



REPUBLIC OF SLOVENIA  
MINISTRY OF INFRASTRUCTURE

# **Resolution on the National Programme for the Development of Transport in the Republic of Slovenia until 2030**



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# 1. Introduction

A few years ago, the Republic of Slovenia started a project of introducing an appropriate system of comprehensive planning of development in the area of transport and transport infrastructure, which is based on a vision harmonised inside the sector and with other sectors and which surpasses the system of planning development in the field of transport and transport infrastructure based on the said incomplete and partial solutions which have been defined by strategic documents until now. The most obvious discrepancy is between the strategically principled visions (e.g. Resolution on Transport Policy of Slovenia (Intermodality – Time for synergy) (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 58/2006) and long-term or medium-term operational national programmes, such as the Resolution on the National Motorway Construction Programme in the Republic of Slovenia (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 50/04 and 109/10 – ZCes-1) and National Programme of the Slovenian Railway Infrastructure Development (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 13/96). The acts have not been harmonised as regards time and content, because the Resolution on Transport Policy as the umbrella strategic act was adopted ten years after the national programmes for the development of motorways and railways. Furthermore, the Resolution on the National Civil Aviation Development Programme of the Republic of Slovenia until 2020 (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 9/10) and the Resolution on the National Maritime Development Programme of the Republic of Slovenia (Official Gazette of the Republic of Slovenia [Uradni list RS] No. 87/10), which were adopted after the Resolution on Transport Policy, have also not been systematically harmonised with it and they only cover narrower scopes. Their operational nature is quite unresolved and insufficient as well. Consequently, development proceeds particularly on the basis of partial and narrow solutions and without any vision harmonised within the sector and with other sectors. Of the presented long-term development documents, only the national programmes on motorways and railways are sufficiently operational, with financial and term definite determined realisation; however, these programmes, too, have not considered the Slovenian transport system as a whole, but only their narrower scopes. All the documents were adopted a few years ago, which is why they no longer offer appropriate answers and solutions for the present situation and needs.

The Transport Development Strategy in the Republic of Slovenia (hereinafter: the Strategy), passed by the Government of the Republic of Slovenia at its session on 29 July (decision No. 37000-3/2015/8), comprehensively deals with the transport system for the first time. Thus, with the preparation and the passing of the Strategy the existing practice of partial solving of the individual transport subsystem has been exceeded. What is more, along with the infrastructure, the strategic level now also includes the comprehensive operation of the transport system. Based on detailed analyses of infrastructure, the functioning of the system and the identified actual problems, the Strategy envisages 108 measures.

The analyses of the infrastructure coverage considering the number of residents and gross domestic product show that the transport infrastructure system in Slovenia is quite well developed and branched, and as regards the EU, it is even above average. This applies particularly to motorways. However, on the other hand, the OECD<sup>1</sup> analyses show, that in the area of transport comparable and more developed countries allocate considerably more budgetary appropriations to the preservation and investment maintenance of the existing infrastructure (reconstruction of carriageways and facilities, construction of bypass roads, etc.). This is where Slovenia lags significantly behind. In order to preserve the quality transport infrastructure, it is therefore crucial that the long-term documents structurally redirect sufficient assets into their preservation and investment maintenance. Measures for the improvement of traffic safety, accessibility, permeability and the like, which are included in the practice of the countries whose example we

1: <http://www.internationaltransportforum.org/statistics/StatBrief/2015-07-Spending-Infrastructure.pdf>

follow and which are more developed in transport, enable gradual improvement of the existing infrastructure with proper maintenance. The same also applies to transport services in public transport. Such approach will significantly improve the efficiency of the Slovenian transport infrastructure system.

The Resolution on the National Programme for the Development of Transport in the Republic of Slovenia (hereinafter: the National Programme) is a document which represents the transition from general measures of the Strategy to concrete activities in preparation and implementation. In their definition, the deadlines and holders of individual activities have been specified along with indicative costs, although, the values for most activities were estimated. With the preparation of an individual study and project documentation these will be detailed further. Therefore, the annual amount of funding necessary for the realisation of activities in the National Programme is only set by areas, whereas the activities themselves, the deadlines for their implementation and the holders are listed in the annexes forming an integral part of this National Programme. The dynamics of the listed activities will otherwise also depend on the level of budgetary appropriations allocated for this purpose; however, if it remains within the frames, listed in the tables below, it will also be possible to take into account the dynamics of activities from the annex to the National Programme. Certainly, the mechanisms for their ongoing monitoring and updating will have to be established. For a more detailed planning of the implementation activities we suggest in the document that the Government of the Republic of Slovenia adopt a six-year operational plan of investments in transport or transport infrastructure, which will stipulate concrete activities (projects) based on expert priorities, costs for their realisation and precise deadlines for the implementation.

The Strategy itself has stressed that in the preparation of concrete projects in the framework of activities it is necessary to follow the principle of transport and cost efficiency. This means that appropriate options for upgrades and modernisation of the existing infrastructure must be found and used. New constructions should only be planned when the upgrades and modernisation of the existing infrastructure can no longer provide appropriate level of transport services. The approval of individual projects must be adequately supported by cost-benefit analyses and/or methods of cost efficiency, while the objective of the improvement of mobility and accessibility to the residents of the Republic of Slovenia must also be given due consideration.

An important segment of the development of the transport system is represented by the establishment of an appropriate management system for the existing property and infrastructure. The development of the activities of public passenger transport must also be based on the optimisation of costs and benefits, primarily with the objective that the system gradually becomes self-sustaining.

The National Programme in itself is ambitious, as it provides on average for investments, maintenance and operation of the system (remunerations, compensations) quite steady investments in a longer period of time amounting between EUR 600 and 700 million per year<sup>2</sup>. Such a constant injection enables faster achievement of the transport system objectives and particularly the achievement of strategic objectives: to improve mobility and accessibility, to improve the supply to the economy, to improve traffic safety and security, to reduce energy consumption in transport, to reduce the costs for the users and operators, and to reduce environmental burdens.

Additionally, injections from private investors (e.g. concessionaires) of approximately EUR 300 million per year are envisaged for a longer period.

Constant and stable investments in infrastructure positively influence the economy and growth of GDP. The objectives of transport development in the Republic of Slovenia do not include investments in themselves, but investments in transport infrastructure, which provide to the

2: All the values in the document include VAT, unless explicitly stated that the price excludes VAT.

users (people and economic operators) mainly direct effects and/or direct benefits. Therefore, the document is strategically set so that in all the phases of the implementation of activities – from the preparation to the final project – it envisages the use of methods of economic evaluation as a necessary basis for decision-making. To ensure maximum positive effects of transport development on the economic and social development of Slovenia, it is necessary to ensure a well-balanced and rational level of investments in the development of transport infrastructure so that mainly their good utilisation and functionality are guaranteed. Hereby, it is necessary to provide appropriate transport capacity and an appropriate level of transport services (no bottlenecks, appropriate travel time).

The basic direction of the Strategy and the National Programme justified by it is based primarily on the improvement of efficiency and optimisation and adaptation of the transport system to the medium- and long-term transport needs of the people and the economic operators in an optimal and/or sustainable manner (how to solve problems most efficiently) and not on new large investment projects (what else can be built). However, by no means does this imply that the set approach gives no possibilities for large development projects. On the contrary, there are possibilities; however, the transport needs must be clearly recorded and the effects (including economic) must be properly justified. To achieve the set objectives, a real-time continuous selection among alternative solutions and variants is envisaged in the frame of current monitoring of the planned activities. The monitoring of the implementation of the National Programme and the 6-year operational plan is therefore a necessary condition to preserve the relevance of this document at any time, and the preparation and implementation of the projects are efficiently directed based on it to the set six basic objectives of the Strategy.

The OECD, monitoring the investments of individual countries in the infrastructure on the aggregate level, notes that developed countries allocate a much greater share of public assets for management and maintenance than for new constructions. The National Programme must provide proper treatment of the existing systems in the medium- and long-term and ensure conditions for efficient management, upgrades, reconstructions and maintenance.

The report of the World Economic Forum titled "Strategic Infrastructure Steps to Operate and Maintain Infrastructure Efficiently and Effectively" (World Economic Forum, April 2014) highlights as a key component of the efficiency of the whole society precisely the management and maintenance of the existing assets, including the necessary modernisations and upgrades. The report also notes that resources (financial and human) far too often target new constructions instead of drawing attention to upgrades, optimisation and modernisation of the existing infrastructure and the transport system with the tougher public financial conditions.

It is particularly problematic if an excessive concentration of resources for the acquisition of new assets or new infrastructure disables or replaces development and optimisation of the existing infrastructure and the functioning of the existing transport system. The above-mentioned report highlights particularly the following:

1. it is necessary to increase efficiency, also by traffic management during peak hours, efficient management of demand and an improved service quality for the users is also necessary;
2. it is necessary to lower the joint costs of the system with an increasingly effective management and maintenance, also by considering the external costs;
3. it is necessary to increase (maintain) the value of assets, where proper upgrades and reconstructions must be provided on time and the priorities must be set based on cost-benefit analysis for the whole life span.

It is possible to develop appropriate management models for the existing assets if sufficient financial and human resources are allocated to these parts. This means gradual adaptation and

reformation of the established operation patterns, including of the public administration and other stakeholders in the whole transport system.

The analyses, performed in the drafting of the Strategy, also result in the findings that in the past twenty years the emphasis has been mostly on the construction of new road infrastructure, particularly multi-lane roads. Thus, DARS manages 746 kilometres of four-lane motorways in total. On the other side, the Slovenian Infrastructure Agency (DRSI) manages 5,936 kilometres of roads and local communities manage additional 32,224 kilometres of mostly too poorly maintained roads.

**Table 1-1:**  
Length of road network  
in the RS

Source: <http://www.di.gov.si/> dated 25 November 2015.

Road category	Length in km	Operator
Motorways and expressways	746	DARS, d.d.
Main roads	819	DRSI
Regional roads	5,117	DRSI
Local roads	13,598	Local communities
Public paths	18,626	Local communities
Total roads	38,906	
Total DRSI	5,936	
Total DARS	746	
Total local communities	32,224	

In the framework of carriageway management, the state of carriageways in the national road network has been regularly monitored and evaluated. The analyses in the Strategy have shown that the state of carriageways has worsened so much that as much as a half of the national roads network is in a very poor condition. In 2011, there were approximately 40% poor sections and in 2013 this number increased to 50%. In 2015, the state was similar, namely approximately 50% of carriageways were in a very poor condition. Along with the carriageways it is necessary to consider other parts of the road body, which need to be maintained, upgraded, renewed and modernised. This is not related only to carriageway constructions; comprehensive solutions for reconstructions and renovations must be provided in the preparation and implementation of projects, which will:

- ensure better accessibility (shorten travel times with the improvement of the elements of the transverse and longitudinal profiles of the road, also, for example, an additional third lane for slow vehicles, etc.) and
- enable improved safety for the road users (separation of non-motorised from motorised transport, physical measures for the reduction of speed before and in the settlements, etc.).

With the dTims programming tool which enables the calculation of costs and benefits based on input data and the implementation of possible optimisations, calculations were made with different scopes of annual investments for the renovation of carriageway constructions of national roads. They showed that for only a part of carriageway constructions we would need over EUR 90 million per year. This would gradually reduce the share of very poor carriageways. Carriageway is only a part of the whole road body. Further, measures must be added to this which will enable better accessibility, higher level of safety, etc.

The National Programme for the complete programme of reconstructions, renovations and individual new constructions of the national road network, including regular maintenance, envisages the following annual volume of resources:

- in 2016, in the amount of EUR 172.8 million,
- in 2017, in the amount of EUR 236.8 million, and
- in 2018, and the following years EUR 263 million per year.



According to the analyses, in 2013, there were 244.5 kilometres of carriageways in very poor and poor condition on motorways and expressways in the Republic of Slovenia, and in 2015, approximately 387.3 kilometres of carriageways were in poor or very poor condition. According to calculations based on the degradation model, the share of carriageways in poor and very poor condition has been increasing, which means that it is necessary to increase investment in the preservation and maintenance of infrastructure. For the renovation of carriageways, reconstruction of facilities and other elements, motorway network programme envisages EUR 57.7 million in 2016, EUR 80.7 million in 2017 and after that EUR 91 million per year. This value, envisaged by DARS, d.d., is not directly a part of public assets. The value enables gradual improvement of the condition of carriageways and the condition of the roadside structure and of the facilities.

Additional resources will have to be provided for the implementation of certain new constructions presented in the framework of the necessary activities: the Draženci – Gruškovje motorway section, second tube of the Karavanke Tunnel, additional connections, expansion of the existing motorway, some sections of the third development axis, etc.

Railways represent an important segment of the transport system, both for the transportation of cargo and for providing public passenger transport. The total length of the main lines amounts to 575.6 kilometres, and regional lines amount to 633 kilometres. Regulation (EU) No. 1315/2013 (hereinafter: the TEN-T Regulation) defines the core trans-European transport network (hereinafter: the TEN-T network). Two corridors of the core network run through Slovenia, that is the Baltic-Adriatic Corridor and the Mediterranean Corridor. There are 337 kilometres of main lines on the Baltic-Adriatic Corridor and 462 kilometres on the Mediterranean Corridor. Because the corridors are not covered in whole, the core network in Slovenia includes 496 kilometres of lines.

**Table 1-2:**

Length of railway network in the RS

Source: <http://www.di.gov.si/> dated 25 November 2015.

<b>Railways</b>	<b>Length in km</b>
National line categories – main lines	575.6
National line categories – regional lines	633.4
<b>Total lines</b>	<b>1,209.0</b>
Actual length of single-track lines (km)	878.7
Actual length of double-track lines (km)	330.3
Length of through tracks	1,539.4
Actual length of electrified lines (km) (single-track line)	170.1
Actual length of electrified lines (km) (double-track line)	330.3

The TEN-T Regulation stipulates the conditions for core railway lines, which must comply with the following standards on the TEN-T network by 2030:

- electrification,
- nominal track gauge of 1,435 mm,
- at least 22.5 t axle load,
- 100 km/h line speed,
- the possibility of running trains with a length of 740 m, and
- ERTMS.

Lines of the core network in the Republic of Slovenia fully comply with the nominal track gauge, they are completely electrified (in 2015, the project of the Pragersko–Hodoš line was completed), the ERTMS system was largely implemented, except on sections Zidani Most–Dobova, Pragersko–Šentilj and Ljubljana–Jesenice. From Ljubljana Jože Pučnik Airport toward Jesenice and Austria, this is included in the comprehensive TEN-T network.

The greatest derogations in meeting the requirements of the TEN-T Regulations are related to the standards for speed and axle load. The analysis of the rail network shows that only 19.3% of the network, that is 95.7 kilometres of the core network lines already meet the standard, required by Regulation No. 1351/2013. For the remaining part of the network, activities are envisaged which include the preparation of documentation for proper line upgrades. In accordance with the provisions of the Regulation, the projects should be subject to cost-benefit analysis, and the Regulation itself allows exemptions.

Along with compliance with the TEN-T standards and with justified exemptions, it is necessary to prepare those projects of upgrading main and regional lines in the railway system with which more appropriate capacities of individual lines will be achieved that will enable the railway to also accept the backbone role in the public passenger transport and most of all, they will strengthen its role in freight transport.

Other modes of transport will also have to meet the TEN-T standards for core networks by 2030 and in this framework it is most important to provide the infrastructure for alternative fuels, and on the other hand, it is necessary to provide incentives for their use.

The Strategy and consequently the National Programme also define a set of measures and activities in the field of sustainable mobility ("park and ride", single ticket, harmonised timetable, quality of services, etc.).

Special attention is also intended to faster development and the expansion of the Port of Koper as the most important source of cargo for the transport network of Slovenia and Central Europe. An equivalent level of concern for faster and better development should also be given to Slovenian airports, with emphasis being placed on the development of the Ljubljana Jože Pučnik Airport, and their actual development mostly depends on concession contracts or investments of their owners. The Republic of Slovenia will promote their development in accordance with its competences.

All the stated objectives, priorities, measures and activities can be implemented with the adoption of the National Programme for the Development of Transport in the Republic of Slovenia, which is the implementation document of the Transport Development Strategy in the Republic of Slovenia.

## 2. The legal basis for the creation of the Resolution on the National Programme for the Development of Transport in the Republic of Slovenia

On 29 July 2015, the Government of the Republic of Slovenia adopted Decision no. 37000-3/2015/8 on accepting the Transport Development Strategy in the Republic of Slovenia (hereinafter: the Strategy) and ordered the Ministry for Infrastructure of the Republic of Slovenia (hereinafter: MInf) to prepare an Operational Plan for the implementation of the Strategy (hereinafter: the Operational Plan), namely within one year from the adoption of the Strategy by the Government of the Republic of Slovenia.

The Operational Plan will consist of concrete projects for the implementation of the Strategy which will coincide partly or completely with the projects planned in the applicable national programmes, adopted by the National Assembly of the Republic of Slovenia. Based on this fact, the National Assembly of the Republic of Slovenia must adopt the National Programme for Transport Development in the Republic of Slovenia before the adoption of the Operational Plan by the Government of the Republic of Slovenia, which will replace the presently applicable national programmes in the parts covered by this National Programme.

The legal basis for the adoption of the national programmes from the section of transport is stipulated by the following statutory provisions:

- Article 42 of the Roads Act (Official Gazette of the Republic of Slovenia [Uradni list RS], Nos. 109/10, 48/12, 36/14 – Ruling of the Constitutional Court and 46/15) stipulates:
  - (1) The objectives and tasks of the Strategy for the development and maintenance of state roads shall be further specified in the National Programme for the development and maintenance of state roads.
  - (2) The National Programme shall specify the order of the priorities of maintenance and development of state roads, the sources of funds for their realisation and the dynamics as well as the scope of realisation of individual development tasks for a period of at least four years. The determination of priority tasks must be based on objective transport, technical, economic and environment protection criteria.
  - (3) The National Programme shall be drafted by the ministry responsible for transport and adopted by the National Assembly of the Republic of Slovenia upon a proposal by the Government of the Republic of Slovenia.
- Article 13 of the Railway Transport Act (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 99/15 – official consolidated text), stipulates the following:
  - (1) The objectives and tasks of the Strategy for the development of the public railway infrastructure and the maintenance of the public railway infrastructure shall be further specified after consultation with stakeholders in the Strategy for the development of public railway infrastructure, independently or within the framework of the development of the whole transport sector (hereinafter: the Development Strategy), which shall be adopted by the Government of the Republic of Slovenia for a period of at least five years and published on the website.
  - (2) Regarding investments in public railway infrastructure and public railway infrastructure maintenance, the Development Strategy specifically determines the order of priority tasks of investing in public railway infrastructure and the maintenance of infrastructure, the sources of funds for their realisation and the dynamics as well as scope of realisation of individual tasks in the planned period. The determination of priority tasks must be based on transport policy and developmental goals by considering objective transport, technical, economic, financial and environment protection criteria.
  - (3) Based on the Development Strategy at the proposal of the operator, the Ministry shall adopt an annual plan of renovation and maintenance of public railway infrastructure for calendar year.

(4) The annual plan of investments in the public railway infrastructure proposed by the company from paragraph one of Article 13.a hereof shall be adopted by the Ministry.

(5) Engineering to the public railway infrastructure, necessary for the implementation of the Strategy for the development of the railway infrastructure shall cover particularly:

- the preparation, organisation and coordination of investments in all phases of the investment process;
- the organisation and implementation of reviews of project documentation.

The Strategy for the development of transport does not meet all the substantive requirements listed in Article 13 of the Railway Transport Act. Therefore, it is necessary from this point of view to prepare a more detailed programme for the implementation of activities in this sector.

- Article 33 of the Maritime Code (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 120/06 – official consolidated text, 88/10, 59/11 and 33/16) stipulates:

Guidelines for the sustainable development of maritime affairs and ensuring security in maritime transport shall be stipulated by means of the National Programme for maritime development in the Republic of Slovenia, which shall be adopted at the proposal of the Government of the Republic of Slovenia by the National Assembly of the Republic of Slovenia (and the Strategy for transport development in the Republic of Slovenia, which shall be adopted by the Government – proposal for amendments of the Maritime Code in the first hearing in the National Assembly).

The National Programme for transport development also includes content, which together with the development of the international port of Koper, also relate to the measures for the development of transport on inland waters and to other development projects from the sector of water-borne transport.

- The Aviation Act (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 81/10 – official consolidated text, hereinafter: ZLet), stipulates the following in Article 6:  
the guidelines for sustainable development of civil aviation and the provision of safety in air traffic shall be stipulated with the National Programme for the development of civil aviation of the Republic of Slovenia, which shall be adopted by the National Assembly of the Republic of Slovenia at the proposal of the Government of the Republic of Slovenia.

Paragraph 2 of Article 6 of ZLet also stipulates that harmonised programmes for the development of airports should be drafted as implementation programmes for individual airports so that a system of airports is provided in accordance with the purpose from Article 86 of the same Act and considering the public interest as well as the development needs of the airport operators and users and navigation services of the air traffic.

In accordance with the requirement referred to in paragraph 1 of Article 6 of the ZLet, the National Assembly adopted the Resolution on the National Civil Aviation Development Programme of the Republic of Slovenia until 2020 (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 9/10), and the Government of the Republic of Slovenia clearly defined the public airport system with the Decision on the definition of a public airport system (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 78/2006).

- In addition to these statutory provisions, the Court of Audit in its audit report "Modernizacija cestne in železniške infrastrukture na 3.a razvojni osi št. 320-1/2013/90 z dne 14. julija 2015" (Modernisation of road and railway infrastructure on 3.a development axis No. 320-1/2013/90 dated 14 July 2015), finds the main reason for ineffectiveness in the fact that the Republic of Slovenia has no national programme for the sector of state roads and also no updated national programme for the development of public railways infrastructure.

Based on the stated, the Ministry of Infrastructure proposes to the Government and the National Assembly of the Republic of Slovenia to adopt the Resolution on the National Programme for the Development of Transport in the Republic of Slovenia.

### 3. Basis for preparation

The conceptual strategic basis for a national programme is a strategy that addresses the present partial concept of transport development in the Republic of Slovenia, which has been mostly directed towards the construction of motorways and expressways and the related transport, in an analytical and positively critical manner. It also analyses the domestic and European legislation in this sector and the political guidelines of the Republic of Slovenia and of the EU.

In the decisions, the Strategy concentrated on the definition of all measures necessary for further development of the transport sector in the Republic of Slovenia which is more compliant with actual transport needs and development objectives, without highlighting the financial aspect, holders of the activity and time horizon. Such approach was necessary so that the Strategy could for the first time cover all the sections of transport, which are also comprehensively and mutually consistently addressed; however, at a general level of needs and objectives identification, without any financial and other limitations. Such approach was also anticipated by the EU institutions for the provision of ex ante conditionality for the absorption of EU funds from the European Cohesion Policy in the financial perspective 2014-2020.

Therefore, a national programme is prepared for an effective strategy implementation. The document is used for the implementation of the adopted strategy with a priority order of the implementation of activities for the implementation of measures. The document stipulates the holders of the activity and defines the necessary financial sources and it also determines the time frame for the implementation of activities. For a more concrete implementation of individual measures, adoption of 6-year operational plan for the implementation of the National Programme on the level of the Government of the Republic of Slovenia is also envisaged.

A comprehensive environmental impact assessment, including an assessment of eventual impact across boundaries to the neighbouring countries was also made. The National Programme, too, completely follows the conclusions and recommendations of the environmental report for the existing and new infrastructure, including the prevention of the loss of biodiversity and ecosystem services. The conclusions of the environmental report will also be considered in the preparation or the implementation of more concrete activities or projects for the implementation of the measures from the Strategy.

## 4. Purpose of the National Programme preparation and its key guidelines

The fundamental purpose of the National Programme preparation is:

- based on the Strategy measures, to determine more concrete activities for a comprehensive development of transport and transport infrastructure and their holders of the activity;
- to transparently define the implementation of concrete activities depending on the provision of regular and steady financing.

### 4.1 Baselines of the Transport Development Strategy in the Republic of Slovenia, forming the basis for the National Programme

The National Programme principally follows the vision and general and specific objectives determined in the Strategy. General objectives are used to check the results (effects) of the implementation of measures in transport, whereas specific objectives are used to determine what needs to be done to eliminate any identified problems and to achieve the anticipated results – effects.

The transport policy vision is defined as the provision of sustainable mobility for the population and the supply to the economy with the following objectives:

- to improve mobility and accessibility;
- to improve supply to the economy;
- to improve traffic safety and protection;
- to reduce energy consumption;
- to reduce costs to users and operators;
- to reduce environmental burdens.

Specific objectives more precisely determine the measures for the elimination of the established problems. For each of them more detailed aspects and/or traffic-gravitational areas are determined where problems need to be solved, namely:

- Specific objective No. 1: improvement of transport connections and harmonisation with neighbouring countries
  - Sub-objective 1a: eliminating congestion at borders
  - Sub-objective 1b: improvement of accessibility of international passenger transport (including transit traffic)
  - Sub-objective 1c: improvement of accessibility of international freight transport (including transit traffic)
- Specific objective No. 2: improvement of national and regional connections within Slovenia
  - Sub-objective 2a: North-eastern Slovenia
  - Sub-objective 2b: South-eastern Slovenia
  - Sub-objective 2c: North-western Slovenia
  - Sub-objective 2d: Goriška region
  - Sub-objective 2e: Koroška region
  - Sub-objective 2f: Primorska region
  - Sub-objective 2g: Central Slovenia region
  - Sub-objective 2h: accessibility within regions (to regional centres)
- Specific objective No. 3: improvement of accessibility of passengers to the main city agglomerations and within them

- Sub-objective 3a: Ljubljana
- Sub-objective 3b: Maribor
- Sub-objective 3c: Koper
- Specific objective No. 4: improvement of the organisational and operational structure of the transport system to ensure system efficiency and sustainability.
  - Sub-objective 4a: harmonisation of legislation, rules and standards with European requirements and best practice
  - Sub-objective 4b: improvement of the organisational system structure and cooperation between respective stakeholders
  - Sub-objective 4c: improvement of the operational system structure
  - Sub-objective 4d: improvement of transport system safety
  - Sub-objective 4e: environmental impact reduction/mitigation
  - Sub-objective 4f: improvement of energy efficiency
  - Sub-objective 4g: financial sustainability of the transport system

Key guidelines for the preparation of the National Programme are the result of the expert analyses (transport, functional, environmental, social and other), produced within the framework of the process of strategy preparation. Its provisions are mostly based on a specific analytical instrument, i.e. the national transport model which considers the present and the future supply of transport networks (permeability, accessibility) and the present and expected future transport demand (socio-economic data). The national transport model was evaluated by the European Commission experts as one of very high quality and as a reference model also for other member states of the EU who are preparing their own strategic documents in the development of transport systems.

Next to the current main problems, the national transport model also found the problems that would arise in the future if the present traffic arrangement was maintained and if we consider that the existing transport infrastructure would only be maintained and the existing investments completed, namely:

- the selection of the means of transport in passenger transport would not spontaneously change towards the strengthening of the public transport; rather, it would remain unchanged and the selection of the means of transport in goods transport would change to the benefit of the road freight transport rather than the other way around;
- without any additional investments, almost the whole TEN-T rail network would fail to provide the necessary permeability capacities and acceptable commodiousness to passengers as well as minimal TEN-T standards;
- despite the enforcement of sustainable transport policy an important part of the Slovenian road network would cause permeability, jams and bottlenecks to be exceeded, which would be particularly pronounced on the Ljubljana Ring Road and its connection motorway sections;
- parking areas for trucks along the motorway system already represent bottlenecks which will be further exacerbated in the future if the situation does not change;
- the present public transport is not competitive to passenger cars and its competitiveness is becoming even worse;
- there are no comprehensive (state, regional) or detailed (municipal) arrangement plans for cyclists; consequently, the system of cycling paths has not been upgraded and functionally and logically completed, making it less developed and not in the function of the public passenger transport and/or it does not enable sufficient development of cycling for daily migration;
- a faster development of the Port of Koper is being limited by the inappropriate dimensions of the entry channels and piers, inappropriate port infrastructure and bottlenecks of the Slovenian rail infrastructure;



- the main problem of Ljubljana Jože Pučnik Airport includes inappropriate passenger and freight terminals and insufficient hangar capacity;
- in the future, greenhouse emissions would increase rather than decrease;
- the adverse effects of excessive noise are already extensive and in the future, they would even increase;
- accessibility from certain areas to regional centres is unacceptably poor, both with passenger cars as well as with public transport;
- there are numerous dangerous locations in the road network and merely passively protected level crossings of roads and railways, which adds to an increase in the number of traffic accidents.

The Strategy thus drafted measures to eliminate the existing and/or to prevent the expected problems. Altogether the Strategy envisages 108 measures, which apply not only to the area of physical transport infrastructure, but also to the organisation of the sector, traffic management, traffic safety, vehicle fleet, etc.

**Table 4-1:**  
Summary of measures

	Measures on the elements (sections) of the network	Measures on the network	Organisational (horizontal) measures	Total
Railway network	11	4	14	29
Road network	22	7	8	37
City (urban) network	4	7	11	22
Water-borne transport	6	3	5	14
Air transport	3	2	1	6
<b>Total</b>	<b>46</b>	<b>23</b>	<b>39</b>	<b>108</b>

The basis for the National Programme is also formed by the reports on the realisation of the National Programme of the Slovenian Railways Infrastructure Development (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 13/96), National Motorway Construction Programme in the Republic of Slovenia (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 13/96, 41/98 and 50/04), Resolution on the National Maritime Development Programme of the Republic of Slovenia (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 87/10) in parts referring to the international traffic port of Koper and other ports, improvement of maritime safety, envisaging control centre construction and the upgrade of the VTS equipment and other systems for the monitoring of maritime transport, maintenance of facilities for the safety of navigation, hydrographic surveying of the Slovenian sea, increase in the administrative capacity and competency of the Slovenian Maritime Administration with the establishment of new business premises of the Administration, and the Resolution on the National Civil Aviation Development Programme of the Republic of Slovenia until 2020 (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 9/10) in parts referring to public airports for international traffic.

## 4.2 Report on the realisation of the National Programme of the Slovenian Railway Infrastructure Development (NPSRID)

The National Programme included the period from 1994 to the completion of the projects which represent a constituent part hereof. The dynamics of the necessary financial resources has only been displayed until 2005; however, long-term projects, such as the high-speed line Trieste–Ljubljana–Zagreb with the connections to Koper and Rijeka, the second track Ljubljana–Jesenice and projects of regional lines, were envisaged to be implemented by 2015.

In the modernisation and development of the railway infrastructure, the programme from 1996 envisaged three fundamental and separated, yet functionally related sets, the implementation of which needs to be coordinated with the standards defined in the applicable European documents



3: International Union of Railways. and UIC regulations<sup>3</sup>. These fundamental sets are:

- renovation of the existing lines,
- extension of the existing lines, and
- construction of higher and high-speed lines.

## 4.2.1 Renovation of the existing lines

Renovation of the existing lines covers renovation and/or maintenance of the existing lines of the operational capacity on a maximum technical level and thus ensuring maximum safety, reliability and rationality of operation. This includes:

- inspection and repair of the track superstructure;
- renovation of the catenary;
- renovation of the signalling and safety devices;
- renovation of bridges and retaining and supporting structures, construction of grade-separated crossings;
- minor reconstructions of stations and tracks.

The following activities were implemented:

- provision of the IUC–B loading gauge;
- renovation of telecommunications system and railway analogue telephone network exchange;
- the Mediterranean Corridor introduced the ETCS system (with all the operation permits), and the introduction of the GSM-R system has reached the final phase throughout the whole rail network;
- in the frame of the EBOR/EIB loans, inspections and repairs were performed on 148 kilometres of tracks (however, all the main tracks are still not renewed, and regional even less so), 50 kilometres of catenary was replaced and a few bridges and retaining and supporting structures were renewed;
- the idea that the inspections and repairs and other works on individual track sections which match the future higher or high-speed tracks would already be performed in accordance with the technical standards applying to this speed level was also not implemented.

The following works were partly executed:

- increase of the track speed within the framework of the existing track axis;
- elimination of bottlenecks (grade-separated crossings, tunnels);
- provision of the permissible axle load of 22.5 t on all the main tracks;
- ensuring safety, reliability and rationality of operation.

## 4.2.2 Additional construction on existing lines, construction of new lines and nodes

This includes the following implemented projects:

- construction of a new line connecting Slovenia to Hungary (25 kilometres);
- construction of co-existing systems of telecommunication devices which also enable appropriate and seamless connection to Europe;
- modernisation of the Zalog marshalling yard;
- adjustment of the signalling devices by installing electronic signalling devices at the sections Divača–Koper, Ljubljana–Sežana and Pragersko–Murska Sobota.

Partly implemented projects:

- construction of grade-separated crossings of roads with railway lines and grade-separated crossings to platforms;
- construction of more modern systems of signalling and safety devices;

- for a more accelerated development of the peri-urban railway transport and the related purchase of new means of transport, additional stations on entry roads, particularly in the Ljubljana region were supposed to be built by 2000.

Projects which were not implemented:

- construction of the second track Koper–Divača (45.8 kilometres) in the period 1998–2000;
- construction of the second track Ljubljana–Jesenice (71.2 kilometres) after 2005;
- construction of the second track Maribor–Šentilj (16.5 kilometres);
- construction of the telecommand device on line Sežana–Jesenice (129.8 kilometres);
- electrification of the line Sežana–Anhovo (56.6 kilometres);
- electrification of the line Anhovo–Jesenice (73.2 kilometres);
- construction of the Ljubljana railway hub in the period 2001–2005;
- construction of the passenger station in Ljubljana;
- connection of the town of Lendava with the Slovenian rail network on the Slovenian territory by 2000 with a new line Beltinci–Lendava of approximately 20 kilometres;
- the construction of new regional lines planned after 2005, which complement the existing railway system.

## 4.2.3 Construction of higher and high-speed tracks

- The Trieste–Ljubljana–Zagreb fast line remained unrealised, within which in addition to junctions (hubs) of the main lines in Ljubljana, Zidani Most, and the Koper–Trieste section, junctions were also envisaged at other points of the intertwining of the fast line with the existing modernised lines; these would allow driving to trains of a lower level, and a certain part of goods transport on this line.
- The main line to Maribor and Vienna and the new line Ljubljana–Jesenice, both envisaged for speeds up to 160 km/h, also remained unrealised.
- Modernisation of the main line Pragersko–Ormož–Murska Sobota–Hodoš for speeds up to 160 km/h has been implemented.

## 4.2.4 Conclusion

The NPSRID envisaged investments of EUR 2,136 million in the period between 1994 and 2005, and only EUR 316 million thereof were realised, i.e. 16.7%. For the period between 2006 and 2015, investments of EUR 3,174 million were envisaged, from which EUR 1,429 million or 43.9% were realised. The realisation of the whole period of NPSRID from 1994 to 2015 amounted to 29.1%.

Therefore, it is necessary to adopt a new National Programme for this sector, as the projects, which were not implemented within the framework of the NPSRID, mostly included in it, depend on the content of the measures envisaged with the Transport Development Strategy in the Republic of Slovenia.

## 4.3 Report on the realisation of the National Motorway Construction Programme in the Republic of Slovenia (NMCP)

In order to ensure appropriate internal state connections, improve traffic safety, ensure connections to the wider European space, encourage economic development (strategic objectives), ensure and improve direct economic effects, reduce negative traffic impacts on the environment, facilitate broader economic, social and tourist benefits, and maintain the already constructed motorway network (structural objectives), the National Motorway Construction Programme in the Republic of Slovenia (NMCP) was adopted by the National Assembly of the Republic of Slovenia. The NMCP was published on 15 November 1995 (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 13/96), the Amendments to the National Motorway Construction Programme of the Republic of Slovenia

(so-called "revised budget") on 23 April 1998 (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 41/98), and the Resolution on the National Motorway Construction Programme in the Republic of Slovenia on 27 February 2004 (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 50/04). The programme envisages the construction of missing motorways and roads of an appropriate standard along two basic directions:

- in the northeast – southwesterly direction from Šentilj at the Slovenian – Austrian border to Koper (IBC Luka Koper) with bifurcations to the Slovenian – Italian border Fernetiči and Vrtobja and the Slovenian – Hungarian border at Pince and Dolga vas, from Maribor towards IBC Gruškovje at the Slovenian – Croatian border and from Postojna/Divača to Jelšane at the Slovenian – Croatian border;
- in the northwest – southeasterly direction from the Karavanke tunnel at the Austrian border to Obrežje at the Croatian border.

The realisation of the National Programme included extensive, complicated and lengthy procedures of spatial integration, project preparation, purchases of land, construction and other activities included in the investments related to the road and transport infrastructure.

**Table 4-2:**

The basic programme – investments of DARS in motorways (MW) and expressways (EW), which formed part of the NMCP.

MW/EW leg	Length under ReNMCP	Actual length	Realisation (EUR)
Pomurje leg	92.1	91.4	870,948,066.35
Štajerska leg	163.7	163	1,586,507,202.79
Primorska leg	64.3	73.7	770,949,782.88
Vipava leg	39.1	40.4	378,325,839.44
Gorenjska leg	31.1	33.9	494,306,281.68
Dolenjska leg	86.1	86.2	842,132,859.27
Podravje leg	56.1	57.8	311,562,351.05
Connecting roads under NMCP	34	34.7	104,677,912.38
Other investments under NMCP (MW, EW – built before 1994)			34,246,696.05
Other investments in MW and EW (additional tollbooths, junctions, IBC areas, electronic toll collection system, rehabilitation of state roads)			9,516,686.89
<b>Total</b>	<b>566.5</b>	<b>581.1</b>	<b>5,403,173,678.78</b>

**Table 4-3:**

Additional programme – investments of DARS to MW and WE, which do not form part of the NMCP

MW/EW leg	Realisation (EUR)
Štajerska leg	9,020,166.47
Primorska leg	3,163,646.36
Gorenjska leg	453,159.77
Dolenjska leg	6,762.75
Podravje leg	36,386,760.83
Connecting roads	1,866,115.94
<b>Total</b>	<b>50,896,612.12</b>

**Table 4-4:**

Investments introduced with the Annual Motorway Development and Reconstruction Programme

	Realisation (EUR)
Rehabilitation of state roads, arrangement of rest areas for heavy cargo vehicles, NTMC, traffic control and management system, noise control measures, arrangement of controlled drainage, etc.	141,100,584.83
<b>Total</b>	<b>141,100,584.83</b>

The total realisation of the NMCP from 1994 to the end of 2014 amounts to EUR 5,595,170,875.73 and in the frame of this amount 585.20 kilometres of MW/EW along with the corresponding transport infrastructure were constructed, including connecting roads. The above listed projects from the basic and also the additional programme are included in the National Programme as an investment of DARS or DRSI, depending on the content of the measures envisaged in the Transport Development Strategy in the Republic of Slovenia.

## 4.4 Report on the realisation of the Resolution on the National Maritime Development Programme of the Republic of Slovenia

The National Maritime Development Programme includes guidelines for sustainable maritime development and for ensuring the safety of maritime transport in the following sections: maritime economy, safety of maritime transport, spatial arrangement of the coastal area, clustering in the maritime economy, education of staff for maritime needs, the cargo port of Koper, economic activities such as shipping, shipbuilding, production of ship components and yachts and recreational crafts, motorways of the sea and short-distance maritime transport, hydrography and cartography, ecology, implementation of international legislation.

