otherwise cities cannot function in synergy with surrounding, rural areas. To provide the appropriate mobility, above all on the regional level is a challenge, that demands overall solution both regarding systemic regulation of public transport sector as well as appropriate investments which support the realization of in broader space coordinated concepts.

One of the major projects in this field is the application of a single ticket, which is one of the mechanisms for implementation of integral and integrated public transport in Slovenia, which will meet the needs of users and provide the expected level of mobility. The use of public transport will be simplified and the services of public passenger transport will be cheaper and thus more accessible. Local communities will more intensively take part in the organisation of suburban public passenger transport, for the state's standards of providing public passenger transport do not meet the needs of population. In accordance with the Act on road transport the connected municipalities can organise urban transport, which will provide better services to the people. The system of public passenger transport has to be much more uniform and has to encourage the users to use monthly tickets. The system has to be redirected to zone system, in which the users can travel inside specific zones, not just with regular service lines. Under the project, the municipalities will prepare new organizational plans of public passenger transport, financial analyzes and bases for public passenger transport marketing.

The OP ETID is a programming document that does not represent all the measures to reduce the impact of transport on the environment. Transport policy is implemented through a series of activities also outside the OP ETID. Other sectorial programmes are in the phase of preparation (for the field of roads, railway, air and land transport). Some have already been adopted (e.g. the programme of sustainable carrier transport with significant environmental implications, the programme of safety in road transport). There are activities going on related to one of the basic measures of the transport policy – at the EU level in line with the White

Paper suitable basis for the internalisation of external costs is in preparation. In Slovenia various cross-sectorial activities have been initiated between the Ministry of Environment and Spatial Planning (forming an approach and measures on the basis of the principle of the integration of environment into sectorial policies – the so called Cardiff process), the Ministry of Economy (e.g. intermodal crossroads, intelligent transport systems, promotion of cycling in connection with tourism), the Ministry of Transport (7<sup>th</sup> Framework Programme) and others. A single ticket project will be implemented in line with the Resolution on Transport Policy and will be directly facing one of the toughest problems of public passenger transport.

The project as a whole is in compliance with the development objectives of the Republic of Slovenia (Slovenian Development Strategy, the Resolution on Transport Policy) in particular with the part referring to the provision of sustainable mobility as the base for achieving economic, social and environmental objectives. With the improved offer of the public passenger transport basic mobility will be granted to all groups of users. The condition to achieve competitiveness and ensure multiple effects in economy and among the population in more remote areas will be the use of state of the art information connections (meaning single architecture of intelligent transport systems).

### ***Planned activities***

Co - financing of activities, which provide better efficiency of public passenger transport within broader urban areas and application of single ticket.

A single ticket project is not the only one but it is a key one to regulate traffic in cities and remote areas. The Ministry of Transport is also planning a pilot project that will ensure the efficiency of measures to increase optimal intermodal arrangement of passenger transport. One of the documents that will serve as the basis is the Green Book on Transport that is being prepared at the level of the Community where Slovenia participates as one of the member states.

### **3.1.6.3. Aviation and airport infrastructure**

#### ***Description and rationale***

The goal of transport policy, in the sector of airport infrastructure, is to increase the traffic, assure the maximal reliability and suitable conditions for the development of air transport and the accompanying services. There is a need to supervise the conditions of the free market in the air transport, create the conditions for the investments in airport infrastructure, harmonise intermodal ways of transport and to conserve the specifics of the nature and ecological balance, however there is a special importance to:

- build a new management and control centre for air traffic control and new control tower on the Ljubljana airport and modernisation of systems and equipment for air traffic control;
- modernise infrastructural facilities, equipment and systems of the navigation services of air transport;
- concerning the constant increase of air traffic and the organisational demands and at the same time with the adoption of the European Regulation of a Single European Sky which dictates a gradual introduction of new equipment and systems for the management and control of air transport, the new control tower with a local centre is completely justified from the point of view to provide a safe and effective control of

- air transport, as well as choose a suitable location for its installation in the region,
- modernise the Maribor airport infrastructure.

Air traffic has been in constant rise, with Slovenia being more and more opened to European space and due to ever-stronger competitiveness between the providers of air services within the Union the continuation of this trend is expected. It is expected that the providers of air services will lower the air transport prices, which will additionally attract more passengers.

In the category of international airports the most problematic one is Maribor airport. In Accession Treaty of Slovenia in EU in the frame of development of trans-European transport network this airport was given the status of a regional airport. Alas technical and technological capacities of Maribor airport barely meet the required standards, the facilities for reception and dispatch of planes are outdated and barely usable, only managing one plane at a time, the same goes for all other airport services. The passenger terminal has space only for passengers of one AIRBUS 320 (150-160 passengers). Municipal infrastructure is partly unusable. Airport infrastructure for aviation operations in reduced visibility conditions for the category II is lacking. Airport Maribor has good development possibilities, shown by development of some market niches, which are not yet covered by surrounding competitive airports (freight and charter transport). For this kind of development the upgrading of ground area and modernization of logistic facilities is vital without which normal development of airport services is not possible. An extensive interest for development of economy zones, logistic centre and charter transport near Maribor airport has been shown, and that would cover approximately 40% of Slovenian regions (Prekmurje, Štajerska, Koroška) and southern part of Austria.

Ensuring permanent mobility in transport implies more and more important balanced development of all transport sub-systems, their intelligent connections and monitoring of travel habits. In order to ensure efficient mobility, transport sub-systems need to be developed that in past years benefited from most extensive investments. In the case of Slovenia these are investments into the airports that will be integrated in international transport chains and will contribute to sustainable mobility in Slovenia. The basic purposes of investments in airport infrastructure are to improve the quality of public passenger transport, the throughput of air space and increase the level of safety in air transport, satisfy the existing standards and harmonise with the European Regulation “Single European Sky” and achieve a higher level of safety and thus improve the quality of life and ensure better mobility of people in line with the guidelines of the development strategy and increase competitiveness.

The general objective of the airport infrastructure modernisation in Maribor is to promote economic development of the region and the growth of new companies, create new jobs for the population in this region. This objective will be achieved by constructing transport infrastructure which will, together with the business zone; enable further development of economy in this region.

According to the size of its population, the area of the Drava River is the second biggest statistical region (16.1% of total Slovene population). With the level of GDP per capita, this region achieves 83% of the national average and is one of the most underdeveloped areas in Slovenia. For a decade, the unemployment rate has been one of the highest and remains to be high despite positive shifts in recent years and is still above the national average.

In the vicinity of the airport, a modern land logistic centre is being planned that will also attract industry and other activities (tourism, recreational activities). The location of this centre is at the crossroads of transport routes (railway, airport, motorway) and in the vicinity of Maribor. As such it promotes balanced development of the entire transport system and equal development of all types of transport. With the investment in the airport infrastructure, the access to the regions of Podravje, Koroška, Savinja and Pomurje will improve. Due to the fact that adequate transport infrastructure is one of the key factors influencing the development of economy in general, this kind of investments will have a direct impact on the development of economic activities in this area as well as in the neighbouring regions.

### ***Planned activities***

The planned activities in the area of air transport are mainly: the construction of a new centre for air traffic navigation and control and of the control tower at the Ljubljana airport; modernization of control towers at the airports of Maribor, Portorož and Cerklje ob Krki; setting up of an air information system; designing the project of heliport network (also for rescue services and emergency cases); the modernization, renovation and upgrading of technical systems for air traffic navigation and control and the modernisation of the infrastructure at the Maribor Airport.

Investments into the implementation of regulatory standards that apply to international airports; among others there are: the preparation of a master plan for the Maribor Airport and the adoption of the Master Development Plan at the national level, the renovation and enlargement of passengers terminal that will satisfy all the Schengen requirements concerning the external EU borders, the construction of the runway, the enlargement and modernization of freight terminal for transport of dangerous goods, upgrading of the systems needed in reduced visibility conditions, upgrading the connections to motorway network, upgrading the capacities for ground handling of aircrafts, enlargement of airport aprons, building facilities in order to meet the needs of airline operators as well as production and maintenance organisations.

### ***Indicative list of major projects***

The proposed projects in the area of air infrastructure within the ERDF (VAT included) are the following:

*Table 27: Priority projects of Air Transport and Airport Infrastructure*

<b>No.</b>	<b>Project title</b>	<b>Estimated value with VAT</b>
		<b>Millions of EUR</b>
1	Modernization of airport infrastructure at the Maribor airport	17.00
2	Modernization of air traffic control systems	52.00
<b>Total air transport and airport infrastructure (ERDF)</b>		<b>69.00</b>

The project “Modernisation of the air control systems” does not fall under the definition of a major project according to Article 39 of the Regulation 1083/2006.

## 3.2. Environment

### 3.2.1. Past experience

The development guidelines of the Republic of Slovenia referring to environment are laid down in the National Environmental Action Programme, adopted by the National Assembly on 11/24/2005 and in the Strategy for the Development of Slovenia. On the basis of the National Environmental Action Programme a set of operational programmes<sup>11</sup> have already been adopted (while some are still being prepared) for separate sectors of the environmental protection; they serve as a basis for the development orientations in this operational programme.

Due to the fragmentation of municipalities these had trouble reaching agreements on joint projects. The fragmentation of financial sources also represented an obstacle in coordination of projects. Therefore the projects will have to be more precisely directed by the state and public finances and finances obtained by charging environmental dues in accordance with the "polluter pays principle" and with the principle of repayment of all the environmental costs should be used as economically as possible. Experience to date shows, that it is better to promote joint projects of several local communities, on the basis of which it is possible to allocate and distribute available funds throughout the area of the river basin during whole period of implementation of the operational programme.

Especially where waste management is concerned, there is still a lot of mistrust in local communities; they do not trust new environmental technologies and a strong NIMBY effect is still present. So when technologic modernizing of regional waste management centres takes place, this fact will have to be given special attention – in Slovenia people are in favour of referendums against building landfills, because their past experience with them is bad. We think that additional funds coming from the Cohesion Fund will help solve these problems, too.

When in 2006 the analysis of achievement of goals set in the Operational Programme for Collecting and Treatment of Urban Waste Water was performed (2004) it was found, that usually the municipalities favoured constructing point facilities such as purification plants, but they failed to add to this the construction of new sewage system, because the process of obtaining consent is very long. Due to this we sometimes encounter high operating costs resulting from the fact that too few users are connected to the purification plant. The above-mentioned experience should be observed when defining the priorities and choosing the projects for new financial perspective.

When in 1970 Slovenia faced building new waste management and purification facilities, the potable water supply sector was put almost to a standstill, therefore now it needs special attention.

In order to ensure flood safety, in the past several water retaining basins were constructed throughout Slovenia (Drtiščica, Ledavsko jezero, Radmožanci, Bolehnečici, Klivnik, Mola);

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<sup>11</sup> These are national implementation documents, which are, in terms of Slovenian legislation, called »operational programmes«, but they do not relate to programme documents, defined by general regulation of the cohesion policy.

they have a positive impact on the life of the population, on the environment, economy, tourism and urban planning, for they ensure flood safety and proper regime of spatial use. The effect can also be observed in the form of balanced quantity of water. Spatial siting of constructions was performed in cooperation and with consent of local communities and those responsible for spatial planning. Where building of flood-prevention constructions is concerned certain implementation documents have already been adopted referring to water basins of the Drava, Mura, Ljubljana, Savinja and Sava.

In the procedures co-financed by the ISPA and the Cohesion Fund, the public administration in Slovenia received training to:

- prepare the programmes and cooperation among various sectors to achieve better outcomes,
- organise the programmes' implementation,
- monitor and evaluate programmes and projects,
- select the most efficient projects,
- control the implementation of projects.

The experiences gained so far were transferred into secondary legislation concerning investments. Still, more efforts will be needed to ensure more efficient cooperation in the implementation of investments between the Government and the local level. Since the majority of investments is within the competences of local communities, the quality of this cooperation to a great extent affects the quality of projects. This is not only related to the technical-technological aspect but also to the organisational aspect where the coordination of time and good mutual provision of information are of key importance for joint success.

Since most of the projects within the ISPA programme (2000-2004) and the Cohesion Fund (2004-2006) are still being implemented, it is hard to come up with any concrete data on the level of efficiency and performance of the investments in environmental projects but nevertheless, the positive impact of these projects on the quality of environment and living is obvious.

Within the ISPA programme the following projects were co-financed:

- the central waste water treatment plant in Celje,
- the sewage system and the waste water treatment plant in Lendava,
- treatment of waste water and upgrading of the potable water supply in the Paka River basin,
- water supply on the Trnovsko-Banjški plateau,
- treatment of waste water in the Mislinja River basin in Slovenj Gradec,
- waste management centre – Dolenjska – 1<sup>st</sup> phase,
- treatment of waste water in the Mislinja River basin
- treatment of waste water in the Lower Sava River basin in Brežice, Krško and Sevnica,
- waste management centre – Puconci,
- technical assistance in the treatment of waste water in the middle Sava basin,
- technical assistance in the preparation of a management plan in the Krka River basin.

According to the financial memoranda signed, the total value of the above mentioned projects amounts to EUR 81.6 million, of which the approved share of the EU funds equals EUR 42.1 million. With 1 May, 2004, all the listed ISPA projects became cohesion projects.

The European Commission confirmed six projects to be financed from the Cohesion Fund:

- Regional waste management centre in Celje,
- Collection and treatment of waste water in the coastal area (Koper, Izola, Piran),
- Regional waste management centre in Celje, Phase II,
- Collection and treatment of waste water and potable water supply in the municipality of Tržič,
- Complex protection of ground water sources in Ptujsko polje, Phase I,
- Waste water treatment plant and the sewage system in the catchment area of the middle Sava River – Trbovlje, Hrastnik,
- Hydraulic improvements of the sewage system in Ljubljana.

The total value equals EUR 145.2 million, of which the EU funds amount to EUR 88.4 million.

### **3.2.2. Key orientations and goals**

The strategy of environment protection is defined on the basis of general objective of the OP Development of environmental and transport infrastructure and its aim is:

**ensuring conditions for sustainable development and healthy living environment by building and management of the environmental infrastructure.**

The key orientations of Slovenia in the field of environment are defined in the National Programme of Environment protection; they refer to climate changes, nature and biodiversity as well as to water management and water protection, use of water and water regulation, air protection, waste management and industrial pollution.

The key orientations arise from the European environmental legislation listed in the chapter Compliance with European and Slovenian development documents. In addition, the key orientations are based on the fact that in the pre-accession period Slovenia committed itself to satisfy the requirements of the EU environmental *acquis communautaire*. Most of the requirements arising from the EU *acquis communautaire* need to be satisfied by the end of the OP ETID programming period. This will improve the environmental situation, the quality of public services and provide a positive impact on the health status of the population as well as enable the preservation of eco-systems, which will lead to sustainable development of Slovenia and better life of each individual.

The key orientation of the waste management sector is the establishment of the infrastructure:

- acceleration of implementation of separate phases of waste management,
- acceleration of extraction of bigger quantities of separately collected fractions of municipal and hazardous waste that can still be used,
- acceleration the construction of collection centres for separately collected fractions of municipal and hazardous waste,
- acceleration of building waste processing plants of different capacities,



- acceleration of building facilities for energy recovery or incineration of waste and water purification sludge.

The key orientation of the collection and treatment of urban waste water is to reduce environment pollution due to untreated urban waste water by equipping with proper systems, the agglomerations in the settlement areas where the load is:

- more than 100.000 PE,
- more than 15.000 PE,
- more than 10.000 PE in the sensitive areas,
- more than 2000 PE.

The UWWD requires that all agglomerations with the burden exceeding 2000 PE will be equipped with sewage systems that end with a waste water treatment plant by 2015. In Slovenia there are 159 such agglomerations where public infrastructure will be constructed with the funds from the Cohesion Fund. On the other hand, agglomerations of more than 15,000 PE will need to be equipped by the end of 2010 (collection and secondary treatment) and agglomerations bigger than 10,000 PE discharging in sensitive areas by the end of 2008 (collection and more advance treatment).. Agglomerations bigger than 10,000 PE have to be equipped by 2008.

