

**REPUBLIC OF BULGARIA**



**MINISTRY OF TRANSPORT, INFORMATION  
TECNOLOGY AND COMMUNICATIONS**



# **OPERATIONAL PROGRAMME ON TRANSPORT 2007-2013**

**COORDINATION OF PROGRAMMES AND PROJECTS DIRECTORATE -  
MANAGING AUTHORITY OF THE OPERATIONAL PROGRAMME ON  
TRANSPORT 2007-2013**

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## **FOREWORD**

The major steps for preparation of the Operational Programme on Transport are defined with the Council of Ministers Decree No 171 from August 2002, amended by the Council of Ministers Decree No 12 from 19 January 2004.

According to the Council Regulation (EC) № 1083/2006 of 11 July 2006, laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999, the Sectoral Operational Programme on Transport is a part of the National Strategic Reference Framework (NSRF), which, on the basis of coordinated sequence of priorities, defines the strategy development of the transport sector for the period 2007 – 2013, with the aim to achieve the EU “Convergence” objective. The Operational Programme on Transport referred to as Sectoral Operational Programme on Transport (OPT) will be co-financed by the Cohesion Fund and the European Regional Development Fund.

The Sectoral Operational Programme on Transport is elaborated in pursuance of:

- Council of Ministers Decree №171/02.08.2002, amended by the Council of Ministers Decree №12/19.01.2004 concerning the establishment of Coordination Council on the National Development Plan/NSRF and the process of preparation of the programming documents concerning the participation of the Republic of Bulgaria in the European Union Structural Funds and the Cohesion Fund;
- Council Regulation (EC) № 1083/2006 ;
- Chapter 21 “Regional policy and co-ordination of structural instruments”.

*Preparation of the Sectoral Operational Programme on Transport:*

The preparation of OPT started in October, 2004, implementing the partnership principle between the key ministries, non-governmental organizations, employers’ organizations, socio-economic partners, academic circles, regional and local authorities, whose representatives are members of the Working Group, established with an Order of the Minister of Transport. The coordination of the preparation of OPT and its coherence with the other Operational Programmes and the National and European transport policies was achieved by the Coordination of Programmes and Projects Directorate – the Managing Authority of OPT in close cooperation with the Agency for Economic Analysis and Forecasting – Secretariat of the National Development Plan. The separate chapters of the OPT were elaborated, discussed and agreed with the members of the Working Group during eleven working sessions.

*Basic documents, used in the process of elaboration of the Sectoral Operational Programme on Transport:*

- National Strategic Reference Framework;
- White paper: “European Transport policy until 2010 – time to decide” and its revision 2006;
- The Report from the High Level Group I chaired by Karel van Miert and the Decision (EC) 1692/96 revised by the Decision (EC)884/2004;
- The Report from the High Level Group Chaired by Loyola de Palacio on Extension of the Major Trans-European Transport Axes to the Neighboring Countries and Regions, November 2005 and the Commission’s Communication 2007 February 7;
- Strategy for Development of Transport Infrastructure of the Republic of Bulgaria by 2015;
- National Strategy for Integrated Development of Infrastructure of the Republic of Bulgaria for the Period 2006-2015;
- Ten Year Development Plan for NRIC developed under Project “Railway Organizational Restructuring – Management Development of the Railway Infrastructure Company” by SYSTRA, CIE Consult, Railplan and Deloitte&Touche financed by PHARE programme 2002;

- Development of Strategy for Integration of the Bulgarian Railway Infrastructure into the European Intermodal Transport Network;
- Study to Improve Navigation on the Danube in Bulgaria and Romania, prepared by Frederic R. Harris B.V. financed by PHARE programme, December 1999;
- Strategy for development of the inland-waterway transport, sea transport and ports until the accession of the Republic of Bulgaria into the European Union;
- National ISPA Strategy – sector Transport;
- National environmental strategy for the period 2000-2006;
- National Environmental Strategy for the Period 2005-2014 (Action Plan);

The objective of the Operational Programme on Transport 2007 – 2013 is the development of the railway, road, waterborne and combined transport infrastructure in conformity with the transport policy of the European Union and the established requirements for development of the trans-European transport network in order to achieve sustainability of the Bulgarian transport system.

## ***I. CURRENT SITUATION IN THE TRANSPORT SECTOR IN THE REPUBLIC OF BULGARIA***

### ***INTRODUCTION***

The National Strategic Reference Framework of Bulgaria introduced a short and medium term vision for the country. By 2013 Bulgaria should become a country with a higher standard of living, based on a sustainable socio-economic growth during the process of full integration into the European Union. To achieve its vision, Bulgaria has two strategic medium-term goals:

- Strengthen the competitiveness of the economy to achieve high and sustainable growth;
- Develop human capital to ensure higher employment, income and social integration.

Transport policy may contribute to the achievement of both. The improvement of the major infrastructure, the organization of a sustainable transport system, such as this Operational Programme for transport proposes, may enhance the dynamism of the sector and provide a stronger basis for all human activities.

In accordance with the main objectives of European cohesion policy, developed in the Community Strategic Guidelines, The National Strategic Reference Framework of Bulgaria is developing a set of coordinated policies aiming to growth, employment, socio-economic, environmental and territorial cohesion.

The specific goals of the *national transport policy* should be directed towards sustainable development of the road and railway transport infrastructure of national, EU and cross-border importance, improvement of the maritime and inland waterway navigation, integration of the national transport network into the EU transport network, achievement of balance and development of links between different transport modes.

Achievement of these goals is a precondition for sustainable and balanced long-term economic growth. Development of the trans-European transport corridors, on the territory of Bulgaria will increase the passenger and cargo flows. Development of environmentally friendly transport infrastructure and construction of by-passes will contribute to the environment balance and improve quality of life in the cities and the regions.

### **1. Contribution of the transport sector to territorial integration of Bulgaria in European Union**

**From a geo-strategic point of view**, Bulgaria's favourable geographical location provides excellent conditions for bridging West and Central Europe with the Near East, West and Central Asia, as well as the north and the south of Europe. On the other hand, improving the transport connectivity with the neighbouring countries will lead to considerable amount of new opportunities for additional routes and changes in the old routes, which should lead to an optimization of the transit transport traffic.

The European transport policy, as presented in the so-called White Paper on "European transport policy for 2010: time to decide", and its revision 2006 focuses on the mutual dependency and equality between the different types of transport and on finding the right balance of transport with the goal of a higher level of efficiency, competitiveness, and more consideration towards the current environmental requirements.

The EU Member States must show a joint effort to improve the following parameters of the European transport system:

- Development of the Trans-European Transport network(TEN-T);
- Diversion/redeployment of cargo from the land (motor) transport to the rail, sea, and river transports;
- Development of a modern transport with the goal of reducing the number of private vehicles used and consequently reducing the carbon oxide emissions.
- Increase of the amount of private investment in the public transport sector.

### **The Trans-European Transport network (TEN-T)**

#### **The Pan European Corridors**

The favourable geographical location of the country can be seen clearly in the passage of five **Pan European Corridors** through the territory of the country: IV, VII, VIII, IX, and X.

The five Pan-European transport corridors that pass through the territory of Bulgaria, as determined at the Common European conferences of the transport ministers in Crete (1994) and Helsinki (1997) are:

#### **Pan-European Transport Corridor IV**

Dresden / Nurnberg – Prague – Vienne / Bratislava – Budapest – Arad – Bucharest – Constanta / Craiova – Sofia – Thessaloniki / Plovdiv – Istanbul

#### **Pan-European Transport Corridor VII**

The Danube River

#### **Pan-European Transport Corridor VIII**

Bari / Brindisi – Durres / Vlora – Tirana – Kafasan – Skopje – Sofia – Plovdiv – Burgas / Varna

+ the road link Ormenion – Svilengrad – Burgas, providing connection with Corridors IV, IX, and the Trans-European transport network;

+ Byala / Gorna Oryahovitza – Pleven – Sofia, providing connection with Corridors IV and IX;

+ Kafasan – Kapstiche / Kristalopigi, providing connection with the Trans-European transport network

#### **Pan-European transport corridor IX**

Helsinki – Saint Petersburg – Moscow / Pskov – Kiev – Ljubasevka – Chisinau – Bucharest – Dimitrovgrad – Alexandruopolis

Branch A: Odessa - Ljubasevka / Razdelna

Branch B: Kiev – Minsk – Vilnius – Claipeda / Kaliningrad

#### **Pan-European transport corridor X**

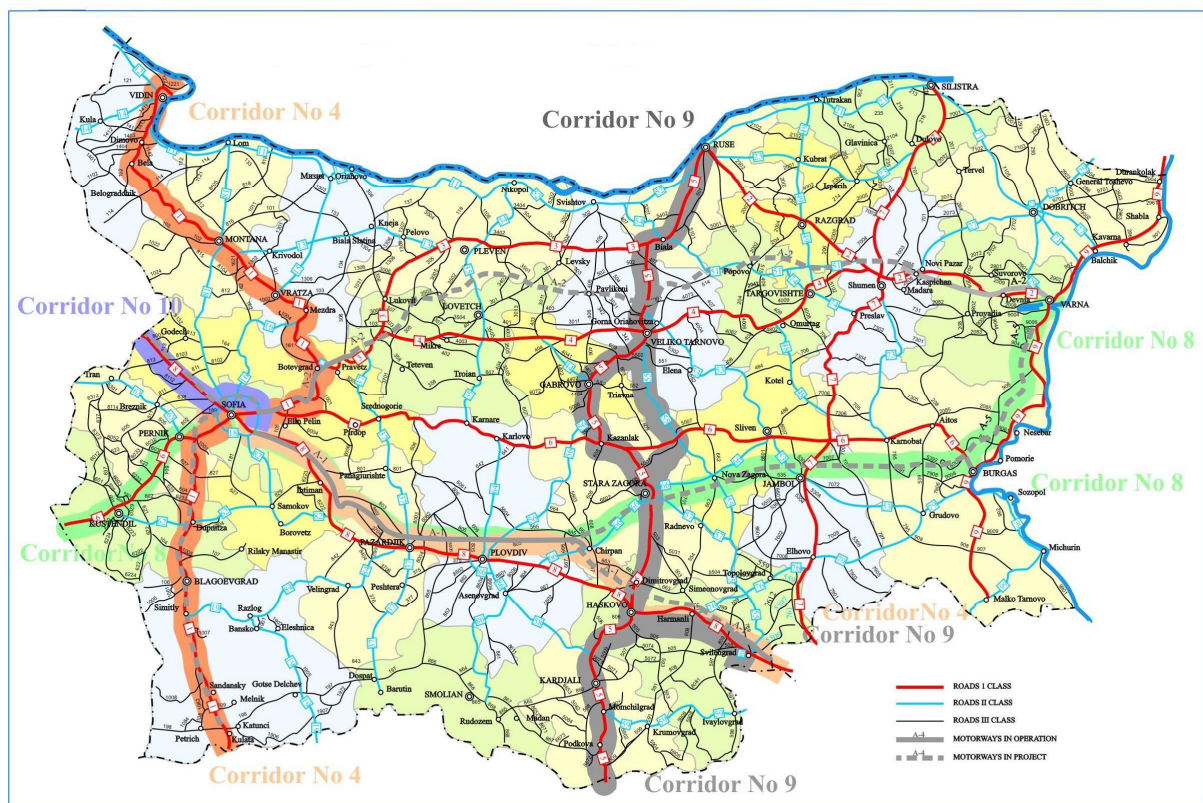
Salzburg – Ljubljana – Zagreb – Belgrade – Nis – Skopje – Veles – Thessaloniki

Branch A: Gratz – Maribor – Zagreb

Branch B: Budapest – Novi Sad - Belgrade

Branch C: Nis - Sofia (Dimitrovgrad – Istanbul through corridor IV)

Branch D: Veles – Prilep – Bitolja – Florina – Via Ignatia - Igoumenitza



This fact is a great benefit, as well as a major challenge, since it calls for a large annual amount of investment meant for improving, maintaining, and repairing the existing infrastructure, as well as constructing the needed missing routes.

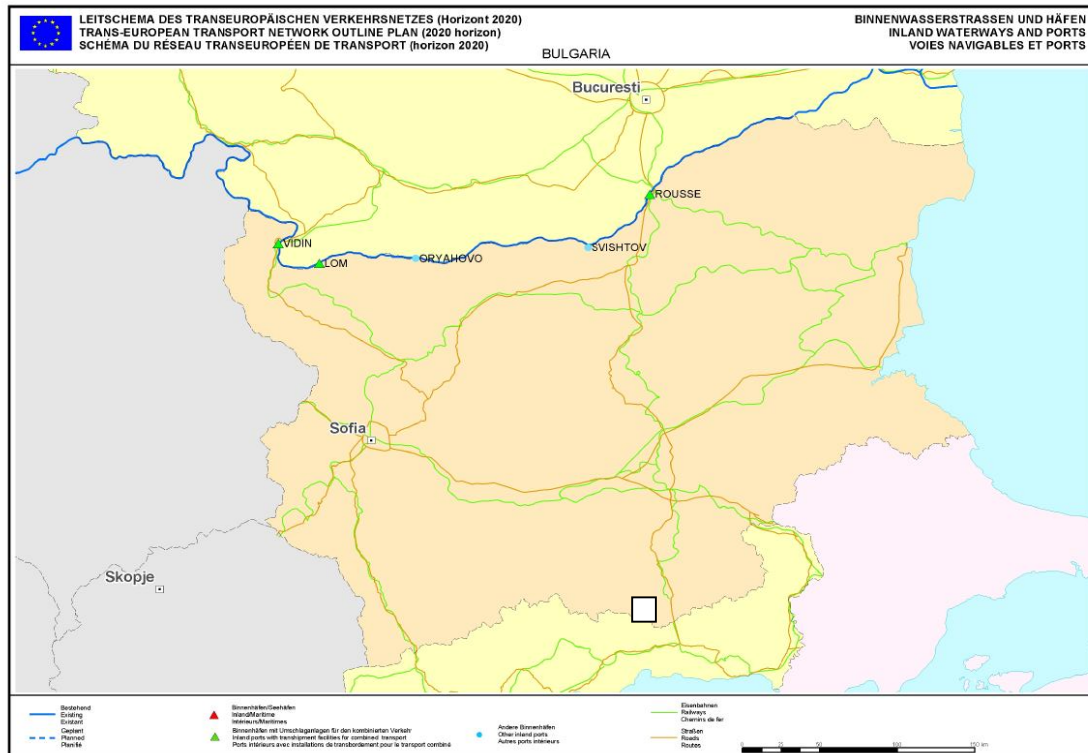
### *Trans-European Transport network*

The legal basis for the TEN-T is provided in the Treaty on the European Union. Under the terms of Chapter XV of the Treaty (Articles 154, 155 and 156), the European Union must aim to promote the development of trans-European networks as a key element for the creation of the **Internal Market** and the reinforcement of **Economic and Social Cohesion**. This development includes the **interconnection and interoperability** of national networks as well as access to such networks.

In accordance with these broad objectives, the Community developed the guidelines, a general reference framework for the implementation of the network and identification of projects of common interest. On July 1996 the European Parliament and Council adopted Decision № 1692/96/EC on Community guidelines for the development of the trans-European transport network (TEN-T). They comprises roads, railways, inland waterways, airports, seaports, inland ports and traffic management systems which serve the entire continent, carry the bulk of the long distance traffic and bring the geographical and economic areas of the Union closer together.

On April 2004 the European Parliament and the Council adopted a decision № 884/2004/EC\* which amending the above mentioned Decision № 1692/96/EC on Community guidelines for the development of the trans-European transport network (TEN-T).

The following schemes feature the rail, road, and inland waterways network integrated in the TEN-T in Bulgaria.



*TENT-T network*  
*Inland waterways*  
*Railways*





TENT-T network  
Roads

In 2003 The High Level Group I, chaired by Karel Van Miert **defined two major European transport axes to pass through the territory of Republic of Bulgaria**: Vidin – Sofia - Kulata (Corridor IV) and the Danube River (Corridor VII).

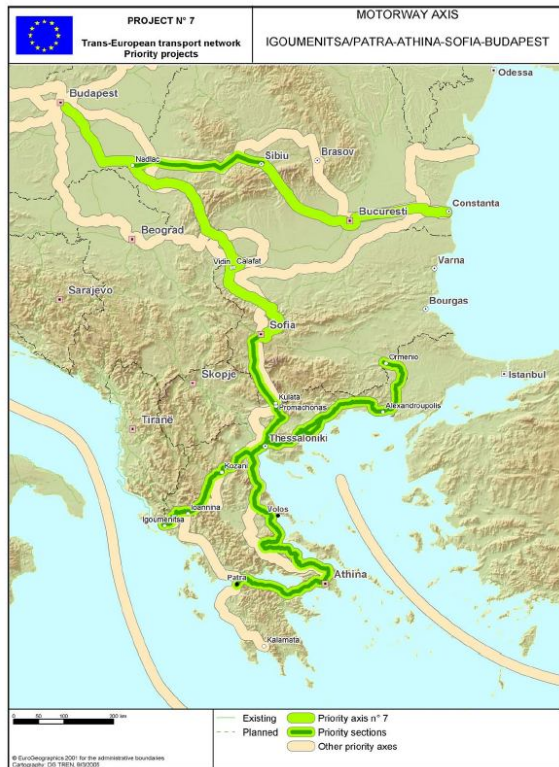
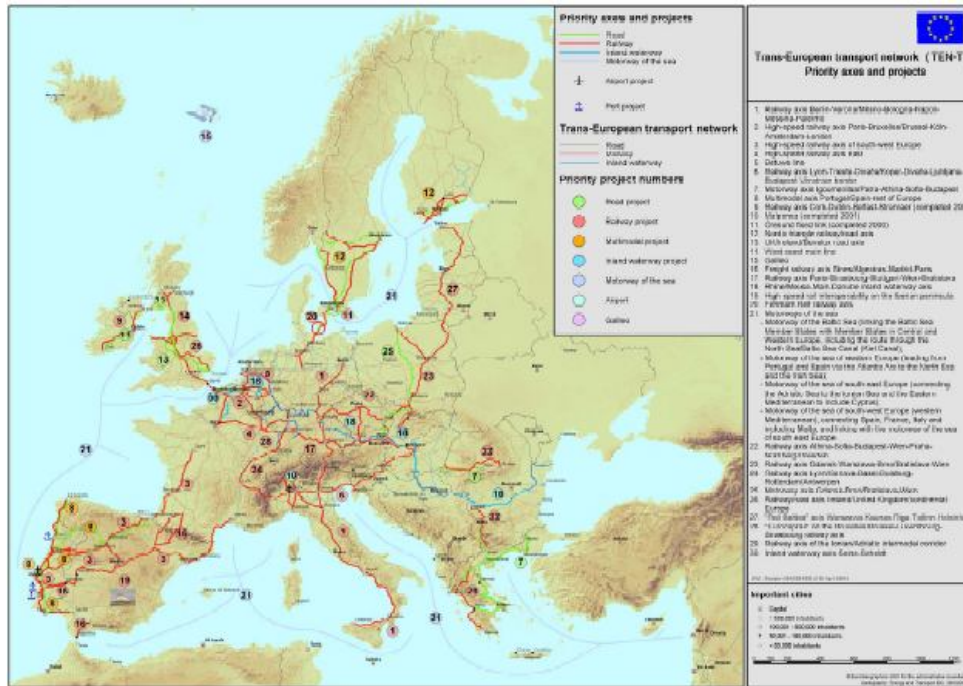
These two corridors are part of the **priority projects 7, 18 and 22** identified in the Decision (EC) 1692/96 revised by the Decision (EC) 884/2004, namely:

Project N° 7 - Igoumenitsa/Patra-Athens-Sofia-Budapest motorway axis, with the priority section in Bulgaria being Sofia-Kulata section.

Project N° 18 – Rhine/Meuse-Main-Danube inland waterway axis, with the priority section in Bulgaria being joint Bulgarian-Romanian section of the Danube River.

N° 22 - Athina – Sofia – Budapest – Vienna – Prague – Nürnberg/Dresden railway axis, with the priority section in Bulgaria being Sofia-Kulata section.

The Pan-European corridor IV is in consistence with the TEN-T priority axes 7 and 22, the Pan –European corridor VII is in consistence with the TEN-T priority axis 18.



Priority project 7





*Priority project 22*



*Priority project 18*

At the end of 2005 the High Level Group II chaired by Ms Loyola de Palacio presented the report on **extension of the major Trans-European transport axes to the neighboring countries** and regions. (and developed also in the "*Guidelines for transport in Europe and neighboring regions*", Com (2006) 726, &Com(2007) February 7). One of the identified in the report five transport axes pass through the territory of Bulgaria - **South Eastern Axis**, which links the EU through the Balkans and Turkey to the Caucasus and the Caspian Sea, as well as to Egypt and the Red Sea. Access links to Albania and FYROM, Iran, Iraq and Persian Gulf are also foreseen.

In reference with the Pan-European corridors, the main multimodal connections thus defined on the territory of Bulgaria are:

- The Pan-European Transport Corridor X– branch C, connecting Belgrade – Nis – Sofia, and then via Trans-European Transport Corridor IV – Istanbul – TRACECA;
- The Pan-European Transport Corridor VIII, beginning at the Italian ports Bari/Brindisi and passes through Durres/Vlora – Tirana – Skopje – Sofia – Burgas/Varna;
- The Danube River – The Sava River.

The right assessment of priorities in the short, medium, and long terms is vital for maximizing the expected profits. When evaluating those priorities, it is important to consider both the policy of the European Union on the Trans-European transport network (Decision (EC) 1692/96, revised by the Decision (EC) 884/2004) and the policies of the other neighbouring countries in the region. (Commission's Communication 2007, February 7).

Bulgaria will benefit by the construction of these transport connections. Considering the fact that the EU will focus its funds on the development of the major axes, as defined by the two high level groups, Bulgaria must focus its investment policy on the preparation and realization of projects situated along those major axes. However, if the implementation of the main transport projects is substantially delayed, there is a risk for the main traffic to be rerouted through the neighboring countries.

## **2. Contribution of the transport sector to employment**

*The social role of the sector* is in connection to the labor market and the employment in the transport sector.

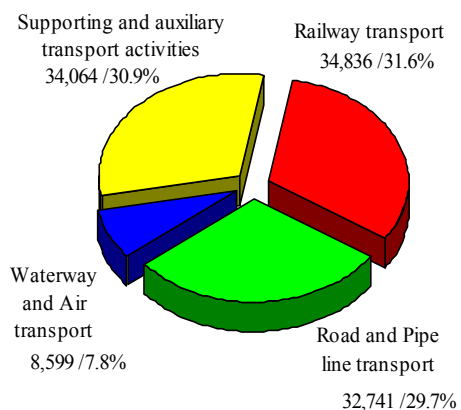
The transport sector provides **employment** of 163 072 people as of the end of 2003 and 161 971 as of the end of 2004.

The number of the employed persons under the Labor code and Civil Servants Law has been gradually decreasing (about 3.5-4.0% in the average per year after 1998) as a result of the optimum methods applied in the activity and private company entrance in the sector.

At the end of 2003 the share of the employed in the private transport sector has already reached about 61.5% of the total employed in the transport sector (44.9% in 1999).

At the end of 2004 the share of the employed in the private transport sector has already reached about 62.4% of the total employed in the transport sector.

Notwithstanding all that, this share remains considerably below the average for the country in the private sector: 101 067 employed in the private transport sector in 2004 compared to 2 488 915 employed in the total private sector for the same year. The total number of the employed in the transport sector for 2004 is 161 971 compared to the total number of employed for the same year which is 3 226 343 (5% employed in the transport sector of total employed).



The number of the employed has decreased mainly in the railway and air transport. From more than 84 000 employed in the railways in 1990, as of 2004 that number has gone down to 35 000

The elaboration of a short term strategy regarding the human resources development in the transport sector is an essential point related to the fact that the implementation of the major transport infrastructure projects under the OPT will have a great impact on employment rates not only during the construction phases but also on the business in Bulgaria at all. This issue is recognized as a great importance for the country and is included to be part of the General Transport Master Plan.

### 3. Contribution of the transport sector to competitiveness

*The transport is a key factor for the competitiveness of the national economy.* The progress in the transport sector is highly important for the international trade and tourism development.

The GDP value for 2005 is 45 000 mln. BGN, the GAV 37 000 mln. BGN, the economic growth reached 5, 5 % and the national debt was 32, 3 % of the GDP. For the same year the GDP per capita is 2 771 Euro. The share of the private sector contribution in the GDP reached 68, 2 %.

**Table: Gross Domestic Product and Gross Value Added**

Value in mln. BGN	2003	2004	2005
GDP	37 000	41 000	<b>45 000</b>
GVA	32 000	35 000	<b>37 000</b>

Source: NSI

Sustainable growth of the **foreign trade exchange** in actual value has been a main trend in the last five years. As a result of the increased domestic demand and still fluctuating foreign demand, the growth in imports is higher than in exports, which leads to growing deficit of the trade balance of the country (as of end 2003 it was estimated to be 12.4% of the GDP). In 2005 the export of Bulgaria reached an increase of 18, 4 % compared to year 2004. The imports increased in faster rate those results on the negative trade deficit.

**Table: Foreign trade – export, import and trade balance**

Indicator	2003	2004	2005
Export in mln. BGN	<b>13 041</b>	<b>15 634</b>	<b>18 490</b>
Import in mln. BGN	<b>17 343</b>	<b>20 950</b>	<b>26 475</b>
Trade balance	<b>-4 302</b>	<b>-5 315</b>	<b>-7 984</b>

Source: NSI

The **transit transport flows** through Bulgaria are greatly influenced by the international and regional factors. In the period after the year 2000 the transit transport flow through our country amounts up to 5 - 6 million tones, the ports handling around 5% of the transit, the railways – between 5 and 10%, while the road transport traditionally holds the highest share – between 85-90%.

The direction of the main transit flow is stable: Northwest (Shopron, Hungary) – Southeast (Halikli, Turkey), the political situation in the region having its influence on the route through Bulgaria: Rousse – Svilengrad (during the crisis in Former Yugoslavia) or Dragoman – Svilengrad.

After the gradual decrease in the trips of **foreign citizens to Bulgaria** from 1990 (5.2 million) until 1998 (2.5 million), constant growth has been observed since 1999, to reach 4.8 million trips in 2005 and 2,4 million transit trips. The main purpose for the visits to the country is the tourism opportunities in the country with increase in the number of tourists with 4.5% for

2005. For the past year, the European Union visitors have the biggest share (54.24%) out of all the international visitors.

More than 75% of the citizens from Western and Central Europe travel to Bulgaria by air transport, while the citizens of the neighboring countries prefer Road transport.

In the years after 1989 significant fluctuations in the **Gross Value Added** (GAV) of the Transport sector have been observed, which reflect the diverse processes in the Bulgarian economy. The trend towards general stability after 1997 has resulted in a more stable status of the transport sector, too. After the serious fall off in 1998 a trend of gradual GAV growth of the sector has taken shape to reach 6.75 % in 2002, thus exceeding to a great extent the general GDP growth for the country (4.89%); for 2003 that growth was 3.62%, while in 2004 GDP growth is expected to reach 6 %, at forecasted growth of 5.5%.

#### **4. Contribution of the transport sector to socio-economic and environmental sustainability**

One of the Bulgarian transport sector's main goals is to help facilitate the country's economic and social cohesion by providing efficient and reliable transportation. Its mission is to aid the balanced regional development, integrating outermost regions, reducing the number of over-populated areas in urban periphery. Public transport contributes also to guarantee equal opportunity between citizens in accessing to jobs, culture and entertainments. Bulgarian transport system guarantees social equal opportunities maintaining especially lower rates in urban and railways services, and insuring the maintenance and the development of a dense network of road infrastructure in the country. Operational Programme for Regional Development, besides the present Operational Program on Transport, focuses on this mission and aims to its strengthening.

Although the OPT is concentrated on the major transport axes and the transport infrastructure at national level, the wider transport situation and needs of the overall Bulgarian territory including rural areas could be addressed within the General Transport Master Plan.

Bulgarian transport policy also fully supports the objective of a sustainable, environmental friendly transport system. Nowadays, Environment Impact Assessments (EIAs) are in Bulgaria mandatory elements of the decisions for construction and/or rehabilitation of transport infrastructure projects, those financed by European funds, State Budget and other IFIs as well. Also, it is mandatory to prepare Strategic Environmental Assessment (SEA) of strategic documents like OPT. **As a result of public consultations during the SEA implementation motivated objections on the grounds of legal conformity have not been received.**

#### **SEA results:**

The SEA results are in compliance with OPT priorities axes. The SEA results will not lead to changes in OPT priorities axis. The project prioritization, proposed in the OPT has been done on the basis of the multi -criteria analyses including the criteria for environmental effect of the each project. (see Annex 5).

OPT implementation will contribute to improving of transport access, to reducing noise pollution level and environmental pollution, to enhancing environmental friendly way of transport, to improving quality of life and to creating better jobs.

With regard to the implementation of operations financed from OPT strategic route planning and thorough assessment of the potential effects of the infrastructure schemes will be required

to ensure that the beneficial effects of reduced congestion, improved local air quality and improved accessibility will be realised and that adverse effects relating to the natural and historic environment are minimised and thoroughly mitigated for. In order to ensure that any adverse effects are minimised environmental enhancements should be considered and implemented within scheme delivery.

In-depth assessment and analysis of the contribution of the transport sector to environmental sustainability is provided in the SEA of OPT.

In connection with Bulgaria's preparation for membership in the European Union and the integration of its transport infrastructure into the European one, great effort has been shown in introducing and implementing the European standards for a modern, environmentally-friendly and secure transport, intensive action has been undertaken to harmonize the Bulgarian legislation with the European one, and opportunities have been created for the exchange of property rights in the transport sector allowing the entrance of private companies in the transportation services market, which will undoubtedly improve the quality of service due to the emergence of competition in the market.

A major issue during this process is the steady development of the transport infrastructure. The insufficient investment in maintenance and development of the infrastructure in the last decades and the increased demand for transportation services call for a new and improved, long-term planning of its future development. Modernization is necessary for the successful integration in the European transport system. Considerable amount of time is necessary for the creation of such a modern transport infrastructure, as well as planning in the long run, assuring the existence of reliable and steady influx of finances, and determination and commitment by all institutions and organizations participating in this process. For the crucial full absorption of the considerable European funds, the government has to prepare vital infrastructural projects and to co-finance their realization. In full compliance with the public policies, and in accordance with the partnership principle, it is also essential that better conditions be created for strengthening the role of the private sector in the development of the infrastructure, including opportunities for various forms of public-private partnerships (for ports, airports and highways by giving them on concession).

For the time being, the incompletely developed transport system capacity; the poor technical and operational parameters of the transport infrastructure and the low market share of the Bulgarian railways are the basic obstacles and challenges for the transport sector in Bulgaria and the present programming aims at facing them.

## ***1. RAILWAY TRANSPORT***

The existence of a particularly extensive, dense railways network and of significant know how in an accessing country such Bulgaria is an unique opportunity that was underlined by the European Commission in the White paper "European transport policy for 2010". According to the Commission, this opportunity should be seized to rebalance the transport mode in enlarged Europe. European Commission policy intends to support the accessing countries to maintain the railway's share and support the reforms of the rail system, mostly through the separation of infrastructures and operators, improvement of their infrastructure basis and the restructuring of railway companies driving them to more market oriented and customer oriented development.

Bulgaria accepted this challenge and it is the common policy of EU member states which in the recent years determined the trends for development of the Bulgarian transport policy for railways. Bulgaria has successfully closed the negotiations on Chapter 9 “Transport Policy”, integrating the European acquis for all modes of transport including railways.

In conformity with the Law on the Railway Transport, adopted in 2000, in the years 2001 and 2002 the Railway Administration Executive Agency was established and the Bulgarian State Railways National Company was divided into the National Railway Infrastructure Company (managing the railway infrastructure) and Bulgarian State Railways (railway operator).

The restructuring of the railway transport system has been accomplished in compliance with the European standards. After the split of the Bulgarian State Railways National Company, the two new entities (Bulgarian State Railways EAD - operator and the National Railway Infrastructure Company (NRIC)) being successors to the Bulgarian State Railways National Company, function well implementing new management technology, which resulted in decrease of the losses.

With the provisions of the Railway Transport Act and of Decree No 167/29.06.2001 the Railway Administration Executive Agency has been established as a legal budget funded entity functioning as a regulatory body and a national safety body.

The introduced regulatory framework shall ensure entire liberalization of the railway transport market. The liberalization is being implemented in compliance with the requirements of the European directives and regulations as well as through introduction of systems which shall provide the access to and use of the railway infrastructure as follows:

- Introduction of licensing procedures for the operators;
- Provision of equal rights for access to infrastructure for licensed operators in possession of certified rolling stock and competent staff;
- Carrying out privileged policy regarding the use of transportation capacity subject to public services obligations executed by international groupings and more environmentally friendly transportations as well as new technologies;
- Introduction of uniform infrastructure charges for all operators;
- Established infrastructure charging system, which ensures equal rights and covers the marginal costs for current maintenance of the railway infrastructure;
- Established two level systems through which control on access to the infrastructure is exercised: both by the infrastructure manager and the Railway Administration Executive Agency, thus the observance of the EU requirements is guaranteed.

The regulatory framework shall recognize the licenses and certificates issued by the EU member states. After the accession of the Republic of Bulgaria foreign operators shall be allowed to operate on its infrastructure. The railway transport market in Bulgaria shall be open for freight transportation as of 01.01.2007.

*The position stated in the field of the transport legislation is that the Republic of Bulgaria does accept and shall completely implement the European legislation with no exemptions foreseen.*

In the period 2006 – 2008 substantial measures are envisaged to be undertaken in order to improve the structures of the aforesaid two entities. The major priorities for the development of the railway transport market in the short-run include the following:

1. Transformation of BDZ EAD (railway operator) into a company of holding type and follow-up privatization;
2. Concessioneing of railway infrastructure elements;
3. Establishment of a system for railway transportation safety management with unified indicators and methodology for the entire European Community.
4. Preparation of projects to be financed by the EU funds;

In compliance with the national legislation a contractual system, aiming at regulation of interaction between the two companies and the State has been introduced through:

- In June 2004, as a result of direct negotiations with the State, a Contract on assignment of Public Services Obligations by Rail was signed. Each year it is revised through an Annex to it. In last two years there is a significant increase of funds from the State budget for railway infrastructure. For 2005 the size of compensations is 82 million leva and for 2006 is 80 million leva. The planned funds for 2007 are 100 million leva.
- In December 2005 a Contract between the State and the National Railway Infrastructure Company for long term planning and financing of the railway infrastructure regarding its maintenance, construction, building and enhancement was signed.
- The planning of annual resources for maintenance of railway infrastructure is according to three major documents as follows:
  - Contract between the State and the NRIC;
  - Long-term (10 years) programme for development of railway infrastructure;
  - Annual business plan of the NRIC.

The contract between the State and the NRIC is according to the Railway Transport Act (Section II., Construction, Support, Development and Operation of the Railway Infrastructure):

- On a proposal of the Minister of Transport, the Council of Ministers shall approve a long-term programme for development of the railway infrastructure and its safe and reliable operation, including in crisis situations.
- The Minister of Transport shall approve an annual programme for construction, support, repair, development and operation of the railway infrastructure.

In addition preparation of updated programme of adequate resources and structures for maintenance and operation is a significant part of each Project preparation (ongoing or to be contracted) for modernisation or renewal of the railway infrastructure.

The following projects are included in the Long-term Programme for development of the railway infrastructure (*State of play 2010*):

#### **Ongoing projects**

- Construction of second Danube bridge at Vidin-Kalafat - planned for completion by 2012;
- Reconstruction and electrification of the Plovdiv-Svilengrad railway line - planned for completion by the end of 2014. (bridging project between ISPA and OPT);



- Electrification and reconstruction of the Svilengrad–Turkish border railway line - planned for completion in 2011;
- Renewal of railway sections along the Plodiv-Burgas railway line – planned to be completed in the middle 2015;
- Modernisation of section Septemvri -Plovdiv of Sofia-Plodiv railway line– planned to be completed in the middle 2015;
- Reconstruction and electrification of the Karnobat-Sindel railway line - planned for completion by the end of 2015;
- Electrification of the Dragoman–Dimitrovgrad railway line - planned for completion by the end of 2011;
- Rehabilitation of the Sofia-Karlovo-Zimnica railway line for reaching the design parameters (204 km) – planned to completion in 2012;
- Restoration and retention of design parameters of the railway track and structures – based on annual needs;
- Development of the railway power supply system – based on annual needs;
- Modernization of the railway signaling and telecommunications – based on annual needs.

#### **❑ Planned projects**

- Renewal of railway sections along the Mezdra-Gorna Orjahovica railway line – planned to complete by the end of 2020;
- Design of Vidin-Sofia railway line – planned to complete by the end of 2014;
- Modernisation of the Vidin-Sofia railway line – planned to complete by the end of 2020;
- Modernisation of section Sofia -Septemvri of Sofia-Plodiv railway line– planned to be completed in 2018;
- Modernisation of the Sofia-Pernik-Radomir railway line – planned to be completed by the end of 2020;
- Modernisation of the Sofia-Dragoman railway line – planned to complete by the end of 2020;
- Doubling and electrification of the Popovitsa-Yabalkovo–Parvomai railway line - planned for completion by the end of 2020;
- Rehabilitation of the Ruse-Varna railway line for reaching the design parameters (232 km) - planned to completion by the end of 2020;
- 

#### **❑ Completed projects**

- Modernisation of the safety and telecommunications along the Blagoevgrad-Kulata railway line - completed in 2007;
- Renewal of the railway track – recovering project (427 km) - completed in 2007;
- Roman-Kunino-Pavlikeni railway line- - completed in 2009;

During the last years the State plays significant role for reducing the considerable shortage of funds necessary for the maintenance and repairs of the railway infrastructure by providing State Budget cashflows. The following table shows the State funding for the period 2003 – 2006 and the planned ones for the 2007 – 2009. Currently, the decrease in the amount of backlog is obvious.

Mln. leva

YEAR	NEEDS	SECURED		BACKLOG
		State Budget	Infrastructure Charges	
2003	145	35	35	75
2004	169	52	40	77
2005	204	82	50	72
2006	184	80	55	49
2007*	156	100	35	21
2008*	156	106	35	15
2009*	156	110	35	11

**Most of the requirements of the Second Railway Package have already been transposed into the national legislation and include the following issues:**

- Ordinance No 57 of 9 June 2004 on essential requirements towards the railway infrastructure and the rolling stock for insurance of the parameters needed for interaction, operability and compatibility with the trans-European system shall ensure the interoperability and the envisaged standards under the provisions of the TSIs for high-speed network; the procedures needed for putting into operation of structural subsystems and assessment of the essential requirements towards the subsystems; issuance of permit for performance of conformity assessment activities;
- Most of the provisions of the Directive 2004/49 on safety management are transposed as of 01.01.2005 through the means of Rules on functional interaction between the safety and control bodies in railway transport, which have been applied prior to the adoption of the Ordinance on Safety Management, whose draft is under agreement and coordination. Respective amendments to the Railway Transport Act are being prepared with regard to the implementation of the provisions of Directive 2004/49 as well as the predicted deadlines to be kept.
- An independent Investigation Body with regard to safety, investigation of accidents and incidents in the railway transport has been established within the Ministry of Transport, Information Technology and Communications in compliance with the provisions of the aforesaid Directive. The Investigation Body was established with the amendments to the Rules of Procedure of the Ministry of Transport, Information Technology and Communications.

The complete transposition of the Second Railway Package is envisaged to be implemented by the end of 2006.

## **1.1. INFRASTRUCTURE**

### ***1.1.1. Description***

#### ***1.1.1.1. Technical parameters***

By the end of 2005 the total railway line length is 4316 km, of which 2915 km along main railway lines (Annex 1; Table 1). The total railway track km length is 7326 km, of which 4904 km or 67% are electrified (Annex 1; Graph 1 and 2).

Taking into consideration the mountain relief of the country the density of the existing railway lines is comparatively high in comparison with the countries from Eastern Europe (Annex 1; Graph 3). The Chart indicates that Hungary and Czech Republic have the highest density of the railway network in the EU and Bulgaria took the sixth position leaving behind Spain, Portugal and Sweden (Annex 1; Graph 4).

In comparison to many of the European countries, the operational and technical conditions of the railway infrastructure are poor. Considerable part of the railway lines have been constructed more than 50 years ago, with geometrical parameters, lower construction and facilities suitable for speed of up to 100 km/h. Bulgarian railway sector is lacking railway lines for speed of up to 160 km/h. The sections which have been doubled in the last 20-30 years are also suitable for limited speed, due to their geometrical parameter, the state of the lower construction, the facilities and the platform development within the station areas.

The main part of the security, telecommunication facilities and the electric power supply facilities was put into operation in the period 1965-1985, and since 1990 minimum funds have been available for their replacement and modernization.

During the last ten years 806 km of the railway network have been renewed, which is 18.6% of the total railway length and mid-range repair works have been carried out to 790 km of main railway lines and only to 41 km of secondary lines. However, due to the policy of renovation and/or repair work of certain sections, those activities do not change the transport capacity of the railway network as a whole. The constant insufficiency of funds for maintenance of the railways and the related railway facilities, as well as the lack of long-term plans and programmes justified with relevant resources, led the poor conditions of the infrastructure and speed limitations along nearly  $\frac{3}{4}$  of the rail network.

#### ***1.1.1.2. Railway network***

The Bulgarian railway connections with the neighboring countries are not sufficient. The railway link between Bulgaria and Republic of Macedonia is still not constructed. The railway link between Bulgaria and Romania along the Priority project 22 is interrupted by the Danube River at the Vidin – Kalafat section. These lead to limitation of the opportunities for development of the business activities with the neighboring countries and particularly for the cross-border cooperation between the border regions.

In this respect, the project of construction of a new bridge over Danube River at Vidin-Kalafat is one of great significance and is included in the priority list of projects of the Stability Pact for South Eastern Europe, supported by the EC (PHARE and ISPA Programmes), EIB, Kreditanstalt für Wiederaufbau of the Federal Republic of Germany (KfW), Agence Francaise de Developpement (AFD). The project the missing link along the Priority project 22 and plays an important socio-economic role for the region. Total value of the project is

€226M and planned time of completion – year 2010. The Contracts for Projecting and Building Executor and for the Supervision of the project "Building of a New Combined Border Bridge (Road and Railway) on the River Danube, near Vidin - Kalafat" was signed in January 2007. Till the mid-year 2007 the contract for adjoining infrastructure on the Bulgarian side will be signed.