The National Maritime Development Programme was realised in the following main areas:

- with the adoption of the Act on Tonnage Tax (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 97/09 – official consolidated version) and the approval of the state aid scheme by the European Commission, an alternative manner of determining tax liabilities by corporate taxpayers obtaining operating income from ships in international sales;
- improvement of navigation safety was directed in the development of activities of the Slovenian Maritime Administration with the upgrade of its existing navigation control, further training of personnel and the purchase of modern vessels for the needs of rescuing, interventions and patrolling at sea;
- gradual establishment of a single window due to relief for economic operators in administrative obligations, such as facilitating data transmission and exchange of data with other public authorities;
- adoption of the Decree on the coordination of services at sea (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 102/12), which is the basis for regular and active cooperation between public authorities exercising their competences at sea;
- for ensuring a more effective maintenance of facilities for navigation safety, the Decree on the method and conditions for the provision of public utility services for regular maintenance of navigational safety facilities (Official Gazette of the Republic of Slovenia [Uradni list RS], Nos. 36/13 and 35/14) was adopted;
- with the adoption of the Decree on National Spatial Plan for comprehensive spatial arrangement of the international port in Koper (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 48/11) the framework for the implementation of investments in the Port of Koper was set and the base for future investment in port infrastructure planning was provided;
- the Decree on seafarer certification (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 85/14), representing a modern regime for training seafarers in compliance with the EU and international legislation (Act ratifying the 2010 Manila Amendments to the Annex to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978, Official Gazette of the Republic of Slovenia – International Treaties [Uradni list RS-MP], No. 8/13);
- in accordance with the adopted Programme for the Development of the Port of Koper for the period 2011–2015, the concessionaire made investments in this period in the public port infrastructure in the total amount of EUR 14,961,426, and in the non-public port infrastructure in the amount of EUR 30,743,355. Some important milestones: in 2014, transhipments in the Port of Koper reached almost 19 million tons of total shipping, of which almost 675 thousand TEU of container transport and 520 thousand cars, and in 2015, total transhipments amounted to 20.7 million tons. In the period 2009-2014, the container transport of the Port of Koper doubled, since 2010 the port has been the lead port in the transhipment of containers in the Adriatic region, with an approximately one third of the market share among the ports of the northern Adriatic region, and since 2013, the port has been the second port in the Mediterranean region as regards the volume of car transhipment. In the period between 2011 and 2015, EUR 2,055,504 of budgetary funds and EUR 7,146,584 EU funds were used for the project of deepening the entry canal into the Pool I of the freight port of Koper. The realisation of the project enables the arrival of larger Post-

Panamax vessels to the port;

- coordination of the labour legislation for seafarers in accordance with the standards of the Maritime Labour Convention, 2006 (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 2/16);
- in accordance with the Personal Income Tax Act (ZDoh-2), a special basis of tax assessment applies to the seafarers who sail in international navigation for at least six months (the basis of tax assessment includes 50% of income with regard to work);
- cooperation in EU projects cofinanced from the Connecting Europe Facility helps in the development of the motorways of the sea and the introduction of electronic commerce in the complete logistic chain. This enabled increased competitiveness and allowed a part of the cargo from land transport to be transferred to the motorways of the sea;
- because of increased efficiency of the functioning of the authorities at sea, the Service for the Protection of Coastal Waters shall be transferred to the Slovenian Maritime Administration;
- appointment of the Geodetic Institute of Slovenia which carries out the tasks of hydrographic activities in the Republic of Slovenia and cooperation with the International Centre for Electronic Navigational Charts which has issued the first Slovenian maritime electronic chart encompassing the area of the freight port of Koper. Protocol of Amendments to the Convention on the International Hydrographic Organization has also been ratified (Official Gazette of the Republic of Slovenia – International Treaties [Uradni list RS-MP], No. 108/12);
- in addition to the above-mentioned conventions, the Republic of Slovenia has also ratified the Convention on Limitation of Liability for Maritime Claims, 1976, and the Protocol from 1996 amending it because of the implementation of the international acquis.

Future maritime activities shall be determined by this National Programme.

## **4.5 Report on the implementation of the Resolution on the National Civil Aviation Development Programme of the Republic of Slovenia until 2020 (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 9/10) in part, related to public airports**

In 2010, the National Assembly of the Republic of Slovenia adopted the Resolution on the Development of the National Civil Aviation of the Republic of Slovenia by 2020 (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 9/10), which was published on 9 February 2010. The Resolution stipulates the guidelines for civil aviation development and measurements for the realisation of the goals of civil aviation development in the Republic of Slovenia.

Furthermore, it lays down that the ministry responsible for transport shall prepare an intermediary report every two years on the status of the implementation of the National Civil Aviation Development Programme. Based on the above-mentioned provision and the needs of the ministry, follows a report in part, related to public airports.

### **4.5.1 Airport development**

The Government of the Republic of Slovenia with the Decision on the definition of a public airport system (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 78/06) determined the system of public airports for public air traffic, which should provide a uniform regional development of civil aviation and connectivity with other transport systems. The above-mentioned Decision is based on the actual status of the existing public airports. The objective in this area was infrastructure development of public airports and consequently an

increase in airport capacities and a comprehensive connection of public airports to the existing and envisaged public transport infrastructure and the provision of options for intermodal access to public airports.

The above-mentioned objectives were realised through various measures, namely:

### **1. Preparation and adoption of executive spatial acts for public airports of national significance.**

The Government of the Republic of Slovenia with the Decision on the definition of a public airport system (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 78/06) determined that the following airports are infrastructure facilities of national significance intended for the international air traffic:

- Ljubljana Jože Pučnik Airport,
- Maribor Edvard Rusjan Airport, and
- Portorož Airport.

Based on the Siting of Spatial Arrangements of National Importance Act it is implied that the spatial arrangements of national importance, which are important for the spatial development of the Republic of Slovenia because of their economic, social, cultural and protection characteristic considering the objectives of spatial planning, are planned by the state.

Because of this, the Ministry of Infrastructure has been intensively continuing the preparation of national site plans for these three airports. They foresee the reservation of space for the placement of infrastructural facilities, devices and assets and infrastructural facilities, devices and systems of air navigation services, facilities and devices for the provision of land transport, internal traffic flows and the space for other facilities and devices necessary for further development. All the three national site plans are envisaged to be completed after 2020.

#### *National Site Plan for Ljubljana Jože Pučnik Airport*

In June 2015, the Government of the Republic of Slovenia adopted the Decision on the preparation of the NSP for Ljubljana Jože Pučnik Airport. An invitation to tender for consultancy and engineering services for the drafting of spatial, environmental, investment and technical documentation is being prepared.

#### *National Site Plan for Portorož Airport*

At the end of 2015, the Initiative for the National Site Plan for Portorož Airport has been made. Currently, an analysis of guidelines is being produced. Active discussions are taking place with local and state area management holders, which will result in the determination of the feasible variety of the planned arrangements at the airport.

#### *National Site Plan for Maribor Edvard Rusjan Airport*

In June 2015, the Government of the Republic of Slovenia adopted the Decision on the preparation of the NSP for Maribor Edvard Rusjan Airport. Activities to produce expert groundwork and spatial, environmental, investment and technical documentation, necessary for the adoption of the Regulation on the NSP, are taking place.

#### *The construction of the passenger terminal at Maribor Edvard Rusjan Airport*

In accordance with the Operational Programme of Environmental and Transport Infrastructure Development (OP ETID) for the 2007–2013 programming period and in the framework of the third development priority, the Ministry of Infrastructure followed a common objective: to modernise aviation and airport infrastructure, and the following three priority guidelines were implemented in this context:



- increase of the air space permeability of the Republic of Slovenia,
- reduction of delays in air transport, and
- enabling maximum efficiency of EU air transport.

In order to provide the above-mentioned objective, the Ministry began the project for the modernisation of the Maribor airport infrastructure 2007–2013 ("Posodobitev letališke infrastrukture na letališču Maribor 2007–2013"), which is partly financed from the European Regional Development Fund. In June 2014, a passenger terminal was built at Maribor Edvard Rusjan Airport and taken over in the framework of the project (new construction of facility B and renovation of facility A).

#### *The construction, modernisation and extension of airport infrastructure*

This measure includes investments by public airport operators in the construction, modernisation and extension of the airport infrastructure. The investments are regular, in accordance with the operational and other needs of the airport and based on ex ante plans.

Modernisation of the infrastructure for other activities implemented on public airports

This measure includes investments by public airport operators in the construction, modernisation and extension of the airport infrastructure. The investments are regular, in accordance with the operational and other needs of the airport and based on ex ante plans.

#### *The construction of the passenger terminal at Ljubljana Jože Pučnik Airport*

Because of the inability to achieve satisfying quality standards at Ljubljana Jože Pučnik Airport, several years ago a decision on the construction of a new passenger terminal size of 31,200 square metres and a capacity of 1,800 passengers per hour.

As regards the construction of the new passenger terminal at Ljubljana Jože Pučnik Airport, the tender documentation for the first public procurement for the implementation of construction and craft works as well as electrical and mechanical installations was published in 2012. Seven to ten other public procurements were meant to follow this one. On 21 January 2013, Aerodrom Ljubljana, d.d., and the Ministry of Infrastructure also signed a contract on the cofinancing of the project for the construction of a new passenger terminal at Ljubljana Jože Pučnik Airport. The terminal was foreseen to be constructed and taken over in spring 2015.

On 16 September 2013, the 18th session of the General Meeting of shareholders took place at the headquarters of Aerodrom Ljubljana, d.d. The shareholders decided on the investment in the new passenger terminal, the implementation of the audit of the financial statements and due diligence. The General Meeting did not pass a decision giving consent to the investment in the new passenger terminal. Because of this, the investment was not completed.

Currently, the new owner of Aerodrom Ljubljana, d.o.o. has been reviewing strategical development plans for the airport and the concept of its future development.

#### *The construction of the cargo terminal at Ljubljana Jože Pučnik Airport*

Because of the construction of the new cargo terminal at Ljubljana Jože Pučnik Airport, the Ministry, in cooperation with the Municipality of Cerklje na Gorenjskem, harmonised the Municipal Spatial Plan which enables its spatial placement.

In March 2014, the Ministry of Infrastructure concluded a general contract on mutual relations and the establishment of a building right regarding the use of certain plots of land at Ljubljana Jože Pučnik Airport, based on which the building right on certain plots of land for the construction of the cargo terminal was also established.

Currently, the new owner of Aerodrom Ljubljana, d.o.o. has been reviewing strategical development plans for the airport and the concept of its future development.

## **2. The construction of a railway connection to Ljubljana Jože Pučnik Airport**

One of the objectives for the spatial-planning arrangements of the line Ljubljana–Kranj–Jesenice–state border with a connection to Ljubljana Jože Pučnik Airport also included the connection of Ljubljana Jože Pučnik Airport to the modernised railway infrastructure. Studies of variants were produced for this purpose and they showed that the connection of the Airport to the line Ljubljana–Kranj–Jesenice–state border would be environmentally unacceptable and that the investment would be unprofitable. Therefore, the connection of the Airport to the line Ljubljana–Kranj–Jesenice–state border is no longer planned and the variation of the line is also being removed from the originally planned corridor and placed parallel to the existing line as the second track. However, now, other possibilities for railway connection of the Airport to Ljubljana are being studied (e.g. through Kamnik).

All the activities in this area which need to be continued are included in the National Programme.



## 5. National Programme content

The National Programme as an implementation document has been produced for the periods 2016–2022 and 2022–2030 or until everything has been completely realised and it includes concrete measures and activities. It has been split into two parts, namely to the areas:

- of preparation and
- of implementation.

The annexes, forming part of each individual area, give more detailed activities for individual measures, the time frame for the preparation and implementation as well as the holder of the activity. The connection between different measures for one transport system (e.g. railways) is given, and the connection between measures in different areas can be given simultaneously (e.g., that a concrete activity must comply with the same measure for railway, road and sustainable mobility). This connection is very important, as it helps maintain the National Programme as a uniform document for all parts of the transport system. Each activity has also been assessed in regard to the value of the preparation of the necessary documentation and implementation, namely based on the already produced documentation for the concrete activity or based on an assessment for similar activities. Value assessments were used to produce the dynamics by individual areas and they are listed below.

The implementation of priority of activities is determined based on:

- ensuring an appropriate accessibility standard;
- environmental requirements, traffic safety and burdens, established with the use of the national transport model and based on the environmental report for the comprehensive assessment of environmental impacts, used or produced for the Strategy;
- the justifications, guidelines, vision and objectives from the Strategy.

The National Programme shall be adopted by the National Assembly of the Republic of Slovenia upon the proposal of the Government of the Republic of Slovenia.

For the implementation of investments and the maintenance of state roads it is stipulated that the manager must comply with the methodology for the determination of the priorities and form a six-year investment plan based on it for these areas (measures for the carriageways, support and retaining structures, embankments, bridging structures, tunnels, traffic equipment and signalisation, etc.) and determine priorities for infrastructure.

In investments to railway infrastructure, the prescribed methodology for the section of public railway infrastructure which defines the elements of individual basic criteria and their range for investments on main and regional lines shall be complied with, and moreover, the projects on the railway network mostly already concretely set in the annex to the National Programme.

The six-year plan of investments also needs to include other measures or activities of national significance, which are given in the annex to the National Programme by name (explicitly), and follow this outlined schedule. As for roads and railways, this also applies to the measures or activities in the sections of sustainable mobility, aviation and maritime, in accordance with the competences of the Government of the Republic of Slovenia or the ministry responsible for transport. The six-year operational plan must include detailed descriptions of activities, holders of the activities, costs and schedule for the implementation.

The programme prepared this way forms the basis for the six-year operational plan, which is prepared by the ministry responsible for transport based on the proposals from the managers and on its competences, which then submits it for adoption to the Government.

The managers must regularly monitor the six-year plan and amend it every year and then submit it to the ministry responsible for transport which shall resubmit it for adoption to the Government (sliding plan).

The first six-year operational plan must be prepared and adopted by the Government within 6 months from the publication of the National Programme in the Official Gazette of the Republic of Slovenia [Uradni list RS].

The National Programme contains the dynamics of investments by individual areas of transport, namely for:

- road transport,
- railway transport,
- sustainable mobility,
- water-borne transport, and
- air transport.

The tables hereinafter are based on indicative plans by individual areas and they include data on the necessary investments of the activity holders:

- the state (MInf and DRSI)
- DARS,
- Luka Koper or other legal person or body which operates and manages the Port of Koper, and
- private investors/municipalities.

The table also shows separately the foreseen expenses, which would need to be provided for regular annual maintenance, the mandatory public utility services, subsidies and compensations.

The foreseen investments for state investments by years are compliant with the foreseen or expected resources of the national budget and on average they amount to approximately EUR 730 million / year (inclusive of the envisaged EU funds, subsidies, compensations and regular maintenance).

From the common planned dynamics of investments in the transport infrastructure and the functioning of the system in the period of the EU financial perspective for 2014-2020, it is evident, that in 2016, when first all the documentation needs to be prepared for the project compliant with the Strategy measures, minimum investments are foreseen. The implementation phase is the strongest between 2018 and 2019, when the foreseen or planned investments range in the framework of the necessary resources that need to be sustainable for the state, regular and as constant as possible. The provision of resources through a longer period will also be provided by law, which ensures a stable and steady resource for the development and maintenance of the existing infrastructure.

Table 5-1 shows all the foreseen investments in the transport infrastructure together with the necessary investments in the existing infrastructure (maintenance), subsidies and compensation and traffic management. The points below show the necessary assets by individual transport areas (roads, railways, aviation, maritime and sustainable mobility).

They contain investments of the state by years, including the foreseen EU funds. In total, cofinancing with the EU funds in the estimated amount of EUR 620 million is envisaged for all areas. Additionally, the Ministry shall endeavour to gain EU funds for the investment of the second track of the Divača-Koper project.

**Table 5-1:** Overview of investments for all transport sections for investment maintenance and investments (in EUR million EUR)<sup>4</sup>, including public-private partnership

4: All values in the document are inclusive of VAT.

Total by areas	2016	2017	2018	2019	2020	2021	2022	Total 2016–2022	Total 2023–2030
<b>Air transport</b>	<b>2.31</b>	<b>1.20</b>	<b>1.36</b>	<b>0.61</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>5.47</b>	<b>0.00</b>
<b>Water-borne transport</b>	<b>52.40</b>	<b>76.35</b>	<b>74.09</b>	<b>63.69</b>	<b>31.62</b>	<b>70.35</b>	<b>79.50</b>	<b>448.00</b>	<b>159.00</b>
MInf	2.70	6.15	3.34	3.54	3.82	12.05	25.65	57.25	0.00
Luka Koper d.d.	49.70	70.20	70.75	60.15	27.80	58.30	53.85	390.75	159.00
<b>Road traffic</b>	<b>222.41</b>	<b>467.84</b>	<b>526.08</b>	<b>609.04</b>	<b>697.51</b>	<b>692.51</b>	<b>605.07</b>	<b>3,820.45</b>	<b>3,910.03</b>
<b>MInf + DARS EU</b>	<b>35.92</b>	<b>30.93</b>	<b>16.41</b>	<b>1.87</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>85.13</b>	<b>2.00</b>
DRSI: investment maintenance and construction of roads	87.16	152.16	196.00	196.00	196.00	196.00	196.00	1,219.32	1,568.00
DARS d.d.	99.28	280.45	304.94	390.31	472.65	477.65	396.21	2,421.51	2,305.75
Municipalities	0.05	4.30	8.72	20.86	28.86	18.86	12.86	94.49	34.28
<b>Rail transport</b>	<b>132.61</b>	<b>184.45</b>	<b>334.37</b>	<b>457.54</b>	<b>462.13</b>	<b>384.45</b>	<b>330.10</b>	<b>2,285.64</b>	<b>1,113.96</b>
DRSI budget: investment activity for railway infrastructure	132.61	184.45	244.37	279.54	208.13	149.45	127.10	1,325.64	828.96
Public-private partnership	0.00	0.00	90.00	178.00	254.00	235.00	203.00	960.00	285.00
<b>Sustainable mobility</b>	<b>10.48</b>	<b>24.07</b>	<b>40.38</b>	<b>56.51</b>	<b>37.37</b>	<b>22.40</b>	<b>22.45</b>	<b>213.65</b>	<b>45.08</b>
MInf/DRSI	10.46	16.56	33.37	49.49	31.86	22.40	22.45	186.58	45.08
Municipalities	0.01	7.51	7.01	7.01	5.51	0.00	0.00	27.07	0.00
<b>Total investments</b>	<b>420.20</b>	<b>753.91</b>	<b>976.27</b>	<b>1,187.38</b>	<b>1,228.63</b>	<b>1,169.71</b>	<b>1,037.12</b>	<b>6,773.21</b>	<b>5,228.07</b>
<b>Total state investments</b>	<b>271.15</b>	<b>391.44</b>	<b>494.84</b>	<b>531.05</b>	<b>439.81</b>	<b>379.90</b>	<b>371.20</b>	<b>2,879.39</b>	<b>2,444.04</b>

\* One of the elements by which the EUROSTAT assesses whether an individual project is recorded in the state balances or off them or whether a certain entity is classified in the state sector, is the percentage of the financing from the state. At the moment, the rule applies that the concession-granting authority may not finance (directly or indirectly) more than 50 % of the public concessionaire's assets. Please, note that this is not the only criterion.

Along with the investments, the dynamic of which is shown by individual stakeholders in table 5-1, it is necessary to also ensure resources for regular maintenance, subsidies and compensations as evident from table 5-2. The investments planned by the state in the period 2016–2022 amount to EUR 2,260.04 million, namely:

- for roads in the amount of EUR 539.85 million;
- for railways in the amount of EUR 905.19 million;
- for sustainable mobility (subsidies and compensations) in the amount of EUR 815.00 million.

**Table 5-2:**

Overview of investments  
in regular maintenance,  
subsidies and  
compensations (in EUR  
million)

<b>Regular maintenance, 2016 subsidies and compensations</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>Total 2016–2022</b>	<b>Total 2023–2030</b>
<b>Roads</b>	<b>90.41</b>	<b>89.44</b>	<b>72.00</b>	<b>72.00</b>	<b>72.00</b>	<b>72.00</b>	<b>539.85</b>	<b>576.00</b>
DRSI: planning and development in the transport and transport infrastructure section	4.70	4.70	5.00	5.00	5.00	5.00	34.40	40.00
DRSI: total management and regular maintenance of state roads	85.71	84.74	67.00	67.00	67.00	67.00	505.45	536.00
<b>Railways</b>	<b>112.19</b>	<b>113.00</b>	<b>136.00</b>	<b>136.00</b>	<b>136.00</b>	<b>136.00</b>	<b>905.19</b>	<b>1,088.00</b>
DRSI budget: maintenance of public railway infrastructure	65.77	66.34	90.00	90.00	90.00	90.00	582.11	720.00
DRSI budget: provision of safety in rail transport	46.42	46.66	46.00	46.00	46.00	46.00	323.08	368.00
<b>Sustainable mobility</b>	<b>105.00</b>	<b>105.00</b>	<b>121.00</b>	<b>121.00</b>	<b>121.00</b>	<b>121.00</b>	<b>815.00</b>	<b>968.00</b>
Subsidies and compensations (bus transport)	60.00	60.00	60.00	60.00	60.00	60.00	420.00	480.00
Integrated system of public passenger transport (railways)	45.00	45.00	61.00	61.00	61.00	61.00	395.00	488.00
<b>Total regular maintenance, subsidies and compensations</b>	<b>307.60</b>	<b>307.44</b>	<b>329.00</b>	<b>329.00</b>	<b>329.00</b>	<b>329.00</b>	<b>2,260.04</b>	<b>2,632.00</b>

## 5.1 Roads

**Table 5-3:**

The planned dynamic of investing in investment maintenance and investments (in EUR million)

Road transport	2016	2017	2018	2019	2020	2021	2022	Total 2016–2022	Total 2023–2030
<b>1. Preparation</b>	<b>12.23</b>	<b>23.51</b>	<b>22.02</b>	<b>11.61</b>	<b>7.36</b>	<b>6.87</b>	<b>3.14</b>	<b>86.75</b>	<b>37.02</b>
1.1 MInf	4.80	2.85	3.15	0.00	0.00	0.00	0.00	10.80	2.00
1.2 DARS, d.d.	7.38	20.36	16.15	11.61	7.36	6.87	3.14	72.88	35.02
1.3 Private investors/ municipalities	0.05	0.30	2.72	0.00	0.00	0.00	0.00	3.07	0.00
<b>2. Implementation</b>	<b>123.02</b>	<b>292.18</b>	<b>308.05</b>	<b>401.43</b>	<b>494.15</b>	<b>489.63</b>	<b>405.93</b>	<b>2,514.38</b>	<b>2,305.02</b>
2.1 MInf	2.80	0.90	0.50	0.00	0.00	0.00	0.00	4.20	0.00
2.2 DARS EU	28.32	27.18	12.76	1.87	0.00	0.00	0.00	70.13	0.00
2.3 DARS, d.d., investments	34.16	179.34	197.79	287.70	374.30	379.78	302.07	1,755.13	1,542.74
2.4 DARS, d.d., renovation of motorways	57.74	80.76	91.00	91.00	91.00	91.00	91.00	593.50	728.00
2.5 Private investors/ municipalities	0.00	4.00	6.00	20.86	28.86	18.86	12.86	91.42	34.28
<b>3. Total MInf + DARS EU</b>	<b>35.92</b>	<b>30.93</b>	<b>16.41</b>	<b>1.87</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>85.13</b>	<b>2.00</b>
<b>4. Total DARS, d.d.</b>	<b>99.28</b>	<b>280.45</b>	<b>304.94</b>	<b>390.31</b>	<b>472.65</b>	<b>477.65</b>	<b>396.21</b>	<b>2,421.51</b>	<b>2,305.75</b>
<b>5. Total private investors/ municipalities</b>	<b>0.05</b>	<b>4.30</b>	<b>8.72</b>	<b>20.86</b>	<b>28.86</b>	<b>18.86</b>	<b>12.86</b>	<b>94.49</b>	<b>34.28</b>
<b>6. DRSl: investment maintenance and construction of roads</b>	<b>87.16</b>	<b>152.16</b>	<b>196.00</b>	<b>196.00</b>	<b>196.00</b>	<b>196.00</b>	<b>196.00</b>	<b>1,219.32</b>	<b>1,568.00</b>
<b>7. Total roads (3 + 4 + 5 + 6)</b>	<b>222.41</b>	<b>467.84</b>	<b>526.08</b>	<b>609.04</b>	<b>697.51</b>	<b>692.51</b>	<b>605.07</b>	<b>3,820.45</b>	<b>3,910.03</b>
<b>8. Roads – state investments</b>	<b>123.08</b>	<b>183.09</b>	<b>212.41</b>	<b>197.87</b>	<b>196.00</b>	<b>196.00</b>	<b>196.00</b>	<b>1,304.45</b>	<b>1,570.00</b>

**Table 5-4:**

The planned dynamic of regular maintenance of roads (in EUR million)

For the roads section, cofinancing with EU funds in the estimated amount of EUR 132 million is planned.

Regular maintenance of roads	2016	2017	2018	2019	2020	2021	2022	Total 2016–2022	Total 2023–2030
DRSl: planning and development in the transport and transport infrastructure section	4.70	4.70	5.00	5.00	5.00	5.00	5.00	34.40	40.00
DRSl: total management and regular maintenance of state roads	85.71	84.74	67.00	67.00	67.00	67.00	67.00	505.45	536.00
<b>Total regular maintenance of state roads</b>	<b>90.41</b>	<b>89.44</b>	<b>72.00</b>	<b>72.00</b>	<b>72.00</b>	<b>72.00</b>	<b>72.00</b>	<b>539.85</b>	<b>576.00</b>

For the roads section, the estimated investments in the period 2016–2022 are as follows:

- by MInf in the amount of EUR 85.13 million, including EUR 70.13 million of EU funds for investments by DARS;
- by the state (DRSI) in the amount of EUR 1,219.32 million for investment in maintenance and road building, EUR 34.40 million for regulation and development in the transport and transport infrastructure section, and EUR 505.45 million for management and regular maintenance of state roads. The resources are planned in the domain of activities Ro.43.3 on the implementation of projects for realisation in the period of six years (sliding plan) ("Izvedba projektov za realizacijo v 6-letnem obdobju (drsni plan)"). The sliding plan would include carriageway restoration and the restoration of horizontal/vertical elements and provide measures for the improvement of traffic safety. Only when the state gets to provide constant resources (e.g. budget fund, specific earmarked sources) will it be possible to plan the investments in the existing infrastructure for a longer period, which has proven in practice to be necessary for providing efficiency, and the Court of Audit of the Republic of Slovenia underline this in their opinions. This dynamic also considers additional resources, provided in the framework of the National Reform Programme 2016–2017, which was adopted by the Government of the Republic of Slovenia on 14 April 2014, Decision No. 41000-2/2016/21 (page 7, paragraph 2) and the Stability Programme 2016, which was adopted by the Government of the Republic of Slovenia on 20 April 2016, Decision No. 41003-3/2016/18 (page 12, paragraph 2). These documents provide additional resources up to and including 2018, after that the additional resources will be later defined in relevant documents and provided in the integral budget. Thus, the Government of the Republic of Slovenia will follow the financial flow of the National Programme;
- DARS (excluding EU funds) in the amount of EUR 1,828.01 million for investments and EUR 593.50 million for renovation of the existing network. The investments by DARS, d.d., are limited exclusively to the investments in toll roads. If a decision is made that for a certain new construction tolls would not be collected, the liability of providing resources and the competence for the implementation of an investment will be transferred to the state (DRSI). DARS, d.d. will provide resources for investments and maintenance within their financial capacity. These investments do not impose a burden on the state budget, except for spatial planning and positioning of motorways and acquisition of real estate for construction of motorways which is performed in accordance with Article 4 of the ZDARS-1. These tasks shall be performed by DARS, d.d. on behalf and for the account of the Republic of Slovenia. The funding for implementing the tasks of spatial planning, motorway placement and real estate acquisition is to be provided in the national budget in an earmarked item to which funds are transferred to establish the right of superficies and which DARS pays in accordance with the Public Finance Balance Act. The condition for investments by DARS is the prior adoption of the legislation regulating the consent and the guarantee for the provision of financial resources and a relevant mechanism for adapting the toll amount to enable the repayment of loans for this purpose;
- private investors/municipalities in the amount of EUR 94.49 million, which apply particularly to the measures or activities Ro. 35.2 Construction of a charging stations network, Ro. 12.3 Continuation of the Brdo link road, and Ro.3.1.3 Implementation of additional rest/parking areas (implementation of additional parking areas and spaces for freight vehicles control). The Operational Plan also defines the maintenance of the road infrastructure at the level of municipalities (Ro.43.2.3); however, the investments are not financially evaluated, although, municipalities will also have to plan the renovation of the existing infrastructure in their local budgets and prepare a plan of priorities, i.e. in accordance with the Ro.43 measure. These investments do not impose a burden on the state budget.

The National Programme plans the implementation of activities related to the maintenance of roads, modernisations and infrastructure development. In the motorways section, the priorities include mainly the construction of the missing section between Draženci and Gruškovje, preparation and implementation of the project for the second tube of the Karavanke tunnel and the preparation of proper solutions for traffic arrangements for Slovenian Istria.

The National Programme includes the preparation of the project for the extension of the Ljubljana ring road and before the actual preparation, it plans the introduction of the ITS and public passenger transport systems. It also plans the introduction of a new toll system in free traffic flow for freight vehicles. Furthermore, it includes activities of investment maintenance of the existing motorway system, which is supported by appropriate management models at the planning level.

The National Programme envisages project preparation at the so-called development axes taking into account the dynamics as regards real transport needs, defined in the Strategy. The dynamic for individual activities stems directly from the established problems and it is justified based on real needs (transport problems, traffic loads) and it ensures the achievement of general and specific objectives in the periods between 2014 and 2020 and by 2030.

In the state road network section, it is also envisaged that appropriate maintenance of the existing infrastructure should be enabled, and that it should be reconstructed with the objective of increasing safety and providing better conditions for accessibility. It is envisaged that suitable earmarked sources be provided to enable the provision of investment maintenance and the development of primary infrastructure.

An important segment includes activities of the National Centre for Road Traffic Operation and Management.

The manager of state roads shall prepare an order of priority of investments and investment maintenance in accordance with the methodology below.

The manager is obliged to regularly and periodically monitor the status of the infrastructure in various ways. In most cases, these are measurements and analyses of different technical parameters (e.g. flexibility, wheel tracks, cracks, state of facilities, the level of traffic safety, elements of transport infrastructure, traffic volume and pattern). They are obliged to process the parameters from the measurements and figures with proper models, for example, the degradation model. The results of the models represent a basis for the determination of the scope of maintenance and construction of the national road network, and they directly determine the priority of various necessary projects on the state road network.

When setting the criteria for including individual projects in the 6-year plan for investment maintenance and the construction of state roads, it is necessary to consider the parameters planned by the National Programme, namely:

1. the state of infrastructure;
2. the traffic volume and its characteristics;
3. the significance of infrastructure in space from the point of view of accessibility and connectivity considering balanced geographical distribution throughout Slovenia and considering the traffic-gravitational areas in the Strategy;
4. the state of traffic safety;
5. economic eligibility of the projects.

The objective is to include in the projects for investment maintenance and construction of state roads projects which will gradually improve the state of the road infrastructure and raise the level of services for the users.

Alongside the measures on the carriageways, it is necessary in the framework of the 6-year plan for the renovation of state roads to ensure effective reconstructions of bridging, support and retaining structures and at the same time to implement measures to increase traffic safety and provide better accessibility and connectivity. Of course, it is also necessary to follow the objectives

for decreasing negative influences of road traffic on people and the environment with investment maintenance and the construction of state roads.

The adopted Transport Development Strategy in the Republic of Slovenia envisages that it is necessary to prepare a 6-year plan for the projects of investment maintenance and construction of state roads (reconstruction of roads, upgrading, facilities, etc.), which will include the projects under the principle that the budget breakdown is as follows:

- 2/3 of the projects that fall within the frame of the cost-benefit analysis has reached the threshold of economic viability;
- 1/3 of the funds is intended for projects where it is not necessary that the project has reached the threshold of economic viability.

This means that the majority of financial resources shall be directed as a rule to busier roads, and the distribution enables the implementation of measures on less busy roads, too. The programme also needs to include those projects which will eliminate bottlenecks on the network (narrow roads, non-load bearing facilities, speed limits outside settlements) and increase travel speed outside settlements). With the 6-year plan it is necessary to provide the increase of travel speeds outside the settlements for personal and public passenger transport, with priority given to those projects on the existing transport infrastructure, and if this is not possible, also with new constructions (e.g. bypasses).

The 6-year plan for the renovation of the state road network must divide the projects into three sets:

- measures on carriageways (resurfacing) in cases where the state of the carriageway represents the only problem;
- combined measures (reconstructions, modernisations, arrangements, renewals, etc.) in cases where renewals and reconstructions of bridging, support and retaining structures must be implemented along with the measures on the carriageways and/or the elements of the horizontal and vertical course must also be improved;
- point interventions, where a reconstruction of bridging, support and retaining structure or a provision of traffic safety is mostly necessary.

It is necessary to perform a proper distribution of funds among different purposes with the use of a multidisciplinary approach and the economic model of valuation. Figure 1 schematically depicts the model of valuation and the use of individual measures.

**Figure 1:**  
Schematic diagram  
of the model for the  
selection of the type  
of measure based on  
justification and the  
volume of traffic  
Source: DRI

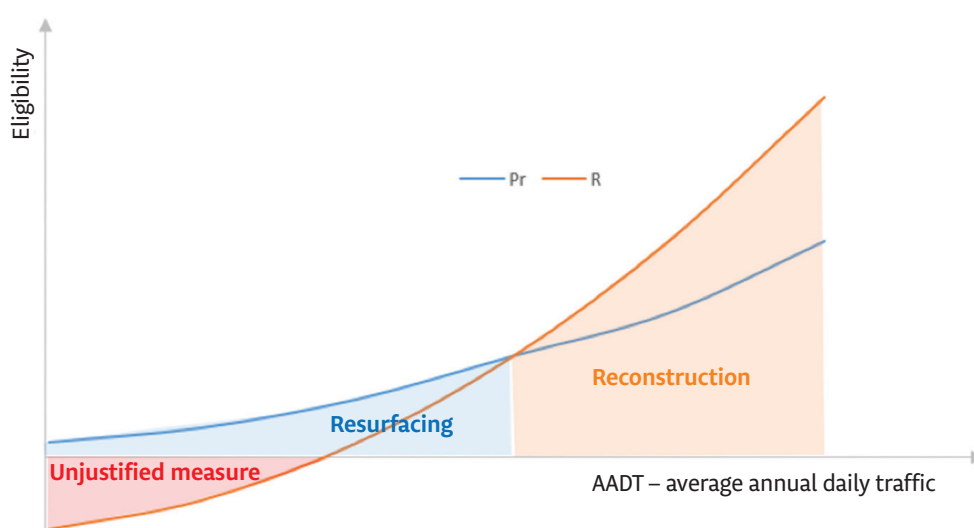


Figure 1 shows two functions. The Pr function represents measures on carriageways (resurfacing), the R function represents the measure of reconstruction (combined measure) depending on the volume of traffic, technical elements and values of an individual measure for an individual category of road (main,



regional). It is a general display of methodology enabling to decide (select) the type of measure for an individual road category. The blue line represents the measure for resurfacing the road, which in a low traffic area also has fewer benefits and with an increase in the volume of traffic, the benefits also increase. If a reconstruction is performed on the same section (the green line), the measure is not economically viable because of a larger investment in low traffic, which is represented by the red section in the graph and which means an unjustified measure from the economic aspect. To the point where the two functions meet, resurfacing is more economically viable (the blue section), and to the right of the joining point, the measure of reconstruction is economically more viable because of the larger volume of traffic.

The multi-annual programme for the renovation of state roads is produced by the manager every year for the period of six years.

They should determine at least the following indicators for the individual year in the frame of the 6-year plan:

- measures on carriageways:  
the works will include a total of \_\_\_ km and \_\_\_ km of carriageways will be concluded;
- combined measures:  
the works will include a total of \_\_\_ km and \_\_\_ km of projects will be concluded;
- point interventions:  
the works will include a total of \_\_\_ facilities and \_\_\_ of facilities will be concluded;

When including the projects in the six-year plan, the manager shall consider the following:

- the basis is represented by the PMS<sup>5</sup> model, which was produced for the whole state road network. The model includes data on infrastructure (roads), traffic by the structure of vehicles with the forecast and results of individual measures. The state and forecasts of traffic are considered, which are made on a strategic level with the use of a strategic traffic model for the whole of Slovenia. The manager shall be obliged to organise the necessary data from different models so that they are directly applicable to the economic model. In the economic model, the manager shall be obliged to produce the costing for the users and economic viability of all the measures each year based on the proposed measures from the PMS model of DRSI and other measures (e.g. on facilities, bypasses, crossroads, the elimination of black spots). Individual measures must be joined into logical projects on a longer section where the interventions are performed (e.g. combined measures);
- the objective is to determine on an annual basis an optimal range of measures (projects) according to the available resources, based on the joint economic viability for all the measures on the state road network (carriageways, facilities, traffic safety, bypasses, roadside areas, etc.);
- particular advantage is given to the measures necessary to maintain the transportability of a road (regardless of the economic viability).

In the framework of the preparation of the National Programme, a generalised calculation of the eligibility of measures has been made according to a different volume of traffic and different type of the project.

The following starting points for the measures on state roads have been considered:

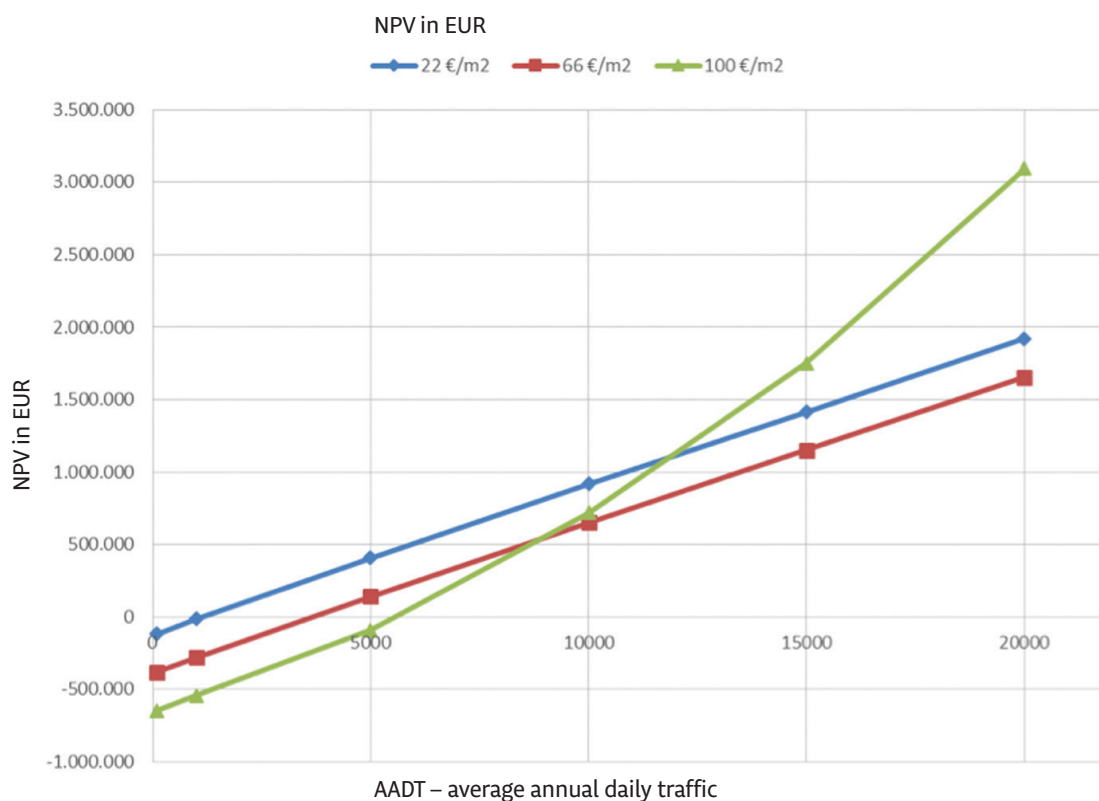
- investment maintenance with carriageway resurfacing, price EUR 22/m<sup>2</sup> excluding VAT, i.e. approx. EUR 100,000 to 150,000/km;
- investment maintenance with carriageway reinforcement, price EUR 66/m<sup>2</sup> excluding VAT, i.e. approx. EUR 300,000 to 400,000/km;
- investment maintenance with carriageway reconstruction, price EUR 100/m<sup>2</sup> excluding VAT, i.e. approx. EUR 600,000 to 700,000/km;
- investment maintenance with carriageway reconstruction + carriageway extension e.g. from 6 to 6.6 m, including the measures on facilities and arrangements in the settlements, price EUR 200/m<sup>2</sup> excluding VAT, i.e. approx. EUR 700,000 to 2,000,000/km;

Different traffic in the AADT unit is considered: 100, 1,000, 5,000, 10,000, 15,000, 20,000 vehicles/day.

**Figure 2:**

A schematic diagram of the viability of measures according to a different volume of traffic and different type of the project

Source: DRI, base Opcost, the prices in November 2014



Individual curves show the viability of measures according to the volume of traffic. The diagram of the results of the valuation in Figure 2 indicates the recommended value of the project, which should serve as the basis for the manager and the project manager in the preparation of the project solution with the objective to come as close to the economic viability of the project as possible.

In the preparation of plans it is necessary to follow the financial perspectives from Table 5-3. If there were less funds than indicated in Table 5-3, it would not be possible to implement the rehabilitation of the state road network, at least not in the dynamic foreseen in this National Programme. It is also necessary to follow the financial perspective for regular maintenance, indicated in Table 5-4.