Improvement of current situation in drinking water supply is envisaged with implementation of the following measures:

- construction of main water supply systems in those areas where centralization proves economically suitable,
- ensuring long-term supply of potable water in times of climate changes and construction of multi-purpose water retaining basins,
- long-term protection of existing and potential potable water sources by reducing burdening of sources within water protection areas and by enrichment measures

The programme Reduction of water damages is based on the Action Programme of the Community of Water Damages, the WFD and climate changes as well as the measures for sustainable water management that take into consideration the problems of the entire catchment area; it includes the following key activities:

- construction of counter-flood facilities,
- modernisation of water regulation facilities,
- retention of excess quantities of water at the source of its origin and gradual direction of this water into the water regime, when this no longer causes damages.

Due to the measures planned water damages will be reduced and in 2013 there will only be 20% of endangered urban surfaces. By 2013, the potential of natural accidents and their consequences will be reduced from the current 50% to 20%.

### **3.2.3. Compliance with European and Slovenian development documents**

Since there are a lot of directives, regulations, and thematic strategies and other documents referring to the area of environment protection and affecting the content of this programme, the Republic of Slovenia included them also in already adopted national programmes, so in the continuation we shall merely list them.

## WASTE

Directive 2006/12/EC on waste,  
Directive 91/689/EEC on hazardous waste,  
Directive 91/157/EEC on batteries and accumulators containing hazardous substances,  
Directive 94/62/EC on packaging and packaging waste,  
Directive 2002/96/EC on waste electrical and electronic equipment,  
Directive 75/439/EEC on disposal of waste oils,  
Directive 86/278/EEC on treatment plant sludge  
Directive 99/31/EC on waste disposal,  
Directive 2000/76/EC on waste incineration,  
Waste Shipment Regulation 2006/1013/EC

## WATER

Council Directive 2000/60/EC establishing a framework for Community action in the field of water policy,  
Council Directive 91/271/EEC on treatment of urban waste water,  
Council Directive 98/83/EC on the quality of water intended for human consumption,  
Council Directive 75/440/EEC of the European Parliament and of the Council concerning the quality required of surface water intended for the abstraction of drinking water in the Member States, setting standards for the quality of surface water intended for human consumption,  
Council Directive 76/160/EEC on the quality of bathing water, setting standards for surface water where people usually bath,  
Council Directive 80/778/EEC; supplemented by the provisions of the Council Directive 98/83/EC,

## PROGRAMMES AND STRATEGIES

Strategic Guidelines of the Community

Lisbon Strategy

Thematic strategy on waste prevention and waste recycling,

Thematic strategy on sustainable use of natural resources,

Act Ratifying the Kyoto Protocol to the United Nations Framework Convention on Climate Change/MKPOKSP/ (Off. Journal of RS-MP, No. 17/2002),

Action Programme of the Community to reduce the danger of floods

Slovenian Development Strategy (the Government, 23 June, 2005)

National reform programme for the implementation of the Lisbon strategy

Resolution on the national programme of environmental protection 2005-2012

Resolution on national development projects 2007- 2013

Consumer protection programme for two years, 2006 and 2007-06-10

Operational programme on elimination of wastes with objective to reduce the quantity of biodegradable disposal wastes for the period until the end of 2008 (2004),

Operational programme for management of separately collected fractions of municipal waste for the period 2006 – 2009 (in preparation),

Operational programme for management of packaging and waste packaging for the period 2002- 2007 (2006),

Operational programme for management of batteries and accumulators for the period 2003- 2006,

Operational programme for management of electrical and electronic equipment, 2006,

Operational programme for collection and treatment of urban wastewater and drainage water, 2004,

Operational programme of potable water supply, 2006,

Operational programme for reduction of greenhouse gas emissions by 2012,  
 Environmental situation in Slovenia 2002,  
 Operational programme of waste oil treatment  
 Operational programme of the removal of polychlorided biphenyl and polychlorided terfenyl

*Table 28: Cohesion between the Strategic guidelines of the Community and the Development Priorities of the OP ETID*

Strategic guidelines of the Community	Area of the strategic guidelines	Development priority
Europe as an attractive place for investments and work	Increasing the synergy between environment protection and growth	<u>Municipal waste management</u>
	Improvement of infrastructure	<u>Environment protection – water sector:</u>
		Collection and treatment of urban waste water
		Potable water supply
		Reduction of detrimental activities of water

The Operational Programme supports and is in line with the Strategic Guidelines of the Community.

*Table 29: Cohesion between priority tasks from the national reform programme for achieving Lisbon Strategy goals in Slovenia and the Development priorities of the environment sector*

Developmental priority task from the National reform programme for the implementation of the Lisbon strategy	Priority measures from the National reform programme for the implementation of the Lisbon strategy	Development priority of the OP ETID
MEASURES FOR ACHIEVEMENT OF SUSTAINABLE DEVELOPMENT III.E.2 Sustainable use of sources (environment protection policy)	Construction of adequate infrastructure for urban waste treatment	<u>Municipal waste management</u>
	Construction of adequate public infrastructure for water sector	<u>Environment protection- water sector:</u>
		Waste water management
		Potable water supply
		Reduction of detrimental activities of water

The Operational Programme supports and is in line with the National reform programme for the implementation of the Lisbon strategy.

*Table 30: Cohesion between priority tasks from the national reform programme for achieving the Lisbon Strategy goals in Slovenia and the Development priorities of the environment sector*

<b>Strategic guidelines of the Community</b>	<b>Lisbon Strategy</b>	<b>OP of the Environmental and Transport Infrastructure Development</b>
Europe as an attractive place for investing and working	National reform programme for the implementation of the Lisbon strategy	Development priority OP ETID
Increasing synergy between environmental protection and growth	MEASURES TO ACHIEVE SUSTAINABLE DEVELOPMENT III.E.2 Sustainable use of sources (environmental protection policy)	Environment protection
Improving infrastructure	Construction of adequate infrastructure for urban waste treatment	<u>Urban waste management</u>
	Construction of adequate public infrastructure for water sector	Collection and treatment of urban waste water
		Potable water supply
		Reduction of detrimental activities of water

The Operational Programme supports and is in line with the Strategic Guidelines of the Community, the Lisbon Strategy and National reform programme for the implementation of the Lisbon strategy

*Table 31: Connection between the Strategic Guidelines of the Community, European environmental policy and individual development priorities of this operational programme for the field of environment and national programmes*

Strategic guidelines of the Community	European environmental policy	OP of the Environmental and Infrastructure Development and Transport	National programmes
Europe as an attractive place for investing and working		Development priority	Resolution on national development projects 2007- 2013
Increasing synergy between environmental protection and growth	Tematske strategije, direktive Thematic strategies and directives	<u>OP ETID</u>	Nacionalni program reform za doseganje ciljev Lizbonske strategije
Improving infrastructure	Thematic strategy on the prevention of waste generation and recycling Thematic strategy on the sustainable use of natural sources Act on the ratification of the Kyoto Protocol to the Framework convention of the UN on climate changes /MKPOKSP/(Off. Journal RS-MP No 17/2002); Action programme of the Community to reduce the threat of floods	Environment protection	<u>Resolution on the national programme of environmental protection 2005-20013</u>
	Directive 2006/12/EC on waste, Directive 91/689/EEC on hazardous waste, Directive 91/157/EEC on batteries and accumulators containing certain dangerous substances Directive 94/62/EC on packaging and packaging waste Directive 2002/96/EC on waste electrical and electronic equipment Directive 75/439/EEC on the disposal of waste oils Directive 86/278/EEC on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture,	<u>Urban waste management</u>	Operational programme of waste removal in order to reduce the quantities of landfilled biodegradable waste for the period by 2008 (2004), Operational programme of the treatment of separately collected waste fractions for the period 2006-2009 (in preparation), Operational programme of the treatment of packaging and waste packaging for the period 2002-2007 (2006), Operational programme of the treatment of batteries and accumulators for the period 2003-2006, Operational programme of the treatment

	Directive 99/31/EC on waste disposal, Directive 2000/76/EC in waste incineration, Waste Shipment Regulation 2006/1013/EC		of waste electrical and electronic equipment, 2006 Operational programme of the treatment of waste oils (amendment in preparation) Operational programme of the removal of polychlorided biphenyl and polychlorided terfenyl (amendment in preparation)
	Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy Decision 91/516/EEC establishing a list of ingredients whose use is prohibited in compound feedingstuffs Council Directive 91/271/EEC concerning urban waste water treatment Council Directive 76/160/EGS on the quality of bathing water defines the standards of surface waters where people usually bathe	Collection and treatment of urban waste water	Operational programme of the collection and treatment of urban waste water and drainage water, 2004-2017
	Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption	Potable water supply	Operational programme of potable water supply , 2006
	Action Programme of the Community to reduce the danger of floods	Reduction of detrimental activities of water	

### 3.2.4. Development priority Municipal waste management

#### *Description with rationale*

The development priority in the **field of municipal waste management is based on** the Operational Programme of waste removal with the objective to reduce the quantity of biodegradable waste in the period to the end of 2008 that the Government of the RS adopted in 2004, and on the Operational programme of the treatment of separately collected waste fractions for the period 2007-2009 adopted in 2007, and the EU directives regulating the field of waste management. All the operational programmes at the national level will be amended in line with the Act on the Environment Protection and new EU directives. As a rule, the objectives will remain the same and only those amendments will be possible that will be required by new European legislation. The key tasks for Slovenia are to set up the entire waste management infrastructure and complete harmonisation with the EU standards in this field.

The programme implies the operationalisation of main strategic objectives in the field of waste management: to reduce the generation and risk potential of waste at a source, to increase material and energy utilisation of waste, to reduce greenhouse gas emissions and disposal of inactive residues as the last and least desirable stage and to set up a complex system of efficient waste management. The main purpose is to construct the necessary infrastructure:

- construction of regional centres for waste management where separation and sorting of various sorts of waste, preliminary waste processing, waste disposal, purification of landfill leachate, capture and utilisation of landfill gas as well as environmental monitoring of the landfill will be carried out.
- construction of several collection centres for separate waste collection,
- modernization of the existing regional centres with waste processing equipment and the devices for environmental monitoring and purification of leachate,
- regulation of sludge management,
- regulation and upgrading of hazardous waste disposal,
- regulation of sewage sludge treatment,
- arrangement and modernisation of the landfill for hazardous waste and its remediation, remediation of areas polluted with waste oils, hard metals, PCB and pesticides.

The efficiency of the system of waste management depends on the facilities and equipment for waste management and their networks. With the definition of the orientations and priorities the operational programme is focused on construction of modern and efficient infrastructure. The technical/technological and economic characteristics of the facilities and equipment for management of waste – especially for processing and elimination of waste – call for construction of infrastructure in the form of regional centres or inter-municipality centres for waste management.

To implement other operational programmes where costs do not burden the public sector but the producers (waste electric and electronic equipment, packaging, old vehicles, construction waste, tyres, textile) efficient waste collection and separation needs to be set up so that new products and technologies can be developed. The implementation of this programme is essential to create jobs, improve environmental situation, and ensure better access to support

services, new product made of secondary raw materials and the use of new environmental technologies.

To satisfy basic needs of separate waste collection it has been assessed that 200 collection centres are needed in the whole territory, which means at least one collection centre in each municipality since some of them are very small. It can be concluded that well-organised waste fraction separation also needs a system of collection centres that at present is still poor. In such centres a system would ensure separation of electrical and electronic equipment, packaging, paper, construction waste, metals, bulky and hazardous waste from households and increase the level of processing and re-use of these materials. Currently there is only one such centre in Ljubljana. Other bigger cities also have one collection centre each. Due to a big number of municipalities (210) it is believed that the expansion of these centres is a precondition for successful implementation of the environmental policy in the field of waste.

National Environmental Protection Programme considered waste a priority since waste management can only be solved together with waste water treatment. In the Resolution on National Environmental Action Plan 2005-2015 the following objectives were set in this respect: at least 55% of urban waste should be entered into the procedures before waste disposal (net output) and 42% of waste should be subject to material utilisation, household waste should be excluded and biologically processed; all waste residues should be processed so that total organic carbon (TOC) will not exceed 5%, the rest of waste where limit values of 5% cannot be achieved through other procedures will be heat-treated, the quantities of biodegradable waste are to be reduced from 47% of disposed waste to 16% by 2013-2015 and the potential of the generation of greenhouse gas emissions is to be reduced by 1162 kt of CO<sub>2</sub> equivalents by 2012. at the same time the already started design of facilities of energy recovery and waste incineration will continue so that in the next five-year period the issue of disposal location will be solved. Special attention will be paid sludge treatment from waste water treatment plants since at present there is no such plan with a long-term solution of this problem.

One of the key projects is the remediation of the existing hazardous waste dump. In addition the attention will be paid to the activities to increase the dynamics of PCB removal in the period from 2007 to 2010, which is the deadline for fulfilling the commitments of Slovenia in this area. The task will be carried out within the regulations on state aid with an adequate operational programme for the whole Slovenia which is being prepared. The remediation of polluted industrial areas due to waste oils and pesticides will be implemented. Co-financing of the following activities is envisaged:

- remediation of areas with acid gudron in the Eastern cohesion region,
- remediation of areas with landfilled pesticides in the Eastern cohesion region,
- remediation of areas with landfilled PCB and soil polluted with PCB in Bela Krajina,
- decontamination of industrial facilities with PCB and the replacement of PCB with environmentally friendly compounds in the whole territory of Slovenia,
- remediation of old landfills containing hard metals in the whole territory of Slovenia.

Within OP ETID priority projects in the field of waste management will be eligible to receive funding. Priority projects will be determined according to the number of inhabitants, complex solution of waste and sludge management in a certain region, construction of several collection centres and this will all be determined in implementing documents.



Similar trends apply to the solution of landfilled pesticides, gudron and PCB where in implementing documents those projects will be prioritised that offer complex solutions and decontamination of larger industrial facilities with PCB and the replacement of PCB with environmentally friendly substances.

With the investments and remediation of waste oils (gudron) the polluter-pays principle will be taken into consideration as much as possible since the Government introduced environmental tax on waste oils. If the polluter is identified or the owner of the land that is not public is known, the projects will be financed according to the rules that apply to state aid.

### ***Goals and indicators***

The main objectives are:

- bigger quantities of urban waste will be introduced into the procedures before waste removal,
- prior treatment of waste residues and sludge from waste water treatment plants to reduce the impact on environment in line with the regulations,
- reduction of threat potential due to old burdens.

*Table 32: Indicators for the development priority Municipal waste management*

DP Municipal waste management quantified targets		Baseline (last available data)	2013 target	Source
<b>Output</b>				
1	Number of co-financed regional waste disposal centres / Number of wate projects		6	Information system of public services for environment protection
<b>Result</b>				
2	Non-hazardous waste in tonnes / year	845.000	300.000	State of environment report
3	Separately collected fractions of waste in tonnes / year	210.000	500.000	State of environment report

### ***Development context***

The development orientation of the Republic of Slovenia in the field of environment is provided in the National environment protection programme, adopted by the National Assembly of the RS on 11/24/2005, and the Strategy for the development of Slovenia. The National environment protection programme follows the orientations laid down in the 6th environmental action programme of the EU and in the Lisbon Strategy. It is also aimed at achieving the environmental goals of the thematic EU strategies such as the Thematic strategy on waste prevention and recycling and The thematic strategy on sustainable use of natural resources and the directives in the field of waste:

Directive 2006/12/EC on waste,

Directive 91/689/EEC on hazardous waste,

Directive 91/157/EEC on batteries and accumulators containing certain dangerous substances,

Directive 94/62/EC on packaging and packaging waste,

Directive 2002/96/EC on waste electrical and electronic equipment,

Directive 75/439/EEC on the disposal of waste oil,  
 Directive 86/278/EEC on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture,  
 Directive 99/31/EC on waste disposal,  
 Directive 2000/76/EC in waste incineration,  
 Waste Shipment Regulation 2006/1013/EC.