In the meantime, the development and globalization of the transport market put into place higher requirements to the railway infrastructure quality and interoperability, due to the fact that the Bulgarian railway network is a part of the Trans-European Transport Network.

### ***1.1.2. Diagnosis***

At this stage, the national railway network is considerably rundown compared to the railway network in the European countries.

The railway network in Bulgaria lacks external connections (only 6) with the neighboring countries. This is the reason for so many termini (round 30%). The permanent lack of financial resources for rehabilitation of the railway track and the railway equipment, in the last ten years, led to a delay in implementation of the rehabilitation time-tables and thus to decrease in the speeds and poor condition of the railway network capacity.

The programming for maintenance and development of the railway infrastructure, implemented until now, is still not sufficient and not fully justified with the necessary financial resources from the National Budget. Moreover, the technologies used are old and require a number of employees and considerable expenditures.

The annually deterioration of railway infrastructure's technical condition renders a negative influence on the maximum allowed speed, travel time and train movement comfort. The analysis of the condition on all the elements of the railway infrastructure shows that at this time NRIC could guarantee only the safety of train movement.

## **1.2. PASSENGER TRANSPORT**

### ***1. 2.1. Socioeconomic factors***

During the last 15 years, the passengers' traffic with the Bulgarian railways decreased almost 3 times due to the decrease in mobility and solvency, from one side, and the increased number of private vehicles and low attractiveness of the railway transport, from the other side (see table 1). The drop in the passengers' traffic led to the decrease in the number of passenger trains. In comparison with 1990, the number of passenger trains has decreased with more than 40%.

Without ignoring the impact of the national economy, it is the demographic factors, which have the strongest and most immediate impact on the demand for passenger transport services.

The population of Bulgaria is decreasing. According to the data of the last national census (01.03.2001), it is 7,932,984 people, or 6.4% less than in 1992. This tendency is expected to continue and a further decrease of about 7% is expected by 2010.

Table 1

INDICATORS	MEASURE	ANNUAL REPORT						
		1999	2000	2001	2002	2003	2004	2005
Passengers carried	Thousand pass.	53 112	50 029	41 817	33 719	35 206	24 149	33 748
Transport performance	Million pass. Km	38 119	3 472	2 990	2 598	2 517	2 404	2 389

### **1.2.2. Diagnosis**

The only operator providing passenger transport service is the National railway operator BDZ EAD.

Market analysis were led and showed that, in addition to the above mentioned sociologic and macroeconomic factors, there were large discrepancies between the demand for mobility of travelers and the services provided.

- Lack of coordination with the other types of passengers transportation
- Low frequency and lack of connections at the stations between the trains for different destinations
- Relatively low section speed due to the bad state of the railway road and the great number of stops in the small settlements
- Outdated and badly maintained rolling stock which is not corresponding to the higher requirements of the customers.

Following this reasoning, the analysis outlines that the interurban and international traffic have good potential for development, which to a large extent depends on the improvement of the railway network and the implementation of a renewed strategy to seize the opportunities of the market. Taking into consideration the quality of the provided by the BDZ EAD services, not corresponding to the requirement for the frequency and travel time, the better and more efficient services should restore the attractiveness of the Bulgarian railways.

## **1.3. Freight transport**

### **1.3.1. Socioeconomic factors**

After the permanent drop in freight transport during the last 15 years (more than 3 times for the period of 1990 – 2002), since 2003 sustainable increase is observing (see table 2). The drastic drop is mainly a result of the closure of the heavy industry enterprises, the decreased attractiveness of the railway transport; the improvement of the national road network.

Table 2

INDICATORS	MEASURE	ANNUAL REPORT						
		1990	2000	2001	2002	2003	2004	2005
Goods carried	thousand tons	21 090	21 082	19 285	18 500	20 070	20 387	20 298
Transport performance	million ton-km	5 297	5 538	4 904	4 627	5 274	5 211	5 163

On the transport market for 2005, the railway share is as follows: 17% of tons goods carried and 5.6% of ton kilometers with regard to transport performance.

The share of the international goods carried in 2005 by railway transport is growing up (Table 3). The share of the international transportations through the border stations is increasing due to the increased foreign trade with the EU countries and shift from the road transport to the railway, because of the restrictions, enforced on the freight operators in the EU.

Table 3

	1999	2000	2001	2002	2003	2004	2005
Comparative share of the international freight traffic to the total freight traffic (%)	11,6	16,2	14,5	17,2	20,4	23.1	26.5
<b>Goods carried – thousand tons</b>	<b>2 455</b>	<b>3 419</b>	<b>2 788</b>	<b>3 178</b>	<b>4 090</b>	<b>4 709</b>	<b>5 217</b>
Export	1 089	1 677	1 295	1 418	1 821	2 046	2 262
Import	738	1 044	917	1 076	1 480	1 644	1 779
Transit	628	698	576	684	789	1 019	1 176

### 1.3.2. Diagnosis

External socio economic and macro-economic factors are favorable to the development of the rail freight transport: long distance transport while energy cost, road saturation and pro-environmental and safety policies limit the growth of the road transport.

In parallel, railways operators, responding to the heavy industries' decline, have developed their marketing capability and the development of the freight transport is oriented towards increase of the transportations with special organization – by route, shuttle trains and block-trains, with tariff policies for the production and logistical chains transportation.

In the next two years, the volume of the railway freight transport along the national and international lines is expected to be kept, but infrastructure rehabilitation should contribute to maintain or enhance the quality and the flexibility of the operators' offer.

### 1.4. Transport safety and security

In accordance with the Law on the Railway Transport, the secondary legislations (total 26 regulations) has been elaborated and adopted.

Taking into consideration that some of the standards for the conventional transport safety, are still under preparation from the European institutions, Temporary rules for functional interaction between the security and control services in the railway transport have been

introduced, which execute the requirements of the Directive for the security and define the category and the type of the accidents, the organization and the interaction between the employees and officials in terms of restoration of the trains time-table (Directive 2004/49 of the EU).

Since 1991 the transport security is being treated as an element of the quality - new phase in the transport management development and includes the management of the reliability of the transportations and the regulation in dangerous situations. The established scheme of organization of the control services in the country does not include only the establishment of departments, but also execution of the state duties as well.

Thanks to the high level of security, the railway transport, to a large extent, meets the requirements for dangerous goods transportation.

### ***1.5. Environmental protection***

The studies carried out in the West and Central Europe confirmed that railway transport takes not only the leading position with regards to the freight and passenger transport in the world transport system, but it is the most favorable transport mode for the environment. Most of the ecological advantages of the railway transport are due to the electrification.

The quantity of the liberated carbon dioxide from the railway transport is 40 times less than the same from the road transport and influences on the global variation of the climate. The local emissions, directly and in a significant degree harm the people's health and the ecological balance. The problem in the Republic of Bulgaria is that the railway transport continues to register drop in the passengers transport and the transport performance, while its basic competitor and the biggest polluter of the environment – road transport, registers a serious growth.

The noise pollution from the railway transport is a serious problem for the populated, tourism and recreational areas.

In the earliest stage, the ecological requirements to the investment proposals for transport projects will be in full compliance with the European requirements are applied through the Environment Impact Assessment (EIA).

### ***1.6. Operators***

**BDZ EAD** is the National Railway Operator in Republic of Bulgaria, owning a license for carriage of passengers and freight.

According to the contracted with the State Treaty for public carriage services it is also obliged to carry out transport railway services on the territory of the whole country. Almost the whole scope of services with the passenger transportation provided by BDZ EAD is socially orientated and covers the public needs for passenger transportation at middle to low quality level for the country, at affordable prices in conformity with the purchasing power of the population.

BDZ EAD keeps a relatively low level of prices for passenger transportation. The railway company is implementing the state social policy to transport with discounts students, elderly citizens and maintain railway destinations of low passenger flow settlements in regions with difficult access where there is no other alternative transportation and that has been done at insufficient compensations provided by the state.

The main part of the freight carriage is realized by BDZ EAD.

The rolling stock analysis, concerning the age structure, renovation and maintenance of the railway network, shows negative tendency. Only 0.3% of the freight stock has been in use

between 5 to 10 years, 35.2% – between 10 and 20 years, 64.5 – more than 20 years. The problem with the lack of specialized carriage stock is very serious, especially the stock for combined and inter-modal transportation.

**“Bulmarket DM” OOD** came into operation in 2004 with an occasional license for carriage of freight in a regional envelopment. Since October 2005 it received a license for carriage of freight of the whole railway infrastructure of the country. **Bulmarket** is a 100% private Bulgarian Company seated in Ruse. The Company deals mainly with distribution of gas propane-butane and in a less degree distribution of diesel fuel, oil and other fuels.

**“Bulgarian Railway Company” AD** has been licensed for performance of freight transportation services in 2005. The Company transports mass freight and chemical derivatives.

### ***1.7. Concluding diagnosis of the railway infrastructure and railway transport current situation***

The main problems in the development of the railway transport are:

- The low speed and the poor services of the passenger and freight transport much below the requirements of the European Union Regulations. This is a result of the poor condition of the infrastructure and rolling stock – 80% of the locomotives and 70% of the passenger wagons are in operation more than 20 years
- The lack of integration of the network within the European railway network, which doesn't enable the operators to seize the opportunity to deliver transit or international services throughout the main developing itineraries for freight transport and passenger mobility.

### ***1.8. Trends for the improvement of the railway infrastructure and development of railway transport services***

#### ***1.8.1. General objectives, completed and ongoing policies for the improvement of railways infrastructure***

The future development of the railway infrastructure aims to favor the development of services of the railways operator in domestic and international market and is mainly oriented to the revival and improvement of the technical and operational parameters of the railway track, catenary, telecommunication and signaling equipment along the cross-border transport axes according to the Trans-European Network (TEN) policy; Agreement for High Speed railway lines (AGC); Agreement for Railway Lines for Combined Transport (AGTC); Trans - European Railway Project (TER).

The future railway infrastructure improvement will be focused on achievement of the EU quality standards and ensuring interoperability through the planned investments and especially speed restrictions removal; increasing of the infrastructure productivity in order to reduce the infrastructure costs (respectively reduction of the infrastructure charges); introduction of EU legislation and Best practices in the field of contracting with the operators in order to develop well adapted time-tables; improvement of the railway links with the neighbor countries; reduction of the time needed for border crossings, according to the Geneva recommendations; improvements in the railway stations attractiveness; introduction of appropriate infrastructure and conditions for the container and combined transport and keeping high quality standard related to the railway network safety.



The planned strategic investments for the railway infrastructure development are based on the prognosed data until 2013 and the planned measures directed at improving the Bulgarian portion of the Union Rail Network in the context of the “cohesion of the continent of Europe, modal balance, interoperability and the reduction of bottlenecks” in the Ten Year Development Plan for SRIC developed under Project “Railway Organizational Restructuring – Management Development of the Railway Infrastructure Company” by SYSTRA, CIE Consult, Railplan and Deloitte&Touche financed by program Phare 2002. Under the Ten Year Development Plan the projects defined the priority railway directions on the territory of the country at domestic and international level, as follows:

**1. Domestic priority directions:**

- Sofia – Plovdiv - Burgas /Varna;
- Sofia – Pleven – Varna;
- Rousse – Gorna Oriahovitsa – Stara Zagora;
- Sofia – Karlovo – Karnobat – Varna.

**2. International priority directions. Particularly by regarding Sofia as a “hub” between:**

- Sofia and Thessaloniki /Athens in Republic of Greece;
- Sofia and Istanbul in Republic of Turkey;
- Sofia and Bucharest in Romania;
- Sofia and Skopje in Republic of Macedonia;
- Sofia and Belgrade in Republic of Serbia;
- Sofia and Budapest and Vienna.

The priority directions were defined by Consultants under above PHARE 2002 project on the basis of following analysis:

- Analysis of Macroeconomic Framework of Republic of Bulgaria until 2013;
- Analysis of transport services demand for passenger and freight transport until 2013;
- Business analysis of transport services;
- Traffic forecast until 2013.

The introduction and applying of the EU technical standards in the railway infrastructure sector has required and still requires massive investments. For that reason the main investments for railway infrastructure development which are planned for financing from the Cohesion Fund under the Operational Program on Transport follow the completed or ongoing projects under various sources of funding (see table) and will be supported from additional investments.

**Completed projects under PHARE Programme**

As a result of the implementation of Twinning project on Railway Safety and Interoperability many amendments have been made in the existing legislation:

- Changes in the articles of the main texts: railway transport law, decree 167 and ordinances 41 and 42,
- Adaptation of existing safety ordinances 47, 49 and 51,
- Full transposition of the directives for interoperability,
- Official translation of the technical specifications for interoperability (tsi).

In terms of safety, there has been jointly elaborated an Ordinance no 59 on safety management of the railway transport which transposes the European legislation in the field of railway safety.

In terms of Interoperability there was set up the beginning of creating and keeping of registers for infrastructure, rolling stocks and loco-drivers.

#### Key developments

- Transposition of Directive 2004/49 on Safety and of the technical specifications for interoperability in the new Ordinance on Safety Management,
- Modifications to the Railway law (Law amending the Railway Transport Act) in order to complete the transposition of Safety and Interoperability Directives and other related evolution of European legislation,
- Adoption of Ordinance No 58 on rules of technical operation for train circulation and signaling in the railway transport (as part of the National Safety Rules for Railway Transport for the railway infrastructure and the rolling stock, which are not yet covered by the TSI ),
- Adoption of Ordinance No 46 on the transport of hazardous goods,
- Amendment of Ordinance No 57 on essential requirement towards the railway infrastructure and the rolling stock for provision of the necessary parameters for interoperability with the Trans-European railway system concerning the procedure of designing notified bodies in conformity with the requirements of the Railway Transport Act.

In this respect, following national legal texts were published:

- The new Ordinance on Safety Management with the annexed Indicators for Safety Railway Transport was published in the O.J. 73/05.09.2006.
- The Law amending the Railway Transport Act was published in the O.J. 92/14.11.2006.
- Ordinance No 58 on rules of technical operation for the train circulation and the signaling in the railway transport was published in the O.J.No 73/2006.
- Ordinance No 46 on the transport of hazardous goods adopted by the Working group 9 – Policy of Transport was published in the O.J. 99/08.12.2006.
- The Amendment of the Ordinance No 57 on essential requirement towards the railway infrastructure and the rolling stock for provision of the necessary parameters for interoperability with the trans-European railway system for the definition of the procedure of notified body's choice in conformity with the requirements of the Law on Railway Transport is in progress.

The notification to the EU Commission of the Bulgarian legislation adopted in order to transpose European legislation - finished.

#### **Completed projects under PHARE CBC Programme:**

- Electrification of Dupnisa – Kulata railway line (financed by PHARE CBC Programme BG/GRE);
- ETCS level 1 along Plovdiv – Burgas railway line (financed by WB loan);
- Electrification of Dragoman – Kalotina railway line (financed by State budget).

#### **Projects in execution under ISPA program and other sources of finance as of 2007:**

- Construction of second Danube bridge at Vidin-Kalafat, € 226 million financed from ISPA, EIB, AFD, KfW, State Budget (planned for completion by the end of 2009);

- Reconstruction and electrification of the Plovdiv-Svilengrad railway line, € 345,2 million financed from EIB, ISPA, State Budget (planned for completion by the end of 2010);
- Reconstruction and electrification of the Karnobat-Sindel railway line, financed from the State Budget (planned for completion by the end of 2010);
- Modernisation of the safety and telecommunications techniques along the Blagoevgrad-Kulata railway line, € 5,86 million financed from PHARE CBC, State Budget (planned for completion by the end of 2007);
- Mechanised renewal of the railway track – recovering project (427 km), € 230 million financed from WB, State Budget, NRIC (planned for completion by the end of 2007).

#### **Projects under ISPA Programme and other sources of finance as of the end of 2010:**

- Construction of second Danube bridge at Vidin-Kalafat, € 226 million financed from ISPA, EIB, AFD, KfW, State Budget (planned for completion in 2012);
- Reconstruction and electrification of the Plovdiv-Svilengrad railway line, € 367 million financed from EIB, ISPA, OPT and State Budget (Section Plovdiv \_Parvomai was completed in 2010, section Parvomai- Svilengrad was bridged for funding from ISPA to OPT and it is planned for completion by the end of 2014);
- Reconstruction and electrification of the Karnobat-Sindel railway line, financed from the State Budget (planned for completion by the end of 2015);
- Modernisation of the safety and telecommunications techniques along the Blagoevgrad-Kulata railway line, € 5,86 million financed from PHARE CBC, State Budget (completed in 2007);
- Mechanised renewal of the railway track – recovering project (427 km), € 230 million financed from WB, State Budget, NRIC (completed).

#### **Used Technical assistance under ISPA program:**

- Technical assistance for modernisation of the Vidin-Sofia railway line;
- Technical assistance for modernisation of the Sofia-Plodiv railway line;
- Technical assistance for renewal of railway sections along the Plodiv-Burgas railway line;
- Technical assistance for modernisation of the Sofia-Pernik-Radomir and Sofia-Dragoman railway line;
- Technical assistance for renewal of railway sections along the Mezdra-Gorna Orjahovica railway line.

#### **Planned projects for financing from the State Budget as of 2007:**

- Rehabilitation of the Sofia-Karlovo-Zimnica railway line for reaching the design parameters (204 km) (planned for completion by the end of 2010);
- Rehabilitation of the Ruse-Varna railway line for reaching the design parameters (135 km) (planned for completion by the end of 2009);
- Rehabilitation of the Plovdiv-Zimnica railway line for reaching the design parameters (104 km) (planned for completion by the end of 2011);
- Rehabilitation of the Ruse-Gorna Orjahovica railway line for reaching the design parameters (84 km) (planned for completion by the end of 2011);

- Rehabilitation of the Gorna Orjahovica-Kaspichan railway line for reaching the design parameters (302 km) (planned for completion by the end of 2013).

**Planned projects for financing from the State Budget as of the end of 2010:**

- Rehabilitation of the Sofia-Karlovo-Zimnica railway line for reaching the design parameters (204 km) (planned for completion by the end of 2012);
- Rehabilitation of the Ruse-Varna railway line for reaching the design parameters (135 km) (by the end of 2020);
- Rehabilitation of the Ruse-Gorna Orjahovica railway line for reaching the design parameters (84 km) (after 2020);
- Rehabilitation of the Gorna Orjahovica-Kaspichan railway line for reaching the design parameters (302 km) (after 2020).



**Financial funding sources cooperating in the National programme for infrastructure, railways sector, 2007-2013 as of 2007**

No	Name of the future investment project that is to be prepared for Cohesion fund financing	EU Funds			ISPA & PHARE (x 1000 Euro)	Loans (x 1000 Euro)	State budget (x 1000 Euro)	Total (x 1000 Euro)	Start/end year for implementation
		ESF (x1000 Euro)	ERDF (x 1000 Euro)	CF (x 1000 Euro)					
RAILWAY PROJECTS									
1	Plovdiv-Svilengrad railway line				153 000	150 000	37 000	340 000	2006/2010
2	Karnobat-Sindel railway line - I phase						21 120	21 120	2005/2008
3	Blagoevgrad Kulata railway line (information system)				3 326		1 117	4 443	2006/2007
4	Dragoman-Dimitrovgrad railway line						1 620	1 620	2006/2010
5	Roman-Kunino-Pavlikeni railway line						2 250	2 250	2005/2009
6	Svilengrad-Turkish border railway line			28 000			7 000	35 000	2008/2009
7	Sofia-Pernik-Radomir railway line			80 000	1 275		20 225	101 500	2010/2013
8	Sofia-Plovdiv railway line			100 000	1 700		25 300	127 000	2010/2014
9	Vidin-Sofia railway line			256 000	3 434		64 606	324 040	2010/2017
10	Karnobat-Sindel railway line - II phase						200 000	200 000	2008/2015
11	Sofia-Karlovo-Zimnica railway line						85 750	85 750	2007/2010
12	Ruse-Varna railway line						47 460	47 460	2007/2010
13	Plovdiv-Zimnica railway line						49 180	49 180	2008/2011
14	Ruse-Gorna Oriahovica railway line						28 300	28 300	2010/2013
15	Gorna Oriahovica-Kaspichan railway line						82 300	82 300	2012/2013
	TOTAL			464 000	162 735	150 000	673 228	1 449 963	
	Alternative projects under OPT								
16	Parvomay-Yabalkovo railway line			18 400			4 600	23 000	2009/2010
17	Plovdiv-Burgas railway line			50 400	3 009		13 131	66 540	2008/2010
18	Sofia-Dragoman railway line			66 400	1 275		16 825	84 500	2009/2011
19	Mezdra-Gorna Oriahovica railway line			128 000	5 899		33 041	166 940	2008/2010
	TOTAL			263 200	10 183		67 597	340 980	



**Financial funding sources cooperating in the National programme for infrastructure, railways sector, 2007-2013 as of the end of 2010**

No	Name of the investment project	EU Funds			ISPA & PHARE (x 1000 Euro)	Loans (x 1000 Euro)	State budget (x 1000 Euro)	Total (x 1000 Euro)	Start/end year for implementation
		2014-2020 (x1000 Euro)	OPT						
			ERDF (x 1000 Euro)	CF (x 1000 Euro)					
RAILWAY PROJECTS									
1	Plovdiv-Svilengrad railway line			142 966	71 649	98 786	53 255	366 656	2006/2014
2	Karnobat-Sindel railway line - I phase						21 120	21 120	2005/2008
3	Blagoevgrad Kulata railway line (information system)				3 326		1 117	4 443	2006/2007
4	Dragoman-Dimitrovgrad railway line						1 620	1 620	2006/2011
5	Roman-Kunino-Pavlikeni railway line						2 250	2 250	2005/2009
6	Svilengrad-Turkish border railway line			23 836			12 731	36 567	2009/2011
7	Sofia-Pernik-Radomir railway line	212 581			1 275		146 996	360 852	2014/2020
8	Sofia-Plovdiv railway line	700 050		166 000	1 700		470 447	1 338 197	2011/2018
9	Vidin-Sofia railway line	1 558 778		32 000	3 578		1 089 105	2 683 461	2011/2020
10	Karnobat-Sindel railway line - II phase						200 000	200 000	2008/2015
11	Sofia-Karlovo-Zimnica railway line						85 750	85 750	2007/2012
12	Ruse-Varna railway line							313 358	2014/2020
13	Plovdiv-Burgas railway line			174 890	3 009		75 714	253 613	2011/2015
14	Ruse-Gorna Oriahovica railway line						28 300	28 300	2010/2013
15	Sofia-Dragoman railway line	71 040		6 000	1 275		55 222	133 537	2009/2020
	TOTAL	2 542 449		545 692	85 812	98 786	2 244 434	5 829 724	
	Alternative projects under OPT								
16	Parvomay-Yabalkovo railway line			18 400			4 600	23 000	2015/2020
17	Mezdra-Gorna Oriahovica railway line			130 593	5 899		61 455	197 947	2011/2015
	TOTAL			148 993	5 899		66 055	220 947	

## ***1.8.2. Trends for development of railways transport services.***

### ***1.8.2.1. Strategy for the development of passenger services***

In the field of passenger transportation services BDZ EAD strategy, which is adequate to the market trends, comprises the following:

- Quality improvement of offered railway transport service including the quality improvement and the dedication of the rolling stock;
- Taking into account the volume of offered transport services to be complied with the market conditions and the behavior of the competitive modes of transport;
- Full compensation by the State of the losing social transportation services of BDZ EAD;
- Fulfillment of the assigned public service obligations by rail in order to reach a certain level of transport servicing, as well as conditions for free of charge and discount railway journeys in favor of the interest of the society (for particular social groups specified and approved in the legislative acts of the Council of Ministers, in compliance with the Contract between the State and BDZ EAD);
- Priority of development of inter-city transport;
- Development of tourist transportation using unique railway rolling stock.

The transport market of passenger transportation on rail shall be divided into the following segments:

#### **1) Internal transportation services**

##### **Inter-city**

With the inter-city transport services there exists good potential for growth in the forthcoming years along with railway infrastructure improvement and refurbishment of the rolling stock. Higher speed and the offer of better and more effective services to the clients shall lead to greater transportation volumes in this segment.

*Inter-city transportation services.* In this segment, the railway transport sector shall have commercial interests and will strive to enhance the scope of the offered transport and other concomitant services through increase of the number of “inter-city” trains till the year 2012, when the national network of inter-city trains will be built. Regular connections between 40 of the biggest cities, in which 56% of the population of the country live, shall be established;

*Inter-regional transportation services.* It is the segment of the transport market of passenger transport in which the railways shall implement the social policy regarding the public service obligations assigned by the State. This is the segment of the passenger transport sector in which the railways shall implement the social policy of the State through establishment of an optimal network of fast trains.

##### **Suburban transportation services**

It is the segment of the transport market of passenger transport in which BDZ AED shall continue to provide mass transport services between the small towns and villages and the regional centre for service and students’ journeys.

The current level of the services does not satisfy the requirement towards frequency and appropriate time of traveling.

As to preserve the market share of this segment, taking into consideration the strong competitiveness, it is necessary to establish schemes of regular zone traffic of the suburban trains, as well as provision of sufficient transportation services in rush hours;

##### **Regional transportation services**

In the last years these transportation volumes constantly decline, which on its side leads to financial losses and reduction of the train numbers. With the introduction of modern rolling stock the transportation volume in this segment shall increase.



## 2) International transport

This kind of transport shall develop entirely on commercial basis in coordination and cooperation with the European railway operators.

*Bulgaria to and from Central and West Europe* - introduction of high quality EURONIGHT high-speed trains and EUROCITY (till 2007) to Vienna and to Munich (till 2012) via Belgrade. Enhancement of the traffic after the Danube Bridge, at Vidin will have been built.

*Balkan region* – linking of Balkan capital cities through one day-time and one night train and introduction of new standards for these trains.

*Bulgaria and CIS countries* – to keep the old positions on the transport market and increase of market share mainly on the basis of seasonal tourist journeys.

### **1.8.2.2. Improvement of rolling stock**

In the year 2005, 25 new Desiro DMUs worth 67 million Euro have been purchased. In 2007 another 15 three-car and 10 four-car EMUs which have already been contracted will be delivered. They will serve the suburban and regional lines. Altogether by the end of 2012 the railway sector envisages investments of 250 million Euro and refurbishment of the passenger car fleet by 862 cars\* along with delivery of 130 new passenger cars for international trains, recycling of 212 cars for Intercity transportation services as well as modernization and delivery of 520 cars for Inter Regio transportation services.

### **1.8.2.3. Social policy**

In the conditions of an economic crisis, under public pressure and the state authorities control, BDZ EAD preserves the passenger transport scheme in general and keeps a relatively low level of prices for passenger transportation. The railway company has continued to implement the state social policy to transport with discounts students, elderly citizens and maintain railway destinations of low passenger flow settlements in regions with difficult access where there is no other alternative transportation and that has been done at insufficient compensations provided by the state. At the present moment BDZ EAD, being the only railway carrier, in compliance with the normative framework, is obliged to carry out transportation railway services on the territory of the country. Almost the whole scope of services provided by BDZ EAD is socially orientated and it covers the public needs of passenger transportation at middle to low quality level for the country, at affordable prices in conformity with the purchasing power of the population

### **1.8.2.4. Strategy for the development of freight transport services**

In the field of freight transportation services the strategy chosen by BDZ EAD, which is adequate to the market trends, comprises the following:

Carrying out own corporative policy tightly connected to the marketing strategy in the different market segments;

Keeping and return of transportation of mass goods through improvement of the quality of offered services;

Increase of international railway transportation (import-export-transit);

Development of combined transport (container, shuttle and block trains along national and international destinations) and implementation of projects and new technologies for combined transport, which are being developed at present;

Gradual renewal and modernization of the rolling stock

The railway freight transport market shall be divided into the following segments:

- International destinations
- Transportation via ports;
- Transportation via border stations.
- Transportation along national destinations

The transportation via ports is realized mainly via The Black sea ports of Varna and Burgas and via the river ports of Ruse, Lom and Svishtov. It is mainly raw materials for metallurgy and a part of its ready production. Fluctuations are with regard to the production cycle as well as the supply of raw materials and production on international markets.

The main axes for realization of this transportation are from/to the region of Sofia (Pernik, Pirdop etc.) and Plovdiv towards the port of Lom, Varna and Burgas. The transit transportation via the ports is realized mainly along the destinations Burgas – Dragoman and Varna – Ruse towards West Europe and the Balkan countries.

Import and export of raw materials and production is realized mainly through the border points Svilengrad, Ruse, Dragoman and Kulata. The transit railway transport is realized in the two directions:

- From Turkey (Malasia) to West Europe) towards Svilengrad – Dragoman, Svilengrad – Ruse, and Svilengrad – Vidin after the construction of Danube bridge 2;
- From Greece to West Europe along destinations Kulata – Dragoman and Kulata-Vidin.

The tendency towards an increase of 15% per year for the international freight transport via the border stations, 2-3% of transportation via ports and retaining of transportation along national destinations.

The transported types of goods by rail are predominantly mass goods: solid mineral fuels, oars, concentrates, metal scrap, fertilizers, petrol products, products of ferrous and non-ferrous metallurgy and non-metalliferous raw materials (minerals). These types comprise the transportation of the plants and works of the coal mining and metallurgic industry. To great extent the change of the structure of the transported goods is determined by the industrial development of the country.

The transportation of freight is realized through wagon shipments and block trains (route trains). It is envisaged an increase of the transportation share by block trains via ports and border stations.

The enhancement of the railway infrastructure must ensure quality services for conventional and combined freight transport along the specified destinations and transportation along the Black Sea and the Danube ports to the port of Thessaloniki to the Mediterranean Sea.

Bulgaria with its favorable geographical situation may attract additional international traffic through implementation of inter-modal transport and block trains.

However, the main priorities of the strategy for development of the national railways transport system remains the rehabilitation (adjustment to the design parameters) and modernization of the railway infrastructure which shall contribute to the quality improvement of offered services and decrease of transport costs. Higher speed shall contribute to increased competitiveness of the railways compared to the other modes of transport.

## **2. ROAD TRANSPORT**

A well-developed and maintained road infrastructure provides the foundations for the country's economic growth and sets the preconditions for development of the road transport. The National Road Infrastructure Fund (successor of the Road Executive Agency as of 12.08.2006) is the institution responsible for the general management of the national roads in Bulgaria (motorways, I, II and III class roads). The implementation of various projects co-financed under EC will be fulfilled by the "Implementation of EU Funded Projects" Directorate. The strategic planning will be done by the "Planning and Control of the Road Infrastructure" Directorate – a newly established structure to the Ministry of Transport aimed at elaboration of concepts, mid- and long-term programs for road infrastructure development, making analyses jointly with the respective directorate to the Ministry of Regional Development and Public Works of the information on the municipal road network and coordination of programs for its maintenance and development, thus achieving integrated maintenance and development of the complete road network.

The functions of the Fund are laid down in the Road Act, last amended in August 2006. In compliance with the Road Transport Law adopted in 1999, the Executive Agency "Road Transport Administration" within the Ministry of Transport was established and currently performs the administrative service and control of the national and international road passengers and cargoes transport on the territory of the Republic of Bulgaria.

With effect of 9 September 2009 pursuant to the amendments in the Roads Act NR1A was transformed in Road Infrastructure Agency (RIA) within Ministry of Regional Development and Public Works.

### **2.1. Infrastructure**

#### **2.1.1. Diagnosis of the road infrastructure network**

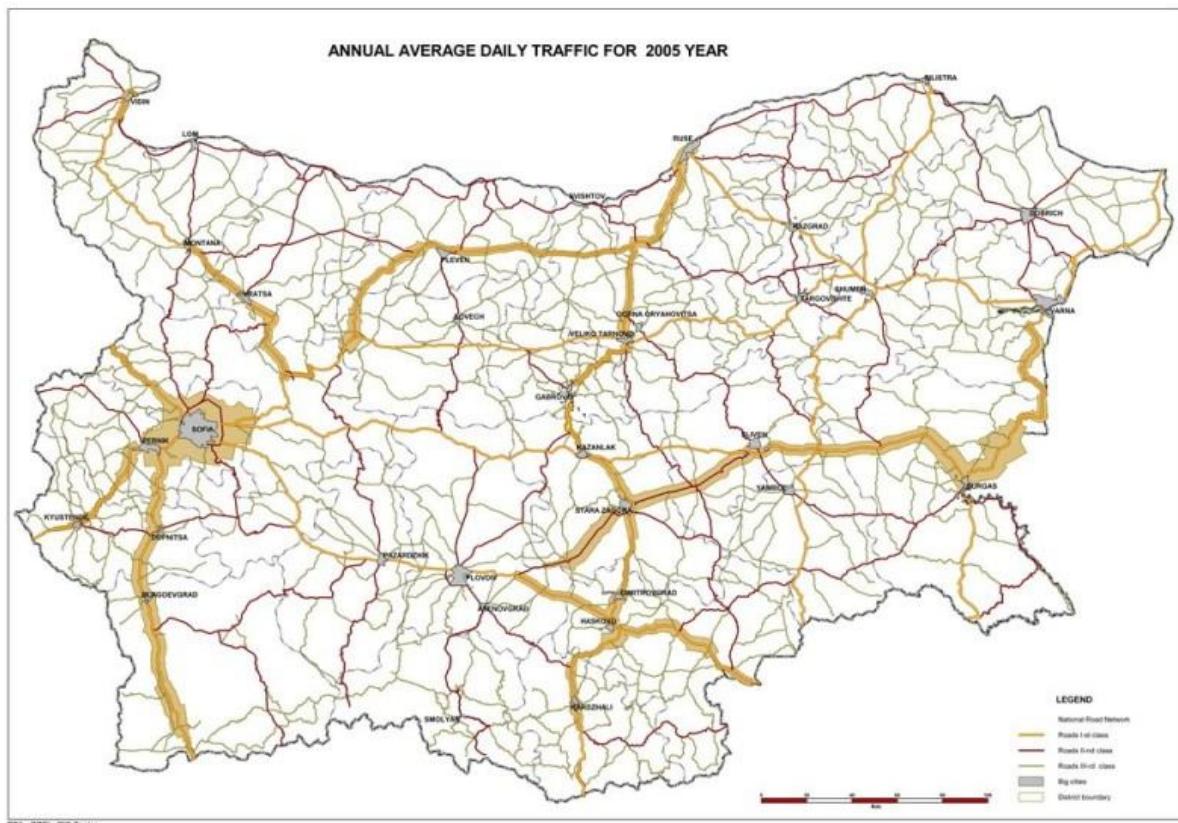
As of 31.12.2005, the total length of the road network in Bulgaria is 37.3 thousand km, of which more than 19.276 km are the state roads (Annex No.1; Table No.5), categorized in the following way:

Motorways	-	331 km
Roads I class	-	2961 km
Roads II class	-	4012 km
Roads III class	-	11927 km
Municipal roads	-	21 000 km
Road connections and nodes	-	242 km

The Bulgarian roads with pavement make up 98.4% of all roads in the country, with 92.5% of them having an asphalt surface and 82.8% of them able to carry 10 tons/axle. The length of the roads with no pavement is 272.1 km or 1.41% of the total length of the road system. Currently only 12 villages are not connected with the road network (61.2 km).

The overall density of the entire road network is 0.39 km/km<sup>2</sup>, which is lower than the average about 0.51 km/km<sup>2</sup> for the EU (15), but is higher than that of countries such as Poland, Slovakia, and Turkey and equals that of Latvia, Lithuania, Rumania, and Slovenia. On the other hand, the density of the Bulgarian road network (0.171 km/km<sup>2</sup>) is higher than the average density for the EU (15) – 0.09 km/km<sup>2</sup>, as well as for all the "new" member countries, with the exception of Hungary and the Czech Republic, but falling behind in terms of motorway density. Having in mind the fact that about 40% of the Bulgarian relief is mountainous and therefore low in population density, the overall density of the road system is sufficient. The classification of the roads is done on administrative basis and does not take into account neither the technical characteristics of the road, nor the intensity of traffic, except when dealing with the motorways. In 1999 with the

approval of the new system of classification, the IV class roads were excluded from the national road network. At that point 5,256.6 km of the latter were reclassified as roads III class. The main goal behind the reclassification was to leave roads connecting the municipal centres and groups of smaller villages in the respective municipalities in the road network. Those roads have been designed and built according to the norms for IV class roads and therefore do not meet the current III class standards and norms. The condition of many of those roads is extremely poor. In this line of thought, the main part of the road network, the roads with the highest concentration of traffic, includes the motorways and a part of I, II, and even III class roads. (See the following map about annual average daily traffic for year 2005).



A large portion of the roads have not been repaired in more than 15 to 20 years, when periodic maintenance is scheduled for every 5 to 7 years and thorough maintenance and major repairs are scheduled for every 12 years. Most of the reclassified roads mentioned earlier need reconstruction in order to meet the standards for III class roads.

The motorway, four-lane, and three-lane road coverage of the country's territory is quite sporadic. The roads going east-west are generally better developed than those going north-south, with unsatisfactory service in the peripherals, namely on the southern border, the Danube riverside, and those located between the Pan-European transport corridors IV and IX.

Due to the chronic lack of maintenance funds and the previously postponed repair work, the condition of the road network is unsatisfactory. A major indicator for that is the condition of the road surface, evaluated according to the "Method for measurement and evaluation of the road surface deterioration", which takes into account the type and magnitude of the existing surface damage, judged and evaluated on the basis of the overall condition of the road surface, or more specifically:

- Good condition – surface damage up to 10 %;
- Average condition – surface damage 10 % to 30 %;
- Poor condition – surface damage over 30 %.

Statistics shows that since from 1990 there is a positive correlation between the decrease in planned maintenance work on the roads and the damage noted on the road pavement. Unfortunately, that correlation seems to still exist today.

The condition of the road pavement of the Bulgarian road network as to 31.12.2005 is shown in Annex No.1, table No.6.

The data show that there is a drastic decrease in the percentage of roads in good condition and that seems to be a recurring trend. It has been concluded that the most deterioration of the road network has occurred in the time period between the years 1992 and 1997.

Currently, over 12,000 km of roads, or 60% of the paved roads, need reconstruction, minor, or major repairs.

The condition of the road infrastructure by the middle of 2006 is characterized by:

- The lack of funds, leading to inability to meet the normative deadlines for maintenance and repairs, which results in multiplication of the aging effect and noticeable increase in the expenses for periodic repairs and maintenance of the road pavement. For the same reason previously prepared technical projects, mainly dealing with road rehabilitation, have to be revised and redone;
- The excessive interval of time between the preparation of the projects and their realization – often caused by a change in the norms and legislation, or an expiration of the validity of documents connected with the expropriation of areas meant for building purposes, of reports, of EIA (Environmental Impact Assessment) decisions, etc.;
- The trend of deterioration of the overall condition of the roads continues to exist. Over the years 2004 and 2005 the length of the roads classified as being in good condition has decreased with 1,444.6 km and 700 km respectively;
- The condition of the III class road network, which is of great municipal importance, is extremely poor due to the fact that the majority of the roads have not been repaired in over 20 years.
- The need of expansion or reconstruction of the sections of the road network with highest levels of concentration of traffic that have exhausted or are close to exhaustion of their traffic capacity.
- The need for construction of roads to connect the towns and different roads in the north-south direction on the main road system, with priority given to the roads part of the TEN-T road network.

It is also important to mention the insufficient number of constructed by-pass roads in order to shift the road traffic from the populated areas and settlements.

Another problem, according to the international commitments undertaken by the country, is the need to increase the loading capacity of the road pavement to 11.5 t per axle along the main international transport corridors and destinations.

### **Past and ongoing rehabilitation of the main road network**

In order to improve the condition of the national road network, the Government of Bulgaria has decided to undertake a long-term road rehabilitation programme namely “Transit Roads Project”. The programme started in 1994 with “Transit Roads Project I”. For the purpose of the financial assistance the two major European banks were sought – the European Bank for Reconstruction and Development and the European Investment Bank. The EU PHARE Programme joined the project by providing a financial assistance. With TRP I the Government of Bulgaria aimed to reduce the further deterioration of the primary road network of the country by the rehabilitation of close to 620 km E-class roads and motorway sections grouped in 11 lots as well as the completion of 32 km stretch of the Trans European Motorway (TEM).

Subsequently the Government of Bulgaria decided to launch “Transit Roads Project II” (TRP II) targeting the rehabilitation of another 800 km of primary roads and motorway sections grouped in 17 lots. A second Loan Agreement with EIB was signed and at a later stage the EC PHARE Programme joined in co-financing this project.

In 1998 Transit Roads Project III (TRP III) was launched, which targeted the rehabilitation of some 600 km of primary roads, grouped into 13 Lots. For four of the above Lots, namely Lots 3, 4, 8 and 9, with a combined length of approximately 245 km, ISPA is providing a financial assistance to cover 75 % of the construction cost.

Following the successful implementation of the Transit Roads Projects I, II & III in April 2003 the Government of Bulgaria signed a Loan Agreement with the European Investment Bank for co-financing of the TRP IV, Phase 1. The Project consists of rehabilitation and upgrading of primary transit roads in Bulgaria with approximate length of 430 km (10 lots).

The investment project Transit Roads Rehabilitation Project IV, Phase II is an integral part of the implemented programmes and projects for improvement and equalization of the national road network.

The majority of the road sections included in the project is located on the routes of the TEN-T network and the E-roads on the territory of the country. Under "PHARE – CBC with Greece" Programme there are also road sections along the TEN-T network, in particular along the Pan-European Transport Corridors IV, VII and IX.

Due to the good results obtained by the implementation of the Transit Roads Rehabilitation Project for the period 1993 up to now, preliminary discussions are being held for determination of the scope of road sections to be rehabilitated as well as the financial parameters of the forthcoming Transit Roads Rehabilitation Project V, which will be co-financed by EIB and the state budget.

The adopted amendments of the Roads Law with regard to the implementation of the vignette system for collecting charges for use of the Bulgarian road infrastructure both for Bulgarian and EU carriers (promulgated in SG No 9 of 31.01.2004) have given the legal basis for further alignment with the European legislation (Directive (EC) 99/62 for the charging of heavy goods vehicles for the use of certain infrastructures and its revision the Directive (EC) 2006/38). The law foresees that the charges' rates for Bulgarian and foreign registered vehicles will be made equal as of 01.01.2007. Secondary legal acts are Decree No 50/ 02.03.2004 of the Council of Ministers for amendment of Tariff No 14 for the fees levied within the system of the Ministry of Regional Development and Public Works and by the regional governors (Promulgated in SG No 20 of 12.03.2004), Decree No 57/12.03.2004 of the Council of Ministers for adoption of the Ordinance on the terms and procedure for collection of vignette charges related to paid use of specified national roads within specified period of time (SG No 24 of 23.03.2004) and Decree No 321/30.11.2004 for amendment of Tariff No 14 for the fees levied within the system of the Ministry of Regional Development and Public Works and by the regional governors (SG No 107/07.12.2004). The list of national roads subject to charge for using of road infrastructure and the structures subject to charge according to Article 10, Paragraph 4 of the Roads Act was approved by Decision of the Council of Ministers No 945/01.12.2004 (promulgated in SG No 109/14.12.2004). Thus the complete legal basis was created.