The programme prepared this way forms the basis for the six-year operational plan, prepared by the ministry responsible for transport and submitted for adoption to the Government.

The manager of state roads shall also prepare a plan for regular annual maintenance.

DARS shall prepare an investment plan with an annual plan for concession implementation.

## 5.2 Railways

**Table 5-5:** The planned dynamic of investing in investment maintenance and investments, railways (in EUR million)

Rail transport	2016	2017	2018	2019	2020	2021	2022	Total 2016–2022	Total 2023–2030
1. DRSI budget: investment activity for railway infrastructure	132.61	184.45	244.37	279.54	208.13	149.45	127.10	1,325.64	828.96
1.1 Preparation	16.62	19.98	16.99	9.49	8.51	5.16	5.17	81.90	0.00
1.2 Implementation	115.99	164.47	227.38	270.05	199.62	144.29	121.93	1,243.74	828.96
2. Public-private partnership (PPP) (implementation)	0.00	0.00	90.00	178.00	254.00	235.00	203.00	960.00	285.00
<b>3. Total railways – investments of the state without PPP (1)</b>	<b>132.61</b>	<b>184.45</b>	<b>244.37</b>	<b>279.54</b>	<b>208.13</b>	<b>149.45</b>	<b>127.10</b>	<b>1,325.64</b>	<b>828.96</b>

Cofinancing with EU assets in the railways section has been estimated to EUR 355 million.

**Table 5-6:** The planned dynamic of investing in the maintenance of the public railway infrastructure and the provision of rail traffic safety (EUR million)

	2016	2017	2018	2019	2020	2021	2022	Total 2016–2022	Total 2023–2030
DRSI budget: maintenance of public railway infrastructure	65.77	66.34	90.00	90.00	90.00	90.00	90.00	582.11	720.00
DRSI budget: provision of safety in rail transport	46.42	46.66	46.00	46.00	46.00	46.00	46.00	323.08	368.00
<b>Total mandatory public utility service – railways</b>	<b>112.19</b>	<b>113.00</b>	<b>136.00</b>	<b>136.00</b>	<b>136.00</b>	<b>136.00</b>	<b>136.00</b>	<b>905.19</b>	<b>1,088.00</b>

For the investment in the second track of the Divača–Koper section, cofinancing from private capital (the investment shown in the PPP line) is envisaged or any cofinancing of this project by the state and its height will depend on the results of the detailed model of the public-private partnership (PPP). The Ministry of Infrastructure has also been implementing activities for the acquisition of EU funds for investing in the project for the second track of the Divača–Koper section.

The railway infrastructure section plans investment in activities on the railway infrastructure in the period between 2016 and 2022 by the state (MInf, DRSI) in the amount of EUR 1,325.64 million (Table 5-5). For investment activities on the railway infrastructure, the expenditure for 2016 has been envisaged in accordance with the approved sources in the budget amounting to EUR 132.61 million. The state also envisages investments (Table 5-6) of EUR 582.11 million for the maintenance of the public railway infrastructure and EUR 323.08 million for providing rail traffic safety.

The holders of activities in the railways section must also produce a 6-year plan for the activities for which they are responsible and which are evident from the annexes to the National Programme. In the implementation of these activities, they must comply with the provisions of the technical specifications for interoperability (hereinafter: TSI) for individual subsystems (infrastructure, energy, control, command and signalling, noise, safety in tunnels, persons with limited mobility, railway rolling stock – locomotives and passenger wagons, and railway rolling stock – freight wagons) in compliance with the adopted EU regulations and the deadlines stipulated therein. The organisation in charge of the investment development shall prepare a proposal for an annual plan of the investments in the public railway infrastructure. The Railway Transport Act (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 99/2015 – official consolidated version) defines the liability that the annual plan of investments in public railway infrastructure shall be adopted by the ministry responsible for transport on the proposal by the organisation from paragraph 1 of Article 13.a.

The organisation responsible for the investment development shall in accordance with the Railway Transport Act establish and manage for the implementation of its task the information system for the management of investments in public railway infrastructure which includes data and documentation on all the investment phases, whereby the MInf shall provide the possibility of a direct insight into the state of investments and the documentation which is kept in the information system.

The tasks of the public railway infrastructure manager in the Republic of Slovenia in accordance with point 2 of Article 11.c of the Railway Transport Act shall be performed by the affiliated company of Slovenske železnice, d.o.o., that is the company SŽ – Infrastruktura, d.o.o. which, inter alia, implements the tasks for the implementation of the public railway infrastructure. These tasks include mainly the following: maintenance works that preserve normal operational capacity and ensure traffic safety; regular maintenance works also include exchange within the scope of maintenance, meaning that the components are replaced during preventive and corrective maintenance with elements with identical function and operation as well as the supervision of sub-systems, ensuring the establishment of transport routes upon natural and other accidents, managing registers and records as well as the implementation of measurements of individual parameters or parts of the system, rehabilitation of railway infrastructure.

The operator, too, in accordance with the Act, shall be obliged to establish and keep the information system for the management of the renovations of the public railway infrastructure, which contains the data and the documentation on all the renovation phases and also the records of the data on expenses for the renovations of the public railway infrastructure. Thereby, it must provide the Ministry with the option of direct insight into the state of renovation and documentation kept in the information system.

The annual investment plan in the rail transport section shall be prepared by the DRSI, approved by the minister responsible for transport, and the 6-year plan for the implementation of activities shall be combined and harmonised with other sections of transport infrastructure and then submitted for adoption to the Government of the Republic of Slovenia.

In the preparation of plans, it is necessary to follow the financial perspectives indicated in Table 5-5 and Table 5-6.

In the preparation and the procedure for the production of investment documentation and in making decisions on investments, it is necessary to consider the methodology, prescribed in the Decree on the uniform methodology for the preparation and treatment of investment

documentation in the field of public railway infrastructure (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 6/2008), which is used to establish the strengths and weaknesses of individual project proposals or in making decisions on the selection of feasible projects, the results of which will contribute to the development of the public railway infrastructure. The annexes of the stated Decree define the elements of individual basic criteria and their range for investments in main and regional lines.

The National Programme contains a series of measures in the railways section, and a part of measures needs to be prepared in connection to the measures on other subsystems (roads, sustainable mobility, etc.). The preparation activities include the production of the studies of eligibility studies or expert groundwork and project or investment documentation, which represent the basis for appropriate planning of the measures on public railway infrastructure.

In short and medium-term it is necessary to prepare and implement the following activities:

- to study the existing and produce new expert groundwork and project and investment documentation for individual activities (documentation for investments, necessary until 2030). It is necessary to take account of the gradual elimination of bottlenecks in all segments (subsystems) of the railways, where it is necessary to follow the principle of gradual increase in the capacity in relation to the needs. Priority is given to the study for the increase of the permeability of infrastructure and for ensuring the TEN-T standards on the Slovenian corridor railway network. It is necessary to complement the existing and produce new project documentation, viability studies or investment documentation for the whole core TEN-T network for achieving the standards, stipulated in the TEN-T Regulation, by 2030 (including the permitted arguments as regards the derogations of individual technical parameters);
- to complete the preparation of the documentation and to implement key projects (for example the project for upgrading the Maribor–Šentilj line, the project for upgrading the Zidani Most–Celje line, the project for the Pragersko hub, the Gorenjska region line, etc.); in the of the documentation production phase, measures in regard to the possibility of the implementation of maintenance works of public interest (MWPI) or the National Site Plan are expected to be separated;
- to complete the preparation of the model for financing with the possibility of including JZP and eventually concluding a partnership in regard to the building of the second track Divača–Koper; and to carry out the investment;
- to produce the plans for activities: to introduce the ETCS or ERTMS system, catenary voltage system, electrification of the regional tracks, priorities in resolving level crossings, methodologies for the calculation of railway infrastructure fee, optimisation of the organisational structure of the railway system;
- to prepare studies and project documentation for the improved role of the railways in public passenger transport (for example, measures on the following line sections: Ljubljana–Kranj, Ljubljana–Kamnik, Ljubljana–Grosuplje, Grosuplje–Kočevje) and the connection of the railway system with, for example, P + R, cycle network);
- to provide the documentation for medium-term solutions in regard to the relief of the Ljubljana railway hub (the Tivoli Arc and the upgrade of the Ljubljana station, regional connections to Kamnik, Grosuplje, etc.).

## 5.3 Sustainable mobility

**Table 5-7:** The planned dynamic of investing in investments, sustainable mobility (in EUR million)

Sustainable mobility	2016	2017	2018	2019	2020	2021	2022	Total 2016–2022	Total 2023–2030
1. Preparation	0.92	0.32	0.02	0.01	0.01	0.00	0.05	1.33	0.15
1.1 MInf	0.90	0.30	0.01	0.00	0.00	0.00	0.05	1.26	0.15
1.2 Municipalities	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.07	0.00
2. Implementation	9.56	23.75	40.36	56.49	37.36	22.40	22.40	212.32	44.93
2.1 MInf	9.56	16.25	33.36	49.49	31.86	22.40	22.40	185.32	44.93
2.2 Municipalities	0.00	7.50	7.00	7.00	5.50	0.00	0.00	27.00	0.00
3. Total MInf	10.46	16.56	33.37	49.49	31.86	22.40	22.45	186.58	45.08
4. Total municipalities	0.01	7.51	7.01	7.01	5.51	0.00	0.00	27.07	0.00
<b>5. Total investments (3 + 4)</b>	<b>10.48</b>	<b>24.07</b>	<b>40.38</b>	<b>56.51</b>	<b>37.37</b>	<b>22.40</b>	<b>22.45</b>	<b>213.65</b>	<b>45.08</b>

**Table 5-8:** The planned dynamic of investing in subsidies and compensations (in EUR million)

Subsidies and compensations	2016	2017	2018	2019	2020	2021	2022	Total 2016–2022	Total 2023–2030
Subsidies and compensations (bus transport)	60.00	60.00	60.00	60.00	60.00	60.00	60.00	420.00	480.00
Integrated system of public passenger transport (railways)	45.00	45.00	61.00	61.00	61.00	61.00	61.00	395.00	488.00
<b>Total subsidies and compensations – investments of the state</b>	<b>105.00</b>	<b>105.00</b>	<b>121.00</b>	<b>121.00</b>	<b>121.00</b>	<b>121.00</b>	<b>121.00</b>	<b>815.00</b>	<b>968.00</b>

The sustainable mobility section envisages investments in the period 2016–2022 in the amount of EUR 213.65 million, of which EUR 186.58 million from the state, and EUR 815.00 million for subsidies and compensations. In the frame of sustainable mobility, cofinancing with EU funds in the estimated amount of EUR 47 million is envisaged.

The National Programme envisages a series of measures in the sustainable mobility section to improve the role of public transport in daily migration. It is possible to prepare a part of the measures independently, and a part in relation to the measures in other subsystems (roads, railways). Activities for the preparation include the production of situation analyses with development plans and/or the analysis of the potential, expert groundwork and project documentation.

The holders of the activities shall produce a 6-year plan for the implementation of activities for which they are responsible and which are evident from the annex to the National Programme. The ministry responsible for transport shall merge the 6-year plan for the implementation of the activities from the National Programme annexes and harmonise it with other sections of transport infrastructure and submit it as a 6-year operational plan to the Government of the Republic of Slovenia for adoption.

In the short- and medium-term, the following activities need to be prepared and implemented as a matter of priority:

- to produce documentation, which will ensure an improved role of the railways in public passenger transport (chiefly in the area of Ljubljana with the rearrangement of the station and Maribor with corresponding surroundings);
- to produce comprehensive transport strategies, to arrange safe access to stations and stops, P + R system, pavements and cycle infrastructure, to make a strategy for promoting walking;
- to produce the analysis of the situation and development potential for the improvement of intermodality including the stress on the increased use of the cycle network in connection to public passenger transport, and for the development of cycling it is necessary to make a strategic plan, too;
- to introduce an integrated ticket (introduction of the system and establishment of the operator), modernisation of public passenger transport services and to provide information on the transport;
- to coordinate and customise the timetables of individual types of transport (railway, public line interurban and urban passenger transport).

The stakeholders from this section will act in accordance with their powers and follow the financial perspectives from Table 5-7 to realise the measures or activities from the annex to the National Programme. It is also necessary to follow the financial perspectives for the subsidies and compensations from Table 5-8.

## 5.4 Water-borne transport

**Table 5-9:** Planned dynamic of investing, water-borne transport (in EUR million)

Water-borne transport	2016	2017	2018	2019	2020	2021	2022	Total 2016–2022	Total 2023–2030
1. Preparation	8.93	7.48	10.97	11.56	1.31	0.40	0.15	40.80	0.00
1.1 MInf	0.23	0.28	0.22	0.41	0.51	0.10	0.00	1.75	0.00
1.2 Luka Koper, d.d.	8.70	7.20	10.75	11.15	0.80	0.30	0.15	39.05	0.00
2. Implementation	43.47	68.87	63.12	52.13	30.31	69.95	79.35	407.20	159.00
2.1 MInf	2.47	5.87	3.12	3.13	3.31	11.95	25.65	55.50	0.00
2.2 Luka Koper, d.d.	41.00	63.00	60.00	49.00	27.00	58.00	53.70	351.70	159.00
3. Total MInf	2.70	6.15	3.34	3.54	3.82	12.05	25.65	57.25	0.00
4. Total Luka Koper, d.d.	49.70	70.20	70.75	60.15	27.80	58.30	53.85	390.75	159.00
5. Total water-borne transport	52.40	76.35	74.09	63.69	31.62	70.35	79.50	448.00	159.00

The main part of infrastructure investments is performed by the concessionaire in the Port of Koper for international transport, i.e. Luka Koper, d.d. In the period 2016–2022, the state envisages to provide EUR 57.25 million for investments, of this the cofinancing of EUR 6 million from the EU funds is envisaged.

The holders of the activities shall produce a 6-year plan for the implementation of activities for which they are responsible and which are evident from the annex to the National Programme. The ministry responsible for transport shall merge the 6-year plan for the implementation of

the activities from the National Programme annexes and harmonises it with other sections of transport infrastructure and submits it as a 6-year operational plan to the Government of the Republic of Slovenia for adoption.

The concessionaire that runs the port for international transport in Koper, shall produce their investment plans in accordance with the concession agreement in the form of expert groundwork for the port development programme for a certain development period. The ministry responsible for transport shall adopt the port development programme and submit it to the Government of the Republic of Slovenia for adoption together with the 6-year operational plan for the implementation of the National Programme.

To achieve the objectives, the National Programme stipulates the measures related to the water-borne transport and the related public transport infrastructure in marine transport:

- the Port of Koper, mainly the following:
  - extension of piers, rearrangement of piers, rearrangement of the existing infrastructure to ensure the development of port activities and the increase in the volume of transshipments;
  - deepening of entry canals and port pools;
  - construction of a passenger terminal;
  - charging stations for alternative fuels
- establishment of an international category inland waterway on the Sava River between Brežice and Obrežje, if it is justified;
- determination of the navigation categories of the inland waterways in Slovenia in regional categories (I–III) in areas of rivers and lakes with proper conditions and the renewal of legislation on inland waterways navigation (production of expert groundwork);
- improvement of the safety of the transport system which envisages the upgrade of the VTS equipment (system for monitoring the maritime transport), establishment of a single window for maritime transport, establishment of a comprehensive maritime surveillance;
- maintenance of facilities for navigation safety;
- hydrographic measurements of the Slovenian sea;
- cleaning of the sea with the take-over of the Service for Protection of Coastal Seas – SVOM;
- increase in the administrative capacity and training – establishment of new business premises of the Slovenian Maritime Administration – URSP and departments of URSP for inland navigation.

In order to realise the measures or activities for this section from the annex to the National Programme, the stakeholders shall act in compliance with their powers and taking into account the financial perspectives from Table 5–9.



## 5.5 Air transport

**Table 5-10:** Planned dynamics of investments, air transport (in EUR million)

<b>Air transport</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>Total 2016–2022</b>	<b>Total 2023–2030</b>
1. Preparation	0.51	1.20	1.36	0.61	0.00	0.00	0.00	3.67	0.00
2. Implementation	1.80	0.00	0.00	0.00	0.00	0.00	0.00	1.80	0.00
3. Total air transport (1 + 2)	2.31	1.20	1.36	0.61	0.00	0.00	0.00	5.47	0.00

Investments in the airport infrastructure by the state are minimal and for the period 2016–2022 they amount to EUR 5.47 million. Most of the investments in airport infrastructure will be contributed by the concessionaire in compliance with their strategic and financial perspectives.

The holders of the activities shall produce a 6-year plan for the implementation of activities for which they are responsible and which are evident from the annex to the National Programme. The ministry responsible for transport shall merge the 6-year plan for the implementation of the activities from the National Programme annexes and harmonises it with other sections of transport infrastructure and submits it as a 6-year operational plan to the Government of the Republic of Slovenia for adoption.

The fundamental objectives of the civil aviation include safety and the reduction of risks in civil aviation, sustainable development and competitiveness. To obtain the goals, measures in relation to the transport infrastructure in air transport have been determined, which also enable the implementation of commercial activities. For all the three airports (Ljubljana Jože Pučnik, Maribor Edvard Rusjan and Portorož) a preparation of the National Spatial Plan is planned which will enable infrastructure air transport related activities development based on need.

The measures also include constructions, reconstructions or setting up infrastructure facilities, devices and the navigation services system, and additionally also charging stations for alternative fuels and for charging aircraft with electric power.

## 6. Financing of activities

The key sections in the transport sector where the state allocates its funding, include:

- investments, maintenance (regular and investment) and infrastructure management;
- subsidies for public transport (bus, railway and school transport) and compensations.

In general, the sources for all the tasks needed to be performed in the transport system include:

1. budgetary resources;
2. EU funds;
3. non-budgetary sources.

### 6.1 Budgetary resources

Budgetary resources are divided into:

- integral funds allocated for the financing (cofinancing) of EU projects, domestic projects and for regular maintenance and other services;
- earmarked funds allocated for the financing (cofinancing) of EU projects, domestic projects, for investment maintenance and for construction and other services.

### 6.2 EU funds

- a. Cohesion Policy funds (determined in the OP ECP 2014–2020): Cohesion Fund funds (CF) and the European Regional Development Fund (ERDF);
- b. resources from the domestic policy of the EU: CEF resources from the tender and the CEF resources from the so-called national envelope.

### 6.3 Non-budgetary resources (e.g. resources from DARS, d.d., Luka Koper, d.d.)

- Tolls and other income of DARS, d.d. (only for DARS, d.d., investments),
- loans from EIB and other international institutions,
- debt securities,
- loans from commercial banks,
- fees for public service financing,
- own resources of Luka Koper,
- resources collected by Luka Koper for entry to the Port, where it performs the role of port administration.

For the financing of the DARS projects on the network for which it is responsible, it is also necessary to provide proper state guarantees. A key source for the payment of commitments from credits and debt securities is represented by the toll, which is why the condition for the implementation of the projects is that toll would be collected, and there must be an appropriate mechanism for the adoption of the toll rate to enable smooth debt servicing.

In 2015, a total of EUR 860 million of resources was spent. It should be noted that this is the year when the absorption of funds from the previous financial perspective (2007–2013) was completed and in which the most intensive investment cycle so far took place. Particularly large is the share of funds from the EU in the railway section, which exceeded EUR 281 million in 2015.

In the medium term, funds in the amount of approximately EUR 730 million per year are planned for the realisation of the set objectives, whereby this value may also be increased through the activation of an increased range of the so-called non-budgetary resources, for example DARS, d.d., Luka Koper, d.d., and Slovenske železnice, d.o.o., resources.

The investment holders must, if the projects correspond to appropriate basic required criteria, also verify the suitability of the use of the EFSI mechanism (European Fund for Strategic Investments).

As imposed by the Strategy and hereinafter the National Programme, it is necessary to produce a 6-year operational plan for the management of the existing road infrastructure with a priority determination of measures or investments and maintenance and development of infrastructure on longer road sections. Investments in the existing infrastructure are planned for a longer period, whereby it is necessary to provide stable long-term sources of funding. The same approach is also necessary to maintain or improve the situation in the section of the existing railway infrastructure. A precondition for the implementation of future projects by DARS, d.d. is the adoption of an appropriate act regulating the guarantee for the obligations of DARS, d.d. from credits and debt securities, raised or issued for the construction and investment maintenance of the motorways.

If the public concessionaire remains classified outside the state sector, the state may not finance it in more than 50%. The state may also not ensure explicit guarantees for more than 50% of the value of the funds.

## **7. Expected effects of the implementation of the measures from the strategy and the activities set in the National Programme and 6-year operational plans**

The National Programme includes several different activities for the whole transport system, where the key objective is to achieve an efficient transport system which is also economically, fiscally and environmental sustainable.

The determination of priority tasks in all sections of the transport infrastructure must be based on objective transport, technical, economic and environment protection criteria.

In the decision-making on the project the needs must be clearly recorded and the effects must be properly justified, i.e., the selection of projects which provide the users (people and economic operators) mainly with direct effects or direct benefits. The use of the method of economic valuations represents a necessary basis for making decisions on investments. In all the investments by DARS, d.d. it is necessary to verify that they do not threaten its financial stability.

The infrastructure in each country has a key role in the development of the company. It serves individuals and economic operators. Appropriate infrastructure with the function of a complete transport system enables people to fulfil their mobility needs. Appropriate infrastructure at the level of the EU is formed by the TEN-T network, where the core network is particularly important. This key network for the EU has been complemented by a comprehensive network. For a simplified realisation of the requirements, corridors of the core network have been formed at the EU level. Slovenia forms part of two such corridors: the Mediterranean Corridor and the Baltic-Adriatic Corridor. Here it is necessary to stress that the core network is a multi-modal network, which means that each section of such network consists of at least two modes of transport: railway and road, and its component can also be river transport. In addition, the TEN-T standards apply for each transport mode which must be realised by 2030. This will be achieved by means of the proposed National Programme.

In the motorways section, the Republic of Slovenia provides a very solid network. A key challenge in the motorways section is thus represented by further provision of an appropriate standard in the maintenance of carriageways and facilities. One of the important challenges is the provision of an appropriate traffic flow, safety and quality data for the users with proper systems for the control and management of traffic. The motorway system provides very good accessibility to individual areas and good connectivity in the European motorway space. Ambitious standards of environmental safety (particularly the reduction of noise and the prevention of biodiversity loss and the loss of ecosystem services) along motorways are currently required and this, inter alia, stems from the Agenda 2030 for Sustainable Development.

Main and regional roads enable connections on the regional and local levels. They serve for the provision of accessibility and connectivity for the population of the Republic of Slovenia and for supply to business. The connections must also ensure an appropriate safety level to all road users. On the one hand, state roads must provide an appropriate accessibility standard (travel speed) and on the other hand, measures providing the users, for example in settlements, with an improvement of the traffic safety situation, must be ensured.

The key segment of activities is also connected to the provision of a proper standard for the investment maintenance of the road infrastructure. With its branched network of more than 6,000 kilometres, the Republic of Slovenia has an above-average developed state road system compared

to the European average; however, this is logical in relation to its dispersed population. With the present trend of accelerated deterioration of the network, this comparative advantage is reducing. In order to stop this trend, it is necessary to achieve stable resources for the renovations and investment maintenance of the infrastructure.

The railways constitute a part of the public passenger transport skeleton and they also serve freight transport, mainly on longer, transit distances. The key challenges in the development of the railway system are mostly related to the gradual elimination of bottlenecks and to the provision of proper TEN-T standards. Appropriate provision of capacities for freight transport and the development of public passenger transport on railways brings benefits, both to the direct users and passengers as well as economic operators, who can use the possibilities of goods transport by rail. Consequently, the measures which enable the above indicated, decrease environmental burdens, mainly pollutants and emissions of greenhouse gases.

The National Programme envisages numerous consecutive measures on port infrastructure and most of the modernisations in the concession area must be performed by the concessionaire, and a part of the measures outside the concession area by the Republic of Slovenia.

In the airport infrastructure section, development is envisaged in accordance with future demands. The state will only provide for the management of the procedures for the preparation of the National Spatial Plans, which will be necessary and justified with an anticipated development of the economic operators.

The whole transport system, both infrastructure as well as the functioning of the system, must follow the principles to make the system more sustainable and to make the subsidies in the transport system efficient and the investments economically viable and sustainable. Only such transport will enable proper benefits to the users and society and it will enable the development of activities in the space.

One of the intentions of the Strategy and the National Programme is to ensure a substantive basis for ensuring stable funding sources in minimum time, which would enable quite constant maintenance and preservation of the existing infrastructure and simultaneous investment development activity and a parallel development of transport sector services.

The budget of the Republic of Slovenia receives income from transport, which are shown below:

- EUR 800–900 million/year from excise duty;
- EUR 146 million/year from the compensation for the use of roads;
- EUR 9.5 million/year from the user charges for railways;
- approx. EUR 2 million/year from concession duty and dividend from the profit of Luka Koper, d.d.

It follows from the above that the budget of the Republic of Slovenia receives income from transport in the amount of approximately EUR 1 billion/year. Total investment from the budget to infrastructure, including subsidies and compensations and in compliance with the dynamics of the National Programme, amount to a little over EUR 700 million/year on average. Transport contributes 6% to gross domestic product and 60% of the construction workers work in the maintenance and infrastructure construction section.

According to experience from the financial perspective 2007–2013, the relatively high investment in infrastructure contributed to an increase of GDP, which also stems from the Spring Forecast of Economic Trends 2016 IMAD, March 2015. In the period 2013–2015, the investments in transport

(railway) infrastructure, which cannot be substituted with investments in other sections, definitely contributed to this. Therefore, their continuity needs to be preserved if we wish to retain economic growth. The adoption of the National Programme definitely contributed to this as it includes a clear message on continuity and uniformity of the necessary resources for investments in transport sector. In the framework of the new financial perspective 2014–2020, there are less funds available in Slovenia for the implementation of the Cohesion Policy than in the previous one and there will be less funds allocated to the infrastructure projects than so far. At the same time, it is necessary to expect a delay in the drawing of funds in the initial period, which was also a characteristic of the previous programming period. Therefore, it would be recommendable to ensure continuity of investment in the transport infrastructure, so that the investments in 2016 and 2017 first begin in the existing transport infrastructure from the budget of the Republic of Slovenia and that it then continues with investments for which the EU funds can be drawn.

## **8. Planning, supervision and monitoring of the implementation of the National Programme**

The ministry responsible for transport will form a relevant internal procedure and establish a relevant internal structure for planning, monitoring and supervision of the implementation of this National Programme.

The ministry responsible for transport, in cooperation with the stakeholders in the transport system section, shall also prepare a report on the results of the implementation of the National Programme and on the achieved objectives for the Government and the National Assembly of the Republic of Slovenia.

The holders of the activities, listed in the annex to the National Programme, shall prepare a proposal each year for the 6-year plan of investment in the transport infrastructure, as described in the preceding chapters.

The ministry responsible for transport, in cooperation with DRI upravljanje investicij, d.o.o. company, shall merge the 6-year plans for individual sections and harmonise them into a uniform 6-year operational plan and then submit it to the Government of the Republic of Slovenia for adoption together with the report on the realisation.

The DRI upravljanje investicij, d.o.o. company, which is 100% owned by the state, shall ensure the updating and refreshing of the data basis for the national transport model, which will represent a basis for amending the data in the National Programme in the 6-year operational plan.

In five years, these stakeholders and the ministry responsible for transport shall prepare a comprehensive review of the implementation of the National Programme of the development of transport, including the analysis of the situation and the definition of the problems with the help of the national transport model, overview of the environmental, spatial and other objectives, domestic and EU legislation in this section, international regulations and other important groundwork. They shall report to the Government and the National Assembly of the Republic of Slovenia on the review and if necessary, they shall propose the preparation of a new National Programme.

## 9. Transitional and final provisions

On the day that this National Programme enters into force, the National Programme of the Slovenian Railway Infrastructure Development shall cease to be in force (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 13/96).

On the day that this National Programme enters into force, the Resolution on the National Motorway Construction Programme in the Republic of Slovenia (Official Gazette of the Republic of Slovenia [Uradni list RS], Nos. 50/04 and 109/10 – ZCes-1) shall cease to apply.

On the day that this National Programme enters into force, the Resolution on the National Maritime Development Programme of the Republic of Slovenia (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 87/10) shall cease to apply in those parts referring to the international traffic Port of Koper and other ports, improvement of maritime safety, envisaging control centre construction and the upgrade of the VTS equipment and other systems for the monitoring of maritime transport, maintenance of facilities for the safety of navigation, hydrographic surveying of the Slovenian sea, increase in the administrative capacity and competency of the Slovenian Maritime Administration with the establishment of new business premises of the Administration.

On the day that this National Programme enters into force, the Resolution on the National Civil Aviation Development Programme of the Republic of Slovenia until 2020 (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 9/10) shall cease to apply in part, related to the public airports for international transport:

- Ljubljana Jože Pučnik Airport,
- Maribor Edvard Rusjan Airport, and
- Portorož Airport.



## 10. Explanation

After gaining independence, the Republic of Slovenia began intensively engaging in the construction of the motorway cross on the route of Pan-European Corridors V and X, as the integration of the international traffic flows connecting national centres, defined in the Spatial Planning Strategy, has been recognised as one of the preconditions for equal integration of Slovenia in the European space. During this time, it became increasingly necessary to modernise the railway transport network due to the increase in transit traffic and because of the deterioration in the quality of public passenger transport. However, both sectors developed very unevenly. Whereas motorway construction has progressed, in railway infrastructure, only urgent investments have been implemented, apart from some exceptions, i.e. mostly regular and investment maintenance, all to a limited extent. It was planned to begin the major cycle of investments in railway infrastructure after the completion of the motorway cross construction. This was determined in the Resolution on the Transport Policy of the Republic of Slovenia from 2006 (Intermodality - time for synergy) (ReTPRS) (Official Gazette of Republic of Slovenia, No. 58/06). Even though the motorway cross was constructed to a major extent, the investment cycle did not continue with investments in railway infrastructure. Something similar occurred in the state roads section. The main and regional roads became of constantly worse quality because of the shortage of funds for investments and maintenance. Consequently, some key roads are in a highly critical condition. The economic and financial crisis was one of the reasons, as well as the absence of a comprehensive investment programme for transport.

Thus, a few years ago, the Republic of Slovenia started a project for introducing an appropriate system of comprehensive planning of development in the area of transport and transport infrastructure, which is based on a vision harmonised inside the sector and with other sectors and which surpasses the system of planning the development in the field of transport and transport infrastructure based on the said incomplete and partial solutions which have been defined by strategic documents until now. The most obvious discrepancy is between the strategically principled visions (e.g. Resolution on Transport Policy of Slovenia (Intermodality – Time for synergy) (Official Gazette of the Republic of Slovenia [Uradni list RS], No. 58/2006)) and long-term or medium-term operational national programmes. Most of these were adopted even before the Resolution on Transport Policy of Slovenia or they only addressed a narrow section.

The Transport Development Strategy in the Republic of Slovenia (hereinafter: the Strategy) passed by the Government of the Republic of Slovenia at its session on 29 July (decision No. 37000-3/2015/8) is the first document in this field which deals with the transport system as a whole. Thus, with the preparation and the passing of the Strategy the existing practice of partial solving of the individual transport subsystem has been exceeded. What is more, along with the infrastructure, the strategic level now also includes the comprehensive operation of the transport system. Based on detailed analyses of infrastructure, the functioning of the system and the identified actual problems, the Strategy envisages 108 measures. These thus represent a conceptual strategic basis for the National Programme.

The National Programme is a document representing a transition between general measures from the Strategy to concrete activities in the preparation and implementation. In their definition, the deadlines and holders of individual activities have been specified along with indicative costs, although, the values for most activities were estimated. With the preparation of an individual study and project documentation these will be detailed further. Therefore, the annual amount of founding, necessary for the realisation of activities in the National Programme is only set by areas, whereas the activities themselves, the deadlines for their implementation and the holders

are listed in the annexe; however, excluding financial resources. The determination of activities, holders of the activities and the expenses for the measures from the Strategy therefore represents the fundamental purpose of the preparation of the National Programme.

The legal basis for the preparation of the National Programme, together with the decisions of the Government of the Republic of Slovenia, is provided by the legislation in individual transport sections (roads, railways, aviation and maritime). In addition to these statutory provisions, the Court of Audit of the Republic of Slovenia in its audit report "Modernizacija cestne in železniške infrastrukture na 3.a razvojni osi št. 320-1/2013/90 z dne 14. julija 2015" (Modernisation of road and railway infrastructure on 3.a development axis No. 320-1/2013/90 dated 14 July 2015), finds the main reason for ineffectiveness in the fact that the Republic of Slovenia has no national programme for the sector of state roads and no updated national programme for the development of public railways infrastructure.

Financial resources are envisaged for individual years until 2022 and from 2023 to 2030 for the whole period, namely for all the transport sections together and for each individual section: road transport, rail transport, sustainable mobility, marine transport and air transport. The first five annexes define the deadline for the preparation and implementation and the holder of the activity for each measure or activity. The annexes with "dynamics" include the implementation of individual activities by years, namely in chronological order from 2016 on. This is not related only to the activities in transport infrastructure, but also to the activities in the field of traffic management, road safety, environmental impact of transport, organisation of the sector, public passenger transport, etc.

The implementation of priority of activities is determined based on:

- ensuring appropriate accessibility standard;
- environmental requirements, traffic safety and burdens, established with the use of the national transport model and based on the environmental report for the comprehensive assessment of environmental impacts, used or produced for the Strategy;
- the justifications, guidelines, vision and objectives from the Strategy.

It has not been possible to specify the activities for all the measures in detail, as relevant studies and documents have not been prepared yet. Therefore, the National Programme envisages that the Government of the Republic of Slovenia should adopt a 6-year plan of investments based on the National Programme. Such plan must include the activities explicitly provided in the National Programme, but also other additional activities for the projects which need to be prepared and activities in maintenance. A methodology for the determination of priorities has also been prescribed for the planning and maintenance of state roads. Every year, the ministry responsible for transport shall report to the Government of the Republic of Slovenia on the realisation of the 6-year plan and propose a new 6-year plan. This is the so-called sliding plan.

In the determination of the measures or activities, it has been considered, that the potentials of the existing transport infrastructure should be utilised to the maximum possible extent with solutions which do not require great financial contributions, such as traffic management systems, introduction of intelligent transport systems, minor investments and similar. Only where such measures do not provide satisfactory results, we focused on major investments; however, we also observed concrete problems established on the expert level in these cases.

General guidance involved an emphasis on the environmentally friendly modes of transport and sustainable mobility in accordance with national and EU policies and legislation in the relevant field. This is also the recommendation from the report for the comprehensive assessment of environmental impacts.

In freight transport, the source of traffic flow for the Port of Koper and the Mediterranean Corridor and Baltic-Adriatic Corridor of the core network on the south-west (Italy) – north and north-east (Austria, Hungary) route is crucial. Furthermore, the traffic flow between Ljubljana and Jesenice to Austria is also extensive and important and it is also increasing because of the accession of Croatia to the EU and the approximation of the states of the Western Balkans to the EU. If we wish to follow these trends, it is mainly necessary to ensure that this freight will be able to enter and exit the state. In the motorways section, there are no larger problems (at least not compared to the railways), because the motorway cross has been completed; the problems arise in the railways section.

In the Port of Koper, an increase in transshipments is planned, namely from the present 18 million tonnes/year to 35 million tonnes/year in 2030–2035. If we consider the fact that 60% of this freight is transported by railways, it means that in the period 2030–2035, there will be around 20 million tonnes of freight per year. The present railway tracks have reached the limit of their capacity and safety and reliability assurance, therefore the construction of the second track between Koper and Divača is crucial for the development of the Port of Koper and for logistics in the Republic of Slovenia. Because of increasing traffic flows on the corridors of the core network, it is necessary to provide an appropriate connection on the railway section between Trieste and Divača, for which project documentation would be prepared by 2020 and the investment made after 2020. The railway undertakings in the territory of Slovenia will also be given a sufficient and stable freight quantity for successful business with both connections.

With the construction of the aforementioned railway sections, the stress of freight to the railway section between Divača and Ljubljana will be increased, and this will be resolved mainly with the improvement of traffic management.

The largest bottleneck in the railways section is represented by the Ljubljana railway node, which will first be resolved with the construction of the Tivoli Arc. It will unburden the Ljubljana railway station for up to 60 trains/day and this relaxation will be used by additional transports or passenger transport.

In accordance with the TEN-T standards, the rail network should provide 22.5 tonnes axle load. The Slovenian rail network has provided this everywhere but on the section Zidani Most–Celje, therefore it is necessary to implement the relevant investment by 2020. Furthermore, the Pragersko hub and the section Maribor–Šentilj are also bottlenecks. The Pragersko station needs to be modernised and on the Maribor–Šentilj section, the existing tracks need to be upgraded and the second one needs to be constructed.

The measures (investments) above will provide for smooth freight traffic by 2020 and on some sections even by 2030. However, it is necessary to also intensify the preparation of the studies and documentation for the pressing investments to follow 2020, namely for the upgrade (or new construction) of the railway connection Divača–Ljubljana, a comprehensive solution for the Ljubljana railway hub, construction of the second track Ljubljana–Jesenice and upgrade of the Zidani Most–Maribor line. The above-mentioned projects will also have to include solutions for the Divača and Zidani Most hubs. Between 2020 and 2030, investments must follow on these sections. The whole TEN-T network in Slovenia also needs to introduce the traffic management system of ETCS 2 level.

Between 2020 and 2030 it is also necessary to prepare the studies for the improvement of the quality of the lines Ljubljana–Zidani Most and Dobova, Rijeka–Pivka, Pragersko and Hodoš (second

track) and for the construction of an additional Karavanke railway tunnel. These investments depend on the plans and the implemented investments of the neighbouring countries, therefore it is not possible to precisely forecast their urgency; however, all these connections are of sufficient quality and capacity for all the freight transported by them and they also have enough reserves for the future.

The relevant modernisation of the rail network will also create conditions for more attractive transport by rail. Only a few regional lines, particularly in the surroundings of Ljubljana, will remain open, namely Kamnik–Ljubljana and Grosuplje–Ljubljana (considering the fact that the Kočevje–Grosuplje railway line will be modernised by 2020). Relevant viability studies will have to be prepared for these sections and they will have to be modernised in compliance with these. This is mostly related to the electrification and (partial) double-track system. The same will have to be done for other regional lines and they should also be modernised in accordance with this and need (probably no sooner than after 2030).

Because most of the growing freight and most of the passenger flows will be resolved with the modernisation of the railway infrastructure, only the problem of growing transit flows will be resolved on the motorways. With this purpose, electronic toll collection in free traffic flow will have to be introduced for all freight vehicles and intelligent transport systems. Further on, the Ljubljana motorway ring, the second tube of the Karavanke tunnel and the section Ljubljana–Jelšane will have to be extended. Regarding this, the national transport model has shown that in relation to the quality of traffic and other problems of this road (road safety, accessibility, pollution, noise, etc.), a conventional strategic road in compliance with the categorisation of high quality roads in the TEN-T Regulation (point 3 of Article 17) would suffice. The Draženci–Gruškovje is already under construction.

It is also necessary to provide investments in the so-called development axes; however, for these, too, such connections need to be projected, which would appropriately eliminate the problems identified on them: accessibility – too lengthy travel times, road safety, noise, etc. The transport model has shown that everywhere but on the section between Velenje and the A1 motorway, where the 4-lane connection is justified, only a 2-lane connection is justified, which of course must be of appropriate quality (speed of 90–100 km/h, appropriate safety, possibility of overtaking, etc.).

State roads, the quality of which has been steeply declining in the past years because of the limited financing resources, are a specific issue. It is necessary to provide regular and steady financing resources for these.

Ljubljana Jože Pučnik Airport as the airport of the capital of an EU Member State is another specific issue and it needs to be appropriately developed. The master plan which was prepared for it has shown that the airport would regress if no congress and hotel business activities and logistics developed around it. This should not happen to Slovenia and its capital, since a great development potential would hereby be lost.

Slovenia has also not given up the possibilities for an inland navigation route in an international category between Brežice and the Croatian border, as one of the most environmentally friendly modes of transport. Of course, the realisation of this navigation route depends on the agreement with or development of this section in Croatia. Additionally, Slovenia will regulate this section for all other categories of the inland navigation routes.

Particularly important is sustainable mobility, where a variety of activities for the promotion of environmentally friendlier transport modes is envisaged: a uniform ticket, coordination of timetables, arrangement of additional P + R ("park and ride"), development of the cycle lanes, promotion of environmentally friendlier transport modes, etc.