On the basis of the National environment protection programme the state has already adopted (or is in the process of adopting) a series of operational programmes referring to separate sectors of environment protection, which serve as a basis for the development orientations in this operational programme.

### ***Planned activities***

Key activities are directed towards:

- setting-up more than 200 new collection centres,
- building of regional centres for waste management,
- technological supplementation of the existing regional centres by equipping them with devices for processing waste prior to disposal and for monitoring and treatment of leachate (hazardous and non-hazardous waste dumping depots),
- construction of one or two plants for energy processing – incineration of waste and sludge,
- rehabilitation of landfills and old burdening due to depositing of waste oils, pesticides and PCB.

### ***Indicative list of major projects***

The projects covered by the definition in Article 39 of the Regulation 1083/2006 will be confirmed by the European Commission and are shadowed in the table below:

<b>No.</b>	<b>Project title</b>	<b>Estimated value of total investment with VAT</b>
		<b>In million of EUR</b>
1	Regional waste management center- Dolenjska - II. phase	12
2	Regional waste management center - Koroška	20
3	Regional waste management center - Ljubljana	144
4	Regional waste management center - Gorenjska	23
5	Regional waste management center - Istra, Kras	23
6	Regional waste management center - Notranjska	23
7	Regional waste management center – Štajerska region (two sub-projects)	40
8	Regional waste management center - Pomurje - II. phase	12
9	Regional waste management center - Zasavje - II. phase	10
10	Thermal treatment of waste (two sub-projects)	50
	<b>TOTAL:</b>	357

### **3.2.5. Development priority Environment protection – water sector**

#### *Description and rationale*

The development orientations of the Republic of Slovenia referring to the environmental sector are provided for in the National environment protection programme, adopted by the National Assembly of the RS on 11/24/2005, and the Strategy for the development of Slovenia. On the basis of the National environment protection programme the state has already adopted (or is in the process of adopting) several programmes. The analysis of the situation shows, that in the frame of the development priority Environment protection – water sector the following areas need infrastructural investments:

- Potable water supply,
- Collecting and treatment of urban waste water,
- Reducing water damages.

As a natural source, water is one of the goods on which depend life and health as well as economic development. In the Republic of Slovenia uneven distribution of precipitation and diversity of draining conditions cause the difference in the availability of water, for supplying the population as well as for other use. Legislation provides for the conditions and manner of use of water, it determines quality parameters with regard to its intended use, methodology for its preservation and platform for pricing it. When potable water supply is concerned the programme focuses on the part of supply, which until now has not been included in the potable water monitoring programme, because the inhabitants used their own supply sources (8% of total population of the RS). So the key objective is establishing of new and rehabilitation of existing infrastructure facilities and devices for ensuring regular and quality supplying of the inhabitants of the RS with potable water.

The Operational Programme of Urban Waste Water Collection and Treatment is a programme of coordinated measures by the state and the municipalities adopted in order to gradually achieve the goals of protecting environment from the impact of the accumulated urban wastewater. Construction of infrastructure for collection and treatment of urban wastewater means elimination of differences due to the accession to the EU; therefore, in accordance with the Accession Treaty, Slovenia has to implement all the overdue investments by 2015.

Due to natural characteristics the scope and the frequency of floods and resulting damages are extensive in Slovenia. The floods represent a complex problem, for they cause huge material damage as well as loss of lives. The reduction of water damages is a priority measure which will be achieved on the basis of the Detailed Water Management Plan for Reduction of Water Damages in the water area of the Danube River, where the following anti-flood measures are planned: the construction of high-water level embankments, the reconstruction of high-water level embankments and the construction of retention basins and the regulation of riverbeds.

## Goals and indicators

The goals of the development priority Environment Protection – water sector, are the following:

- ensuring adequate infrastructure for the collection and treatment of urban waste water in areas that in the national programme are regarded as those that need to be equipped with the sewage system in line with the European directives regulating the collection and treatment of urban waste water and pre-accession treaty,
- reducing environmental impact (water, soil),
- ensuring adequate infrastructure for potable water supply,
- preserving natural sources and eco systems,
- improving the quality of ground water as potable water source,
- improving health status of the population,
- improving public potable water supply,
- increased protection against floods;
- natural enrichment of ground water,
- erosion prevention,
- increased retention space,
- reduced impact of climate changes.

Table 33: Indicators for the development priority Environment protection – water sector

DP environment protection – water sector quantified targets		Baseline (last available data)	2013 target	Source
1	Additional population served by safer and better quality fresh water supply	1.840.000	increase by 150.000	MESP
2	Additional population connected to public sewerage systems (additional pop. served by water projects)	500.000	increase by 700.000	Fresh water monitoring, MH
3	Number of projects in the field of risk prevention		7	MESP
4	Number of people benefiting from flood protection measures (additional pop. served by water projects)		30.000	MESP
<b>Result</b>				
5	Percentage of communally equipped agglomerations	50%	95%	MESP
6	Reduction of water emissions ( in mio PU)	1,5	0,3	MESP
7	Population connected to new drinking water supply systems	91,4%	96%	MESP, MH
8	Flood endangered area (ha)	300.000	220.000	MESP
9	Decrease of population potentially exposed to chemical or microbiological pollution of fresh water	21,8%	10%	MESP, MH
10	Decrease of population exposed to unadequate fresh water (pesticides)	7%	2%	MESP, MH

MESP: Ministry of the environment and spatial planning; MH: Ministry of health

### ***Development context***

The development orientation of the Republic of Slovenia in the field of environment is provided in the National environment protection programme, adopted by the National Assembly of the RS on 11/24/2005, and the Strategy for the development of Slovenia. The National environment protection programme follows the orientations laid down in the 6th environmental action programme of the EU and in the Lisbon Strategy. It is also aimed at achieving the environmental goals of the Council Directive 2000/60/EC establishing a framework for Community action in the field of water policy and on treatment of urban waste water, Council Directive 91/271/EEC on treatment of urban waste water, Council Directive 98/83/EC on the quality of water intended for human consumption, Council Directive 75/440/EEG concerning the quality required of surface water intended for the abstraction of drinking water in the Member States. On the basis of the National environment protection programme the state has already adopted (or is in the process of adopting) a series of operational programmes referring to separate sectors of environment protection, which serve as a basis for the development orientations in this operational programme.

### ***Priority orientations***

Environment protection in the water sector will be implemented within three priority guidelines:

- Collection and treatment of urban waste water,
- Drinking water supply,
- Reducing of water damages.

#### **3.2.5.1. Collection and treatment of urban waste water**

##### ***Description and rationale***

The Preference direction Urban wastewater collection and treatment arises from the Operational programme Urban Waste Water Collection and Treatment, adopted by the Government of the RS in 2004. The Operational programme Urban Waste Water Collection and Treatment is a programme of coordinated measures by the state and the municipalities adopted in order to gradually achieve the goals of protecting environment from the impact of the accumulated urban waste water. Construction of infrastructure for collection and treatment of urban wastewater means elimination of differences due to the accession to the EU; therefore, in accordance with the Accession Treaty, Slovenia has to implement all the overdue investments by 2015. In the whole territory of Slovenia environmental tax was introduced due to the environmental pollution caused by waste water and doing so the polluter-pays principle was observed. Environmental tax is the source of revenue of the national budget and a source for co-financing investments supported by the Government although the systems for urban waste water collection and treatment are a part of municipal infrastructure.

The Directive 91/271/EEC (UWWTD) and the pre-accession treaty require that all agglomerations with the burden exceeding 2000 PE will be equipped with sewage systems that ends with a waste water treatment plant by 2015. In Slovenia there are 159 such agglomerations where public infrastructure will be constructed with the funds from the Cohesion Fund (value determination can be adapted on the basis of the decision adopted by

the managing authority during the implementation of the programme). Total value of investment into the construction of sewage systems amounts to EUR 337 million, the construction of waste water treatment plant: EUR 252 million, and this equals EUR 589 million (including EUR 40 million for treatment of sewage sludge). On the other hand, agglomerations of more than 15,000 PE will need to be equipped by the end of 2010 (collection and secondary treatment) and agglomerations bigger than 10,000 PE discharging in sensitive areas by the end of 2008 (collection and more advance treatment). Agglomerations bigger than 100,000 PE have to be equipped by 2008. All other facilities that are below 2,000 PE and located within the Natura 200 area, protected areas or in the areas with bathing rivers, lakes or other tourist areas and whose density of population is more than 10 inhabitants per hectare and less than 20 inhabitants per hectare will be financed from the Operational Programme for Strengthening Regional Development Potentials (indicative division).

Key objectives are:

- ensuring adequate infrastructure for the collection and treatment of urban waste water in areas that in the national programme are regarded as those that need to be equipped with the sewage system in line with the European directives regulating the collection and treatment of urban waste water and pre-accession treaty,
- reducing environmental impact (water, soil).

### ***Planned activities***

The activities are based on the implementation of the primary, first and second phase of the National Operational programme for collection and treatment of urban waste water, adopted by the Government of the RS in 2004, which encompasses more than 159 agglomerations throughout Slovenia. Main activities, which will be co-financed, relate to construction and modernization of sewage networks and water treatment plants, in accordance with EU directives and the pre-accession treaty.

For the sector of collection and treatment of urban wastewater the Cohesion Fund will participate about 103 million EUR.

For all the preference directions applies that within the frame of implementing provisions a detailed demarcation will be defined with activities financed in the frame of OP SRDP.

### ***Indicative list of major projects***

The projects covered by the definition in Article 39 of the Regulation 1083/2006 will be confirmed by the European Commission and are shadowed in the table below:

No.	Project title	Estimated value of total investment with VAT
		In million of EUR
1	Collection and treatment of waste water in the basin of Upper Sava and in the area of Kranjsko and Sorško polje	50
2	Collection and treatment of waste water in the basin of Middle Sava	12
3	Collection and treatment of waste water in the basin of Sora	25
4	Collection and treatment of waste water in the basin of Krka	30
5	Collection and treatment of waste water in the area of Ptujsko polje	12
6	Collection and treatment of waste water in the basin of Drava	12
7	Collection and treatment of waste water in the basin of Dravinja	12
8	Collection and treatment of waste water in the area of Maribor	20
9	Collection and treatment of waste water in the Šaleška valley	12
10	Collection and treatment of waste water in the basin of Meža	12
11	Collection and treatment of waste water in the basin of Savinja	12
12	Collection and treatment of waste water in the area of Pomurje	10
13	Collection and treatment of waste water in the basin of Soča (WWTP Nova Gorica)	10
14	Collection and treatment of waste water in the basin of Vipava	10
15	Collection and treatment of waste water in the basin of Idrijca	10
16	Collection and treatment of waste water in the area of the aquafico stratum of the Ljubljansko polje (Ig and surrounds)	20
17	Collection and treatment of waste water in the basin of Ljubljana (area of Vrhnika, Logatec, Pivka)	20
18	Collection and treatment of waste water in the area of Domžale - Kamnik	12
	<b>TOTAL:</b>	301

### 3.2.5.2. Drinking water supply

#### *Description and rationale*

The use of water as drinking water is able to compete with any other use of water – one of them, which need to be emphasized, is agricultural use (irrigation). Due to noted climatic changes the need for seasonal containment of water to cover different needs for it has to be assessed. The seasonal containment of water is in complementarily with measures related to flood prevention. River basins or catchments that show unsuitable distribution of drainage regime with regard to the needs for water are the following: Soča, Sava river basin, Krka catchments, Kolpa catchments, Savinja catchments, Ljubljana catchments. Into this scope belongs also more efficient use of water from already constructed accumulations and completion of started investments into accumulations (Medvedce). Enrichment or artificial

feeding of the waterbeds for the needs of water supply follows the basic goal of monitoring the quality of water flowing into the water source. In case of polluted or highly vulnerable alluvial waterbeds used as a potable water source the contamination usually occurs without a warning; the rehabilitation needs a lot of time, for the polluting agent has to be slowly washed from the waterbed or has to decompose in it. By artificial feeding the waterbeds with quality-monitored water (usually surface water basins suit this purpose) required quality at water source is achieved, with high level of reliability; from then on the authorized bodies have enough time to rehabilitate the polluted waterbed by applying required measures. In Slovenia the artificial enrichment has already been introduced (Vrbanski plato), but there are still some potential waterbeds from which polluted water is being taken. For those riverbeds there is foreseen a remediation in a way, that an artificial enrichment of the area of the riverbed is arranged.

On 30 June, 2004, the population of the Republic of Slovenia amounted to 1,997,004 (Source: the Ministry of Internal Affairs; Statistical Office of the RS). In 2004, in the database on the systems of potable water supply there were 977 water supplying areas that provided water to 1,840,135 inhabitants, which means 92% of the population in Slovenia. These data tell us that 156,869 inhabitants were supplied with water of lower quality. We wish to connect them to public water supply systems that have managers and maintenance and control in place.

Key objectives are:

- ensuring adequate infrastructure for drinking water supply,
- preserving natural sources and eco systems,
- improving the quality of ground water as drinking water source,
- improving health status of the population,
- improving public drinking water supply.

Priorities are determined in the Operational Programme of Drinking Water Supply adopted by the Government of the Republic of Slovenia in 2006. In this National Operational Programme the water supply is distinguished according to the importance - the national or municipal importance. The tasks of national importance will be financed from the Cohesion Fund but we wish to finance the tasks of municipal importance from the Operational Programme for Strengthening Regional Development Potentials.

Among the tasks of national importance there are (indicative division):

- construction of adequate infrastructure for drinking water supply,
- ensuring reserve water sources for bigger systems that supply at least 50,000 inhabitants,
- construction of multi-purpose retarding basins and
- active protection of ground water and the elimination of ecological accidents from the past with potential impact on more than 10,000 inhabitants.

Among the tasks of municipal importance there are (indicative division):

- ensuring reserve water sources for other smaller systems (supplying from 49,000 to 10,000 inhabitants),
- reduction of water losses with bigger systems (if the loss exceeds 30%),
- modernisation of water supply systems with more than 10,000 inhabitants.



### ***Planned activities***

The key activities are:

- connecting water supply systems to bigger common water sources;
- ensuring reserve water sources on major water distribution systems supplying more than 50.000 inhabitants;
- rehabilitation of insufficient water sources (quantity. Especially lateral region), retention of water and rehabilitation of main systems;
- active protection of potable water catchments against polluted water.