On 01.01.2005 commenced the second phase of the vignette system, embracing the last road vehicle category, namely road vehicles for transportation of passengers with up to 8 + 1 seats.

The last stage of the vignette system was developed in 2006. As of the beginning of 2007 equal vignette rates are applied to both foreign and Bulgarian registered vehicles, thus fulfilling the requirements of Directive 1999/62/EC toward non-discrimination in terms of the nationality of the haulier or the registration of the vehicle, or origin or destination of the transport. A daily vignette was introduced thus fulfilling the commitment undertaken to the EC. At present daily, weekly, monthly and annual vignettes are sold for vehicles with more than 8 seats and freight vehicles with 2 or more axles.

The rates of the vignette charges are in conformity with the requirements of Directive 1999/62/EC and the new Directive 2006/38/EC. The calculations of the infrastructure costs are made accordingly to the principles set forth in the two Directives. With a view to the consultations hold with the Bulgarian hauliers and having in mind the vastly increased financial burden to them in 2007 compared to 2006, the rate of the vignette charges is considerably lower than those economically justified in the study of the consultant. During technical consultations the respective EC authorities were informed for the structure and rates of the applied tariffs. It is important to be

noted that the rate of the charges is differentiated with respect to the costs caused by the road vehicles and meets the requirements of Directive 1999/62/EC. Pursuant to Article 44 of the Roads Act in force the income of the vignette charges shall be used for maintenance and improvement of the vignette road network only and not for new construction.

Complete transposition of Directive 2006/38/EC in the Bulgarian legislation is forthcoming so as to be effective as of 2008.

As of the moment of its implementation till now the vignette system is successfully operating based on well developed network of about 3 500 sales points all over the country. The vignette stickers are distributed by the units of the Road Executive Agency (Central office in Sofia, 27 Regional Road Administrations and sales points at all Border Crossing Check Points), the branches of “Bulgarian Posts” and DZI Trans. The revenues from the vignette system in 2004 was about 39 000 000 Bulgarian Leva, and in 2005 - about 135 000 000 Bulgarian Leva. The forecast revenues for 2007 are about 180 000 000 Bulgarian Levs.

The introduction of vignette system aims to guarantee the funding for maintaining the national roads, but not to cover the whole expenditure for the road infrastructure. It is one of the tools for providing of income for maintenance of the vignette road network. The state budget is also a source for supplying of funds for this purpose. In case of disasters and accidents the National Road Infrastructure Fund will get additional funds for fulfillment of necessary repair works. At present jointly with Dutch experts a modern Road Management System is under elaboration. It will contribute for the more rational and effective use of the funds available for maintenance. The elaboration of a price system allows dynamic change and sustainable funding of the road infrastructure.

### **Concluding overview**

All roads of international importance are paved, but as a whole, the quality of these roads as well as the state of the road structures is poor. The country's coverage with high-class roads is irregular – the Eastern-West destinations are better developed than the Northern-South destinations; the peripheral regions along the Southern border, the Danube coast, and the regions located between Pan-European Transport Corridors IV and IX are suffering from the poor quality of the road infrastructure.

#### **2.1.2. Trends for the improvement of the road infrastructure network**

The improvement of the road network and the progress in the road transport sector as a whole depend on the realization of the following strategic goals:

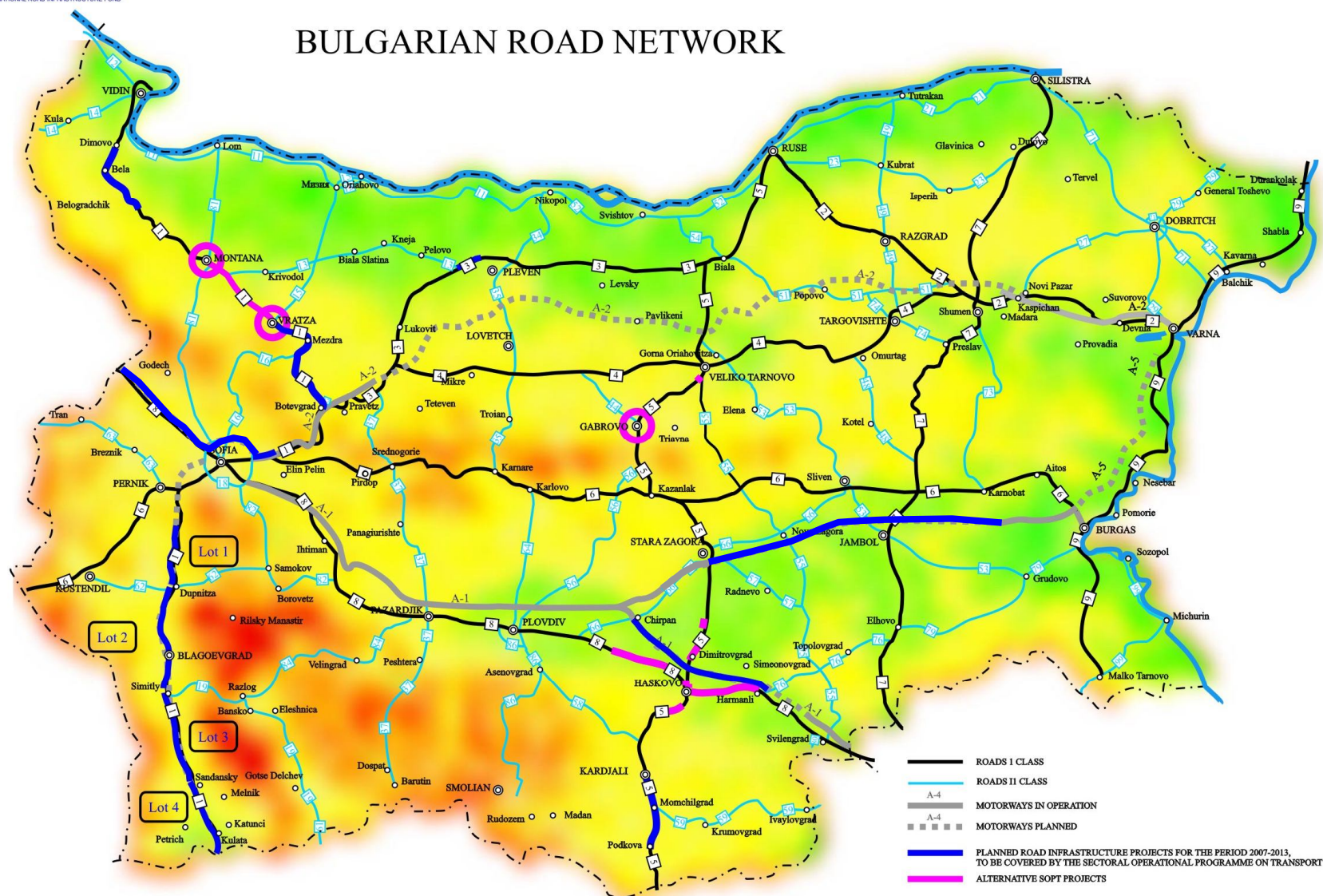
- Improvement of the national road network control system through introduction of a modern planning processes providing effective maintenance and saving financial resources;
- Achievement of compliance of the technical and operation parameters of the road infrastructure with the European technical standards for ensuring transport safety and comfort;
- Homogenization of the road network along the Pan-European transport corridors and within the sections of the TINA-network on the territory of the country and providing pavement-loading capacity for axle loading of 11,5 t per axle. The TINA (Transport Infrastructure Needs Assessment) process was designated to initiate the development of a multi-modal transport network within the territory of the candidate countries for accession: Estonia, Latvia, Lithuania, Czech Republic, Slovakia, Hungary, Poland, Slovenia, Romania, Bulgaria and Cyprus. In the Final Report, October 1999, the backbone network was defined, which was the network proposed by the European Commission and is based on the ten Pan-European Transport Corridors, and the additional network components, proposed by the countries;
- Integration of the Bulgarian road network with neighboring countries network.

The achievement of these goals will provide better opportunities for the successful integration of the national road infrastructure into the developed road network of the EU countries.

The following tables describe in details the coordinated policies undertaken to reach the above mentioned objectives.



## BULGARIAN ROAD NETWORK





## **Road projects currently being realized on Pan-European Transport Corridors:**

### **Pan-European Transport Corridor IV TEN-T priority axe 7**

- “Maritza” Motorway; L = 114 km with a total cost of € 360 million and a deadline for completion 2009.
- Construction of the “Lyulin” Motorway; L = 19,125 km with a total cost of € 148.450 million and a deadline for completion 2009.
- Lot 1 – “Rehabilitation, strengthening, and improvement of the I-1 /E-79/ road, Daskalovo – Dupnitsa section”; L = 40.00 km, including 18 km of motorway construction and 22 km of rehabilitation with a total cost of € 54 million and a deadline for completion 2006.
- Road I-1 /E 79/ “Construction of the second tube of the tunnel on the Dupnitsa bypass”; L = 0.270 km with a total cost of € 4.6 million and a deadline for completion 2006.
- Lot A – “Rehabilitation and partial reconstruction of the II-19 road at the Simitli – Razlog section; L = 36.00 km with a total cost of € 10,178 million and a deadline for completion 2007.
- Lot B – “Rehabilitation of the II-19 road in the Razlog – Bansko – Gotze Delchev – Sadovo sections”; L = 58.00 km with a total cost of € 10.301 million and a deadline for construction 2007.

### **Pan-European Transport Corridor VIII**

- Project “Trakia” Motorway, Lot 1 – “Orizovo – Stara Zagora”; L = 38.740 km with a total cost of € 84.858 million and a deadline for completion 2007.
- Project “Trakia” Motorway, Lot 5 – “Karnobat – road node Burgas-west”; L = 35.288 km with a total cost of € 79.444 million and a deadline for completion 2006.

### **Pan-European Transport Corridor IX**

- The construction of an access road “Podkova – Makaza” L = 18.00 km with a total cost of € 25,941 million and a deadline for completion 2006.

### **Other projects being realized**

- Transit roads III – Lots 3, 4, 8, and 9 L = 245.00 km (with a width of 7.50 m) with a total cost of € 38.500 million and a deadline for completion 2006.
- “Bulgaria – Transit roads IV”; L = 352 km with a total cost of € 97.200 million and a deadline for completion 2008.
- Construction of a bypass road Rudozem – the Greek border; L = 9.600 km with a total cost of € 6.949 million and a deadline for completion 2007.

## Motorways

### Situation as of 2007

The total length of the planned motorways network as of 2007 was 1302 km, to be constructed till 2014. In 2007 road network in operation was 408 km length (see the table “Motorways in Republic of Bulgaria as of 2007”).

### State of play as of the end of 2010

The total length of the planned motorways network to be constructed till 2020 is 1264.5 km. Currently, the road network in operation is 462.6 km length (see the table “Motorways in Republic of Bulgaria as of the end of 2010”).

### MOTORWAYS IN THE REPUBLIC OF BULGARIA as of 2007

Condition	Trakia motorway (km)	Hemus motorway (km)	Marisa motorway (km)	Kalotina – SOP Hemus motorway (km)	Ljulin motorway (km)	Cherno More motorway (km)	Struma motorway (km)	Total (km)
Project length	361	456	117	90	19	103	156	1302
In operation	221	162	5 – completed 20 (left carriageway)	12		8		331
Under construction	22	15	21				18	76
Planned for the period 2007 – 2013	118	279	91	78	19	95	138	818

# MOTORWAYS IN THE REPUBLIC OF BULGARIA as of the end of 2010

Condition	Trakia motorway (km)	Hemus motorway (km)	Marisa motorway (km)	Kalotina – SOP Hemus motorway (km)	Ljulin motorway (km)	Cherno More motorway (km)	Struma motorway (km)	Total (km)
Project length	361	433	117	75	19,5	103	156	1264,5
In operation	244	148	44	0	0	8.6	18	462.6
Under construction	117	0	0	0	19,5	0	0	136.5
Planned for the period 2007 – 2013	0	8,5	73	75	0	0	66	222.5

The “Trakia” motorway, with a total length of 188 km;

- Lot 2, Lot 3 and Lot 4 L = 118 km;

Initially the project was meant for realization via Public-Private-Partnership (Concession) and it was not included in the indicative list of major projects under OPT. In 2008 the Government decided not to implement the project via PPP and to be implemenvete with EU funding. Taking in to account the maturity of the project and being a part of Pan-European Transport Corridor VIII and TEN-T network in Bulgaria, Trakia Motorway project was added to the list of projects under OPT after decision of Monitoring Committee dated 08 June 2009.

- Section of the Sofia bypass road–northern arc L = 22 km;

- The Kalotina – Sofia bypass road–northern arc section L = 48 km.

The “Hemus” motorway L = 280 km (needs to be finished):

- Lot 1 L = 58.8 km

- Lot 2 L = 85.1 km

- Lot 3 Section L = 101.9 km.

During the Programming period 2007-2013 will be implemented project: Connection of the Hemus Motorway to the Sofia Ring Road with total length 8.5 km.

The "Black Sea" motorway L = 94 km

Economic and feasibility studies will be launched and supported by the action plan for Bulgarian into the BEI JASPERS program that will increase the quality of the programming and the capabilities of the Bulgarian administration to launch and monitor the projects. Horizontal actions will be directed to define the PPP frameworks to be implemented and

Struma motorway project, due to its importance for TEN-T network, will receive specific support in order to define the best financing framework.

## **2.2 Passenger transport**

The figures provided in the table below shows the passengers carried and transport performance by busses.

INDICATORS	MEASURE	ANNUAL REPORT						
		1999	2000	2001	2002	2003	2004	2005
Passengers carried	Thousand pass.	1 165 338	1 108 522	1 088 688	777 153	795 066	685 233	664 265
Transport performance	Million pass. Km	14 741	14 587	14 963	16 985	14 400	13 029	13 688

### **2.2.1. Domestic passenger transport**

With regard to the domestic passenger transport, the road transport occupies the leading position among the other transport modes in Bulgaria.

The poor condition of the road pavement creates problems for the urban transport, especially in the capital cities and big towns. The difficulties to handle with the road pavement, traffic organization problems in Sofia, the traffic jams in the main boulevards, the lack of urban transport priority regarding the bus-lanes, and the parking areas are to be solved in order to facilitate the transport operators and passengers.

Bus transport is well developed and spread in the country, including the destinations not covered by railway transport. In spite of the impressive number of companies licensed for bus transport, on the market of the interurban travels transport leaders are observed, which possess significant fleet of motor vehicles. The product provided by the bus companies satisfies to a greater extent the requirements of the customers in the country.

The basic bus transport problems are as follows: travel safety, lack of fixed arrival time, passenger services at the bus stations, lack of complex services (bus-bus or bus-train).

In the segment of suburban transport services are provided by bus or microbus transport companies as well. Most often, the quality of offered services in this segment does not meet the requirements of the passengers. Private cars satisfy an essential part of the demands.

A relatively new service is the microbus service that during the recent years became popular and is still developing. The microbus transport, provide regular and comfortable transport from the stops and access points to the populated areas. Most of the minibuses are owned by private carriers. Essential part of the demand on the market of interurban passenger carriages is satisfied by private cars, as well.

Based on the socio-economic data relevant to the development of the country, it should be noted that with the implementation of market economy and the country's entry into the European Union, there will be a increase in foreign investment, which in its turn will lead to a noticeable increase in the need for motor transport over the next 10 to 20 years. In this line of thought, areas lagging in their development until now are expected to become very active in the near future. The analysis of the country's motorization over the last several years helps evaluate its effects on the road system's improvement.

At the moment there are about 3,000,000 motor vehicles, of which 72% are passenger vehicles. Over the last several years there has been a relatively steady annual increase in the number of automobiles in the country of 3.5%. The distribution of automobiles in the country is fairly proportional to the regions' sizes. For example, 9% of all motor vehicles can be found

in Pleven, Veliko Turnovo, and Ruse and 33% of all motor vehicles can be found in Sofia and Varna.

### **2.2.2. International passenger transport**

During the past few years, the Bulgarian tourists prefer bus transport for traveling abroad. The international bus transport offers direct communication with all the Balkan Capitals, with the exception of Bucharest, and with a large number of countries to the west of Bulgaria. Although the obvious inconveniences of the continuous travels, the bus transport takes good positions on the transport services market, offering highly competitive prices and acceptable quality of service. **As a whole, the development** of passenger road transport is oriented towards: harmonization of the Bulgarian legislation in the field of road transport with the legislation of the EU; liberalization of the transport market; increase of the road transport safety; promotion of the environmentally-friendly transport; improvement of the quality of the control and efficiency of the public transport.

The promotion and development of environmental-friendly urban transport is the policy of all the capital cities and large cities worldwide. The strategic goal is to make the urban transport more attractive, and thus to reduce the continuously increase of the private car traffic. From the environmental point of view, urban transport traffic, especially the electric one, is to be preferred.

Over the last several years, there has also been a steady annual increase of foreign tourists coming into the country of about 15%, of which 74% enter with their own automobiles. A major issue with the development of out automobile tourism is the poor condition of the road system in Bulgaria.

Bulgaria's expected entry into the European Union in 2007 will undoubtedly lead to a fast increase in the number of foreign tourists, and consequently will lead to higher expectations towards our road infrastructure.

The Bulgarian country has taken an important step in the development of Intelligent Transport Systems in the Road Transport section by sending an official letter to the European Commission declaring its willingness to participate in ITHACA (Italy Hellas Advanced Corridor Applications) project.

The ITHACA is Euro-regional project and the countries involved in it are: Italy, Greece, Bulgaria and Romania. The partners would define a basic frame for ideas and figures to be fit into the 2007-2013 Work-Program in order to be able to submit a proposal according the EC schedule. The first call for proposal that EASYWAY will be attending is for the period of 3 years (2007-2009), will be issued around March – April 2007.

The aim of this proposal is to bring efforts towards the creation of new Euro-regional project specifically dedicated to Italy-Greece links and connections with the new Member States Bulgaria and Romania on the Eastern side with a possible prosecution towards Turkey.

### **2.3. Freight transport**

The table below shows the goods carried and transport performance.

Table

INDICATORS	MEASURE	ANNUAL REPORT						
		1990	2000	2001	2002	2003	2004	2005
Goods carried	thousand tons	79 655	36 758	39 164	56 804	54743	53 530	60 418

Transport performance	million ton-km	6 389	4 127	5 423	6 603	6 840	9 015	11 843
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On the transport market for 2005, the road transport share is as follows: 51% of tons goods carried and 12.9% of ton kilometres with regard to transport performance.

### **2.3.1. Domestic freight transport**

The shares of road and railway transport with respect to transport of chemicals, cellulose, paper waste and construction ceramic products are approximately equal, and for the other groups of commodities, the road transport is preferred.

The zones generating greatest demand of cargo road services are the regions of Sofia, Varna, Sofia City, Stara Zagora, Bourgas, Shoumen and Plovdiv.

### **2.3.2. International freight transport**

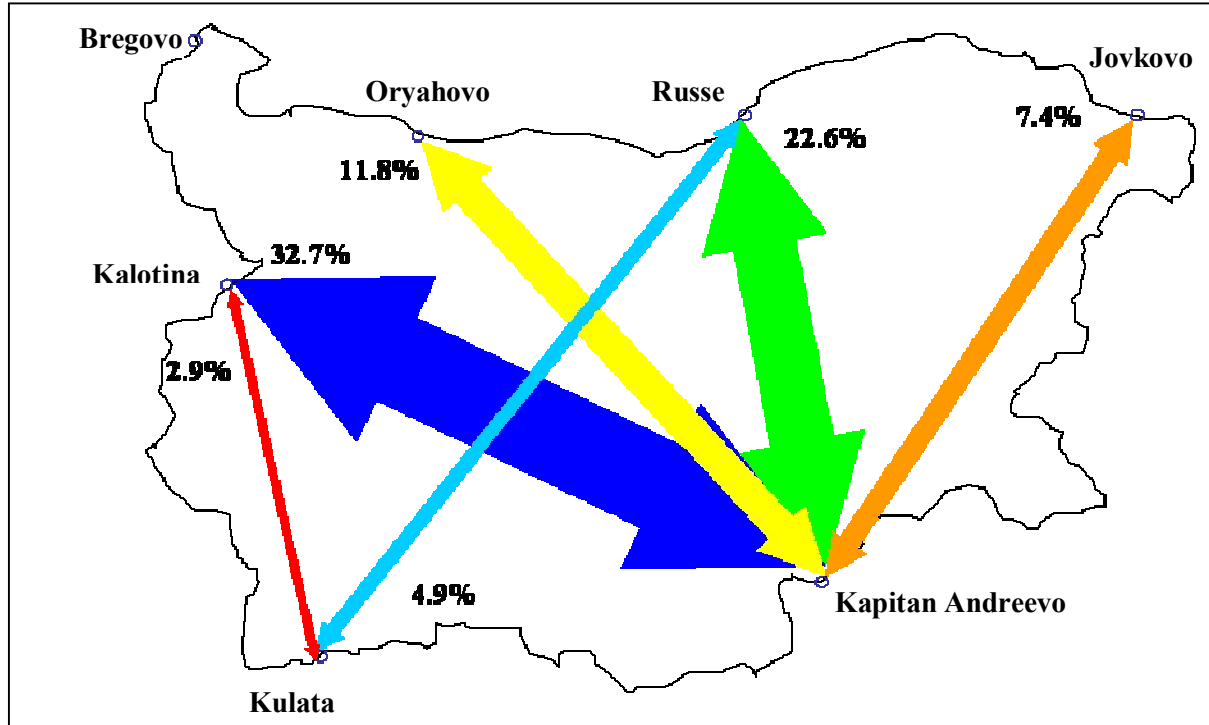
Road transport performs 50% of the import from the Western Europe, about 25% - from Central Europe, and 30% - from Southern Europe. In the case with Greece, more than 75% of the goods are imported by road transport, and just the opposite numbers are analysed for the Romania case.

Road transport performs 20% of the export to Western Europe, less than 10% - for Southern Europe, about 40% - for the former socialist countries from Central Europe, above 60% for Yugoslavia, 40% - for Greece, about 15% - for Turkey, and 80% - for FYROM and Albania.

- By road transport 98% of the food products and 100% of the chemical substances and 93% of the goods of group 9 of the NNGT (machines, factory products, and other various commodities) are transported;
- Road transport is dominating in the transportation of the agricultural products, construction products and fertilizers, (68%, 67%, and 60%), accordingly.

### **2.3.3. Transit transport**

Transit cargo flows through Bulgaria are strongly affected by international and regional factors, whereas the share of the road transport is about 85-90%. The cargoes transited through the Bulgarian territory in 2003, amounted up to 94.6%. The major part of the transit cargoes is with the following destinations: from and to Turkey, Germany, Romania, and Greece. The amount of transit carriages performed in 2003 by road transport, measured in tons, increased by 11.4% - from 4.3 mln. tons to 4.9 mln. tons. The number of the motor vehicles which transited the country in 2003 increased by 19.5% compared to the previous year, whereas at the end of 2003, their average daily number exceeded 1,000. The transit destinations in road transport are much more compared to the railway transport ones. The most important of them are: Capitan Andreevo – Kalotina; Capitan Andreevo – Rousse; Capitan Andreevo – Oryahovo; Capitan Andreevo – Dourankoulak; Koulata – Rousse; Koulata – Kalotina.



A major problem to face for cargo transport is the lack of a sufficient number of external links with the neighboring countries. In 2004, the operating BCCPs in the country were 21, with one more BCCP in Varna and Bourgas; accordingly, whereas not all of them were included in the TIR system for customs coverage of carried goods and only seven of them were on the first-class roads. The small number of BCCPs is the reason for the irregular loading of the existing road network by the transit transport traffic. The current situation restricts the trans-border development, communication and trade with the neighboring countries.

Regarding the existing BCCPs between Bulgaria, Rumania and Greece it should be noticed that the accession of Bulgaria and Rumania to the European Union is a precondition for a better and more effective cooperation system between the border control authorities. This enables introducing of relaxing and shorter procedures with a view to the control system, optimization of the work technology and achievement of the necessary compatibility of the information systems, and as a result reduction of the stopping times at the border crossings.

#### **2.4. Transport safety and security**

The Bulgarian legislation has adopted all the social and technical requirements of the European Union related to the safety and security of road transport.

Bulgaria has joined the European Agreement Concerning the Adoption of Unified Rules with respect to the Periodic Inspections for Check-Up of the Good Technical Working Order of Motor Vehicles and the Mutual Recognition of Such Inspections. Since March 2003, Bulgaria has joined the European Agreement on the International Carriage of Passengers by Road by Means of Occasional Bus Services (INTERBUS), which imposes specific control on the technical state on buses performing occasional international carriage of passengers.

The safety and security of road transport face a number of negative effects: poor quality of the road infrastructure, outdated motor fleet and active and passive safety, insufficient technical equipment of the control bodies of the Executive Agency Road Administration to perform an effective control, the rude neglect ion of the traffic regulation rules, insufficient number of pedestrian subways and over-bridges, insufficient safety provision and signaling of areas characterised with high concentration of road traffic accidents (RTA).

Every year, about 1,000 people die on the roads, thousands get injured, and the inflicted material losses are great. In spite of the decreasing tendency observed during the recent years, the state of road traffic traumatism is still causing anxiety.

For the period 2000-2005 the number of deaths and injured people was respectively 5842 and 52002. Outside the urban territories the victims are 21234 inclusive 3209 deaths. Less then 7% of the mortal cases befall on the highways. The simple analysis of the road accidents data

shows that the highways in Bulgaria are the most safety mode of roads. With regard to the unsatisfactory condition of the first class roads in combination with the increased number of motor vehicles and the badly technical condition of the private cars the number of deaths is 1171. The forecast for the number of dead people in road traffic accidents, made using the method of exponential chain shows that, during the period 2004-2008, no essential change in the developmental tendencies is expected. The basic measures that must be undertaken are related to: improvement of the efficiency of traffic participants' control; put into operation an automatic devices to control the speed regime monitoring; improvement of the traffic organization in populated areas and resorts; restrictions to the import of old motor vehicles (MVs); capacity building and creation of technical conditions in order to increase the quality control efficiency of the periodic technical inspections of the MVs; modernization and rehabilitation of existing main roads.

According to Council of Ministers Decision №603/11.08.2006 permanent tendency toward reducing the number of road accident victims in conformity with the European Union target that aims to reduce the road tolls by transport accidents with 50% down till 2010 in Bulgaria has to be achieved.

In December 2006, the Council of Ministers adopted the National strategy for the improvement of road safety in the Republic of Bulgaria for the period 2007-2010. This document was elaborated by the State Public Consultative Commission on the Problems of the Road Safety. Spatial attention is devoted for the operation of a safety infrastructure, the security in the repair zones and for the improvement of the traffic management on the motorways and I class roads.

The construction of motorways and reconstruction and rehabilitation of I class roads financed by OPT and the implementation of the National strategy for the improvement of road safety will have significant contribution to the EU wide targets on reduction of death from road traffic accidents.

The State-public consultative commission on the problems of road traffic safety was constituted with the aim to fulfil the national tasks for improvement of road safety. The purpose of this commission is to improve the coordination between the state bodies and the public on the problems of the road traffic safety. The commission assists the Council of Ministers in taking decisions related to road traffic safety, prepares positions and elaborates drafts of laws and bylaws, analyses information, prepares reports, national programs, etc.

The following priority tasks will have special accent in the activity of the National Road Infrastructure Fund in this field within the program period of Sectoral Operational Programme on Transport:

1. To commence the development of "Action plan for improvement the road safety till 2010" in which shall be described the main problems, aims and possible measures to be taken towards the road infrastructure for improvement the road traffic safety.
2. With a view to the forthcoming adoption of the Directive of the European Parliament and of the Council on road infrastructure safety management, to organize and hold courses in the system of the Fund for clarification of the role, the responsibilities, the tasks and engagements of the owner of the road infrastructure in terms of its application.
3. A concrete program to be prepared for training of experts, auditors and inspectors for road infrastructure safety management. The training shall conclude with a certificate for competence.
4. A data base shall be designed and built up in 2008, which will serve as information system for storage, automatic processing and analysis of the data on road accidents over the national roads.



5. Special chapter shall be included in the terms of reference for design of infrastructure projects with requirements to the designers for considering the problems related to road safety.
6. The Bulgarian side will proceed to participate with its specialists in the program “Partners for Roads – road infrastructure safety management” funded by the World Bank and the government of the Netherlands. Opportunities shall be searched for financing of study and implementation of safety measures towards sections with high rate of black spots within the framework of the Program.

## ***2.5. Environmental protection***

The transport as a whole, and mostly, the road transport, affects negatively on the environment by affecting the quality of atmospheric air (QAA) in the populated areas, the global climate changes, the landscape and agricultural land (completion of big transport infrastructural projects) and by creating noise and waste.

The analysis of the data concerning the general annual emissions for the major pollutants shows that, with respect to Pb emissions, the share of road transport in the total amount of emitted lead is significant. This is due to the persisting significant share of lead oils in the country's total oil consumption – 33%. Because of the increased consumption of the lead-free oils during the recent years, lead emissions from road transport have been considerably reduced compared to past periods. The quality and the pollution of the atmospheric air in the so called hot points of the country is getting worse due to the continuously increasing motor fleet. The problem with the increase of atmospheric pollution by MVs is additionally aggravated by the fact that the available motor fleet in the country has an extremely unfavorable age structure. The number of newly registered used and new cars in the country increases rapidly.

Generally, 58% of the cars (1,543,229) are more than 16 year old, whereas the prevailing part of them is more than 20 year old. The data shows plainly that the motor fleet of the country is physically and morally outdated and causes environmental problems. The rate of upgrading the cargo fleet is positive, whereas the newly registered motor vehicles comply with the requirements for harmful emissions and noise. A great part of the road traffic passes through the populated areas, therefore, being a major factor determining the QAA. The regions with deteriorated QAA are in most cases, the highly populated regions with intensive transport traffic – Sofia, Bourgas, Plovdiv, Varna, Pernik etc. In 2002, road transport emission of harmful substances into the atmospheric air at national level showed growth, compared to 2001. Unfortunately, the total oil consumption increased from 567,038 t to 610,983 t and the consumption of propane-butane gas increased by 27,000 t. A positive tendency for reduction of the lead emissions from road transport is observed. In 2002, the lead emissions dropped from 98.5 t to 15.9 t as a result of the implementation of the National Program for Gradual Termination of the Production and Use of Lead Oils in the Republic of Bulgaria. During 2002, transport in general, was the major source of nitrogen dioxide and one of the greatest sources of carbon oxide in Bulgaria: it emitted for 55% of the national emissions of nitrogen dioxide and 31% of carbon oxide. The emissions of NMLOS and sulphur dioxide from transport are respectively 14.1% and 3.4% of the national emissions of these harmful substances. The transport noise constitutes 80-85% of the overall noise loading in the highly populated areas. The noise from the road transport is the major factor for above-norm noise pollution in the cities. The noise characteristics of the cities show a lasting tendency for increase of the noise pollution in urban areas up to levels ranging within 63-67 dB(A) and 68-72 dB(A), while the norm is 55-60 dB(A). Since 2002, the Decree on the Terms and Conditions for Reduction of MV Pollution has been put into force, reflecting the requirements set in the Directive 2000/53/EC concerning the Waste from OIMVs. The establishment of a

system and infrastructure for environmental-friendly treatment of the OIMVs is just starting on. A Programme for application of Directive 2000/53/EC has been elaborated that includes specific organisational, administrative and investment measures for implementation the Directive's objectives. The road transport is the major source of accumulator and tire waste. A technical infrastructure for processing of accumulator waste was constructed, and with respect to tire waste, in 2003, installations for processing and burning of the old tires were introduced, which resolve partially the existing problems.

The environmental impact associated with construction of the motorway is related to air emission, water pollution, noise caused by traffic, disposal of construction material, wildlife protection and landscape infringement.

Protective and mitigation measures must be carried out during project design, implementation, and operation and maintenance and close consideration should be given to the following aspects:

- visual impact of the project and providing landscape planting
- air pollution both during construction and during operation
- implementation of noise reduction measures
- Protecting water resources

A special attention the Bulgarian authorities (MT, MOEW, NRIF) are paying on the environmental impact associated with the construction of Struma Motorway- the most important road project and planned to lead through Cresna Gorge, which is to become Natura 2000 Site. That is the reason all alternative routes of the motorway to be duly considered through the process of continuous public consultations, that involve representatives of municipalities, NRIF, MT and NGOs. In the cases where sections which appear to have no other reasonable alternative routes due to justifiable reasons and which cross Natura 2000 sites, a mutual agreement for their alignment is expected to be achieved and additional mitigation measures shall be taken in order to comply with EU Directives 79/409/EC and 92/43/EEC on Natura 2000

## ***2.6. Operators***

Among the road transport companies in the country, there is no one with State majority; moreover, significant part of the big companies is with foreign co-participation. The considerable part of the transport enterprises in Bulgaria – over 95% are private-owned. A small part, performing mostly in-town passenger carriages, is municipality-owned. The overall situation of the transport companies can be shortly described as bad.

As of December 2005 the data about the licensed passengers and cargoes transport performance on the territory of Bulgaria is as follows:

- For cargo transport within the country: 2,470 operators with 10, 800 lorries;
- For passenger transport within the country: 1, 654 operators with 11, 710 coaches;
- Taxi services – 3,733 operators with 22, 564 cars.

As of the same period, 4,848 operators were licensed for international passengers and cargoes transport (Annex No.1; Tables No.No.7, 8). Considerable part of the transport companies has only one lorry and one driver. Certain transport companies are operating well on the market, possessing large number of lorries. The average structure of cargo motor fleet as a whole is unsatisfactory, but reportedly, the upgrading rate is growing up. The newly registered MVs comply with the requirements for harmful emissions and noise.

## ***2.7. Diagnosis of the road transport sectors***

**The problems in the development of the road transport** are numerous but it must be mentioned in priority the poor quality of the road infrastructure; lack of sufficient

administrative capacity and technical equipment to perform an effective control of the implementation of the social and technical requirements of *acquis communautaire* transposed on Bulgarian legislation, the low technical level of the considerable part of the motor fleet, and, as a major consequence, the limitation of the access of the Bulgarian transport operators to the transport market of the EU currently, this access is limited on the basis of bilateral agreements with the member-states and the licensed quotas for market access agreed therein. The operator must face as a consequence; the shortage of bilateral carriage licenses to/from third parties; the traffic jams at the cross-border checkpoints (BCCPs).

For the time being, the road transport in Bulgaria is developing, showing serious growth with respect to the cargoes performances. The problems with the age structure of the motor fleet in the country, the transport operators' difficulties concerning planning the investment interventions, the emissions into the environment, the noise caused by road transport, the treatment of accumulated waste from decommissioned MVs are among the most negative factors, which the country must overcome in order to integrate the national transport system successfully into the EU transport system.

## ***2.8. Trends for the development of the road transport sector***

Due to its vocation as an important crossroad and transit area in the Balkan Peninsula, especially for freight transport, a situation that could be seen as an opportunity for local transport sector, Bulgaria should take advantage of the implementation of the road freight corridor programmed by the European Union. This policy should enable Bulgaria to have a better level of investment in major roads maintenance, have better connection with neighboring countries and with the whole European transport network as well, and to develop consequently the road cargo transport with safer condition of work and a limited impact on environment. Under National transport strategy coverage is programmed or in course of implementation a more specific policy addressing the main issues of the sector such as amending the legal basis with a view to introducing tachographs and speed limit devices for the heavy goods vehicles, enhancing the usage of environmentally friendly and energy saving vehicles and fuels, development of intermodal transport, national plans and programmes for training the personnel of the transport sector

**Financial funding sources cooperating in the National programme for infrastructure, road sector, 2007-2013 as of 2007**

No	Name of the future investment project that is to be prepared for Cohesion fund financing	EU Funds			PHARE & ISPA	Loans	State Budget	Total (x1000 Euro)	Start/end year for implementation
		ESF (x1000 Euro)	ERDF (x1000 Euro)	CF (x1000 Euro)					
ROAD PROJECTS									
1	Trakia Motorway – Lot 1					34 800	50 058	84 858	2003/2007
2	Trakia Motorway – Lot 5					38 400	41 044	79 444	2003/2006
3	TRRP IV – I phase					60 000	37 200	97 200	2006/2008
4	Ljulin Motorway				111 337		37 113	148 450	2006/2009
5	Daskalovo-Dupnica road					27 000	27 000	54 000	2002/2006
6	Dupnica tunnel				3 330		1 270	4 600	2005/2006
7	Podkova-Makaza road				14 620		11 321	25 941	2002/2006
8	TRRP III – Lots 3, 4, 8 and 9				28 875		9 625	38 500	2004/2006
9	Simitli-Razlog road				6 920		3 258	10 178	2005/2007
10	Razlog-Sadovo road				7 201		3 100	10 301	2005/2007
11	Rudozem-Greek border				4 915		2 034	6 949	2005/2007
12	Dimovo-Bela-Ruzinci road			21 400			10 600	32 000	2007/2009
13	Kardjali-Podkova road			21 400			10 600	32 000	2007/2009
14	Reconstruction works on Pan-European Corridors IV and VIII			271 750			135 875	407 625	2008/2014
15	Ruse-Veliko Tarnovo road			167 400			82 600	250 000	2008/2012
16	TRRP IV – II Phase			33 400			16 400	49 800	2009/2010
17	Vraca-Botevgrad road			57 000			28 000	85 000	2009/2012
18	Ring roads - Montana, Vraca, Gabrovo			54 000			26 000	80 000	2008/2011
19	Yablanica Junction			20 000			10 000	30 000	2007/2009

No	Name of the future investment project that is to be prepared for Cohesion fund financing	EU Funds			PHARE & ISPA	Loans	State Budget	Total (x1000 Euro)	Start/end year for implementation
		ESF (x1000 Euro)	ERDF (x1000 Euro)	CF (x1000 Euro)					
20	Botevgrad-Bjala road			24 450			12 225	36 675	2010/2011
21	Maritza Motorway from km 5 to km 72			140 700			69 300	210 000	2007/2009
22	Belokopitovo Junction						30 000	30 000	2007/2009
23	Botevgrad-Sofia Ring Road						33 000	33 000	2007/2008
24	Sofia Ring Road - I phase						30 000	30 000	2007/2008
25	Sofia Ring Road - II phase						108 000	108 000	2008/2010
26	Hemus Motorway - I phase						262 000	262 000	2011/2014
27	Hemus Motorway - II phase						378 000	378 000	2012/2015
28	Struma Motorway			480 000			120 000	600 000	2007/2011
	TOTAL			1 150 800				3 561 015	

**Financial funding sources cooperating in the National programme for infrastructure, road sector, 2007-2013 as of the end of 2010**

No	Name of the future investment project that is to be prepared for Cohesion fund financing	EU Funds			PHARE & ISPA	Loans	State Budget	Total (x1000 Euro)	Start/end year for implementation
		2014-2020	OPT						
		(x1000 Euro)	ERDF (x1000 Euro)	CF (x1000 Euro)					
ROAD PROJECTS									
1	Trakia Motorway – Lot 1					34 800	62 624	97 424	2003/2011
2	Trakia Motorway – Lot 5					38 400	31 900	70 300	2003/2007
3	TRRP IV – I phase					60 000	78 000	138 000	2006/2012
4	Ljulin Motorway				111 337		73 662	185 000	2006/2011
5	Daskalovo-Dupnica road					43 118	54 335	97 453	2002/2007
6	Dupnica tunnel				3 350		3 270	6 620	2005/2008
7	Podkova-Makaza road				14 620		11 321	25 941	2002/2006
8	TRRP III – Lots 3, 4, 8 and 9				28 875		9 625	38 500	2004/2006
9	Simitli-Razlog road				6 920		8 247	15 167	2005/2008
10	Razlog-Sadovo road				7 201		3 100	10 301	2005/2008
11	Rudozem-Greek border				4 916		5 198	10 114	2005/2008
12	Dimovo-Bela-Ruzinci road	25 600					6 400	32 000	2014/2020
13	Kardjali-Podkova road			25 600			6 400	32 000	2011/2013
14	Reconstruction works on Pan-European Corridors IV and VIII			271 750			135 875	407 625	2008/2020
15	Ruse-Veliko Tarnovo road	167 400					82 600	250 000	2012/2020
16	TRRP IV – II Phase			33 400			16 400	49 800	2011/2013
17	Vratsa-Botevgrad road			68 000			17 000	85 000	2012/2014

No	Name of the future investment project that is to be prepared for Cohesion fund financing	EU Funds			PHARE & ISPA	Loans	State Budget	Total (x1000 Euro)	Start/end year for implementation
		2014-2020	OPT						
		(x1000 Euro)	ERDF (x1000 Euro)	CF (x1000 Euro)					
18	Ring roads - Montana, Vraca, Gabrovo			54 000			26 000	80 000	2012/2014
19	Yablanica Junction						30 000	30 000	2007/2009
20	Botevgrad-Bjala road						36 675	36 675	2010/2011
21	Maritza Motorway from km 5 to km 72			167 200			41 800	209 000	2011/2013
22	Belokopitovo Junction						30 000	30 000	2012/2014
23	Botevgrad-Sofia Ring Road						33 000	33 000	2007/2008
24	Sofia Ring Road - I phase						30 000	30 000	2007/2008
25	Sofia Ring Road - II phase						108 000	108 000	2008/2010
26	Hemus Motorway - I phase						262 000	262 000	2011/2014
27	Hemus Motorway - II phase						378 000	378 000	2012/2015
28	Struma Motorway	271 819		208 181			120 000	600 000	2011/2020
29	Trakia Motorway , Lots 2, 3 and 4			286 180			76 411	362 591	2010/2013
30	Sofia-Kalotina Motorway, Phase I			64 000			16 000	80 000	2012/2020
31	Sofia-Kalotina Motorway, Phase II			140 000			35 000	175 000	2012/2020
32	Sofia-Kalotina Motorway, Phase III			120 000			30 000	150 000	2012/2020
	TOTAL	464 819		1 438 311	177 219	176 318	1 858 843	4 115 843	

In 2009- 2010 RIA proposed two new Major projects to be funded under OPT – “Completion of Trakia MW, lots 2, 3 and 4” and “Sofia – Kalotina MW” in three phases. Adding these two projects to the indicative list led to overbooking of the committed budgeted for road projects. OPT MA approach is to fund the most mature projects until the total budgeted of the priority axis 2 is awarded.