The measures are also related to the organisation of the section, traffic management, traffic safety, environment, promotion of infrastructure and alternative fuel vehicles, etc.

It is necessary to provide EUR 600–700 million annually for the realisation of the measures or activities from the National Programme. Resources for the provision of these funds come from the budget (integral and earmarked funds), EU funds (from the Cohesion Policy and the EU's internal policy) and from non-budgetary resources (toll collection and other income of DARS, loans, debt securities, own resources of Luka Koper, etc.).

The positive effects of the implementation of the measures from the Strategy or the National Programme will not only be expressed in the transport section in quality infrastructure, the decrease of negative environmental impacts, the improvement of public passenger transport, etc., they will also positively influence the economy and the growth of gross domestic product. The National Programme provides a stable and steady amount of the funds for the measures in the transport section, including investments, which will certainly have a positive effect on economic development, particularly on the construction sector.

According to experience from the financial perspective 2007–2013, the relatively high investment in infrastructure contributed to an increase of GDP, which also stems from the Spring Forecast of Economic Trends 2016 IMAD, March 2015. In the period 2013–2015, the investments in transport (railway) infrastructure which cannot be substituted with investments in other sections contributed a lot to this. Therefore, the continuity needs to be preserved, if we wish to retain economic growth. The adoption of the National Programme definitely contributed to this as it includes a clear message on continuity and uniformity of the necessary resources for investments in the transport sector. With this, the Republic of Slovenia will show that it is capable of efficient and mature planning and of providing funds for this purpose.

The ministry responsible for transport will monitor the implementation of the National Programme. In five years, it will prepare an overall review of its implementation, including the analysis of the situation and the definition of the problems with the help of the national transport model, the review of the environmental, spatial and other objectives, the domestic and EU legislation, international regulations and other relevant groundwork. It shall report to the Government and the National Assembly of the Republic of Slovenia about the review and, if necessary, it shall propose a preparation of a new National Programme.

With the adoption of this National Programme, the need for most sectional national programmes is eliminated. However, the parts of these national programmes from the maritime and aviation sections, which are not included in this programme, shall still apply.

In case of a collision between this National Programme and other sectional programmes or the legislation on transport, it shall be deemed that the provisions hereof prevail.



## 11. Annexes

Annex 1: Projects – Road transport  
Annex 2: Projects – Rail transport  
Annex 3: Projects – Sustainable mobility  
Annex 4: Projects – Water-borne transport  
Annex 5: Projects – Air transport  
Annex 6: Dynamics – Road transport  
Annex 7: Dynamics – Rail transport  
Annex 8: Dynamics – Sustainable mobility  
Annex 9: Dynamics – Air transport  
Annex 10: Dynamics – Water-borne transport

## Annex 1: Projects – Road transport

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Road network elements							
Ro.1	Draženci–Gruškovje (HR) motorway	The section is a part of the comprehensive TEN-T network and is now constructed as a half motorway, causing poorer transport flow. In the current arrangement, the throughput during increased traffic volume with congestions is problematic. Jams a few kilometres long occur on certain days. For safety reasons, access for haulage vehicles is limited, or access to the tunnel is controlled. Traffic volumes are also growing annually, thus additionally increasing the extent and number of days with congestion, which is problematic for users (congestion, environmental burdening) and the tunnel manager (provision of safety). No other alternative exists to a single-tube tunnel than to construct an additional tube and renovate the existing one (the first tunnel tube), which will provide a full profile four-lane road. This will also improve traffic safety, which will fulfil the requirements of the directive on safety in tunnels (Directive of the European Parliament and of the Council, No 2004/54/EC of 29 April 2004 on minimum safety requirements for tunnels in the Pan-European road network). Measure R.33 must be taken into account when siting and designing.					
Ro.1.1	Draženci–Gruškovje (HR) motorway			-	-	2015–2018	DARS
Ro.2	Completion of the Karavanke motorway tunnel	The section is a part of the comprehensive TEN-T network and is now constructed as a half motorway, causing poorer transport flow. In the current arrangement, the throughput during increased traffic volume with congestions is problematic. Jams a few kilometres long occur on certain days. For safety reasons, access for haulage vehicles is limited, or access to the tunnel is controlled. Traffic volumes are also growing annually, thus additionally increasing the extent and number of days with congestion, which is problematic for users (congestion, environmental burdening) and the tunnel manager (provision of safety). No other alternative exists to a single-tube tunnel than to construct an additional tube and renovate the existing one (the first tunnel tube), which will provide a full profile four-lane road. This will also improve traffic safety, which will fulfil the requirements of the directive on safety in tunnels (Directive of the European Parliament and of the Council, No 2004/54/EC of 29 April 2004 on minimum safety requirements for tunnels in the Pan-European road network). Measure R.33 must be taken into account when siting and designing.					
Ro.2.1	Construction of the second tube of the Karavanke tunnel and completion of the second half of the motorway			2017–2019	DARS	2016–2023	DARS
Ro.2.2	Renovation of the existing tube of the Karavanke tunnel			do 2017	DARS	2022–2023	DARS
Ro.3	Development of the concept of rest/parking areas on the motorway network and arrangement of areas on former international border crossings	In Article 19, the TEN-T Regulation defines the priorities of Member States with regard to the development of road infrastructure. It also foresees the provision of adequate parking areas for commercial users and thus certain levels of safety and protection. Information support should be provided with regard to the number of available and free parking spaces in car parks and for better use of existing car parks (ITS). By expanding existing car parks or the construction of new ones, if necessary, additional capacity must also be provided. The result of the accession of the Republic of Slovenia to the EU and the adoption of the Schengen regime on its borders is that border posts have to be rearranged or other functions have to be allocated to them. Within the scope of the measure, it is necessary to prepare an examination and analysis of border points, establish their needs, define their new, changed function and prepare reorganisation projects for these areas. Measure R.33 must be taken into account when siting and designing.					
Ro.3.1	Arrangement of rest/parking areas						
Ro.3.1.1	Introduction of ITS			2016–2017	DARS	2017–2025	DARS
Ro.3.1.2	Study of the number of necessary car parks			2016–2018	DARS	-	-
Ro.3.1.3	Implementation of additional rest/parking areas for freight vehicle control			2018	municipalities/private investor/DARS	2019–2025	
Ro.3.2	Arrangement of AC and HC within the scope of former IBC			2016–2022	DARS	after 2017	DARS



Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Ro.4	Connection of Bela Krajina to Novo Mesto	Bela Krajina has poor connections with regional centres, or their access is poor due to low speeds and weather conditions. With better accessibility, the possibility of future development and adequate connection of regions in terms of the economy and society will be provided. Accessibility through Gorjanci must be improved in this area in winter conditions. The proper standard of accessibility to centres of regional importance as well as to core centres and the core or comprehensive transport network has to be provided. The measure foresees the preparation of a project which includes the actual needs of the transport system. It is foreseen that the existing transport infrastructure will be used and reconstructed or upgraded to the greatest extent possible. Only certain cases or locations where a suitable standard cannot be provided on the existing infrastructure it is possible to prepare a project outside it. Measure R.33 must be taken into account when siting and designing.					
Ro.4.1	3 <sup>rd</sup> development axis – link road at Novo Mesto east – Revoz			2016–2017	DARS	2018–2020	DARS
Ro.4.2	3 <sup>rd</sup> development axis south (Revoz – Maline section)		Ro.4.1	2016–2018	DARS	in 2018	DARS
Ro.4.3	Povezava Maline–meja RH			2 <sup>nd</sup> section: 2016–2021; 3 <sup>rd</sup> section: 2018–2023	DRSI	after 2022	DRSI
Ro.5	Novo Mesto city network	The situation on the current 2030 road network during afternoon rush hours on an average working day was analysed. Congestions and traffic jams occur on certain sections of the network, and thus related excessive emissions in the residential environment. The preventing, reducing or mitigating the impacts on the environment, especially in residential environments due to the transport-related activities is one of the strategic objectives. The measure anticipates the construction of a bypass to create suitable throughput capacity for long-distance and origin-destination traffic in the city. The measure also improves conditions in the residential environment. Measure R.33 must be taken into account when siting and designing.					
Ro.5.1	Bypass – west		measure, related to Ro.4.1 and R.4.2	-	-	-	-
Ro.6	Connection of Bohinj and Bled to Ljubljana	The situation on the current 2030 road network during afternoon rush hours on an average working day was analysed. Traffic congestion and jams occur on certain sections of the network, particularly between the motorway and Bled. This is especially true during the tourist season or rush hours at weekends. The measure foresees the reconstruction of the existing road, which will provide the proper conditions for traffic flow for long-distance transport and for source-target city traffic, and the construction of the southern Bled by-pass. The measures also improve conditions in the residential and natural environment. The possibility of improving accessibility to public passenger transport (existing rail connection, alternative modes of transport, ITS, etc.) must be studied. Measure R.33 must be taken into account when siting and designing.					
Ro.6.1	Bled south bypass			2016–2018	DRSI/ Bled municipality	2019–2022	DRSI/ Bled municipality
Ro.6.2	Bled north bypass			2016–2018	Bled municipality + DRSI	2016–2019	Bled municipality + DRSI
Ro.6.3	Lesce–Bled			2018–2021	DRSI/Bled and Radovljica municipalities	2021–2023	DRSI/Bled and Radovljica municipalities
Ro.7	Connection of Predel, Bovec, Tolmin and Cerkno to Ljubljana	Some areas of Goriška have poor connections with regional centres, or their access is poor due to low speeds and weather conditions. Thus, better possibilities for future development and the adequate economic and social connection of regions will be provided. The road over Vršič in winter is also a problem, and should be addressed. The proper standard of accessibility has to be provided to centres of regional importance as well as to core centres and the core or comprehensive transport network. The measure foresees the preparation of a project which includes the actual needs of the transport system. It is foreseen that the existing transport infrastructure will be used and reconstructed or upgraded to the greatest extent possible. This mainly refers to interventions in the infrastructure. Only in certain cases or at locations where a suitable standard cannot be provided on the existing infrastructure are the possibilities of preparing the project outside them studied. Measure R.33 must be taken into account when siting and designing.					
Ro.7.1	Reconstruction of the existing road connection		2016–2019	DRSI	2017–2025	DRSI	
Ro.7.2	Passability of Vršič						
Ro.7.2.1	Passability of Vršič			2017–2018	DRSI	2018–2022	DRSI
Ro.7.2.2	Passability of Vršič			po 2022	DRSI	po 2022	DRSI
Ro.7.3	4. os		Ro.7.1	2016–2022	DRSI	po 2022	DRSI

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Ro.8	Škofja Loka city network	The situation on the current 2030 road network during afternoon rush hours on an average working day was analysed. Congestions and traffic jams occur on certain sections of the network, and thus related excessive emissions in the residential environment. The preventing, reducing or mitigating the impacts on the environment, especially in residential environments due to the transport-related activities is one of the strategic objectives. The measure anticipates the construction of a bypass to create suitable throughput capacity for long-distance and origin-destination traffic in the city. The measure also improves conditions in the residential environment. Measure R.33 must be taken into account when siting and designing.					
Ro.8.1	Northern bypass		continuation of the project depends on the efficiency of the southern bypass	after 2016	DRSI, municipality	after 2020	DRSI, municipality
Ro.9	Connection of Koroška to the motorway system	Certain areas of Koroška must be provided suitable accessibility, safety and adequate level of transport connections to the centres of regional importance, as well as to core or comprehensive transport network (motorways). Thus, better possibilities for future development and the adequate economic and social connection of regions will be provided. The existing transport infrastructure has been modernised or upgraded to the greatest extent possible. This mainly refers to interventions in the infrastructure. Only in certain cases or at locations where a suitable standard cannot be provided are the possibilities of implementing interventions outside the existing infrastructure studied. Measure R.33 must be taken into account when siting and designing.					
Ro.9.1	new, two to four lane connection between Slovenj Gradec– and Velenje A1			2016–2018	DARS	2018–2022	DARS
Ro.9.2	Reconstruction of the existing road connection between Slovenj Gradec –Kotlje–Ravne			2017–2022	DRSI	2017–2024	DRSI
Ro.9.3	Reconstruction of the existing road connection between Dravograd– Slovenj Gradec			2016–2017	DARS	2020–2025	DARS
Ro.9.4	Reconstruction of the existing road connection between Otiški Vrh–Holmec, including the link to Črna na Koroškem			2016–2017	DARS	2020–2025	DARS
Ro.10	Connecting Hrastrnik with Zidani Most and Brežice	Individual areas of Slovenia have poorer connections to regional centres, or their accessibility is difficult due to low travel speeds. The main road at this part is only a single-lane road, which means that only one-lane alternate traffic is possible. A proper standard of accessibility (two-lane main road) has to be provided to centres of regional importance as well as to core centres and the core or comprehensive transport network. At the same time, a proper connection past Krško to Brežice has to be established. Measure R.33 must be taken into account when siting and designing.					
Ro.10.1	Reconstruction of the existing road			2018–2019	DRSI	2019–2022	DRSI
Ro.10.2	New construction – Hrastrnik– Zidani Most		Ro.10.1	2017–2020	DRSI	2021–2024	DRSI
Ro.10.3	Krško bypass			2016–2018	DRSI	2016–2023	DRSI
Ro.10.4	Krško–Brežice			2016–2022	DRSI	2023–2027	DRSI
Ro.10.5	Brežice bypass			2018–2022	DRSI	2022–2025	DRSI
Ro.11	Povezava Kočevja	Individual areas of Slovenia have poorer connections to regional centres, or their accessibility is difficult due to low travel speeds. The proper standard of accessibility to centres of regional importance as well as to core centres and the core or comprehensive transport network has to be provided. The measure foresees the preparation of a project which includes the actual needs of the transport system. It is foreseen that the existing transport infrastructure will be used and reconstructed or upgraded to the greatest extent possible. This mainly refers to interventions in the infrastructure. Only in certain cases or at locations where a suitable standard cannot be provided on the existing infrastructure are the possibilities of preparing the project outside them studied. In addition to road infrastructure, there is also rail infrastructure in the direction of Kočevje. When preparing the measure, both modes of transport have to be taken into account. What specific measures can meet the objectives of faster and better accessibility also has to be established. In particular, whether upgrading the rail infrastructure would fully meet the foregoing objectives has to be studied, or if the final proposals for measures should be sought in the road and rail infrastructure by taking into account the more efficient implementation of public transport. Measure R.33 must be taken into account when siting and designing.					

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Ro.11.1	Kočevje–Ljubljana connection		U.3, U.16 and R.23.16	2016-2018	MzI	-	-
Ro.11.2	Reconstruction of the existing infrastructure and potential bypass (2 + 2 – expansion of the existing road)		Ro.11.1	2016–2018 existing, after 2018 additional measures	DRSI	2016–2020, after 2020 additional measures	DRSI
Ro.11.3	Škofljica bypass		Ro.11.1, Ro.11.2	after 2020	DRSI	after 2020	
Ro.12	Ljubljana motorway ing and motorway connecting roads and their rearrangement	The situation on the current 2030 road network during afternoon rush hours on an average working day was analysed. Congestion occurs on almost all sections of the Ljubljana motorway ring. Planned measures: - introduction of public transport in which railway assumes a more significant role in the main directions or in the direction of regions. It can be expected that some traffic will decrease; nevertheless, an increase in traffic can be expected up to e.g. 2030 due to an increase in mobility; - Introduction of the ITS system. If these measures do not fully eliminate problems, measures should also be implemented to increase the capacity of existing motorway sections and connecting motorway roads, e.g. by expanding the existing motorway with another driving lane in each direction, etc. - Rearrangement and new construction of connecting motorway roads, e.g. Brezovica, Šmarje - Sap, Domžale, Vrhnika, etc. The possibility of implementing the project by means of private-public partnership should also be studied. Measure R.33 must be taken into account when siting and designing.					
Ro.12.1	Introduction of the ITS system						
Ro.12.1.1	Introduction of ITS system to AC and HC			2016–2018	DARS	2016–2021	DARS
Ro.12.1.2	Introduction of ITS system at G, R and LC		Ro.12.1.1	2016–2018	DRSI/municipalities		
Ro.12.2	Public transport		U.1, U.2, U.3, U.11, U.14	-	-	-	-
Ro.12.3	Link roads						
	Šmarje Sap		-	-	2016–2018	DARS	
	Dragomer (Brezovica (2))			2016	DARS	2017–2018	DARS
	Vnanje Gorice bypass		Connection with the Dragomer link oad (Brezovica (2))	2018–2022	DRSI	2023–2026	DRSI
	Domžale (Študa)		Ro.13.2	2016–2023	Municipality/DARS/DRSI	after 2025	DARS
	Vrhnika		Ro.43.4.1	after 2025	DARS	after 2030	DARS
	Continuation of the Brdo link road			2016–2018	municipality	2019–2021	municipality
Ro.12.4	Expansion of the motorway ring with connection sections						
Ro.12.4.1	Expansion of the motorway ring with connection sections			2016–2020	DARS		
Ro.12.4.2	Expansion of the Koseze–Kozarje motorway section into six lane motorway			2016–2018	DARS	2017–2020	DARS
Ro.12.4.3	Šentvid–Koseze (completion of a full link road to Celovška cesta)			2016–2017	DARS	2016–2017	DARS

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Ro12.4.4	Expansion of the motorway ring with connection sections		Ro.12.1, Ro.12.4.1 and U	2020–2025	DARS	after 2025	DARS
Ro.13	Connection of Gorenjska, Ljubljana and Štajerska	The connection between Gorenjska and Štajerska is provided by the Ljubljana motorway ring. As a result, a great share of the traffic between the respective regions runs through a longer route which causes additional costs to the users. Traffic burdens the Ljubljana motorway ring and the environment with emissions. The solution is in tangential connections: the new construction of a direct connection between Gorenjska and Štajerska (Želodnik–Vodice) which will shorten the route between both regions; a new road between Trzin and the planned Študa connecting motorway road, which will relieve the existing Trzin radial road and Trzin and Domžale road network; the construction of the Stanežiče–Brod–Ježica–Šentjakob connection which will relieve the Ljubljana city road network. Measure R.33 must be taken into account when siting and designing.					
Ro.13.1	Connection of Gorenjska– and Štajerska (Želodnik–Mengeš–Vodice)			2016–2018	DARS	2016–2023	DARS or DRSI
Ro.13.2	Link road (Trzin–Domžale–Študa link road; study of the measure together with the Študa, Želodnik–Mengeš–Vodice, Brod–Ježica–Šentjakob, link roads, Kamnik railway line, Gorenjska railway line)		Ro.12.3., U.1, Ro.13.1, Ro.13.3, U.2, Ro.12.4	2017–2018	MZI	after 2020	DRSI
Ro.13.3	North tangent (Brod–Ježica–Šentjakob; study of the measure together with the Študa, Želodnik–Mengeš–Vodice, Trzin–Domžale–Študa link roads, Kamnik railway line, Gorenjska railway line)		Ro.12.3., U.1, Ro.13.1, Ro.13.2, U.2, Ro.12.4	after 2025	MZI	-	-
Ro.14	Štajerska–Dolenjska connection	The connection between Štajerska and Dolenjska runs past Ljubljana via the motorway. As a result, a great share of the traffic between Štajerska and Dolenjska runs through a longer route which causes additional costs to the users. Traffic also burdens the Ljubljana motorway ring and the environment with emissions. The existing roads between Celje and Novo Mesto do not provide a proper connection standard. A direct connection between Celje and Novo Mesto will shorten the route between the regions. The possibility of using the existing infrastructure, which must be upgraded for speeds up to 90 km/h, must be studied. Where this is not possible, a new road should be constructed. Measure R.33 must be taken into account when siting and designing.					
Ro.14.1	Celje bypass		Ro.14.5	2016–2022	DRSI	after 2025	DRSI
Ro.14.2	Reconstruction of the existing Celje–Laško road connection			2018–2025	DRSI	after 2025	DRSI
Ro.14.3	Reconstruction of the existing Laško–Zidani Most road connection		Ro.10.2	2018–2025	DRSI	after 2025	DRSI
Ro.14.4	Reconstruction of the existing Zidani Most–Novo Mesto road connection			2018–2025	DRSI	after 2025	DRSI
Ro.14.5	3 <sup>rd</sup> development axis – middle		Ro.14.1, Ro.14.3, Ro.14.4, Ro.14.5, Ro.10.2	2016–2022	DRSI	after 2025	DRSI

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Ro.15	Connection of Škofja Loka/Medvode to Ljubljana	Škofja Loka and Medvode are considerable traffic generators, especially in terms of daily commuters. Daily burdening of traffic from these directions is particularly pronounced during morning and afternoon rush hours. Traffic jams occur on the road between Ljubljana and Medvode, which increases expenses for users and additionally burden the environment. Planned measures: some daily transport flows have to be redirected to other transport modes, in particular to public passenger transport, whereby it is necessary to study which organisational solutions (bus transport, railway transport) can meet current and expected needs; - upgrade or completion of the existing road infrastructure; - where a suitable standard cannot be provided on the existing infrastructure, the possibilities of preparing the project outside it are studied. Measure R.33 must be taken into account when siting and designing.					
Ro.15.1	Connection of Gorenjska to Ljubljana (Jeprca–Stanežiče)		R.3 and U.2	2016–2017	DARS	-	-
Ro.15.2	Reconstruction of the existing connection with a potential construction of lanes		R.3 and U.2	2016–2018	DRSI	2022–2025	DRSI
Ro.15.3	Connection of Gorenjska to Ljubljana (Jeprca–Stanežiče)		Ro.15.1 and Ro.15.2	2018–2020	DARS	2021–2025	DARS
Ro.16	Road network around Maribor	The situation on the current 2030 road network during afternoon rush hours on an average working day was analysed. The main problem is mainly the traffic in the southern part of Maribor, namely in the direction from the western part of Maribor and its hinterland towards the expressway and motorway. Traffic jams occur on certain sections of the network due to traffic congestion, and thus related excessive emissions in the residential environment. The preventing, reducing or mitigating the impacts on the environment, especially in residential environments due to the transport-related activities is one of the strategic objectives. The measure anticipates the construction of a bypass to create suitable throughput capacity for long-distance and origin-destination traffic in the city. The measure also improves conditions in the residential environment. Measure R.33 must be taken into account when siting and designing.					
Ro.16.1	Maribor bypass (Extension of the Proletarskih brigad road)			2016–2019	DRSI	2020–2023	DRSI
Ro.16.2	Maribor bypass (Western bypass (Lackova)–motorway)			2016–2020	DRSI	po 2020	DRSI
Ro.16.3	Maribor South bypass (connection from the motorway to Miklavž)			after 2030	DRSI	after 2030	DRSI
Ro.17	Road network around Koper, connection of the Koper–Izola–Piran conurbation to the motorway system	The situation on the current 2030 road network was analysed, i.e. during the afternoon rush hour on an average working day and in a tourist peak period. Traffic congestion and jams occur on certain sections of the network (in the Koper direction, Dragonja border crossing), and thus related excessive emissions in the residential environment. The preventing, reducing or mitigating the impacts on the environment, especially in residential environments due to the transport-related activities is one of the strategic objectives. The measure anticipates the construction of a bypass to create suitable throughput capacity for long-distance and origin-destination traffic in the city. The measure also improves conditions in the residential environment. The situation on an average day on the existing road from Izola in the direction of Piran or Portorož is extremely poor in terms of transport technical and safety characteristics, while the daily volume of traffic exceeds the capacity of this road. Additional traffic in summer months and rush hours also affect the situation, causing major traffic jams. The measure foresees the construction of a new expressway from Jagodje to Lucija, which is the missing section of the so called coastal road, the function of which is to connect the conurbation of Koper–Izola–Piran to the motorway system. Measure R.33 must be taken into account when siting and designing.					
Ro.17.1	Connection of Slovenian and Croatian Istra			2016–2018	MZI		
Ro.17.2	Koper–Šmarje Dragonja (Šalara bypass)		Ro.17.1	2016–2019	DARS	2020–2023	DARS
Ro.17.3	Reconstruction of the existing Šalara HR (border point) road connection		Ro.17.1	2016–2020	DRSI	2017–2023	DRSI

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Ro.17.4	Koper–Šmarje Dragonja		Ro.17.1	after 2025	DARS	after 2030	DARS
Ro.17.5	Jagodje–Lucija		Ro.17.1	2016–2020	DARS	2017–2023	DARS
Ro.17.6	Bertoki and Srmin slip road			2016–2019	DARS	2016–2023 (Bertoki slip road 2016–2019; Srmin slip road 2021–2023)	DARS
Ro.17.7	MMP Dragonja–national border with RH			2016–2021	DARS	after 2023	DARS
Ro.18	Connection of Ilirska Bistrica (HR) to the motorway system	The section from Postojna/Divača to Croatia is part of the TEN-T comprehensive network, and a missing section between Ljubljana/Trieste and Rijeka, as well as a missing part of the Adriatic–Ionian road connection. Ilirska Bistrica and its hinterland currently have a main road with no proper standard for a long-distance main road. Also, denser tourist traffic is recorded in the direction from Postojna towards Croatia (Rijeka, western part of Istria, Kvarner), which is especially heavy during the tourist season, when it reaches 3- to 4-times the average. During this period, traffic congestion occurs, which also presents an additional environmental burden. The section from Postojna to Croatia is also a part of the TEN-T comprehensive network. Traffic analyses indicate that the road already in current conditions does not meet the proper standard, since it runs through the settlements, part of the road has no proper elements and also goods vehicle traffic is limited. The measure anticipates the modernisation of the existing infrastructure in order to ensure an appropriate standard and throughput of the existing road for speeds up to 90 km/h. The measure also foresees the study of relocating a section of the route that passes the areas of settlements in the form of by-passes, in particular to separate long-distance traffic from national transport and origin destination traffic. Also, better traffic safety has to be ensured, so the solution also needs to include the separation of motorised from non motorised traffic. Where a suitable standard cannot be provided on the existing infrastructure, the possibilities of preparing the project outside it are studied. Measure R.33 must be taken into account when siting and designing.					
Ro.18.1	Bypasses (Pivka, Prestranek)			2017–2025	DRSI	after 2022	DRSI
Ro.18.2	Reconstruction of the existing Postojna–Jelšane road connection			2016–2019	DRSI	2016–2023	DRSI
Ro.18.3	Motorway connection (Postojna–Jelšane)		Ro.18.1, Ro.18.2	2016–2025	DARS	after 2030	DARS
Ro.19	Celje road network	The situation on the current 2030 road network was analysed, i.e. during the afternoon rush hour on an average working day and in a tourist peak period. Traffic congestion and jams occur on some sections of the Celje network between connecting motorway roads and other network, and thus related excessive emissions in the residential environment. The preventing, reducing or mitigating the impacts on the environment, especially in residential environments due to the transport-related activities is one of the strategic objectives. The measure anticipates the construction of a bypass to create suitable throughput capacity for long-distance and origin-destination traffic in the city. The measure also improves conditions in the residential environment. Measure R.33 must be taken into account when siting and designing.					
Ro.19.1	Bypass		Ro.14.1	-		-	-
Ro.20	Connection of Ormož to Ptuj/Maribor	Individual areas of Slovenia have poorer connections to regional centres or their accessibility is difficult due to low travel speeds. The accessibility has to be provided to centres of regional importance, as well as to core or comprehensive transport network (motorways). The measure foresees the preparation of a project which includes the actual needs of the transport system. An adequate by-pass system is arranged in Ptuj, while the level of traffic situation has improved at the Ptuj-Ormož connection, namely by interventions in the existing transport infrastructure. Where a suitable standard cannot be provided on the existing infrastructure the possibilities of preparing the project outside the existing transport infrastructure are studied. Measure R.33 must be taken into account when siting and designing.					
Ro.20.1	Ptuj–Ormož						
Ro.20.1.1	Ptuj–Ormož (reconstruction)			2017–2019	DRSI	2019–2025	DRSI
Ro.20.1.2	Ptuj–Ormož (new construction)		Ro.20.1.1	2017–2018	DARS	2022–2025	DARS
Ro.20.2	Ptuj bypass (Ptuj–Markovci connection)			2018–2025	DARS	after 2025	DARS

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Ro.21	Nova Gorica city network	The situation on the current 2030 road network was analysed, i.e. during the afternoon rush hour on an average working day and in a tourist peak period. Traffic congestion and jams occur on some sections of the Nova Gorica network, and thus related excessive emissions in the residential environment. The preventing, reducing or mitigating the impacts on the environment, especially in residential environments due to the transport-related activities is one of the strategic objectives. The measure anticipates the construction of a bypass to create suitable throughput capacity for long-distance and origin-destination traffic in the city. The measure also improves conditions in the residential environment. Measure R.33 must be taken into account when siting and designing.					
Ro.21.1	Nova Gorica bypass			after 2018	DRSI	po 2025	DRSI
Ro.22	Connection of Kozjansko, Rogaška Slatina and the hinterland to the central network	Bizeljško, Kozjansko, Šentjur and Rogaška Slatina have poorer connections to regional centres or their accessibility is difficult due to low travel speeds. A suitable standard of accessibility has to be provided to centres of regional importance, as well as to core centres and the core or comprehensive TEN-T transport network. The measure anticipates the preparation of several projects which take account of the actual needs of the transport system. Interventions are particularly planned for the existing transport infrastructure. Only in certain cases or locations where a suitable standard cannot be provided on the existing infrastructure, is the possibility of preparing a project outside the existing transport infrastructure studied (e.g. Dramlje–Šentjur connection). R.33 measure must be taken into account when siting and designing.					
Ro.22.1	Dramlje–Šentjur			2016–2023	DRSI	2020–2025	DRSI
Ro.22.2	Šentjur–Dobovec			2016–2023	DRSI	2020–2026	DRSI
<b>Road network</b>							
Ro.31	Improving the accessibility of regions without a direct connection to the TEN-T network	A regional network (road and railway network) which would enable people and economy to access regional centres (jobs, services of public importance) must be improved within a reasonable time. In addition to regional connections, the construction of bypasses is foreseen due to throughput issues caused by excessive environmental burdens and road traffic safety.					
Ro.31.1	Programme of measures		Ro.43.2.1 and Ro.43.3.1	2016	DRSI	-	-
Ro.32.	Traffic management, monitoring and counting, and information system	Traffic management is an important element of a traffic system. Traffic data collection and processing is a basis for complementing the traffic data base. Traffic counting is done in various ways, whereby access to data at the proper platforms, which are also publicly accessible, needs to be ensured. The functions of traffic control, management and operation form a basis for improving traffic flow capacities. Efficient systems enable management which minimises congestions during regular traffic flow and for example during exceptional traffic events. The national transport model was developed within the scope of the broader preparation of the transport system development documents in the Republic of Slovenia. The model has to be maintained and upgraded with new research studies (e.g. surveys of households, other research projects), so that it is constantly up to date is thus ensured.					
Ro.32.1	National Traffic Management Centre (NTMC)			2016	Mzi	2016	Mzi
Ro.32.2	Establishment of data model (within NTMC)					2016	Mzi
Ro.32.3	Upgrade of the macroscopic transport model (within NTMC)					2016–2017	Mzi
Ro.32.4	Establishment of the dynamic simulation model (within NTMC)					2017–2018	Mzi
Ro.33	Measures to prevent, mitigate and maximise the elimination of the consequences of significant impacts of the plan on the environment, nature, people's health and cultural heritage, and measures to improve transport safety (mitigation measures)	Measures to protect the environment from noise caused by road transport in particular include measures to reduce noise at source (low noise road surface, temporary or permanent rerouting of transit transport and reducing speeds in noise-exposed areas), measures to prevent the spread of noise into the environment (noise barriers and embankments) and measures on buildings (anti-noise renovation of façade elements). More detailed measures must be defined in the operational programme for protection from noise, which must include all important roads and the road network on both sides of the settlement areas (Municipality of Ljubljana and Municipality of Maribor). In preparing the respective programme, the focus must be on: a) reduction of noise caused by road infrastructure; detailed strategy and technological solutions to ensure efficient noise reduction due to tyre-road sound emissions must be prepared; b) preparation and observation of uniform positions to determine areas protected by noise barriers/embankments and the method of constructing them; and c) formation of uniform positions to prepare and implement measures on buildings. In terms of reducing the degradation of the natural environment, the reconstruction of existing infrastructure connections has priority over the construction of new traffic routes, and also the positioning of transport infrastructure in the existing infrastructural corridor has priority over positioning in naturally preserved areas. Therefore, sustainable land management and soil protection must be ensured when planning the integration of transport infrastructure in the environment. Activities in agricultural land and woodland must be reduced to the lowest level possible, and planned according to land with poorer production potential, and land outside dense forest areas and forest areas with important wood					

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		<p>production functions at the first level must be given top priority. Transport infrastructure should not be integrated in the coastal land. Such interventions may cause significant impacts on the ecological status of watercourses and a reduction of retention surfaces, while cumulative impacts affect the biodiversity and ecosystem of the area. When planning interventions in areas with extremely high, very high and highly vulnerable aquifers, it is necessary to study and plan appropriate technical solutions that will prevent negative effects of the construction and operation, as well extraordinary events. In the spatial integration of transport infrastructure, it is necessary to avoid water protection areas and areas at risk of flood and related erosion. Infrastructure corridors should not be integrated in cultural heritage areas, exceptional landscapes or landscapes with distinctive features at the national level. The proper technical measures must be applied to provide a high-quality landscape image by taking into account the natural and cultural features and topography of the area. When siting transport infrastructure in the area, it is necessary to avoid areas with nature conservation status (Natura 2000 areas, protected areas, ecologically important areas, areas proposed for protection). The time when interventions occur has to be adjusted to the life cycles of animals and plants. Variants with less impact on the migration paths of wild animals should be given priority (those with long sections in tunnels, covered burrows; those which cross fewer migration paths). When fragmenting migration paths, adequate passages must be provided, pursuant to good practices in the European Union. On the basis of analyses of data on traffic accidents and on-site inspections, crossroads and sections with high rates of traffic accidents are determined. Measures to improve traffic safety must be implemented in these areas due to other impacts. For these, a programme of measures is prepared which determines the immediate possible measures; short-term, medium-term and permanent measures to improve traffic safety. Previous analyses indicated that many of the crossroads and sections in the Slovenian transport network must be rehabilitated. Measures for a greater motorway safety also need to include safety measures which will efficiently prevent a wrong-way driving and which have to be carried out in the shortest time possible. The Strategy also states specific mitigation measures according to individual areas which must be taken into account in the preparation of spatial plans and designing of road infrastructure.</p>					
Ro.33.1	Operational programme for noise			Continuously	MOP		
Ro.33.1.1	Implementation according to the operational programme for noise protection					Continuously	DRSI
Ro.33.1.2	Implementation according to the operational programme for noise protection					Continuously	DARS
Ro.33.2	Recommendations for reducing environmental impacts			Continuously	naročniki	-	-
Ro.34	Development of network into intermodal hubs, agglomerations in accordance with demand	<p>The new TEN-T Regulation lists the following transport hubs in Slovenia: Ljubljana and Koper as hubs in the core section of the TEN-T network, and Maribor as the hub in the comprehensive section of the TEN-T network. These points have the best possibilities for the development of logistics activities relating to cargo, and Ljubljana and Maribor have the potential for establishing multimodal passenger platforms. However, a wider (greater scope) approach to goods transport and the transition of passengers from one transport mode to the other could also be provided in Slovenia. This will provide efficient combinations of various transport modes in the transport chain and thus increase transport efficiency. For this purpose, it is necessary to identify possible points of passenger and goods transition between various transport modes in the future. Where necessary and efficient, intermodal passenger platforms should be established to increase the use of public passenger transport, or a proper connection of logistics freight terminals with various modes of transport should be provided where a commercial interest exists.</p>					
Ro.34.1	Intermodal passenger hubs		U.31, U.33	Continuously	Contracting - authorities	-	
Ro.34.2	Logistics centres			-	-	-	-
Ro.35	Stimulation of the use of ecol vehicles and construction of a charging stations network	<p>Within the scope of EU institutions (the Council of Europe and the European Parliament), Directive No 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure was adopted. It stipulates that Member States must adopt national strategies for the respective field, namely relating to passenger vehicles for electric passenger vehicles, vehicles fuelled by compressed natural gas and hydrogen; relating to cargo vehicles for cargo vehicles fuelled by liquefied natural gas; relating to sea traffic for ships fuelled by liquefied natural gas and charging of ships with electric power from the land, and relating to aviation for charging aircraft with electric power at airports. The Directive also sets deadlines for this (mainly by 2025, except for electric vehicle charging stations, for which the deadline is 2020). In an annex, the Directive also lays down the standards for this infrastructure. Relating to environmental requirements at the national or EU level, the purchase of electric or hybrid vehicles will have to be promoted, and the network of charging stations has to be constructed, so that at least 15% of transport on Slovenian roads by 2030 is without GHG emissions. Financial incentives have to be projected which would encourage people to purchase the vehicles that run on environmentally friendly fuels (e.g. electric power, gas).</p>					



Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Ro.35.1	National framework for market development policy related to alternative fuels in the transport sector and establishment of suitable infrastructure			Preparation	Mzl	Implementation	
Ro.35.2	Construction of the network of charging stations			2016			
Ro.35.3	Promoting the use of vehicles			2016	Mzl	do 2020	Private investors with the support of the state
Ro.35.4	Charging stations for electric vehicles			2016	Mzl		competent ministries and municipalities
Ro.35.5	Refuelling point for LNG in the Port of Koper		M.11	2016	Mzl	2020	Private investors with the support of the state
Ro.35.6	Publicly accessible refuelling points for LNG for motor vehicles and publicly accessible refuelling points for SZP for motor vehicles in the TEN-T network			2016	Mzl	do 2016	Private investors with the support of the state
Ro.35.7	Publicly accessible refuelling points for SZP for private vehicles in urban areas			2016	Mzl	2025	Private investors with the support of the state
Ro.35.8	Publicly accessible refuelling points for hydrogen			2016	Mzl	2020	Private investors with the support of the state
Ro.35.9	Infrastructure for supplying electricity from the land at sea ports		M.11	2016	Mzl		Private investors with the support of the state
Ro.35.10	Infrastructure for charging aircraft with electric power		A.11	2016	Mzl	2025	Private investors with the support of the state
Ro.36	Internalisation of external costs	This is a tool of transport policy based on European Directive 2011/76/EU of the European Parliament and of the Council of 27 September 2011 amending Directive 1999/62/EC on the charging of heavy goods vehicles for the use of certain infrastructure. The Directive lays down that EU Member States must introduce the charging of external costs at least for heavy goods vehicles over 11t (it could also introduce charges for other vehicles) if this measure is adopted. Congestion, air and noise pollution may be charged for additionally. It is the inclusion of environmental costs related to the energy efficiency (quantity of CO <sub>2</sub> /km) and clean vehicles (EURO standard) into the fee price for the use of public roads and parking areas, if they are located in the city centres. The condition for this is the introduction of an electronic toll system in free traffic flow, or congestion charging.					
Ro.36.1	Criteria for determining fees			2016–2017	DRSI, DARS, municipalities		
Ro.37	Restrictive parking policy	Efficient measures to achieve objectives on the reduction of CO <sub>2</sub> emissions and pollutants are: a) reducing the number of kilometres travelled by passenger vehicles in urban environments; b) increasing the share of pedestrian and bicycle traffic in the modal split; c) increasing the share of public passenger transport in the modal split; d) increasing the number of passengers in cars used in urban environments and reducing the use of fuel per cargo unit; e) improving the energy efficiency of vehicles; among measures to reduce the number of kilometres travelled by passenger vehicle, efficient restrictive parking policy measures in large cities include payable parking and limiting surfaces intended for parking passenger vehicles.					