About 148 million EUR of Cohesion Fund funds will be allocated to the area of drinking water supply

### ***Indicative list of major projects***

The projects covered by the definition in Article 39 of the Regulation 1083/2006 will be confirmed by the European Commission and are shadowed in the table below:

<b>No.</b>	<b>Project title</b>	<b>Estimated value of total investment with VAT</b>
		<b>In million of EUR</b>
1	Protection of the water source Mrzlek	20
2	Integral protection and regulation of supplying Bela Krajina with drinking water	25
3	Integral protection and regulation of supplying the Coastal and Karst region with drinking water	40
4	Integral protection and regulation of supplying Pomurje with drinking water	30
5	Integral protection and regulation of supplying Suha Krajina with drinking water	20
6	Integral protection and regulation of supplying the area of Sodražica-Ribnica-Kočevje with drinking water	15
7	Integral protection and regulation of supplying the basin of Sotla with drinking water	12
8	Integral protection and regulation of supplying Šaleška valley with drinking water	12
9	Integral protection and regulation of supplying the basin of Ljubljana with drinking water	12
10	Integral protection and regulation of supplying the basin of Sora with drinking water	20
11	Integral protection and regulation of supplying the basin of Drava and Dravinja with drinking water	30
12	Integral protection and regulation of supplying the basin of Meža with drinking water (Črna na Koroškem)	12
13	Integral protection and regulation of supplying the area of Domžale - Kamnik with drinking water	12

14	Integral protection and regulation of supplying the area of Upper Sava with drinking water	12
15	Integral protection and regulation of supplying the area of Haloze with drinking water	2
16	Integral protection and regulation of supplying the area of NE Slovenia with drinking water	25
17	Hydraulic improvement of the sewerage system in the Coastal region	10
18	Hydraulic improvement of sewerage system in the Central Dolenjska and Posavje area	25
	<b>TOTAL:</b>	334

#### 4.2.5.3. Reducing damaging effects of water

##### *Description with rationale*

Floods are natural phenomena, that cannot be totally prevented, but the potential material damages and human losses can be reduced. For this to succeed certain actions have to be undertaken, which include construction and non-construction works, that help reduce the damages, that would occur in case of a flood, that mainly damages human health, environment and economy. The National program on water management that regulates the water management policy includes also the programs, operative programs and plans for achievement of these goals; it sets the development and implementation deadlines and provides the financing funds. It provides for preparation of three sets of measures: building the infrastructure for flood prevention in priority areas, mapping the flood liable areas, the program for improvement in forecasting floods and setting up of an appropriate hydrologic monitoring. The First Plan on water management of the Danube River basin and water basin of the Adriatic rivers and sea will include also more detailed plan of measures against flood threats and more detailed measures needed to achieve the goals set concerning river flows and basins.

The Ministry of Environment and Spatial Planning runs procedures to prepare a detailed location plan to ensure protection against floods in the Savinja and Ljubljana River basins. The ordinance for the Savinja River basin will be adopted in 2008. The Decree on the national location plan for the rehabilitation and construction of high-water level embankments along the Mura River from Dokležovje to Kučnica was adopted and published in the Official Journal of RS, No 73/04. The Decree on the national location plan for the rehabilitation and construction of high-water level embankments along the Mura River from Cvena to Vučja was also adopted and published in the Official Journal of RS, No 79/04. A water management plan of the Danube River will be adopted in accordance with the deadlines stipulated in the WFD Directive (probably by 2009).

Key objectives are:

- increased protection against floods;
- natural enrichment of ground water;
- preservation of eco-systems;
- erosion prevention;
- increased retention space;
- reduced impact of climate changes.

### *Planned activities*

More detailed plan on water management for reducing damaging effects of water in the Donava river basin and the rivers of Adriatic deals with those basins where important flood liable areas are and where actions and measures for reducing damaging effects of floods will be undertaken.

These actions and measures will include the assessment of the degree of risk for each important flood liable area and complete proposal of measures. The proposal on construction measures will include spatial planning of uninhabited flood liable areas for intermittent containment of water (controlled floods in the areas, where substantial material damages cannot be caused) and the construction of water infrastructure facilities for flood prevention in urban areas and areas that in case of a flood present a danger to the environment, also in areas, that are crucial for the economic activity. At present moment there are more than 300.000 ha of flooded areas; we expect to lessen the liability factor in urban areas by half.

Modernization of the Slovene system for water condition monitoring is needed in order to improve overall assessment, and monitoring of factors, which affect the water circle from every angle. In spatial planning balance is very important (better water management), also construction of the representative network based on the concept that deals with the assessment of the condition of water bodies. Thus key data for reference lines for programmes and projects dealing with aquatic resources protection will be provided, protection against natural disasters will be provided and also sustainable use of natural resources and energy.

The Mura River basin: the existing embankments on the Mura River were constructed 30 to 40 years ago and they took into account the then rate of water flow. Nowadays the status of the embankments does not ensure adequate safety in case of floods. After the construction of new embankments has been completed, they will ensure much higher level of safety for all settlements and in particular the road infrastructure. Redevelopment of high level embankments will be carried out that will cover the arrangement of high-water level embankments, the edge areas of forestry, agricultural and inhabited surfaces and other contact points, the existing water courses and gutters, reallocation and arrangement of municipal, energy and other infrastructural capacities and devices, the arrangement of roads and path, measures of nature protection, the preservation of nature and cultural heritage, re-location of roads, measures for the preservation of environment and cultural heritage and sustainable energy use.

The Ljubljana River basin: south-eastern part of Ljubljana can be protected against floods only with long-term measures, that is the construction of a system for keeping out high waters in combination with supplementary water-management systems and measures. A construction of retarding basins is planned as well as the regulation of the flow of water of Mali Graben from the Bokalce dam to its outfall into the Ljubljana. The construction of retarding basins is also envisaged on the Gradaščica River and in some other parts of the City Municipality of Ljubljana.

The Savinja River Basin: to ensure protection against floods in a wider area of the Savinja Valley several measures have been envisaged that depend on the space available and the existing and planned constructions. These measures are:

- construction of several retarding basins to control the flooding wave,
- elevation of the existing embankments and stabilisation of the novelette

- setting up flow openings in frequently flooded area
- construction of safety embankments to protect urban areas
- remediation of already existing high-water level embankments and bank protections on the Savinja River
- water measurement stations and their management.

The Sava River Basin: Parallel to the construction of hydro power plants measures will be implemented that will ensure protection against floods (high-water level embankments, bank protection, the arrangement of areas where effluents fall into the river, on some effluents retarding basins for sediments) to all infrastructure and settlements along the Sava River.

The Drava and Dravinja River basins: a project of protection against floods is extremely important for sustainable regulation of agricultural land in the basins of both rivers. With the establishment of water management regimes the protection against flood will strengthen in both basins and in particular the area of Duplek and the lower part of the Dravinja. Thus also the collection and treatment of waste water in these two basins will be provided and this will satisfy the criteria of complex regulation of basins, which is a basic objective of the Water Directive.

For the reduction of damaging effects of water around EUR 74 million will be provided from the Cohesion Fund.

***Indicative list of major projects***

The projects covered by the definition in Article 39 of the Regulation 1083/2006 will be confirmed by the European Commission and are shadowed in the table below:

No.	Project title	Estimated value of total investment with VAT
		In million of EUR
1	Ensure the protection against flood in the Savinja river basin	60
2	Ensure the protection against flood in the Ljubljana river basin	15
3	Ensure the protection against flood in the Sava river basin	30
4	Ensure the protection against flood in the Drava and Dravinja river basin	20
5	Reconstruction of embankments along river Mura	35
6	Upgrading the system for monitoring and analyzing of water environment status	25
	<b>TOTAL:</b>	185

## 3.3. Sustainable use of energy

### 3.3.1. Past experience

With regard to sustainable use of energy Slovenia set its goals with adoption of the Resolution on National Energy programme; in this programme goals are defined referring to efficient use of energy and renewable energy sources – the goals are to increase energy efficiency by the year 2010, to increase the scope of co-generation of heat and electrical energy and to increase generation of heat and electrical energy from renewable sources and to increase the share of bio-fuel in transport.

National programmes promoting efficient use of energy are carried out directly by the Ministry of Environment or through the Ecology Fund. In addition to financial incentives for investments into efficient use of energy (households, public and services sector, industry) and into environment-friendly production of energy (renewable energy sources, co-generation systems) the national programmes also include energy counselling, awareness-raising, informing and training of energy users and other target groups.

Due to limited funds from state budget the scope of the implementation of these programmes is considerably below the necessary level. In 2005 the allocated financial incentives for investments amounted to SIT 500 million or EUR 2.1 million of non-refundable funds; favourable loans in the amount of SIT 1 billion or EUR 4.2 million were also granted. The reduction of CO<sub>2</sub> emissions amounted to about 26.000 tons. Compared to the average annual goals arising from the National Energy Programme only 8% realisation was achieved. In order to meet the goals, considerably larger funds are needed. So the CF co-financing of the »Sustainable Energy« development priority will be very welcome.

National interventions in the area of EUE and RES are needed due to inefficient functioning of the market, which cannot itself make changes happen quickly enough. The purpose of the development programmes is to eliminate numerous obstacles. In the costs of companies the share of energy consumption costs is frequently low, therefore the investment in EUE and RES are not a priority. Investments in some energetic technologies have a long term return service and that is why they are not attractive. Here is also present a lack of appropriate information about the costs and available technologies, a lack of qualified tenders of energy services and an inaccessibility of suitable financial instruments.

### 3.3.2. Key orientations and goals

On the basis of general objective of the OP for development of environmental and transport infrastructure the strategy of the Sustainable use of energy is defined the aim of which is:

**to ensure, by means of efficient use of energy and production of energy from renewable energy sources, reliable energy supply and support for the development of the economy and to reduce negative environmental impacts.**

Development priority Sustainable use of energy is based on activities, laid down in the Operational programme for reduction of greenhouse gas and is defined in more detail in the National energy programme (NEP). So the areas of EUE and RES are becoming more and more important, especially with entering into force of the Kyoto Protocol in February 2005, because it would be possible to reduce, by »Kyoto Period« 2008-2012, with EUE and RES

programmes, 40%-50% of the total greenhouse gas emission, that needs to be reduced. NEP gives the following objectives for the EUE and RES areas:

- to increase the energy efficiency in all the sectors, that use energy – in the period 2004-2010 by 10% and in public sector by 15%,
- to double, by 2010, the share of electrical energy coming from systems for co-producing heat and electrical energy,
- to increase the share of renewable energy sources in the primary energy balance, in the period 2001 – 2010 from 8,8 % to 12,0 %. This goal encompasses also increase of the share of renewable sources in heat supply, from 22 % in 2002 to 25 % in 2010.

The implementation of the Sustainable use of energy development priority will importantly contribute to the achievement of the objective laid down in Directive on efficient use of final energy in accordance with which Member States need to achieve a cumulative saving of 9% in the period 2008-2016. This development priority will also contribute to the reduction of greenhouse gas emissions and the increased share of renewable energy sources in primary energy. These objectives were adopted by the European Council in March 2007. They envisage conditional 30-percent reduction of the emissions by 2020 and further required 60 to 80-percent emission reduction by 2050.

A huge unused potential for EUE (buildings) and RES (biomass, sun) has been established as well as the potential for reduction, if GG, improvement of local quality of air and economic efficiency. Huge increase of electrical energy consumption is worrying, because it causes increased dependence on the energy import.

The development priority »Sustainable use of energy« represents a key for reduction of emissions of greenhouse gas and decreasing of electrical energy use in Slovenia. The activities carried out to date did not bring desired results, so that now the goal of the development priority is to encompass all the areas, which need strategically oriented action. The development priority relates to increasing the energy efficiency in industry, in service sector, in public sector, transport; it also relates to significantly increasing the scope of production of environment-friendly energy from renewable energy sources and from the systems of co-generation of heat and electrical energy.

The development tasks are focused on elimination of obstacles that hinder the increase of energy efficiency and more efficient use of renewable energy sources. The main fields of activity are the following:

- promotion of investments into EUE,
- promotion of investments into RES,
- informing, rising awareness, training of energy consumers, investors and other target groups,
- promotion of consultation services.

With the implementation of the Sustainable use of energy development priority the purchase of fuels abroad will be substituted with investments and services and the use of domestic energy sources. With the Sustainable use of energy development priority the following goals will be achieved: reliable energy supply, environment protection with the emphasis on greenhouse gas emission reduction, energy costs reduction that will entail an increase in the competitiveness of the economy (especially energy-intensive sectors), decreasing the burden on public finances, larger purchasing power of population, technological development in the fields of construction and other materials, builders' joinery, installations (heating, ventilation,

air-conditioning), polygeneration, information technology, stronger competitiveness in segments where we have knowledge and tradition, the creation of new jobs, the promotion of regional development, the improvement of living and working conditions of the citizens and the reduction of health care costs etc.

The implementation of the Sustainable use of energy development priority will contribute to fulfilling the requirements laid down in the directive on energy efficiency and energy services in relation to final energy saving in the period 2008 – 2016; it will also significantly contribute to the fulfilment of the obligations of Slovenia in relation to the reduction of greenhouse gas emissions laid down in the Kyoto Protocol.

With the funds available for the Sustainable use of energy development priority implementation, the following quantified goals will be achieved by the end of the programming period:

Table 34: Indicators of DP Sustainable use of energy

DP Sustainable use of energy quantified targets		Baseline (last available data)	2013 target	Source
<b>Impact</b>				
1	Reduction of greenhouse emissions (CO <sub>2</sub> and equivalents, kt)	20.284**	reduction by 660 *	MESP
2	Savings of final energy (in GWh)	46.000**	reduction by 621	MESP
3	Renewable energy production increase (in GWh)	8.978**	increase by 510	MESP
MESP: Ministry of the environment and spatial planning; * Emissions reductions relative to the non-intervention scenario from the OP; ** Refers to quantity of emissions, consumption and production in the most recent year with available data.				

With the realization of the development priority Sustainable use of energy, in the area of efficient energy use a 2.6% saving of energy can be achieved (0.37 % annually) with regard to reference use of final energy in accordance with the directive on energy end-use efficiency and energy services whereas in the field of renewable energy sources a 46.1% of a target for the increased production of energy from renewable energy sources as stated in the National Energy Programme.

The implementation of development priority Sustainable use of energy will notably reduce emissions of air pollutants linked to energy production and consumption and thus support compliance with the Community standards on air quality and contribute to increased public health.

### 3.3.3. Compliance with European and Slovenian development documents

Because there are a lot of directives, regulations, and thematic strategies and other documents referring to the area of sustainable energy and affecting the content of this programme, the Republic of Slovenia included them also in already adopted national programmes, so in the continuation we shall merely list them

1. Green paper on the European strategy for sustainable, competitive and safe energy, KOM(2006) 106 final, Brussels, 3.8..2006
2. Green paper on energy efficiency, KOM (2005) 265 final, Brussels, 6. 22. 2005
3. Biomass action plan, KOM(2005) 628 final, Brussels, 7.12.2005
4. European Parliament and Council Directive No.2006/32/EC of April 5. 2006 on the energy end-use efficiency and energy services and on annulment of Council Directive 93/76/EEC
5. European Parliament and Council Directive No 2002/91/EC of December 16. 2002 on energy performance of buildings
6. European Parliament and Council Directive 2004/8/EC of February 11. 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC,
7. European Parliament and Council Directive No 2001/77/EC of September 27. 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market
8. Operational programme for reduction of greenhouse gas emissions, July 2003
9. Resolution on the National energy programme (ReNEP), Official Gazette of the RS No. 57/04.
10. Resolution on national programme for environmental protection 2005-2012 (Official gazette of the RS No. 2/06)
11. Act Ratifying the Kyoto Protocol to the United Nations Framework Convention on Climate Change /MKPOKSP/ (Off. Gaz. RS-MP, No. 17/2002)
12. Strategy for the development of Slovenia (Government of the RS, June 23. 2005)
13. Reform Programme for Achieving the Lisbon Strategy Goals, 2005

*Table 35: Links between the Strategic guidelines of the Community and the Development priority Sustainable use of energy*

Strategic guidelines of the Community	Areas of strategic guidelines	Development priority
Europe and its regions as attractive place for investment and work	Increase in the synergy between environmental protection and growth of economy; Promotion of investments that contribute to Kyoto commitments of the EU	<u>Sustainable use of energy</u>
	Intensive use of traditional energy sources in Europe; Support to projects for the improvement of energy efficiency; Support to the development of technologies to exploit renewable energy sources;	Energy restoration and sustainable construction of buildings
		Efficient use of electrical power
		Innovative local energy supply systems
		Demonstration projects,



		informing and energy consulting
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*Note: all the areas of the development priority Sustainable Energy are in line with both areas of the strategic guidelines*

*Table 36: Links between the priority tasks of Reform Programme for Achieving the Lisbon Strategy Goals in Slovenia and the development priority Sustainable use of energy*

Priority development task	Priority measures	Development priority
MEASURES FOR ACHIEVING SUSTAINABLE DEVELOPMENT III.E.2 Sustainable use of resources (environment protection policy)	1/ Implementation of Operational programme for reduction of greenhouse gas emissions	<u>Sustainable use of energy:</u>
		Energy restoration and sustainable construction of buildings
		Efficient use of electrical power
		Innovative local energy supply systems
		Demonstration projects, informing and energy consulting

In the »Lisbon« programme, as defined in the Article 9.3 of the Decree of the Council on General Provisions on the European Regional Development Fund, the Social Fund and the Cohesion Fund, the development priority »Sustainable use of energy« was fully observed, for it relates to the codes 39-43.