Depending on project readiness, the implementation of the phases of Sofia – Kalotina MW could start this programming period and continue the next period.

### ***3. WATERBORNE TRANSPORT***

The European transport policy emphasises the development of intra-Community maritime transport and inland waterway transport, two key components of intermodality, which should provide a means of coping with the growing congestion of road and rail infrastructure and of tackling air pollution. Until now these two modes have been underused. These transport modes should be supported through the development of better inland waterway services, promotion of the short-sea shipping (establishment of Motorways of the sea) and more efficient port services.

Danube River is the only domestic inland waterway. The Bulgarian section of the Danube River is situated in the lower flow of the river. The transport functions of the Danube River are of great importance for the development of the adjacent river regions. Danube River has been included in the general scheme of the European Inland Waterways (Pan-European Transport Corridor VII), on the meetings of the European Transport Ministers, held in Crete, 1994 and Helsinki, 1997. The Rhine, Main and Danube Rivers connect Western and Eastern Europe by the Rhine-Main-Danube Channel, thus giving excellent practical opportunities for direct navigational links between the Black Sea and North Sea with and a convenient waterway access to many of the European countries and their industrial centres. The increased interest in this important European inland waterway was confirmed in the report of the High level group on the trans-European transport network, 27 June 2003 (Van Miert report) and in the Decision (EC) 1692/96 revised by the Decision (EC) 884/2004. The Danube River was identified as priority axis № 18.

Republic of Bulgaria is now an external border of the European Union and link with Central Asia, the Near East, the Middle East, the Far East and the countries of the Black Sea Region. The biggest share of the trade of the European Union with non-member states is carried out by maritime transport.

In accordance with the regulations of the Law on the Maritime Spaces, Inland Waterways and Ports of the Republic of Bulgaria, the Bulgarian Ports Infrastructure Company within the Ministry of Transport, Information Technology and Communications manages the infrastructure of the public transport ports of national importance. The Executive Agency "Maritime Administration" within the Ministry of Transport, Information Technology and Communications controls the navigation safety in the Bulgarian maritime spaces and along the Bulgarian section of the Danube River. The institution responsible for the control and maintenance of the navigational conditions along the inland waterways of the Republic of Bulgaria is Executive Agency for Exploration and Maintenance of the Danube River, within the Ministry of Transport, Information Technology and Communications.

#### ***3.1. Infrastructure***

##### ***3.1.1. Port infrastructure***

The main seaports that carry out maritime transport in Bulgaria are Port of Varna PLC and Port of Bourgas PLC. They realize around 60% of the national import-export trade. The ports of Varna and Bourgas are included in the Concept for Development of the Pan-European transport corridors, due to their strategic location at the crossroads between Europe and Asia. The ports have sufficient capacity for general cargo, solid and liquid bulk cargo, containers, heavy parcels and RO-RO units handling. They have relatively well-developed transport infrastructures connecting them with the state's road and rail system, which enables



communication with the ports on the European transport corridors IX, X, VIII and TRACECA.

The ports for public transportation of national importance along the Danube River are the Ports of Vidin, Lom and Rouse. The biggest Bulgarian river port is the Port of Rouse, which is an important trade, industrial and transport centre, providing over 60% of the processed cargoes units of the country along the Danube River. The Port of Rouse is situated on the important combined crossroad on the Pan-European Transport Corridors VII and IX. The other ports for public transport with national significance on the Danube River are: the Port of Vidin and Port of Lom, which provide over 30% of the inland waterways freight turnover.

Most of the Bulgarian ports are built in the beginning of the past century for multifunctional purposes and that has a negative effect on their technical condition. At the current moment all of them have enough free capacity. The main problems for the development of the Bulgarian ports are connected to the lack of sufficient investments for maintenance and development of the ports infrastructure in the preceding years, outdated fundamental and transshipment mechanical facilities, poor condition of the piers.

The envisaged concession of the national ports provided for in the Law on the Maritime Spaces, Inland Waterways and Ports of the Republic of Bulgaria and the adopted national programme for development of the ports, outlines the main trend for the future development of the Bulgarian ports - modernization and development in conformity with the European Union market economy principles.

### ***3.1.2. Facilities for strengthening the river bed of Danube River***

There are a few parallel guiding walls and groins along the Bulgarian bank of the Danube River. Their current state is considered as unsatisfactory as most of them are partially or completely destroyed. Regarding the bottom sills, (which serve to re-direct the river flow and regulate the water quantities) two such facilities are build in the region of Belene. One of them is located within the Belene island channel and is in good technical condition. The other one blocks the Milka island channel. It had an impact for a short period of time (for a period of 10 years) but due to the method of its construction it is not functional at the moment.

The navigational channel on the Danube does not comply with the internationally accepted design standards, issued by the Danube Commission. There are numerous bottlenecks registered for the period 1994 – 2005 along the Bulgarian section of the Danube River.

Downstream of the Iron Gates II the Danube is flowing freely without any dams. For this part of the Danube the recommended depth of the channel is 25 dm below the reference navigation and regulation level (RNRL), which ensures usage of up to 94% per annum. The recommended width of the navigation channel (at RNRL – 25dm) amounts to 180m with minimal radius of the curves when fairway turns.

With respect to these design dimensions and situating, it should be noted that the least available depth is the predominant factor affecting the navigational conditions as it determines the allowable draft of the vessels and hence the carrying capacity of the fleet. According to data supplied by the Executive Agency for Exploration and Maintenance of the Danube River the following minimal depths has been found for the period 1996 – 2004:

- Belene island – least available depth of 15 dm and duration in which depth was less than 25 dm of 184 days;
- Bathin island - least available depth of 16 dm and duration in which depth was less then 25 dm of 129 days;

In certain sections of the river the banks and islands are subject to erosion due to the water flow and the unstable soil layers which often changes the direction of the fairway. In addition, large part of the eroded river banks are fertile land is completely lost.

The preferred methods for improvement of the navigational conditions are combination of river strengthening facilities (which re-direct the river flow) and regular maintenance through dredging. A hydrologic model of the sections was developed with the purpose to simulate and forecast the dynamic river processes. The total number and location of the facilities are determined on the basis of that model.

The hydro-technical engineering works and embankments in Bulgarian section of the Danube River, regarding the improvement of the navigation conditions are in compliance with the conclusions of the report of the High level group on the trans-European transport network, 27 June 2003 (Van Miert report) for development of the Rhein-Main-Danube link.

### ***3.2. Passenger services and cargo handling***

The passenger traffic through the sea ports is growing gradually since 2003 (Annex 1, Table 9). Most of the passengers that are rendered services in the Bulgarian seaports are cruise passengers visiting the Black Sea resorts. Naturally most of the passenger traffic through the river ports is done between Bulgaria and Romania. It is composed from people, accompanying motor vehicles (Annex 1, Table 11). The passengers from the EU are cruise passengers.

After the accession of Bulgaria to the European Union it is very possible that there would be an increase of the tourist traffic from and to the other member states. It is expected that the number of cruise passengers in Bulgarian ports should increase significantly. Therefore, it is necessary to improve the quality of the transport services and the safety of the traffic in Bulgarian maritime spaces and inland waterways. The transit traffic flow is also expected to grow gradually.

The statistical data shows significant increase for the last years in the handled goods in the ports (Annex 1; Table 10, 13). The general reason is the increase in the container flows, which corresponds with the world trends for the development of the container and inter-modal transport. The market economy oriented reforms and the new international trade policy of the Republic of Bulgaria oriented toward the EU countries are the very reasons for the decrease in the share of the bulk cargoes freights.

Regarding the river cargo traffic with the EU member countries, there is a growing tendency, and the main partner is Germany (Annex 1; Table 14). The basic imported cargo units processed in the national ports are Ro-Ro and general cargo. The exported cargo for the EU member countries is predominantly agricultural production and metals.

The freight traffic is expected to increase due to the accession of the country to the European Union, the manufacture and international trade development. The main advantages of the cargo transport along the Danube River are: safety, economy, low level of environmental pollution and high development potential. That kind of transport is an alternative to the road and rail transport. However it should be outlined, that the current situation in the Bulgarian river transport is far from that, because there are many objective negative factors. The optimization of the navigation conditions will transfer a big part of the freight traffic to waterway, which is in compliance with the established transport policy of the EU (the transport White Paper adopted by the European Commission on 12 September 2001).

According to the Van Miert Report removing the bottlenecks on the Rhine-Main-Danube link could transfer some 5 billion tones-kilometres of freight each year to waterways.

### ***3.3. Transport safety and environmental protection***

The current legislation on the maritime and inland waterway safety and environmental protection is in compliance with the international and the European Union requirements. The Republic of Bulgaria has ratified most of the international conventions on maritime safety and

the main international regulations, concerning control and prevention of maritime pollution from ships, intervention in cases of oil pollution and compensation of sea casualties.

In order to execute an adequate safety and environmental control of the navigation in the Bulgarian maritime spaces the Republic of Bulgaria has started the establishment of Vessel Traffic Management Information System since 1998 and at the current moment the system is already functioning. VTMISS is a system of harmonized informational services for the maritime shipping. The VTS information exchange between the ships and the coast based operators leads to higher level of maritime safety in the Bulgarian territorial waters, increased pollution response capacity, creation of instrument for effective traffic management and information services, support of the SAR operation implementation, overall facilitation of the maritime transport. Two projects co-financed by the PHARE programme on the establishment of the system have been prepared. PHARE Project BG 0012.01 – Bulgarian Vessel Traffic Management and Information System was finalized in October 2004. The implementation of PHARE Project BG 2003/004-937.04.01 Vessel Traffic Management and Information System Phase 2 is ongoing. A third phase of the project is envisaged with regard the further development of the established infrastructure and improvement of the effectiveness of the system, the coverage of the Bulgarian Black Sea region and increasing the scope of shipping services.

The major risks for the Danube River navigation are ice-drifting on the river, storms and fog, quick change in water levels, obstacles caused by sunken large objects like ships and barges, divergence from the marked navigational way due to negligent navigating of the ship and lack of timely warnings for state of the river sent to the ships by the specialized services. In order to reduce the risks for the navigation it is necessary timely informing of the navigators for the state of the river and hydro meteorological forecast in real time to be ensured, constant monitoring and informing for the obstacles which are important for the navigation safety.

The River Information Service system should collect, process, control and disseminate geodetical, hydrographical, morphological, hydrological, meteorological and statistical data relevant to the Danube River navigation. The development and implementation of the information technologies in the management and control of the inland waterways lead to a considerable increase of the navigation safety and the effectiveness of the inland water transport, also to a better protection of the environment. The River Information Service for the Danube River is responding to these needs. The experience gained during the development of Vessel Traffic Services will support the establishment of information services for the Bulgarian part of the Danube River.

The preservance of the water environment and the purity of the Danube River waters is a matter of great importance as Bulgaria is one of the poorest European countries as water resources. Both water and sediments are polluted at a number of places along the Danube River, although in other parts the water is relatively clean and suitable to be used even for drinking. A comprehensive assessment on the current pressures and impacts on the Danube River has been carried out by the International Commission for the Protection of the Danube River (ICPDR) in which Bulgaria contributed actively. This analysis demonstrates that there are already significant negative effects from navigation on the Danube and any future developments needs to take this into account. The implementation of the Water Framework Directive, in particular Art. 4.7, provides a solid basis for this.

In periods of low river waters there are places with low depths of the fairway. These unfavorable conditions can cause stranding of vessels and accidents may occur. This may lead to the release of oily and waste waters from ships which will lead to river pollution. The improvement of the depth in the critical sections will reduce the reasons for stranding of vessels and the possibility to occur accidents.

The development of traffic management information systems corresponds to the conclusions of the report of the High level group on the trans-European transport network, 27 June 2003

(Van Miert report). The establishment of Vessel Traffic Services system is closely related to the Directive 2002/59/EC of the European Parliament and the Council of 27 June 2002 which establishes a Community vessel traffic monitoring and information system (VTMIS) for the maritime spaces and repeals Council Directive 93/75/EEC. Since 2005 there is also Directive 2005/44/EC of the European Parliament and of Council of 7 September 2005 that establishes the provision of harmonized river information services (RIS) on inland waterways in the Community.

### **3.4. Operators**

Currently, the main Bulgarian Sea Operator - Navigation Maritime Bulgare is reducing its merchant fleet – respectively its transport capacity, due to the scrapping and selling of old vessels. Other sea operators are Mediterranean Shipping Co. (MSC), Evergreen, Maersk Sealand, ZIM Israel Navigation Company (Israel), TURKON, Hapag Lloyd, P&O Nedlloyd, K-Line. Most of the Sea Operators operate also trans-oceanic lines and thus can perform very flexible and aggressive price policy for the short destinations.

Bulgarian River Shipping PLC is the biggest Bulgarian river operator. The basic competitors in the eastern operative destination are the Ukraine Danube Shipping and Ukrechflot. The Ukraine operators transport 73% of the cargoes on eastern destination, the Bulgarian operators – 20% of the cargoes and the other 7% are transported by other operators. In the west operative destination, there is an increase in the number of the small flexible private operators.

The development of Bulgarian transport services market is based on the principles of liberalization and privatization of the transport services. That market can be described as specific, very dynamic and sensitive toward changes of any character - demand and supply of goods and raw materials, taxation, custom and other regulations. The increasing of the passenger and cargo traffic on waterway due to the manufacture, trade and tourism development of the country and the improvement of the navigation are precondition for the increasing of the number of the operators.

The economic effectiveness of the Bulgarian river and sea operators' activity and their competitive participation in the international transport services market depend on the aging of the fleet and the expenses on its maintenance. According to the ship statistic the average age of the ships poses the necessity of renewal of the fleet.

### **3.5. Conclusions**

#### ***3.5.1. Concluding diagnosis of the infrastructure and the waterborne transport current situation***

The density of the existing port infrastructure is high and free ports capacity persists. Convenient links are built between the ports and the national road and railway network. Most of the Bulgarian ports are in poor technical condition due to the fact that they are built in the beginning of the past century and the lack of sufficient investments for maintenance and development of the port infrastructure in the preceding years.

The technical parameters of the river bed of the Danube River are unsatisfactory. The problems are related to the erosion of the banks and islands and low depth in certain sections of the river, which pose the necessity of undertaken of measures for improvement of the depth in the critical sections of the river and fortification of the banks.

The number of the modern logistic, navigation and information systems is unsatisfactory which complicate the navigation conditions and the risk of accidents exists.

### ***3.5.2. Trends for development of the infrastructure and the waterborne transport***

The tendency for the development of the river public transport and sea ports of national importance is related to the concession and liberalization of the port services; improvement of the technical conditions of the port aquatories and the usage of fairways for navigation.

The synopsis for the following years are: increased cargo and passenger traffic, development of the waterborne transport in conformity with the European Union transport policy and increasing in the number of the private operators due to the tourism, manufacture and international trade development and the improvement of the navigation conditions.

The policy of improvement of the navigation conditions along the Danube River and the maritime spaces of the Republic of Bulgaria is in compliance with the Community policy for strengthening the maritime transport and inland waterways transport network. It will be enhanced through the realization of EU co-funded projects for improvement of the technical parameters of the river bed and strengthening the maritime and inland waterway safety and environment protection.

## ***4. INTERMODAL TRANSPORT SYSTEM***

### ***4.1. Intermodal Freight transport***

#### ***4.1.1. Infrastructure***

Intermodal system infrastructure basically consists in railways linkages between major nodes for freight transport. The railways links must be defined in order to offer, compared to road, an efficient, safe and competitive solution for shippers and well chosen nodes of the network should enable the intermodal companies to operate on a large quantity of cargo and redirect the freight to rail transport services.

For these reasons, the intermodal network has to be planned at an international scale in order to enable shippers to operate with as long as possible distance for rail transport, while the network of the nodes should be designed to serve main economic centres in each country. The Bulgarian intermodal system already complies with most of these conditions but needs to be technically improved to take advantage of all the opportunities of the growth of transport demand in Balkan area and participate to the building of a more sustainable transport system.

##### ***4.1.1.1. Railways links***

The following Bulgarian railways are included in the European Agreement of Important International Combined Transport Lines and Related installations (AGTC):

- Rouse-Gorna Oriahovitza-Dubovo-Dimitrovgrad (310 km)
- Sofia-Mezdra- Gorna Oriahovitza –Kaspitchan-Varna (543 km)
- Dragoman-Sofia-Plovdiv-Dimitrovgrad-Cvilengrad (382 km)
- Plovdiv-Zimnitza-Karnobat-Bourgaz (294 km)
- Vidin-Sofia (279 km)
- Sofia-Kulata (210 km)

9 railway stations for performing international inter-modal cargo freights are also included in AGTC - Sofia, Filipovo, Stara Zagora, Rouse, Dimitrovgrad-North, Varna, Bourgas, Kaspichan and Gorna Oriahovitza.

#### 4.1.1.2. Intermodal nodes

The basic facilities for the national and international container freights transport have been established during the 70's and 80's, last century. The most common technology for the combined transport in that period was transportation of cargo by Gross tonnage containers (GTC). That is why the available machinery plant is specialized mainly in processing of such GTC's. Due to the huge decrease of the container cargos in the early 90's, the terminals are not maintained and used in a proper way.

Despite the old technique and equipment, the Bulgarian railways have the potential for accomplishing the container transport freights.

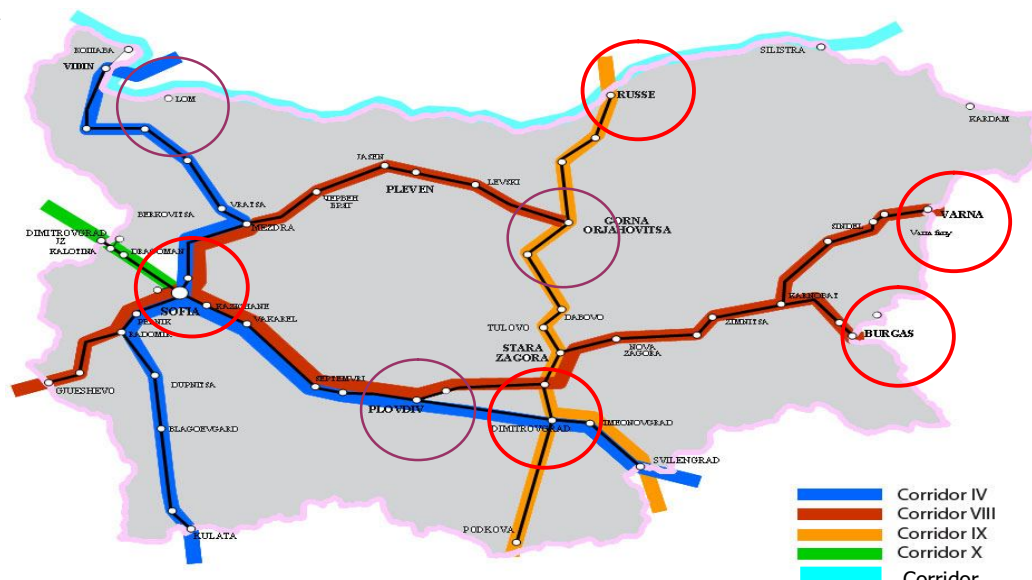
At present, one block-train is processing twice a week on the existing container terminal 'Sofia' (container block-train Sofia-Thessaloniki-Sofia), along with other containers as coach shipment in national or import-export communication (60-100 TEU per week). An increase in the motion frequency of the trains up to 4-6 per week is forthcoming. The existing equipment and infrastructure of the Sofia container terminal is insufficient for processing of more combined units and trains. For the period 2008 – 2010, a construction of a new container terminal near Sofia should be planned. Until then, with relatively small investments in the present container terminal in Sofia, in the existing infrastructure and equipment, more trains could be processed and therefore more combined trains could be run.

The other 7 container terminals are inside the country territory:

- Railway container terminals in operation are situated at the stations Plovdiv-Filipovo, and Stara Zagora
- There are terminal sites in Dimitrovgrad-North (operated by DESPRED), Dimitrovgrad-North,, Gorna Oriahovitsa (Chestovo-cargo terminal), Pleven-West and Vratza, but portal cranes are out of service;
- The others are located at the Black sea coast and the Danube river

Although in general the status of the infrastructure does not meet the requirements for performing of modern cargo and freight activities, in part of the terminals the equipment is good enough to be put into exploitation with a certain investment. There is no direct operational/logistic connection between the railway and maritime transport. The terminals should be provided with the necessary equipment according to the requirements for performing combined transport (cranes, storehouses, truck freight loading platforms and truck chains).

The infrastructure modernization includes the following: technical improvement of the railways and railway facilities as a part of the trans-European Transport network; ensuring the necessary gauge clearance for the combined freights transport on the above-mentioned directions.



#### ***4.1.2. Combined transport services***

##### ***4.1.2.1. Domestic combined transport***

At present, the combined transport market in Bulgaria is underdeveloped. Most containers are loaded or unloaded in Varna Port itself and not transported as container transport further into Bulgaria. There is a limited flow of road transit containers and also a limited number of containers on rail. Currently there is only the single direct train / shuttle for containers or combined transport, Sofia/Thessaloniki, which was inaugurated in 2003. Other container flows exist between Plovdiv and Burgas, Varna and Maritsa East.

##### ***4.1.2.2. International combined transport***

The Pan-European transport corridors crossing the Balkans (IV, VII, VIII, IX and X) offer a potential for the organisation of a combined transport sector. However, all the existing intermodal terminals are largely under-utilised. As a rule, the Balkans' intermodal operators are poorly equipped with regard to intermodal railway wagons. The existing container wagon fleet is mainly adapted to the transport of ISO containers. There is lack of road equipment, which can be handled by a TEU carrier (containers, swap bodies) for Ro-La and Ro-Ro techniques. In general, the flow of unitised traffic (container and swap bodies) accounts for less than 0.5 % of the total traffic, which is exceptionally low compared to the about 4% in Western European countries.

Most of the traffic registered concerns land transport of maritime containers from/to overseas (intercontinental traffic) organised from/to many different ports, which means short distances and dispersed volumes, conditions which are all in favor of transport by road.

Meanwhile, the intra-continental traffic (involving semi trailers and/or swap bodies in intermodal transport chains) is close to zero as Balkan carriers do not own or use this technique. The segment remains unexplored in spite of its potential: the volume of continental trade is much higher than overseas trade, it involves longer distances and, it has become easier to operate as an important hub has been created in the area allowing faster connections with the international continental networks.

In that context, all efforts regarding intermodal transport should be focused in the short-term, on the organisational, regulatory and institutional framework

#### ***4.1.3. Transport safety and security***

While all transportation modes are vulnerable, perhaps no sector is more dangerously exposed than ports and the intermodal freight systems to which they are connected. The potential insertion of Weapons of Mass Destruction into vessels, vehicles and freight containers is a particularly high risk.

The issue of safety and security of cargo is very critical in intermodal transport, as customers value safety very much, because of the high value of each loading unit they are responsible for. Nevertheless, security is a problem at the terminals, while the loading units are waiting during weekends at the terminals.

Since 2001, EU is in the process of maximising transport (and intermodal) security, focusing mainly on terrorism. This process will lead to the creation of the relevant legislation. On 27 February 2006, the Commission presented COM (2006), 79, “Communication on enhancing supply chain security - Proposal for a Regulation of the European Parliament and of the Council on enhancing supply chain security”.

It has been proposed by the Commission that a “secure operator” scheme should be set-up in the Member States, which would allow for operators in the supply chain to prove their compliance with minimum security requirements. The status of “secure operator” would be awarded to operators found to be in compliance with the requirements. For this purpose, Member States may avail themselves of existing systems or procedures or wish to create a system specifically earmarked for supply chain security. The implementation will need verifying. Member States should appoint a competent authority for supply chain security and should ensure that a focal point assumes the role of contact point between the Commission and the Member States.

When Bulgaria enters the EU, these proposals will need to be adopted and therefore in the railways sector, it is most probable that railway companies such or rail terminal operators or any company operating a warehouse, storage facility, inland terminal or an inland port in the intermodal supply chain would need the “secure operator” status.

#### ***4.1.4. Environmental protection***

The Gothenburg strategy of the Commission place among its greatest objectives for a sustainable development of the EU Member states a major shift in transport use from road to rail, water and public passenger transport. The Common Transport Policy support that aim and tackle rising levels of congestion and pollution and encourage use of more environmentally-friendly modes of transport.

For that purpose, it is recommended to Member states and accessing countries to give priority to infrastructure investment for public transport and for railways, inland waterways, short sea shipping and intermodal operations.

In the area of freight transport, the guidelines for the Trans-European Transport Networks promote multimodal corridors, with as many as possible nodes enabling modal shift from road to more environment friendly transport modes.

Development programme of combined transport in Bulgaria fully comply with all this objectives.



#### ***4.1.5. Concluding diagnosis of the intermodal system***

The current situation suggests that in order to develop the intermodal transport sector, there are a number of requirements to be put in place, namely:

- Provide suitable network with well located terminals
- Establish frequent and fast shuttle services with a regular timetable between the terminals;
- Provide support to the operator, including good cooperation with neighboring railway enterprises and attractive tariffs.

#### ***4.1.6. Trends for development of intermodal infrastructure and combined transport current situation***

##### ***4.1.6.1. Global strategy***

The aim of the strategy is to provide the Bulgarian economy with the necessary infrastructure for an attractive to businesses, efficient and effective rail freight transport network, fully integrated with the European intermodal transport network.

The objectives of the intermodal development strategy are:

- To develop a set of rail freight nodes, meeting all EU standards and capable of complementing and competing effectively other means of transportation
- To improve the railway network to match the needs of freight transport actors and effectively compete with the road network
- To improve the services, promote the use of rail freight among interested parties, attract more users and operators and establish a common understanding and co-operation with other major stakeholders
- To initiate and promote the necessary legal amendments and institutional arrangements
- To initiate the necessary actions for the implementation of modern supportive systems
- To ensure financing for all its actions

##### ***4.1.6.2. Improvement of infrastructures***

In order to match the global strategy with a step by step implementation, based on a realistic approach of the freight market and conditioned by the positive feedback and involvement of freight haulers, the future investment were prioritized according to the economic potential of each link or node of the network.

According to Phare project “Development of strategy of the Bulgarian Railways infrastructure into the intermodal transport network”, priority has been given to projects possession the highest potential to attract cargo from road to rail.

**Forecast of road, rail, maritime and intermodal freight in years 2010, 2015 and 2020 in mln tns**

Node	Road freight (now) '000	Rail freight (now) '000	Forecast 2010 (intermodal)	Forecast 2010 (total)	Forecast 2010 (rail)	Forecast 2015 (intermodal)	Forecast 2015 (total)	Forecast 2015 (rail)	Forecast 2020 (intermodal)	Forecast 2020 (total)	Forecast 2020 (rail)
Sofia	44,326	8,917	2,346	62,009	10,491	2,786	73,597	12,458	3,356	88,018	15,080
Varna*	33,669	1,853	1,304	50,871	2,180	1,505	59,822	12,458	1,779	71,179	15,080
Burgas*	36,101	5,830	1,899	65,571	6,859	2,181	77,058	8,145	2,571	91,660	9,860
Plovdiv	5,786	661	218	7,502	778	258	8,904	923	310	10,639	1,118
Ruse*	10,948	925	881	18,304	1,088	1,037	21,667	1,292	1,224	25,782	1,564
Dimitrovgrad	8,237	1,043	328	10,801	1,227	389	12,819	1,457	468	15,318	1,764
Gorna Orjahovitsa	5,254	195	126	6,336	229	150	7,519	272	179	8,975	330
Lom*	5,077	883	419	9,145	1,039	493	10,825	1,234	582	12,892	1,493

*\* Total traffic volumes including maritime and inland waterway traffic*

**Forecasts of total terminal area needs for 2010, 2015 and 2020**

Node	FV/IT total needs 2010 (000 sqm)	Intermodal terminal needs 2010 (000 sqm)	FV/IT total needs 2015 (000 sqm)	Intermodal terminal needs 2015 (000 sqm)	FV/IT total needs 2020 (000 sqm)	Intermodal terminal needs 2020 (000 sqm)
Sofia East	3400	340	4000	400	4900	490
Varna	3000	300	3500	350	4100	410
Burgas	4400	440	5000	500	6000	600
Plovdiv	500	50	600	60	700	70
Ruse	2000	200	2400	240	2800	280
Dimitrovgrad	750	75	900	90	1100	110
Gorna Orjahovitsa	300	30	350	35	400	40
Lom	1000	100	1150	115	1350	135
Sofia West	1100	110	1350	135	1600	160
Sofia South	900	90	1000	100	1250	125

*Source : Phare project*

The Freight Villages/Intermodal Terminals area in total expresses the need for space for the efficient handling of rail freight traffic, the maritime traffic and the local industry production. Thus, the total area needs in the selected nodes also include area destined to serve road and maritime freight not related to rail freight operations.

Based on these results the ports will keep handling their operations by adding intermodal functionalities in their facilities, so there is a major need for an integrated intermodal connection between rail and maritime sector. Support is needed for these operations upgrading the rail infrastructure that interconnects the ports' operations with its network. Special attention must be given to Sofia Node as there are several opportunities and possible locations (present Sofia Terminal, Slatina, Kazichene, Volujak) for the location of 3 terminals if needed (East, West, South).

The main FV triangle creation is (Sofia – Burgas – Varna). So these installations could be upgraded after the FV/IT intermodal triangle operation (after 2010). These are the first priority Terminals. Ruse is also first priority node, as basic supplementary to the triangle.

A set of 2nd priority FV/IT could be constructed as supplementary to the FV Network creation like Plovdiv, Dimitrovgrad, Gorna Orjahovitsa, Lom. These FV/IT could upgrade their operations with slight investments in their equipment as a first stage of their deployment. Secondly they can serve the FV network that will be created in the future as satellites of the main FVs.

The railway network renewal will be synchronized with the required steps for FVs creation to support the intermodal operations around the country. The railway networks which interconnect the major nodes presented above is included the network priorities (from ISPA, ERDF or State financing). The Ruse – Varna connection, as the trapezoid connecting Sofia – Varna – Burgas including Plovdiv and Gorna Orjahovitsa are also useful to serve the projected intermodal freight traffic as part of railway traffic (20% – 25%) of the total rail traffic.

#### ***4.1.6.3. Operators***

Apart from creating the necessary infrastructure for intermodal transport, the policy for combined transport development should attract intermodal operators, who will make use of theses infrastructure. A marketing plan has been proposed by the above mentioned PHARE study to National Railway Infrastructure Company to be undertaken, with a focus on intermodal transport. This plan will identify the key players in the Bulgarian intermodal transport market and will propose ways to attract them on the rail network and the intermodal terminals.

Different strategy is needed for different users. For example a freight terminal serves freight forwarders, transport operators, shippers, cargo handling companies, industries, wagon construction companies, etc. Each of them has different needs and therefore needs a different marketing approach. NRIC may form a marketing strategy based on the added values that will be offering in the future through its network (terminals and links). For example, high speeds or safety and security would be assets, which need to be communicated to potential new users of the infrastructure. Also, marketing will be needed in order to attract possible partners in the financing side, when NRIC will seek partners who invest in public-private schemes for the creation of new intermodal terminals.

#### ***4.1.6.4. Freight villages***

##### ***4.1.6.4.1. Concept and opportunity***

In all cases of successful intermodal networks, there exists a clearly and carefully articulated national intermodal and freight transport policy. Such national policies are always in line with the national “spatial”/physical plan. It includes a prioritisation of actions and areas (in relation with the parallel development of the transport corridors and railway lines that match the needs of the freight nodes).

A freight terminal should be located close to the main rail network, the motorway network or the waterway network, should be far from populated areas in order to cause as little nuisance

as possible (noise, pollution, jamming of surrounding access roads). The capacity and quality of the transport network must be compatible with the needs of the customers (take into account peaks in road traffic, railway time tables, dwell time limitations in ports, etc). The related services should be:

- Transhipment
- Operators' offices
- Storage or depot for ITU (empty, loaded, dangerous, refrigerated, etc.),
- Parking for road chassis,
- Maintenance installations (repairs, washing, etc.),
- Proximity of a logistics centre (warehouses, etc.).

Such combinations of services and territories were highly developed under the "freight village" concept. According to EUROPLATFORM definition : "A freight village is a defined area within which all activities relating to transport, logistics and the distribution of goods, both for national and international transit, are carried out by various operators.

These operators can either be owners or tenants of buildings and facilities (warehouses, break-bulk centres, storage areas, offices, car parks, etc...), which have been built there.

Also, in order to comply with free competition rules, a freight village must allow access to all companies involved in the activities set out above. A freight village must also be equipped with all the public facilities to carry out the above-mentioned operations.

If possible, it should also include public services for the staff and equipment of the users.

In order to encourage intermodal transport for the handling of goods, a freight village must preferably be served by a multiplicity of transport modes (road, rail, deep sea, inland waterway, air).

Finally, it is imperative that a freight village be run by a single body, either public or private".

#### ***4.1.6.4.2. Financing***

The Phare funded FV-2000 project has demonstrated that PPP has proved to be successful for the development of many FVs. Various FVs have been built by financial investors in Europe, since the operation is considered being profitable in the long run. A mixed partnership with participation of local authorities, financial institutions and real estate companies is considered favourable.

There are high investment costs in order to realise a FV. In many of the project FV-2000 studied cases public funding at the early stage has been crucial for the infrastructure investment. Intermodal infrastructure means land acquisitions and long-term pay back time. It is thus very important to have the authorities participating in the development and planning, and that they understand the role of FVs as instruments for economic and territorial development, as well as the environmental advantages.

New services launched by operators could be also supported by the Marco Polo programme. However, the long-term aim is to operate FVs on a strictly commercial basis.

## ***4.2. Intermodal passenger transport***

Sustainable urban transport system is a priority of the strategy of the Bulgarian transport policy. However, the market share of the public transport system gradually decreases as individuals vehicle possession increases, accompanied with traffic jams and air pollution.

In Sofia, the demand for bus, trolley, tram and metro transportation services (the last two are only available in Sofia) was gradually increasing until 1999 (1,23 mln. travels), but since then a decrease has been registered (816 thousand travels in 2003).

#### ***4.2.1. Current situation of the public urban transport system***

##### ***4.2.1.1. Operators***

The Sofia Holding Company for public transport, property of the Sofia Municipality, exploits the bus, trolley and tram services throughout two companies, offering transport benefits, known respectively as “Autotransport” and “Electrotransport”. The services of the fast rail transport –the Metro are offered by the “Metropolitan” company, which is also a property of the Municipality.

The Autotransport ensures public bus travel throughout the whole city. During the year 2002 the bus network covered around 1210 Km, proposed 95 routes and possessed 790 transport vehicles. In 1999, the Autotransport transported about 460 millions passengers

The Electrotransport has transported in 2002 195,3 millions of passengers. The two networks cover total lengths of around 326 Km, together with the rout lines, servicing not only the centre of the city, but also the peripheral quarters situated outside the city centre. In working days there are running total of 301 trolleys and tramcars, the whole park consisting in 509 vehicles.

The Metropolitan Company is property of the Sofia Municipality and services the rail lines for fast urban transport. The first metro line has been put in exploitation in the beginning of 1998, servicing 5 stations. From 1999 to 2000 three additional stations were built, and the total length of the operational network is today 9,9 KM. In 2002 the metro has made around 800 000 run, and the number of passengers transported is around 75 000 per day. The metro disposes of 48 wagons, composed in 12 four wagons trains.

##### ***4.2.1.2. Diagnosis***

The number of transported passenger by the public transport system was of 614,2 millions of passengers. Due to competition with individual modes of transport, it decreased to 474 millions in 2004.

Guided surface transport (electrotransport) was insuring 35, 4 % of the total of the transported passenger in 2000, and increased its position to 40 % in 2004. Metropolitan increased also from 1,9 % in 2000 to 6,1 % in 2004. Decrease of the part of bus travel in public transport system was observed during this period, from 62,7 to 53,4.

Although traffic congestion, the public transport system seems to be unable to compete with mobility by car. As a whole, the railway services do not meet the requirements of the passengers, especially in terms of frequency and duration of travels.

The rolling stock is in poor technical and sanitary conditions. The quality of bus transportation services is not good as well. Problematic for the bus transport remain mostly

the safety of travels and to some extent the fixed arrival time, as well as the lack of complex multi-modal service (bus – bus or bus – train).

The mini-bus transportation is a comparatively new service (provided mainly by private companies) which has been growing over the last years. It is growing and well established on the market. After its success in the urban transportation services, the mini-bus travels were been also introduced for the peripheral urban areas. The mini-bus transportation, although more expensive, provides passengers with regular connections, voluntary stops, faster ride and extended access to certain settlements.

Railway transport also contributes to the good market position of the mini-bus transportation, since railway services in the urban surrounding areas are been significantly reduced and the bad condition of infrastructure increases the travels duration. The continuous urbanization process will probably lead to growth of urban travels in larger agglomerations and will bring serious problems to the urbanized territories like increased usage of automobiles, decreased demand of urban public transportation, and lower standard of provided transport services, increased necessities of state/municipal subsidies, traffic jams and harmful environmental impact.

For these reasons, development of sustainable urban transportation systems, friendly to the environment is of significant importance. It is required by the European Union that large cities should aim to increase the number of passengers using trolley, tram and underground transportation with 30% until 2013 and should also design programmes for construction of cycling lanes, bicycle parking lots, etc. This could become possible in the case of Sofia only if public transportation projects such as metro extension proposes fast, secure and comfortable public transport services and if it is supported by an inter-modal network proposing door to door public transport routes.

#### ***4.2.2. Trends for development of a sustainable urban transport***

Some coordinated policies has been undertaken or planned by the Bulgarian Ministry of transport and by the local authorities in order to address the problem with consistent and accurately targeted policies:

- a development of clean transport urban policy (mainly under the OPRD framework)
- a sustainable development plan for urban transport (in the National strategic plan for transport)
- the development of intermodal connections for passengers (implemented trough the extension of network of the Metropolitan, selected as a major project in the present OPT).

These policies are fully in line with the UE approach of urban mobility developed in the White Paper "European transport policy for 2010: time to decide. They aim to favour the citizen's mobility while maintaining or reducing the impact of the transport system of environment and quality of life in the urban areas.

The Operation programme for Regional Development for Bulgaria focuses on the following priorities:

- Establishment of automated systems for traffic management and control
- Accelerated renovation of the transport infrastructure, the socket and catenary cable network, improving 117 stations, repair and maintenance facilities and equipment;

- Innovation of the rolling stock by importing new units - barrier-free buses, trams, trolley fleet;
- Improvement of basic infrastructure access and affordability to the city bus stations - stops platforms for the disabled groups, removing the orientation and information barriers, light and audio announcements of stops, clear visual marking of the lines and readable timetables even for those with imperfect eyesight, information for the blind etc.
- Introduction and improvement of Traffic Management and Information Systems (e.g. Traffic Operations Centres, Central Computer Systems, Vehicle Detector Stations, Changeable Message Signs, Ramp Metering Stations, communications sub-systems)
- Development of infrastructure and route networks of new destinations to more remote residential areas
- Provision on protection system for noise reduction and noise screening - construction of tram tracks with anti-vibration and anti-noise elements
- Improving urban bus transport in respect to environmental aspects – fleet upgrading with buses that are compliant with European legislation on harmful emissions from engines; use of alternative gas fuels for obsolete engines, and replacement of obsolete power units with new ones meeting EURO1 and EURO2 requirements

The National strategic plan for transport of Bulgaria provides a large set of 8 measures promoting the public transport use, fully in accordance with EC policy in this direction.

*Measure 1: Clearly defined long-term transport public service obligations of the state*

Instrument/Programme	Term	Expected Result
Quantity and quality defining the transport public service obligations as per 2005, 2010 and 2015 and the financial burden for their ensuring	Permanent	Effective long-term planning the activities and the necessary expenses for the latter by the transport operators
Concluding long-term contracts for providing passenger transport services	Mid-term	Private business interest for performing railway passenger transport operations and emergence of competition in this market segment
Improving and developing the legal basis and the control functions of the state administration	Permanent	Quality providing of services for the population in compliance with the actual needs and the regional development
Co-operation with the regional and municipal authorities	Permanent	

*Measure 2: Optimising the public transport in the sub-urban areas of the big city agglomerations*

Instrument/Programme	Term	Expected Result
Analysis and appraisal of the demands for sub-urban transport	Short-term	Quality servicing the population
Plans for optimising the sub-urban transport	Short-term	Increase of the public transport usage Optimisation of the expenses for public transport services

*Measure 3: Gradual establishment of integrated networks for public transport services*

Instrument/Programme	Term	Expected Result
Studying, analysing and identifying the integrated networks for public transport services	Mid-term	Optimising the transport services for the population
Negotiating and contracting integrated public transport services	Mid-term	Increasing the public transport usage
Improving the legal basis and the control mechanisms	Permanent	Decreasing the budget expenses/subsidies for the public service obligations

*Measure 4: Establishing favourable conditions for public transport usage by disabled people*

Instrument/Programme	Term	Expected Result
Expanding the pilot system “vehicle – railways – vehicle” for transport of disabled people	Short-term	Fulfilment of the social obligations of the state to this category of citizens
Creating facilities for access of disabled citizens to the transport sites	Short-term	Increase of the public transport usage

*Measure 5: Ensuring access to transport services at preferential prices for certain categories of citizens*

Instrument/Programme	Term	Expected Result
Analysing and defining the customer categories to take benefit of the provision of transport services at preferential prices	Short-term	Fulfilment of the social obligations of the state to certain categories of citizens
Amending the legal basis	Mid-term	Optimisation of the revenues of the transport carriers

*Measure 6: Balanced developing the city transport systems by means of enhancing railway transport usage in cities as an environment-friendly alternative of the bus, taxi transport and the private car usage*

Instrument/Programme	Term	Expected Result
Constructing city railway systems	Long-term	Restricting the road traffic by shifting the passenger transport to the railway one Reducing the adverse green gas emissions of the road transport in cities
Introducing differentiated road fees determined in compliance with the traffic levels of the city road network (the existence of traffic jams)	Mid-term	
Establishing paid parking lots and increasing the parking fees	Short-term	

*Measure 7: Improving road traffic administration*

Instrument/Programme	Term	Expected Result
Renewing the bus fleet and introducing environment-friendly engines	Permanent	Optimising the city traffic and eliminating traffic jams in cities Better opportunities for usage of the public and taxi transport by population and restricting the usage of private road vehicles Reducing the adverse green gas emissions of the road transport in cities
“Green wave” systems establishing	Short-term	
Creating special lanes for the public transport and for the taxis	Short-term	

*Measure 8: Enhancing non-motorised way of transport*

Instrument/Programme	Term	Expected Result
Limiting the time for parking	Mid-term	Restricting the road traffic and reducing the green gas emissions
Establishing bicycle paths	Short-term	
Closing streets and establishing pedestrian areas	Mid-term	

The Financing of these measures will be supported by the financial resources from the state budget oriented to the municipalities, the Global Environmental Fund Energy and the Effectiveness National Fund.