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Ro.37.1	Cycling connections		Ro.45.2, U.17.1				
Ro.37.2	P+R parking		U	2016–2020			
Functioning/organisation of road traffic							
Ro.41	Modernisation of legislation and planning guidelines	The legislation and planning guidelines related to roads have to stimulate the development of the sector and should be pursuant to the best international practice and European regulations, especially those related to the safety, interoperability, sustainability and environment.					
Ro.41.1	Harmonising the legislation			Continuously	MzI		
Ro.42	Improving the financial sustainability of the road network and toll collection system	Introduction of a stable earmarked source of financing and establishment of an electronic toll system in free traffic flow.					
Ro.42.1	Electronic toll system for goods vehicles				DARS		
Ro.42.1.1	Electronic toll system for goods vehicles				DARS	after 2016	DARS
Ro.42.1.2	Demolition of toll stations		Ro.42.1.1.	2016	DARS	2017–2020	DARS
Ro.42.2	Electronic toll system for all vehicles				DARS	after 2025	DARS
Ro.42.3	Provision of stable funding sources			2016	Republic of Slovenia or Ministry of Infrastructure and DARS, d.d.		
Ro.43	Provision of a suitable standard of the existing road infrastructure	The Republic of Slovenia has widespread road, railway and other infrastructure, which enable mobility and economic activities. For this reason, operators must provide for their suitable quality. In recent years, operators have introduced various measurements which are used to establish the real state of infrastructure quality. Some segments, e.g. motorways, have implemented a computer-based system (e.g. dTIMS_CT or PMS_DARS) which enables continuous monitoring of the state of roads and the preparation of reconstruction plans on the basis of mathematical models based on road surface deterioration curves. Such systems provide efficient infrastructure management and long-financial sustainability. Systems based on real data on the state of infrastructure which enable					
Ro.43.1	Model for managing and maintaining the infrastructure (taking into account the already introduced systems)				DRSI, DARS, municipalities		
Ro.43.1.1	Model for managing and maintaining the infrastructure (taking into account the already introduced systems)		Ro.31	2016–2020	DRSI		
Ro.43.1.2	Model for managing and maintaining the infrastructure (taking into account the already introduced systems)			2018–2020	DARS		

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Ro.43.1.3	Model for managing and maintaining the infrastructure (taking into account the already introduced systems)			2016–2020	Municipalities		
Ro.43.2	Preparation of the projects to be realised in a 6-year period (sliding plan) – Project programme				DRSI, DARS, municipalities		
Ro.43.2.1	Programme of the projects to be realised in a 6-year period (sliding plan)		Ro.31		DRSI		
Ro.43.2.2	Preparation of the projects to be realised in a 6-year period (sliding plan)			2016–2022	DARS		
Ro.43.2.3	Preparation of the projects to be realised in a 6-year period (sliding plan)			2016–2020	Municipalities		
Ro.43.3	Implementation of the projects to be realised in a 6-year period (sliding plan)				DRSI, DARS, municipalities		
Ro.43.3.1	Implementation of the project programme to be realised in a 6-year period (sliding plan)		Ro.31, Ro.43.2			2016–2022	DRSI
Ro.43.3.1.1	Arrangement and development in the transport and transport infrastructure section					2016–2022	DRSI
Ro.43.3.1.2	Management and regular maintenance of state roads					2016–2022	DRSI
Ro.43.3.1.3	Reconstructions					2016–2022	DRSI
Ro.43.3.1.4	Investment maintenance and construction of roads					2016–2022	DRSI
Ro.43.3.2	Implementation of the projects to be realised in a 6-year period (sliding plan)					2016–2022	DARS
Ro.43.3.3	Implementation of the projects to be realised in a 6-year period (sliding plan)					2016–2022	Municipalities
Ro.43.4	Investments in G and R roads		Ro.43.2 AND Ro.43.3				
Ro.43.4.1	07-0037 OBVO Vrhnika bypass			after 2025	DRSI	after 2030	DRSI

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Ro.43.4.2	07-0047 NOVO Logatec–Valkarton			2016–2020	DRSI	2021–2022	DRSI
Ro.43.4.3	08-0039 OBVO Divača			after 2025	DRSI	after 2025	DRSI
Ro.43.4.4	08-0046 OBVO Podpeč bypass			2018–2020	DRSI	2021–2023	DRSI
Ro.43.4.5	08-0187 OBVO Travnik			2019–2020	DRSI	2021–2023	DRSI
Ro.43.4.6	10-0047 NOVO ALU. Komen			after 2022	DRSI	after 2022	DRSI
Ro.43.4.7	10-0209 OBVO Hrpelje–Kozina bypass			2019–2022	DRSI	2023–2025	DRSI
Ro.43.4.8	10-0211 OBVO R1-204/1012 Bazarav Dornberk (Volčja Draga)			2019–2022	DRSI	2023–2025	DRSI
Ro.43.4.9	13-0060 OBVO Žiri bypass			2016–2020	DRSI	2017–2022	DRSI
Ro.43.4.10	95-0119 OBVO Kanal bypass			2016–2019	DRSI	2022–2024	DRSI
Ro.43.4.11	00-0054 OBVO Ljutomer bypass			after 2022	DRSI	after 2022	DRSI
Ro.43.4.12	01-0001 OBJN Brežnica, Poljčane bypass			2016–2018	DRSI	2018–2020	DRSI
Ro.43.4.13	02-0058 OBJN Središče ob Dravi (crossing the railway)			2020–2023	DRSI	after 2022	DRSI
Ro.43.4.14	02-0060 OBJN Križni vrh (crossing the railway)			after 2022	DRSI	after 2022	DRSI
Ro.43.4.15	08-0069 OBVO Murska Sobota west			2018–2020	DRSI	2021–2024	DRSI
Ro.43.4.16	08-0075 NOVO Mariborska – roundabout			after 2020	DRSI	after 2022	DRSI
Ro.43.4.17	10-0072 OBVO Kidričevo bypass			2016–2018	DRSI	2019–2020	DRSI
Ro.43.4.18	10-0089 OBVO Ruše bypass			after 2022	DRSI	after 2022	DRSI
Ro.43.4.19	10-0093 OBVO Slovenska Bistrica western bypass			2016–2019	DRSI	2020–2023	DRSI
Ro.43.4.20	13-0061 OBVO Ormož eastern bypass			2016–2017	DRSI	2017–2018	DRSI
Ro.43.4.21	06-0049 OBVO Moravče bypass			2020–2022	DRSI	po 2022	DRSI

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Ro.43.4.22	08-0190 OBVO Sodražica			after 2022	DRSI	after 2022	DRSI
Ro.43.4.24	10-0121 OBVO G2-108/1182: Zg. Hotič–Sp. Hotič, O BVO Litija		Ro.10	2018–2025	DRSI	after 2025	DRSI
Ro.43.4.25	10-0126 NOVO R3-661/1210: new construction Metlika–Drašiči		Ro.4.3	2016–2021	DRSI	po 2021	DRSI
Ro.43.4.26	10-0127 OBVO R3-664/2501: Birčna vas bypass			2018–2020	DRSI	2020–2021	DRSI
Ro.43.4.27	10-0139 OBVO R3-650/1159: Dobrnič bypass			after 2025	DRSI	after 2025	DRSI
Ro.43.4.28	10-0140 OBVO R1-216/1175: Žužemberk bypass			after 2020	DRSI	after 2022	DRSI
Ro.43.4.29	98-0229 OBJN bridge over Hotedršica				DRSI	stage 1: 2016–2018; stage 2: 2018–2020	DRSI
Ro.43.4.30	06-0045 OBVO Železniki (at Plavž)			2016–2018	DRSI	2018-2020	DRSI
Ro.43.4.31	07-0014 OBVO Sl. Konjice–Oplotnica			after 2022	DRSI	after 2022	DRSI
Ro.43.4.32	07-0087 OBVO Gornji Grad			2016–2020	DRSI	2021–2022	DRSI
Ro.43.4.33	08-0168 OBVO Bistrica ob Sotli s bypass with roundabout			after 2020	DRSI	after 2022	DRSI
Ro.43.4.34	10-0196 OBVO Šmarje bypass		Ro.22.2	2016–2023	DRSI	2020–2026	DRSI
Ro.43.4.35	85-0491 NOVO Hotemaže–Britof			2016–2018	DRSI	2019–2021	DRSI
Ro.43.4.36	94-0413 OBVO Luče bypass			2016–2018	DRSI	2019–2022	DRSI
Ro.43.4.37	10-0017 OBJN Railway overpass on Cankarjeva cesta				DRSI	2018–2020	DRSI
Ro.43.4.38	10-0024 OBJN Sevnica–railway overpass				DRSI	2016–2017	DRSI
Ro.43.4.39	10-0025 OBJN G1-5 Radeče–Boštanj: Bridge over the Sava River at Log			2018–2021	DRSI	after 2022	DRSI

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Ro.43.4.40	09-0006 OBVO Murska Sobota bypass – east			2016–2018	DRSI	2018–2019	DRSI
Ro.43.4.41	98-0893 OBVO Ponikve bypass		Ro.11.3	after 2022	DRSI	after 2022	DRSI
Ro.43.4.42	10-0138 OBVO R3-647/1368: Zdenska vas bypass		Ro.11.3	po 2022	DRSI	after 2022	DRSI
Ro.43.4.43	17-0011 OBVO Ilirska Bistrica (Vilharjeva and Šercerjeva) – in the draft budget	Ro.18	Ro.18	2017–2022	DRSI	after 2022	DRSI
Ro.43.4.44	17-0001 OBVO Volče – in the draft budget			2017–2022	DRSI	after 2022	DRSI
Ro.43.4.45	17-0005 OBVO Dolenjske Dolenjske Toplice – in the draft budget			2017–2022	DRSI	after 2022	DRSI
Ro.43.4.46	17-0006 OBVO Mirna –in the draft budget			2017–2020	DRSI	after 2020	DRSI
Ro.43.4.47	OBVO Most na Soči – in the draft budget	Ro.7		2017–2022	DRSI	after 2022	DRSI
Ro.43.4.48	09-0005 NOVO Safe driving site			2016	DRSI	2017–2019	DRSI
Ro.44	Recycling and use of waste in construction	Stimulation of recycling and application of own waste in construction and reconstruction of transport infrastructure and also the application of certified construction materials from the recycled by-products or waste material from other sectors (Decree on Green Public Procurement is used). When using building materials for transport infrastructure which are not of primary natural origin, their volume (in particular they are used as construction fillings) should be taken into account, and also that some hazardous substances from waste materials can be permanently mobilised. New construction materials have even better functional qualities than materials of natural origin.					
Ro.44.1	It is included in the project preparation, if necessary, reasonable and useful		All measures	Continuously	Contracting a authorities		
Ro.45	Reduction of emissions and pollutants	Reducing pollutant emissions by adopting the measure that the road vehicle fleet in public transport is regularly modernised and when purchasing new vehicles, ensuring that these are in compliance with the state of technology; the same attention as to encouraging the use of public transport in urban centres is also paid to other modes of sustainable mobility (cycling, pedestrian zones or low emission zones). When preparing spatial acts for new infrastructure activities or for the extension of the existing transport network, the following general guidelines must be observed in order to attain the objective of reducing ambient air pollution: - measures to reduce pollutant emissions (prevention of traffic congestions, provide smooth traffic flow at moderate travel speeds between 60 and 90 km/h, traffic detours) must be provided to the greatest extent possible; - measures to prevent increased traffic flow on individual sections of the road network, and measures to prohibit the entry of motor vehicles (especially cargo vehicles) which do not meet environmental standards for new vehicles must be implemented in areas with excessive ambient air pollution; - the integration of measures in populated areas which are especially sensitive to ambient air pollution (residential buildings, health care facilities, tourist areas) should be avoided).					
Ro.45.1	Vehicle fleet modernisation		Ro.35.3, U.35				
Ro.45.2	Bike commuters		U.17.1	2016	DRSI	2016–2022	DRSI

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Ro.46	Preparedness for extreme weather conditions	Pursuant to Article 41 of Regulation (EU) No. 1315/2013 with regard to adaptation to climate change: ensuring the preparation of the analysis of the sensitivity of transport infrastructure to climate change, and on the basis of the findings of the analysis, implementing measures and adaptations that adequately improve the resistance of infrastructure to these changes. Guidelines, methodologies and procedures for collecting information on extreme weather conditions and for planning and implementing measures to reduce the sensitivity of transport infrastructure to these phenomena have to be developed.					
Ro.46.1	Guidelines to reduce the sensitivity of transport infrastructure to extreme weather (e.g. glaze ice, floods)		All measures	2016	Mzi		
Ro.46.2	Anti-wind measures			2016–2018	DARS	2016–2018	DARS
Ro.47	Provision of migration corridors for wild animals and protection of drivers against collisions with wild animals	The provision of migration corridors for wild animals and protection of drivers against collisions with wild animals: Reduction of the fragmentation of habitats of species by establishing passages for wild animals on existing traffic routes (especially for species from groups of mammals and amphibians). For this purpose, initially, a study is conducted or the findings of already conducted monitoring of roadkill are summarised. Then, based on the study findings, facilities for the migration of wild animals are established. Within the measure, a priority list of black spots where amphibians are run over is prepared, where facilities for migrations are arranged, including redirecting fences. To improve traffic safety (to prevent collisions with large mammals), the setting-up of chemical deterrent devices, sound devices, light reflectors and combined devices is possible on unfenced traffic routes, depending on location and traffic volumes. Ensure the preservation of existing migration paths with newly planned infrastructural traffic routes by constructing suitable facilities or other arrangements for the movement of wild animals (particularly carnivores, deer, bats and amphibians). For the needs of planning, a purpose study is prepared already in the first phase (or the results of already conducted studies, if available, are summarised) which includes data on species the migration of which will be affected by the intervention, and guidelines for the project designer on planning the facility or arrangement (location, shape, size, greening of the facility and surroundings, etc.).					
Ro.47.1	Preparation of instructions and technical specifications to provide migration corridors of large mammals and amphibious animals on the existing roads		All measures	2016–2018	DRSI	-	-
Ro.47.2	Provision of suitable migration corridors for large carnivores and other species of large mammals at the existing AC networks, but no more than two		Ro.47.1	2016–2018	DARS	2016–2022	DARS
Ro.47.3	Provision of passages for amphibians at the state road sections with the most negative impact on amphibian populations		Ro.47.1	2016–2018	DRSI	2016–2022	DRSI
Ro.48	More accessible infrastructure to less mobile persons	The proper accessibility of infrastructure must be provided for all users. It must be adapted to be more accessible for less mobile persons, e.g. arrangement of proper access from pavements, application of disabled-friendly means of public transport; setting up public electric charging stations, adjusted to wheelchair use, etc.					
Ro.48.1	Recommendations or instructions that must be reasonably taken into account in project preparations according to need		All measures	Continuously	DRSI		

## Annex 2: Projects – Rail transport

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Railway network elements							
R.1	Koper–Ljubljana	The corridor, connecting Koper and Ljubljana to Eastern Europe, is mostly used for the freight transport. However, it also provides the possibility for international passenger transport at the section from Divača to Ljubljana. It is a part of the Mediterranean and Baltic Adriatic TEN-T corridor. To deal with the expected growth of needs for the freight transport in the Port of Koper and similar economic growth, the capacity has to be increased. Koper is also the main Slovenian TEN-T port and one of the most important ports in the Adriatic Sea. In addition to the increase of capacities related to the importance of the railway connection for the freight transport, the railway network will have to fulfil the following minimum technical criteria: axle load of 22.5 tonnes, train length of 740 metres, ERTMS and electrification. The basis for project speed is up to 160 km/h for passenger transport and up to 100 km/h for goods transport, whereby possible tolerances will also be taken into consideration pursuant to TSI with regard to line functionality.					
R.1.1	Koper–Divača: Bottleneck rehabilitation in the Bivje area	measures to increase the capacities at the PSS area of Dekani-Koper and PSS area of Hrastovlje turn-out track of the Koper freight station				2016–2019	DRSI
R.1.2	Koper–Divača: 2 <sup>nd</sup> track	Construction of the 2 <sup>nd</sup> track	R.39	2016–2018	DRSI	2018–2025	DRSI
R.1.3	Koper–Divača: additional measures on the existing Divača–Koper line	Within the scope of the study and further project documentation (IDZ, IZN, etc.) measures must be determined which enhance the capacity of the existing line (e.g. upgrade of stations – extension of tracks, additional tracks, upgrade or additional ENP, renovation of the super- and sub-structure elements, corrections of curves in terms of increasing line speed, etc.)	R.1.2, R.39	2016–2017	DRSI	2018–2022	DRSI
R.1.4	Divača–Ljubljana: line upgrade	Determination of the necessary measures of upgrade of TEN and other TEN network sections (upgrade of the line, catenary, stations, APB/ETCS; ENP, etc.); upgrade of the Rakek-Postojna line, LC Rakek, measures to enhance the capacity	R.2.1, R.5.1, R.7.1, R.9.1, R.11.1, R.21 U.14.6 R.39	2016–2017 (corridor line study) 2016–2018 (implementation documents)	DRSI DRSI	2018–2020	DRSI DRSI
R.2	Zidani Most–Dobova (HR)	The section is part of the TEN-T core network; it is intended for mixed transport. TEN-T standards have to be provided on this section with the proper axle load, speed, electrification and capacity, whereas the upgrade will be necessary due to the train length requirement, i.e. 740m, and the ERTMS implementation. The line should allow speeds up to 160 km/h for passenger transport and up to 100 km/h for goods transport, whereby possible tolerances must also be taken into consideration pursuant to TSI with regard to line functionality.					
R.2.1	Zidani Most–Dobova: upgrade and arrangement of Zidani Most hub	Measures to provide train transport in both directions, upgrade of stations (expansion of useful lengths, grade-separated access to platform infrastructure, etc.), arrangement of NPr, introduction of ECTS, etc.	R.1.4				
R.3	Ljubljana–Jesenice (AT)	The section is part of the comprehensive TEN-T network. It is important for goods and at least on 2/3 of the Ljubljana–Kranj section for passenger transport (daily commuters). It is important to increase the capacity of the line and upgrade the (quality) of service. The line should allow speeds up to 160 km/h for passenger transport and up to 100 km/h for goods transport, whereby possible tolerances will also be taken into consideration pursuant to TSI with regard to line functionality. The length of trains of 740 metres should be taken into account. The ERTMS system must be introduced. The Karavanke railway tunnel must be arranged according to the requirements of transport safety and throughput capacity.					
R.3.1	Ljubljana–Jesenice: upgrade	Measures to enhance the throughput and provision of the TEN standard (upgrade of SVTK devices by introducing remote transport management, increasing line speed, upgrade of stations, etc.)	R.3.3, R.4.1 U.2.1 U.2.2 R.39	2016–2020	DRSI	2018–2022	DRSI
R.3.2	Ljubljana–Jesenice: completion of an additional track	Measures to enhance the throughput and provision of the TEN standard	R.4, U.2.3, R.39	2016–2022	DRSI	2020–2025	DRSI
R.3.3	Jesenice–national border –Karavanke tunnel: upgrade	Upgrade of the existing tunnel to provide safety measures	R.3.1	2016–2018	DRSI	2019–2022	DRSI



Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
R.4	The Ljubljana Railway Hub (LRH)	LRH is a crossroads of international transport corridors and the most important national transport hub. The increase of capacities is necessary for ensuring smooth goods flows as well as for the improvement of public passenger transport services. In addition to the re-arrangement (reorganisation) of the existing hub, extensions and the construction of missing tracks (e.g. the Tivoli Arc), a bypass for goods transport will be necessary, so that it no longer runs through the main railway station. The Ljubljana passenger station is arranged. The ERTMS system must be introduced.					
R.4.1	The Tivoli Arc	Construction of the Tivoli Arc	R.3.1, R.3.2, R.3.3, U.14.4, R.39	2016–2019	DRSI	2020–2021	DRSI
R.4.2	Upgrade of the existing station	SV devices, track devices, platform infrastructure, etc.	U.14.1, U.14.2; U.14.3	by 2020	DRSI	2021–2025	DRSI
R.4.3	Arrangement of bypass lines for goods transport and arrangement of LRH		U.14, R.39	by 2022	DRSI	-	DRSI
R.4.4	Zalog marshalling yard	Reduction of negative noise impacts	R.39	by 2020	DRSI	2021–2022	DRSI
R.4.4.1	Anti-noise protection within the Zalog marshalling yard	Reduction of negative noise impacts		2016–2017	DRSI	2017–2018	DRSI
R.5	The Ljubljana Railway Hub (LRH)	The section is in the Baltic-Adriatic (BA) and MED corridor and is part of the TEN-T network. It is intended for mixed transport. The TEN-T standards for the core network have to be provided on the section, with sufficient axle load and capacity. The line is also electrified; the upgrade is necessary to achieve higher speeds, namely up to 160 km/h for passenger transport and up to 100 km/h for goods transport, whereby possible tolerances must also be taken into consideration pursuant to TSI with regard to line functionality. A train length of 740 metres must be taken into account and ERTMS must be introduced.					
R.5.1	Ljubljana–Zidani Most: upgrade of the line and arrangement of the Zidani Most hub	directions, introduction of the ETCS system, remote control of transport, upgrade of stations, upgrade of catenary, etc.	R.1.4, U.14.5, R.39		DRSI	after 2023	DRSI
R.6	Divača–Sežana (IT)	The section is part of the BA corridor and the TEN-T core network; it is intended for mixed transport. This is a single-track line on which capacities must be increased (also by constructing a second track) and which requires an upgrade in order to achieve TEN-T standards (mainly: axle load 22.5 t, speed up to 160 km/h for passenger transport and up to 100 km/h for goods transport, whereby possible tolerances shall also be taken into consideration pursuant to TSI with regard to line functionality). Trains 740 metres long must be provided for and ERTMS must be introduced.					
R.6.1	Divača–Sežana: upgrade of the existing line	upgrade of the existing line, measures to increase line speed, upgrade of the Sežana station, introduction of the ETCS system	R.39	2016–2020	DRSI, EGIZ	after 2022	
R.7	Pragersko–Hodoš (HU)	The section is a part of the MED corridor and core TEN-T network; the Murska Sobota–Hodoš section is intended mainly for goods transport and partly also for the mixed transport; the track meets TEN-T standards (it will with the conclusion of a current investment) and for the time being provides sufficient level of capacity despite being a one-track line. A potential construction of additional second track depends on the plans of Hungary and the increase of traffic flows. The ERTMS system must be introduced.					
R.7.1	Pragersko–Hodoš–national border: construction of the 2 <sup>nd</sup> track	Construction of the 2nd track according to phases Pragersko–Ormož; Ormož–Murska Sobota, Murska Sobota–Hodoš–national border	R.1.4, R.39		DRSI		DRSI DRSI
R.7.2	Pragersko Hub	According to phases, only the most urgent measures first	R.39	2016	DRSI	Stage 1 by 2020 Stage 2 after 2020	DRSI DRSI
R.8	Maribor–Šentilj (AT)	The section is part of the BA corridor and the TEN-T core network; it is intended for mixed transport. This is a single-track line on which capacities must be increased (also by constructing a second track) and which requires an upgrade in order to achieve TEN-T standards (mainly: axle load 22.5 t, speed up to 160 km/h for passenger transport and up to 100 km/h for goods transport, whereby possible tolerances shall also be taken into consideration pursuant to TSI with regard to line functionality). Trains 740 metres long must be provided for and ERTMS must be introduced.					

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
R.8.1	Maribor–Šentilj: upgrade	Upgrade of SV devices, bridging of Pesniška dolina with a tunnel or viaduct or restoration of the existing Pesnica embankment, provision of axis load of 22.5 tonnes at the entire line, upgrade of stations, introduction of the ETCS system, expansion of useful lengths of stations tracks, grade-separated accesses to platform infrastructure, potential increase of line speed, remote train transport control	U.12.1, R.39	by 2018	DRSI	2017–2022	DRSI
R.8.2	Maribor–Šentilj–national border: construction of the second track	Construction of the second track	R.21, U.12.1, R.39	by 2023	DRSI	after 2022	DRSI
R.9	Pragersko–Maribor	The section is part of the BA corridor and the TEN-T core network; it is intended for mixed transport. The line capacity suffices; its upgrade is necessary to meet the TEN-T standards (mainly: axle load 22.5 t, speed up to 160 km/h for passenger transport and up to 100 km/h for goods transport, whereby possible tolerances must also be taken into consideration pursuant to TSI with regard to line functionality. Trains 740 metres long must be provided for and ERTMS must be introduced.					
R.9.1	Pragersko–Maribor: upgrade	upgrade of SV and other devices to provide the train transport in both directions on this line, upgrade of stations (extension of useful track lengths, grade-separated access on infrastructure, trapezoidal track connections, etc.), upgrade of SV devices and introduction of the ETCS system of level 2 or APB	R.1.4, R.21, U.12.1, R.39				
R.10	Zidani Most–Pragersko	The section is part of the BA and MED corridor and the TEN-T core network; it is intended for mixed transport. The line capacity suffices; its upgrade is necessary to meet the TEN-T standards (particularly axle load of 22.5 tonnes, speed is up to 160 km/h for passenger transport and up to 100 km/h for goods transport, whereby possible tolerances will also be taken into consideration pursuant to TSI with regard to line functionality. Trains 740 metres long must be provided for and ERTMS must be introduced.					
R.10.1	Zidani Most–Celje: upgrade of track and stations	the upgrade of the Zidani Most–Celje line section due to the increase of axis load to D4 category, increase of line speed, upgrade of Rimske Toplice, Laško, Celje stations	R.39	by 2016	DRSI	2016–2020 + 2 years for completion	DRSI
R.10.2	Poljčane–Slovenska Bistrica: upgrade	Enhancing the load axis to D4 category		-	-	2016–2018	DRSI
R.10.3	Šentjur–Pragersko: introduction of APB	APB is provided until the introduction of ETCS 2	R.21	2016	DRSI	-	DRSI
R.10.4	Celje–Pragersko: upgrade of stations	Extension of useful lengths of station tracks, 740 metres, grade-separated access to platform infrastructure	R.39	2017	DRSI	-	DRSI
R.11	Postojna–Ilirska Bistrica–Šapjane	Odsek spada v celovito omrežje TEN-T in ima pomemben potencial predvsem za tovorni promet. Na progi je treba povečati The section is a part of the comprehensive TEN-T network and has important capacities, in particular for goods transport. The line capacity has to be improved and upgraded to a higher level of service, i.e. increased speed and frequency or passenger transport rides and adequate throughput and goods transport capacity. The line should allow speeds up to 160 km/h for passenger transport and up to 100 km/h for goods transport, whereby possible tolerances must also be taken into consideration pursuant to TSI with regard to line functionality. Trains 740 metres long must be provided for and ERTMS must be introduced.					
R.11.1	Pivka–Ilirska –Šapjane: upgrade of the track	Enhancing the axis load to D4 category, upgrade of stations or TEN-T standard, upgrade of catenary and PSS; change of voltage – harmonisation with the Republic of Croatia	R.1.4 R.21 R.39		DRSI		DRSI
Railway network							
R.21	ETCS	The installation of the ETCS system on tracks which are not described in the previous measures would enable an increase of the interoperability of the entire network. The ETCS installation on other lines of the Slovenian network (fully and not only on parts of the TEN-T network) is also reasonable. Further studies will determine specific needs and technical parameters for each case (e.g. ETCS second level on main and regional lines and ETCS Regional on regional lines).					

Code Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
R.21.1 ERTMS	The project is related to the project of electrification R.22.1, solutions will be presented in a joint study	R.22.1	2016	DRSI, DRI, SŽ	-	DRSI, DRI, SŽ
R.21.2 ETCS or ERTMS on the Zidani Most–Dobova–national border and Pragersko–Šentilj–national border sections.	Introduction of ETCS on the Zidani Most–Dobova–national border and Pragersko–Šentilj–national border sections	R.21.1	2016–2019	DRSI, DRI, SŽ	2018–2020	DRSI, DRI, SŽ
R.22 Electrification	The electrification of regional railway lines would increase the efficiency of the existing infrastructure. With additional studies special needs and technical parameters will be determined for every case.					
R.22.1 Change of the catenary voltage system	The project is related to the project of electrification R.21.1, solutions will be presented in a joint study, to be harmonised with the Energy Directorate	R.21.1		DRSI		DRSI
R.22.2 Electrification of regional lines		R.23, U, R.21.1, R.39	2016–2018	DRSI		DRSI
R.23 Renovation, upgrade or new construction of other lines (similar list of all other lines which are not specifically stated below will be included in the operational plan)	By studying individual sections, the need for renovation and upgrade of tracks which are not included in the specific measures will be established, whereby the concept of operation as well as economic and environmental aspects will be taken into account (regional lines and lines to neighbouring countries which are not included in the TEN-T network).					
R.23.1 Ormož–Središče–national border	Upgrade of SV devices, increase of axis load	R.1.4, R.22.2, R.39	by 2025	DRSI	after 2030	DRSI
R.23.2 National border –Metlika–Ljubljana	Ljubljana–Grosuplje section: APB, upgrade of stations, construction of new stations, ERTMS, 2 <sup>nd</sup> track Ljubljana–Novo Mesto section: electrification (possibility of direct train operation on the Revoz–Port of Koper line upgrade of the Ljubljana–Trebneje section: establishment of a bypass line measures must be harmonised with the planned development LRH)	R.22.2, R.23.16, U.3.1, U.3.2, R.4, R.39	by 2016	DRSI	by 2022 at the LJ–Grosuplje section 2030	DRSI
			2016–2018	DRSI	by 2030	DRSI
R.23.3 Lj. Šiška–Kamnik Graben	Construction of stations, construction of new stations, upgrade of SV device, gradual two-track arrangement on the Ljubljana–Domžale–(Kamnik) section electrification - For PPT needs measures must be harmonised with the LRH development	R.22.2, R.23.2, U.1, R.4, R.39	by 2016 2016–2018	DRSI	by 2025 2023–2030	DRSI
R.23.4 Celje–Velenje	Enhancing the axis load and electrification upgrade of stations	R.22.2, R.23.2, U.13, R.39	do 2016	DRSI	do 2030	DRSI
R.23.5 national border–Rogatec–Grobelno	Upgrade of stations and ETCS regional	R.22.2, R.23.2, R.39	by 2016	DRSI	after 2030	DRSI
R.23.6 national border–Imeno–Stranje	Upgrade of stations and SV devices (spring points)	R.23.2, R.39	by 2016	DRSI	after 2030	DRSI
R.23.7 Maribor–Prevalje–national border	Maribor–Ruše section: electrification, 2 <sup>nd</sup> track upgrade of SV and stations	R.22.2, R.23.2, U.12 (Maribor–Ruše), R.39	by 2016	DRSI	after 2030	DRSI
R.23.8 Ljutomer–Gornja Radgona	Upgrade of stations and SV devices (spring points)	R.23.2, R.39	by 2016	DRSI	after 2030	DRSI
R.23.9 National border–Lendava		R.23.2, R.39	by 2016	DRSI	after 2030	DRSI

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
R.23.10	Prešnica–Podgorje–national border junction		R.23.2, R.39	by 2016	DRSI	after 2030	DRSI
R.23.11	Jesenice–Sežana	Upgrade of stations, upgrade of SV devices (potential APB)	R.22.2, R.23.2, R.39	by 2016	DRSI	after 2030	DRSI
R.23.12	Šempeter pri Gorici–Vrtojba		R.22.2, R.23.2, R.39	by 2016	DRSI	after 2030	DRSI
R.23.13	Prvačina–Ajdovščina		R.22.2, R.23.2, R.39	by 2016	DRSI	after 2030	DRSI
R.23.14	Kreplje–Repentabor–national border junction		R.23.2, R.39	by 2016	DRSI	after 2030	DRSI
R.23.15	Sevnica–Trebnje	Electrification and increase of axis load (possibility of a bypass line)	R.22.2, R.23.2, R.39	by 2016	DRSI	after 2030	DRSI
R.23.16	Grosuplje–Kočevje	being implemented	R.23.2,	by 2016	DRSI	2016–2018	DRSI
R.23.17	New regional lines	e.g. Lendava–Beltinci, Ljubljana–Vrhnika, Velenje–Dravograd, Gornja Radgona – national border with Austria, etc.	R.22.2, R.23.2, U, R.39	by 2016	DRSI	after 2030	DRSI
R.24	Safety	The elimination of dangerous level crossings: the relevant legislation must be changed for this purpose and we would have to re-determine which types of level crossings may be defined as suitably or unsuitably secured and thus dangerous. Then, on the basis of this, a schedule has to be prepared for the elimination of improperly protected railway crossings.					
R.24.1	Harmonising the legislation	Review and harmonisation of the legislation, whereby minimum required standards must be taken into account		2016	DRSI, AŽP	-	
R.24.2	Analysis and programme to determine the priority tasks	Determination of priorities through the methodology of protecting/eliminating level crossings		2016	DRSI	-	DRSI DRSI
Functioning/organisation of the railway							
R.31	Reorganisation of railway line fees	Railway line fees have to be proportional to the emissions and therefore in accordance with the 'polluter pays' principle. They must be the same as marginal costs incurred directly by the provision of railway transport service; the system for calculating user charges must be changed by introducing an adequate incentive to equip trains with ETCS. The harmonisation of railway user charges with the railway administrations of neighbouring countries will facilitate international transport.					
R.31.1	Adjustment of the methodology for calculating the fee	Measures to stimulate the transport provider to optimise the transport, examination of the introduction of passenger transport user fee		Continuously	AŽP	-	-
R.32	Multi-annual contract on the implementation of public services	Pogodba/pogodbe o izvajanju javne službe v skladu z Uredbo (ES) št. 1370/2007 Evropskega parlamenta in Sveta z dne 23. oktobra. The contract/contracts on the implementation of public service pursuant to the ES Regulation No. 1370/2007 of the European Parliament and of the Council of 23 October 2007 on public services of rail and road passenger transport and repealing Council regulations (EEC) Nos 1191/69 and 1107/70 are basic tools for providing transparency and efficiency in performing public transport services. Therefore, the expanded implementation of contracts on the implementation of public service is not only necessary for the purposes of harmonisation, but also as the first step to achieve better quality of the Slovenian transport system. Typology and duration of the contract on the implementation of public service have to be determined by the analysis of individual cases together with the applicability of its own model (which could be based on the issues of full conformity or on the applicability after a thorough evaluation of technical and financial requirements).					

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
R.32.1	Changes and amendments to the multi-annual contract for passenger transport	As per Regulation 1370/2007 of the European Parliament and of the Council of 23 October 2007 on public services of rail and road passenger transport and repealing Council regulations (EEC) Nos 1191/69 and 1107/70 with SŽ Potniški promet d.o.o., the Republic of Slovenia has signed a contract No 3/2010-2019 on the implementation of the mandatory public utility service of transporting passengers and regional cross-border traffic for the 2010–2019 period. The contract is based on an annual extent of services which is determined by timetable and is expressed with the number of train kilometres. Changes and amendments include developmental elements of railway passenger transport according to the needs of passengers in terms of sustainable mobility, environmental goals and in relation to infrastructural measures.	R.2, R.3, R.4, R.5, R.6, R.9, R.10, R.22.2, R.23.2, R.23.3, R.23.16, R.23.17, R.34, R.3, R.40, R.44	2018	DRSI	Permanent measure	DRSI
R.33	Increase of financial sustainability	An increase in financial sustainability is one of the objectives of the Pan-European transport system. To attain this objective, it is necessary to optimise the organisational structure of railway system and increase the efficiency of its operation and maintenance. The financial sustainability of the railway transport system should reduce the dependence of the system on public subsidies. The further studies will evaluate the concrete measures necessary for the optimisation of costs and income.					
R.33.1	Changes an amendments to the multi-annual contract to maintain public railway infrastructure	The Republic of Slovenia has signed a three-year contract with the operator of public railway infrastructure, which provides safety, maintenance and improvement of quality of infrastructural services. The share for an operator is also foreseen as a stimulation for high-quality and efficient management of public railway infrastructure. The adjustment of the methodology for implementing the public utility service of maintaining and managing public railway infrastructure and the preparation of 10-year programmes of maintaining and a contract which will provide a stable source for maintaining and managing public railway infrastructure and stimulations for an efficient and quality implementation are foreseen.	All measures	2018	DRSI	Permanent measure	DRSI
R.33.2	Optimisation of the organisational structure of the railway system	Slovenia has a relatively diversified organisational structure of the railway system and division of jurisdiction and tasks between state authorities, agencies and the operator.	Optimisation of the organisational structure	2018	MZI		
R.34	Improvement of the railway passenger vehicle fleet	To increase the competitiveness of the railway transport over other transport modes, it is necessary to modernise the railway rolling stock in accordance with the foreseen improvements of the infrastructure. The first step in the development of this measure is a comprehensive analysis of current organisation, operation and maintenance structures of the railway operator and thus the future requirements and operation and maintenance plan. After establishing the actual needs, the specific technical requirements regarding the rolling stock will be defined on the basis of further studies.					
R.34.1	Modernisation and purchase of means of transport	Means of transport for passenger transport do not provide for the introduction of such transport in urban regions and improvement of transport quality. Some 25 new vehicles and the modernisation of the existing vehicles must be provided.	R.32.1	-	Concessionaire and concession provider	2023–2030	Concessionaire and concession provider
R.35	Improvement of the railway freight rolling stock	Goods rolling stock consists mainly of standard close and open carriages, with some of them suitable for combined transport. The first step in the development of this measure is a comprehensive analysis of current organisation, operation and maintenance structures of the railway operator and thus the future requirements and operation and maintenance plan. After establishing the actual needs, the specific technical requirements regarding the rolling stock will be defined on the basis of further studies.					

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
R.35.1	The state adopts the measures to promote (help) the transport provider in efficient drawing of EU funds for upgrading the rolling stock or purchasing the equipment.	It applies for the installation of the ERTMS system on rolling stock	R.21	-	-	-	-
R.36	Modernisation of legislation and planning guidelines	The legislation and planning guidelines related to the railway have to stimulate the development of the sector and should be pursuant to the best international practice and European regulations, especially those related to safety, interoperability, transport sustainability and environment.					
R.36.1	Review of legislation and adjustment of guidelines with the aim of rationalisation			2016	MZI	-	-
R.37	Development of the concept for maintaining the railway network	The Republic of Slovenia has a widespread road as well as railway infrastructure and other infrastructures. The infrastructure enables the mobility of population and implementation of commercial activities. In the recent years, the operators started to conduct various measurements of the situation which are used to establish a real state of the infrastructure quality. A computer-based system was introduced to some segments providing a continuous monitoring of the state and preparation of renovation plans on the basis of mathematic models. These systems enable an efficient management of the infrastructure and also assist the system to become financially sustainable in the long term. Systems based on real data on the state of the infrastructure enable more suitable planning of necessary financial resources in the long term. After these bases are established, multi-annual contracts for maintaining railway infrastructure will also be signed.					
R.37.1	Model for managing and maintaining the infrastructure	Planning of maintenance by using modern models based on real data		2017–2019	JŽI manager	-	-
R.37.2	Comparison with EU	A study of price comparison in the EU Member States is prepared		2017–2019	DRSI	-	-
R.38	Reorganisation of operations/ timetables	The timetable needs to be rearranged (suitable timetable) to increase the share of rail transport and to improve the connectivity and efficiency of services. Further studies will analyse this possibility by observing the passenger potential and operation and infrastructure requirements.					
R.38.1	Within the scope of concrete PN for a greater role of PPT in the RS (emphasis on larger agglomerations)		U	Continuously	Contracting authorities	-	-
R.39	Measures to prevent, mitigate and maximise the elimination of the consequences of significant impacts of the plan on the environment, nature, health and cultural heritage (mitigation measures)	Measures to protect the environment against noise caused by rail transport in particular include measures to reduce the noise at source (upgrade of rolling stock and upgrade of railway infrastructure), measures to prevent the spread of noise into the environment (standard and low-noise barriers) and measures on buildings (anti-noise renovation of façade elements). More detailed measures must be defined in the operational programme for protection against noise, which must include all important railway lines and the railway network on both sides of settlement areas (Municipality of Ljubljana and Municipality of Maribor). The reduction of noise must also be taken into account in implementing measures R.34 and R.35 (modernisation and technical measures on rolling stock). In terms of reducing the degradation of the natural environment, the reconstruction of existing infrastructure connections has priority over the construction of new traffic routes, and also the positioning of transport infrastructure in the existing infrastructural corridor has priority over positioning in naturally preserved areas. Therefore, sustainable land management and soil protection must be ensured when planning the integration of transport infrastructure in the environment. Activities in agricultural land and woodland must be reduced to the lowest level possible, and planned according to land with poorer production potential, and land outside dense forest areas and forest areas with important wood production functions at the first level must be given top priority. Railway infrastructure should not be sited on coastal land. Such interventions may cause significant impacts on the ecological status of watercourses and a reduction of retention surfaces, including cumulative impacts on the biodiversity and ecosystem services of the area. When planning railway infrastructure in areas with extremely high, very high and highly vulnerable aquifers, it is necessary to study and plan appropriate technical solutions that prevent negative impacts of construction and operation, as well as extraordinary events. In the spatial integration of transport infrastructure, it is necessary to avoid water protection areas and areas at risk of flood and related erosion. Infrastructure corridors should not be integrated in cultural heritage areas and exceptional landscape areas and landscapes with distinctive features at the national levels. The proper technical measures must be applied to provide a high-quality landscape image by taking into account the natural and cultural features and topography of the area. When siting railway infrastructure in the area, it is necessary to avoid placing facilities in areas with nature conservation status (Natura 2000 areas, protected areas, ecologically important areas, areas proposed for protection). The time when interventions occur has to be adjusted to the life cycles of animals and plants. If the electrification of a railway line is planned in the area of flight and migration routes of birds, appropriate technical solutions for preventing the collisions of birds with power lines must be anticipated. Variants with less impact on the migration paths of wild animals should be given priority (those with long sections in tunnels, covered burrows; those which cross fewer migration paths). When fragmenting migration paths, adequate passages must be provided following good practices in the European Union.					