The development priority Sustainable use of energy is in compliance with the Strategy for the Development of Slovenia, with the strategic EU documents referring to energy, environment protection, cohesion policy, Lisbon objectives for growth and new jobs and with the requirements of the directives referring to energy efficiency and promotion of the use of renewable energy sources.

The development priority »Sustainable use of energy« and its goals represent the implementation of the Strategy of the development of RS within several priorities:

- Fifth development priority: reduction of contribution to changing of climate, introduction of sustainable use of natural resources, reduction of energy intensity, promotion of efficient use of energy and use of renewable energy sources, promotion of nature-friendly entrepreneur and consumer practice, promotion of development of environmental technologies, promotion of more balanced regional development by allocating funds to municipalities for the development of local economy, creation of good work and social conditions;
- First development priorities: promotion of technological development in areas where we have competitive advantages, promotion of investments into strategic projects which have positive effects on national and international level, reduction of energy intensity of Slovenian economy;

- Second development priorities: directing the research and development activities towards technological areas in which the research potentials can be connected with economic activities. The programme will indirectly support these efforts.

### **3.3.4. Priority guidelines**

Within the Sustainable Energy Use Development Programme support will be given for promotion and support towards energy efficiency and more extensive use of renewable energy sources. The main areas of promotion will be the following:

- Energy restoration and sustainable use of buildings: energy efficient restoration of existing buildings in the public sector, construction of low energy and passive buildings, use of modern heating technologies, air conditioning and environment friendly decentralized energy supply systems with emphasis on renewable sources and cogeneration;
- Efficient use of electrical energy: implementation of measures in industry, public and service sectors;
- Innovative local energy supply systems: more extensive individual systems and remote and joint systems for production of heat and electrical energy, with emphasis on renewable energy sources and cogeneration;
- Demonstrational and pilot projects and energy consulting programmes, informing programmes and training of energy users, potential investors, energy services providers and other target groups.

Within the Sustainable Energy Use Development Programme investments of small values are envisaged that will be performed on the basis of a public tender. Projects covered by the definition in Article 39 of the Regulation 1083/2006 will not be included in this development programme.

#### **3.3.4.1. Energy restoration and sustainable construction of buildings**

##### *Description and rationale*

Energy restoration of buildings and their sustainable construction involve various aspects of improving the characteristics of buildings and their integrated systems; its purpose is to reduce the use of energy and to increase the use of renewable energy sources in buildings in the public sector. Energy restoration of the buildings of the state and local administrations, primary and secondary schools and faculties, hospitals etc is envisaged. Energy restoration and sustainable construction of residential buildings will not be co-financed by using the funds of the development priority Sustainable Development.

Energy restoration of buildings in public sector encompasses investments into improvement of thermal insulation of the existing older buildings, which are not sufficiently insulated. Construction of new low energy buildings includes investments into new buildings, which with thermal insulation better than average – at least 40% better than defined by the standard. Construction of new passive buildings involves investment into buildings with thermal insulation that meets the standards specifying it as a passive building. Improvement of heating systems involves replacing of inadequate boiler facilities with high utilization rate equipment, promotion of purchase of wood biomass and optimization of heating systems.

Promotion of use of solar systems aims at increase in the use of renewable energy sources for heating the buildings and sanitary water in various fields of energy use. The central heating pumps are efficient and environment friendly form of heating. The heat, extracted by the heating pumps from the surroundings, is energy, is solar energy accumulated in various substances, therefore it is a renewable energy. Exploitation of solar energy is more and more popular also in Slovenia – in 2005 the solar energy market started to blossom but it needs to be promoted.

Installation of micro systems for co-generation of heat and electrical energy – which has higher utilization than separate production – brings considerable primary energy saving, and due to its consumption at the site of its generation there are no losses at distribution.

### ***Planned activities***

The area of energy rehabilitation and sustainable construction of buildings includes:

- Energy rehabilitation of buildings (thermal insulation of facades, thermal insulation of lofts, change of windows),
- Construction of new low energy buildings,
- Construction of passive buildings,
- Rehabilitation of heating systems (installation of condensation and modular boilers, installation of boilers using wood biomass, installation of thermostatic valves, regulation and hydraulic calibration of heating systems, measuring and billing actually used energy, replacing of heating substations in the remote heating systems),
- Installation of solar heating systems,
- Installation of heating pumps for heating and preparation of sanitary water,
- Installation of photovoltaic systems for exploitation of solar energy,
- Installation of systems for micro cogeneration of electrical energy and heat.

### **3.3.4.2. Efficient use of electrical energy**

#### ***Description with rationale***

The growth in the use of final electrical energy in Slovenia exceeds all expectations (in recent years more than 4 % per year). The highest growth is recorded in industry, service industry follow – this represents a serious threat to the long-term reliability of energy supply in Slovenia. The result of this is increase in environmentally less suitable production, which uses coal and electrical energy import. The increase in energy-inefficient production of electrical energy increases the environmental burden and makes meeting the requirements of the Kyoto Protocol and other environmental obligations of Slovenia difficult.

The reasons lie in too slow (or too limited) implementation of measures related to efficient use of energy, measures for directing the use of energy (demand side management), unsuitable pricing policy and high energy intensity of industry (compared to elsewhere in EU), caused by the industry structure, which is very slow in changing in favour of less intensive branches of industry.

The Preference direction of efficient use of electric energy encompasses various activities aimed at reducing use of electrical energy in all sectors of its use in industry (processing activities) and other broad use. The goal of the programme is to slow down the trends of

growing use of electrical power; in Slovenia this growth considerably exceeds the expected growth and this hinders the possibility of sustainable development of economy and society.

#### ***Planned activities***

The preference direction "efficient use of electrical energy" encompasses activities aimed at reducing the use of electrical energy in:

- industry (target technologies, energy-efficient electro motors, frequency adapters for regulation of motor rotations, energy-efficient pumps and ventilators and air-compressing systems, energy-saving lighting),
- extensive use (energy-efficient air conditioning systems and lighting),
- public lighting (installation of energy saving light bulbs and regulators).

### **3.3.4.3. Innovative measures for local energy supply**

#### ***Description with rationale***

Priority orientations of innovative systems for local energy supply encompass investments into modern energy supply systems, which will considerably improve utilization of fossil fuel energy conversion or increase the use of renewable energy sources. The priority guideline focuses on bigger individual and regional energy systems.

Key target groups: companies, entrepreneurs, individuals and local communities.

Demarcation with the Programme of Rural Development will be based on the type and location of a beneficiary and the size of a project since micro enterprises in small settlements will be entitled to financial incentives from Axis 3 of the Programme for Rural Development to invest into energy generation from renewable energy sources. The size of a project should not exceed EUR 480,000 although the value can be changed provided that both managing authorities agree.

The programme aims at promotion of innovative systems involving highly efficient energy conversion and exploitation of renewable energy sources as well as development of remote heating networks.

#### ***Planned activities***

The following technological areas represent priorities::

- district heating systems using biomass, including the systems of heat and electricity co-generation;
- modern boilers and systems for co-generation of heat and electrical energy using biomass and natural gas;
- heat generation systems using biogas;
- generation of heat and electrical energy from geothermal energy.

Co-financed project will mirror the character of public infrastructure as well as the state aid.

### **3.3.4.4. Demonstration projects, information provision and counselling**

#### ***Description with rationale***

Beside promoting investments into efficient use of energy and renewable sources of energy, informing, promoting awareness and training of energy users, investors, energy services providers and other target groups also plays an important part, as does energy counselling – for only in that way we can achieve required level of quality and dynamics of increase in investment into EUE and RES.

Within this frame demonstration and pilot projects will be carried out, projects of good practice will be promoted and activities for rising awareness of the energy users and other target groups will be implemented; energy counselling will all be encouraged. The majority of the funds will be earmarked for the demonstration and pilot projects in the public sector.

### ***Planned activities***

The following activities are planned:

- implementation of demonstration and pilot projects (low energy and passive houses, innovative heat and electrical energy generating systems) with an emphasis on public sector;
- programmes for rising awareness, for informing and training;
- counselling network for users;
- programme for promotion of energy inspections;
- programme for promotion of local and regional energy concepts;
- supporting local communities in implementation of projects based on contractual reduction of energy costs (third party financing).

## **3.4. Technical assistance**

### ***Description with rationale***

The purpose of technical assistance is to ensure efficient implementation of the operational programme, development priorities, priority directions and operations. The activities that will be implemented within the technical assistance will increase the recognisability of the programme and its integral parts, the quality of its implementation, its monitoring and control over its implementation; it will ensure coordination between the partners. Within the technical assistance preparation of project proposals will be promoted, different evaluations and studies, public activities and suitable administrative support will be carried out

### ***Goals***

The main goals of the technical assistance are the following:

- to ensure smooth and good implementation and monitoring of the programme, with preparation and choosing the projects, implementation of studies and evaluations, expert assessments and reports, suitable administrative qualification of beneficiaries;
- to ensure visibility and coordination of the programme/ development priorities/preference directions/operations between the partners, general and expert public;
- to ensure information-supported management and monitoring of the programme and reporting on it.

### ***Development context***

The technical assistance activities support the development priorities, defined in the NSRF and the development priorities/operations defined in the OP ETID.

### ***Planned activities***

In particular, the technical support projects will include the following activities:

- activities for the preparation and selection of operations;
- studies for the implementation of development priorities / priority orientations / operations of the operational programme, primarily in the area of environment, transport and energy;
- evaluations / reports / expert assessments;
- measures intended for partners, beneficiaries, general and expert public, including the activities of information provision and raising awareness, measures of coordination and promotion of cooperation among partners and the measures to raise awareness;
- activities for setting up, upgrading and connecting the information systems for management, monitoring, evaluation, reporting and controlling the implementation of operations/priority orientations/development priorities;
- support activities for the implementation of the operational programme and activities to build administrative capacities of the beneficiaries (additional jobs, training, exchange of experience, work of the monitoring committee etc.).

Within the OO ETID technical assistance not only the above mentioned activities will be financed but also the activities of horizontal character related to the content of at least two operational programmes including also the contents of the OP ROPI and in particular:

- functioning of the monitoring committee for the OP ROPI and OP RR;
- support activities in the implementation of the operational programme and the activities to build administrative capacities of the Managing Authority, the Certifying Authority and the Audit Authority (additional jobs, training, experience exchange etc.);
- activities to provide information to the public;
- activities for setting up, upgrading and connecting the information systems for management, monitoring, evaluation, reporting and controlling the implementation of operations/priority orientations/development priorities;
- studies and evaluations.

Within the OP ETID technical assistance not only the contents of the OP ROPI and horizontal contents will be financed, but also the contents referring to the activities of the Single Programming Document for the period 2004-2006.

### ***Beneficiaries or target groups***

Beneficiaries for the project of technical assistance within the frame of OP ETID are the following:

- public law entities involved in the implementation of the OP (example: ministries, government offices, public agencies, public institutes, public funds, bodies promoting regional development, municipalities, chambers, universities),
- private law entities, beneficiaries of the programme (example: non-government organizations, sheltered companies, companies involved in educational activities, organizations promoting regional development, associations of small and medium-size undertakings), whose technical assistance projects were chosen through a public tender.

In the implementation of the technical assistance within the OP ETID restrictions defined in Article 46 of the Council Regulation No 1083/2006 will be taken into account.

## **4. COMPLEMENTARITY OF ACTIONS**

### **4.1. Demarcation with rural development**

The reference framework for the Rural Development Programme of the Republic of Slovenia (NSPRD) 2013 (RDP) is the National Strategic Plan of Rural Development (NSNRP). The NSPRD lays down the priorities of the rural development policy. The priorities have been set up in accordance with the Community priorities on the rural development policy. The NSPRD shall apply for the period 2007-2013 and shall be, if not defined otherwise by the priorities, implemented throughout the Republic of Slovenia.

Within the framework of its priority tasks the NSPRD is aimed at strengthening the multifunctional role of agriculture in Slovenia. Particularly emphasised are the needs for restructuring the agriculture and food processing industry as well as for enhancing the competitiveness of the entire agricultural sector and agrifood chain. The NSPRD is founded on the principles for a sustainable management of renewable natural resources and pays special attention to the maintenance of cultural landscape and environmental protection as well as the maintenance of the settlement and rural identity in the countryside. It also reflects the multifunctional role of forests, which give Slovenian landscape a unique mark and represent an important element of the environmental consistency and a source for biodiversity. The NSPRD priorities shall also contribute towards the economic and social enhancement of the countryside and introduce new approaches for increasing employment opportunities in rural areas and not only in the primary agricultural activity.

The balance between the three main intervention areas: competitiveness, environment, and diversification of economic activities as well as the quality of life in the countryside, shall be achieved by a targeted and a well-considered allocation of resources between the intervention areas. Slovenia's national priorities are based on the baseline analysis, potentials and specific needs, which shall contribute towards an efficient accomplishment of the overall Community objectives laid down in the Council Decision on Community strategic guidelines for rural development and the Lisbon and Göteborg objectives. Next to the national priorities under the rural development strategy another priority is the preservation of forests, which, however, shall be governed under the national policy instruments. Slovenian forestry is based on prevention activities providing for sustainable forest exploitation and management, which shall considerably contribute towards the fulfilment of the EU forestry policy objectives.

Slovenia will implement rural development policy with the measures of 4 priority axes of the NSRF. Below are indicatively described the 4 axes with definition and demarcation of issues with the cohesion policy, where the MA and Ministry of Agriculture, Forestry and Food will regularly coordinate issues with regard to provisions of implementing documents, which will prevent the risk of double financing.

*Axis 1: Improved competitiveness of agricultural and forestry sector* The rural development policy shall primarily support the restructuring of agriculture, food processing industry and forestry by implementing measures pursuant to the following four priorities:

- a) improved level of capacities and human potential strengthening (activities in this field will follow the goals: better qualifications for work in agriculture and forestry, the promotion of transfer of agricultural holdings to a younger generation, the acceleration of structural changes on agricultural holdings and the improvement of the age structure of farm holders);
- b) modernisation and restructuring of agriculture and forestry and the promotion of innovativeness (activities in this field will follow the goals: technological adaptations of agriculture to the Community standards, structural improvements, the needs to raise efficiency in agriculture and improve income of primary agricultural producers);
- c) the improvements in the quality of the production and processing of agricultural, food and forestry products (activities in this field will aim to strengthening the efficiency, innovation promotion, quality improvement and environmental protection in the production, processing and marketing of agricultural, food and forestry products – special attention shall be paid to networking alongside the food chain, recovery of raw materials for renewable energy sources from crops and wood, and participation in food quality schemes),
- d) transitional measures – support the constitution and operation of groups of producers.

The demarcation within the priority Agriculture Modernisation and Restructuring in the area of improving and developing infrastructure is based on beneficiaries. Within the Rural Development Programme the beneficiaries are agricultural holdings whereas they are not beneficiaries within the OP ETID. Within the priority More Effective Forestry Management forest roads and private roads on private land can be financed that cannot be financed from the ERDF. The ERDF only gives support to the local category of roads that are public infrastructure. Within the same priority also investments into the production and use of wood biomass are financed whereas with the Operational Programme of Environmental and Transport Infrastructure incentives are given to construct systems for efficient use of wood biomass - the crucial element here is that within the OP ETID farmers are not beneficiaries. All this clearly indicates that doubling is not possible since the demarcation is very precise and an agreement was reached between the managing authorities.