It is worth underlining that these measures set up an articulated strategy aiming both to the reduction of the attractiveness of individual cars use (pedestrian areas, reduction of street lanes devoted to cars, increase of parking fees) and to an increased comfort and speediness of daily travels for public transport users.

Complementarily with the OPRD of Bulgaria, which will support urban transport projects outside Sofia and the National Transport Plan, the Operational Program for Transport will establish through the extension of the Sofia Metro network, the intermodal connection between the national railway system (Metro station – Central railway station), air passenger system (Sofia airport station) interconnection between tramway and buses line, and contribute to maintain the market share of the public transport at an acceptable level.

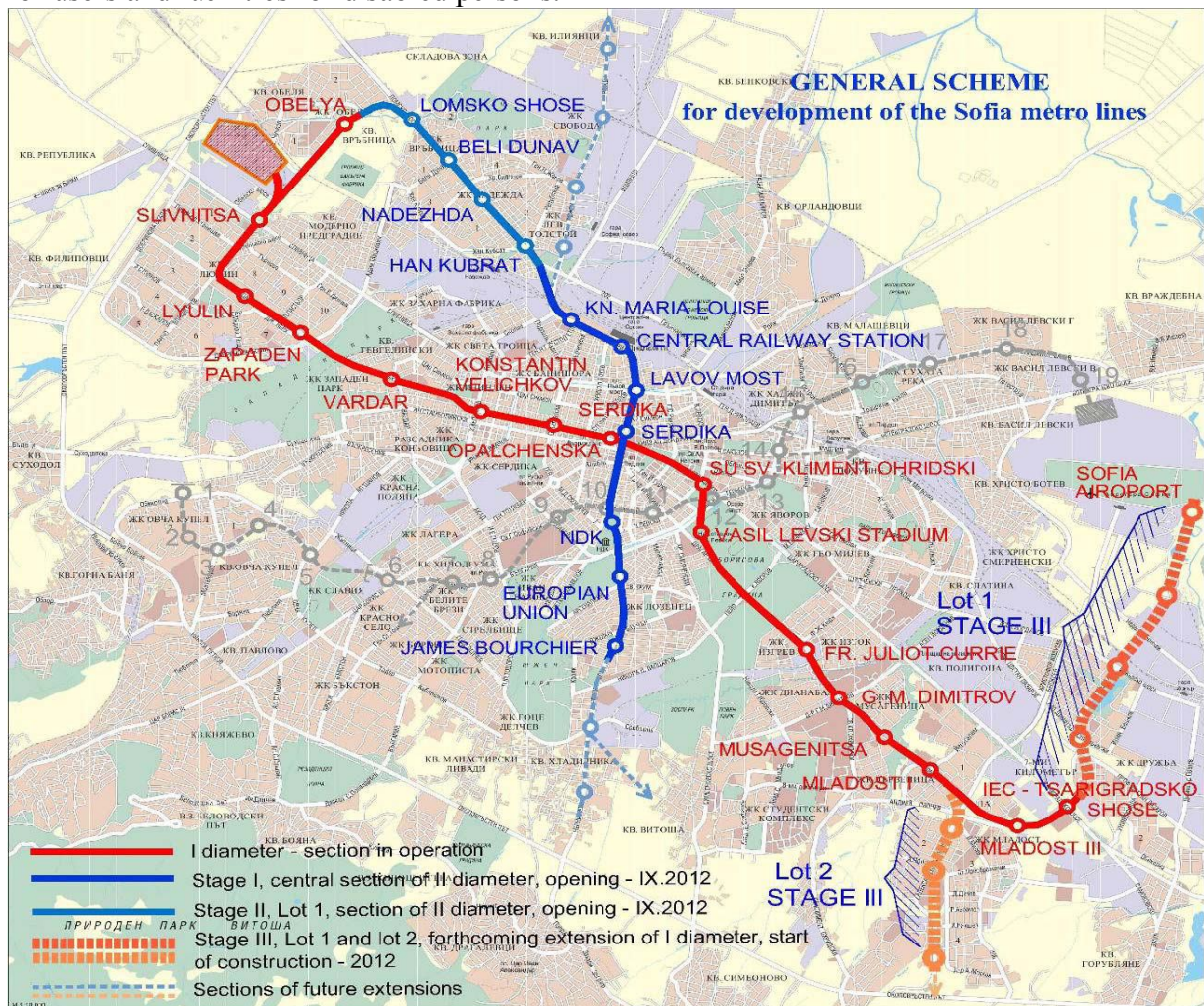
Sofia metro should become the master piece of urban transport system in the city. After its completion, the Metro should carry over than 45% of the urban transport, a figure that only could be compared to far larger city than the capital of Bulgaria. Its performances should



enable the public transport system to answer to the growing transport demand (especially from the areas of the periphery of Sofia to the centre of the town without major impact on quality of life.

### *Master plan of the Metro Project 2020*

The following scheme figures out the present status of the metro, including last section under construction, and currently suggested projects, that are carried out or could be programmed under different origins of funding. The ongoing feasibility studies should establish as soon as possible which of the envisaged scenarios for extension will be submitted to National and European public authorities for support. The projects clearly integrate an enhanced comfort for users and facilities for disabled persons.



This operation aims to achieve the major modal shift from road transport to rail transport necessary to build in Sofia a sustainable and clean urban transport system for the next decades.

## **5. ANALYSIS OF THE STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS**

The analysis of the strengths, weaknesses, opportunities and threats (SWOT analysis) was elaborated based on the analysis of the current situation in the transport sector. The SWOT analysis includes the identified strength and weak features of the transport system and the transport modes object of the OPT (analysis of the internal factors that can be influenced through clear policy and reasonable measures) and the opportunities and threats (external factors that we shall consider and observe carefully) following logically the structure of the current situation.

<b>NATIONAL TRANSPORT SYSTEM</b>	
<b>STRENGTHS:</b>	<b>OPPORTUNITIES:</b>
<ul style="list-style-type: none"> <li>• The favorable geographic location of Bulgaria on a transport crossroad, allowing the country to be an important part of the common European transport axes*;</li> <li>• The political stability in the country;</li> <li>• The liberalized transport market*;</li> <li>• All transport modes exist*;</li> <li>• The good level of density of the transport infrastructure*;</li> <li>• The good level of compatibility of the Bulgarian legislation to that of the European Union*;</li> <li>• The tradition of quality of the transport system*;</li> <li>• The projects for development and modernization of the transport system, currently being realized*.</li> </ul>	<ul style="list-style-type: none"> <li>• Republic of Bulgaria is crossed by the TEN-T priority axes 7,8, 22 and the other sections of the TEN-T network along the Pan-European transport corridors IV, VII, VIII, IX and X*;</li> <li>• Increased EU financial support for development and modernization of the transport infrastructure after the Bulgarian accession*;</li> <li>• Opening of transport sector to attractive public-private partnership projects*</li> <li>• The attraction of more international transit traffic for fully utilizing the crossroad location of the country*;</li> <li>• Integration into the common European market for transport services*;</li> <li>• Development of exchanges with neighbouring countries;</li> <li>• The development of multi-/intermodal corridors and logistics chains*;</li> <li>• Development of tourism ;</li> <li>• Attraction of foreign investors and operators *;</li> <li>• More intensive utilisation of the Danube river*.</li> <li>• Better mobility of workers*</li> </ul>
<b>WEAKNESSES:</b>	<b>THREATS:</b>
<ul style="list-style-type: none"> <li>• The unsatisfactory condition of the technical conditions and level of maintenance of the current transport infrastructure, as well as the outdated transport technology and equipment*;</li> </ul>	<ul style="list-style-type: none"> <li>• The late realization of priority infrastructure projects;</li> <li>• The lack of resources for operations and maintenance*</li> </ul>

<ul style="list-style-type: none"> <li>• The insufficient level of traffic that does not provide enough funds for standard maintenance of the infrastructure;</li> <li>• The existence of bottlenecks in the transport infrastructure*;</li> <li>• The difficult access and poor condition of transport infrastructure connections between rural areas and larger cities</li> <li>• The insufficient level of coordination between the different types of transport*;</li> <li>• The relatively closed transport system*;</li> <li>• The chronic lack of investment, leading to safety problems and risks of accidents*.</li> </ul>	<ul style="list-style-type: none"> <li>• The detour of the international transit traffic around Bulgaria*;</li> <li>• The late reformation, restructuring, and modernization of the sector or some of its divisions*;</li> <li>• The increase in the fuel and energy resources price.</li> </ul>
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RAILWAY TRANSPORT	
STRENGTHS:	OPPORTUNITIES:
<ul style="list-style-type: none"> <li>• High density of the existing and electrified railway infrastructure*</li> <li>• Sustainable positions on the market for transportation of mass cargoes*</li> <li>• Environmental friendly and safer than the other transport modes*</li> </ul>	<ul style="list-style-type: none"> <li>• Attracting the foreign investments and transport operators*</li> <li>• Provision of considerable financial resources for the development of the railway infrastructure after the Bulgarian accession in EU*</li> <li>• Adequate using of the country situation in order to attract international transit traffic along the European railway transport corridors*</li> <li>• better integration in European rail system enabling interoperability*</li> <li>• better integration in Balkan state rail system enabling to operate an enhanced regional traffic*</li> <li>• Potential for development of an auxiliary business from the concomitant property of the telecom, the outdoor advertisement, renting of the real estates etc.</li> <li>• New technologies adoption*</li> <li>• Development of multi/intermodal corridors and logistic chains*</li> <li>• The second Danube bridge and the adjoining infrastructure will build the missing railway link along the IV Pans-European Corridor, TEN-T priority project 18 which will perform conditions for new freight flows from West Europe via Bosphorus to the Middle East countries to be attracted*</li> <li>• The prognoses show a small increase in the passenger traffic in the mid-term perspective, which needs a policy for the service quality improvement adoption*</li> <li>• Ongoing modernisation of the rolling stock*</li> <li>• Introduction of modern logistic chains*</li> <li>• Economy globalization and liberalized transport market*</li> </ul>

<b>WEAKNESSES:</b>	<b>THREATS:</b>
<ul style="list-style-type: none"> <li>Part of the national railway infrastructure is in poor technical condition*</li> <li>Absence of railway lines, allowing speed of 160 km/h for the passenger transport and 120 km/h for the freight transport*</li> <li>Most of the railway infrastructure does not allow reaching the designed speed*</li> <li>Non satisfactory condition of the rolling-stock</li> <li>technologies incompatible with the European Union <u>technologies still in use*</u></li> </ul>	<ul style="list-style-type: none"> <li>Delay in the implementation of priority infrastructure projects</li> <li>Delays in neighbouring countries to implement similar policies*</li> <li>Traffic deviation from Republic of Bulgaria*</li> <li>Delay in the introduction of the new technologies and improvement of the technical condition of the railway infrastructure*</li> <li>Lack of resource for maintenance*</li> <li>Continuing loss of traffic to roads*</li> </ul>

<b>ROAD TRANSPORT</b>	
<b>STRENGTHS:</b>	<b>OPPORTUNITIES:</b>
<ul style="list-style-type: none"> <li>The already constructed roads and their density does not present any problems with the accessibility of any towns*;</li> <li>The primary road network, part of the Trans-European transport corridors has been repaired under the "Transit Roads" Program and meets all of the European quality requirements and standards;</li> <li>The harmonization of the Bulgarian and European legislation, dealing with the road transport, is at a very advanced stage*;</li> <li>The sections of the road system with a decreased traffic capacity are very few*;</li> <li>The favourable geographic location*.</li> </ul>	<ul style="list-style-type: none"> <li>The good geographic location of Bulgaria, providing good conditions for stable development of the road transportation sector and for attracting foreign investors*;</li> <li>Finishing the motorway system will lead to an increase of international transport and to further development of the tourist industry*;</li> <li>The assured provision of investment EU funds needed for the development of the road infrastructure after Bulgaria joins the European Union*;</li> <li>The integration of the road systems of the European and neighbouring countries*.</li> <li>Opening to PPP projects*</li> <li>The development of road transport companies in parallel with the growth of the national economy</li> <li>The improvement of road transport activities (passenger and freights) with improved and safer infrastructure and more environmental friendly motorization*</li> </ul>
<b>WEAKNESSES:</b>	<b>THREATS:</b>
<ul style="list-style-type: none"> <li>The lack of bypass roads around some towns and the existence of road sections with poor technical parameters, not guaranteeing the level of comfort and safety of the European standards*;</li> <li>The insufficient number of roads connecting Bulgaria with the neighboring countries*;</li> </ul>	<ul style="list-style-type: none"> <li>The late realization of priority infrastructure projects;</li> <li>The detour of the international transit passenger and cargo traffic around Bulgaria*;</li> <li>The late introduction of new technology and late improvement of the condition of the existing road infrastructure*;</li> </ul>



<ul style="list-style-type: none"> <li>• The bad maintenance of the road network due to the limited funds meant for such activities*;</li> <li>• The need for road surface repairs and reconstruction in accordance with the European norms and standards*;</li> <li>• The lack of any other investment for building new and repairing the old roads, apart from the budget*.</li> <li>• The limitations for exporting road transport services</li> </ul>	<ul style="list-style-type: none"> <li>• The existence of a lot of “frozen” installations, leading to a higher cost of construction;</li> <li>• The increase of oil, oil-based product and road construction material prices.</li> <li>• Lack of implementation of social regulation, safety control and vocational training in road sector increasing risks of fatalities and poor quality of services*</li> </ul>
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<b>WATERBORNE TRANSPORT</b>	
<b>STRENGTHS:</b>	<b>OPPORTUNITIES:</b>
<ul style="list-style-type: none"> <li>• High density of the existing port infrastructure and free ports capacity*</li> <li>• Convenient links between the ports and the national road and railway network*</li> <li>• Commitment to the European system of inland-waterway channels*</li> </ul>	<ul style="list-style-type: none"> <li>• Development of Danube corridor attractiveness*</li> <li>• Concession of the ports and corresponding services*</li> <li>• Increase in the passenger and cargo traffic*</li> <li>• Increase in the number of the private operators and renewal of the fleet</li> </ul>
<b>WEAKNESSES:</b>	<b>THREATS:</b>
<ul style="list-style-type: none"> <li>• Unsatisfactory number of modern logistic, navigation and information systems*</li> <li>• Poor technical parameters of the inland waterway channel*</li> <li>• Erosion of the banks and islands and low depth in certain sections of the Danube river*</li> </ul>	<ul style="list-style-type: none"> <li>• Climate changes that influence negatively on the permanent inland navigation</li> <li>• Delay in the concession of the ports and lack of sufficient investments*</li> <li>• Lack of resource for maintenance*</li> </ul>

<b>COMBINED TRANSPORT</b>	
<b>STRENGTHS:</b>	<b>OPPORTUNITIES:</b>
<ul style="list-style-type: none"> <li>• National railway lines are part of the network AGTC</li> <li>• Necessary equipment available for the organization of combined transport*</li> <li>• Existing legal standards for organization of combined transport*</li> <li>• Ecological, cheaper and not greatly damaging the condition of roads*</li> </ul>	<ul style="list-style-type: none"> <li>• Decreasing the time spent at stops during conterminous transitions after Bulgarian accession to the EU*</li> <li>• Increasing the traffic in the region after commencing the exploitations of the tunnel under Bosphorus strait*</li> <li>• Strategic collaboration with foreign operators and firms working in the field of combined transport</li> <li>• Development of the railway network*</li> </ul>
<b>WEAKNESSES:</b>	<b>THREATS:</b>

<ul style="list-style-type: none"> <li>• Out of date facilities in some terminals*</li> <li>• Lack of specialized rolling stock for combined transport*</li> <li>• Lack of one unified strategy for development of combined transport*</li> <li>• Only a part of the destinations could be reached*</li> <li>• Lower speed of transportation*</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequately developed connections with neighbouring countries*</li> <li>• Not being considered as a priority in the policy pursued by the country*</li> <li>• Delay in constructing of freight villages and logistics freight chains</li> </ul>
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\*Results from the analysis considered as most important.

## II. STRATEGY

The long term vision for Bulgaria combines two specific medium-term **goals** for the duration of the 2007-2013 programming period. These have been developed, based on the EU priorities and are in line with the Community Strategic Guidelines (CSG)<sup>1</sup>:

- Strengthen the competitiveness of the economy to achieve high and sustainable growth;
- Develop human capital to ensure higher employment, income and social integration.

The Bulgarian policy emphasises as key factors for sustainable development the need to develop the necessary basic infrastructure, to modernise and restructure the industrial and public services sectors not only in terms of technology, but also in terms of quality and efficient management of resources.

To achieve the overall medium term goals Bulgaria needs to focus on **four strategic priorities** – three thematic and one territorial:

- Improving basic infrastructure;
- Increasing quality of human capital with a focus on employment;
- Fostering entrepreneurship, favourable business environment and good governance;
- Supporting balanced territorial development

Insufficient investment in basic infrastructure in the last 15 years has resulted in its current poor condition.

The Programme's Strategy, as part of NSRF's priorities, aims to achieve balanced and sustainable development of national transport system through development and modernization of main transport infrastructure links with European, national and cross-border importance. The *first priority* foresees support for better quality transport infrastructures, ICT infrastructure and links, and investments in environmental protection infrastructure. Taking into account the limited EU and national resources, the investments will be prioritised and coordinated. This will be the main contributor to the attractiveness of the country to invest and work, in line with the first objective of the CSG and the National Strategy for Integrated Development of the Infrastructure in Bulgaria and Action Plan for the period 2006-2015.

Investments in infrastructure are one of the most critical areas that facilitate the reduction of disparities between the regions lagging behind in terms of socio-economic development. The infrastructure is the backbone of the economy and the society, and the strength of this foundation determines the opportunities to ensure rapid, sustainable and balanced development. This is fully recognized by the government of Bulgaria as a national priority and is reflected in the National Strategy for Integrated Development of the Infrastructure in Bulgaria and Action Plan for the period 2006-2015, approved in 2006 by the Council for coordination, control and implementation of infrastructure projects of national importance, which is at ministerial level and chaired by the Prime Minister.

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<sup>1</sup> COM(2005) 299, published on 15 July 2005.

Transport not only provides access to places which concentrate income-generating activities, or key public goods and services (including education and health care), but also supports the growth of production of goods and services, especially by decreasing costs. In addition, the growth of the transport-related construction sector contributes to the total growth of the economy. The **investments in transport** focus on the improvement of the infrastructure along the major European transport axes crossing the territory of Bulgaria. In order to overcome the main bottlenecks in the whole national transport system, public-private schemes will be used in regards to ports, airports and some motorways. The strategy follows the principles and findings of the Mid-Term Review of the European Commission's 2001 Transport White Paper. It is based on connection of the development of the transport sector to the European sustainable growth and competitiveness and recognises anticipated faster growth of international transport demand. In this respect the basic target for the Bulgarian Strategy in the transport sector is the development of the European Transport Corridors in the territory of the country. More precisely, it relies on the most appropriate development of all modes of transport in order to accommodate the constantly growing demand most efficiently, and at the same time aiming at the removal of infrastructural bottlenecks, encouraging technological development, and removing barriers between modes, locations, and markets.

As the analysis of the country's development disparities, weaknesses and potentials reveal, the existing transport links cannot cope with the present and expected demand. This results in reduced opportunities for growth, especially of business activities and tourism. Transport investments focus on connecting the country at three basic levels – **external** (whereby EU connections determine the major investments), **national** (which supports the major economic growth), and **regional** (contributing to the balanced territorial approach of the economic development). The foreseen interventions are prioritised in order to maximise the combined effect on growth and employment opportunities a transport network can provide, taking into account also the level of resources available: improvement of the major links between urban centres, creating efficient transport axes, and subsequently the links of those to smaller but important settlements with economic potential, because of their cultural or environmental endowments.

Bulgaria aims at reducing the environmental and traffic congestion and safety risks of the expected increase in transport needs by an economically efficient balance of investment in road quality and in modernisation of the major rail links for passenger and freight, including the investments in safety measures, logistics, and signalling in line with the EU Directives.

The investments in key rail and road linkages will be combined with investments in transport intermodality and improved conditions for navigation along inland water-ways, including the efficient functioning of Vessel Traffic Management and Information System on the River Danube.

The Strategy of the Sectoral Operational programme on Transport corresponds to the EU Strategies and Policies for development of the Trans-European transport network (Decision (EC) 1692/96 revised by the Decision (EC) 884/2004, sustainable development in compliance with the Goteborg Strategy and the White paper on Transport (2001) "time to decide" and its revision 2006, and establishment of a dynamic and knowledge based economy; sustained economic growth and reduce the unemployment in compliance with the Lisbon Strategy, and it is in line with the Community Strategic Guidelines

The priorities of the OPT aim to contribute to the priorities of the EU Sustainable Development Strategy in order to create better quality of human life, now and for generations



to come, to foster the balanced and equitable economic development, to protect the environment and social justice. They are in line with the Draft National Transport Strategy and the National Strategy for Integrated Development of the Infrastructure in Bulgaria and Action Plan for the period 2006-2015.

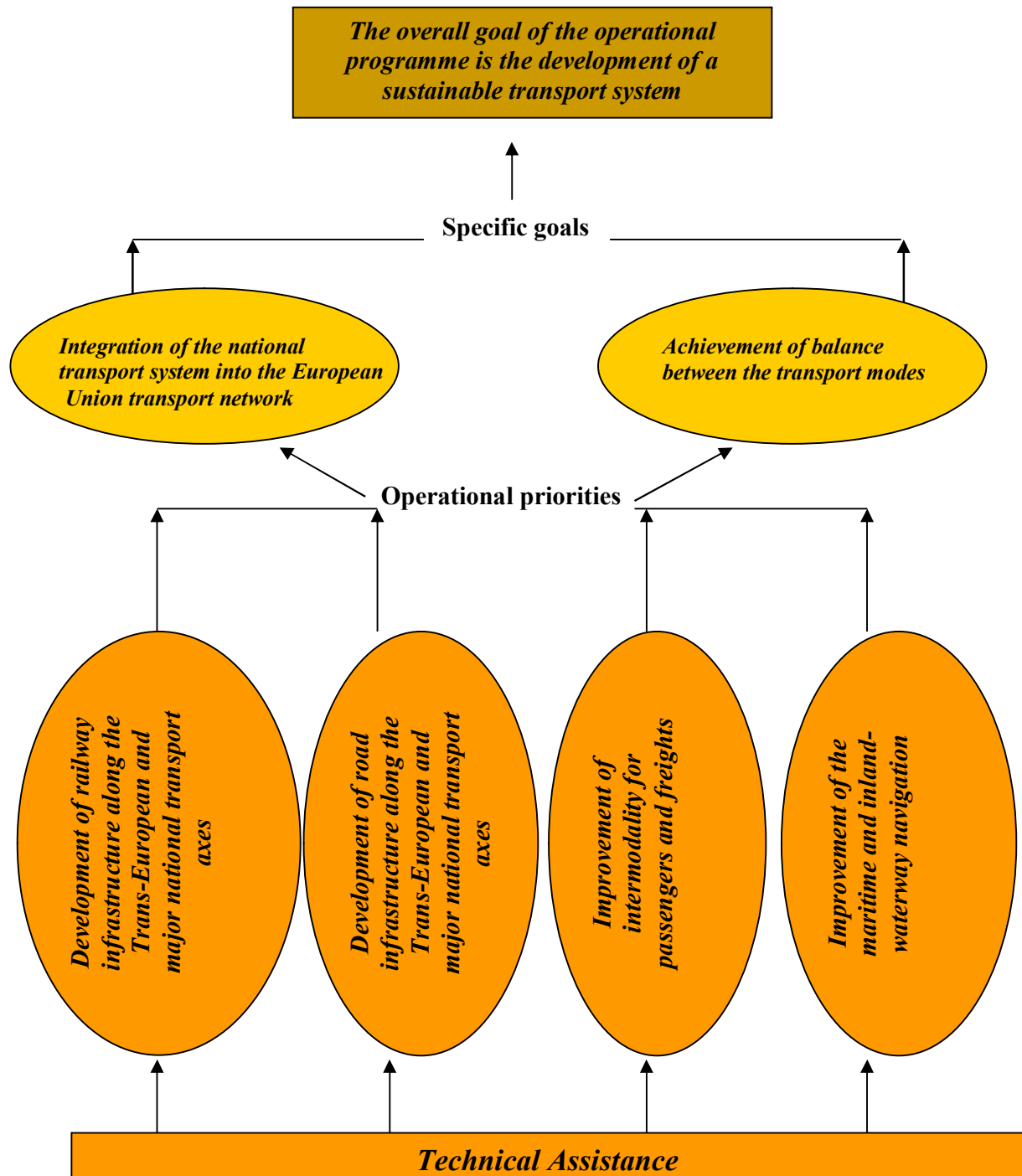
The OPT focuses on few strategic goals and priorities that will be achieved through a series of operations, which will contribute for the integration of the national transport system into the EU transport network.

The strategic goals of OPT are development of sustainable transport, integration of the national transport network into the EU transport network, balance between transport modes. Achievements of these goals are precondition for sustainable and balanced long-term economic growth.

The investments in the transport infrastructure will contribute directly to improvement of transport access. It will enhance people mobility and will also lead to more and better employment opportunities. As a result it will reflect to reaching higher quality of life.

Efficient and safe transport infrastructure will increase the volume of the traded goods between the different regions of the country. Furthermore, the development of the Trans-European transport axis will strongly contribute to achieve integration of the national markets into the EU internal markets.

### III. GOALS AND PRIORITY AXES



## 6. OVERALL AND SPECIFIC GOALS

### OVERALL GOAL

Due to the fact that there are no existing completed studies covering all transport modes with regard to a strategic and coherent base of technical data, transport model, multimodal technical studies for project identification for long and medium term investment programming in the transport sector in Bulgaria, these technical studies are planned to be financed under the Technical Assistance Priority Axis through the appropriate elaboration of a transport master plan. As being an essential tool for project identification for long and medium term investment programme the General Transport Master Plan will be used as an instrument for continuous development of transport sector decisions and investment planning directed towards "demand-driven" approach for the identified and justified infrastructure projects in order to facilitate their faster and efficient realization.

*The overall goal of the Programme is development of sustainable transport system*

The sustainable transport policy is one of the essential aspects of the programme. The achievements of the programme will contribute to the reducing of congestion levels, noise and pollution levels, to improve the human live, to promote the use of environment-friendly modes of transport and to create better jobs.

In this relation the implementation of OPT relates to the CSG provisions with regard to **1.1. Guideline: Making Europe and its regions more attractive places in which to invest and work**, 1.1.1. *Expand and improve transport infrastructures* where it is stipulated that "...The provision of efficient, flexible, safe and clean transport infrastructure may be regarded as a necessary precondition for economic development as it boosts productivity and, thus, the development prospects of the regions concerned by facilitating the movement of people and goods. Transport networks boost opportunities for trade, while increasing efficiency. Furthermore, the development of Europe-wide transport infrastructures (notably the relevant parts of the thirty priority projects for Trans-European Transport Networks, 'TEN-T projects'), with a particular focus on cross-border projects, is essential to achieving greater integration of national markets, especially within the context of an expanded Union...", etc.

The implementation of OPT also is directed towards achieving the two specific medium-term goals of the National Strategic Reference Framework for 2007-2013, namely:

- Strengthen the competitiveness of the economy to achieve high and sustainable growth;
- Develop human capital to ensure higher employment, income and social integration, and to the achievement of the four NSRF strategic priorities – three thematic and one territorial:
  - Improving basic infrastructure;
  - Increasing quality of human capital with a focus on employment;
  - Fostering entrepreneurship, favourable business environment and good governance;
  - Supporting balanced territorial development.

OPT will contribute to the achievement of the following priorities laid down in the National Strategy for Integrated Development of the Infrastructure of the Republic of Bulgaria and Action Plan for the Period 2006 – 2015 (<http://www.government.bg/cgi-bin/e-cms/vis/vis.pl?s=001&p=0162&n=000017&q=>) :

- Build and develop the key transport infrastructure connections of national, cross-border and European importance and to improve the interoperability of the main railway lines;
- Develop the national road infrastructure and to integrate it into that of the EU Member States;
- Develop and improve the road network and to adjust it to the European norms and standards;
- Optimize the capacity and efficiency of the existing and new infrastructure;
- Modernize the infrastructure of the river Danube and sea waterways;
- Improve the conditions for navigation and promotion of intermodal transport.

OPT contributes to the achievement of the following goals identified in the Strategy for the Development of the Transport Infrastructure of The Republic of Bulgaria by 2015 (<http://www.mt.government.bg/page.php?category=93&id=2022>) being an integral part of the National Strategy for Integrated Development of the Infrastructure of the Republic of Bulgaria and Action Plan for the Period 2006 – 2015:

- Optimization the capacity and efficiency of the existing transport infrastructure;
- Construction and development of the key transport infrastructure connections of national, international, and European importance and improving the operational compatibility of the major railway lines;
- Development of the road infrastructure and its integration into the European Union's networks;
- Improving the sailing conditions and encouraging the development of intermodal transport.

The OPT also is directed towards achieving the goals of Strategy for the development of the transport system of the Republic of Bulgaria until 2020 ([http://www.mt.gov.bg/upload/docs/Transport\\_Strategy\\_2020\\_eng.pdf](http://www.mt.gov.bg/upload/docs/Transport_Strategy_2020_eng.pdf)) as one of the measures for implementation of the Priority 1 [“Efficient maintenance, modernisation and development of the transport infrastructure” of the strategy:](#)

- **Achieving economic efficiency** through:
  - Raising the competitiveness of Bulgaria's transport system;
  - Creating the conditions required for a sustainable growth of domestic and international transport at a higher energy efficiency;
  - Assuring the conditions for a loyal competition among and within the different transport modes;
- **Development of sustainable transport sector** through:
  - Reducing the negative influence of transport on the environment and the climate;
  - Integrating Bulgaria's transport system into the European network;
  - Assuring a high level of safety and security of the transport system;
- **Regional and social cohesion improvement** through:
  - Coordinated development of the transport sector in compliance with the economic and social development at a national and regional level;
  - Improving, at a regional level, the access to the transport corridors and creating incentives for the development of border regions;

- Assuring the mandatory public transport services at affordable prices.

And in addition to the above, OPT is in compliance with the following strategic priorities of the national transport policy laid down in the draft Strategic Document for the Development of the National Transport System of the Republic of Bulgaria by 2015 (<http://www.mt.government.bg/page.php?category=93&id=2022>):

- Priority 1 – Effective maintenance, modernisation and development of the transport infrastructure
- Priority 2 – Integration of the Bulgarian Transport System into the European one
- Priority 5 – Limitation of the environmental and health impact of the transport
- Priority 6 – Development of Intermodal Transport
- Priority 8 – Sustainable Development of the public transport

## SPECIFIC GOALS

Two specific goals are identified in order to achieve the overall goal of OPT. These specific goals also contribute to the achievement of the above mentioned specific medium-term goals and strategic objectives of NSRF, as well as the CSG Annex with regard to **1.1. Guideline: Making Europe and its regions more attractive places in which to invest and work, 1.1.1. Expand and improve transport infrastructure.**

The first specific goal is:

- ***Integration of the national transport system into the European Union transport network.***

One of the most essential aspects in the national and European Union transport policies is to complete the trans-European transport network. Taking into consideration that the Republic of Bulgaria will be one of the peripheral countries and external border of the European Union in 2007, this programme concentrates on: eliminating the bottlenecks on the Danube River, completing the priority roads and railways for absorbing the traffic flows; improving the quality of the main road and railway arteries, promoting the combined transport and transport by sea and inland waterway; developing high-quality multimodal passenger transport in the Capital City.

With an interoperable trans-European transport network gradually being completed and traffic growth expected to rise, this programme is looking forward to better integration of the national network with those of the neighbouring countries and the EU.

The second specific goal is:

- ***Achievement of balance between the transport modes***

Most passengers and goods traffic goes by road. Saturation is a serious problem on the main road arteries and on the main boulevards in the capital city. The greatest competitive advantage of road transport is its capacity to carry goods all over the country with flexibility and at low price. The incomplete and low-speed railway infrastructure, the lack of built combined infrastructure and the low traffic capacity in the terminals on the sea and Danube River ports hinder the development of alternative transport modes.

Turning intermodality into reality, revitalizing the railway sector, promoting the sea and inland waterway transport, developing of metropolitan railway in the big cities could provide

means of coping with the congestion of the main road infrastructure and will support the achievement of better balance between the transport modes.

## **7. PRIORITY AXES**

### **PRIORITY AXES 2007-2013**

The selection of the listed Priority Axes has been done by the Working Group based on:

- Main conclusions, identified in the SWOT analysis of the SOP on Transport;
- Disparities in the development of the national transport system and those of the EU countries, listed in the National Strategic Reference Framework 2007-2013;
- Strategic goals and priorities of the National Strategic Reference Framework 2007-2013;
- Main priorities, laid down in the White Paper: “European Transport policy till 2010 – time to decide” and its revision 2006- basic document, determining the future activities of the Community for optimizing the transport system;
- Community Guidelines for development of the Trans-European Transport network, Decision EC 1692/96 revised by the decision EC 884/2004;
- EU Cohesion policy goals for the period 2007-2013, the Community Strategic Guidelines;
- National priorities for the development of the national transport system;
- Priorities laid down in the other operational programmes;
- Strategy for the development of the transport infrastructure of the Republic of Bulgaria by 2015.

The conclusions and recommendations provided in the Ex-ante evaluation of the OPT have been also taken into consideration with regard to elaboration of the priority axes, namely:

#### **7. Conclusions and recommendations**

“Finally, it seems necessary for the country, to conduct a National Transport Study, in order to better prioritise the various projects not only for the programming period 2007-2013, but also for future horizons. This study has been included as independent operation in the Priority Axis of the Technical Assistance, under the title “General Transport Master Plan”.

The transport strategic initiatives, which have been included as priorities axes and the respective operations in the Sectoral Operation Programme “Transport” have been found to be consistent with the National Development Plan and the adopted National Transport Strategy, as presented in the National Strategic Reference Framework. The Guidelines regarding cohesion have been respected and the proposed operations meet the selection criteria for financing under the regulation for the 4<sup>th</sup> programming period. Therefore, is concluded that the overall goals and objectives are consistent and in line with the European Union priorities.”

In order to enhance the coherence and coordination between the OPs and to achieve the partnership principle, a project “Forum for reaching consensus on the priorities of the Operational Programmes”, funded by the Swiss Agency for Development and Cooperation, started in February 2005. Three forum sessions have been carried out until December 2005 with the participation of the key ministries, members of Parliament, non-governmental organizations, socio-economical partners, academic circles, regional and local authorities and citizens.

Taking into consideration the budget resources (Community and State budgets allocated for the SOP on Transport); the timeframe of the programme; the priority needs to modernize the national transport infrastructure; the actions eligible for funding under the Cohesion Fund and European Regional Development Fund for the period 2007-2013; the priorities of the other Operational Programmes, five operational priority axes have been identified.

According to the Council Regulation (EC) № 1083/2006 the programme should be defined at an aggregate or priority level, highlighting the most important operations.

***Priority axis 1 - Development of railway infrastructure along the Trans-European and major national transport axes***

The objectives of this priority axis are the establishment and development the main railway infrastructure of the nation-wide, cross-border and EU importance in the TEN-T priority axis 22 and in the remaining sections of the TEN-T network and to improve the interoperability on major rail routes as well as development of sustainable urban railway transport systems outside the TEN-T with environmental benefits. The priority axis objectives are in line with Article 2 of Council Regulation (EC) 1084/2006 establishing a Cohesion Fund and repealing Regulation (EC) No 1164/94.

To justify this Priority Axis special reference to the CSG on cohesion, the NSRF and the results of the Ex-ante evaluation of OPT have also been used, as follows:

***Reference to the CSG***

*In point 1.1.1. Expand and improve transport infrastructures of CSG Annex it is stipulated that:*

- Member States and regions eligible for funding under the Convergence objective (1) or the Cohesion Fund, should give appropriate priority to those of the 30 projects of European interest where they fall within their territory. Within this group of projects, cross-border links merit special attention. Other TEN-T projects, and strategic transport links, should be supported where this presents a strong case in terms of their contribution to growth and competitiveness.
- Complementary investment in secondary connections will also be important in the context of an integrated regional transport and communications strategy covering urban and rural areas, in order to ensure that the regions benefit from the opportunities created by the major networks.
- Support for rail infrastructure should seek to ensure greater access. Track fees should facilitate access for independent operators. They should also enhance the creation of an EU-wide interoperable network. Compliance and applications of the interoperability and the fitting of ERTMS on board and on track should be part of all projects financed where appropriate.
- Promoting environmentally sustainable transport networks, particularly in urban areas. This includes public transport facilities (including park-and-ride infrastructures), mobility plans, ring roads, increasing safety at road junctions and soft traffic (cycle lanes, pedestrian tracks). It also includes actions providing for accessibility to common public transport services for certain target groups (the elderly, disabled

persons) and providing distribution networks for alternative vehicle fuels. Inland navigation routes can also contribute to the sustainability of networks.

### ***Reference to NSRF***

*In point 3.1 Priority 1 “Improving Basic Infrastructure” of NSRF*, Infrastructures for a growing Economy it is stipulated that:

“The investments in transport focus on the improvement of the infrastructure along the major European transport axes crossing the territory of Bulgaria.....In this respect the basic target for the Bulgarian Strategy in the transport sector is the development of the European Transport Corridors in the territory of the country.

The investments in key rail and road linkages will be combined with investments in transport intermodality.”

*In point 3.4 Priority 4 “Supporting Balanced Territorial Development”, the role of cities* it is stipulated that:

“the urban systems of transport will need particular attention in order to encourage a fully integrated and multi-modal approach as appropriate particularly in larger towns”

Transport investments focus on connecting the country at four basic levels - external, national, regional and urban

The ***Development of railway infrastructure along the Trans-European and major national transport*** Priority axis comprises a group of operations which are closely related and have the following specific measurable goals:

- ***Modernization, rehabilitation and electrification of railway sections along the trans-European transport axes of nation-wide and EU importance;***
- ***Modernization, rehabilitation and electrification of railway sections connecting the main railway network of Republic of Bulgaria with the main railway networks of the neighbouring countries***
- ***Development of sustainable urban railway transport outside the TEN-T and its interoperability which clearly present environmental benefits, namely clean urban public transport.***

The operations co-financed under this priority axis should correspond at least to one of the pointed goals.

The strategic issues to be implemented should enable heighten the competitive profile of rail transport and sustainable urban railway transport. Together with the envisaged major infrastructure projects in long term horizon variety of other activities will be taken in order to achieve the following strategic outcomes in a short to medium term:

- *A competitive railway network*

The measures of this action line aim at addressing exactly the strategic issues that will have an impact on railway freight transport. The measures are focused to directly related particular issues: increase safety and security, co-ordinate timetables, enhance interoperability, enhance interconnectivity.

- *A competitive marketing strategy*

NRIC should develop a modern marketing function that will overview and promote the railways as a means of transportation. What brings customers is: service value, service quality, service content and access to markets and clients.



A marketing function in NRIC may contribute to attracting more freight to the railways. The tools that NRIC can set to improve its presence to the market are - pricing of usage rights, active promotion of services, competition among operators, gamut of services offered to operators and users.

- *A supportive legal and institutional environment*

Bulgaria's legal and institutional environment should: Be harmonised with EU directives; Establish all the necessary competencies and clear lines of institutional authority and responsibility among the bodies and organisations involved; Provide for all the necessary co-ordinating and decision making mechanisms.

- *Effective organisation and support systems*

To implement the measures of this action, NRIC should to assure that possess internally the necessary:

- Organisational capacity in terms human resources committed and empowered (establish task force)
- Support systems implements (modernize IT systems).

- *A competitive terminal network*

The measures of this action line aim at bridging the gap in specific measures per terminal - create a network of rail Intermodal nodes / terminals and invest in creating new high-quality parts of Intermodal infrastructure network.

- *Attract financing*

NRIC should be able to safeguard public interest and obtain value for money, while control/ownership of its activities remains public. All use of financial resources should guarantee accountability, while procedures for the award of contracts should be fair, transparent and efficient.

- *Rapid and efficient public transport*

The measures of this action line aims at increasing the average travel speed of urban transport, increased number of transported passengers and reduced travel time.

- *Environmental benefits*

Project implementation should be able to prove positive environmental impact. This includes reduction of harmful emissions in the environment as well as reduction of noise.

- *Increased traffic safety*

The measure of this action aims in the reduction of the road accidents and the related to them number of dead and injured passengers and reduction of urban traffic congestion.

For the implementation of the projects for the development of the railway infrastructure on the territory of Bulgaria and development of sustainable urban railway transport in Sofia, included in the OPT, are summarized as follows:

- Priority sections on the European Priority Axes (part of TEN-T):
  - Modernisation of the Vidin-Sofia railway line;
  - Modernisation of the Sofia-Pernik-Radomir railway line.
- TEN-T sections linking to the European Priority Axes:
  - Modernisation of the Sofia-Dragoman railway line;
  - Modernisation of the Sofia-Plodiv railway line;
  - Renewal of railway sections along the Mezdra-Gorna Orjahovica railway line.
- TEN-T remaining sections:
  - Renewal of railway sections along the Plovdiv-Burgas railway line;
  - Electrification and Reconstruction of Svilengrad –Turkish border railway line;

- Doubling and Electrification of Parvomai – Yabalkovo railway line.
- Sustainable urban railway transport
  - Sofia Metro Extension Project: Stage II Lot 1 “Obelya – Nadezhda” and Lot 2 “Mladost I – Tsarigradsko Shose”

*Operations under this Priority axis will be co- financed by the Cohesion Fund according to the Council Regulation (EC) No 1084/2006.*

With regard to the development of the Trans-European transport network, particularly projects of European interest as identified by Decision 1692/96/EC, revised by the Decision 884/2004 EC, Bulgaria can apply for financing under the TEN-T budget. The TEN-T budget, Cohesion Fund and ERDF play an important role supporting TEN-T projects through direct grants. For the period 2007-2013, it is envisaged the co-financing rate to be increased to a maximum of 20% for the priority projects, and to allow, in exceptional cases, a maximum rate of 30 % for cross-border sections of priority projects. The budget of OPT does not include the financial resources of the TEN-T budget.