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Ro.39.1	Operational programme for noise	Preparation of expert bases for operational programmes, implementation of studies and		2016–2022	DRSI	-	-
R.39.2	Recommendations for reducing environmental impacts	The recommendation for a comprehensive assessment of environmental impacts must be taken into account when planning. Investments in the existing infrastructure connections have priority over the construction of new routes. Interventions in agricultural and forest land must be reduced to the minimum when siting transport infrastructure. Railway infrastructure should not be sited on coastal land. Infrastructure corridors should not be integrated in cultural heritage areas and exceptional landscape areas and landscapes with distinctive features at the national levels. In siting railway infrastructure, it is necessary to avoid siting the facilities in Natura 2000 areas.		Continuously	Contracting authorities	-	-
R.40	Development of network into intermodal hubs, agglomerations in accordance other with demand	The new TEN-T Regulation lists the following transport hubs in Slovenia: Ljubljana and Koper as hubs in the core section of the TEN-T network, and Maribor as the hub in the comprehensive section of the TEN-T network. These points have the best possibilities for the development of logistics activities relating to cargo, and Ljubljana and Maribor have the potential for establishing multimodal passenger platforms. However, a wider (greater scope) approach to goods transport and the transition of passengers from one transport mode to the other could also be provided in Slovenia. This will provide efficient combinations of various transport modes in the transport chain and thus increase the transport efficiency. For this purpose, it is necessary to define possible points of passenger and goods transition between various transport modes in the future. Where necessary and efficient, intermodal passenger platforms should be established to increase the use of public passenger transport, or a proper connection of logistics freight terminals with various modes of transport should be provided where a commercial interest exists.					
R.40.1	Intermodal passenger hub	When planning, the index of commuters and possibility of transfer of pedestrians and cyclists, transfer from private transport and between different modes of public passenger transport must be taken into consideration.		Continuously		2020	
R.40.2	Logistic centres	The state adopts the measures to increase (stimulate) logistics activity, e.g. Ministry of the Economy provides co-funding and MZI provides suitable accesses.					
R.41	Recycling and use of waste in construction	Stimulation of recycling and application of own waste in construction and reconstruction of transport infrastructure and also the application of certified construction materials from the recycled by-products or waste material from other sectors (Decree on Green Public Procurement is used). When using building materials for transport infrastructure which are not of primary natural origin, it should be taken into account that it is the use of larger amounts, especially for construction fillings, and that some hazardous substances from waste materials are permanently mobilised. New construction materials have even better functional qualities than materials of natural origin.					
R.41.1	It is included in the project preparation, if necessary, reasonable and useful		All measures	Continuously	Contracting authorities		
R.42	Preparedness for extreme weather conditions	Pursuant to Article 41 of Regulation (EU) No. 1315/2013 with regard to adaptation to climate change: ensuring the preparation of the analysis of the sensitivity of transport infrastructure to climate change with detailed documents, and on the basis of the findings of the analysis, implementing measures and adaptations that adequately improve the resistance of infrastructure to these changes. Guidelines, methodologies and procedures for collecting information on extreme weather conditions and for planning and implementing measures to reduce the sensitivity of transport infrastructure to these phenomena have to be developed.					
R.42.1	Guidelines		All measures	2016	DRSI		

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
R.43	Provision of migration corridors for wild animals and protection of drivers against collisions with wild animals	Provision of migration corridors for wild animals and protection of drivers against collisions with wild animals: when constructing the projected railway lines the existing migration corridors of wild animals have to be preserved by constructing proper objects of other crossing facilities (especially for large mammals and bats). For the needs of planning, the purpose study was prepared already in the first phase (or the results of already conducted studies, if available, are summarised) which includes data on species the migration of which will be affected by the intervention, and guidelines for the project designer on planning the facility or arrangement (location, shape, size, greening of the facility and surroundings, etc.).					
R.43.1	Recommendations or instructions that must be reasonably taken into account in project preparations on PRI according to need	All measures	Continuously	DRSI			
R.44	More accessible infrastructure to less mobile persons	The proper accessibility of infrastructure must be provided for all users. It must be adapted to be more accessible for less mobile persons, e.g. arrangement of proper access from platforms.					
	Recommendations or instructions that must be reasonably taken into account in project preparations on PRI according to need		All measures	Continuously	DRSI		



## Annex 3: Projects – Sustainable mobility

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
City network elements							
U.1	Kamnik–Ljubljana corridor	It is one of more important radial roads to the capital city of Slovenia, with high traffic density, especially in the form of daily commuters. Also the public passenger transport is widely spread. However, it could be improved, especially in the field of railways. This will be achieved through the increase of capacities and quality of passenger transport services. A double-track line (or at least a partial double-track line) has to be ensured for this purpose to enable a clock-face timetable and electrification. Measure U.40 must be taken into account when siting and designing.					
U.1.1	Upgrade of SV devices		R.23.3	2016–2018	DRSI	by 2025	DRSI
U.1.2	Upgrade of Ljubljana Črnuče, Domžale and Jarše Mengeš stations, the stops must be suitably equipped		R.23.3	2016–2018	DRSI	by 2025	DRSI
U.1.3	Implementation of a partial two-track arrangement on the Ljubljana Šiška–Domžale line		R.23.3	2016–2018	DRSI	by 2025	DRSI
U.1.4	Implementation of end solution (complete two-track arrangement)	Solutions in compliance with a comprehensive study of the development of stations and radial lines in the Ljubljana railway hub	U.14.1, R.23.3	2022–2025	DRSI	by 2025	DRSI
U.2	Kamnik–Ljubljana corridor	It is one of more important radial roads to the capital city of Slovenia, with high traffic density, especially in the form of daily commuters. Also the public passenger transport is widely spread. However, it could be improved, especially in the field of railways. This will be achieved through the increase of capacities and quality of passenger transport services. A double-track line (or at least a partial double-track line) has to be ensured for this purpose to enable a clock-face timetable and electrification. Measure U.40 must be taken into account when siting and designing.					
U.2.1	Upgrade of SV devices		R.3	2016–2020	DRSI	by 2025	DRSI
U.2.2	Upgrade of Medvode, Škofja Loka, Kranj stations, construction of additional stations in Bitnje		R.3	2016–2020	DRSI	by 2025	DRSI
U.2.3	Construction of an additional track on Ljubljana–Kranj section	Solutions in compliance with a comprehensive study of the development of stations and radial lines in the Ljubljana railway hub	U.14.1, R.3.2	2016–2022	DRSI		DRSI
U.3	Southeast Ljubljana corridor	It is one of more important radial roads to the capital city of Slovenia, with high traffic density, iparticularly by passenger vehicle. Public passenger transport, in particular by rail, could also be improved with specific measures on this section. This will be achieved through the increase of capacities and quality of passenger transport services. A double-track line (or at least a partial double-track line) has to be ensured on the Ljubljana–Grosuplje section for this purpose to enable a clock-face timetable and electrification. Measure U.40 must be taken into account when siting and designing.					
U.3.1	Upgrade of SV devices Ljubljana–Grosuplje	R.23.2	2016–2018	DRSI	2018–2022	DRSI	
U.3.2	Upgrade of Ljubljana Rakovnik, Škofljica, Grosuplje and Šmarje-Sap stations		R.23.2	2016–2018	DRSI	2018–2022	DRSI
U.3.3	Implementation of final solution (completetwo-track arrangement)	Solutions in compliance with a comprehensive study of the development of stations and radial lines in the Ljubljana railway hub	U.14.1, R.23.2	2022–2025	DRSI	after 2025	DRSI
U.4	Connection of Ljubljana with the airport	Ljubljana Jože Pučnik Airport does not have the proper public passenger transport connections to the capital city of Ljubljana. Proper bus connections must be introduced (direct connections, not through surrounding areas, e.g. a direct connection between the airport and Ljubljana), and/or combined vehicles on demand or a proper railway connection provided. Measure U.40 must be taken into account when siting and designing.					

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
U.4.1	Connection with eco-friendly minibuses (bus shuttle)	Studying the connection with eco-friendly minibuses		2016–2018	DRSI	2018–2022	DRSI
U.4.2	Examining the appropriateness of other connections (e.g. railway connection)	Examining a link with eco-friendly minibuses or railway connection, establishing the economic viability of solution and proposing a suitable solution	U.14.1	2022–2025	DRSI	-	DRSI
<b>City network</b>							
U.11	Ljubljana P+R (park and ride)	Ljubljana is the largest Slovenian city and the capital of Slovenia with the largest number of daily commuters. They could be provided with more convenient and better commuting services through the introduction of the P+R system. The car parks are directly connected to the capacities of public transport, which enable users direct access to the city centre in an environment-friendly way. Users avoid a stressful drive through congested city streets, while the city is relieved of passenger vehicles and their negative consequences – from overcrowded streets and car parks to the pollution and general degradation of the city centre environment. 25 P+R locations are planned for Ljubljana. Measure U.40 must be taken into account when siting and designing.					
U.11.1	P + R for the Ljubljana area with gravitational hinterland			2016–2020	LUR	2016–2020	Municipalities within the LUR and EU funds upon a successful candidacy of municipalities
U.12	Maribor P + R	Ljubljana is the largest Slovenian city and the capital of Slovenia with the largest number of daily commuters. They could be provided with more convenient and better commuting services through the introduction of the P+R system. The car parks are directly connected to the capacities of public transport, which enable users direct access to the city centre in an environment-friendly way. Users avoid a stressful drive through congested city streets, while the city is relieved of passenger vehicles and their negative consequences – from overcrowded streets and car parks to the pollution and general degradation of the city centre environment. 25 P+R locations are planned for Ljubljana. Measure U.40 must be taken into account when siting and designing.					
U.12.1	P + R for the Maribor area with gravitational hinterland			2016–2020	MO Maribor	2017–2019	MO Maribor and EU funds upon a successful candidacy of municipalities
U.13	Slovenia P + R	Slovenia is a very specific country in terms of population distribution. It has around 6000 settlements; translated into acreage this means 20,273 km <sup>2</sup> and in terms of population number approximately 2 million. The application of P+R (park and ride) seems a suitable way to promote the use of public passenger transport. It is a combination of parking lots and public transport stop facilities which enable the user to drive in their own his or another vehicle to more important points on the outskirts of the city or to main radial roads they enter the means of public transport or rent a bicycle. Potential points for constructing P+R were suggested by the traffic model, but a more detailed study will be necessary to plan their precise locations. 72 P+R locations are planned for Slovenia. Measure U.40 must be taken into account when siting and designing.					
U.13.1	P + R at public passenger transport stations and stops	A single system for managing the existing parking areas according to the P+R principle, methods of arranging P+R systems, payments, suitability of land available for P+R system with proposals of measures, whereby: within the scope of intermodal points, the P+R system must also be determined at the national level, intermodal points and P+R system must be categorised (e.g. according to the volume of transfers, offer of parking places, programme arrangement (e.g. a wider commercial and other offer, without additional offer)), study microlocational possibilities to introduce the P+R system and accesses, design simple and comfortable transfers	R.32, R.34, R.40	2016	MZI	2017–2025	MZI
U.14	Development of stations	Through the proper analysis of the existing state and the expected development of traffic system and social and economic circumstances in city and regional areas – from the aspect of sustainable mobility/integrated public transport plans - it will be possible to recognise the need for reconstruction/upgrade of stations or their new constructions where this is justifiable in terms of the level of mobility. On the other hand, this could also mean the closure or functional degradation of some existing stations, where expected levels of mobility become insufficient. The development of stations will focus mainly on improving accessibility for passengers, especially persons with reduced mobility, through which passenger safety will be ensured, along with the introduction of information systems and systems for public communication. Special attention must be paid to the arrangement of the currently inadequate Ljubljana passenger station. Measure U.40 must be taken into account when siting and designing.					

Code Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
U.14.1 Comprehensive study of the development of stations and radial lines in the Ljubljana railway hub	The study to solve urban traffic of the Ljubljana hub	U.1, U.2, U.3, U.4, R.4, R.22, R.23.17	2016–2018	DRSI		DRSI
U.14.2 Rearrangement of the Ljubljana main station	Nadgradnja obstoječih postajnih tirov The upgrade of the existing station tracks on the south side of the station, upgrade of station tracks and track connections on the northern part of the station, upgrade of tracks 50 and 51 and removal of cleaning facility and wagon washing station, construction of additional platforms, increase of the availability of longer platform tracks	R.4.2	2016–2018	DRSI	after 2022	DRSI
U.14.3 Upgrade of SVTK devices at the Ljubljana hub		R.4.2	by 2020	DRSI	after 2020	DRSI
U.14.4 The Tivoli Arc	Construction of the Tivoli Arc	R.4.1	2016–2020	DRSI	after 2020	DRSI
U.14.5 Upgrade of the Ljubljana–Litija section	Upgrade of SV devices, arrangement of additional, trapezoidal track connections, upgrade or arrangement of Litija, Laze, Kresnice stations and Jevnica stop	R.5.1	2016–2018	DRSI	2018–2022	DRSI
U.14.6 Upgrade of Ljubljana–Logatec section	Additional trapezoidal track connections to be constructed (Brezovica station, Preserje, Verd and Logatec), upgrade of Brezovica, Borovnica, Verd and Logatec stations, introduction of APB or ERTMS at level 2, upgrade and complete the power supply of stations, provide a suitable length of station tracks	R.1.4	2016–2018	DRSI	2018–2022	DRSI
U.15 Separation of transport types – giving priority to public transport, elimination of congestion	Public urban transport (buses and possibly a light railway) has to coexist with other transport modes, since the space in towns is always limited. More attention will be paid to public transport and the return of a section of urban space to use by residents. In this regard and due to the increased efficiency of public transport, the extent of separation of private and public transport will be increased by constructing driving lanes for public transport only (buses and possibly the light railway) and carrying out measures providing the right of way for public transport through traffic management elements such as traffic lights. Obstacles which prevent an efficient public transport flow, cause delays and may endanger the road safety (e.g. level crossings) will also be eliminated. Measure U.40 must be taken into account when siting and designing.					
U.15.1 Evaluation of the possibility of introducing yellow lanes for large cities	When preparing comprehensive transport strategies, the municipalities reasonably include the introduction of yellow lanes		2016–2020	Municipalities		
U.16 Enhancing intermodality	Public urban transport (buses and possibly a light railway) has to coexist with other transport modes, since the space in towns is always limited. More attention will be paid to public transport and the return of a section of urban space to use by residents. In this regard and due to the increased efficiency of public transport, the extent of separation of private and public transport will be increased by constructing driving lanes for public transport only (buses and possibly the light railway) and carrying out measures providing the right of way for public transport through traffic management elements such as traffic lights. Obstacles which prevent an efficient public transport flow, cause delays and may endanger the road safety (e.g. level crossings) will also be eliminated. Measure U.40 must be taken into account when siting and designing.					
U.16.1 Intermodality of transfer points	Within the scope of measures U.13, U.14, the analysis of other types of transfer points is prepared to increase the efficiency of the system and attractiveness of the public passenger transport offer. Intermodal points must be categorised (quantity, size, transport and non-transport equipment)	U.11, U.12, U.13, U.14, R.40, R.34	2016–2018			

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
U.17	Bicycle network	It is necessary to prepare a plan for the organisation and classification of national and sub-urban cycling routes and related equipment. The priority tasks will be to link already constructed cycling sections into larger, logically closed units, the provision of a higher standard or level of services for cyclists, additional reduction of the number of traffic accidents involving cyclists (the "zero" vision principle is applied abroad) and construction of local cycling connections which are linked to the national cycle network and provide cyclists with higher mobility. The final long-term plan period foreseen for the construction of the entire network is 25 years. The construction will be carried out in phases. The investment in the establishment of national cycle network has to be balanced according to the individual projected short-term, mid-term and long-term planning stages. Prudent planning of measures is necessary according to the financial and spatial possibilities and available road infrastructure. It is reasonable to use as many existing roads with low average annual daily traffic as possible, which have to be reorganised or equipped with traffic signalisation for the safe operation and management of cycle traffic. The construction of new cycling routes is foreseen only for locations where the cycling route standard so demands. The construction of cycling routes and cycling lanes is foreseen especially in settlements and where it is really necessary from the aspect of traffic safety. Measure U.40 must be taken					
U.17.1	Establishment of national bicycle network	Daily commuters and remote pconnections	U.16.1, U.13.1	2016	MzI, DRSI in relation to DRI	-	-
U.17.2	Categorisation of the bicycle network		U.17.1	2016–2017	MzI, DRSI in relation to DRI	-	-
U.17.3	Establishment of a single platform at the state level to arrange, signalise and categorise national bicycle connections and pertaining equipment			-	-	-	-
Functioning/organisation of city traffic							
U.31	Introduction of a uniform ticket	One of the most tangible benefits for users of integrated transport systems is the introduction of integrated tariff systems. The level of integration of tariff system and types of tickets and technologies which will be used (single tickets and/or electronic tickets, smart cards contactless payment, etc.) will be analysed in a case-by-case approach on the basis of the competence of a relevant transport body and by taking into account all possibilities, such as the options of smart card for P+R payment, parking in the street, tolls, etc.					
U.31.1	Introduction of the integrated ticket system in the RS	Introduction of a single integrated ticket system that foresees harmonised timetables, tariffs and settlement systems between transport operators, good management of PPT, providing information to passengers and promotion of PPT		2016	MzI	2016	MzI
U.31.2	Establishment of the IPTT operator at the national level	Integrated public passenger transport equires good planning, management and control of PPT. The Republic of Slovenia establishes an operator that will take care of the PPT planning, harmonisation of timetables between transport operators, settlements between transport operators that will implement integrated lines and transports, control, providing information to passengers and promotion of the use of PPT. The operators must have all relevant system tools and staff.		2016	MzI	2016	MzI
U.32	Introduction of on-demand public transport services	One of the main objectives of the strategy for transport development is to increase the sustainability of the transport system and provide the solutions for public transport at the same time which will be accessible to the majority. By taking into account that there is insufficient demand in some parts of Slovenia to justify the introduction of regular public transport lines (e.g. rural areas or areas of dispersed population), the introduction of public transport services on demand will make the option of public transport services available in the aforementioned areas.					
U.32.1	Transport on demand	In the countryside and areas of dispersed population where line transport is not economically viable, on call transport is provided to the nearest transfer points or municipal centres. On call transport is implemented according to pre-determined lines and pre-determined departures which are carried out only if there is a demand for transport.	U.31, U.33	2016	MZI	2018	MzI or IPTT operator

Code Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
U.32.2 Transport on demand for the	Transport on demand for physically disabled people is organised according to good practices of non-governmental disability organisations that provide their members such service. The offer of transport is divided between individual organisations and the environments where they operate. The introduction of a single system would increase the mobility of people with special needs and provide them a possibility to be more equally integrated in all activities related to work and spare time.		2016	MDDSZ	2018	MDDSZ
U.33 Adjustment of timetables (harmonised)	To increase the share of public transport in the city, sub-urban and regional transport, the timetables have to be harmonised to improve the connectivity, efficiency and coordination of various transport modes. Further studies will analyse this possibility by observing the passenger potential and operation and infrastructure requirements.					
U.33.1 Introduction of integrated cyclic timetables	The project "IPPT introduction in the Republic of Slovenia" foresees the harmonisation of timetables between individual modes of transport (railway passenger transport, public line intercity passenger transport, city passenger transport) that will provide the timetables to supplement each other and support the best offer for passengers and promote the use of modes of transport which have a priority on a specific route.	U.31	2016	MzI or IPTT operator	2017	MzI or IPTT operator
U.34 Administrative capacities and training	<p>The introduction of integrated transport means and new technologies together with the need for increasing financial sustainability and efficiency leads to the definition of the lack of administrative capacities and adequately trained personnel as one of the key issues in this sector and at the same time as one of the priority tasks of the EU cohesion policy. The use of additional administrative capacities is important in this sector, in particular in terms of creating new jobs for integrated transport systems and project preparation and control. The introduction of new technologies means that existing and new personnel have to be trained to operate and maintain these systems. Due to a close connection between the city, sub-urban and regional transport with zero emissions and users of passenger vehicles, the trainings on safe use of various transport modes will be conducted in combination with educational programmes for users. The training and educational programme also has to be developed inter alia:</p> <ul style="list-style-type: none"> <li>– to increase the capacities and qualification of administrative personnel;</li> <li>– to train the personnel of various carriers for a cost-efficient and safe driving and communication with passengers;</li> <li>– to train students in the field of use and safety of bicycles and public transport;</li> <li>– to raise the awareness of the public on the safe driving and efficient and safe use as well as advantages of public transport with the emphasis on the vulnerable groups (e.g. the disabled and the elderly).</li> </ul> <p>The programme will be based on case studies and examples of good practice. In this way, it will provide a dynamic and permanent education.</p>					
U.34.1 Establishment of the IPPT operator	The establishment of the IPPT operator is implemented within the measure U.31 to provide a suitable planning, management and control of the system with a suitable organisation, qualified staff and control.	U.31		MzI	2016	MzI
U.35 Vehicle fleet modernisation	Apart for some exceptions, the current fleet of public transport vehicles is old and based on out-of-date and inefficient technologies. In order to increase the competitiveness of public transport in comparison with private vehicles, the vehicle fleet has to be modernised and comply with the highest quality standards and safety and environmental standards, including its accessibility to people with limited mobility. The modernisation of the vehicle fleet will be carried out together with the projected improvements of the infrastructure. The first steps in the development of this measure are a comprehensive analysis of the current organisation, operation and maintenance structures of the respective operators and the analysis of future requirements and operation and maintenance plan. After establishing the actual needs, the specific technical requirements regarding the vehicle fleet will be defined on the basis of further studies.					
U.35.1 The state adopts the measures to promote (help) transport providers in efficient drawing of EU funds for upgrading the vehicle fleet		Ro.35, U.4.1	-	-	-	-

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
U.35.2	Modernisation of the vehicle fleet	Bus operators have 1,100 buses nominated for implementing public utility service of passenger transport. The modernisation of the vehicle fleet will be included in a tender to grant multi-annual concessions to implement a public utility service for a quick change of means of transport that are worn out and irrational in terms of comfort and passenger safety, environmental demands and rational operation. As per the conditions and lines, a gradual transfer to technologies is foreseen.	U.31	2016	MZI + Climate fund	2019–2025	MZI + Climate fund
U.36	Information platform	Raising the awareness of the public on the efforts of administration and advantages of public transport is important for the successful implementation of other measures. Promotion groups will be organised for raising the awareness on the adopted measures. These will include traditional public media, advertisements, public workshops and the establishment of special information platforms, which will also operate as public forums.					
U.36.1	Establishment of an informational platform within the scope of NTMC for public transport users	Providing information, promoting and awareness-raising of the public through the portal or public forum which will operate within the scope of NTMC on novelties and advantages of using specific public transport due to the use of an integrated ticket, adjusted timetables, P+R, information on the status	Ro.32.1	-	-	-	MZI
U.36.2	IPPT portal	The information portal for passengers that will provide all information on timetables, PPT advantages and will also be a portal for stating an opinion on PPT	U.31, Ro.3, Ro.12.1, Ro.12.2	2016	MZI	2016–2017	MZI, operator of IPPT
U.37	Support for non-profit groups in the field of transport	Non-profit groups promoting the use of alternatives to passenger vehicles proved very successful in numerous cities across Europe. There are also groups which stimulate the every-day use of bicycles, groups which advocate for the rights of passengers, maintenance of pedestrian zones or even traffic control. These groups (neighbourhoods or groups with joint interest, non-governmental organisations, etc.) can assist local administrations and bodies in their tasks and the implementation of the use of public transport. For this reason, the cooperation of such associations, local communities and non-governmental organisations have to be encouraged and taken into account in decisions related to transport planning.					
U.37.1	Promoting non-profit groups in preparing the promotion to purchase vehicles on alternative fuels					2020–2030	
U.38	Transport and logistics management and related information	Among other things, new technologies also enable the collection of data and monitoring of traffic conditions and the use of public transport in real time. To utilise these new technologies, centres for centralised public transport management will be established, which will be equipped with the latest IT solutions. New public transport vehicles will be equipped accordingly; IT platforms will be used to plan routes; traffic signs will be updated so they are integrated into the centralised management system (e.g. 'smart traffic lights' or measures favouring public transport). In this way, the quality of planning and monitoring public transport, user information for passengers, traffic control and data collection on traffic jams, and arrivals of public transport vehicles in real time will rise.					
U.38.1	Collection and processing of data in the data model within the scope of NTMC		Ro.32.2				MZI
U.38.2	Monitoring of public transport in real-time within the scope of NTMC	Monitoring of timetables, arrivals, delays of public transport in real time and display on the portal or applications	Ro.32.4			po 2020	MZI
U.39	Review/modernisation of local/regional central transport plans	In regard to obligations for traffic planning, the functional regions and/or cities will have to develop proper plans for sustainable mobility in the cities (mobility plans can cover the area of one or several joined cities (functional regions)). These plans will facilitate an analysis of the current state of the traffic systems, not only from the infrastructural, but also from the operational and organisational aspect, while on the basis of the analysis, future needs will be defined. The existence of these plans is a precondition for investments in public transport systems. These mobility plans have to be examined and updated; they have to be in accordance with high-level planning documents, such as the transport development strategy.					

Code Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
U.39.1 Comprehensive strategies	The purpose of tenders is to establish sustainable planning of transport in Slovenian municipalities with prepared comprehensive transport strategies (CTS). The prepared CTS is a precondition for the municipalities to stand as a candidate for the public tender to obtain non-refundable funds for the measures stated below.		-	-	2016	MzI + municipalities
U.39.2 Pavements, bicycle infrastructure, P + R system, PPT stops	Arrangement of safe accesses to PPT stations and stops, arrangement of stands and overhanging roofs for bicycle parking, P+R system, PPT stops, pavements, cycling paths.	U.11, U.12, U.13, U.14, U.16, U.17	2016, 2017 in 2018	MzI	2017–2020	MzI + municipalities
U.39.3 Promotion of walking	Preparing of the national strategy to promote walking. Norms and standards for pedestrian zones.	U.39.1, U.39.2	2016, 2017	MZI	2017–2020	MZI
U.39.4 Measures of sustainable parking policy	By limiting the parking in city centres, financial policy of more expensive parking in centres and cheaper parking on the city outskirts and P+R system, the traffic volume in cities is managed	U.11, U.12, U.13	2018	MzI	2019–2020	MzI + municipalities
U.39.5 Preparation of mobility plans	Different institutions prepare their own mobility plan according to the specifics of their location, travel habits and possibilities of a sustainable arrival at work and school and promote the changing of travel habits of their employees	U.31, U.33	2019	MzI	2018–2019	MzI + municipalities
U.39.6 Green city logistic sustainable urban strategies, P+R system, limiting the transport in city centres for private transport and measures in the field of air quality	Green city logistics: cities will determine the policy in the field of goods supply that will stipulate the conformity of delivery vehicles with environmental standards, time frames of delivery and promote alternative solutions in terms of the specifics of location in city centres. Limiting the transport in city centres for private transport: a city determines the limits of private vehicle access to wider or narrower transport centre on the basis of different criteria, such as vehicle emission standards (environmental zones) or closures of individual areas. In selected cities, the measures could be supported through a mechanism of comprehensive territorial investments.	U.11, U.12, U.13, U.15, U.16, U.40.1	2017–2020	MOP + municipalities	2018–2019	MOP + municipalities
U.39.7 Educating and awareness-raising activities	Educating and awareness-raising activities on sustainable mobility will be directed to different target groups: from kindergartens, primary schools, secondary schools, students to the adult car drivers and different professional groups of the public	U.36	2016–2019	MzI	2016–2019	MzI
U.39.8 Application of modern technologies for efficient mobility management	Numerous mechanisms are available, e.g. monitoring of vehicles in real time with displays at the PPT stops, information portals for passengers with a possibility of using mobile phones, etc.	U.40.1	2019–2020	MzI	2019–2020	MzI

Code Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
U.40	Measures to prevent, mitigate and maximise the elimination of the consequences of significant impacts of the plan on the environment, nature, health and cultural heritage (mitigation measures)	Reducing pollutant emissions by adopting the measure that the road vehicle fleet in public transport is regularly modernised and when purchasing new vehicles, ensuring that these are in compliance with the state of technology; the same attention as to encouraging the use of public transport in urban centres is also paid to other modes of sustainable mobility (cycling, pedestrian zones or low emission zones). When preparing spatial acts for new infrastructure activities or for the extension of the existing transport network, the following general guidelines must be observed in order to attain the objective of reducing ambient air pollution: - measures to reduce pollutant emissions (prevention of traffic congestions, provide smooth traffic flow at moderate travel speeds between 60 and 90 km/h, traffic detours) must be provided to the greatest extent possible; - measures to prevent increased traffic flow on individual sections of the road network, and measures to prohibit the entry of motor vehicles (especially cargo vehicles) which do not meet environmental standards for new vehicles must be implemented in areas with excessive ambient air pollution; - the integration of measures in populated areas which are especially sensitive to ambient air pollution (residential buildings, health care facilities, tourist areas) should be avoided. Measures to protect the environment from noise caused by city transport in particular include measures to reduce noise at source, measures to prevent the spread of noise into the environment and measures on buildings. Therefore, sustainable land management and soil protection must be ensured when integrating urban infrastructure into the environment. It is also necessary to avoid water protection areas and areas at risk of flood and related erosion and areas of cultural heritage and exceptional landscape. When siting, it is necessary to avoid areas with nature conservation status (Natura 2000 areas, protected areas, ecologically important areas, areas proposed for protection). When fragmenting migration paths, adequate passages must be provided following good practices in the European Union. This strategy also states specific mitigation measures according to individual areas which must be taken into account in the preparation of spatial plans and designing of railway infrastructure.				
U.40.1	Transport management within the scope of NTMC	Transport management with the assistance of a dynamic simulation model which will provide a smooth flow of traffic and thus a reduction of emissions	Ro.32.4	-	-	Mzi
U.40.2	Determining the effect of individual measures on the reduction of pollution through the transport model within the scope of NTMC	Transport management with the assistance of a dynamic simulation model which will provide a smooth flow of traffic and thus a reduction of emissions	Ro.32.3	-	-	Mzi
U.41	Preparedness for extreme weather conditions	Pursuant to Article 41 of Regulation (EU) No. 1315/2013 with regard to adaptation to climate change: ensuring the preparation of the analysis of the sensitivity of transport infrastructure to climate change, and on the basis of the findings of the analysis, implementing measures and adaptations that adequately improve the resistance of infrastructure to these changes. Guidelines, methodologies and procedures for collecting information on extreme weather conditions and for planning and implementing measures to reduce the sensitivity of transport infrastructure to these phenomena have to be developed.				
U.41.1	Preparation of guidelines to reduce the sensitivity of transport system to extreme weather		All measures	2016	DRSI	2016 DRSI



## Annex 4: Projects – Water-borne transport

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Element of water network							
M.1	Port of Koper – extension of piers	The Port of Koper's objective is to achieve transport growth of over 19 million tonnes by 2015 and over 23.5 million tonnes by 2020. In 2030, over 30 million tonnes of transshipment is expected. To attain these goals, piers 1 and 2 must be extended (among other things). Both measures are also defined in the adopted national spatial plan. Measure M.35 must be taken into account when siting and designing.					
M.1.1	Extension of Pier I – Southern part	Construction of shore and Pier I defined in NSP		by 2016	Luka Koper, d.d.	by 2020	Luka Koper, d.d.
M.1.2	Extension of Pier I – Northern part	Construction of shore and Pier I defined in NSP	related to the measure M.1.1	2020	Luka Koper, d.d.	by 2025	Luka Koper, d.d.
M.1.3	Extension of Pier II	Construction of shore and Pier II defined in NSP	2016	Luka Koper, d.d.	by 2030 (50 EUR) (150 EUR)	by 2030	Luka Koper, d.d.
M.2	Port of Koper – extension of piers	Construction of Pier 3 as a condition for transshipment to increase in the Port of Koper is foreseen after 2030. This measure is also defined in the national spatial plan. Measure M.35 must be taken into account when siting and designing.					
M.2.1	Arrangement of berths at the beginning of Pier III	Construction of berths and coast with deepening			Luka Koper, d.d.	by 2030	Luka Koper, d.d.
M.2.2	Construction of Pier III	Construction of Pier III		by 2022	Luka Koper, d.d.	by 2030	Luka Koper, d.d.
M.3	Port of Koper – rearrangement of port infrastructure	In accordance with measures M.1, M.2 and M.4, the rearrangement of the port infrastructure is necessary, i.e.: expansion of rear terminals, depots and warehouses, expansion or extension of railway track capacities, loading stations, reservoirs and car parks, implementation of ecological rehabilitation for bulk material, additional road capacities, arrangement of external connections and entry to the port, and external freight terminal etc. Measure M.35 must be taken into account when siting and designing.					
M.3.1	Upgrade and rearrangement of berths at Pool I	Rearrangement of the coast at the southern part of Pier I and arrangement of the eastern coast (berths and deepening)		2016	Luka Koper, d.d.	by 2020	Luka Koper, d.d.
M.3.2	Upgrade and rearrangement of berths at Pool II	Rearrangement of the coast at the southern part of Pier II and in Pool II (berths and deepening)			Luka Koper, d.d.	by 2025	Luka Koper, d.d.
M.3.3	Upgrade and rearrangement of berths at Pool II	Berth for tankers at the beginning of Pier II		by 2016	Luka Koper, d.d.	by 2030	Luka Koper, d.d.
M.3.4	Upgrade and rearrangement of berths at Pool III	RO-RO berths in Pool III		by 2016	Luka Koper, d.d.	by 2020	Luka Koper, d.d.
M.3.5	Improvement of accessibility to the port (last mile)	New entrance points to the port and truck terminal (Sermin, Bertoki)		by 2016, 2016, 2019	Luka Koper, d.d.	by 2020	Luka Koper, d.d.
M.3.6	Improvement of the internal port transport (also in terms of new entrance points and berths)	Upgrade of the road-railway internal network in the area of the port		2016–2022	Luka Koper, d.d.	by 2030	Luka Koper, d.d.
M.3.7	Increasing the storage capacities	closed storage capacities (tanks, new warehouses)		2016–2022	Luka Koper, d.d.	by 2030	Luka Koper, d.d.
M.3.8	Increasing the storage capacities	open storage capacities (containers, cars, wood)		2016–2022	Luka Koper, d.d.	by 2030	Luka Koper, d.d.
M.3.9	Expansion of port area	acquisition of new areas – expansion of the port area/containers in the hinterland		2016, 2018, 2021	Luka Koper, d.d.	by 2030	Luka Koper, d.d.

Code Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
M.3.10 Construction of the Luka Koper, d.d., off-port terminal	depending on the 2nd track construction dynamics, the construction of the off-port terminal can be a short-term or medium- solution	R.40	2016	Luka Koper, d.d., private investor	2016–2017	Luka Koper, d.d., private investor
M.4 Port of Koper (non-concession area) – deepening	Vessels, especially container ships, are becoming larger and have larger draught, and that is why the deepening of the entry channels and pools is constantly required. Thus, the deepening of the entry canal to Pool I and Pool I to a depth of 15m is projected in the Port of Koper by 2015, while by 2020 the entry canal to Pool II and Pool II to a depth of 16m is foreseen. Measure M.35 must be taken into account when siting and designing.					
M.4.1 Deepening of the ship canal into Pool II			by 2022	MzI	by 2022	MzI, URSP
M.4.2 Deepening of entry canals in the Port of Koper					after 2020	MzI, URSP
M.5 Port of Koper – passenger terminal	Arrangement of infrastructure and construction of a passenger terminal facility. Measure M.35 – European funds must be taken into account when siting and designing.					
M.5.1 Construction of the passenger terminal facility			by 2016		by 2020	Luka Koper, d.d.
M.6 Establishment of an inland waterway in the international category on the River Sava between Brežice and Obrežje	Through cooperation in the appropriate European cross-border project, Slovenia and Croatia may construct a harmonised hydro-energy chain and at the same time establish the international navigability of the Sava River to Slovenia. For this purpose, Slovenia was to submit a request for a special comprehensive project already prepared during drafting of the Danube Strategy as a cross-border Krško–Zagreb pilot project. The Krško–Zagreb project includes a comprehensive approach to the arrangement of the Sava River for the needs of energy, navigation, flood protection, irrigation and tourism, while observing sustainable principles of environment protection and preservation of biotic features by introducing substitute natural habitats when this is necessary. Both countries could draw resources to implement this project with joint candidature at tenders of financial funds of the European cohesion and regional policies. Measure M.35 must be taken into account when siting and designing.					
M. 6.1 Agreement with Croatia to re-classify the Sava River into an international waterway (waterway category 4)	International agreement				by 2020	
M.6.2 Establishment of a waterway with the construction of HPP on the Lower Sava River and HPP chain in RH	Construction of accumulation pools suitable for waterway, the reservation of space for ship launching facilities on the HPP barriers.		by 2020		after 2020	MzI, HESS
M.6.3 River port at Obrežje	Preparing design and investment documentation		by 2020		after 2020	MzI in JZP
M.6.4 Ship launching facilities	Preparing design and investment documentation		by 2020		after 2020	MzI in JZP
<b>Water network</b>						
M.11 Charging stations for alternative fuels	Regarding the proposal of the Directive on the employment of alternative fuels infrastructure, the core TEN-T ports (Port of Koper being one of them) will be provided with the infrastructure for charging the vessels on the liquefied natural gas and the electric charging from land by 2025.					
M.11.1 Supplying the electric energy to ships from land	Provided by SODO as a distributor (10–20 mW)	Ro.35.2, Ro.35.5, Ro.35.9, Ro.35.10			2020–2025	Luka Koper, d.d.
M.11.2 Zagotovitev ustrezne infrastrukture za vzpostavitev alternativnih goriv	GAINN4MOS project – Establishing the pilot port infrastructure to charge ships and towing vessels with natural gas and the use of natural gas for port machinery	Ro.35.2, Ro.35.5, Ro.35.9	by 2019	Joint project of Slovenia, Spain, France, Italy		

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
M.11.3	Providing suitable infrastructure to establish alternative fuels	POSEIDON MED project – a study on the possibility of LNG use as an alternative fuel for the Port of Koper; Study on the possibility of electric power supply to charge ships from land.		by 2016	Coordinator – Cyprus, Slovenian partner Koper, d.d.		
M.12	Motorways of the sea and the development of short-distance maritime transport	Strengthening cooperation with stakeholders to establish a single window for organising motorways of the sea and short-distance maritime transport. Cooperation on efforts to establish the free flow of goods by sea (blue belt).					
M.12.1	National single window or maritime transport	Implementation of Directive EC/2010/65		by 2016	MZI, URSP	2016	URSP
M.13	Improving the transport system safety	The establishment of the VTS centre (system for monitoring maritime transport) with proper technical equipment and organisation of control service					
M.13.1	Upgrading the VTS equipment	The upgrade of the existing software to control the maritime transport and the purchase of VTS sensors, CCTV camera and visibility sensor		by 2016	MZI, URSP	by 2016	MZI, URSP
M.13.2	Comprehensive maritime control	Within the scope of OP EMFF – Implementation of measures of the sixth priority task of the Union – promoting the implementation of comprehensive maritime policy within the scope of the Operational Programme for the Implementation of the European Maritime and Fisheries Fund in the Republic of Slovenia for the 2014–2020 period		2016	MKGP, MZI, URSP	2017–2020	MKGP, MZI, URSP
M.13.3	Purchase of a large vessel (9–10m)	The new vessel is needed for successful operations at sea.		by 2016	MZI, URSP	2016	MZI, URSP
M.13.4	Maintenance of facilities for navigation safety	Maintenance of facilities for safety				by 2022	MZI, URSP
M.13.5	Hydrography	Hydrographic measurements of the Slovenian sea, keeping of hydrographic bases and charts and their distribution to users, technical assistance and advice of MZI in the field of Hydrography and Cartography.				2016–2022	MZI
Functioning/organisation of water-borne transport							
M.21	Development of network into intermodal hubs, agglomerations in accordance with demand	In addition to transshipment, logistics activity is carried out in the port. This is related to the (re)arrangement of port infrastructure, described in measure M3, which also serves for logistics activity. For a successful development of the respective area the proper final connections with the port (so-called last miles) also have to be provided, i.e. the road as well as railway and maritime connections.					
M.21.1	Intermodal passenger hubs	According to the results of the IPPT introduction in the Republic of Slovenia, important transfer points are determined which are used as intermodal passenger hubs.	U.31, U.33	Continuously	Contracting authorities		
M.21.2	Logistic centres	The state adopts the measures to increase (stimulate) logistics activity, e.g. Ministry of the Economy provides co-funding and MZI provides suitable accesses.					