*Axis 2: Improved environment and rural areas*

Under this set of contents the rural development policy shall support in particular the:

- a) preservation of agricultural landscape in natural handicap areas (activities in this field will mainly be directed towards maintenance of agriculture in areas where due to natural handicaps (mountainous, inclination, flooding, soil sliding, and strong winds) the use of the generally acknowledged technologies is not possible - in these areas the production is extensive and the quantity of the produce is far lower than the production in the lowland areas; the production economy in these areas is significantly weaker; as a result of these restrictions additional costs arise to be compensated by these measures; indirectly, this priority is aimed at the maintenance of rural landscape and the settlement of the areas where agricultural activity is being abandoned),
- b) promotion of environment friendly agricultural practices (activities in this field will aim to preserving and improving natural resources: soil, water and air).

The measures of the Axis 2 will be implemented in a form of direct payments and will not cover the activities of the cohesion policy.



The Axis 2 measures are implemented in a form of direct payments (it is about payments per a justified unit – surface, animal ... as compensation of higher costs) and therefore do not overlap with the activities of the Cohesion policy where such activities are not eligible.

*Axis 3: Quality of life in rural areas and rural economy diversification*

Rural development policy shall support the improvement of the quality of live in rural areas, primarily by the implementation of measures under the two priorities:

- a) improvement of employment opportunities in rural areas (the goal is to enhancing business potentials in rural areas by diversification of agricultural holdings into non-agricultural activities as well as by promoting the creation and development of micro enterprises in the countryside – support shall be aimed at enterprise development based on competitive strengths of the countryside (traditional knowledge, manpower, raw materials, and working environment) in the form of investments, and operational and advisory actions;
- b) improvement of the quality of life in rural areas (the goal is revival of village cores, renewal of multipurpose facilities, setting up and use of local ICT, tourism and other infrastructure, securing the possibilities for performing versatile activities, and renewal of cultural and natural heritage - the priorities shall be targeted at the renewal and construction of common facilities to improve the social, cultural and other activities in villages; a special attention shall be paid to the renewal and construction of typically rural cultural monuments; for the purposes of the tourism promotion natural values shall be preserved, various thematic trails established and other infrastructure required; the services shall be aimed in particular to reduce the differences between urban and rural areas and to raise the quality of life in the countryside).

Where the measures of axis 3 are concerned, there's a special purpose, so there's no overlapping with OP ETID.

The only comparable area within Axis 3 of PRP is the supports provided to micro companies and their production of electricity and district heating systems. The demarcation will be based on the threshold value of projects. The indicative demarcation value is EUR 480,000 (OP ETID will finance projects above this threshold) and can be changed during implementation phase in agreement between the two managing authorities. Elsewhere overlapping between the operational programme and Rural Development Programme is not possible.

*Axis 4: LEADER — building local capacities for employment and diversification*

The axis 4 of the NSPRD is targeted at strengthening the subsidiary principles in rural development. Under the LEADER axis rural development policy shall focus on the following priorities:

- a) skills acquisition and increase of the rural population self-initiative (the activities of this priority will focus on involvement of the civil society and interested public into planning of economic, social and environmental development at the local level to be carried out by organisations and individuals trained for this purpose – the activities shall be targeted at the ongoing training and encouraging of local population self-initiatives),
- b) establishment of local action groups (LAG) in rural areas (the activities of this priority will focus on provision of partnerships between bodies governed by public and private law by taking into consideration the bottom-up approach in drawing up and the implementation of the local development strategies),

- c) implementation of local development strategies (the activities of this priority will focus on independent decision-making within LAG in selecting projects and activities deriving from local development strategies).

In the case of measures of axis 4 the purpose is specific and there is no risk of overlapping with the OP ETID. With Axis 4 support is ensured to the establishment and functioning of the local action groups (LAG) by satisfying the conditions of the Rural Development Programme and concerns smaller projects that can not overlap with the contents of the OP ETID. Within the OP ETID the construction of infrastructure is supported that is within the competence of state institutions (railway, motorways, national and regional roads, cycling routes) or municipalities in the field of environment. These are large-scale investments that cannot be financed within LAG. With projects referring to sustainable energy use the same demarcation will be applied as with Axis 3. Therefore it will be based on the size of a project.

## **4.2. Demarcation with fisheries**

Within the priorities of the European Fisheries Fund, Slovenia will endeavour to achieve the following key goals and follow the Strategy of fisheries development in Slovenia:

- Ensuring sustainable and competitive fisheries,
- Modernising and expanding aquaculture,
- Modernising and expanding the processing industry
- Promoting fish, fish products and fishing sector,
- Providing suitable conditions for the work and safety of the fishermen by setting up adequate infrastructure, arranging fishing ports and landing sites,
- Promoting the development of coastal fishing areas and achieving lasting prosperity by diversifying the activities and connecting fisheries with tourism, cultural heritage and tradition.

Within the Operational Programme for Fisheries Development 2007-2013 11 measures on 4 priority axes and a technical assistance measure will be implemented.

- Axis 1: Sustainable use of fishing resources aiming at the provision of sustainable and competitive fisheries includes scrapping of vessels and their re-allocation to activities that are not fishing, investments in fishing vessels and equipment. These measures supplement the objectives of axis 1. The measures, activities and the target group of beneficiaries of this axis are not entitled to the support granted within Axis 1 of PRP and this is why demarcation with fisheries is not necessary.
- Axis 2: Aquaculture, processing and marketing aiming at modernising and expanding aquaculture, modernising and expanding of processing activities, the promotion of fish, fishery products and fishery sector. Activities and beneficiaries registered for the activities of aquaculture and/or fish processing and marketing, including those farmers who have registered this activity as secondary, are entitled to receive support to be invested into aquaculture of commercial character only with the measures of Axis 1 of PRP. Activities of nature protection (protection of natural habitats) are covered by measures in PRP.
- Axis 3: Short-term measures of common interest aiming at providing adequate conditions for work and the safety of fishermen by ensuring suitable infrastructure, arranging fishing ports, loading sites. These activities do not overlap with the PRP measures.
- Axis 4: Development of fishing areas aiming at promoting the development of coastal fishing areas and achieving long-term well-being by diversifying the activities

and connecting fisheries with tourism, cultural heritage and tradition. One coastal action group (CAG) is envisaged to implement these measures. If the areas and partners within this CAG overlap with the areas and partners of the LAG of Axis 4 of the PRP and if there is one implementor selected for the implementation of both local strategies for coastal area development and rural development, the activities and financial resources will be divided to both local strategies in a transparent way.

- Flanking measure Technical assistance for the OP of the Fisheries Development is intended to ensure administrative support to the implementation of the measures in the OP of the Fisheries Development does not overlap with the measure of the technical support in PRP.

An area of financing similar to the OP ETID is only the area of arranging and modernising ports. However, within the Operational Programme of the Fisheries Development only the arrangement of already existing ports in the three coastal municipalities (Izola, Koper, Piran) is financed whereas these activities are not financed within the OP ETID where the aim is to ensure port services for international trading and port services for international public transport.

In any case, the managing authorities of the cohesion and fisheries policy will regularly meet and coordinate the implementation of the provisions in implementing documents that will prevent double financing.

### **4.3. European Territorial Cooperation**

The foreseen activities of the OP ETID are complemented by the third objective of the Cohesion policy, the European territorial cooperation. In this field Slovenia participates in three sets of programmes:

**a) Cross-border operational programmes:**

- cross-border cooperation with Austria,
- cross-border cooperation with Italy,
- cross-border cooperation with Hungary,
- cross-border cooperation with Croatia,
- cross-border cooperation within the Adriatic Initiative.

**b) Transnational operational programmes:**

- Alpine space,
- South-Eastern Europe,
- Central and Eastern Europe,
- Mediterranean area

**c) Interregional operational programmes:**

- Interregional thematic programme;
- Interregional Interact programme,
- Interregional ESPON programme;
- Interregional URBACT programme.

From the first group, the cross-border cooperation, the most relevant for OP ETID are those projects that refer to development planning in the cross-border areas as well as investments in the construction of infrastructure of cross-border importance. Also the knowledge transfer and

development of joint concept can be important, in particular in the field of sustainable energy use.

Transnational programmes refer to joint challenges and the utilisation of opportunities in wider macro regions. In the field of transport, projects whose objective is to optimise transport flows in the wider European space are extremely important and relevant and the same is true for the search of innovative solutions to reduce negative impacts on environment.

The objective of interregional programmes is primarily to exchange best practices and to prepare professional analysis and blueprints for further action and for OP ETID ESPON programme studies could be pointed out as particularly relevant. The initiative “Regions for Economic Change” adopted within the objective European Territorial Objective will also contribute to the quality of the operational programme implementation. Its purpose is to identify best practices in modernisation in relation with projects that clearly add to the EU Agenda for jobs and growth and its expansion to all regions in order to promote their regional growth and reduce economic disparities. The initiative will play an important role in achieving cohesion goals in member states by emphasising the importance of development guidelines at the national, regional and local levels and the importance of networking that enhances the transfer of ideas and good practice. This will also be utilised in the implementation of the operational programme.

## 5. Financial Plan

### 5.1. Financial plan of commitments by years

Reference number of the operational programme: CCI 2007SI161PO002

Table 37: Commitments by years with regard to the financing source (in EUR, current prices)

	Structural Funding (ERDF or ESF) (1)	Cohesion Fund (2)	Total (3) = (1) + (2)
<b>2007</b>			
In Regions without transitional support	12.024.435		12.024.435
In Regions with transitional support	0		0
<b>Total 2007</b>	<b>12.024.435</b>	<b>91.503.092</b>	<b>103.527.527</b>
	0		0
<b>2008</b>			
In Regions without transitional support	18.034.488		18.034.488
In Regions with transitional support	0		0
<b>Total 2008</b>	<b>18.034.488</b>	<b>125.243.793</b>	<b>143.278.281</b>
	0		0
<b>2009</b>			
In Regions without transitional support	26.470.366		26.470.366
In Regions with transitional support	0		0
<b>Total 2009</b>	<b>26.470.366</b>	<b>160.705.309</b>	<b>187.175.675</b>
	0		0
<b>2010</b>			
In Regions without transitional support	32.249.421		32.249.421
In Regions with transitional support	0		0
<b>Total 2010</b>	<b>32.249.421</b>	<b>197.951.134</b>	<b>230.200.555</b>
	0		0
<b>2011</b>			
In Regions without transitional support	41.828.910		41.828.910
In Regions with transitional support	0		0
<b>Total 2011</b>	<b>41.828.910</b>	<b>237.046.773</b>	<b>278.875.683</b>
	0		0
<b>2012</b>			
In Regions without transitional support	45.488.086		45.488.086
In Regions with transitional support	0		0
<b>Total 2012</b>	<b>45.488.086</b>	<b>278.059.808</b>	<b>323.547.894</b>
	0		0
<b>2013</b>			
In Regions without transitional support	47.934.180		47.934.180
In Regions with transitional support	0		0
<b>Total 2013</b>	<b>47.934.180</b>	<b>321.059.949</b>	<b>368.994.129</b>
	0		0
<b>Total in Regions without transitional support (2007-2013)</b>	<b>224.029.886</b>		<b>224.029.886</b>
<b>Total in Regions with transitional support (2007-2013)</b>	<b>0</b>		<b>0</b>
<b>Grand Total 2007-2013</b>	<b>224.029.886</b>	<b>1.411.569.858</b>	<b>1.635.599.744</b>

## 5.2. Sources of financing by development priorities

Reference number of the operational programme (CCI number): CCI 2007SI161PO002

Table 38: Sources of financing by development priorities (in EUR, current prices)

	EU assets(a)	National participation (b)=(c)+(d)	Framework financial distribution of national participation		Joint financing (e) = (a) + (b)	Rate of co-financing (f)=(a) / (e)	For information	
			Nacional public sources ©	National private sources (d)			Contribution EIB	Other sources
1. Railway infrastructure (CF-public)	449.567.581	79.335.456	79.335.456	0	528.903.037	0,85	0	0
2. Road and port infrastructure (CF-public)	241.370.738	42.594.837	42.594.837	0	283.965.575	0,85	0	0
3. Transport infrastructure (ERDF-public)	224.029.886	39.534.686	39.534.686	0	263.564.572	0,85	0	0
4. Management of municipal waste (CF-public)	205.568.426	36.276.782	36.276.782	0	241.845.208	0,85	0	0
5. Environment protection-water sector (CF-public)	325.483.339	57.438.237	57.438.237	0	382.921.576	0,85	0	0
6. Sustainable use of energy (CF-public)	159.886.553	28.215.275	28.215.275	0	188.101.828	0,85	0	0
7. Technical assistance (CF-public)	29.693.221	5.239.981	5.239.981	0	34.933.202	0,85	0	0
<b>TOTAL</b>	<b>1.635.599.744</b>	<b>288.635.254</b>	<b>288.635.254</b>	<b>0</b>	<b>1.924.234.998</b>	<b>0,85</b>	<b>0</b>	<b>0</b>

## 6. IMPLEMENTING PROVISIONS

### 6.1. Determining implementation structure and responsible institutions

#### *Experiences from the period 2004-2006*

**The period 2004–2006** was for Slovenia the first programming period of full inclusion in the cohesion policy. On the basis of experiences obtained through implementation of pre-accession instruments the Republic of Slovenia decided to maintain centralized institutional set-up for managing structural funds and the Cohesion fund. This means that Slovenia had one managing authority - GOSP, which coordinated the preparation of the SPD, and one paying authority within the Ministry of Finance.

The Managing Authority of the structural and the cohesion funds was set up by Decision of the Government of the Republic of Slovenia (Official Gazette of the RS, No. 115/02) in December 2002 within the framework of the Government Office for Structural Policy and Regional Development (hereinafter GORD); it defined legal platform and the obligations of GORD within the Government of the RS. The basic responsibilities of GORD were comprehensive management of the structural funds and the cohesion fund and coordination of activities for successful regional development.

In accordance with the government decision the area of structural policy in GOSP was responsible for the preparation of programming documents for the EU cohesion policy and acted as managing authority for the structural funds and the cohesion fund. The government office was headed by a minister without portfolio who exercised rights and duties of the director of the office. Appointment of the minister without portfolio gave a political emphasis to economic development and structural policy, since the minister is directly accountable to the Prime Minister.

With the **Ordinance on the establishment and fields of work of the Government Office for Local Self-government and Regional Policy** (O.G. of the RS, No. 7/05) the GOSP was set up. On the day of entering into force of the ordinance all the powers and tasks of the Government Office for Structural Policy and Regional Development, laid down in the Promotion of Balanced Regional Development Act (O.G. of the RS No. 60/99 and 56/03), statutory regulations, adopted on the basis of this Act and the decisions of the European Commission referring to cohesion policy, were transferred to the newly set up Government Office for Local Self-government and Regional Policy.

In the field of the European cohesion policy for 2004-2006 the Managing Authority:

- Heads preparation and coordination of programming documents with the EU; on the basis of these documents Slovenia can obtain the CFs from the EU budget.
- Performs general management tasks for the purposes of European structural funds and the cohesion fund, arising from the EU legislation referring to cohesion policy.
- Coordinates, defines, monitors and evaluates operation of the ministries and government offices and other bodies and offices involved in the implementation of the cohesion policy, reports to the governments and performs other tasks related to the European cohesion policy.

- Ensures conditions for establishing, maintenance and functioning of the information system for monitoring and evaluation of the national development programme and the Single programming Document (SPD).

At the implementation of SPD and the Reference framework for the CF it became clear that the existing system, which was based on a central coordination body on the one hand and the strong role of the ministries, responsible for particular domains, on the other, were an effective and adequate approach.