In line with Council Regulation (EC) 1084/2006, Article 2, paragraph 1, Cohesion fund may also intervene in areas related to sustainable development which clearly present environmental benefits, namely energy efficiency and renewable energy and, in the transport sector outside the trans-European networks, rail, river and sea transport, intermodal transport systems and their interoperability, management of road, sea and air traffic, clean urban transport and public transport.

Within the OPT Priority axis 5 “Technical Assistance” it is envisaged preparation of a Strategic Business Development Plan for the development of the railway sector as a whole. This would aim to provide a strategy for a number of core market segments, both passenger and freight, where railways can develop sustainable competitive advantage in the medium to long term. Such a plan will cover both domestic and international services. The strategy should consider the potential for value added services, such as logistics services for freight customers and door to door transport partnerships for intercity passenger journeys, as well as pure rail transport services. It should identify a strategy that will assist in improving the financial and economic performance of the rail sector. It will identify the quality of service required to deliver competitive advantage and therefore assist in determining the suitability of planned investment in the rail sector and assist in prioritising projects for implementation. The plan will consider the business development strategy from the perspective of the rail sector as a whole, rather than from the perspective of individual organisations within it.

### **Rationale:**

#### ***Modernization, rehabilitation and electrification of railway sections along the Trans European Transport Network.***

Railways commercial lines located along EU corridor possess the greatest potential of development (both in term of freight transport and passenger transport) and should possess an improved infrastructure basis.

The programmed operations intend to match with the global commercial strategy of railway operators and enable them to provide to their customers the requested quality of service in terms of speed, comfort, frequency of services and their continuous development or adaptation.

The preliminary output of the operations should consist, where it is necessary, in the enhancement of the technical parameters of the track lines following the standards defined in the Trans-European Network (TEN); Agreement for High Speed railway lines (AGC); Agreement for Railway lines for Combined Transport (AGTC); Trans - European Railway Project (TER). The development of the railway infrastructure is mainly oriented to modernization and improvement of technical and operational parameters in compliance to AGC and AGTC requirements on major routes.

Applying of AGC/AGTC requirements was adopted by Bulgarian government in 1994 and this is part of the Bulgarian government policy in the railway transport and this option is one that will be taken into account and assessed during the Projects preparation for modernization. The technical parameters regarding applying of AGC/AGTC standards (160 km/h for the passenger transport and 120 km/h for the freight transport) are the minimum required to comply with AGC/AGTC standards and simultaneously considering the size and terrain of the Republic of Bulgaria these parameters are enough to provide competitiveness of the railway transport.

These parameters will enhance the global safety of the network and fully include the Bulgarian rail infrastructure in the European railways system, enabling interoperability between regional and international networks.

Besides the upgrade of technical parameter of the tracks, all operations will intend to enhance the global efficiency of the network and define and implement if necessary new design for tracks section, doubling of tracks, energy supply in accordance with the forecasted services to be delivered, station layouts, etc.

Operation will be supported by preliminary technical studies which will define key investments related to physical works and equipment in order to meet NRIC customer's requirement and passenger's satisfaction.

***- Modernization, rehabilitation and electrification of railway sections connecting the main railway network of Republic of Bulgaria with the main railway networks of the European Union and outside the European Union***

Analysis of trade data between Bulgaria and other countries demonstrate clearly the interest to enhance border connection in order to support the growing movement of goods transiting by Bulgarian borders and infrastructure connections with Greece and Turkey must be strengthened.

The connection with FYROM is still undeveloped because of the absence of a significant section of railway on the other side of the border. According to the draft final report of project "Technical assessment of feasibility of Corridor VIII railway border crossings within CEI region" prepared by the technical secretariat of Corridor VIII, the railway link Bulgaria-FYROM will be developed in phase 2 (after 2010).

On the other hand, natural economic partnership with Romania remains under a normal level due to the natural barrier of the Danube River and the lack of sufficient infrastructure between the two countries (there is only one bridge over the Danube River at Russe-Giurgiu).

Above all, a global historical change can be observed, redirecting main commercial transaction from Russia to European Union. Passenger mobility also follows this trend. In consideration of this, the connection should be located along the main routes to/from Western Europe.

The planned investments in the railway infrastructure development are directed to the cross-border connections improvement and focus on this missing links in the Trans-European Transport priority axis 22 and the remaining sections of the TEN-T network.

By the second Danube bridge construction, the natural link between Bulgaria and Romania along Trans European Transport priority axes 22 will be soon constructed. This will result in speed increase, travel time decrease and new freight flows attraction.

Electrification and Reconstruction of Svilengrad –Turkish border railway line will facilitate the increase of commercial relationships between the two countries.

The planned projects should also contribute to enhance the main domestic railways section of the TEN-T network in order to fully integrate internal transport capacity to regional transport capacity and enable the freight operators to provide services at the chosen scale.

In all the projects under preparation special attention will be given in order to pursue a “top-down market-driven” methodological approach to analyse the modernisation requirements based upon a robust business/market analysis. The latter shall provide indication of the type of transportation services that shall be earmarked as the core of railway business activities in the specific railway axis under consideration. Design requirements for the infrastructure shall follow from such service requirements in a “top-down” approach to guarantee the adequacy of the infrastructure characteristics with the sustainable fulfilment of the over-riding business goals in a long-term perspective. “Bottom-up” engineering-pushing approaches shall be avoided without an appropriate underlying rationale.

During the preparation special attention will be given to the following issues:

- The assurance of the coherence of the project with the national transport strategy. This criterion is of the utmost importance as it will determine from the outset the acceptability of the project by the Commission services;
- A cost-benefit analysis resulting in an economic rate of return. This analysis shall be carried out following a recognised “state of the art” methodology<sup>2</sup>;

A credible financing plan demonstrating the financial viability of the project throughout its expected lifetime – including a register of internal and external sources of investment funds (including notably long-term loans and subsidies) and revenue generation capability, risk appraisals.

The scope of the feasibility analyses are to extend beyond the upgrading of the traditional railway infrastructure assets (e.g. civil engineering works, track, power supply, signalling) towards considering other support information management and logistic systems (e.g. IT systems, passenger information systems, traffic management systems, cargo tracking and tracing systems) which are pivotal not only to ensure the quality of railway transportation services in a short to medium term perspective but also to maximise the return-on-investment of the capital-intensive infrastructure assets.

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<sup>2</sup> The handbook on cost-benefit analysis developed by the Commission services can be used for this purpose.

The fulfilment of these activities will require notably:

- The elaboration of a business plan for the infrastructure development capable of heightening the long-term demand for railway transport services in a context of promotion of regional development. This includes the selection of a “core set” of transportation services capable of ensuring a sustainable competitiveness of rail transport within a long-term horizon. The definition of such a “core set” shall evolve from the current and forecasted evolution of the regional development patterns and the transportation market as well as from the factors influencing modal split, notably those customer preferences shaping the choice of competing road, air, inland waterways and/or maritime services;
- The elaboration of a “reference operations plan” required to deliver the “core set” of transportation services identified above. This shall include aspects such as the indicative number of trains per day, the type of trains, typical schedules and stopping patterns capable of matching the evolving market requirements within the forecast horizon;
- The definition of a modernisation/upgrading programme deemed necessary to deliver totally or partially the selected “reference operations plan”. This encompasses the assessment of different modernisation scenarios in terms of their cost/benefit, risk and environmental impact;
- The delineation of the overall system concept and the associated technical and operational requirements for the modernisation/upgrading of the infrastructure and superstructure (viz. signalling, telecommunications, power supply systems, ICT systems) of the line for the preferred modernisation scenario. In addition this shall also include recommendations regarding technologies to be implemented and organisation of operational work as well as proposals relating to the end of life policy (removal, re-qualification) for those infrastructure assets considered as redundant;
- The performance of the design of all systems, sub-systems, devices and facilities necessary to fulfil the scope of the modernisation programme to the extent necessary to enable the completion of the feasibility study. This includes notably: (i) infrastructure elements, including track, major engineering structures, buildings, flood protection facilities; (ii) traction and power supply system both for traction and ancillary applications; (iii) the signalling and integrated centralised traffic management, (including traffic control and supervision and other auxiliary SCADA Systems); (iv) telecommunication systems; (v) level-crossings protection; (vi) the ICT systems for logistic and operational purposes.
- The selection of the necessary measures for environmental protection.

During the preparation of projects will be elaborated an infrastructure/systems maintenance policy and concept of a maintenance operational plan. The maintenance policy shall address the techniques, procedures and technologies necessary for the maintenance of infrastructure and systems facilities including inspections. Where appropriate, use must be made of remote monitoring and auto-diagnostic facilities and reprogramming facilities in order to sustain the overall system availability and to enhance the degree of responsiveness to degraded situations.

Based on the characteristics of the infrastructure, this task deals with the development of changes in the current operational and maintenance regulations that may lead to more robust, cost-effective and flexible operational environment whilst providing for an optimal exploitation of the new technologies that are proposed to be adopted. Special emphasis shall be given to the re-engineering of operational processes that might lead to an enhancement of operational performance and cost-effectiveness of railway operation through simplification of

processes, adoption of solutions requiring reduced manning, and the establishment of coherent infrastructure maintenance programme that whilst guaranteeing the economics of operation can preserve the technical performance of the infrastructure.

- ***Sustainable development of intermodal transport systems outside the TEN-T and their interoperability which clearly present environmental benefits, namely clean urban public transport.***

Incentives for limiting car use and provide parking areas for cars are programmed and will accompany the development of the metro network. At metro-station at the „Tsarigradsko Shosse” blvd. via the introduction of a big buffer parking lot for about 2 000 places and relevant featured limitations it is aimed to propose to the people arriving in the city by their own cars, to avoid entering with them in the central city area, park their vehicles and use the metro.

Sofia Metro Extension Stage II

#### **LOT 1 “Obelya – Nadezhda”**

- Line 2, Section „Obelya – Nadezhda RD – Road Junction Nadezhda”

#### **LOT 2 “Mladost 1 – Tsarigradsko Shose”**

- Line 1, section „Mladost I (MS 13) – Tsarigradsko shose (MS19) with an underground parking lot”

The coordination and the consistency between Cohesion Fund investment and national or other funded investment will also enable, for passenger transport, the National operator to operate on a renewed network on main domestic lines and provide better quality services, especially between main cities of Bulgaria.

#### **Potential Beneficiaries of this priority axis are:**

- National Railway Infrastructure Company ;
- Metropolitan PLC;

### ***Priority Axis 2 - Development of road infrastructure along the Trans-European and major national transport axes***

The objective of this priority axis is to establish and develop the main road infrastructure of EU, nation-wide and cross-border importance and to improve the interoperability and road safety on major road routes.

To justify this Priority Axis special reference to the CSG on cohesion, the NSRF and the results of the Ex-ante evaluation of OPT have also been used, as follows:

#### ***Reference to the CSG***

*In point 1.1.1. Expand and improve transport infrastructures of CSG Annex it is stipulated that:*

- Member States and regions eligible for funding under the Convergence objective (1) or the Cohesion Fund, should give appropriate priority to those of the 30 projects of European interest where they fall within their territory. Within this group of projects, cross-border links merit special attention. Other TEN-T projects, and strategic transport links, should be supported where this presents a strong case in terms of their contribution to growth and competitiveness.

- Complementary investment in secondary connections will also be important in the context of an integrated regional transport and communications strategy covering urban and rural areas, in order to ensure that the regions benefit from the opportunities created by the major networks.

### ***Reference to the NSRF***

*In point 3.1 Priority 1 “Improving Basic Infrastructure” of NSRF, Infrastructures for a growing Economy it is stipulated that:*

*“The investments in transport focus on the improvement of the infrastructure along the major European transport axes crossing the territory of Bulgaria. In this respect the basic target for the Bulgarian Strategy in the transport sector is the development of the European Transport Corridors in the territory of the country.*

Transport investments focus on connecting the country at three basic levels-external, national and regional”

The priority axis comprises a group of operations which are related and have the following specific, measurable goals:

- Establishment and development of the main road infrastructure of nation wide and EU importance;
- Establishment and development of the road infrastructure connecting the main road network of RB with the main road networks of the neighbouring countries.
- Establishment of Integrated transport management and information systems (ITMIS) along the Trans-European Transport Network.

The operations co-financed under this priority axis should correspond at least to one of the pointed goals.

The most important **operations** under the Priority Axis “Development of road infrastructure along the Trans-European and major national transport axes” could be summarized as follows:

- Construction of new and rehabilitation and modernization of the existing motorways of nation-wide and EU importance along the TEN-T network with a major priority to the operations located in the TEN-T priority axis 7
- Construction of new and modernization and rehabilitation of the existing I class roads of nation-wide and EU importance along TEN-T network
- Construction of new and modernization and rehabilitation of the existing II class roads of nation-wide and EU importance along the TEN-T network
- Construction, modernization and rehabilitation of road sections connecting the main road network of Bulgaria with the main road networks of the neighbouring countries;
- Establishment of Integrated transport management and information systems (ITMIS) along the Trans-European Transport Network in compliance with the White Paper “Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system” of the European Commission since 28 March 2011.

The establishment of ITMIS is aimed at creating the necessary conditions for better management of the road traffic and improving of road safety, which corresponds to the White Paper “Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system” of the European Commission since 28 March 2011. Within the framework of the above mentioned activities is envisaged the establishment of an automated system for traffic data collection on motorways and First Class roads in the Republic of Bulgaria along the TEN-T network. The ITMIS shall facilitate traffic management for

improved use of infrastructure and vehicles, and real-time information systems to track and trace freight and to manage freight flows; passenger/travel information, booking and payment systems.

The supplement of the Priority Axis scope corresponds to the scope of assistance under the Cohesion Fund in line to subsection b), item 1, art. 2 of Council Regulation (EC) № 1084/2006.

While the Sectoral Operational Programme on Transport is concentrating on development of the road infrastructure along the Trans-European and major national transport axes (Priority Axis 2), the Operational Programme “Regional Development” is focusing on regional and local road infrastructure. OP “Regional Development” will support activities for improvement of municipal road network within the 86 municipalities of the urban agglomeration areas under Priority Axis 2: “Regional and Local Accessibility”, operation 2.1. “Regional and local road infrastructure”.

This will be complemented by support offered under the Rural Development Programme (EAFDR) for improvement of municipal road infrastructure in the remaining 178 municipalities in rural areas, under the axis 3 measure “Basic services for the economy and rural population”.

*Operations under this Priority Axis will be co-financed by the Cohesion Fund according to the Council Regulation (EC) No 1084/2006.*

### **Rationale**

The objective of this Priority Axis is to establish and develop the main road infrastructure along the TEN-T priority axis 7 and the remaining sections of TEN-T network of the national-wide, cross-border and EU importance and to improve the interoperability on major road routes.

The territory of the Republic of Bulgaria is an important element for continuity of the TEN-T priority axis 7 and a crossing point of the five out of ten Pan-European transport corridors – IV, VII, VIII, IX and X, which are part of the priority projects selected in the HLG de Palacio taken into account in the Commission’s Communication 2007, February, 7 and which enforce additional requirements to the quality of the Bulgarian transport network in order to make the most of the geo-strategical advantage (as a transport bridge between: Western and Central Europe, Near East, Western and Middle Asia and the countries along the “North – South” direction and provides comfortable access to the Black Sea) and thus to contribute to the functioning of the Common European Market by providing an effective transport links and facilitate the transport of people and goods and access to the other countries and markets.

The map of road projects presents all road projects, categorized by funding mechanism as follows:

- Competed road infrastructure projects up to 2006 (WB, EU pre-accession instruments);
- Road infrastructure projects under construction (EU pre-accession instruments)
- Road infrastructure projects in OPT
- Road infrastructure projects financed by other sources (State Budget, Loans)

With regard to the development of the Trans-European transport network, particularly projects of European interest as identified by Decision 1692/96/EC, revised by the Decision 884/2004 EC, Bulgaria can apply for financing under the TEN-T budget. The TEN-T budget,



Cohesion Fund and ERDF play an important role supporting TEN-T projects through direct grants. For the period 2007-2013, it is envisaged the co-financing rate to be increased a maximum of 20% for the priority projects, and to allow, in exceptional cases, a maximum rate of 30 % for cross-border sections of priority projects.

The National Company Strategic Infrastructure Projects (NCSIP) was imperatively included as a beneficiary of OPT as a result of an amendment of the Roads Act, published in State Gazette 55 of 19 July 2011. The NCSIP was established with a statute of State Company under art. 62, p. 3 of the Trade Law by the abovementioned amendment in Art. 28.a of the Roads Act. The company's main activities are related to provisions of financing, design, construction, management, maintenance and repair of foreseen as motorways road sections "Struma", "Hemus" and "Black Sea". These road sections are located along the major Trans-European transport axes as "Struma" Motorway (Lots 1,2 and 4) is included in the Main project list under the OPT, the others are priority of national importance for preparation under the current programming period and will be proposed for funding and implementation after 2014. In this context is the proposal for including the NCSIP as beneficiary under Priority axes 2 and 5.

For generating long-term conditions for capacity and quality build-up of road transport infrastructure at international, national and regional level and meeting vigorous traffic is therefore in place to consider with projects along Trans-European transport axes and major national axes.

**Potential beneficiaries of this priority axis are:**

- Road Infrastructure Agency;
- National Company Strategic Infrastructure Projects;

***Priority Axis 3 – Improvement of intermodality for passengers and freight***

The objective of this priority is making travelling conditions easier and facilitating modal transfers of passengers and freights to more environment friendly transport modes.

To justify this Priority Axis special reference to the CSG on cohesion, the NSRF and the results of the Ex-ante evaluation of OPT have also been used, as follows:

***Reference to the CSG***

*In point 1.1.1. Expand and improve transport infrastructures of CSG Annex it is stipulated that:*

- Promoting environmentally sustainable transport networks, particularly in urban areas. This includes public transport facilities (including park-and-ride infrastructures), mobility plans, ring roads, increasing safety at road junctions and soft traffic (cycle lanes, pedestrian tracks). It also includes actions providing for accessibility to common public transport services for certain target groups (the elderly, disabled persons) and providing distribution networks for alternative vehicle fuels. Inland navigation routes can also contribute to the sustainability of networks.

***Reference to the NSRF***

*In point 3.1 Priority 1 "Improving Basic Infrastructure" of NSRF, Infrastructures for a growing Economy it is stipulated that:*

“The investments in key rail and road linkages will be combined with investments in transport intermodality.

*In point 3.4 Priority 4 “Supporting Balanced Territorial Development”, the role of cities it is stipulated that:*

“the urban systems of transport will need particular attention in order to encourage a fully integrated and multi-modal approach as appropriate particularly in larger towns”

The priority axis „**Improvement of intermodality for passengers and freight**” comprises a group of operations which are related and have the following specific, measurable goals:

- Improvement of the network of combined transport terminals;
- Development of multimodal mobility for passengers;
- Rehabilitation of Railway stations along the Trans – European Transport Network.

#### ***Operation 1 Improvement of the network of combined transport terminals***

The operations corresponding to the first goal “Improvement of the network of combined transport terminals” will be related to the:

- Construction of new intermodal terminals
- Improvement of the technical, technological and operational parameters of the existing terminals

According to the requirements of the White Paper for EU transport policy till 2010, OPT is concentrating certain resources for intermodal transport development, offering high quality passenger and freight transport services integrating the advantages of the different transport modes and facilitating the transfer of passengers and freights between the transport modes.

*Operations under this Priority axis will be co-financed by the European Regional Development Fund according to Regulation of the Council of the European Parliament and of Council on the European Regional Development Fund (EC) No 1080/2006*

After the construction or modernization of terminals, depend on traffic flow of each terminal the freight villages in near areas will be developed, financed by:

- Private sources;
- PPP;
- PPP and EU grant;

#### **Rationale**

The strategy for the development of combined transport established that some terminals of the network, prioritized according to their economic potential, should increase their capacity of work in order to be reliable nodal points for the implementation of combined transport services.

The operation will consist in developing in these chosen locations, railways connections, Office/Customs/Maintenance Buildings, Unload/Load Areas & Tracks, areas for maneuvers and storage and integrating some space devoted to the future development of the area, and which could propose a large array of logistics or logistics related activities (Freight villages' lands and infrastructures), and attract international operators.

The first project desirable to implement is the creation or the improvement of terminal connection and facilities in Sofia area.

The capital of Bulgaria, being the city with the biggest consumption and biggest contribution to the GDP of the country, generates sufficient transport traffic volumes. Sofia is the crossing point of three Pan-European Transport Corridors and is situated in the centre of the Balkan Peninsula, which makes it appropriate for a transport logistic centre of the region. The Sofia-Plovdiv railway line, which has a cargo railway station with a container terminal, is in contiguity to the Sofia airport, and it is easy to create new deviations from the existing railway lines for constructing a new terminal for the combined transport. The airport has good transport connections to all the parts of the city and the transit motorways. There are many free terrains round the airport to the Sofia ring road. The connection between the airport, the cargo city, the parking places and the terminals can be put into practice by shuttle-buses.

In other words, there are excellent preconditions for the development of the combined transport and connections with the other transport modes in the capital – for example for long distances (airplane, train, combined) and for short distances (truck).

### ***Operation 2: Development of multimodal mobility for passenger in Sofia***

#### **Rationale**

Favour a major modal swift from private cars to rail transport trough the extension of the Metro and create new intermodal connections for passengers in the public transport system of Sofia.

The operation corresponding to the second goal “Development of multimodal mobility for passengers” will be related to the development of public rail transport for passengers in the capital by the extension of the metropolitan network, enabling new railway connections with key transport centres of national importance (airports, central railway stations, central bus stations, ports etc.) and other public transport modes.

The project of extension of Sofia Metro can be used as the backbone to develop several intermodal nodes in Sofia’s public transport system. Some of them, such as the Central Railways Station or the Sofia Terminal Airport Station, will have a strategic importance in the development of the public transport.

The planned station in the main extension project and its function as multimodal nodes and as railways service station of first importance are:

- ✚ For the section of Stage I: “Central Railway Station” – “St. Nedelya” square – “Cherni Vrah” blvd. (“James Bouchier” blvd.), including development of the section form MS James Bouchier to crossroad of bul. Cherni Vrah with bul. Henrik Ibsen and Srebarna str. (MS Vitosha).
- Metro station under the Maria Liza blvd. in proximity to the road junction “Nadezda”;
- Metro Central Rail-Way Station” – „St. Nedelya” square – the NPC – the “Hemus” hotel in the “Lozenets” RD (MS6);
- The metro-station at the cross-road of the “Slivnitsa” blvd. and the “Maria Louise” RD (MS7);
- The metro-station at the „St. Nedelya” square (MS8);
- The metro-station in front of the NPC (MS9);
- Metro-station at the “Hemus” hotel in the “Lozenets” RD (MS10);
- Metro-station “James Bouchier“ (MS11);
- Metro-station “Vitosha“ (MS12);\*

✚ For the Section of Stage III: “Tsarigradsko Shousse – Sofia Airport” and “Mladost 1 – the Business Park in Mladost 4”

- Metro station between “Tsvetan Lazarov” Blvd. and “Captain Dimitar Spisarevski” Blvd. in “Drujba I” Residential District (MS20);
- Metro station between on the crossing of “Kr. Pastuhov” Blvd. with “Iskarsko Shousse” Blvd. (MS21);
- Metro station on “Podporuchik Jordan Todorov” Str. near “Polkovnik Vassil Zlatarev” Str. in the industrial zone “Iskar Station” (MS22);
- Metro station Sofia Airport (MS23);
- The metro station is situated between “Mladost” 2 Residential District and “Mladost 3” Residential District under the roadway of “Alexander Malinov” Blvd.(MS14);
- Metro station near the crossing of “Alexander Malinov” Blvd. with “Prof. Balan” Str. (MS15);
- Metro station on the crossing of the Ring Road and “Samara” Str. (MS16)

\* Initially the development of the section from MS James Bourchier to MS Vitosha was proposed for financing under Operational Programme “Transport and Transport Infrastructure” 2014-2020 (OPTTI). Subsequently, the implementation of the project was divided into two phases (Reverse phasing), a measure included in the Action plan for 2015 on completion 2007-2013 programming period. It was decided Phase 1 to be financed under OPT and Phase 2 to be financed under OPTTI. The Phase 1 includes all activities for preparation for implementation, reconstruction of engineering networks, construction of the structures of tunnels and metro stations, and road works above them to restore all affected by the construction of roads. The Phase 2 comprises all finishing activities for completion of the site aiming its put in operation.



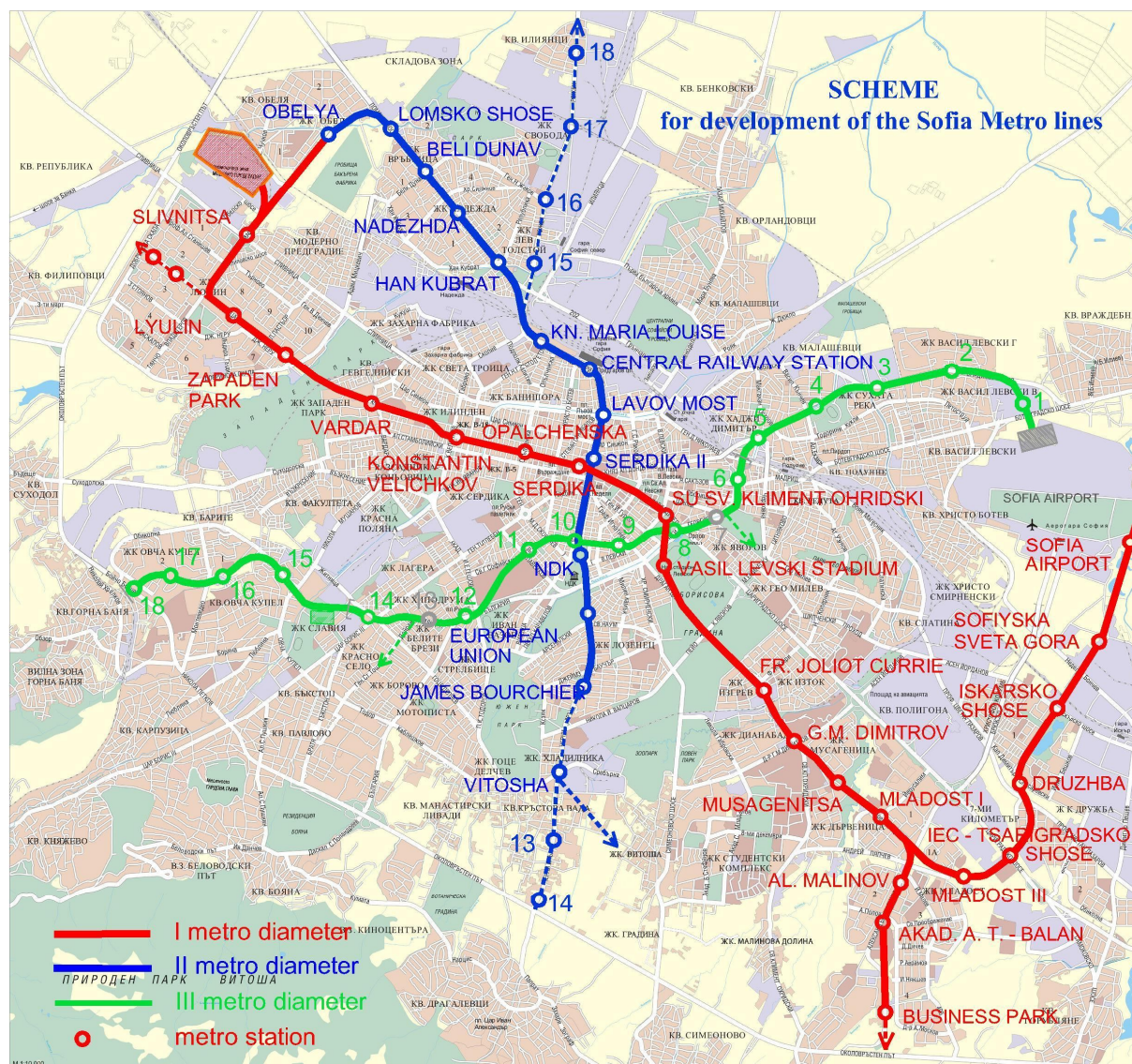


Figure 1

Forecasts suggest that the Metropolitan should absorb mostly the passengers for bus services and individual users.

As a whole, the predominant impact of this operation on the modal share of urban transport should be a substantial increase of the passenger flows from 75 000 passengers /day to 580 000 passengers /day at completion of the sections and of the suggested metro extensions.

### ***Operation 3: Rehabilitation of railway station along the Trans-European Transport Network***

This operation is aimed at achieving greater completeness of the railway services provided, namely the renewal of the railway infrastructure to be combined with better conditions for passengers and provision of convenient connections with other transport modes, which is expected to encourage use of railway transport.

This supplement to the Priority axis scope corresponds to priority of assistance of the European Regional Development Fund (ERDF), defined in paragraph 8, art. 4 of Regulation (EC) № 1080/2006 of the Council, namely: „transport investments, including improvement of Trans-European Networks and links to TEN-T; integrated strategies for fostering clean transport which contribute to improving the access to and quality of passenger and goods services, to achieving more balanced modal split, to promoting intermodalintermodal sysstem and to reducing environmental impact”. As main project to be prepared and

implemented under this activity is the project for renewal and rehabilitation of Central Railway Station in Sofia, which is aimed at completing the services to be provided by the currently constructed metro line in front of the Central Station. In this way a synergy effect between the two investments, both co-financed by the ERDF, will be achieved facilitating the connections between the passengers of the railway transport and the metro, including from and to Sofia Airport.

While the OPT is concentrated on the capital city the Regional Development OP envisages interventions related to the urban transport in other cities under Operation 1.5 “Sustainable urban transportation system”. This operation is focusing on sustainable urban transportation systems and on this way to increase the living and the environmental conditions in the main urban areas of the country.

**Potential beneficiaries of this priority axis are:**

- Metropolitan PLC;
- National Railway Infrastructure Company;
- Bulgarian Ports Infrastructure Company;

**Priority Axis 4 - Improvement of the maritime and inland-waterway navigation**

To justify this Priority Axis special reference to the CSG on cohesion, the NSRF and the results of the Ex-ante evaluation of OPT have also been used, as follows:

***Reference to the CSG***

*In point 1.1.1. Expand and improve transport infrastructures of CSG Annex it is stipulated that:*

- Member States and regions eligible for funding under the Convergence objective (1) or the Cohesion Fund, should give appropriate priority to those of the 30 projects of European interest where they fall within their territory. Within this group of projects, cross-border links merit special attention. Other TEN-T projects, and strategic transport links, should be supported where this presents a strong case in terms of their contribution to growth and competitiveness.
- Promoting environmentally sustainable transport networks, particularly in urban areas. This includes public transport facilities (including park-and-ride infrastructures), mobility plans, ring roads, increasing safety at road junctions and soft traffic (cycle lanes, pedestrian tracks). It also includes actions providing for accessibility to common public transport services for certain target groups (the elderly, disabled persons) and providing distribution networks for alternative vehicle fuels. Inland navigation routes can also contribute to the sustainability of networks.

*In point 1.1.2. Strengthen the synergies between environmental protection and growth of CSG Annex it is stipulated that:*

- Promoting, in addition to the investments in sustainable energy and transport covered elsewhere, investments that contribute to the EU-Kyoto commitments.

***Reference to the NSRF***

*In point 3.1 Priority 1 “Improving Basic Infrastructure” of NSRF, Infrastructures for a growing Economy it is stipulated that:*

“The investments in key rail and road linkages will be combined with investments in transport intermodality and improved conditions for navigation along inland water-ways, including the efficient functioning of Vessel Traffic Management and Information system on the River Danube.”

The priority axis comprises a group of operations which are related and have the following specific, measurable goal - Improvement of the vessel traffic conditions on the Danube River and the Bulgarian maritime spaces.

The operations under the Priority axes ***Improvement of the maritime and inland-waterway navigation will be related to the:***

- Removing the bottlenecks on the Danube River (TEN-T priority axes 18) and improvement of safety and navigation in the region and aquatory of the Bulgarian Danube River Ports
- Setting up and development of navigation information systems
- Improvement of safety and ports infrastructure in the region and aquatory of the sea ports of the Republic of Bulgaria

*Operations under this Priority will be co-financed by the European Regional Development Fund according to the Regulation (EC) No 1080/2006*

**Operation 1:** Improvement of safety and navigation on Danube River and ports infrastructure in the region of the ports with national importance

### **Rationale**

#### Consistency with the EU transport policy

The importance of the Danube River as a major transport corridor connecting EU member states with countries in Central and Eastern Europe (CEE), was confirmed in 2003 by the High Level Group I, chaired by Karel Van Miert and in by 2005 the High Level Group II chaired by Ms Loyola de Palacio. Following these recommendations in the Decision (EC) 884/2004 the Danube River is currently the TEN-T priority axes 18.

The overall strategy of the European Union is to prepare a project for improvement of the navigation on the Danube River, where the river sills in the critical sections, which are dangerous for the navigation, should be removed. Bulgaria should also maintain the navigation conditions for safe navigation according to the recommendations of the Danube Commission and the European Economic Commission within UN in the context of the Convention for navigation regime over the Danube River since 1948 in Belgrade.

#### Main issues identification

The constantly changing hydrometeorological conditions and the construction of the dams Iron Gate 1 (km 943) and Iron Gate 2 (km 863), caused sudden amplitudes in the river water level. At the location of the big island groups there are a lot of floating deposits that increase the sand shallows and decreases the depths. The Least Available Depth (LAD) was reduced to 14-18 dm, while the width of the channel at low water was restricted to only 40 m to 60 m. The total provision of days for navigation in the critical sections with depth over 25 dm. at LAD is about 64% during the year, while the recommendations of the Danube Commission is 94%. The feasibility study done by Frederic Harris in 1999-2000 (Phare project (ZZ-97-29) Technical-economic research for improvement of the navigation conditions over the Danube River from Iron Gate to Giurgeni (km 863 – km 240) and Final report of Frederic Harris on

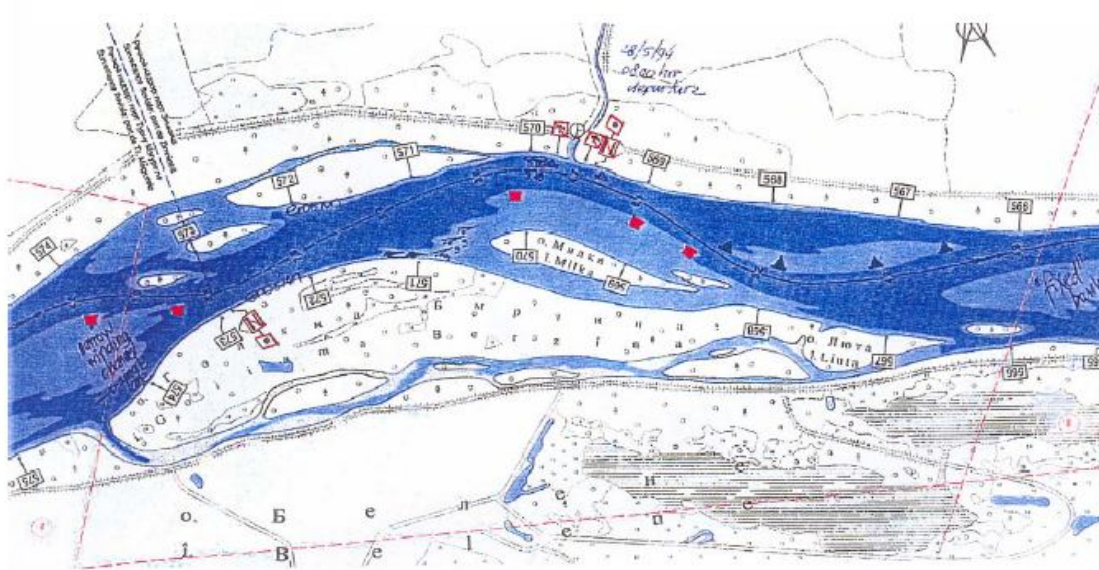


Phare-contract 98-0468) studied and determined the narrow sections (critical sections, obstructions) that prevent the navigation, which directs to priority execution of corrections of the river bed in two of the most critical sections – Batin Island and Belene Island the regions, which are subject of the following project.

### Content of the project

The main goal of the project is to ensure the recommended parameters of the fairway (to improve the navigation way) in the two most critical sections of the Danube River. It will secure the international navigation and ensure the passage of vessels throughout the whole year in these sections.

The project should improve the river bed and the banks, including islands which will control the river flow, in a way that will secure free navigation in two of the most critical bottlenecks in the joint Bulgarian-Romanian section of the Danube River, namely in the section between km 530 and 520 – Batin and the section between km 576 and km 560 – Belene. The location of the two sections (the two sub objects) is within the section, which is under the maintenance of the Bulgarian side (km 610 – km 375).



### *Danube at Belene Island*

The project provides for construction of:

1. River groynes for control of the flow direction;
2. Bank-strengthening equipment over the isle banks that will contribute for directing the water flow and will prevent the erosion.
3. Sills (bottom sills) that will limit the water flow in the river branches, which will contribute for maximum control over the total water amount in the sections where it is envisaged that the fairway will be settled, aiming to achieve higher speed and self-washing of the bed.
4. Dredging works for deepening of the river bed and widening of the fairway.

### Preliminary studies



Preliminary studies should be provided in order to:

1. Update the Frederic R. Harris pre-feasibility study through conduction of field measurements (hydrographic, hydrologic, geologic and morphologic). Note: The preliminary research of Frederic R. Harris is based mostly on historical data and the specific measurements done for the purpose of the study are minimal.
2. Provide Preliminary design with the necessary complete hydrographic, hydrologic and geological studies with several solutions – each solution should be accompanied with mathematical and field hydrological modal researches.
3. Provide detailed design of the selected variant.

The actualization of the pre-feasibility study of Frederick and Harris and preparation of Feasibility study with several options for every critical section will be done within the Romanian project co-financed by ISPA - EUROPEAD/122137/DISV/RO. The Republic of Bulgaria will have reciprocal right for concordation, including Approval and will receive the results of the project. The good coordination between the two countries involved, should contribute to the overall success of the project for removing bottlenecks along the Danube River and improvement of the navigational conditions.

#### Expected impacts of the project:

##### - Impact on transport capacity of the corridor

- The stay of the vessels at the borders due to low waters will be reduced to a minimum, which will reduce the losses of the ship owners from such stays;
- The operational costs of the ship-owners will decrease because of the reduced time for transport;
- The loading capacity of the vessels in low water conditions will be better utilized. At the moment the parameters of the shipment during period of low waters is in smaller volume and tonnage in order to avoid the risks related to crossing through the critical areas;
- The possibilities to use combined transport solutions will increase (water, road and rail);
- The global capacity of transport corridor VII (Trans-European priority axis 18) will be increased. Due to the implementation of both projects, the ensured usage per annum will be increased with around 30% and that will contribute to the increase in the global capacity of the transport corridor. It is accepted that, when the other critical sections will be removed as well, the common Bulgarian-Romanian part of the Danube River will (km. 845, 650 to km. 374, 100) will ensure usage of 94 % per annum.

##### - Socio-economic impact

- A Cost-Benefit Analyses has been developed on the basis of the pre-feasibility study prepared by Frederic R. Harris for the period 2000 – 2020, using the method of the discounted cash flows. According to it, the lowest limit of the Economic Internal Rate of Return should be 12 % in order for the project to be viable. The results from the study show that the IRR is expected to be over 12%.
- The transport costs will be reduced with 0.03 Euro per ton/km. The utilization of the loading capacity will be increased with 0.01 Euro per ton/km for a meter increased draught; There will be a shift from a railway to inland waterway transport - 0.03 Euro per ton/km.
- The socio-economic cohesion between the EU-member states will improve. The advantages of the inland water transport will be better realized for improving the links

and developing new contacts, for transport of goods, for trade and tourism development.

- For Bulgaria and Romania this is a cross-border project. The design and construction is planned at both banks of the Danube river, incl. the islands. Project implementation will open new opportunities for planning of joint initiatives by the central and local authorities, the citizens and companies from Bulgaria and Romania for better utilization of the banks and islands in these sections of the river.
- The unemployment rate in the region will be reduced to about 5%. The project will create temporary employment during its implementation and also good conditions for employment for the later maintenance dredging.

The significant delay in preparation of the project “Improvement of the navigation in the Bulgarian – Romanian section of Danube River from km. 530 to km. 520 – Bathin and from km 576 to km 560 – Belene” led to inability for its real implementation in the current programming period. In joint declaration of MTITC and the Romanian Ministry of Transport and Infrastructure, the two countries undertook the engagement to work for the realization of the project for improving navigation in the Danubbe River in the next programming period, as during the current programming period are foreseen preparatory activities. With formal letter dated 14.05.2013 the Romanian Ministry of Transport confirms that provide all needed funding for preparatory activities of the project, including Bulgarian section under Rumanian Sectoral Operational Programme Transport. . With this regard during the Fourteenth Session of the OPT Monitoring Committee held in the period 05-06.06. 2013, it was decided to transfer the allocated funds for preparatory activties of the project to Priority Axis 3 providing sufficient funds for implementatation the project for rehabilitation of railway staions. As a result project “Improvement of the navigation in the Bulgarian – Romanian section of Danube River from km. 530 to km. 520 – Bathin and from km 576 to km 560 – Belene” was removed from the list of Main list of Projects under OPT.

## **Operation 2: Setting up and development of navigation information systems**

### **a) Foreseen project for vessel traffic management along Bulgarian coastlines**

#### **Rationale**

The establishment of such information exchange system is closely related to the Directive 2002/59/EC of the European Parliament and the Council of 27 June 2002, which establishes a Community vessel traffic monitoring and information system (VTMIS) for the maritime spaces and repeals Council Directive 93/75/EEC. Since 2005 there is also Directive 2005/44/EC of the European Parliament and of the Council of 7 September 2005 that establishes the provision of harmonized river information services (RIS) on inland waterways in the Community. Currently, under TEN-T, Member States are developing a master plan for the coordinated technological, financial and physical implementation of the EU Directive on RIS on the European inland-waterway system.

The Republic of Bulgaria has started the establishment of Vessel Traffic Management and Information System along its coastline since 1998 and at the current moment the system is already functioning. The Bulgarian Maritime Administration is planning to develop further and improve the system.