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
M.34	Administrative capacities and training	The provision of proper organisational and administrative capacities to carry out control, monitoring and information in maritime transport.					
M.34.1	New VTS jobs (according to need)	Employment of new operators for VTS centre operation				2016	MZI, URSP
M.34.2	New jobs related to the control of the concession contract for the Port of Koper (according to need)	Jobs related to implementing the provisions of the concession contract				2016, 2017	MZI, URSP
M.34.3	New business premises of URSP and other state authorities operating at sea	placing civil maritime authorities in one location by establishing a single system to control the sea and maritime transport		by 2016	MZI, URSP	by 2017	MZI, URSP
M.34.4	New jobs according to need (maritime inspectors, port captain)	New jobs (inspector) to control working and accommodation standards of seafarers, as per MLC convention and for new tasks related to sampling the fuels as per MARPOL				2016, 2017, 2018	MZI, URSP
M.34.5	Purchase of a derrick and upgrading the simulator	The purchase of the equipment to implement seafarer training in survival techniques and to manage rescue vessels and upgrade of simulators.		2016	University of Ljubljana	2016 to 2022	co-funding by MZI, URSP
M.35	Measures to prevent mitigate and maximise the elimination of consequences of significant impacts of the plan (mitigation measures)	The measures must be adopted to permanently reduce negative impacts on sea quality, bathing waters in the wider Koper and inland waters area, e.g. training of inspection services; purchase of proper equipment for spillages of dangerous substances into the sea; construction of proper infrastructure to receive and dispose of waste material from vessels; provision of the circulation of water currents and thus prevention of eutrophication through proper planning and construction of ports. Effects on the ecological status of water, water organisms, erosion and flood safety.					
M.35.1	Cleaning of the sea	new SVOM employments	M.11			by 2016	MZI, URSP
M.35.2	Purchase of eco-friendly vessel	A vessel is needed for SVOM service operation		2016	MZI, URSP	2017	MZI, URSP
M.36	Determination of the navigation categories of inland waterways in Slovenia in regional categories (I-III) in areas of rivers and lakes with suitable conditions	Within the scope of national and local regulations, proper legal solutions must be established, including the type of permitted motorised vessels for individual inland waters, forms of navigation, safety of navigation, supervision of navigational regimes, etc. Expert bases must be prepared which address the impact of navigation on the ecological status of water, aquatic and shore flora and fauna, areas with nature conservation status, erosion, flood protection, etc. The regulations must also include all the necessary mitigation measures based on scientific bases.					
M.36.1	Renewal of legislation in the field of navigating inland waters	new MZI-DI employment, Maritime Division	M.37	2016	MZI-DI, Maritime Division	2016	MZI-DI, Maritime Division
M.37	Provision of navigation safety on inland waterways by implementing the EU IWW legislation and the rules of the International Sava River Basin Commission into Slovenian legislation	By establishing an international waterway on the Sava, Slovenia will be linked to the Danube and the entire European network of inland waterways (TEN IWW), and will thus be obliged to include all European legislation on inland waterway transport and regulations of the Sava Commission on the navigation on the Sava River into its legal order as an EU Member State and signatory to the Framework Agreement on the Sava River Basin. The safety of navigation on inland waterways regarding regional classifications (I-III) will also be arranged accordingly.					
M.37.1	International regulations	Implementation of the EU directives, CEVNI and OSSB regulations	M.34	2018	MZI-DI, SP	2020	MZI-DI, SP

Code Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
M.372 Reorganisation of URSP – branches	Establishment of 3 URSP branches for inland navigation	M.34	2018	MzI–URSP	2020	MzI–URSP
M.373 Reorganisation of URSP – maritime inspection	employment of new inspectors for inland waters navigation (according to actual needs)	M.34	by 2016, 2016	MzI–URSP	2016	MzI–URSP

## Annex 5: Projects – Air transport

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
Air network elements							
A.1	Ljubljana Jože Pučnik Airport	The continuation of development for the needs of transport of passengers, mail and/or goods. Thus, it is important to provide a proper air transport infrastructure, especially in terms of runway track, construction of passenger and freight terminal, construction of additional plane parking positions, logistics complex, etc., on the basis of which a greater financial effects and indirect effects on the tourism and economic development of the whole Slovenia will be achieved. The objective of developing Ljubljana Jože Pučnik Airport is to make it into a regional airport. The airport already has a master plan for its further development					
A.1.1	Development of airport infrastructure	Further development of airport infrastructure will be implemented according to the NSP which is being prepared. The development will also take into account the needs of the Republic of Slovenia and the airport operator.		by 2020	Mzi	-	Mzi
A.1.2	Relocation of main road		Ro.43.3.1.2			2017–2018	DRSI
A.1.3	Renovation or modernisation of of airport infrastructure	Renovation or modernisation of airport infrastructure will be implemented according to development documents and strategies of the Republic of Slovenia and business plan of the airport operator. The current priority is the elimination of bottlenecks.		-	Aerodrom Ljubljana, d.o.o.	-	Aerodrom Ljubljana, d.o.o.
A.1.4	Renovation and modernisation of air transport navigation services at the airport	Renovation and modernisation of air transport navigation services infrastructure will be implemented according to the development documents and strategies of the Republic of Slovenia and business plan of the operator of air transport navigation services.		-	Mzi and Kontrola zračnega prometa Slovenije, d.o.o.	-	Mzi and Kontrola zračnega prometa Slovenije, d.o.o.
A.2	Maribor Edvard Rusjan Airport	The continuation of development for the needs of transport of passengers, mail and/or goods according to demand. The airport could be an alternative to the Ljubljana Jože Pučnik Airport. The airport already has a master plan for its further development. When planning facilities within the airport: – Directive 2002/30/EC on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports must be taken into account. When drafting the project documentation, a groundwater risk assessment including suitable technical measures for groundwater protection must be prepared due to the possibility of affecting the highly vulnerable aquifer.					
A.2.1	Development of airport infrastructure	Further development of airport will be implemented according to the NSP which is being prepared. The development will also take into account the needs of the Republic of Slovenia and the airport operator.		by 2020	Mzi	-	Mzi
A.2.2	Renovation or modernisation of airport infrastructure	Renovation or modernisation of airport infrastructure will be implemented according to development documents and strategies of the Republic of Slovenia and business plan of the airport operator.		-	Mzi and Aerodrom Maribor, d.o.o.	2016	Mzi and Aerodrom Maribor, d.o.o.
A.2.3	Renovation and modernisation of air transport navigation services infrastructure at the airport	Renovation and modernisation of air transport navigation services infrastructure will be implemented according to the development documents and strategies of the Republic of Slovenia and business plan of the operator of air transport navigation services.		- -	Mzi and Kontrola zračnega prometa Slovenije d.o.o.	-	Mzi and Kontrola zračnega prometa Slovenije d.o.o.

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
A.3	Portorož Airport	<p>The continuation of development for the needs of transport of passengers, mail and/or goods and the provision of the proper infrastructure for regular airport operation, on the basis of which better financial effects and indirect effects on tourism and the economic development of the Primorska region could be achieved. When preparing spatial and project documentation to expand the airport, the following guidelines must be taken into account: 1. Within the scope of extending the airport, only inventions which do not have a negative impact on the residential environment (noise) and development of tourism at the local level, and on the Sečovelje Salt Pans Landscape Park. 2. Directive 2002/30/EC on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports must be taken into account. Increased environment pollution is expected mainly in the area of Portorož Airport, where an additional mitigation measure of purchasing and changing the intended use of buildings for which the excess of legally prescribed noise pollution was established is possible. A variant mitigation measure to reduce the impact of Portorož Airport on the increased level of noise pollution in the environment is the provision of multimodal transport connections to other airports in the wider vicinity (Ljubljana, Trieste, Rijeka, Pula), where the capacity of passenger and goods transport is already provided in the existing state. 3. Appropriate technical solutions must be planned to prevent negative impacts on bathing waters in the wide area of Koper, namely during construction and operation, as well as in the case of exceptional events (e.g. spillages of dangerous substances). 4. The use of land with lower productive potential must be given priority. 5. The protection guidelines for the Sečovelje Salt Pans cultural landscape. 6. The nature conservation guidelines must be taken into account: - the expansion of the airport is permissible only if the number of airport operations decreases and the number of passengers increases; interventions in the protected area of the Sečovelje salt-pans have to be avoided to the greatest extent possible, on the basis of which the Ramsar locality, Natura 2000 and landscape park are defined; - the airport will not be expanded into habitats which are important for preserving biodiversity in the area of the Sečovelje salt-pans.</p>					
A.3.1	Development of airport infrastructure	Further development of airport infrastructure will be implemented according to the NSP which is being prepared. The development will also take into account the needs of the Republic of Slovenia and the airport operator. Currently, final works are executed within the European project of modernising the airport infrastructure.	Ro.17,5	by 2020	Mzi	-	Mzi
A.3.2	Renovation or modernisation of air transport infrastructure	Renovation or modernisation of airport infrastructure will be implemented according to development documents and strategies of the Republic of Slovenia and business plan of the operator of air transport navigation services.		-	Aerodrom Portorož, d.o.o.	-	Aerodrom Portorož, d.o.o.
A.3.3	Renovation or modernisation of air transport navigation services infrastructure at the airport	Renovation or modernisation of airport infrastructure will be implemented according to development documents and strategies of the Republic of Slovenia and business plan of the operator of air transport navigation services.		0	Mzi and Kontrola zračnega prometa Slovenije, d.o.o.	0	Mzi and Kontrola zračnega prometa Slovenije, d.o.o.
<b>Air network</b>							
A.10	Air navigation services	The implementation of air navigation services must provide safety, regularity and continuity of air traffic, the fulfilment of international obligations of the Republic of Slovenia relating to these services and also flights in search and rescue actions for humanitarian and medical purposes, emergency flights of aircraft and flights of state aircraft. Within this scope, constructions, reconstructions or building of infrastructure facilities, devices and systems of air transport navigation services are foreseen.					
A.10.1	Renovation and modernisation of the infrastructure of air transport navigation services	Renovation and modernisation of the air transport navigation services infrastructure will be implemented as per annual and five-year business plans of the provider of air transport navigation services, taking into account the plans to implement the Functional Airspace Blocks of Central Europe for a reference period which are prepared as per Implementing Regulation (EU) No 390/2013 on the plan of implementing the air transport navigation service and network function.		-	Kontrola zračnega prometa Slovenije, d.o.o. (KZPS)	-	Kontrola zračnega prometa Slovenije, d.o.o. (KZPS)
A.11	Charging stations for alternative fuels	In accordance with the TEN-T Directive (1315/2013), infrastructure for the use of alternative fuels has to be provided at TEN-T airports by 2030. According to the draft of the Directive on the deployment of alternative fuels infrastructure, airports will have to be equipped with infrastructure for charging aircraft with electric power until 2025. The Slovenian TEN-T airports are Ljubljana Jože Pučnik Airport, Maribor Edvard Rusjan Airport and Portorož Airport.					

Code	Measure	Description of measures	Link between measures	Preparation – Time schedule	Preparation – Holder of activity	Execution – Time schedule	Execution – Holder of activity
A.11.1	Mzi will actively monitor and implement activities in the field of alternative fuel development in aviation at the international level	Cooperation in ICAO, ECAC, EUROCONTROL, etc.	Ro.35.10	-	Mzi	-	Mzi
Functioning/organisation of air transport							
A.21	Development of network into intermodal hubs, agglomerations in accordance with demand	Ljubljana Jože Pučnik Airport and Maribor Edvard Rusjan Airport also have options to develop logistics activities if there is an economic interest. Both airports have the spatial options and proximity of motorway and railway connections (Maribor in particular) within the scope of the core TEN-T connections and corridors of the core network (BA and/or MED). Portorož Airport currently only operates the logistics platform for the transit of passengers from air to road or maritime transport to other tourist centres of Slovenian coast.					
A.21.1	Intermodal passenger hubs	According to the results of the IPPT introduction in the Republic of Slovenia, important transfer points are determined which are used as intermodal passenger hubs.	U.31, U.33	Continuously	Contracting authorities		
A.21.2	Logistics centres	The state adopts the measures to increase (stimulate) logistics activity, e.g. Ministry of the Economy provides co-funding and MZI provides suitable accesses.		-		-	





## Annex 6: Dynamics – Road transport

Code	Measure	Description of measures
Ro.32.1	National Traffic Management Centre (NTMC)	Establishment and operation
Ro.35.6	Publicly accessible refuelling points for LNG for motor vehicles and publicly accessible refuelling points for SZP for motor vehicles in the TEN-T network	Provide a suitable number of refuelling points for private vehicles (SZP) and goods vehicles (UZP)
Ro.32.2	Establishment of data model (within NTMC)	Digital map, single base of input and output data
Ro.35.5	Refuelling point for LNG in the Port of Koper	Provision of a suitable infrastructure or organisation of a possibility to charge vessels coming to the northern Adriatic Sea
Ro.35.8	Publicly accessible refuelling points for hydrogen	Provision of a suitable number of refuelling points for hydrogen if the state decides to develop this type of fuel
Ro.35.10	Infrastructure for charging aircraft with electric power	Study the possibility for charging aircraft with
Ro.35.7	Publicly accessible refuelling points for SZP for private vehicles in urban areas	Provision of a suitable number of refuelling points for USZP for private vehicles
Ro.35.9	Infrastructure for supplying electricity from the land at sea ports	Provision of a suitable infrastructure for charging vessels with electricity from land
Ro.31.1	Programme of measures	Provision of a suitable standard of the existing infrastructure, enhancing the safety, elimination of bottlenecks, shortening of travel times, reducing the impact of noise. The priorities must be based on economic viability of the projects or that at least 2/3 of projects showing also direct economic viability are implemented in the annual plan
Ro.35.2	Construction of the network of charging stations	
Ro.35.4	Charging stations for electric vehicles	Provision of a suitable number of private and available public charging stations for electric vehicles
Ro.12.2	Public transport	Studying how an improved public transport contributes to the reduction of traffic loads, the project is implemented together with the introduction of ITS, then the expansion of the ring follows
Ro.19.1	Celje bypass	
Ro.34.2	Logistics centres	The state adopts the measures to increase (stimulate) logistics activity, e.g. Ministry of the Economy provides co-funding of activities and MZI provides suitable accesses. dejavnosti in MZI v delu zagotavljanja ustreznih dostopov
Ro.37.1	Cycling connections	
Ro.42.1	Electronic toll system for goods vehicles	
Ro.43.1	Model for managing and maintaining the infrastructure (taking into account the already introduced systems)	
Ro.43.2	Preparation of the projects to be realised in a 6-year period (sliding plan) – Project programme	
Ro.43.2.1	Programme of the projects to be realised in a 6-year period (sliding plan)	The measure takes into account the preparation of priority sections for reconstructing the roads, facilities. The measure takes into account the corrections of horizontal/vertical technical elements, provision of a suitable level of traffic safety. Measures are expected to be prepared for longer project sections. The priorities must be based on economic viability of the projects or that at least 2/3 of projects showing also direct economic viability are implemented in the annual plan

Preparation

Implementation

the activity has no financial consequences  
or it was implemented before 2016

Link between measures	Preparation – Time schedule	Execution – Time schedule	2016	2017	2018	2019	2020	2021	2022	2016	2017	2018	2019	2020	2021	2022	Prepara- tion 2023- 2030	Implemen- tation 2023- 2030	Prepara- tion after 2030	Implemen- tation after 2030
	2016	2016																		
	2016	2016																		
	–	2016																		
M.11	2016	2020																		
	2016	2020																		
A.11	2016	2025																		
	2016	2025																		
M.11	2016	2025																		
Ro.43.2.1 and Ro.43.3.1	2016	–																		
M.11, A.11	2016	–																		
	2016	–																		
U.1, U.2, U.3, U.11, U.14	–	–																		
Ro.14.1	–	–																		
		–	–																	
Ro.45.2, U.17.1	–	–																		
	–	–																		
	–	–																		
	–	–																		
Ro.31	–	–																		

Code	Measure	Description of measures
Ro.43.3	Implementation of the projects to be realised in a 6-year period (sliding plan)	
Ro.45.1	Vehicle fleet modernisation	Link to the measure on alternative fuels (e.g. it is resolved through concession)
Ro.5.1	Novo Mesto West bypass	The measure, related to Ro.4.1 and R.4.2
Ro.15.1	Connection of Gorenjska to Ljubljana	Study of Jeprca–Stanežiče by taking into account the railway line and regional road
Ro.36.1	Criteria for determining fees	DARS, DRSI and municipalities foresee the charging of external costs in the field of pollution, noise, traffic jams – where this is a problem (as per EUROIII)
Ro.11.1	Kočevje–Ljubljana connection	Intermodal study
Ro.12.1.2	Introduction of ITS system at G, R and LC	In relation to the introduction of ITC at AC and HC
Ro.17.1	Connection of Slovenian and Croatian Istra	Studying the direct connection between Izola and border with Croatian Istra
Ro.3.1.2	Study of the number of necessary car parks	Study of the number necessary parking areas and points for goods vehicle control.
Ro.47.1	Preparation of instructions and technical specifications to provide migration corridors of large mammals and amphibious animals on the existing roads	DRSI
Ro.12.4.1	Expansion of the motorway ring with connection sections	
Ro.37.2	P+R car parks	Rearrangement or relocation of the car parks to the outskirts, the responsibility of municipalities to prepare a suitable strategy for arranging parking areas, the state will promote the measure with co-funding
Ro.43.1.1	Model for managing and maintaining the infrastructure (taking into account the already introduced systems)	Planning of maintenance by using modern models based on real data
Ro.43.1.3	Model for managing and maintaining the infrastructure (taking into account the already introduced systems)	Planning of maintenance by using modern models based on real data
Ro.43.2.3	Preparation of the projects to be realised in a 6-year period (sliding plan)	The measures take into account the preparation of priority sections for reconstruction (renovation of the carriageway structure) of roads, facilities (provision of a suitable level of transport safety). Measures are expected to be prepared for longer project sections
Ro.43.2.2	Preparation of the projects to be realised in a 6-year period (sliding plan)	The measures take into account the preparation of priority sections for reconstruction (renovation of the carriageway structure) of roads, facilities (provision of a suitable level of transport safety). Measures are expected to be prepared for longer project sections
Ro.43.1.2	Model for managing and maintaining the infrastructure (taking into account the already introduced systems)	Planning of maintenance by using modern models based on real data
Ro.13.3	Northern tangent	Brod–Ježica–Šentjakob; study of the measure together with the Študa, Želodnik–Mengeš–Vodice, Trzin–Domžale–Študa link roads, Kamnik railway line, Gorenjska railway line
Ro.33.2	Recommendations for reducing environmental impacts	Recommendations as stated under the measure Ro.33
Ro.34.1	Intermodal passenger hubs	According to the results of the IPPT introduction in the Republic of Slovenia, important transfer points are determined which are used as intermodal passenger hubs.
Ro.1.1	Draženci–Gruškovje (HR) motorway	

Link between measures	Preparation – Time schedule	Execution – Time schedule	2016	2017	2018	2019	2020	2021	2022	2016	2017	2018	2019	2020	2021	2022	Preparation 2023-2030	Implementation 2023-2030	Preparation after 2030	Implementation after 2030
	–	–																		
Ro.35.3, U.35	–	–																		
–	–																			
R.3 and U.2	2016–2017	–																		
	2016–2017	–																		
U.3, U.16 and R.23.16	2016–2018	–																		
Ro.12.1.1	2016–2018	–																		
	2016–2018	–																		
	2016–2018	–																		
	2016–2018	–																		
	2016–2020	–																		
U	2016–2020	–																		
Ro.31	2016–2020	–																		
	2016–2020	–																		
	2016–2020	–																		
	2016–2022	–																		
	2018–2020	–																		
Ro.12.3, U.1, Ro.13.1, Ro.13.2, U.2, Ro.12.4	after 2025	–																		
	Continuously	–																		
U.31, U.33	Continuously	–																		
	2015	2015–2018																		

Code	Measure	Description of measures
Ro.43.4.38	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0024 OBJN Sevnica–railway overpass
Ro.32.3	Upgrade of the macroscopic transport model (within NTMC)	Hourly traffic model, surveys and field research
Ro.12.4.3	Šentvid–Koseze	Completion of a full link road to Celovška cesta
Ro.12.3	Link roads	Šmarje Sap
Ro.46.2	Anti-wind measures	Implementation of the anti-wind protection at Rebernice and study of needs on other motorway sections
Ro.43.4.29	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	98-0229 OBJN BRIDGE OVER HOTEDRŠICA
Ro.6.2	Bled north bypass	
Ro.11.2	Reconstruction of the existing infrastructure and potential bypass (2 + 2 – expansion of the existing road)	Studying the possibility of reconstruction with a correction of technical elements of the existing road connection in the existing corridor by taking into account the completion of additional lanes (facilities) or short detours outside the existing route to eliminate bottlenecks (related to the measure Ro.11.1)
Ro.12.1.1	Introduction of ITS on AC and HC	To increase the throughput of the motorway and expressway, first the ITS systems are introduced (arranging the systems for traffic control and management and systems that provide occasional use of emergency lanes), then the expansion of the ring or implementation of optimum measures according to the respective plan period
Ro.45.2	Bike commuters	
Ro.43.3.1	Implementation of the project programme to be realised in a 6-year period (sliding plan)	The measures take into account the implementation of priority sections for reconstructing the roads, facilities and covers all budget items, except for new constructions. The measure takes into account the corrections of horizontal/vertical technical elements, provision of a suitable level of traffic safety. Measures are expected to be prepared for longer project sections
Ro.43.3.1.1	Arrangement and development in the transport and transport infrastructure section	
Ro.43.3.1.2	Management and regular maintenance of state roads	
Ro.43.3.1.3	Reconstructions	
Ro.43.3.1.4	Investment maintenance and construction of roads	
Ro.43.3.2	Implementation of the projects to be realised in a 6-year period (sliding plan)	The measures take into account the preparation of priority sections for reconstruction (renovation of the carriageway structure) of roads, facilities (provision of a suitable level of transport safety and throughput). Measures are expected to be prepared for longer project sections
Ro.43.3.3	Implementation of the projects to be realised in a 6-year period (sliding plan)	The measures take into account the preparation of priority sections for reconstruction (renovation of the carriageway structure) of roads, facilities (provision of a suitable level of transport safety). Measures are expected to be prepared for longer project sections
Ro.47.2	Provision of suitable migration corridors for large carnivores and other species of large mammals at the existing AC networks, but no more than two	DARS
Ro.47.3	Provision of passages for amphibians at the state road sections with the most negative impact on amphibian populations	DRSI
Ro.10.3	Krško bypass	New construction – continuation of the construction



Code	Measure	Description of measures
Ro.13.1	Gorenjska–Štajerska connection	Želodnik–Mengeš–Vodice
Ro.18.2	Reconstruction of the existing Postojna–Jelšane road connection	Reconstruction with the comparison of solutions in a new corridor (NSP is being carried out)
Ro.2.1	Construction of the second tube of the Karavanke tunnel and completion of the second half of motorway	
Ro.17.6	Bertoki and Srmin slip roads	Expansion of the Bertoki slip road and implementation of the Srmin slip road
Ro.12.3	Link roads	Dragomer (Brezovica (2))
Ro.32.4	Establishment of the dynamic simulation model (within NTMC)	Dynamic simulation model of hourly traffic
Ro.43.4.20	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	13-0061 OBVO Ormož eastern bypass
Ro.43.4.48	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	09-0005 NOVO Safe driving site
Ro.42.1.2	Demolition of toll stations	
Ro.12.4.2	Expansion of the Koseze–Kozarje motorway section into a six-lane motorway	
Ro.43.4.9	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	13-0060 OBVO Žiri bypass
Ro.17.3	Reconstruction of the existing Šalara–HR (border point) road connection	Reconstruction of the existing road, first the comparison of the reconstruction of the existing road with a new construction, which the NSP is in progress)
Ro.17.5	Jagodje–Lucija	New construction
Ro.9.2	Reconstruction of the existing road connection between Slovenj Gradec–Kotlje–Ravne	Preparation of the reconstruction of the Slovenj Gradec–Kotlje–Ravne road connection
Ro.3.1.1	Introduction of ITS	Providing information to drivers on available parking spaces at rest areas
Ro.7.1	Reconstruction of the existing road connection	Preparation of the reconstruction of the road in the existing corridor with the comparison of solutions in the new corridor (NSP in progress). Determination of priority sections for the preparation and implementation
Ro.43.4.40	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	09-0006 OBVO Murska Sobota bypass – east
Ro.43.4.37	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0017 OBJN Railway overpass on Cankarjeva cesta
Ro.4.1	3rd development axis – Novo Mesto east–Revoz link road	3 <sup>rd</sup> development axis: A 4-lane link road of the east bypass road (from the existing Novo Mesto – east link road to the Ljubljana–Obrežje motorway to Revoz)
Ro.43.4.12	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	01-0001 OBJN BREŽNICA, POLJČANE
Ro.43.4.30	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	06-0045 OBVO Železniki (at Plavž)
Ro.9.1	New, two to four lane connection – Slovenj Gradec–Velenje–A1	Velenje-A1: a 4-lane connection and Velenje-Slovenj Gradec 2-lane section
Ro.7.2.1	Passability of Vršič	Reconstruction of the road



Link between measures	Preparation – Time schedule	Execution – Time schedule	2016	2017	2018	2019	2020	2021	2022	2016	2017	2018	2019	2020	2021	2022	Prepara- tion 2023- 2030	Implemen- tation 2023- 2030	Prepara- tion after 2030	Implemen- tation after 2030
	2016–2018	2016–2023																		
	2016–2019	2016–2023																		
	2017–2019	2016–2023																		
	2016–2019	2016–2023 (Bertoki slip road 2016– 2019; Srmin slip road 2021–2023)																		
	2016	2017–2018																		
	-	2017–2018																		
	2016–2017	2017–2018																		
	2016	2017–2019																		
Ro.42.1.1.	2016	2017–2020																		
	2016–2018	2017–2020																		
	2016–2020	2017–2022																		
Ro.17.1	2016–2020	2017–2023																		
Ro.17.1	2016–2020	2017–2023																		
	2017–2022	2017–2024																		
	2016–2017	2017–2025																		
	2016–2019	2017–2025																		
	2016–2018	2018–2019																		
	2015	2018–2020																		
	2016–2017	2018–2020																		
	2016–2018	2018–2020																		
	2016–2018	2018–2020																		
	2016–2018	2018–2022																		
	2017–2018	2018–2022																		

Code	Measure	Description of measures
Ro.43.4.17	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0072 OBVO Kidričevo bypass
Ro.12.3	Link roads	Continuation of the Brdo link road
Ro.43.4.35	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	85-0491 NOVO HOTEMAŽE–BRITOF
Ro.43.4.36	Investicije na cestah G in R: ti projekti se upoštevajo v primeru, da rekonstrukcija ni izvedljiva oziroma smotrna	94-0413 OBVO LUČE bypass
Ro.6.1	Bled south bypass	
Ro.10.1	Reconstruction of the existing road	To study the possibility of the reconstruction of the existing road connection by taking into account the completion of additional lanes (facilities) to eliminate bottlenecks by providing solutions of the railway network
Ro.3.1.3	Implementation of additional rest/parking areas	Implementation of parking areas and points for freight vehicles control
Ro.20.1.1	Ptuj–Ormož (reconstruction)	Reconstruction with a comparison of solutions in the new corridor by studying the possibility of (partial) new construction
Ro.43.4.26	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0127 OBVO R3-664/2501: Birčna vas bypass
Ro.16.1	Maribor bypass	Extension of the Proletarskih brigad road
Ro.17.2	Koper–Šmarje Dragonja	Šalara bypass (Phase 1 of NSP is being prepared)
Ro.43.4.19	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0093 OBVO Slovenska Bistrica western bypass
Ro.9.3	Reconstruction of the existing road connection between Dravograd–Slovenj Gradec	Reconstruction with the comparison of solutions in the new corridor (NSP in progress); prepared solutions within the scope of the NSP preparation.
Ro.9.4	Reconstruction of the existing road connection between Otiški Vrh–Holmec, including the link to Črna na Koroškem	Reconstruction with a comparison of solutions in the new corridor (NSP in progress); for the Otiški Vrh–Holmec section
Ro.22.1	Dramlje–Šentjur	Improvement of the connection and enhancing of flood safety
Ro.22.2	Šentjur–Dobovec	Reconstruction, improving accessibility
Ro.43.4.34	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0196 OBVO Šmarje bypass
Ro.43.4.2	Investments in G and R roads: these projects are taken into account if da rekonstrukcija ni izvedljiva oziroma smotrna	07-0047 NOVO Logatec–Valkarton
Ro.43.4.32	Investments in G and R roads: these projects are taken into account if da rekonstrukcija ni izvedljiva oziroma smotrna	07-0087 OBVO Gornji Grad
Ro.43.4.4	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	08-0046 OBVO Podpeč bypass
Ro.6.3	Lesce–Bled	Studying the possibility of reconstruction with a correction of technical elements of the existing road connection in the existing corridor by taking into account the completion of additional lanes (facilities) or short detours outside the existing route to eliminate bottlenecks
Ro.43.4.5	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	08-0187 OBVO Travnik
Ro.10.2	New construction	Hrastnik–Zidani Most
Ro.43.4.15	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	08-0069 OBVO Murska Sobota west

	Link between measures	Preparation – Time schedule	Execution – Time schedule	2016	2017	2018	2019	2020	2021	2022	2016	2017	2018	2019	2020	2021	2022	Prepara- tion 2023- 2030	Implemen- tation 2023- 2030	Prepara- tion after 2030	Implemen- tation after 2030
		2016–2018	2019–2020																		
		2016–2018	2019–2021																		
		2016–2018	2019–2021																		
		2016–2018	2019–2022																		
		2016–2018	2019–2022																		
		2018–2019	2019–2022																		
		2018	2019–2025																		
		2017–2019	2019–2025																		
		2018–2020	2020–2021																		
		2016–2019	2020–2023																		
	Ro.17.1	2016–2019	2020–2023																		
		2016–2019	2020–2023																		
		2016–2017	2020–2025																		
		2016–2017	2020–2025																		
		2016–2023	2020–2025																		
		2016–2023	2020–2026																		
	Ro.22.2	2016–2023	2020–2026																		
		2016–2020	2021–2022																		
		2016–2020	2021–2022																		
		2018–2020	2021–2023																		
		2018–2021	2021–2023																		
		2019–2020	2021–2023																		
	Ro.10.1	2017–2020	2021–2024																		
		2018–2020	2021–2024																		

Code	Measure	Description of measures
Ro.15.3	Connection of Gorenjska to Ljubljana	Alignment Jeprca–Stanežiče
Ro.2.2	Renovation of the existing tube of the Karavanke tunnel	
Ro.43.4.10	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	95-0119 OBVO KANAL bypass
Ro.15.2	Reconstruction of the existing connection with a potential construction of lanes	Studying the possibility of reconstruction with a correction of technical elements of the existing road connection in the existing corridor by taking into account the completion of additional lanes (facilities) or short detours outside the existing route to eliminate bottlenecks
Ro.20.1.2	Ptuj–Ormož (new construction)	
Ro.10.5	Brežice bypass	Brežice bypass
Ro.43.4.7	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0209 OBVO Hrpelje–Kozina bypass
Ro.43.4.8	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0211 OBVO R1–204/1012 Bazara–Dornberk (Volčja Draga)
Ro.12.3	Link roads	Vnanje Gorice bypass
Ro.10.4	Krško–Brežice	New construction: Krško–Brežice connection
Ro.35.3	Promoting the use of vehicles	The state promotes the use of vehicles that use alternative fuels: tax relief on vehicle purchase, financial stimulations to purchase vehicles (delivery vehicles, utility vehicles, private cars, motorbikes, bicycles, etc.) – subsidising, free parking, exemption from paying the fee to enter the city centre, etc. providing yellow lanes in cities (at least in the initial years of introducing e-mobility), exemption from paying external costs, purchase of vehicles that use alternative vehicles in public administration (courier service, business trips, for personal use of public employees, etc.), potential tax relief in the case of purchasing vehicles that use alternative fuels, determination of special conditions in tenders to grant concessions for vehicles used to provide public utility service of passenger transport, and taxi vehicles, determination of special conditions for vehicles used to transport of children
Ro.42.1.1	Electronic toll system for goods vehicles	Introduction of the system
Ro.3.2	Arrangement of AC and HC within the scope of former IBC	The measure encompasses the arrangement of a suitable speed limit (now 40 km/h); finding solutions according to priorities, priority given to border crossings of the states in the Schengen area
Ro.16.2	Maribor bypass	(Western bypass (Lackova)–motorway
Ro.4.2	3 <sup>rd</sup> development axis – south (Revoz–Maline section)	2-lane connection between Revoz and Maline with a suitable connection to the existing road network
Ro.43.4.46	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	17-0006 OBVO Mirna – in the draft budget
Ro.13.2	Slip road	(Trzin–Domžale–Študa link road; study of the measure together with the Študa, Želodnik–Mengeš–Vodice, Brod–Ježica–Šentjakob link roads, Kamnik railway line, Gorenjska railway line

Link between measures	Preparation – Time schedule	Execution – Time schedule	2016	2017	2018	2019	2020	2021	2022	2016	2017	2018	2019	2020	2021	2022	Preparation 2023-2030	Implementation 2023-2030	Preparation after 2030	Implementation after 2030
Ro.15.1 and Ro. 15.2	2018–2020	2021–2025																		
	by 2017	2022–2023																		
	2016–2019	2022–2024																		
R.3 in U.2	2016–2018	2022–2025																		
Ro.20.1.1	2017–2018	2022–2025																		
	2018–2022	2022–2025																		
	2019–2022	2023–2025																		
	2019–2022	2023–2025																		
Connection with the Dragomer link road (Brezovica (2))	2018–2022	2023–2026																		
	2016–2022	2023–2027																		
	2016	do 2020																		
	-	after 2016																		
	2016–2022	after 2017																		
	2016–2020	po 2020																		
Ro.4.1	2016–2018	after 2020																		
	2017–2020	po 2020																		
Ro.12.3., U.1, Ro.13.1, Ro.13.3, U.2, Ro.12.4	2017–2018	po 2020																		

Code	Measure	Description of measures
Ro.8.1	Škofja Loka north bypass road	
Ro.11.3	Škofljica bypass	Related to measures Ro.11.1 and Ro.11.2
Ro.43.4.25	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0126 NOVO R3-661/1210: new construction Metlika–Drašiči
Ro.4.3	Maline–RH border link road	Reconstruction of the existing road; Phase 2 Maline–Metlika Črnomelj south); Phase 3 Metlika (Črnomelj south)–Semič
Ro.7.3	Axis 4	New construction/assessment after the Ro.7.1 preparation
Ro.43.4.43	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	17-0011 OBVO Ilirska Bistrica (Vilharjeva and Šercerjeva) – in the draft budget
Ro.43.4.44	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	17-0001 OBVO Volče – in the draft budget
Ro.43.4.45	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	17-0005 OBVO Dolenjske Toplice – in the draft budget
Ro.43.4.47	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	OBVO Most na Soči – in the draft budget
Ro.18.1	Bypasses	Pivka bypass, Prestranka bypass (Ilirska Bistrica in the final phase)
Ro.43.4.39	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0025 OBJN G1-5 Radeče–Boštanj: Bridge over the Sava River at Log
Ro.43.4.21	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	06-0049 OBVO Moravče bypass
Ro.43.4.13	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	02-0058 OBJN SREDIŠČE OB DRAVI (crossing the railway)
Ro.43.4.16	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	08-0075 NOVO Maribor – roundabout
Ro.43.4.28	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0140 OBVO R1-216/1175: Žužemberk bypass
Ro.43.4.33	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	08-0168 OBVO Bistrica ob Sotli bypass with roundabout
Ro.43.4.11	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	00-0054 OBVO LJUTOMER bypass
Ro.43.4.14	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	02-0060 OBJN KRIŽNI VRH (crossing the railway)
Ro.43.4.18	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0089 OBVO Ruše bypass
Ro.43.4.22	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	08-0190 OBVO Sodražica
Ro.43.4.31	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	07-0014 OBVO Sl. Konjice–Oplotnica
Ro.43.4.41	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	98-0893 OBVO PONIKVE bypass

Link between measures	Preparation – Time schedule	Execution – Time schedule	2016	2017	2018	2019	2020	2021	2022	2016	2017	2018	2019	2020	2021	2022	Preparation 2023-2030	Implementation 2023-2030	Preparation after 2030	Implementation after 2030
continuation of the project depends on the efficiency of the southern bypass	after 2016	after 2020																		
Ro.11.1, Ro.11.2	after 2020	after 2020																		
Ro.4.3	2016–2021	after 2021																		
	2 <sup>nd</sup> section: 2016–2021; 3 <sup>rd</sup> section: 2018–2023	after 2022																		
Ro.71	2016–2022	after 2022																		
Ro.18	2017–2022	after 2022																		
	2017–2022	after 2022																		
	2017–2022	after 2022																		
	2017–2022	after 2022																		
	2017–2022	after 2022																		
	2017–2015	after 2022																		
	2018–2021	after 2022																		
	2020–2022	after 2022																		
	2020–2023	after 2022																		
	after 2020	after 2022																		
	after 2020	after 2022																		
	after 2020	after 2022																		
	after 2022	after 2022																		
	after 2022	after 2022																		
	after 2022	after 2022																		
	after 2022	after 2022																		
	after 2022	after 2022																		
Ro.11.3	after 2022	after 2022																		

Code	Measure	Description of measures
Ro.43.4.42	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0138 OBVO R3-647/1368: Zdenska vas bypass
Ro.43.4.6	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0047 NOVO ALU. Komen
Ro.7.2.2	Passability of Vršič	Construction of the tunnel
Ro.17.7	MMP Dragonja–national border with RH	A missing section of expressway from the border plateau of IBC Dragonja to the Republic of Croatia border crossing (new construction)
Ro.42.2	Electronic toll system for all vehicles	To provide just use of the motorway, provision of stability to maintain roads.
Ro.14.1	Celje bypass	Continuation of 3 <sup>rd</sup> development axis
Ro.14.5	3 <sup>rd</sup> development axis – middle	
Ro.12.3	Link roads	Domžale (Študa)
Ro.14.2	Reconstruction of the existing Celje–Laško road connection	Reconstruction of the road in the existing corridor, including the comparison of solutions in the new corridor (the NSP in progress, determination of stages with the links to the existing roads)
Ro.14.3	Reconstruction of the existing Laško–Zidani Most road connection	Reconstruction of the road in the existing corridor with the comparison of solutions in the new corridor (NSP in progress)
Ro.14.4	Reconstruction of the existing Zidani Most–Novo Mesto road connection	Reconstruction of the road in the existing corridor with the comparison of solutions in the new corridor (NSP in progress)
Ro.20.2	Ptuj bypass	Ptuj–Markovci connection
Ro.43.4.24	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0121 OBVO G2-108/1182: Zg. Hotič–Sp. Hotič, OBVO Litija
Ro.12.4.4	Expansion of the motorway ring with connection sections	Implementation of works in phases according to priorities
Ro.21.1	Nova Gorica bypass	The connection with the national road network must also be taken into account since the bypass ends on the municipal road at the railway station and former border crossing, then the railway underpass has too low clearance
Ro.43.4.27	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	10-0139 OBVO R3-650/1159: Dobrnič bypass
Ro.43.4.3	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	08-0039 OBVO Divača
Ro.18.3	Motorway connection (Postojna–Jelšane)	The proposal of the annual implementation contract for 2016 between the RS and DARS determines that the NSP preparation continues
Ro.12.3	Link roads	Vrhnika
Ro.17.4	Koper–Šmarje Dragonja	New construction
Ro.43.4.1	Investments in G and R roads: these projects are taken into account if reconstruction is not executable or reasonable	07-0037 OBVO Vrhnika bypass
Ro.16.3	Maribor south bypass	Connection from the motorway to Miklavž
Ro.35.1	National framework for market development policy related to alternative fuels in the transport sector and establishment of suitable infrastructure	As per Directive 2014/94/EU