Where the structural funds are concerned, in the beginning of the period a two-level coordination was planned, based on the Managing Authority function and the function of three intermediate bodies. The experiences showed that this system was not as effective as it was expected, for it decreased transparency and caused excess scope of coordination. At the Government session which took place on December 22, 2005 the amendments to the SPD were adopted, they were approved by the Monitoring Committee of the SPD on December 16, 2005 for the programming period 2004-2006, with which the platforms for the integration of the intermediate bodies of the ERDF and the ESF into the Managing Authority were adopted.

On the basis of positive experiences with this change of system The Republic of Slovenia in the new programming period maintains the centralized system of management; the RS also introduces additional simplifications of the system. Certain adjustments of the current management and control system to the Council of EU implementing provisions applying for the period 2007-2013 are needed. On the other hand some other experience gained so far should be considered. The first is the importance of clear and timely instructions, which is the precondition for all the operations to be carried out in accordance with the Operational Programme and the prescribed rules. The procedures, tasks and competences of each individual authority, its organisational units and employees need to be clearly defined as well. In further development of implementing systems additional attention should also be paid to the information system for monitoring.

### ***Implementing structure for both structural funds and the Cohesion Fund – period 2007-2013***

In defining the authorisation and obligations of the stakeholders involved in the implementation, the EU regulations and the legislation of the Republic of Slovenia are taken into full consideration. Among the most important regulations of the Republic of Slovenia are the act on implementing the budget, the act defining the fundamental rules on managing and controlling public finance that is also applicable to EU funds, the act regulating state administration, the act regulating the Government activities and the act regulating state aid control.

### ***Implementing provisions***

In order to fully meet the requirements of the EU legislation and in order to create a suitable and effective system for implementation of the activities concerning the structural funds and the EU Cohesion Fund, a clear demarcation of tasks is needed as well as the definition of relationship between the involved institutions, as described in the continuation:



- Managing Authority: Government Office for Local Self- Government and Regional Policy (internal organizational units, defined in the act on internal organization and systematization of jobs in the GOSP)
- Certifying Authority: Ministry of Finance, National Fund
- Audit Authority: Ministry of Finance – Budget Supervision Office

In the definition and use of the implementing system in Slovenia the provisions in Articles 58 to 62 of the Council Regulation (EC) No 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999 (official Journal, No 210 of 31 July 2006, page 25) (hereinafter referred to as: the General Regulation).

The powers and the relationships between the institutions involved in the utilization of the means of the structural funds and the cohesion fund, the purpose of which is ensuring optimal use of the European Cohesion Policy funds in the Republic of Slovenia, will be defined in more detail in a special regulation. Thereby principles will be observed defined in Article 58 of the General Regulation, especially the principle of dividing duties among and within individual bodies. Even in case that the Managing Authority, intermediate bodies, the Certifying Authority or the Audit Authority act as a beneficiary or represent any other incompatible function, a suitable demarcation of means is ensured.

#### ***Managing Authority for the EU Structural Funds and the Cohesion Fund***

In accordance with the first paragraph of Article 59 of the General Regulation, the function of the Managing Authority for both structural funds and the Cohesion Fund is performed by the GOSP. The head of this body is the director of the government office or a person authorized by the head of the office; within the framework of the office internal organization units operate which perform the function of the Managing Authority. The role of the Managing Authority and other roles of the GOSP should be kept clearly separate and a definition of the relationship between the two as well as their relationships, tasks, competences and responsibilities is determined in the internal act of the Office.

In accordance with Article 60 of the General Regulation the Managing Authority is responsible for effective and proper management and implementation of operational programmes and is, in this framework, obliged to establish a system of implementation as defined in the provisions of the General Regulation and of the implementing ordinance. In line with paragraph 2 Article 59 of the General Regulation the Managing Authority or the intermediate body into which the authority was vested is particularly responsible for the following:

1. Compliance of co-financed activities with the provisions of the operational programme and other EU and Slovenian regulations;
2. Setting up a system of administrative control and on-site control along with the reporting on irregularities;
3. Setting up a system for monitoring and evaluation and giving all necessary information to other institutions involved in the implementation, especially to the Certifying and Audit Authorities;
4. Setting up a system of information and publicity, as laid down in Article 69 of the General Regulation;

5. Setting up and managing Monitoring committee, which can be involved with more than one operational programme and providing administrative and technical support for it.
6. ensuring to the certifying authority that the control system has been set up and functions, that the expenditure declared has actually been incurred, that the products and services have been delivered in line with the approval decision that the applications for reimbursement from the part of the beneficiary are correct and that the operations and expenditure are consistent with the EU and national regulations.

In line with Article 13 of the Regulation 1828/2006/EC control is performed by either the Managing Authority or intermediate body when the Managing Authority transfers these controls to this body.

The intermediate body performs the tasks transferred to it by the Managing Authority that issued a decision. Among the tasks that the Managing Authority can transfer to the intermediate body the following should be mentioned:

- performance of administrative controls and the preparation of applications for reimbursement;
- implementation of selection procedures and approval of operations;
- with direct certification of operations it performs verification of administrative, technical and financial suitability of operations as well as the adequacy of the content;
- regular monitoring of operations and reporting to the Managing Authority to confirm their execution.

A more detailed description of the tasks of the MA and the transfer of the powers or tasks shall be defined in a special regulation. Especially defined in this framework will be the procedures for implementation of principle of cross-over financing (flexibility rule), which will be implemented at the level of individual development priority. The mentioned financing possibility will be enabled in cases of direct connectedness with the content of the project and when this financing will be essential for the implementation of the project. MA will also be in charge of coordination, implementation and monitoring of this provision.

### ***Certifying Authority***

In accordance with Item b of the first paragraph of Article 69 of General Regulation, the body appointed as the Certifying Authority (CA) for the ERDF the ESF and the CF shall be the Ministry of Finance, National Fund.

In accordance with Article 61 of the Council Regulation (EC) No 1083/2006 the Certifying Authority is responsible in particular for:

- receiving payments under the title of the Community contribution from the European Commission and keeping an interest subaccount for each fund and keeping records of the transactions
- certifying that the declaration of expenditure and applications for payment are accurate and submitting them to the European Commission
- making reimbursements from the title of the Community contribution based on individual application for reimbursement into the national budget

- ensuring for the purposes of certification that it has received adequate information from the managing authority on the procedures and verifications carried out in relation to expenditure included in statements of expenditure
- performance of administrative verification on the basis of each application for reimbursement in the state budget before executing payments in the abovementioned indent
- performance of on-the-spot checks at the managing authority or intermediate body, and if necessary, at the beneficiary
- taking account of the results of all audits carried out by or under the responsibility of the audit authority
- maintaining accounting records in computerised form of expenditure declared to the Commission
- issuing applications for reimbursement to all line ministries
- keeping an account of claimed and executed reimbursements, as well as preparing annual declaration on reimbursements claimed submitted to the audit authority
- taking due account of the reimbursements made when certifying expenditure and preparing applications for reimbursement
- drawing up and submission of forecasts of likely applications for payment of the cohesion policy funds for the current and the subsequent financial year.

### ***Audit authority***

In accordance with Item c of the first paragraph of Article 59 of the General Regulation the body appointed as the Audit Authority for the ERDF, the ESF and the CF will be the Budget Supervision Office (BSO). The BSO is a body within the Ministry of Finance which performs the task of coordinating internal control over the public finances (system of ICPF) and the tasks of independent control of all EU funds; it is authorized to coordinate counter-fraud activities (performing the AFCOS function).

The tasks of the AA defined in Article 62 of the Council Regulation (EC) No 1083/2006 the Audit Authority is responsible in particular for:

- ensuring that audits are carried out to verify the effective functioning of the management and control system;
- ensuring that audits are carried out on operations on the basis of an appropriate sample to verify expenditure declared;
- preparation and submission of an audit strategy within nine months of the approval of the operational programme;
- submission of the Annual control report to the European Commission;
- issuing an opinion, on the basis of the controls and audits of the effectiveness of the management and control system functions;
- reporting the information concerning all the important findings about the management system and the system of internal control provided by all the participants in the procedures of implementing the cohesion policy to the Managing Authority, the Certifying Authority and participants subject to audit;
- preparation and submission of a closure declaration and when necessary, also a declaration of a partial closure.

Audits will be carried out on the basis of the International Auditing Standards.

The audit authority is responsible for drawing up a report and giving an opinion on the compliance of the systems of management and control set up the way it is determined in paragraph two, three and four of Article 71 of the Regulation (EC) 1083/2006.

A more detailed breakdown of tasks of the AA will be defined with a special provision.

### **Separation of functions**

When delegating tasks the principle of the separation of functions between and within such bodies needs to be taken into account and this is particularly important to separate the function of control and implementation.

The principle of the separation of functions will be taken into account when defining tasks and mutual relationships among the participants being involved in the implementation of the cohesion policy. When a participant has several roles, the separation is ensured by dividing into several internal organisational units or the division of tasks among individual participants.

Separation of functions of the certifying authority and the audit authority is ensured by the fact that although the bodies belong to the same ministry, organisationally they are separate as well as they are competent for different tasks that they perform independently. The internal organisation and the determination of the tasks of the Ministry of Finance as well as its constituent bodies is in detail determined in the Act on internal organisation and post classification. The audit body, that is the Budget Supervision Office, acts as an independent body within the Ministry of Finance. In accordance with the national legislation such bodies within ministries are a part of the internal organisation of a ministry in the broader sense but they are characterised by elements of independence. Such bodies are established to perform specialised professional tasks and inspections as well as other controls whenever a higher level of professional independence in the implementation of tasks needs to be ensured.

## **6.2 Monitoring and evaluation**

### ***Monitoring Committee and the principle of partnership***

A single monitoring committee established by the Government of the Republic of Slovenia will be responsible for directing and controlling the implementation of the Operational Programme of the Environmental and Transport Infrastructure Development and the operational Programme for Strengthening Regional Development Potential. The members of the monitoring committee will be proposed by the participants and partners and will be nominated by the Government of the Republic of Slovenia and will be chaired by the representative of the Managing Authority. The monitoring committee monitors the efficiency and effectiveness of the operational programme implementation and adopts guidelines for its implementation. In detail, competences are regulated by a special act.

The composition of the monitoring committee is in line with the principle of partnership. In the monitoring committee there are representatives of social partners, regions and non-governmental organisations but there might as well be representatives of key development stakeholders who the operational programme refers to. At its own initiative or at the request of the monitoring committee, a representative of the Commission can participate in the work

of the monitoring committee in an advisory capacity. In the composition and the operations of the monitoring committee special emphasis is put on gender equality, non-discrimination and sustainable development and protection of environment. Special attention will be paid to these areas also in the implementation phase, which means the determination of concrete activities, and in the phase of monitoring and evaluation. This implies that supported activities will need to be in accordance with the above mentioned principles and will be identified separately for each dimension. In this case the consent of the competent ministries will be obtained. In addition to the EU and national guidelines, also the recommendations of the environmental impact assessment will be considered.

The principle of partnership will be observed in the phases of implementation, monitoring and evaluation. Within the activities of the monitoring committee the Managing Authority and social partners agree upon concrete ways and forms of cooperation respectively that will enable social partners to give initiatives, perform monitoring and be provided with information. However, this does not mean that implementation procedures will be prolonged.

### ***Monitoring***

An operational programme is the basis for allocation of funds; such programme must be in accordance with Article 9 of the General Regulation, must be consistent with the national Strategic Reference Framework (NSRF), and coordinated with other funds (EAFRD, EFF), with the European Investment Bank funds and other existing financial instruments. Monitoring means actual comparing of the planned – which is usually defined at higher levels of the operational programmes (OP, NSRF) – with the achieved which is usually recorded at lower levels (project). It is important that already in the phase of preparation of the project the monitoring system is planned, so that the processes of the implementation of the programmes will ensure gathering and storing of data which can be, in aggregated form, at higher levels compared to the planned, which ensures successful monitoring of the OP and the NSRF.

Monitoring and reporting as laid down in Article 66 of the General Regulation and by considering the provisions of Articles 58 and 60, will be implemented within the central information system managed by the managing authority which will, connected with the accounting system of the Ministry of Finance, provide current data on payments made from the budget and will be likewise connected with the control information system of the certifying authority. In order to ensure clear organisation and functioning of the information system (IS), the managing authority will issue guidelines for the purpose of monitoring that will base on the following. Elaboration, coordination, guidelines and training for the functioning of the IS are provided by the managing authority. The latter closely cooperates with the intermediate bodies or authorised organisations thereby in the manner so as to ensure as simple process aspect as possible of providing data, while data are also provided at the content level. Data entry takes place immediately or as soon as possible at the intermediate body or authorised organisations thereby. Electronic connection will be ensured for the agents that keep a separate IS for the implementation of the programmes with the central IS. In order to safeguard effective functioning of the connected systems, clear reciprocal data and process connection is identified. The process of connections that is set by the managing authority will allow entry of data and modification thereof only in the source system, i.e. the system that is responsible for the data.

This involves a centralised IS that functions on the premises of the managing authority. The access of users is managed directly (internet, terminal server) and indirectly via separate ISs of certain agents with the following underlying principles:

- direct access will base on the entry of all data that refer to the planning of the project and will be carried out by the intermediate bodies, and on the entry of data on reporting in the form of an application for payment (payments, invoices, performed tasks etc.) by the beneficiaries. The process of certification of the applications for payment will take place directly with the involvement of different responsible persons of the intermediate body (contract trustee, financial service, control unit or department of payments). The existing connection with the IS of the Ministry of Finance will provide direct data transfer for the printout of the payment order from the budget. Unknown users will be able to access the IS in the phase of the submission of tender application, whereas known users will be awarded certificates for the selected projects (special module intended for the project selection).
- indirect access to central IS will be possible at those agents that already implement programmes via their ISs. Special standards will be elaborated to connect the central IS with the ISs of individual agents. The latter will provide the preparation of adequate data structures for the transfer into the central IS to all interested parties.

In addition to constant financial monitoring the central information system also enables continuous physical monitoring based on the experience gained in the programming period 2004-2006 since the Guidelines of the Managing Authority for monitoring the implementation of the Single Programming Document (2004-2006) at the project level contain a special form for entering physical objectives. The information system will therefore enable monitoring of objectives and indicators at the level of an operational programme and development priorities and as such it will enable quantitative as well as qualitative monitoring of the progress made within the operational programme. The base is a set of existing indicators in the central information system that already in the period before the implementation phase enables supplementing and harmonisation with the quantified objectives that had been set up. The data collected will be used to regularly report to the monitoring committee and it will represent a key tool for the Managing authority and other institutions involved in the operational programme implementation to monitor the progress made. With the information system the principle of equal opportunities as well as the impact on sustainable development with a stress on the environmental dimension will be observed.

The development and functioning of the information system will be financed from technical assistance.

### ***Evaluation***

Evaluation of co-financed activities is a mandatory element stipulated by Articles 47 – 49 of the General Regulation. Evaluations aim to improve the quality, effectiveness and consistency of the programmes with regard to the environment where these activities are conducted and with regard to the framework of sustainable development. The operational programme will be subject to ex-ante, current and final evaluations. Whereas the final evaluation which will be conducted by December 31, 2015, is the responsibility of the European Commission, the ex-ante and the current evaluations are the responsibility of each member state.

To ensure transparency and simplicity, the organisation and structure of responsibilities in the field of evaluations will be based on a simple hierarchic logic. The organisation is presented from the top downwards, from the monitoring committee to the ministries.

The monitoring committee represents a body that in line with its monitoring function is responsible for the quality of performed evaluations on the basis of which potential decisions concerning adjustments of the programmes will be taken. For this reason, the monitoring committee will regularly be provided with information on envisaged activities and it will provide guidelines as far as the content is concerned, therefore priority areas, when its members consider the base for taking a decision is insufficient.