VTMIS is a system of harmonized informational services for the maritime shipping. Its aim is the improvement of the ship's safety and protection of the environment. With the financial support of PHARE program there have been two projects on the establishment of the system:

- PHARE Project BG 0012.01 - Bulgarian Vessel Traffic Management and Information System (finalized in October 2004);
- PHARE Project BG 2003/004-937.04.01 Vessel Traffic Management and Information System (VTMIS) **Phase 2** (ongoing);

The VTS information exchange between the ships and the coast based operators leads to a higher level of maritime safety in the Bulgarian territorial waters; increased pollution response capacity; creation of instrument for effective traffic management and informational services; support of the SAR operation implementation, overall facilitation of the maritime transport.

A third phase of the project is foreseen. It will improve the effectiveness of the system, the coverage of the Bulgarian Black Sea region and increase the scope of shipping services

The third phase should include the following stages:

#### **Stage I – Preparatory Works:**

- Preparation of Status Report after completion of Project PHARE BG2003-004-937.04.01 – VTMIS Phase 2.
- New feasibility study for the complete System.
- Preparation of needs assessment report for the Training of operators and Quality Assessment of the existing organizational structure.
- Update of the VTMIS System Design and preparation of the necessary Terms of Reference for Technical assistance and Technical Specifications for the VTMIS Project Phase 3.

#### **Stage II – Establishment:**

- Supply of equipment and software for completing of the System.

The experience gained during the development of Vessel Traffic Services will support significantly the establishment of information services for the Bulgarian part of the Danube River.

### **b) Foreseen projects related to Danube navigation facilitation**

#### **Rationale**

The Transport White Paper adopted by the European Commission on 12 September 2001 sets out an ambitious action program for development of the inland waterways transport: “The inland waterways transport is a very competitive alternative to road and rail transport. Following the enlargement of the European Union, this mode could do much to relieve traffic on east-west routes. Moreover, the capacity of the inland waterways is considerably underused in terms of infrastructure and vessels.”

It is calculated that the increase in the Vehicle/Kilometre in the inland waterways for the period 1998 – 2010 is going to be over 30 %. The general growth in traffic between Member States is expected to double by 2020 (Foreword to “TEN-T Priority Axes and Projects 2005” by Jacques Barrot – Vice President of the European Commission, with Responsibility for Transport). The Danube corridor (TEN-T Priority Axe 18) is increasingly congested due to sharp increase in the volume of traffic, which is expected to continue.

One of the components that should make the waterborne transport more reliable, efficient and accessible is “Installing highly efficient navigational aid and communication systems on the inland waterway network” (White Paper).

The River Information Services concept, which represents the most substantial change in the sector in several decades, aims at the implementation of information services in order to support the planning and management of traffic and transport operations. The implementation

of RIS will not only improve safety and efficiency in traffic but simultaneously enhance the efficiency and security of transport operations.

RIS facilitates the tasks of the competent authorities, in particular traffic management and the monitoring of hazardous goods. Through the provision of notices to skippers, it improves the basis for immediate navigational decisions. Safety and environmental protection will be enhanced through better information and reduced reaction times in emergencies.

RIS supports the inland waterway transport sector in coming into line with modern developments in logistics and supply chain management, and thus facilitates the integration of inland waterway transport into the intermodal transport chain which is a prerequisite for a higher modal share for inland waterway transport.

RIS has to be seen as a major step forward, turning inland waterway transport into a transparent, reliable, flexible and easy-to-access transport mode. Together with cost-effective and environmentally-friendly logistics operations, the development of RIS makes inland waterway transport attractive to modern supply chain management.

The key requirements for RIS are as follows:

- Generation of ship information (position, ID);
- Ship-to-ship communication;
- Ship-to-shore communication;
- Shore-to-ship communication;
- Display of ship information;
- Tactical Traffic Image on board and on shore;

Bulgaria shall develop the services in such a way that the RIS application is efficient, expandable and interoperable so as to interact with other RIS applications and, if possible, with systems for other modes of transport. It shall also provide interfaces to transport management systems and commercial activities. In order to set up Bulgarian RIS, Bulgaria shall:

- Supply to RIS users all relevant data concerning navigation on the inland waterways. These data shall be provided at least in an accessible electronic format;
- Enable, as far as ship reporting is required by national or international regulations, the competent authorities to receive electronic ship reports on the voyage and cargo data of ships. In cross-border transport, this information shall be transmitted to the competent authorities of the neighbouring state before arrival of the vessels at the border;
- Ensure that notices to skippers, including water level and ice reports of their inland waterways, are provided as standardized, encoded and downloadable messages. The standardized message shall contain at least the information necessary for safe navigation. The notices to skippers shall be provided at least in an accessible electronic format.

According to Directive 2000/60/EC establishing a framework for Community action in the field of water policy further integration of protection and sustainable management of water into other Community policy areas such as energy, transport, agriculture, fisheries, regional policy and tourism is necessary.

According to Article 4.7 of the WFD, a negative impact on water quality status is only allowed under certain conditions, such as if the least harmful technical and economically feasible alternatives are being chosen and mitigation measures are being taken. Concerning the projects under priority axis "Improvement of maritime and inland waterway navigation", it will have to be assessed in detail whether they have a negative impact related to the

objectives set by this directive and which will be chosen in order to mitigate the adverse impact on the status of the surface water body, to safeguard the public interest, to protect the human health and human safety, to ensure sustainable development and correspondence with the river basin management plan. In this connection an impact assessment of the projects which is consistent with Article 4.7 WFD will be carried out.

**Potential Beneficiaries of this priority are:**

- Agency for Exploration and Maintenance of the Danube River
- Bulgarian Ports Infrastructure Company

**Priority Axis 5 - Technical assistance**

The sound management and implementation of OPT requires specific measures for technical assistance in order to answer to the main needs of support for programme coordination and to strengthen the administrative capacity of the structures involved in the processes of programming, implementation, monitoring, evaluation and control. Following the completion of General Transport Master Plan, measures focused on GTMP implementation will also be funded, including *inter alia* identification and preparation of future investments. Resources will be also allocated to projects focused on measures that contribute to the sustainable development of transport sector as a whole.

The main goal of this priority axis is the achievement of effective and efficient management and implementation of OPT.

The Structural and Cohesion Funds will contribute for the financing of the technical assistance on initiative of the Member States in accordance with Article 46 from Regulation 1083/2006 as well as on initiative of the Commission in accordance with Article 45 from Regulation 1083/2006.

The Community budget allocated to the Funds shall be implemented within the framework of shared management between the Member State and the Commission, in accordance with Article 53, paragraph 1, point b) of Regulation (EC, Euratom) No 1605/2002 of the Council, with the exception of the technical assistance referred to in Article 45 No 1083/2006.

The Member States and the Commission shall ensure compliance with the principle of sound financial management

Under technical assistance, the Funds can provide support for the preparation of evaluations, improvement of administrative capacity linked to the management of the Funds, preparation of studies, pilot projects and experience exchange intended, to encourage innovative approaches and practices.

According to the Council Regulation (EC) No 1083/2006, Article 46, the Managing Authority of OPT requires up to 4 % of the total amount allocated to the OPT, for financing technical assistance measures.

**Technical assistance at the initiative of the Commission:**

1. On initiative of and/or on behalf of the Commission, subject to a ceiling of 0.25% of their respective annual allocation, the Funds may finance the preparatory, monitoring,

administrative and technical assistance, evaluation, audit and inspection measures necessary for implementing the Regulation. These actions are executed in accordance with Article 53(2) of Regulation (EC, Euratom) No 1605/2002 and any other provisions of that Regulation and of its implementing modalities applicable to this form of execution of the budget.

**Those actions shall include:**

- a) Studies linked to the drawing up of the strategic guidelines of the Community, the Commission's annual report and the three-yearly cohesion report;
- b) Evaluations, expert reports, statistics and studies, including those of a general nature concerning the operation of the Funds;
- c) Measures, aimed at the partners, the beneficiaries, of assistance from the Funds and the general public, including information measures;
- d) Measures for dissemination of information, networking, raising of awareness, promotion of cooperation and exchange of experience throughout the Union;
- e) Installation, operation and interconnection of computerised systems for management, monitoring, inspection and evaluation;
- f) Improvements in evaluation methods and the informational exchange of good-practices in this field.

Technical assistance measures implemented at the initiative of, or on behalf of the Commission may be financed up to 100%.

**Technical assistance at the initiative of the Ministry of Transport, Information Technology and Communications, as a MA for OPT:**

The Technical Assistance is a special Priority Axis within OPT. Its purpose is to back up the implementation of the other four Priority Axis and operations (horizontal activities and studies) specified in OPT. The effective and efficient management of OPT depends on the ability of the stakeholders involved in implementation of OPT, to administer their commitments in accordance with EU Regulations.

The Priority Axis is connected to the strategic need of strengthening the instruments for improvement of the effectiveness and efficiency of the OPT. Experience has shown that the good management requires transition from the traditional "top-down" approach, to more flexible option, which should involve the relevant stakeholders from the regions and the districts.

The expenses during the preparation, coordination, management, monitoring, evaluation, information and control of the Operational Programs, payments and expenditure verification, expenditures audit and the systems for management and control, as well as the measures for strengthening the administrative capacity for the utilization of financial support from the Funds, are considered eligible for co-financing under technical assistance of Structural and Cohesion Funds, according to Article 46 of Regulation 1083/2006<sup>3</sup>.

**Basic measures that will be financed under this Priority Axis:**

- 1. Preparation of General Transport Master Plan;
- 2. Preparation of Strategic Business Development Plan for the Development of the Railway Transport;
- 3. Preparation, Evaluation, Monitoring and Control of OPT;
- 4. Strengthening the administrative capacity;

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<sup>3</sup> Regulation of the Council 1083/ 2006 from 11 July 2006, laying down general rules governing the European regional Development Fund (ERDF), the European Social Fund (ESF) and the Cohesion Fund, surpassing Council Regulation 1260/1999

5. Information and Publicity;
6. Preparation of General Plan for Monitoring of the Environment and its implementation;
7. Administrative management of OPT

## **1) Preparation of General Transport Master Plan**

### **Specific objective**

The establishment of a strategic and coherent base of technical data, transport model, multimodal technical studies for project identification for long and medium term investment programming in the transport sector in Bulgaria. These technical studies should possess a high degree of consistency, through the appropriate elaboration of a transport master plan.

As being an essential tool for project identification for long and medium term investment programme, the General Transport master Plan should be elaborated by the end of 2008.

### **Rationale**

Bulgarian authorities need a coherent strategy for the national transport sector as well as short/medium term investment programmes and guidelines for long-term project identification, i.e. a *General Transport Master Plan (GTMP)*. On the basis of detailed analysis of the current state and regarding the national and European transport priorities, the GTMP will be a basis for the planning of all future activities: the Cohesion Fund pipeline projects, the ERDF, planning of transport infrastructure projects financed under the State budget, by IFIs (international financing institutions), PPPs (public-private partnerships), PFIs (private financed initiatives) etc. The document will also serve as a basis on the programming of the next program period.

The General Master Plan will have to meet the priorities, set up by the Regulations on the Trans European Network, Transport (TEN-T) Regulations, the *European Priority Projects*, the goals, etc. of the Cohesion Fund and the ERDF, and to promote sustainable development of the transport infrastructure based on a balance of social, economic and environmental requirements.

Although the OPT is concentrated on the major transport axes and the transport infrastructure at national level, the wider transport situation and needs of the overall Bulgarian territory including rural areas could be addressed within the General Transport Master Plan

Technical assistance will provide support to the Bulgarian administration to consolidate the Strategy and General Master Plan, as an instrument for continuous development of transport sector decisions and investment planning, while pursuing the following basic goals:

- Ensure the mobility of persons and goods under the best possible social and safety conditions, while supporting the achievement of the Community's objectives, particularly in regard to competition and environment, and contributing to the strengthening of economic and social cohesion;
- Ensure the planning of a high-quality infrastructure on acceptable economic terms;
- Include all modes of transport, taking into account their relative advantages;
- Allow the optimal usage of existing infrastructure capacity;

- Encourage the operational harmonization and intermodality between the different modes of transport;
- Be feasible on macro-economic level;
- Contribute to the implementation of transport activities conformable to the environmental requirements.

The preparation of the General Transport Master Plan will be consulted with the respective DGs in the EC and EC representatives will be invited as observers in the respective Steering Committee.

## **2) Preparation of Strategic Business Development Plan for the development of the Railway Transport**

### **Specific objective**

The establishment of such a strategic plan should aim at providing a service strategy on a number of core market segments (for both passenger and freight transport) for which railways can develop sustainable competitive advantages in the medium to long term. This plan is also of crucial importance for justification of the project prioritization in the railway sector and it should be elaborated by the end of 2008.

### **Rationale**

Bulgarian railway sector needs a long-term strategic business development plan in which service strategy should be understood in its broadest sense encompassing not only straight transportation services but also any other value-added services (e.g. logistics services for freight customers, door-to-door transport partnerships for intercity passenger transport) that can evolve as additional revenue sources in order to heighten the economic and financial profile of the railway-related operations. Without such a strategic plan going beyond the rather generic statements on the improvement of quality and frequency of service it is difficult to ascertain the suitability of the investment planned for the emergence of a coherent rail network throughout Bulgaria.

The preparation of the Strategic Business Development Plan for the development of the Railway Transport will be consulted with the respective DGs in the EC and EC representatives will be invited as observers in the respective Steering Committee.

## **3) Preparation, Evaluation, Monitoring and Control of OPT**

### **Specific objective**

To support the Managing Authority of OPT in implementing common activities related to the provisions and prescriptions of the EU Regulations (analyses, ex-ante and on-going evaluations, implementation of monitoring control systems).

Sample activities, to be financed:

- provision of technical support, including surveys and evaluations (preliminary, on-going and following), as well as consultant and advisory services, provided by national and international experts, related to different aspects of the system for management and implementation of the activities financed by Structural and Cohesion Funds, including the preparation of tender specifications;
- activities on the monitoring and realization as well as supportive activities on the management of the current financial control;



- preparation of the next programming period 2014-2020
- organisation of the activities of the Monitoring Committee of OPT, of the meetings of the monitoring sub-committees, if such have been created in the process of OPT implementation; administrative and logistic expenditures, as well as such on the organisation of meetings if the activities are not performed by employees, financed under 7-th measure; rent for meeting rooms and multimedia equipment; preparation of analysis (including payments for the services of national and international experts); preparation, coping/printing and dissemination of meetings protocols, documents and other relevant materials, catering expenditures if relevant.

### **Rationale**

The Bulgarian administrative structures face for the first time the management of projects, co-financed by the Structural and Cohesion Funds, even if Bulgaria had been involved for a long period in PHARE and ISPA projects. In general, the management of an operational programme as well as single projects (or integrated projects) requires long list of activities, including elaboration of informal reports and preparation of official documents to be sent to the EU Commission in the course of the entire programming period.

## **4) Strengthening the administrative capacity**

### **Specific objective**

Development of administrative capacity means increasing of the efficiency and effectiveness of the public administration. The development of human resources is time consuming. It needs continuous process of education and training, backed by the relevant financial resources. A widespread understanding is that the general administrative procedures, connected with the financial support from EU funds are complex in nature and that requires high level of qualification from the inner structures.

A specific assistance is needed for stimulation of the implementation and monitoring structures that should be supported in their extraordinary work on the management and implementation of OPT.

Sample activities, to be financed:

- organization of seminars, work meetings, rent for hall, multimedia, audio systems;
- training and development of the employees responsible for the management and implementation of the activities on the Structural and Cohesion Funds, including rent of halls and equipment, lecturer fees, fees for participation in training courses for employees of the MA of the OPT, preparation of educational papers and catering if relevant;
- measures providing sustainable development of transport sector as a whole for example such as human resources development, effective and efficient management and restructuring of transport sector.

### **Rationale**

- Lack of experience in the MA of OPT on the management of programs co-financed by the Structural and Cohesion Funds;
- There is insufficient institutional capacity for the effective implementation of OPT;
- The current level of training is inadequate for the effective implementation of OPT.

The Management Authority of OPT and the Beneficiaries of the program will not benefit from the measures for strengthening of the administrative capacity, financed by OP Administrative Capacity, managed by the Ministry of Finance. OP Administrative Capacity is focused mainly on the strengthening of the institutional capacity of the Ministry of Transport, Information Technology and Communications and its regional structures.

## **5) Information and Publicity**

### **Specific objective**

In accordance with Article 69 of the Regulation No 1083/2006 the Republic of Bulgaria and the MA for the OPT will provide information on and publicise operations, realized by co-financed programmes. The information shall be addressed to European Union citizens and beneficiaries with the aim of highlighting the role of the Community and ensure that assistance from the Funds is transparent.

Regarding the Commission Regulation 1828/2006 setting out detailed rules for the implementation of Council Regulation 1083/2006 the MA for the OPT will elaborate a Communication plan for the 2007-2013 programming period, which shall be financed by Priority Axis Technical Assistance.

More detailed information can be found in Chapter 16 “Information, communication and publicity” of the OPT.

### **Sample activities that will be financed:**

- Preparation and monitoring of the Communication plan of OPT;
- Implementation of large scale information campaigns;
- Seminars, workshops and conferences, including costs of room, multi-media equipment, PA system;
- Information and publicity actions at the program level (that is, excluding individual projects, whose information and publicity actions are eligible for co-financing by the Structural and Cohesion Funds, on other means than technical assistance), including preparing, copying / printing and publishing promotional materials, the use of all relevant media (including print, exhibitions, signs, radio, TV, video / DVD, and internet, web site), and the creation and maintenance of information desk; targeted initiatives to raise the profile of the programme among different elements of the partnership; initiatives to promote the Programme through accessible formats for disabled people and ethnic minority community languages. (venue and speaker costs; printing and publicity costs, including provision of websites; associated translation costs; costs of facilitators)
- Sociological surveys.

### **Rationale**

- The publicity and promotion of OPT to the public and the Beneficiaries are essential requirements, for highlighting the role of the Community and ensuring the transparency of the aid from the Funds. The institutional and social support is significant for the in time start of the projects provided in OPT and their successful implementation.

## **6) Elaboration of General plan for monitoring of the environment and its implementation**

### **Specific objective:**

To ensure ecological monitoring of the environment on the implementation of OPT for the avoidance and mitigation of the impacts on the environment.

**Sample activities that would be financed:**

- Monitoring of the ecological indicators – railway transport;
- Monitoring of the ecological indicators – road transport;
- Monitoring of the ecological indicators – maritime and inland waterways transport;
- Monitoring of the ecological indicators – intermodal transport;
- Monitoring of the environment – information and publicity.

**Rationale**

- The elaboration of general Master Plan for Monitoring of the Environment and its implementation is a basic requirement in the report of the Strategic Environment Assessment of OPT, prepared as part of the ex-ante evaluation of OPT.
- Decision of the Ministry of the Environment and the Waters for elaboration and provision of report on the monitoring and control of Program implementation, including the mitigation measures of the negative impacts of the program implementation, that should be presented every 3 (three) years, no later, than 15<sup>th</sup> of April.

The preparation of the General Master Plan for Monitoring of the Environment will be consulted with the respective DGs in the EC and EC representatives will be invited as observers in the respective Steering Committee.

**7) Administrative management of OPT****Specific objective**

To provide the necessary technical conditions for administration of OPT, as well as stimulus for the administration personnel that participates in the programming, monitoring, control and management of activities financed by OPT.

**Activities that will be financed:**

- Provision of motivational scheme for the employees of the Managing Authority and the beneficiaries of OPT for the fulfilment of their duties on the management and implementation of the activities related to the Structural and Cohesion Funds; provision of expenditures for additional payment and social security of civil servants, working for in the MA of OPT;
- Working extraordinary, accommodation and travel expenses for the employees, responsible for the management and implementation of the activities on the Structural and Cohesion Funds, for example audits and on-the-spot checks, participation in trainings, travels abroad, related to the management of the activities on OPT;
- Rent, leasing, purchase and/or insurance of the equipment, necessary for the management and implementation of the activities on the Structural and Cohesion Funds;
- Expenses for oral and written translation, as well as for rent of equipment, if necessary.

**Rationale**

The effective and efficient management and control of the resources of the Structural and Cohesion Funds, is in direct dependence, upon the available administrative capacity and technical provision. One of the instruments for attraction and keeping of high-qualified personnel, except the possibilities for training and career, is the additional material stimulation. The increase in the salaries in the private sector and the poor work conditions of the civil servants provoke migration of trained staff to the private business. The provision of

necessary technical base will reduce the weight of the implementation of daily duties of the civil experts and shorten the terms of implementation of administrative activities.

The expenditures during the preparation, coordination, management, monitoring, evaluation, information and control on the operational programs, the payments and certification of payments, the audit of expenditures and the systems for management and control, as well as the activities, aiming to support the administrative capacity for utilization of the resources from the funds, are considered eligible for co-financing under the Priority Axis Technical Assistance by the Structural and Cohesion Funds, according to Article 46 of the Council Regulation 1083/2006.

**Potential Beneficiaries on that Priority Axis can be:**

- Managing Authority of OPT;
- The Beneficiaries under the rest of Priority Axes;
- Ministry for Regional Development will also be eligible to receive financing in order to improve management of road projects under OPT and provide better control on RIA activities as OPT beneficiary;
- National Company Strategic Infrastructure Projects;
- “BDZ – Passenger Services” Ltd. - with purpose of preparing a project for purchasing new railway Rolling Stock in the next programming period 2014 - 2020;

Beneficiaries of the programme will be the public bodies at MS level authorized to perform the activities needed to implement the projects, specified under each axis.

Besides the supporting actions envisaged in the operations “Strengthening the Administrative Capacity” and “Administrative Management of OPT”, under the Technical assistance Priority Axis”, additional actions were taken in advance in order to improve the administrative capacity of both MA and beneficiaries regarding the implementation of projects financed from OPT. These actions were financed from pre-accession instruments PHARE and ISPA under the projects:

- Phare Twinning Project BG/04/IB/TR/02/UE “Strengthening the capacity of the Ministry of Transport to manage the Sectoral Operational Programme on Transport under the Cohesion Fund and the European Regional Development Fund”
- ISPA Measure N°: 2005/BG/16/P/PA/003 "TA for strengthening the Administrative Capacity of the Transport Sector in Bulgaria"

<b>Priority Projects</b>
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Priority projects are identified under Priority Axes 1, 2 and 4 of OPT. These projects are along TEN-T priority axes 7, 18 and 22 (defined by Decision (EC) 884/2004).

Projects starting from No 1 to No 7 (as included in Annex 6, Table 1.A, Priority projects along the priority Trans-European transport axes as of November 2010) are envisaged to be co-financed from the Cohesion Fund (CF). Around 54.4% from the total amount of the CF (allocated for OPT according to NSRF) will be allocated for the abovementioned projects. Priority project No 8 (as included in Annex 6, Table 1.A, Priority projects along the priority Trans-European transport axes as of November 2010) is envisaged to be co-financed from ERDF. Around 31.8% from the total amount of the ERDF (envisaged for OPT according to NSRF) will be allocated for the project. The above proportion of co-financing is indicative; it is suggested that the MA shall consider the option to reallocate funds within axes subject to condition that mature projects are in place and their financing could bring benefits in short time without compromising the objectives of the OP. Key criteria for a mature project will be *inter alia*: implementation readiness (the project is under implementation or is being

tendered) and application for financing readiness (there are no substantial time gaps between project start and application for financing submission).

In addition to the development of the TEN-T priority actions, joint initiative has been undertaken regarding the cross-border TEN-T connections. As a follow up of a joint meeting between DG REGIO, Bulgarian, Romanian, Greek and Hungarian delegations, held in April 2007, separate meetings were held in May and June 2007 between the four railway public enterprises from Greece (OSE), Bulgaria (NRIC), Romania (CFR) and Hungary (MAV). The parties have agreed to submit a proposal for a TEN-T study on the development of the Railway Priority Axis 22 to be co-financed by the TEN-T budget. The four parties agreed that the proposal should extend over the multi-annual work programme period 2007-2013 and contain:

- A first phase dealing with the overall socio-economic, financial, operational and infrastructure assessment of the upgrade of the Railway Axis 22 along the four countries in subject;
- Subsequent phases, building upon the findings of the above first phase study and dealing with constituent parts of the Railway Axis 22. These second phase studies would be assigned by each interested party (e.g. Thessaloniki-Promachon upgrade study by OSE, Radomir-Kulata preliminary study by NRIC, Craiova-Timisoara preliminary study by CFR, Hegyeshalom-Lokochaza ETCS Level 2 study by MAV, etc.) via the continuous co-operation and information guaranteed by the work of the joint Steering Committee.

## ***8. COHERENCE WITH THE EU POLICIES***

### ***8.1. Lisbon Strategy***

The overall and specific objective of Sectoral Operational Programme on Transport will contribute to achievement of common political aims laid down in the Lisbon Strategy.

The overall political aims of the Lisbon strategy are:

- To establish an inclusive, dynamic and knowledge based economy;
- To produce accelerated and sustained economic growth;
- To restore full employment as the key objective of economic and social policy, and reduce unemployment to the levels already achieved by the best performing countries, and
- To modernize the social protection systems

The main objectives of the Lisbon Strategy are orientated to stimulation of economic growth and establishment of new jobs:

- Creation of better conditions for work in Europe;
- Encourage development of knowledge and innovations in order to reach to economic growth in EU;
- Better conditions for business in order to achieve creation of new jobs.

The Lisbon strategy is orientated to two main policy strands – pursuing economic reform to prepare the knowledge economy and strengthening the European social model by investing in human capital. The achievement and maintenance of macro-economic stability as well as the management of adequate budget policy will tend to the success of the Lisbon strategy implementation – sustainable economic growth with more and better jobs and greater social cohesion.

## ***8.2. Coherence with EU Transport Policy***

### ***8.2.1. Main objectives of EU transport policy as defined in the White Paper “European transport policy for 2010”***

Current EU common transport policy puts emphasis on the following four orientations of actions:

- Shifting the balance between modes of transport. The imbalance between modes of transport is leading to an uneven distribution of traffic, increasing congestion, particularly on the main trans-European transport corridors and in towns and cities.
- Elimination of bottlenecks of community transport infrastructures and solving the financial puzzle of how to support infrastructure projects by creating new sources of financing (reinsurance and mutual financing by private investors, higher involvement of the Community budget, fine-tuning principles of public-private partnerships);
- Paying more attention to transport users (awareness of external costs, development of passenger multimodal systems, developing the Grapher of rights and responsibilities of transport users, more attractive forms of public transport in municipalities);
- Meeting global challenges in European transport (common position of the EU on the Forum of international transport organisations, common policy principles for sea shipping and development of global “intelligent networks” in the EU – Galileo programme).

The following guidelines need to be taken into account in the implementation of transport projects financed by ERDF and the Cohesion Fund.

- creation of trans-European transport network (TEN-T),
- transfer of freight from roads to railways and maritime transport,
- development of modern public transport with view to reduce use of private cars and CO emissions,
- increase in use of private capital in implementation of transport development schemes.

The transport policy should be linked with the above mentioned objectives, the economic policy (due to financial resources required for implementation) and with the spatial policy.

These orientations means that projects proposed for financing by the Cohesion Fund and ERDF should meet the following criteria:

- Constitute elements of future trans-European transport network,
- Create opportunities for increased traffic volumes in railways and maritime transport,
- Facilitate improvement of transport services in capital city supporting development of public transport,
- Use as much as it is possible private funds for implementation.

At the same time the transport projects should have the following features:

- Serve quality improvements in road sector and improve road safety,
- Revitalise railways,
- Improve maritime and inland navigation,
- Promote the multimodal transport,
- Eliminate congestion (bottlenecks) on transport networks,
- Facilitate use of environmental-friendly public transport,
- Enhance EU role in addressing globalisation issues in transport.

The sustainable transport policy is one of the essential aspects of OPT. The achievements of the programme will contribute to the reducing of congestion levels, noise and pollution levels, to improve the human live, to promote the use of environment-friendly modes of transport and to create better jobs.

In this relation the implementation of OPT relates to the CSG provisions with regard to **1.1. Guideline: Making Europe and its regions more attractive places in which to invest and work**, 1.1.1. *Expand and improve transport infrastructures*.

#### **8.2.2. Key areas of the programming and EU transport policy objectives**

The proposed measures by the White Paper and the guidelines for development of the trans-European transport network were taken into consideration while identifying the priority axes objectives and main operations of the Programme.

OPT Key operations	Supported EU transport policy orientations
<i>Development of railways infrastructures along the Trans-European transport priority axes 22 and the TEN-T remaining sections</i>	<i>TEN-T development policy</i> <i>Well developed rail network in accessing countries</i>
Modernized, rehabilitated and electrified railways sections	Development of railways services, aiming at modal shift from road to rail
<i>Development of road infrastructure along the Trans-European transport axes 7 and the TEN-T remaining sections</i>	<i>TEN-T development policy</i>

Modernization and rehabilitations of existing roads, construction of by-passes

Improved road safety

*Development of combined transport terminals*

*Linking up the modes of transport*

*Development of railways freight services, aiming at modal shift from road to rail*

*Multimodal mobility for passengers in Sofia*

*Intermodality for people*

*Clean urban transport*

*Improvement of the navigation in the Danube*

*TEN-T development policy*

*Removing main bottlenecks*

*modal shift from road to waterborne transport*

Aids to navigation

Shipping safety

### ***Territorial Cooperation Programmes***

Bulgaria participates in five cross-border programmes for the period 2007-2013. Two of them ETC Programme Interreg IV A Greece-Bulgaria and Romania-Bulgaria CBC Programme are under Objective 3. The other three are under IPA: CBC Programmes Bulgaria - Serbia, Bulgaria - Turkey and Bulgaria-FYROM. The ETC Programme Interreg IV A Greece-Bulgaria will support only actions and interventions that will have a complementary role to the initiatives undertaken at the national levels of the two Member States of the Cross-Border area in terms of infrastructure for ensuring the upgrading of the infrastructure (railway, road and ICT) at the cross-border area.

The Territorial cooperation CBC/TC Programmes are not supposed to finance any large-cost and durable infrastructural investments (like Objective 1 area programmes), but mainly soft and small-scale activities. The projects must be designed by representatives of both sides of the border, must clearly integrate the ideas, priorities and actions of stakeholders throughout the whole cross-border region in the two neighbouring countries. They have a clear cross-



border impact which is impossible to be covered by the Objective 1 operational programmes. All projects under CBC/TC programmes obligatory meet a minimum of two of the following criteria: 1) joint development, 2) joint implementation, 3) joint staffing and 4) joint financing.

### ***Regions for Economic Change***

In the framework of the Regions for Economic Change initiative, the Managing Authority commits itself to:

- a) make the necessary arrangements to welcome into the mainstream programming process innovative operations related to the results of the networks in which the region is involved
- b) to allow in the Monitoring Committee (or programming committee) the presence of a representative (as an observer) of the network(s) where the Region is involved, to report on the progress of the network's activities
- c) to foresee a point in the agenda of the Monitoring Committee (or programming committee) at least once a year to take note of the network's activities and to discuss relevant suggestions for the mainstream programme concerned
- d) to inform in the Annual Report on the implementation of the regional actions included in the Regions for Economic Change initiative

### ***8.3. Competition policy and State Aid***

All operations supported by the Structural and Cohesion Funds under the OPT conform to provisions of the Treaty establishing the European Community and policies/actions of the Community with respect to the competition policy.

Any public support under this programme shall comply with the procedural and material State aid rules applicable at the point of time when the public support is granted.

Managing Authority shall ensure that any State aid under this programme is lawful, i.e. that it complies with the procedural and material State aid rules applicable at the point of time when the public support is granted.

### ***8.4. Public procurement***

**Administration in public procurement in Bulgaria. Establishment of the “Office for Public Procurement” as the central state administration authority for public procurement.**

The Public Procurement Agency is established with a Council of Ministers Ordinance N° 56 of 13.03.2004.

The state policy in the field of public procurement is carried out by the Ministry of Economy and Energy. In addition an independent administrative structure is established within the Ministry of Economy and Energy – the Public Procurement Agency, the responsibility of which is to ensure efficiency of the public procurement system in Bulgaria.

By a new Act on Public Procurement (SG N°37/05.05.2006), which entered into force from 1 July 2006, Directives N°2004/17/EC and 2004/18/EC of 31 March 2004 have been transposed, as well as the requirements of Directives 89/665/EEC and 92/13/EEC relating to the review of procurement procedures.

Public procurement shall be the procedures pursuant to this Act, by which supply contracts, building works contracts and service contracts are awarded.

In the award of contracts, the contracting authority and contracting entity shall be obliged to follow this Act.

In the award of contracts, the principle of equal treatment, the principle of non-discrimination of tenderers or candidates, the principle of transparency and the principle of economics and efficiency must be applied.

Equally beneficial conditions shall be applied with regard to tenderers and candidates of Members States in the award of contracts as those to be applied with regard to tenderers and candidates from third countries in the implementation of the Agreement on Government Procurement.

The contracting authorities, at the different levels of the administration that will be directly in charge of the practical implementation (especially the tendering, evaluation and award of public contracts) of the different parts of the Operational Programme will be the relevant Beneficiaries with regard to the relevant priority axes.

Operational agreements between the MA and the Beneficiaries will be signed including responsibilities for tendering and contracting. The MA will have the responsibility to control the tendering, evaluation and contracting carried out by the Beneficiaries.

Tendering strategy for the implementation of the different projects is developed by the Final Beneficiaries based on the specific parameters of the projects. In the preparation of tender strategy, the Final Beneficiaries may use technical assistance measures under the separate contracts for project preparation, assistance of EC experts under JASPERS or develop it with their own sources.

Relationships between the entities at the different levels of the administration will be defined in the specific agreements between the MA and FB. Final Beneficiaries are responsible for:

- Tender strategy and preparation of tender documents;
- Launching of Tender Procedure ;
- Evaluation of offers and awarding of contracts;
- Concluding of contracts.

The role of the Managing Authority consist of:

- Review and verification of tender documents before launching the tender procedure in view of quality and compliance with the EC and national requirements;
- Review and verification of the results from the evaluation procedures;

Endorsement of contracts

The control of the procurement process will be carried out in the following way:

### ***Procedure for coordination of Tender Documents***

The Final Beneficiary is responsible to prepare tender documents and to submit them to the Managing Authority for review and verification. The Managing Authority checks the quality of the Tender Dossier and its compliance with the EC and national requirements and the agreement signed between the MA and the FB and to expresses opinion on the documents submitted. The Final Beneficiary launches the tender procedure upon receiving MA „no objection”.

### ***Procedure for composition of tender evaluation committee***

The Final Beneficiary is responsible for the composition and appointment of the Evaluation Committee and submission of information to the MA for the expected procedure. A statement from the FB should be submitted to the MA confirming that:

- The adequate number of members of the Evaluation Committee is proposed;
- CVs of Evaluation Committee members have been reviewed;
- The administrative and technical capacity of each proposed member is appropriate;
- Non-hierarchical relationship between all members of the Evaluation Committee is checked for all participants of the evaluation;
- There is no conflict of interest identified.

If it is considered necessary the Managing Authority may request information on the composition of the evaluation committee, including CVs of the experts.

#### ***Procedure for approval of Tender Evaluation Report***

The Final Beneficiary is responsible for conducting of evaluation procedure. Upon completion of the evaluation of offers the Final Beneficiary is responsible to submit to the Managing Authority copy of the Evaluation Report, copies of the submitted offers and statement consisting of FB's opinion on the tender evaluation committee proposal for award.

#### ***Procedure of signing procurement contracts***

The Final Beneficiary is responsible to prepare the draft contract and to submit the draft contract to the Managing Authority of OPT. The Managing Authority checks the quality of the draft contract and its compliance with the agreement signed between the MA and the FB and the Commission Decision (in case of major project) and expresses opinion on the draft contract. The Final Beneficiary revises the draft contract (if necessary) considering the opinion of the Managing Authority and signs the contract with the awarded contractor. The Managing Authority receives a copy of the signed contract and records the required data for the contract into the MIS.

#### ***Procedure of modifying/signing additional procurement contracts***

The Final Beneficiary is responsible to prepare and to submit the draft modified/additional contract to the Managing Authority (according to the Bulgarian Public Procurement Act a special option is envisaged for signing an additional contract with the already awarded contractor, up to 50% of the already contracted value, in the cases when such actions are needed and well justified). The Managing Authority checks the quality of the draft modified/additional contract and its compliance with the agreement signed between the MA and FB or the Commission decision (in case of major project) and expresses opinion on the draft modified/additional contract. The Final Beneficiary revises the draft modified/additional contract (if necessary) considering the opinion of the Managing Authority and sign the contract with the awarded contractor. The Managing Authority receives a copy of the signed modified/additional contract and records the required data for the modified/additional contract into the MIS.

The Bulgarian Authorities (MA, Beneficiaries) involved in the preparation and implementation of major transport infrastructure projects are aware of the importance to create specific organizational structures responding to the specific project in order to facilitate the successful implementation. Moreover, following the previous experience with ISPA Programme and the lessons learned, special attention will be given to the timely and proper completion of the EIA, land acquisition, cost/benefit analyses and adequate procurement strategies together with the specific responsibilities of the organizational structures for the respective projects

The Managing Authority shall ensure that public contracts or concessions awarded, concerning projects benefiting from the assistance of the Structural Funds comply with the provisions of Directives 2004/17/EC, 2004/18/EC, Regulation (EC) No 1564/2005 or the Treaty principles where applicable.

### ***8.5. Protection of the environment and sustainable development***

The environmental protection policy of the EU and the Sustainable development strategy (setting overall objectives in terms of climate changes and clean energy, sustainable transport, sustainable production and consumption, addressing public health threats, better management of natural resources, social inclusion, demography and migration and fighting global poverty) were used as base in the process of identification of OPT goals.

The national environmental policy follows the main EC environmental principles: precautionary principle, the principle of prevention and protection of environment; the polluter pays principle; "publics' right to know" and the protection of human health.

The requirements of Directive 2001/42/EC on the assessment of the effect of certain plans and programmes on the environment were transposed in Bulgarian legislation in the Environmental Protection Act.

In Bulgaria the provisions of EA for plans and programmes are in force from 01 July 2004. Generally, development of the transport sector has negative impact on the environment. One of the greatest challenges for all Member States of EU is to find solutions in order to reduce the effects of traffic growth, undesirable modal splits and to sustainable infrastructure construction. As a member state Bulgaria is obliged to harmonized its policy with respect to transport and the environment with that of the European Union, contributing in this way for solving of the above-mentioned problems.

Environmental Impact Assessment, according to the procedures of Council Directive 85/337/EC, amended by Directives 97/11/EC and 2003/35/EC, is carried out in the planning and implementation stages of all transport infrastructure projects. In addition, water-related impacts need to be assessed in accordance with the Water Framework Directive (2000/60/EC) and in particular Art. 4.7 which goes beyond the above mentioned obligations but can be assessed in conjunction with the EIA.

Each project originating effects on the environment should be assessed in accordance to the EC legislation and Bulgarian environmental law.

In accordance with the provisions of the European and national environmental legislation, OPT was a subject to Strategic Environmental Assessment (SEA). The Strategic Environmental Assessment of Sectoral Operational Programme on Transport 2007-2013 is done and the results are incorporated in the final version of the OPT

On the basis of the Environmental Report and the results of consultations during SEA preparation the Ministry of Environment and Water required measures for monitoring and control during OPT implementation and measures to prevent, reduce and as fully as possible offset any significant adverse effect on the environment (see **Annex 7**/Decision № 2-1/2007 issued by the Ministry of Environment and Water).

According to the Decision for approval of OPT /Ecological assessment statement/No. 2 - 1/2007 the Ministry of Transport (by the Managing Authority - Coordination of Programme and Projects Directorate) has to prepare report for monitoring and control during programme implementation including measures for prevention, mitigation or elimination of environmental damage likely to occur as a results of the programme implantation, which to be submitted to the Ministry of Environment and Water on each three year of programme implementation, not later than April 15.

A full respect of the provisions of the Directive 79/409/EC and 92/43/EEC concerning Natura 2000 will be strictly followed. The results received by appropriate assessments in compliance with Art. 6 of the Directive 92/43/EEC *on the conservation of natural habitats and of wild fauna and flora* should be taken into consideration as one of the criteria for selection of the projects based on the requirements for measures in the Decision of the Minister of Environment and Water for approval of OPT / Ecological assessment statement № 2-1/2007.

Considering that the transport sector is the main noise polluter, all the requirements regarding the environmental protection, inclusive noise pollution, and the respective measures for reduction of the environmental pollution when implementing infrastructure projects financed from OPT shall be strongly respected according to the national legislation and EU standards

Projects co-financed by OPT will fully respect the provisions of the Environmental Impact Assessment Directive, Habitats and Birds Directives. Appropriate screening criteria will be applied at the projects selection stage to ensure that the projects are compliant with the above mentioned Directives. The Bulgarian authorities will take appropriate actions (e.g. guidance, trainings for beneficiaries etc. based on the best Community practices) to assure that the projects will comply with these requirements. Co-financing of projects having negative impact on potential Natura 2000 sites (i.e. sites, that in the Commission's view need to be designated, but were not designated by Bulgaria), will not be permitted.

Art. 6.4 of the Habitats Directive is applicable only to sites which have been designated.

#### ***8.6. Equal opportunities***

All measures under OPT shall conform to the community requirements and provisions of the Regulation No 1083/2006, Article 16, in the scope of eliminating unfair treatment and promoting equality of men and women.

Equal rights in family, political, social and economic aspects of female and male life in Bulgaria are provided for in the Constitution of the Republic of Bulgaria.

Equality between men and women and non discrimination as one of the EU horizontal policy is dealing with preventing any discrimination on the basis of gender, race or ethnic origin, religion or belief, disability, age or sexual orientation during the various stages of implementing the Funds and, in particular, access to them. During implementation of the program measures will be taken to eliminate barriers that could prevent any of these discriminations. Equal opportunities for women and men in their social and professional development or equal opportunities for disadvantaged groups are an important element of the social dimension of sustainable development.

An adequate representation of both women and men will be provided in the Steering Committee and in the Monitoring Committee.

#### ***8.7. Application of Partnership principle***

The partnership principle according to the EU Regulation for the Cohesion Fund and Structural Funds was widely applied in the preparatory phase of the OPT. The Working group was established including representatives of the key ministries, local administration, NGOs, Employer's, transport and environment organizations, Universities and socio-economic partners.

Partnership principle during OPT development was strictly followed.

The partnership principle should also be applied during the implementation, monitoring and evaluation of the OPT.

The involvement of wide representation in the Monitoring Committee of Sectoral Operational Programme on Transport 2007-2013 will guarantee the quality of the monitoring, evaluation and as well as the effectiveness of OPT implementation.

After the official approval of the Sectoral Operational Programme on Transport 2007-2013, the operational agreements will be signed between the Managing Authority of the OPT and the main beneficiaries of the programme for implementation of the projects.