Link between measures	Preparation – Time schedule	Execution – Time schedule	2016	2017	2018	2019	2020	2021	2022	2016	2017	2018	2019	2020	2021	2022	Preparation 2023-2030	Implementation 2023-2030	Preparation after 2030	Implementation after 2030
Ro.11.3	after 2022	after 2022																		
	after 2022	after 2022																		
	after 2022	after 2022																		
	2016–2021	after 2023																		
	-	after 2025																		
Ro.14.5	2016–2022	after 2025																		
Ro.14.1, Ro.14.3, Ro.14.4, Ro.14.5, Ro.10.2	2016–2022	after 2025																		
Ro.13.2	2016–2023	after 2025																		
	2018–2025	after 2025																		
Ro.10.2	2018–2025	after 2025																		
	2018–2025	after 2025																		
	2018–2025	after 2025																		
Ro.10	2018–2025	after 2025																		
Ro.12.1, Ro.12.4.1 and U	2020–2025	after 2025																		
	after 2018	after 2025																		
	after 2025	after 2025																		
	after 2025	after 2025																		
Ro.18.1, Ro.18.2	2016–2025	after 2030																		
Ro.43.4.1	after 2025	after 2030																		
Ro.17.1	after 2025	after 2030																		
	after 2025	after 2030																		
	after 2030	after 2030																		
	2016	Continuously																		

Code	Measure	Description of measures
Ro.42.3	Provision of stable funding sources	DARS's key sources are tolls (vignettes and tolls for goods vehicles) which must be stable and at a suitable level to repay existing loans and also to implement new investments. Within the scope of the measure, the possibility of co-funding by the state must be studied, for example to implement the projects included in activities of the operational plan and due to insufficient volume of traffic, the toll revenues will not suffice to cover the liabilities from loans
Ro.46.1	Guidelines to reduce the sensitivity of the transport infrastructure to extreme weather (e.g. glaze ice, floods)	
Ro.44.1	Recycling and use of waste in construction	It is included in the project preparation, if necessary, reasonable and useful
Ro.48.1	Recommendations or instructions that must be reasonably taken into account in project preparations according to need	
Ro.33.1	Operational programme for noise	Preparation of expert bases for operational programmes, implementation of studies and preparation of projects
Ro.41.1	Harmonising the legislation	Transparent and regularly – regular harmonisation of EU and Slovenian regulations – acts, rules and technical specifications, whereby the prescribed standards or demands must be taken into account that will provide a suitable – optimum level of traffic user safety and road maintenance
Ro.33.1.1	Implementation according to the operational programme for noise protection	
Ro.33.1.2	Implementation according to the operational programme for noise protection	
Ro.43.4	Investments in G and R roads: these project are taken into account if reconstruction is not executable or reasonable	After the 6-year period of the action plan, the continuation of the existing NRP projects are studies for investments to G and R roads or these projects are already taken into account during the implementation of the action plan if reconstruction is not executable or reasonable

Link between measures	Preparation – Time schedule	Execution – Time schedule	2016	2017	2018	2019	2020	2021	2022	2016	2017	2018	2019	2020	2021	2022	Prepara- tion 2023- 2030	Implemen- tation 2023- 2030	Prepara- tion after 2030	Implemen- tation after 2030
	2016	Continuously																		
All measures	2016	Continuously																		
All measures	Continuously	Continuously																		
All measures	Continuously	Continuously																		
	Continuously	Continuously																		
	Continuously	Continuously																		
	-	Continuously																		
	-	Continuously																		
Ro.43.2 and Ro.43.3	-																			

## Annex 7: Dynamics – Rail transport

Code	Measure	Description of measures
R.40.1	Intermodal passenger hub	When planning, the index of commuters and possibility of transfer of pedestrians and cyclists, transfer from private transport and between different modes of public passenger transport
R.4.3	Arrangement of bypass lines for goods transport and arrangement of LRH	
R.23.16	Grosuplje–Kočevje	Being implemented
R.10.2	Poljčane–Slovenska Bistrica: upgrade	Enhancing the load axis to D4 category
R.1.1	Koper–Divača: Bottleneck rehabilitation in the Bivje area	Measures to increase the capacities at the PSS area of Dekani–Koper and PSS area of Hrastovlje; turn-out track of the Koper freight station
R.10.1	Zidani Most–Celje: upgrade of track and stations	The upgrade of the Zidani Most–Celje line section due to the increase load to D4 category, increase of line speed, upgrade of Rimske Toplice, Laško, Celje stations
R.4.4.1	Anti-noise protection in area of the Zalog marshalling yard	
R.8.1	Maribor–Šentilj: upgrade	Upgrade of SV devices, bridging of Pesniška dolina with a tunnel or viaduct or restoration of the existing Pesnica embankment, provision of axis load of 22.5 tonnes at the entire line, introduction of the ETCS system, expansion of useful lengths of stations tracks, grade-separated accesses to platform infrastructure, potential increase of line speed, remote train transport control
R.21.2	ETCS or ERTMS on the Zidani Most–Dobova–national border and Pragersko–Šentilj–national border sections	Introduction of ETCS or ETCS on the Zidani Most–Dobova–national border and Pragersko–Šentilj–national border sections
R.1.4	Phase 2 – Divača–Ljubljana: line upgrade	Determination of the necessary measures of upgrade of TEN and other TEN network sections (upgrade of the line, catenary, stations, APB/ETCS; ENP, etc.); upgrade of the Rakek–Postojna line, LC Rakek, measures to enhance the capacity
R.1.3	Koper–Divača: additional measures on the existing Divača–Koper line	Within the scope of the study and further project documentation (IDZ, IZN, etc.) measures must be determined which enhance the capacity of the existing line (e.g. upgrade of stations – extension of tracks, additional tracks, upgrade or additional ENP, renovation of the super- and sub-structure elements, corrections of curves in terms of increasing line speed, etc.)
R.3.1	Ljubljana–Jesenice: upgrade	Measures to enhance the throughput and provision of the TEN standard (upgrade of SVTK devices by introducing remote transport management, increasing line speed, upgrade of stations, etc.)
R.1.2	Koper–Divača: 2 <sup>nd</sup> track	Construction of the 2 <sup>nd</sup> track
R.24.2	Analysis and programme to determine priorities	Determination of priorities through the methodology of protecting/eliminating level crossings
R.3.3	Jesenice–national border–Karavanke tunnel: upgrade	Upgrade of the existing tunnel to provide safety measures
R.4.1	The Tivoli Arc	Construction of the Tivoli Arc
R.3.2	Ljubljana–Jesenice: completion of an additional track	Measures to enhance the throughput and provision of the TEN standard
R.4.4	Zalog marshalling yard	Reduction of negative noise impacts
R.4.2	Upgrade of the existing station	SV devices, track devices, platform infrastructure, etc.

				Preparation								Implementation								the activity has no financial consequences or it was implemented before 2016			
	Link between measures	Preparation – Time schedule	Execution – Time schedule																				
		Continuously	-																				
	U.14, R.39	by 2022	-																				
	R.23.2	by 2016	2016–2018																				
			2016–2018																				
		2016–2019																					
	R.39	by 2016	2016–2020 years for completion																				
		2016–2017	2017–2018																				
	U.12.1, R.39	by 2018	2017–2022																				
	R.21.1	2016–2019	2018–2020																				
	R.2.1, R.5.1, R.7.1, R.9.1, R.11.1, R.21, U.14.6, R.39	2016–2018	2018–2020																				
	R.1.2R.39	2016–2017	2018–2022																				
	R.3.3, R.4.1, U.2.1, U.2.2, R.39	2016–2020	2018–2022																				
	R.39	2016–2018	2018–2025																				
		2016	2018–2030																				
	R.3.1.	2016–2018	2019–2022																				
	R.3.1, R.3.2, R.3.3, U.14.4, R.39	2016–2019	2020–2021																				
	R.4, U.2.3, R.39	2016–2022	2020–2025																				
	R.39	by 2020	2021–2022																				
	U.14.1, U 14.2; U.14.3	by 2020	2021–2025																				

Code	Measure	Description of measures
R.23.3	Lj. Šiška–Kamnik Graben, 2-track arrangement	Construction of stations, construction of new stations, upgrade of SV device, gradual two-track arrangement on the Ljubljana–Domžale–(Kamnik) section; electrification–For PPT needs; measures must be harmonised with the LRH development
R.34.1	Modernisation and purchase of means of transport	Means of transport for passenger transport do not provide for the introduction of such transport in urban regions and improvement of transport quality. 25 new vehicles and the modernisation of the existing vehicles must be provided
R.7.2	Pragersko Hub	According to phases, only the most urgent measures first
R.23.3	Lj. Šiška–Kamnik Graben, 2-track arrangement	Construction of stations, construction of new stations, upgrade of SV device, gradual two-track arrangement on the Ljubljana–Domžale–(Kamnik) section; electrification? For PPT needs; measures must be harmonised with the LRH development
R.23.4	Celje–Velenje	Enhancing the axis load and electrification, upgrade of stations
R.23.2	National border–Metlika–Ljubljana	Ljubljana–Grosuplje section: APB, upgrade of stations, construction of new stations, ERTMS, 2nd track, Ljubljana–Novo Mesto section: electrification (possibility of direct train operation on the Revoz–Port of Koper line; upgrade of the Ljubljana–Trebnje section: establishment of a bypass line, measures must be harmonised with the planned development LRH)
R.6.1	Divača–Sežana: upgrade of the existing line	Upgrade of the existing line
R.8.2	Maribor–Šentilj–national border: construction of the 2 <sup>nd</sup> track	Construction of the second track
R.5.1	Ljubljana–Zidani Most: upgrade of the line and arrangement of the Zidani Most hub	Measures to provide train transport in both directions, introduction of the ETCS system, remote control of transport, upgrade of stations, upgrade of catenary, etc. ... (SP and preparation of a study for corridor lines)
R.23.1	Ormož–Središče–national border	Upgrade of SV devices, increase of axis load
R.23.5	National border–Rogatec–Grobelno	Upgrade of stations and ETCS regional
R.23.6	National border–Imeno–Stranje	Upgrade of stations and SV devices (spring points)
R.23.7	Maribor–Prevalje–national border	Maribor–Ruše section: electrification, 2nd track upgrade of SV and stations
R.23.8	Ljutomer–Gornja Radgona	Upgrade of stations and SV devices (points)
R.23.9	National border–Lendava	
R.23.10	Prešnica–Podgorje–national border junction	
R.23.11	Jesenice–Sežana	Upgrade of stations, upgrade of SV devices (potential APB)
R.23.12	Šempeter pri Gorici–Vrtojba	
R.23.13	Prvačina–Ajdovščina	
R.23.14	Kreplje–Repentabor–national border junction	
R.23.15	Sevnica–Trebnje	Electrification and increase of axis load (possibility of a bypass line)



Code	Measure	Description of measures
R.23.17	New regional lines	E.g. Lendava–Beltinci, Ljubljana–Vrhnika, Velenje–Dravograd, Gornja Radgona–national border–Austria, etc.
R.23.2	National border–Metlika–Ljubljana	Ljubljana–Grosuplje section: APB, upgrade of stations, construction of new stations, ERTMS, 2nd track, Ljubljana–Novo Mesto section: electrification (possibility of direct train operation on the Revoz–Port of Koper line; upgrade of the Ljubljana–Trebneje section: establishment of a bypass line, measures must be harmonised with the planned development LRH)
R.32.1	Changes and amendments to the multi-annual contract for passenger transport	As per Regulation 1370/2007 of the European Parliament and of the Council of 23 October 2007 on public services of rail and road passenger transport and repealing Council regulations (EEC) Nos 1191/69 and 1107/70 with SŽ Potniški promet d.o.o., the Republic of Slovenia has signed a contract No 3/2010-2019 on the implementation of the mandatory public utility service of transporting passengers and regional cross-border traffic for the 2010–2019 period. The contract is based on an annual extent of services which is determined by timetable and is expressed with the number of train kilometres. Changes and amendments include developmental elements of railway passenger transport according to the needs of passenger in terms of sustainable mobility, environmental goals and in relation to infrastructural measures.
R.33.1	Changes and amendments to the multi-annual contract for passenger transport	The Republic of Slovenia has signed a three-year contract with the operator of public railway infrastructure, which provides safety, maintenance and improvement of quality of infrastructural services. The share for an operator is also foreseen as a stimulation for -quality and efficient management of public railway infrastructure. The adjustment of the methodology for implementing the public utility service of maintaining and managing public railway infrastructure and the preparation of 10-year programmes of maintaining and a contract which will provide a stable source for maintaining and managing public railway infrastructure and stimulations for an efficient and quality implementation are foreseen
R.7.1	Pragersko–Hodoš–national border: construction of the 2 <sup>nd</sup> track	Ormož–Murska Sobota, Murska Sobota–Hodoš–national border
R.9.1	Pragersko–Maribor: upgrade	Upgrade of SV and other devices, to provide the train transport in both directions (extension of useful track lengths, grade-separated access on infrastructure, trapezoidal track connections, etc.); upgrade of SV devices and introduction of the ETCS system of level 2 or APB
R.10.3	Šentjur–Pragersko: introduction of APB	APB is provided until the introduction of ETCS 2
R.10.4	Celje–Pragersko: upgrade of stations	Extension of useful lengths of station tracks, 740 metres, grade-separated access to platform infrastructure
R.11.1	Pivka–Ilirska Bistrica–Šapjane: upgrade of the track	Enhancing the axis load to D4 category, upgrade of stations or TEN-T standard, upgrade of catenary and PSS; change of voltage – harmonisation with the Republic of Croatia (SP and preparation of the study for corridor lines)
R.21.1	ERTMS	The project is related to the project of electrification R.22.1, solutions will be presented in a joint study
R.22.1	Change of the catenary voltage system	The project is related to the project of electrification R.21.1, solutions will be presented in a joint study, to be harmonised with the Energy Directorate
R.22.2	Electrification of regional lines	
R.24.1	Harmonising the legislation	Review and harmonisation of the legislation, whereby minimum required standards must be taken into account
R.31.1	Adjustment of the methodology for calculating the fee	Measures to stimulate the transport provider to optimise the transport, prevention of the introduction of passenger transport user fee
R.33.2	Optimisation of the organisational structure of the railway system	Slovenia has a relatively diversified organisational structure of the railway system and division of jurisdiction and tasks between state authorities, agencies and operator



Link between measures	Preparation – Time schedule	Execution – Time schedule	2016	2017	2018	2019	2020	2021	2022	2023 - 2030	after 2030	2016	2017	2018	2019	2020	2021	2022	2023 - 2030	after 2030
R.22.2, R.23.2, U, R.39	by 2016	after 2030																		
R.22.2, R.23.16, U.3.1, U.3.2, R.4, R.39	2016–2018	after 2022																		
R.2, R.3, R.4, R.5, R.6, R.9, R.10, R.22.2, R.23.2, R.23.3, R.23.16, R.23.17, R.34, R.38, R.40, R.44.	2018	Permanent measure																		
All measures	2018	Permanent measure																		
R.1.4, R.39																				
R.1.4, R.21, U.12.1, R.39																				
R.21	2016																			
R.39	2017																			
R.1.4, R.21, R.39																				
R.22.1	2016																			
R.21.1																				
R.23, U, R.21.1, R.39	2016–2018																			
	2016																			
Continuously																				
Optimisation of the organisational structure	2018																			

Code	Measure	Description of measures
R.35.1	The state adopts the measures to promote (help) the transport provider in efficient drawing of EU funds for upgrading the rolling stock or purchasing the equipment.	It applies for the installation of the ERTMS system on rolling stock
R.36.1	Review of legislation and adjustment of guidelines with the aim of rationalisation	
R.37.1	Model for managing and maintaining the infrastructure	Planning of maintenance by using modern models based on real data
R.37.2	Comparison with EU	A study of price comparison in the EU Member States is prepared
R.38.1	Within the scope of concrete PN for a greater role of PPT in the RS (emphasis on larger agglomerations)	
R.39.1	Operational programme for noise	Preparation of expert bases for operational programmes, implementation of studies and preparation of projects
R.39.2	Recommendations for reducing environmental impacts	The recommendation for a comprehensive assessment of environmental impacts must be taken into account when planning. Investments in the existing infrastructure connections have priority over the construction of new routes. Interventions in agricultural and forest land must be reduced to the minimum when siting transport infrastructure. Railway infrastructure should not be sited on coastal land. Infrastructure corridors should not be integrated in cultural heritage areas and exceptional landscape areas and landscapes with distinctive features at the national levels. In siting railway infrastructure, it is necessary to avoid siting the facilities in Natura 2000 areas.
R.40.2	Logistics centres	The state adopts the measures to increase (stimulate) logistics activity, e.g. Ministry of the Economy provides co-funding and MZI provides suitable accesses.
R.41.1	It is included in the project preparation, if necessary, reasonable and useful	
R.42.1	Guidelines	Preparation of the spatial plan and guidelines
R.43.1	Recommendations or instructions that must be reasonably taken into account in project preparations on PRI according to need	In all phases of project preparation
R.44.1	Recommendations or instructions that must be reasonably taken into account in project preparations on PRI according to need	In all phases of project preparation
R.1.4	Phase 1 – Divača–Ljubljana: line upgrade	Determination of the necessary measures of upgrade of TEN and other TEN network sections (upgrade of the line, catenary, stations, APB/ETCS; ENP, etc.); upgrade of the Rakek–Postojna line, LC Rakek, measures to enhance the capacity
R.2.1	Zidani Most–Dobova: upgrade and arrangement of Zidani Most hub	Measures to provide train transport in both directions, upgrade of stations (expansion of useful lengths, grade-separated access to platform infrastructure, etc.), arrangement of NPR; introduction of ECTS, etc. (SP and preparation of the study for corridor lines)

Link between measures	Preparation – Time schedule	Execution – Time schedule	2016	2017	2018	2019	2020	2021	2022	2023 - 2030	after 2030	2016	2017	2018	2019	2020	2021	2022	2023 - 2030	after 2030
R.21																				
	2016																			
	2017–2019																			
	2017–2019																			
R	Continuously																			
	2016–2022																			
	Continuously																			
All measures	Continuously																			
All measures	2016																			
All measures	Continuously																			
All measures	Continuously																			
R.2.1, R.5.1, R.7.1, R.9.1, R.11.1, R.21, U.14.6, R.39	2016–2017																			
R.1.4																				

## Annex 8: Dynamics – Sustainable mobility

Code	Measure	Description of measures
U.31.1	Introduction of the integrated ticket system in the RS	Introduction of a single integrated ticket system that foresees harmonised timetables, tariffs and settlement systems between transport operators, good management of PPT, providing information to passengers and promotion of PPT
U.31.2	Establishment of the IPTT operator at the national level	Integrated public passenger transport requires good planning, management and control of PPT. The Republic of Slovenia establishes an operator that will take care of the PPT planning, harmonisation of timetables between transport operators, settlements between transport operators that will implement integrated lines and transports, control, providing information to passengers and promotion of the use of PPT. The operators must have all relevant system tools and staff
U.34.1	Establishment of the IPPT operator	The establishment of the IPPT operator is implemented within the measure U. 31 to provide a suitable planning, management and control of the system with a suitable organisation, qualified staff and control
U.39.1	Comprehensive transport strategies	The purpose of tenders is to establish sustainable planning of transport in Slovenian municipalities with prepared comprehensive transport strategies (CTS). The prepared CTS is a precondition for the municipalities to stand as a candidate for the public tender to obtain non-refundable funds for the measures stated below
U.41.1	Preparation of guidelines to reduce the sensitivity of the transport system to extreme weather	
U.33.1	Introduction of integrated cyclic timetables	The project "IPPT introduction in the Republic of Slovenia" foresees the harmonisation of timetables between individual modes of transport (railway passenger transport, public line intercity passenger transport, city passenger transport) that will provide the timetables to supplement each other and support the best offer for passengers and promote the use of modes of transport which have a priority on a specific route
U.32.1	Transport on demand	In the countryside and areas of dispersed population where line transport is not economically viable, on call transport is provided to the nearest transfer points or municipal centres. On call transport is implemented according to pre-determined lines and pre-determined departures which are carried out only if there is a demand for transport
U.32.2	Transport on demand for the physically disabled	Transport on demand for physically disabled people is organised according to good practices of non-governmental disability organisations that provide their members such service. The offer of transport is divided between individual organisations and the environments where they operate. The introduction of a single system would increase the mobility of people with special needs and provide them a possibility to be more equally integrated in all activities related to work and spare time
U.36.2	IPPT portal	The information portal for passengers that will provide all information on timetables, PPT advantages and will also be a portal for stating an opinion on PPT
U.39.7	Educating and awareness-raising activities	Educating and awareness-raising activities on sustainable mobility will be directed to different target groups: from kindergartens, primary schools, secondary schools, students to the adult car drivers and different professional groups of the public
U.12.1	P + R for the Maribor area with gravitational hinterland	
U.11.1	P + R for the Ljubljana area with gravitational hinterland	
U.39.2	Pavements, bicycle infrastructure, P + R system, PPT stops	Arrangement of safe accesses to PPT stations and stops, arrangement of stands and overhanging roofs for bicycle parking, P+R system, PPT stops, pavements, cycling paths
U.39.3	Promotion of walking	Preparing of the national strategy to promote walking. Norms and standards for pedestrian zone

	Link between measures	Preparation – Time schedule	Execution – Time schedule	2016	2017	2018	2019	2020	2021	2022	2023 - 2030	after 2030	2016	2017	2018	2019	2020	2021	2022	2023 - 2030	after 2030
		2016	2016																		
		2016	2016																		
	U.31		2016																		
			2016																		
	All measures	2016	2016																		
	U.31	2016	2017																		
	U.31, U.33	2016	2018																		
		2016	2018																		
	U31, Ro.3, Ro.12.1, Ro.12.2	2016	2016–2017																		
	U.36	2016–2019	2016–2019																		
		2016–2020	2017–2019																		
		2016–2020	2017–2020																		
	U.11, U.12, U.13, U.14, U.16, U.17	2016, 2017 and 2018	2017–2020																		
	U.39.1, U.39.2.	2016, 2017	2017–2020																		

Code	Measure	Description of measures
U.13.1	P + R at public passenger transport stations and stops	A single system for managing the existing parking areas according to the P+R principle, methods of arranging P+R systems, payments, suitability of land available for P+R system with proposals of measures, whereby: within the scope of intermodal points, the P+R system must also be determined at the national level, intermodal points and P+R system must be categorised (e.g. according to the volume of transfers, offer of parking places, programme arrangement (e.g. a wider commercial and other offer, a narrower commercial and other offer, without additional offer)), study microlocational possibilities to introduce the P+R system and accesses, design simple and comfortable transfers
U.39.5	Preparation of mobility plans	Different institutions prepare their own mobility plan according to the specifics of their location, travel habits and possibilities of a sustainable arrival at work and school and promote the changing of travel habits of their employees
U.39.6	Green city logistics, sustainable urban strategies, P+R system, limiting the transport in city centres for private transport and measures in the field of air quality	Green city logistics; cities will determine the policy in the field of goods supply that will stipulate the conformity of delivery vehicles with environmental standards, time frames of delivery and promote alternative solutions in terms of the specifics of location in city centres Limiting the transport in city centres for private transport: a city determines the limits of private vehicle access to wider or narrower transport centre on the basis of different criteria, such as vehicle emission standards (environmental zones) or closures of individual areas. In selected cities, the measures could be supported through a mechanism of comprehensive territorial investments
U.3.1	Upgrade of SV devices Ljubljana–Grosuplje	
U.3.2	Upgrade of Ljubljana Rakovnik, Škofljica, Grosuplje and Šmarje-Sap stations	
U.4.1	Connection with eco-friendly minibuses (bus shuttle)	Studying the connection with eco-friendly minibuses
U.14.5	Upgrade of the Ljubljana–Litija section	Upgrade of SV devices, arrangement of additional, trapezoidal track connections, upgrade or arrangement of Litija, Laze, Kresnice stations and Jevnica stop
U.14.6	Upgrade of Ljubljana–Logatec section	Additional trapezoidal track connections to be constructed (Brezovica station, Preserje, Verd and Logatec), upgrade of Brezovica, Borovnica, Verd and Logatec stations, introduction of APB or ERTMS at level 2, upgrade and complete the power supply of stations, provide a suitable length of station tracks
U.35.2	Modernisation of the vehicle fleet	Bus operators have 1,100 buses nominated for implementing public utility service of passenger transport. The modernisation of the vehicle fleet will be included in a tender to grant multi-annual concessions to implement a public utility service for a quick change of means of transport that are worn out and irrational in terms of comfort and passenger safety, environmental demands and rational operation. As per the conditions and lines, a gradual transfer to technologies is foreseen
U.39.4	Measures of sustainable parking policy	By limiting the parking in city centres, financial policy of more expensive parking in centres and cheaper parking on the city outskirts and P+R system, the traffic volume in cities is managed
U.39.8	Application of modern technologies for efficient mobility management	Numerous mechanisms are available, e.g. monitoring of vehicles in real time with displays at the PPT stops, information portals for passengers with a possibility of using mobile phones
U.37.1	Promoting non-profit groups in preparing the promotion to purchase vehicles on alternative fuels	
U.1.1	Upgrade of SV devices	
U.1.2	Upgrade of Ljubljana Črnuče, Domžale and Jarše Mengeš stations, the stops must be suitably equipped	
U.1.3	Implementation of a partial two-track arrangement on the Ljubljana Šiška– Domžale line	

Link between measures	Preparation – Time schedule	Execution – Time schedule	2016	2017	2018	2019	2020	2021	2022	2023 - 2030	after 2030	2016	2017	2018	2019	2020	2021	2022	2023 - 2030	after 2030
R32, R34, R40	2015–2016	2017–2025																		
U.31, U.33	2019	2018–2019																		
U.11, U.12, U.13, U.15, U.16, U.40.1	2017–2020	2018–2019																		
R.23.2	2016–2018	2018–2022																		
R.23.2	2016–2018	2018–2022																		
	2016–2018	2018–2022																		
R.5.1	2016–2018	2018–2022																		
R.1.4	2015–2018	2018–2022																		
U.31	2016	2019–2025																		
U.11, U.12, U.13	2018	2019–2020																		
U.40.1	2019–2020	2019–2020																		
		2020–2030																		
R.23.3	2016–2018	by 2025																		
R.23.3	2016–2018	by 2025																		
R.23.3	2016–2018	by 2025																		

Code	Measure	Description of measures
U.2.1	Upgrade of SV devices	
U.2.2	Upgrade of Medvode, Škofja Loka, Kranj stations, construction of additional stations in Bitnje	
U.38.2	Monitoring of public transport in real-time within the scope of NTMC	Monitoring of timetables, arrivals, delays of public transport in real time and display on the portal or applications
U.1.4	Implementation of end solution (complete two-track arrangement)	Solutions in compliance with a comprehensive study of the development of stations and radial lines in the Ljubljana railway hub
U.3.3	Implementation of end solution (complete two-track arrangement)	Solutions in compliance with a comprehensive study of the development of stations and radial lines in the Ljubljana railway hub
U.14.3	Upgrade of SVTK devices at the Ljubljana hub	
U.14.4	The Tivoli Arc Gradnja Tivolskega loka	
U.14.2	Rearrangement of the Ljubljana main station	The upgrade of the existing station tracks on the south side of the station, upgrade of station tracks and track connections on the northern part of the station, upgrade of tracks 50 and 51 and removal of cleaning facility and wagon washing station, construction of additional platforms, increase of the availability of longer platform tracks
U.2.3	Construction of an additional track on the Ljubljana–Kranj section	Solutions in compliance with a comprehensive study of the development of stations and radial lines in the Ljubljana railway hub
U.4.2	Examining the appropriateness of other connections (e.g. railway connection)	Examining a link with eco-friendly minibuses or railway connection, establishing the economic viability of solution and proposing a suitable solution
U.14.1	Comprehensive study of the development of stations and radial lines in the Ljubljana railway hub	The study to solve urban traffic of the Ljubljana hub
U.15.1	Evaluation of the possibility of introducing yellow lanes for large cities	When preparing comprehensive transport strategies, the municipalities reasonably include the introduction of yellow lanes
U.16.1	Intermodality of transfer points	Within the scope of measures U.13, U.14, the analysis of other types of transfer points is prepared to increase the efficiency of the system and attractiveness of the public passenger transport offer. Intermodal points must be categorised (quantity, size, transport and non-transport equipment)
U.17.1	Establishment of a national bicycle network	Daily commuters and remote connections
U.17.2	Categorisation of the bicycle network	
U.17.3	Establishment of a single platform at the state level to arrange, signalise and categorise national bicycle connections and pertaining equipment	
U.35.1	The state adopts the measures to promote (help) transport providers in efficient drawing of EU funds for upgrading the vehicle fleet	
U.36.1	Providing information, promoting and awareness-raising of the public through the portal or public forum which will operate within the scope of NTMC on novelties and advantages of using specific public transport due to the use of an integrated ticket, adjusted timetables, P+R, information on the status	
U.38.1	Collection and processing of data in the data model within the scope of NTMC	
U.40.1	Transport management within the scope of NTMC	Transport management with the assistance of a dynamic simulation model which will provide a smooth flow of traffic and thus a reduction of emissions
U.40.2	Determining the effect of individual measures on the reduction of pollution through the transport model within the scope of NTMC	Evaluation of individual measures with a transport model



Link between measures	Preparation – Time schedule	Execution – Time schedule	2016	2017	2018	2019	2020	2021	2022	2023 - 2030	after 2030	2016	2017	2018	2019	2020	2021	2022	2023 - 2030	after 2030
R.3	2016–2018	by 2025																		
R.3	2016–2020	by 2025																		
Ro.32.4		by 2020																		
U14.1, R.23.3	2022–2025	by 2025																		
U14.1, R.23.2	2022–2025	by 2025																		
R.4.2	by 2020	after 2020																		
R.4.1	2016–2020	after 2020																		
R.4.2	2016–2018	after 2022																		
U14.1, R.3.2	2016–2022																			
U14.1	2022–2025																			
U.1, U.2, U.3, U.4, R.4, R.22, R.23.17	2016–2018																			
	2016–2020																			
U.11, U.12, U.13, U.14, R.40, Ro.34	2016–2018																			
U16.1, U13.1	2016																			
U.17.1	2016–2017																			
Ro.35, U.4.1																				
Ro.32.1																				
Ro.32.2																				
Ro.32.4																				
Ro.32.3																				

## Annex 9: Dynamics – Air transport

Code	Measure	Description of measures
A.2.2	Renovation or modernisation of airport infrastructure	Renovation or modernisation of airport infrastructure will be implemented according to development documents and strategies of the Republic of Slovenia and business plan of the airport operator
A.1.4	Renovation and modernisation of air transport navigation services at the airport	Renovation and modernisation of air transport navigation services infrastructure will be implemented according to the development documents and strategies of the Republic of Slovenia and business plan of the operator of air transport navigation services
A.2.3	Renovation and modernisation of air transport navigation services infrastructure at the airport	Renovation and modernisation of air transport navigation services infrastructure will be implemented according to the development documents and strategies of the Republic of Slovenia and business plan of the operator of air transport navigation services
A.3.3	Renovation and modernisation of air transport navigation services infrastructure at the airport	Renovation and modernisation of air transport navigation services infrastructure will be implemented according to the development documents and strategies of the Republic of Slovenia and business plan of the operator of air transport navigation services
A.11.1	Mzi will actively monitor and implement the activities in the field of alternative fuel development in aviation at the international level	Cooperation in ICAO, ECAC, EUROCONTROL, etc.
A.21.1	Intermodal passenger hubs	According to the results of the IPPT introduction in the Republic of Slovenia, important transfer points are determined which are used as intermodal passenger hubs.
A.21.2	Logistic centres	The state adopts the measures to increase (stimulate) logistics activity, e.g. Ministry of the Economy provides co-funding of activities and MZI provides suitable accesses.
A.1.1	Development of airport infrastructure	Further development of airport infrastructure will be implemented according to the NSP which is being prepared. The development will also take into account the needs of the Republic of Slovenia and the airport operator
A.1.3	Renovation or modernisation of airport infrastructure	Renovation or modernisation of airport infrastructure will be implemented according to development documents and strategies of the Republic of Slovenia and business plan of the airport operator The current priority is to eliminate bottlenecks
A.2.1	Development of airport infrastructure	Further development of airport infrastructure will be implemented according to the NSP which is being prepared. The development will also take into account the needs of the Republic of Slovenia and the airport operator
A.3.1	Development of airport infrastructure	Further development of airport infrastructure will be implemented according to the NSP which is being prepared. The development will also take into account the needs of the Republic of Slovenia and the airport operator Currently, final works are executed within the European project of modernising the airport infrastructure
A.3.2	Renovation or modernisation of airport infrastructure	Renovation or modernisation of airport infrastructure will be implemented according to development documents and strategies of the Republic of Slovenia and business plan of the airport operator
A.10.1	Renovation and modernisation of the infrastructure of air transport navigation services	Renovation and modernisation of the air transport navigation services infrastructure will be implemented as per annual and five-year business plans of the provider of air transport navigation services, taking into account the plans to implement the Functional Airspace Blocks of Central Europe for a reference period which are prepared as per Implementing Regulation (EU) No 390/2013 on the plan of implementing the air transport navigation service and network function
A.1.2	Relocation of main road	

	Link between measures	Preparation – Time schedule	Execution –Time schedule	2016	2017	2018	2019	2020	2021	2022	2016	2017	2018	2019	2020	2021	2022	2023-2030	after 2030
		-	2016																
		-	-																
		-	-																
		-	-																
	Ro.35.10	-	-																
	U.31, U.33	Continuously	-																
		-	-																
	by 2020	-																	
		-	-																
	by 2020	-																	
	Ro.17.5	by 2020	-																
		-	-																
		-	-																
	Ro.43.3.1.2		2017–2018																

## Annex 10: Dynamics – Water-borne transport

Code	Measure	Description of measures
M.12.1	National single window for maritime transport	Implementation of Directive ES/2010/65
M.13.3	Purchase of a large vessel (9–10m)	The new vessel is needed for successful operations at sea.
M.34.1	New VTS jobs (according to the needs)	Employment of new operators for VTS centre operation
M.36.1	Renewal of legislation in the field of navigating inland waters	New MZI-DI jobs, Maritime Division
M.37.3	Reorganisation of URSP – maritime inspection	Employment of new inspectors for inland waters navigation (according to actual needs)
M. 35.2	Purchase of eco-friendly vessel	A vessel is needed for SVOM service operation
M.37.1	International regulations	Implementation of EU directives, CEVNI and OSSB regulations
M.37.2	Reorganisation of URSP – branches	Establishment of 3 URSP branches for inland navigation
M. 34.5.	Purchase of a derrick and upgrading the simulator	The purchase of equipment to implement seafarer training in survival techniques and to manage rescue vessels and upgrade of simulators.
M.34.2	New jobs related to the control of concession contract for the Port of Koper (according to need)	Jobs related to implementing the provisions of the concession contract
M. 34.4	New jobs according to need (maritime inspectors, port captain)	New jobs (inspector) to control working and accommodation standards of seafarers, as per MLC convention and for new tasks related to sampling the fuels as per MARPOL
M.3.10	Construction of the off-port terminal	Depending on the 2nd track construction dynamics, the construction of the off-port terminal can be a short-term or medium-term solution
M. 13.5	Hydrography	Hydrographic measurements of the Slovenian sea, keeping of hydrographic bases and charts and their distribution to users, technical assistance and advise of MZI in the field of Hydrography and Cartography.
M.13.2	Comprehensive maritime control	Within the scope of OP EMFF – Implementation of measures of the sixth priority task of the Union – promoting the implementation of comprehensive maritime policy within the scope of the Operational Programme for the Implementation of the European Maritime and Fisheries Fund in the Republic of Slovenia for the 2014–2020 period
M.11.1	Supplying electric energy to ships from land	Provided by SODO as a distributor (10–20 mW)
M.13.1	Upgrading the VTS equipment	The upgrade of the existing software to control maritime transport and the purchase of VTS sensors, CCTV camera and visibility sensor
M.35.1	Cleaning of the sea	New SVOM jobs
M.34.3	New business premises of URSP and other state authorities operating at sea	Placing civil maritime authorities in one location by establishing a single system to control the sea and maritime transport
M.1.1	Extension of Pier I – Southern part	Construction of shore and Pier I defined in NSP
M.3.1	Upgrade and rearrangement of berths at Pool I	Rearrangement of the coast at the southern part of Pier I and arrangement of the eastern coast (berths and deepening)
M.3.4	Upgrade and rearrangement of berths at Pool III	RO-RO berths in Pool III
M.3.5	Improvement of accessibility to the port (last mile)	New entrance points to the port and truck terminal (Sermin, Bertoki)
M.5.1	Construction of the passenger terminal facility	

	Link between measures	Preparation – Time schedule	Execution –Time schedule															2023-2030	after 2030
		by 2016	2016																
		by 2016	2016																
			2016																
	M.37	2016	2016																
	M.34	by 2016,	2016 2016																
		2016	2017																
	M.34	2018	2020																
	M.34	2018	2020																
		2016	2016 by 2022																
			2016, 2017																
		2016, 2017, 2018																	
	R 40	2016	2016–2017																
			2016–2022																
		2016	2017–2020																
	Ro.35.2, Ro.35.5, Ro.35.9., Ro.35.10		2020–2025																
		by 2016	by 2016																
	M.11		by 2016																
		by 2016	by 2017																
		by 2016	by 2020																
		by 2016 and 2016	by 2020																
		by 2016	by 2020																
		by 2016, 2016, 2019	by 2020																
		2015	by 2020																

Code	Measure	Description of measures
M. 6.1	Agreement with Croatia to re-classify the Sava River into an international waterway (waterway category 4)	International agreement
M.4.1	Deepening of the ship canal into Pool II	
M.1.2	Extension of Pier I – Northern part	Construction of shore and Pier I defined in NSP
M.3.2	Upgrade and rearrangement of berths at Pool II	Rearrangement of the coast at the southern part of Pier II and in Pool II (berths and deepening)
M.3.3	Upgrade and rearrangement of berths at Pool II	Berth for tankers at the beginning of Pier II
M.3.6	Improvement of the internal port transport (also in terms of new entrance points and berths)	Upgrade of the road-railway internal network in the area of the port
M.3.7	Increasing storage capacities	Closed storage capacities (tanks, new warehouses)
M.3.8	Increasing storage capacities	Open storage capacities (containers, cars, wood)
M.3.9	Expansion of port area	Acquisition of new areas – expansion of the port area/containers in the hinterland
M.2.1	Arrangement of berths at the beginning of Pier III	Construction of berths and coast with deepening
M.1.3	Extension of Pier II	Construction of shore and Pier II defined in NSP
M. 13.4.	Maintenance of facilities for navigation safety	Maintenance of facilities for safety
M.4.2	Deepening of entry canals in the Port of Koper	
M.6.2	Establishment of a waterway with the construction of HPP on the Lower Sava River and HPP chain in RH	Construction of accumulation pools suitable for a waterway, the reservation of space for ship launching facilities on the HPP barriers.
M.6.3	River port at Obrežje	Preparing design and investment documentation
M.6.4	Ship launching facilities	Preparing design and investment documentation
M.2.2	Construction of Pier III	Construction of Pier III
M.11.2	Providing suitable infrastructure to establish alternative fuels	GAINN4MOS project – Establishing the pilot port infrastructure to charge ships and towing vessels with natural gas and the use of natural gas for port machinery
M.11.3	Providing suitable infrastructure to establish alternative fuels	POSEIDON MED project – a study on the possibility of LNG use as an alternative fuel for the Port of Koper; Study on the possibility of electric power supply to charge ships from land.
M.21.1	Intermodal passenger hubs	According to the results of the IPPT introduction in the Republic of Slovenia, important transfer points are determined which are used as intermodal passenger hubs.
M.21.2	Logistics centres	The state adopts the measures to increase (stimulate) logistics activity, e.g. Ministry of the Economy provides co-funding and MZI provides suitable accesses.

Link between measures	Preparation – Time schedule	Execution –Time schedule	2016	2017	2018	2019	2020	2021	2022	2016	2017	2018	2019	2020	2021	2022	2023-2030	after 2030
		by 2020																
	by 2022	by 2022																
M.1.1.	2020	by 2025																
		by 2025																
	do 2016	by 2030																
	2016-2022	by 2030																
	2016-2022	by 2030																
	2016-2022	by 2030																
	2016,2018, 2021	by 2030																
		by 2030																
	2016	by 2030 (50 EUR) after 2030 (150 EUR)																
		by2022																
		after 2020																
	by 2020	after 2020																
	by 2020	after 2020																
	after 2020	by 2020																
	after 2022	after 2030																
Ro.35.2, Ro.35.5, Ro.35.9	by 2019																	
	by 2016																	
U.31, U.33	Continuously																	

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