The responsibility for the implementation and coordination of evaluation rests on the Managing Authority that is also responsible for the establishment of an interdisciplinary steering group consisting of the representatives of the MA, the ministries and other bodies of the state administration who monitor the achievement of the Lisbon process objectives at the national level. The role of MA in its dialogue with this group is mainly to ensure administrative-technical (the establishment of the administrative framework, quality assurance and the submission of findings to the monitoring committee and the EC), data (submission of financial and physical data on the implementation of NSRF and OPs from the monitoring information system) and financial (ensuring funds for the implementation from the Technical Assistance) support in order to grant as effective evaluation system as possible.

The ministries and other participants will carry out more specialised evaluations whereas in order to ensure the synergy effects of findings at the national and European levels the representatives will be included in the monitoring committee. With the purpose of providing good coordination in the area of evaluations MA prepares an evaluation plan where the authorized bodies are defined and their responsibilities. The evaluation plan will be common for both OP ETID and OP SRDP.

The implementation of the operational programme will be subject to on-going evaluations mainly of the activities that will significantly deviate from the planned goals. If necessary, other evaluations of the content will be performed with the purpose of establishing soundness, effectiveness and successfulness as well as the impacts of the implementation of the programme, the evaluation of the implementation and management systems, evaluation of horizontal goals achievement and evaluation of information and publicity. These evaluations will contribute recommendations for more effective implementation of programmes. Within this framework special emphasis will be placed on the following areas:

- a) implementation of the horizontal theme “Sustainable development with the emphasis on the environmental dimension” and
- b) the establishment of net effects in achieving the objective of job creation taking into consideration the methodology of the document “Working document No 6: Measuring Structural Funds on Employment Effect”.

The performance of evaluations will be financed with the funds allocated to technical assistance.

### **6.3. Financial flows**

The contribution from the funds at the level of the OP will be defined with regard to eligible public expenditures. The authorized ministries will ensure that the beneficiaries will receive the full amount of public contribution as rapidly as possible.

Direct and indirect users of state or/and municipal budgets are obliged to present justified public expenditures. The authorized sector ministries, in cooperation with MA, on the basis of eligible public expenditures prepare the claim for reimbursement of assets from structural funds or the CF and submit it to the CA, which performs reimbursement of individual structural or the cohesion fund in the state budget.

CA, on the basis of confirmed claims for a reimbursement of funds of Structural or Cohesion Fund, prepares and certifies a statement on the expenditure and payment claims Documents concerned are forwarded to the Commission.

CA is authorized to receive payments of the Commission, as provided in Articles 76 and 77 of the Council Regulation 1083/2006/EC. For this purpose the CA keeps – for the assets from individual structural funds and the Cohesion Fund – within the framework of single treasury accounts with the Bank of Slovenia – sub-accounts for each programme and for each fund separately. In addition to payments also the interest and potential repayments are accrued to these special accounts

The Ministry of Finance – National Fund has opened a separate subaccount within the framework of the treasury single account of the state at the Bank of Slovenia for European Regional Development Fund resources of the OP ETID 2007-2013, IBAN no. SI56011006000021169.

The Ministry of Finance – National Fund has opened a separate subaccount within the framework of the treasury single account of the state at the Bank of Slovenia for Cohesion Fund resources of the OP ETID 2007-2013, IBAN no. SI56011006000021072.

#### ***Use of Euro***

As of January 1, 2007, Euro is a national currency in the Republic of Slovenia.

### **6.4 Information and publicity**

The MA is responsible for the preparation of the communication plan which will be the same for all the three operational programmes financed by the cohesion policy funds. In continuation the platforms are described which will serve as a basis for preparation of the operational programme.

#### ***Strategy of information and publicity***

The goals of informing and publicity are the following:

- presentation of the operational programmes to all participants in their implementation – from the aspect of their contribution to important social and economic benefits they bring to the state,



- definition of informing and publicity measures with regard to different levels within the OP,
- promotion of inclusion of potential beneficiaries,
- strengthening of partnership at national, regional and local level,
- informing general public on contribution of the EU.

In order to achieve the set objectives/guidelines of informing public, an integrated approach applied with the help of the following orientations:

### **1. Identification of different levels within the operational programmes**

Specific communication means for different levels within the operational programmes will be used for informing the public, which will make the operational programmes credible and the communication with partners easier.

### **2. Uniform, clear and simple approach**

In order to make the operational programmes recognizable, a uniform identity will be developed with clear and recognizable slogan. Creating a suitable slogan is an important factor of introducing the operational programmes; it will serve as a basis for all further informing and publicizing activities. Along with the slogan a complex visual image will be designed which will give the impression of wholeness. All the information and publicizing activities must be consistent and user-friendly.

### **3. Informing on EU funds**

The positive image of the structural funds and the CF is built by emphasizing the advantages they offer to Slovenia, with encouraging target groups to support the vision of these funds. In this way it is possible to raise the awareness of the people about how European means can be obtained and inform individuals and enterprises about each fund. In order to train target groups, workshops, seminars and promotion activities will be organized.

### **4. Promoting of participation**

All target groups and partners will be encouraged to participate – they will be informed on the possibilities of co-financing done via structural and the CFs. The target groups will be presented with the examples of good practices of informing which will promote the planning of projects for utilization of the EU means.

### **5. Transparency**

In the framework of this measure we will strive to make available to the public the information related to the structural funds and the CF. Via media the public will be regularly informed on the progress of the operational programmes. At least once a year a press conference will be held where the achievements and projects within the OPs will be presented. Every year we will also publish the list of beneficiaries, together with projects and the amounts of public funds used for all the operational programmes.

### ***Implementation and monitoring of the communication plan***

The Managing Authority reports to the Monitoring Committee on the communication plan and on the progress in the implementation of the plan, on the implemented measures of informing and publishing and on the used communication means - on the basis of examples. The annual reports will include the examples of measures of informing and publicizing related to the operational programmes and carried out at the implementation of the communication plan, as well as any changes of the communication plan. Along with

information concerning implementation of the communication plan the evaluation of informing and publishing measures will also be included in the annual and the final reports for 2010.

## **6.5. Procedures on electronic data exchange**

For the programming period 2007 – 2013 the European Commission has set up a new information system (SFC2007) for collecting data on the implementation of programmes in the member states. Each state can access the system via internet. It supports electronic exchange of data between the Commission and the member state on programmes financed through the structural and the cohesion fund, and manual entering of data through a web application. The new system therefore aims at achieving non-paper exchange of data between the European Commission and the member state - on the basis of the regulations applying for the period 2007 – 2013 – within the information system that is common for each fund. In the first phase, Slovenia will still use the opportunity to enter structured as well as non-structured (documents) data via the internet application of the information system SFC2007.

For assuring correctness of the data, data and process controls are set up in the reference system which will be appropriately upgraded during the implementation of the OP.

The exchange of data between the European Commission and the member state will encompass the following content sets:

- Implementation of NSRF,
- Programming,
- Annual and final reporting,
- Payment applications and payment forecasts,
- Audit,
- Evaluation.

An access to SFC database will be determined in accordance with the competent individual institutions in accordance with the provisions of a special regulation and the coordination will be implemented by the Management Authority.

## **6.6. Compliance with competition and public procurement rules**

Slovenia undertakes to ensure that the funds of the operational programme will be allocated in accordance with the procedural and substantive rules applying to state aids and valid at the time when funds are allocated. The compliance of individual measures within the operational programme with the rules on state aid and their relation to a concrete scheme of state aid will be defined in implementing documents.

In the implementation of the operational programme the rules regulating the internal market and in particular the rules of public procurement also determined in the Directives 2004/18/EC and 2004/17/EC as well as relevant provisions of the EU Treaty will be taken into consideration.

## 7. ANNEXES

### 7.1. BREAKDOWN OF CONTRIBUTION OF THE COMMUNITY BY CATEGORIES IN OP ETID

Committee reference No. CCI 2007SI161PO002

Programme name: OP for the development of environmental and transport infrastructure

<b>CODES FOR THE PRIORITY THEME DIMENSION</b>		
<b>Code</b>	<b>Priority theme</b>	<b>€, current prices</b>
	<b>Research and technological development (R&amp;TD), innovation and entrepreneurship</b>	
1	R&TD activities in research centres	
2	R&TD infrastructure ( <i>including physical plant, instrumentation and high-speed computer networks linking research centres</i> ) and centres of competence in a specific technology	
3	Technology transfer and improvements to cooperation networks linking small businesses (SMEs), businesses and with universities, post-secondary education establishments of all kinds, regional authorities, research centres and scientific and technological parks (scientific and technological parks, technopoles, etc.)	
4	Assistance to R&TD, particularly in SMEs ( <i>including access to R&amp;TD services in research centres</i> )	
5	Advanced support services for firms and groups of firms	
6	Assistance to SMEs for the promotion of environmentally-friendly products and production processes ( <i>introduction of effective environment managing system, adoption and use of pollution prevention technologies, integration of clean technologies into firm production</i> )	
7	Investment in firms directly linked to research and innovation ( <i>innovative technologies, establishment of new firms by universities, existing R&amp;TD centres and firms, etc.</i> )	
8	Other investment in firms	
9	Other measures to stimulate research and innovation and entrepreneurship in SME's	
	<b>Information society</b>	
10	Telephone infrastructures ( <i>including broadband networks</i> )	
11	Information and communication technologies ( <i>access, security, interoperability, risk-prevention, research, innovation, e-content, etc.</i> )	
12	Information and communication technologies (TEN-ICT)	
13	Services and applications for citizens ( <i>e-health, e-government, e-learning, e-inclusion, etc.</i> )	
14	Services and applications for SMEs ( <i>e-commerce, education and training, networking, etc.</i> )	
15	Other measures for access to ICT by SMEs and efficient use of ICT by SME's	
	<b>Transport</b>	
16	Railways	
17	Railways (TEN-T)	449,667,581
18	Mobile rail assets	
19	Mobile rail assets (TEN-T)	
20	Motorways	
21	Motorways (TEN-T)	206,840,911
22	National roads	184,089,886
23	Regional/local roads	

24	Cycle tracks	6,660,000
25	Urban transport	
26	Multimodal transport	3,700,000
27	Multimodal transport (TEN-T)	
28	Intelligent transport systems	
29	Airports	30,680,562
30	Ports	34.529.827
31	Inland waterways ( <i>regional and local</i> )	
32	Inland waterways (TEN-T)	
	<b>Energy</b>	
33	Electricity	
34	Electricity (TEN-E)	
35	Natural gas	
36	Natural gas (TEN-E)	
37	Petroleum products	
38	Petroleum products (TEN-E)	
39	Renewable energy: wind	
40	Renewable energy: solar	27.086.553
41	Renewable energy: biomass	21.300.000
42	Renewable energy: hydroelectric, geothermal and other	5.800.000
43	Energy efficiency, co-generation, energy management	105.700.000
	<b>Environmental protection and risk prevention</b>	
44	Management of household and industrial waste	205.568.426
45	Management and distribution of water ( <i>drinking water</i> )	148.466.085
46	Water treatment ( <i>waste water</i> )	102.784.212
47	Air quality	
48	Integrated prevention and pollution control	
49	Mitigation and adaptation to climate change	
50	Rehabilitation of industrial sites and contaminated land	
51	Promotion of biodiversity and nature protection ( <i>including Natura 2000</i> )	
52	Promotion of clean urban transport	
53	Risk prevention ( <i>including the drafting and implementation of plans and measures to prevent and manage natural and technological risks</i> )	74.233.042
54	Other measures to preserve the environment and prevent risks	
	<b>Tourism</b>	
55	Promotion of natural assets	
56	Protection and development of natural heritage	
57	Assistance to improve tourist services	
	<b>Culture</b>	
58	Protection and preservation of the cultural heritage	
59	Development of cultural infrastructure	
60	Assistance to improve cultural services	
	<b>Urban and rural regeneration</b>	
61	Integrated projects for urban and rural regeneration	
	<b>Increasing the adaptability of workers and firms, enterprises and entrepreneurs</b>	
62	Development of life-long learning systems and strategies in firms; training and services for employees workers and administrators to step up their adaptability to change; promoting entrepreneurship and innovation	
63	Design and dissemination of innovative and more productive ways of organising work	
64	Development of specific services for employment, training and support in connection with restructuring of sectors and firms, and development of systems for anticipating economic changes and future requirements in terms of jobs and skills	

	<b><i>Improving access to employment and sustainability</i></b>	
65	Modernisation and strengthening labour market institutions	
66	Implementing active and preventive measures on the labour market	
67	Measures encouraging active ageing and prolonging working lives	
68	Support for self-employment and business start-up	
69	Measures to improve access to employment and increase sustainable participation and progress of women in employment to reduce gender-based segregation in the labour market, and to reconcile work and private life, such as facilitating access to childcare and care for dependent persons	
70	Specific action to increase migrants' participation in employment and thereby strengthen their social integration	
	<b><i>Improving the social inclusion of less-favoured persons</i></b>	
71	Pathways to integration and re-entry into employment for disadvantaged people, ;; combating discrimination in accessing and progressing in the labour market and promoting acceptance of diversity at the workplace	
	<b><i>Improving human capital</i></b>	
72	Design, introduction and implementation of reforms in education and training systems in order to develop employability, improving the labour market relevance of initial and vocational education and training, updating skills of training personnel with a view to innovation and a knowledge based economy.	
73	Measures to increase participation in education and training throughout the life-cycle, including through action to achieve a reduction in early school leaving, gender-based segregation of subjects and increased access to and quality of initial vocational and tertiary education and training	
74	Developing human potential in the field of research and innovation, in particular through post-graduate studies and training of researchers, and networking activities between universities, research centres and businesses	
	<b><i>Investment in social infrastructure</i></b>	
75	Education infrastructure	
76	Health infrastructure	
77	Childcare infrastructure	
78	Housing infrastructure	
79	Other social infrastructure	
	<b><i>Mobilisation for reforms in the fields of employment and inclusion</i></b>	
80	Promoting partnerships, pacts and initiatives through the networking of relevant stakeholders	
	<b><i>Strengthening institutional capacity at national, regional and local level</i></b>	
81	Mechanisms for improving good policy and programme design, monitoring and evaluation at national, regional and local level, capacity building in the delivery of policies and programmes	
	<b><i>Reduction of additional costs hindering the outermost regions development</i></b>	
82	Compensation of any additional costs due to accessibility deficit and territorial fragmentation	
83	Specific action addressed to compensate additional costs due to size market factors	
84	Support to compensate additional costs due to climate conditions and relief difficulties	
	<b><i>Technical assistance</i></b>	
85	Preparation, implementation, monitoring and inspection	22.269.916
86	Evaluation and studies; information and communication	7.423.305
<b>Total</b>		<b>1.635.599.744</b>

<b>CODES FOR THE FORM OF FINANCE DIMENSION</b>		
<b>Code</b>	<b>Form of finance</b>	<b>€, current prices</b>
1	Non-repayable aid	1.635.599.744
2	Aid ( <i>loan, interest subsidy, guarantees</i> )	
3	Venture capital ( <i>participation, venture-capital fund</i> )	
4	Other forms of finance	
<b>Total</b>		<b>1.635.599.744</b>

<b>CODES FOR THE TERRITORIAL DIMENSION</b>		
<b>Code</b>	<b>Territory type</b>	<b>€, current prices</b>
1	Urban	633.010.492
2	Mountains	
3	Islands	
4	Sparsely and very sparsely populated	
5	Rural areas ( <i>other than mountains, islands or sparsely and very sparsely populated areas</i> )	1.002.589.252
6	Former external Border (after 30.04.2004)	
7	Outermost region	
8	Cross-border cooperation area	
9	Transnational cooperation area	
10	Inter-regional cooperation area	
11	Not applicable	
<b>Total</b>		<b>1.635.599.744</b>