The operational agreements aim to strengthen the strong partnership developed between CPPD and its partners during the preparation of the programme and it will cover the implementation, monitoring and evaluation of the OPT.

Ensuring public participation in decision-making process and access to information will be of great importance for the successful implementation of the programme.

## **9. PROGRAMME INDICATORS**

The indicators are useful instrument for the EC, Managing Authority to monitor and measure the progress of the implementation of the programme.

Following the Guidelines for indicators of Bulgarian NDP and its Operational Programmes, issued by the Ministry of Finance, the following indicative set of indicators was selected in order to monitor and control the implementation of the SOP on Transport and to evaluate the effectiveness of the EU financial support absorption within the scope of OPT.

During the formulation of indicators the core indicators that are established in annex I of the Working Document No 2 "Indicators for Monitoring and Evaluation" of the Commission have been taken into account.

Being a major element laid down in the Working Document on measuring employments effects, produced by the Evaluation Unit of DG REGIO, the Jobs created indicator at OPT level is envisaged to be developed under the General Transport Master Plan which will be financed under the Technical Assistance Priority Axis. The elaboration of Jobs created indicator at programme level is also related to the elaboration of a short term strategy regarding the human resources development in the transport sector. This issue is also included to be part of the General Transport Master Plan.

**Target values of all indicators don't include the baseline value with the exemptions of indicators under PA 4.**

**The indicators *"Time savings (metro) in thousands of hour"* , *"Time savings (metro) millions in Euro"* and *"Number of trips (metro)"* measure the total result from the implementation of the three projects for the extension of metro, implemented under priority axes 1 and 3.**

Core indicators				
<u>No</u>	Indicator	Unit	Baseline value	Target value until 2015
13	Number of projects (Transport)	(number)	0	20
14	New roads	(km)	0	320
15	new TEN roads	(km)	0	3318

16	Reconstructed roads	(km)	0	19
18	TEN railroads	(km)	0	345
19	Reconstructed railroads	(km)	0	345
20	Value for time savings (roads)	(euro per year)	0	216 813 133
21	Value for time savings (railways)	(euro per year)	0	13 060 000
22	Additional population served with improved urban transport	(number)	0	445 000

Indicators for monitoring				
Priority axis 1 „Development railway infrastructure along the Trans-European and major national transport axes ”				
Type	Indicator	Unit	Baseline value	Target value until 2015
Result	Time savings (railways)	thousand hours/year	0	5 310
	Value for time savings (railways)	euro per year	0	13 060 000
Output	Reconstructed/rehabilitated railway lines	km	450	345
	Length of metro line	km	9,9	6,7
	Metro stations	number	8	6
	Projects under PA1	number	0	5

Priority axis 2 "Development road infrastructure along the Trans-European and major national transport axes"				
Type	Indicator	Unit	Baseline value	Target value until 2015
Result	Time savings	thousand hours/year	0	29 584
	Value for time savings	euro/year	0	216 813 133
Output	New roads	km	0	320
	Reconstructed/rehabilitated I class roads	km	0	19
	Projects under PA 2	number	0	9

Priority axis 3 „Improvement of intermodality for passengers and freights”				
Type	Indicator	Unit	Baseline value	Target value until 2015

<b>Result</b>	<b>Time savings (metro under PA1 and PA3)</b>	thousand hours/year	0	<b>13 678</b>
	<b>Value for time savings (metro under PA 1 and PA3)</b>	euro/year	0	<b>65 375 947</b>
	<b>Number of trips (metro under PA 1 and PA3)</b>	thousands/year	25 550	<b>69 100</b>
	<b>Number of cargo handled in intermodal terminals</b>	number of TEU/year	5 200	<b>4 000</b>
	<b>Capacity of intermodal terminals</b>	number of TEU/year	26 000	<b>57 600</b>
<b>Output</b>	<b>Length of metro line</b>	km	9,9	<b>14,1</b>
	<b>Metro stations</b>	number	8	<b>14</b>
	<b>Built intermodal terminals</b>	number	0	<b>1</b>
	<b>Projects under PA 3</b>	number	0	<b>3</b>

Priority axis 4				
„Improvement of the maritime and inland-waterway navigation”				
Type	Indicator	Unit	Baseline value	Target value until 2015
<b>Result</b>	Supervised coast length	nautic miles	24,7	<b>238,4</b>
	Supervised river length	km	24	<b>471,5</b>
<b>Output</b>	Implementation of VTMS - phase 3	number	0	<b>1</b>
	River information system	number	0	<b>1</b>
	<b>Projects under PA 4</b>	number	0	<b>3</b>

Priority axis 5				
„Technical assistance”				
Type	Indicator	Unit	Baseline value	Target value until 2015
<b>Output</b>	<b>General transport master plan</b>	<b>number</b>	0	1
	<b>Strategic business plan for development of railway transport</b>	<b>number</b>	0	1
	<b>Communication plan</b>	<b>number</b>	0	1
	<b>General plan for monitoring of the environment and its</b>	<b>number</b>	0	1



	<b>implementation</b>			
	<b>Trained people according to training programmes</b>	<b>%</b>	0	100%
	<b>Publicity actions at national level</b>	<b>number</b>	0	24

## **10. FINANCIAL PLAN 2007-2013**

### **10.1. Financial sources**

In the new programming period 2007-2013 the number of funds is limited to three (ERDF, ESF and Cohesion Fund) compared to the current six. *As opposed to current multi-Fund programmes, future fund interventions would aim at operating with only one fund per programme.*

The assistance of the Cohesion Fund will and the ERDF will be jointly programmed in the operational programmes on transport and the environment. In order to address the need for simplification and decentralization, programming and financial management will be carried out at the level of the priorities alone.

The contribution from the Funds for each priority can be subject to the following ceilings in the case of Bulgaria concerning OPT:

- 85% of the public expenditure co-financed by the Cohesion Fund and
- 85% of the public expenditure co-financed by the European Regional Development Fund.

Without prejudice to the derogations laid down in the specific regulations of the Funds, the ERDF may finance, in a complementary manner and subject to a limit of 5 % of each priority of the operational programme, measures falling within the scope of assistance from the other funds, provided that they are necessary for the satisfactory implementation of the operation and are directly linked to it.

TEN-T budget, Cohesion Fund, ERDF play an important role supporting TEN-T projects through direct grants.

The EIB and the EIF may participate, in accordance with the modalities laid down in their statutes, in the programming of assistance from the Funds.

The EIB and the EIF may, at the request of Member States, participate in the preparation of national strategic reference framework and operational programmes, as well as in activities relating to the preparation of major projects, the arrangement of finance, and public-private partnerships. The Member state, in agreement with the EIB and the EIF, may concentrate the loans granted on one or more priorities of an operational programme, in particular in the spheres of innovation and the knowledge economy, human capital, the environment and basic infrastructure projects.

### **10.2. Financial contribution by the EU Funds and national public co-financing 2007-2013**

The financial plan of the SOP on Transport is based on the financial plan of the National Strategic Reference Framework for the Republic of Bulgaria 2007-2013 and the estimations made in order to respond to the priority needs for development of the national and urban transport and infrastructure.

The OPT implementation will be supported by the Cohesion Fund, European Regional Development Fund, national co-financing of the public expenditures, TEN-T budget and Bank loans.

Table breaking down for each year the amount of the total financial appropriation envisaged for the contribution from each Fund should be as follows:

**Financial Plan of EU commitments by year and by EU Fund in EUR, current prices**

Year	ERDF	Cohesion Fund	Total
	(1)	(2)	(3) = (1) + (2)
<b>2007</b>			
In regions without transitional support	26 821 961	94 301 144	121 123 105
In regions with transitional support	0	0	0
<b>Total for 2007</b>	<b>26 821 961</b>	<b>94 301 144</b>	<b>121 123 105</b>
<b>2008</b>			
In regions without transitional support	39 263 892	135 163 478	174 427 370
In regions with transitional support	0	0	0
<b>Total for 2008</b>	<b>39 263 892</b>	<b>135 163 478</b>	<b>174 427 370</b>
<b>2009</b>			
In regions without transitional support	53 462 329	181 778 878	235 241 207
In regions with transitional support	0	0	0
<b>Total for 2009</b>	<b>53 462 329</b>	<b>181 778 878</b>	<b>235 241 207</b>
<b>2010</b>			
In regions without transitional support	56 335 405	191 319 852	247 655 257
In regions with transitional support	0	0	0
<b>Total for 2010</b>	<b>56 335 405</b>	<b>191 319 852</b>	<b>247 655 257</b>
<b>2011</b>			
In regions without transitional support	60 312 494	204 477 857	264 790 351
In regions with transitional support	0	0	0
<b>Total for 2011</b>	<b>60 312 494</b>	<b>204 477 857</b>	<b>264 790 351</b>
<b>2012</b>			
In regions without transitional support	64 311 779	217 711 270	282 023 049
In regions with transitional support	0	0	0
<b>Total for 2012</b>	<b>64 311 779</b>	<b>217 711 270</b>	<b>282 023 049</b>
<b>2013</b>			
In regions without transitional support	68 301 871	230 917 413	299 219 284
In regions with transitional support	0	0	0
<b>Total for 2013</b>	<b>68 301 871</b>	<b>230 917 413</b>	<b>299 219 284</b>
<b>Total in Regions without transitional support (2007-2013)</b>	<b>368 809 731</b>	<b>1 255 669 892</b>	<b>1 624 479 623</b>
<b>Total in Regions with transitional support (2007-2013)</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Grand Total 2007-2013</b>	<b>368 809 731</b>	<b>1 255 669 892</b>	<b>1 624 479 623</b>

**10.3. Allocation of EU Funds and national public funds per Priority Axes for the period 2007-2013 (current prices in Euro)**

Financial plan of the operational programme giving, for the Whole programming period, the amount of the total financial Allocation of each fund in the operational programme, the National counterpart and the rate of reimbursement by priority Axis.

Priority axis –EU Fund	Community Funding	National counterpart	National breakdown of the national counterpart		Total funding	Rate of EU Funds contribution	For information	
			National public funding	National private funding			EIB funding*	Other funding
	(a)	(b)=(c)+(d)	(c)	(d)	(e)=(a)+(b)	(f)=(a)/(e)		
Priority axis 1 <i>“Development of railway infrastructure along the Trans-European and major national transport axes - CF</i>	528 000 000	93 176 471	93 176 471	0	621 176 471	85%	0	0
Priority axis 2 <i>“Development of road infrastructure along the Trans-European and major national transport axes “ - CF</i>	727 669 892	128 412 334	128 412 334	0	856 082 226	85%	0	0

<b>Priority axis 3</b> <b><i>“Improvement of intermodality for passengers and freight “ - ERDF</i></b>	291 714 731	51 479 070	51 479 070	0	343 193 801	85%	0	0
<b>Priority axis 4</b> <b><i>“Improvement of the maritime and inland-waterway navigation “ - ERDF</i></b>	29 537 500	5 212 500	5 212 500	0	34 750 000	85%	0	0
<b>Priority axis 5</b> <b><i>“Technical Assistance “ - ERDF</i></b>	47 557 500	8 392 500	8 392 500	0	55 950 000	85%	0	0
<b>TOTAL</b>	<b>1 624 479 623</b>	<b>286 672 875</b>	<b>286 672 875</b>	<b>0</b>	<b>1 911 152 498</b>		<b>0</b>	<b>0</b>

\* A Memorandum of Understanding for the development and financing of infrastructure in the framework of the Bulgarian government’s transport and basic infrastructure investment plan (2007-2013) was signed on 5 October 2006 (published in State Gazette, number 95, dated 24 November 2006) aiming to ensure financing to projects according to the financial budget forecast for utilisation of EU Structural and Cohesion Funds amounting up to 500-700 MEUR per year for the period 2007-2013. EIB funding will be defined under Credit Agreement between the Republic of Bulgaria and European Investment Bank for the period 2007-2015. This Credit Agreement is designed as a credit line aimed at co-financing a number of projects and Measures receiving EU grant support during the 2007-2013 Programming Period and which comply with EIB sector eligibility criteria to be defined in subsequent structural programme loan contracts. Projects within the Transport OP, Environmental OP, Regional Development OP, Rural Development Programme, OP for Competitiveness of the Bulgarian Economy and Human Resources Development OP could potentially be supported by the Credit Agreement. The extent of co-financing resources from national budget and IFI loans is to be approved by the Ministry of Finance. The exact EIB contribution will be provided in the Application Forms for the relevant operations.

EU Funds		National co-financing	EU Funds and National co-financing	% of total
CF	ERDF			OPT budget
1	2	3	4=1+2+3	5
Development of railway infrastructure along the TEN-T and major national transport axes				
528 000 000	0	93 176 471	621 176 471	~32,50%
85%	X	15%	100%	
Development of road infrastructure along the TEN-T and major national transport axes				
727 669 892	0	128 412 334	856 082 226	~44,79%
85%	X	15%	100%	
Improvement of intermodality for passengers and freight				
X	291 714 731	51 479 070	343 193 801	~17,96%
X	85%	15%	100%	
Improvement of the maritime and inland-waterway navigation				
X	29 537 500	5 212 500	34 750 000	~1,82%
X	85%	15%	100%	
Technical Assistance				
X	47 557 500	8 392 500	55 950 000	~2,93%
X	85%	15%	100%	
TOTAL:				
1 255 669 892	368 809 731	286 672 875	1 911 152 498	100%

**10.4. Financial plan for SOP on Transport per years, per priorities (current prices in EUR)**

Year	Public financial resources				
	EU co-financing			National co-financing	Total public financial resources
	CF	ERDF	TOTAL		
<i>Development of railway infrastructure along the TEN-T and major national transport axes</i>					
Year 2007	32 847 561	X	32 847 561	5 796 628	38 644 189
Year 2008	X	X	X	X	X
Year 2009	87 441 490	X	87 441 490	15 430 851	102 872 341
Year 2010	97 407 930	X	97 407 930	17 189 635	114 597 565
Year 2011	107 638 824	X	107 638 824	18 995 087	126 633 911
Year 2012	113 240 804	X	113 240 804	19 983 671	133 224 475
Year 2013	89 423 391	X	89 423 391	15 780 599	105 203 990
Total	528 000 000	X	528 000 000	93 176 471	621 176 471
<i>The indicative annual allocation of EU funds covers the financial recourses needed for technical assistance for projects preparation.</i>					

Year	Public financial resources				
	EU co-financing			National co-financing	Total public financial resources
	CF	ERDF	TOTAL		
Development of road infrastructure along the TEN-T and major national transport axes					
Year 2007	61 453 583	X	61 453 583	10 844 750	72 298 333
Year 2008	135 163 478	X	135 163 478	23 852 378	159 015 856
Year 2009	94 337 388	X	94 337 388	16 647 774	110 985 162
Year 2010	93 911 922	X	93 911 922	16 572 692	110 484 614
Year 2011	96 839 033	X	96 839 033	17 089 241	113 928 274
Year 2012	104 470 466	X	104 470 466	18 435 965	122 906 431
Year 2013	141 494 022	X	141 494 022	24 969 534	166 463 556
Total	727 669 892	X	727 669 892	128 412 334	856 082 226
The indicative annual allocation of EU funds covers the financial recourses needed for technical assistance for projects preparation.					
Year	Public financial resources				
	EU co-financing			National co-financing	Total public financial resources
	CF	ERDF	TOTAL		
Improvement of intermodality for passengers and freights					
Year 2007	X	20 821 961	20 821 961	3 674 464	24 496 425
Year 2008	X	32 953 892	32 953 892	5 815 393	38 769 285
Year 2009	X	46 732 329	46 732 329	8 246 882	54 979 211
Year 2010	X	50 025 405	50 025 405	8 828 013	58 853 418
Year 2011	X	48 531 885	48 531 885	8 564 449	57 096 334
Year 2012	X	50 929 279	50 929 279	8 987 520	59 916 799
Year 2013	X	41 719 980	41 719 980	7 362 349	49 082 329
Total	X	291 714 731	291 714 731	51 479 070	343 193 801
The indicative annual allocation of EU funds covers the financial recourses needed for technical assistance for projects preparation.					
Year	Public financial resources				
	EU co-financing			National co-financing	Total public financial resources
	CF	ERDF	TOTAL		
Improvement of the maritime and inland-waterway navigation					
Year 2007	X	X	X	X	X
Year 2008	X	X	X	X	X
Year 2009	X	X	X	X	X
Year 2010	X	X	X	X	X
Year 2011	X	5 090 609	5 090 609	898 343	5 988 952

Year 2012	X	6 362 500	<b>6 362 500</b>	1 122 794	<b>7 485 294</b>
Year 2013	X	18 084 391	<b>18 084 391</b>	3 191 363	<b>21 275 754</b>
<b>Total</b>	<b>X</b>	<b>29 537 500</b>	<b>29 537 500</b>	<b>5 212 500</b>	<b>34 750 000</b>
<i>The indicative annual allocation of EU funds covers the financial recourses needed for technical assistance for projects preparation.</i>					
Year	Public financial resources				
	EU co-financing			National co-financing	Total public financial resources
	CF	ERDF	TOTAL		
<b>Technical Assistance</b>					
Year 2007	X	6 000 000	<b>6 000 000</b>	1 058 824	<b>7 058 824</b>
Year 2008	X	6 310 000	<b>6 310 000</b>	1 113 529	<b>7 423 529</b>
Year 2009	X	6 730 000	<b>6 730 000</b>	1 187 647	<b>7 917 647</b>
Year 2010	X	6 310 000	<b>6 310 000</b>	1 113 529	<b>7 423 529</b>
Year 2011	X	6 690 000	<b>6 690 000</b>	1 180 588	<b>7 870 588</b>
Year 2012	X	7 020 000	<b>7 020 000</b>	1 238 824	<b>8 258 824</b>
Year 2013	X	8 497 500	<b>8 497 500</b>	1 499 559	<b>9 997 059</b>
<b>Total</b>	<b>X</b>	<b>47 557 500</b>	<b>47 557 500</b>	<b>8 392 500</b>	<b>55 950 000</b>
<i>The indicative annual allocation of EU funds covers the financial recourses needed for technical assistance for projects preparation.</i>					
2007-2013	TOTAL CF	TOTAL ERDF	TOTAL EU co-financing	TOTAL National co-financing	Total public financial resources
	1 255 669 892	368 809 731	1 624 479 623	286 672 875	1 911 152 498

For the purpose of information and in accordance with Article 37 (d) of Regulation 1083/2006 a table including an indicative breakdown of total expenditure by category using the codes already defined in the OP within each priority is provided in the tables below:

**Table 1. Indicative breakdown of the contribution of the Funds by category (in Euro)**

Priority Themes		
Code	Description	Amount
17	Railways (TEN – T)	341 390 809
21	Motorways (TEN – T)	674 246 265
22	National roads	53 423 627
26	Multimodal transport	446 023 568
27	Multimodal transport (TEN – T)	32 300 354
28	Intelligent transport systems	27 970 491
32	Inland waterways (TEN-T)	1 567 009
85	Preparation, implementation, monitoring and inspection	44 457 500
86	Evaluation and studies; information and communication	3 100 000
<b>Total</b>		<b>1 624 479 623</b>



Financing Types		
Code	Description	Amount
01	Non-repayable aid	1 624 479 623
Total		1 624 479 623

Territories		
Code	Description	Amount
00	Not applicable	1 178 456 055
01	Urban	446 023 568
Total		1 624 479 623

Code	Description
BG	Bulgaria (NUTS 1 level)

Convergence Objective			
Code	Priority Themes	Community amount allocated to the category	Share of category within total Community allocation to this objective (%)
Sub Total	Transport	<b>1 523 498 496</b>	<b>93,78%</b>
17	Railways (TEN – T)	341 390 809	21,02%
21	Motorways (TEN – T)	674 246 265	41,51%
26	Multimodal transport	446 023 568	27,46%
27	Multimodal transport (TEN – T)	32 300 354	1,99%
28	Intelligent transport systems	27 970 491	1,72%
32	Inland waterways (TEN-T)	1 567 009	0,10%
<b>Total Community financial allocation to earmarked categories</b>		<b>1 523 498 496</b>	<b>93,78%</b>
<b>Total Community financial allocation to Convergence Objective</b>		<b>1 624 479 623</b>	<b>100,00%</b>

## **11. MAJOR PROJECTS**

As part of an operational programme, the ERDF and the CF may finance expenditure in respect to an operation comprising a series of works, activities or services intended in itself to accomplish an indivisible task of a precise economic or technical nature, which has clearly identified goals and whose total cost exceed 50 mln. EUR.

Large projects would be adopted by the Commission separately, but managed within the operational programme.

### **11.1. Indicative List of Major Projects**

The major projects, identified at the moment of preparation of the OPT are as follows:

#### **Indicative list of major projects for OP "Transport" 2007 -2013 as of 2007**

No.	Name of project	Main components	Total eligible cost of the project (indicative)	EU funding contribution (indicative)		National funding (indicative)	Time table		
				CF	ERDF		Preparation indicative	Start indicative	Completion indicative
Priority axis : Development of railway infrastructure along the Trans-European and major national transport axes									
1.	Modernization of Vidin-Sofia railway line (along Trans-European transport priority project 22)	Implementation of relevant contracts for Construction works, Signaling, Telecommunications and Information systems, Supervision and Long term Assistance.	320 000 000	256 000 000		64 000 000	2007-2009	2010	2014/2015
2.	Modernization of Sofia-Plovdiv railway line (along Trans-European transport network)	Implementation of relevant contracts for Construction works, Signaling, Telecommunications and Information systems, Supervision and Long term Assistance.	125 000 000	100 000 000		25 000 000	2007-2009	2010	2014/2015
3.	Modernization of Sofia-Pernik-Radomir railway line (as part of Modernization of Sofia-Kulata railway line), (along Trans-European transport priority project 22)	Modernization of railway section for 160 km/h.	100 000 000	80 000 000		20 000 000	2007-2009	2010	2013
	SUB-TOTAL		545 000 000	436 000 000		109 000 000			
Priority axis : Development of road infrastructure along the Trans-European and major national transport axes									

No.	Name of project	Main components	Total eligible cost of the project (indicative)	EU funding contribution (indicative)		National funding (indicative)	Time table		
				CF	ERDF		Preparation indicative	Start indicative	Completion indicative
4.	Upgrading of road I-1 (E 79) <b>Vratza-Botevgrad</b>	Upgrading the existing two lanes road to four lanes expressway, 31.5 km long, between Mezdra and Botevgrad. It is along the route of E-79 and Trans-European transport priority project 7.	85 000 000	68 000 000		17 000 000	2007-2008	2009	2012/2013
5.	Construction of Struma Motorway	<p>The project is identified as priority project for development of the Trans-European transport network along Trans-European transport priority project 7. The project envisages construction of sections:</p> <p>-Lot 1 – Dolna Dikanya – Dupnitsa – 16,78 km;</p> <p>-Lot 2 – Dupnitsa – Simitly – 45 km;</p> <p>-Lot 3 – Simitly – Sandanski – 56 km.</p> <p>-Lot 4 – Sandanski – Kulata – 15 km.</p>	<p><u>600 000 000</u></p> <p>Lot 1 + Lot 4 92 000 000</p> <p>Lot 3 + Lot 3 508 000 000</p>	480 000 000		120 000 000	<p>Lot 1 + Lot 4 2007-2008</p> <p>Lot 2 + Lot 3 2007-2009</p>	<p>Lot 1 + Lot 4 2008</p> <p>Lot 2 + Lot 3 2009/2010</p>	<p>Lot 1 + Lot 4 2012/2013</p> <p>Lot 2+Lot 3 2015</p>
6.	Construction of Maritza Motorway – from km 5 to km 72	Maritza motorway is located along Trans-European transport network and will link Trakia motorway at Orizovo junction with Kapitan Andreevo at the Bulgarian –Turkish border crossing. The project includes construction of 67 km long motorway section, starting from the end of the already completed part of Maritza motorway at km 5 + 000 and ends at the beginning of the Harmanli- Liybimetc motorway section, that is currently under construction. The implementation of the project will	208 587 365	166 869 892		41 717 473	2007	2008	2011/2012

No.	Name of project	Main components	Total eligible cost of the project (indicative)	EU funding contribution (indicative)		National funding (indicative)	Time table		
				CF	ERDF		Preparation indicative	Start indicative	Completion indicative
		result in decrease of travel time and enhance both traffic comfort and road safety.							
	<b>SUB-TOTAL</b>		893 587 365	714 869 892		178 717 473			

**Priority axis : Improvement of intermodality for passengers and freight**

7.	Extension of the Metropolitan Sofia sections: Nadejda junction - Central Station and Central Bus Station – Sveta Nedelia square – Tcherni Vrah blvd. and “Drujba” -new terminal at the Sofia Airport.	The extension of the Sofia underground includes 2 phases of implementation. I Stage – Nadejda junction - Central Station and Central Bus Station –Sveta Nedelia square – Tcherni Vrah blvd.; II Stage – “Drujba” - new terminal at the Sofia Airport	185 193 801  Stage I – 145 000 000  Stage II – 40 193 801		157 414 731	27 779 070	Stage I – 2007  Stage II – 2007-2008	Stage I – 2008  Stage II – 2009	Stage I – 2011  Stage II – 2012
	<b>SUB-TOTAL</b>		185 193 801		157 414 731	27 779 070			

**Priority axis : Improvement of the maritime and inland-waterway navigation**

8.	Improvement of the navigation on the Danube in joint Bulgarian - Romanian parts: <b>from rkm 530 to rkm 520 - Bathin from rkm 576 to rkm 560 - Belene</b>	The project envisages insurance of the navigational safety on the Danube river as the part from the Trans-European transport priority project 18. Improvement of the navigational conditions in the two critical sections on the Danube at low water levels (at +107cm the Lowest Navigational and Regulating Water Level). Objectives: Preparation of the pre-investment study, including the report; design – a preliminary and a working stage; procedures for the consultant to the Technical assistance, for an executor of the construction and a consultant for the	138 000 000		117 300 000	20 700 000	2007-2008	2010	2014/2015
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No.	Name of project	Main components	Total eligible cost of the project (indicative)	EU funding contribution (indicative)		National funding (indicative)	Time table		
				CF	ERDF		Preparation indicative	Start indicative	Completion indicative
		supervision in the project implementation. Accomplishment of the Danube riverbed corrections in the sections Belene from rkm 576 to rkm 560 (16km in length) and Bathin from rkm 530 to rkm 520 (10km in length), consisting of the construction of groines, bank fortifications, dredging works etc.							
	<b>SUB-TOTAL</b>		138 000 000		117 300 000	20 700 000			
	<b>TOTAL</b>		1 761 781 165	1 150 869 892	274 714 731	336 196 543			

***Note: The indicative list of all projects is included in Annex 6.***

**List of Major projects for OP “Transport” 2007 -2013  
as of the September 2015**

No.	Name of project	Main components	Total cost of the project in euro <i>(according AF)</i>	EU funding contribution <i>(according AF)</i>		National funding in euro <i>(according AF)</i>	Time table		
				CF 85%	ERDF 85%		Preparation <i>(according AF)</i>	Start <i>(according AF)</i>	Completion <i>(according AF)</i>
Priority axis 1 : Development of railway infrastructure along the Trans-European and major national transport axes									
1.	Modernization of Sofia-Plovdiv railway line(along Trans-European transport network); ("Septemvri-Plovdiv Section") *	Implementation of relevant contracts for Construction works, Signaling, Telecommunications and Information systems, Supervision during construction for <b>Septemvri-Plovdiv Railway Section</b>	164 552 563	107 528 753	-	57 023 810	2007-2010	2012	2016
2.	Renewal of railway sections along Plovdiv-Burgas railway line (along Trans-European transport network) **	Implementation of relevant contracts for Construction works, Signaling, Telecommunications and Information systems, Supervision and Long term Assistance.*	235 765 014	139 765 112	-	95 999 902	2006	2011	
3.	Plovdiv – Svilengrad Railway Electrification and Upgrading of Corridors IV and IX, Phase 2: Parvomai - Svilengrad	Implementation of relevant contracts for Construction works, Signaling, Telecommunications and Information systems, Supervision and Long term Assistance.	339 148 526	151 900 882	-	187 247 644	1994-2006	2011	2016
4.	Sofia Metro Extension Project: Stage II <u>Lot 1</u> : Obelya – Nadezhda <u>Lot 2</u> : Mladost I – Tsarigradsko Shose	The Project covers the following sections: <u>Lot 1</u> : line 2, section Obelya -Road Junction Nadezhda <u>Lot 2</u> : line 1, section Mladost I (MS 13)- Tsarigradsko shose blvd. (MS 19) with underground parking	385 897 073	212 500 000	-	173 397 073	2006-2010	Lot 1 – 2008 Lot 2 - 2010	2012
	SUB-TOTAL		1 125 363 176	611 694 747	-	513 668 429			

No.	Name of project	Main components	Total cost of the project in euro ( <i>according AF</i> ))	EU funding contribution in euro ( <i>according AF</i> ))		National funding in euro ( <i>according AF</i> )	Time table		
				CF	ERDF		Preparation ( <i>according AF</i> )	Start ( <i>according AF</i> )	Completion ( <i>according AF</i> )
Priority axis 2 : Development of road infrastructure along the Trans-European and major national transport axes									
5.	Construction of Struma Motorway	The project is identified as priority project for development of the Trans-European transport network along Trans-European transport priority project 7. The project envisages construction of sections: - <u>Lot 1</u> – Dolna Dikanya – Dupnitsa – 16,78 km; - <u>Lot 2</u> –Dupnitsa – Blagoevgrad – 37 km; - <u>Lot 4</u> – Sandanski – Kulata – 15 km and design of <u>Lot 3</u> – Blageograd – Sandanski– 62 km	342 549 725	291 167 266	-	51 382 459	Lot 1 + Lot 4- 2007-2011  Lot 2- 2012-2013  Lot 3- 2012- 2015	Lot 1- 2011  Lot 4- 2012  Lot 2- 2013  Lot 3- 2015	Lot 1- 2013  Lot 4- 2015  Lot 2- 2015  Lot 3- 2020
6.	Construction of Maritza Motorway – from km 5 to km 72	. The project includes construction of 66 km long motorway section, starting from the end of the already completed part of Maritza motorway at km 5 + 000 and ends at the beginning of the Harmanli- Liybimetc motorway section, that is currently under construction.	203 810 385	173 238 827	-	30 571 558	2007-2011	2011	2015
8.	Completion of Trakia Motorway, Lots 2, 3, 4	Project comprises construction of three lots completing the missing at the moment part of the motorway between Stara Zagora and Karnobat. The total length of the three lots is 115.18 km.	362 591 215	304 065 816	-	58 525 399	1977-2011	2010	2013
9.	Construction of “Kalotina-Sofia” Motorway - Lot 1 "Western arc of Sofia Ring Road (SRR)” ***	<u>Lot 1</u> - Western arc of the Sofia Ring Road (SRR) - reconstruction and modernization of a Section 1 of the Western arc of the SRR with total length of 3 km *	<b>123 187 799</b>  <i>Section 1:</i> 47 490 485  <i>Section 2:</i> 75 697 314	<b>92 541 108</b>  <i>Section 1:</i> 37 756 055  <i>Section 2:</i> 54 785 053	-	<b>30 646 691</b>  <i>Section 1:</i> 9 734 430  <i>Section 2:</i> 20 912 261	2007-2012	<i>Section 1-</i> 2013  <i>Section 2-</i> 2016	<i>Section 1-</i> 2015  <i>Section 2-</i> 2020

No.	Name of project	Main components	Total cost of the project in euro (according AF))	EU funding contribution in euro (according AF))		National funding in euro (according AF)	Time table		
				CF	ERDF		Preparation (according AF)	Start (according AF)	Completion indicative
10.	Bypass of Gabrovo	<u>Construction of bypass of Gabrovo town with total length of 23.25 km. The project consists rehabilitation of 7.76 km, reconstruction of 3.27 km, construction of new road 12.31 km as well as design of 3.22 km Tunnel under Shipka Peak</u>	56 501 969	47 266 996	-	9 234 974	2008-2012	2013	2016
<b>SUB-TOTAL</b>			<b>1 088 641 093</b>	<b>908 280 013</b>	<b>-</b>	<b>180 361 080</b>			
<b>Priority axis 3: Improvement of intermodality for passengers and freight</b>									
11.	Extension of the Metropolitan Sofia section: Nadejda junction - Central Station-Sveta Nedelia square – Tcherni Vrah blvd.	The extension of the existing Sofia underground is separated into 2 implementation phases <b>Stage I</b> – Nadejda junction - Central Station-Sveta Nedelia square –Tcherni Vrah blvd.;	379 115 649	-	157 414 731	221 700 918	2007	2008	2012
12.	Sofia Metro Extension Project Stage III, Lot 1 "Tsarigradsko Shose - Sofia Airport" and Lot 2 " Mladost 1 RD - Business Park in Mladost 4"	The extension of the existing Sofia underground in the sections: "Tsarigradsko Shose - Sofia Airport" and Lot 2 " Mladost 1 RD - Business Park in Mladost 4"	239 755 041	-	116 087 084	123 667 957	2006-2012	2012	2015
<b>SUB-TOTAL</b>			<b>618 870 690</b>	<b>-</b>	<b>273 501 815</b>	<b>345 368 875</b>			
<b>TOTAL</b>			<b>2 832 874 959</b>	<b>1 519 974 760</b>	<b>273 501 815</b>	<b>1 039 398 384</b>			

\* The scope of the project is reduced as activities for construction of four overpasses and related land acquisition are withdrawn from the scope of the project due to delayed public procurement procedures. These activities are expected to be finished until the end of 2016 and will be funded by a new project under OPTTI 2014-2020;

\*\*The project was downscaled with exclusion of works for construction of three power substations and signaling and communication systems of the Burgas area. The whole project Plovdiv-Burgas will be completed in the framework of Operational Programme "Transport and Transport Infrastructure" 2014 -2020.

\*\*\* The realization of the project goes through presenting Application Forms for each of its segments complaint with funding requirements for "Major projects" in the meaning of Council Regulation 1083/2006. Construction of Lot 1: Western arc of Sofia Ring road is financed under OPT and its implementation is divided into two sections – Section 1 with length 3 km and Section 2 with length 5.5 km. Due to implementation difficulties the construction of



*the Westren Arc of SRR is phased and part of Section 2 will be finaced as Phase 2 under Operational Programme Transport and Transport Infrastructure 2014- 2020.*

*Construction of Lot 2- Northern Speed Tangent is granted under Operational Programme Regional Development 2007 -2013 and construction of Lot 3- Kalotina – Sofia Ring Road shell be funded with other sources.*

***Note: The list of all projects is included in Annex 6***

## ***11.2. Project prioritization***

As Bulgaria has a comparatively low GDP per capita and budget restrictions, most efforts have to be concentrated on planning, programming and management, to avoid misuse of very scarce resources. Therefore it is very important for the period 2007-2013 to concentrate the efforts on the main links. Priority projects of European interest are projects localized on the Trans-European transport networks as identified by Decision No 1692/96/EC of 23 July 1996.

Particular criteria of project's eligibility for cofinancing by EU Funds:

- in accordance with EC Regulations;
- in accordance with Bulgarian Transport Policy and EU Policy;
- in accordance with Bulgarian Strategic Development Documents, NSRF, OPT;
- time period of project implementation is corresponding with the availability of finance
- sustainable development, economic effectiveness ( minimum IRR > 6% );
- fulfillment of administrative requirements, project readiness for implementation.

Prioritization of the projects started with identification of criteria for evaluation and prioritization of projects.

The first stage of multi – criteria analysis is identification of criteria for projects prioritization.

The projects selection which will be managed by within the Sectoral Operational Programme Transport is based on (see Annex 5):

- Access of the Bulgarian National transport network to the European Transport system (TEN-T priorities, cross-border impact)
- Environmental criterion (decreasing the level of environmental pollution)
- Socio-economic criterion (traffic forecast, economic return, contribution to the GDP/ regional development; employment during the implementation period and afterwards)
- Project readiness

Over the course of the new program period a major emphasis of the European transport policy is put on the construction and development of the main transport corridors. This explains the highest weight of the first criterion dealing with two aspects of the access of the Bulgarian transport system to the European one. A maximum number of points is assigned to projects dealing with the Trans-European transport axes and respectively the priority projects of European interest. Next in weight comes the sub-criterion for cross-border impact.

The environmental criterion is next in weight. The maximum number of points is assigned to projects that include less damage to the environment.

An equal number of points is given to the socio-economic criterion. Maximum number of points is assigned to projects dealing with the development of the sections with high traffic expectations and projects with high investment returns. Next in weight and having equal number of points comes: the employment after the implementation period of the project and the contribution to the GDP/regional development. Less number of points is given to the employment during project implementation.

The criterion for project readiness is also taken into consideration in order to ensure the timely absorption of funds from OPT

### ***11.3. Management of Major Projects***

The Managing Authority will provide the Commission with the following information on the major projects:

- information on the body to be responsible for implementation;
- information on the nature of the investment and a description of it, its financial volume and location;
- the results of the feasibility studies;
- a timetable for implementing the project and, where the implementation period for the operation concerned is expected to be longer than the programming period, the phases for which Community co-financing is requested during the 2007- 2013 programming period;
- a cost-benefit analysis, including a risk assessment and the foreseeable impact on the sector concerned and on the socio-economic situation of the Member State and/or the region and, when possible, of the other regions of the Community;
- a guarantee of compliance with Community law;
- an analysis of the environmental impact;
- a justification for the public contribution;
- the financing plan showing the total planned financial resources and the planned contribution from the Funds, the EIB, the EIF and all other sources of Community financing, including the annual schedule of the project.

The Commission will appraise the major project, if necessary consulting outside experts, including the EIB, its consistency with the priorities of the operational programme, its contribution to achieving the goals of those priorities and its coherence with other Community policies.

The Commission will offer the Member States methodological support and will agree reference values for the principal parameters of the cost-benefit analysis.

The Commission will adopt a decision as soon as possible after the submission by the Member State or the managing authority of all the information referred to in Article 39. That decision shall define the physical object, the amount to which the co-financing rate for the priority applies, and the annual schedule.

Where the Commission refuses to make a financial contribution to a major project, it will notify the Member State of its reasons.

The clear definition of responsibilities, including deadlines for the different activities, between the MA and the beneficiaries will be set out in Operational Agreements signed by both sides. These Operational Agreements/Contracts will be elaborated in the cases of beneficiaries having great number of projects. In order to facilitate and to ensure the successful implementation of the projects, the Bulgarian Authorities (MA and Beneficiaries) will have to establish specific organizational structures for the specific projects, especially the major projects. In relation to this, the MA will insist on the establishment of Project Implementation Units (PIUs) for every major project in each Beneficiary. The main tasks of the PIUs will be to coordinate the project preparation and respectively the project implementation. The permanent PIUs' staff will need to have the relevant experience and knowledge relevant to the scope of the project. In order to ensure the proper project implementation, the MA will carry out assessments of the capacity of the PIUs at least twice a year. In cases where a potential risk occurs regarding the PIUs capacities, the MA will

organize special trainings. As an additional precaution measure, the MA may decide to outsource the coordination of the project implementation and to finance it from the Technical Assistance Priority Axis.

#### ***IV. INSTITUTIONAL FRAMEWORK FOR IMPLEMENTATION OF THE OPT***

##### ***12. INSTITUTIONS INVOLVED IN THE PROGRAMME IMPLEMENTATION***

The Council of Ministers Decision (No 965/16.12.2005 and its amendments), Council of Ministers Decree No 70/14.04.2010 and the Structural Regulation of Council of Ministers it is define the structures for the management of EU funds in Bulgaria. These structures comprise the Minister responsible for the management of EU funds, the Council for Coordination of EU funds management, Central Coordination Unit (CCU), Managing Authorities (MA) for the OPs and their Intermediate Bodies (IBs). The functions of the CCU are assigned to Directorate for the Management of EU funds of the Ministry of Finance. A schematic diagram of the coordination structures is reproduced in the following table.

A Coordination body is established for assisting the Council of Ministers when it discuss current matters on EU funds management.

This system evolved over time and now (October 2013) the key stakeholders in EU Funds Management are:

***12.1. The Minister responsible for EU funds management is Deputy Prime Minister for EU Funds and Economic Policies.*** The Deputy Prime Minister for EU Funds and Economic Policies supports the Prime Minister and he bears the responsibility for overall organization and management of the system for coordination of the EU funds management.

Council of Ministers Decree № 70/ 14.04.2010 defines the responsibilities of the Minister in charge with EU funds management, namely:

- Acts as the central representative of the Republic of Bulgaria to the EU Commission and other European institutions, regarding programming, management and monitoring of EU funds;
- Formulates and proposes priorities and measures for implementing the objectives and priorities of the Strategic and Programming documents for the management of EU funds;
- Carries out coordination regarding the participation of Republic of Bulgaria in the process of decision-making EU Cohesion Policy;
- Manages preparation and negotiations of Partnership Agreement and operational programmes for programming period 2014-2020 with EC as well as strategic document under Common Agricultural Policy and Common Fisheries Policy;
- Coordinates implementation of NSRF and negotiates its approval by EC;
- Coordinates and controls implementation of the operational programmes funded by Structural funds and Cohesion fund of EU;
- Coordinates actions considering financial instruments JESSICA, JEREMIE, JASPERS including preparation and implementation of JASPERS Annual Action Plans;
- Bears the responsibility for the implementation of horizontal policies in relation the EU funding;
- Coordinates effective implementation of Publicity and Transparency Measures in relation the EU funding;

- Coordinates strengthening of administrative capacity at central, regional and local level, considering the absorption of EU funds;
- Carries out communication with the European Commission and other EU institutions on horizontal issues related to programming, management, monitoring, reporting and control of EU funds;
- Proposes drafts of strategic documents and operational plans regarding EU funds management to Council of Ministers
- Provides methodological guidance on the management of programmes financed by the Structural Funds and the Cohesion Fund;

The Deputy Prime Minister for EU Funds and Economic Policies carries out other tasks related to the management of EU funds assigned by the Council of Ministers or by Prime Minister.

## ***2. Council for coordination of EU funds management***

The Council consists of President and members. The Chairman is Deputy Prime Minister for EU Funds and Economic Policies and members are Deputy Prime Minister for Demographic and Social Policies and Minister of Labor and Social Policy, Minister of interior, Minister of finance, Minister of economy, Minister of Energy, Minister of Tourism Minister of regional development and Public works, Minister of transport, information technology and communications, Minister of environment and waters, Minister of agriculture and food, Minister of education and science, Minister of healthcare, Minister of culture and Minister of Youth and Sports. If a member of the Council could not attend the meeting, he/she shall be replaced by his designated Deputy minister, promptly inform the President of the Council.

The Council for coordination of EU funds management assists the Council of Ministers by:

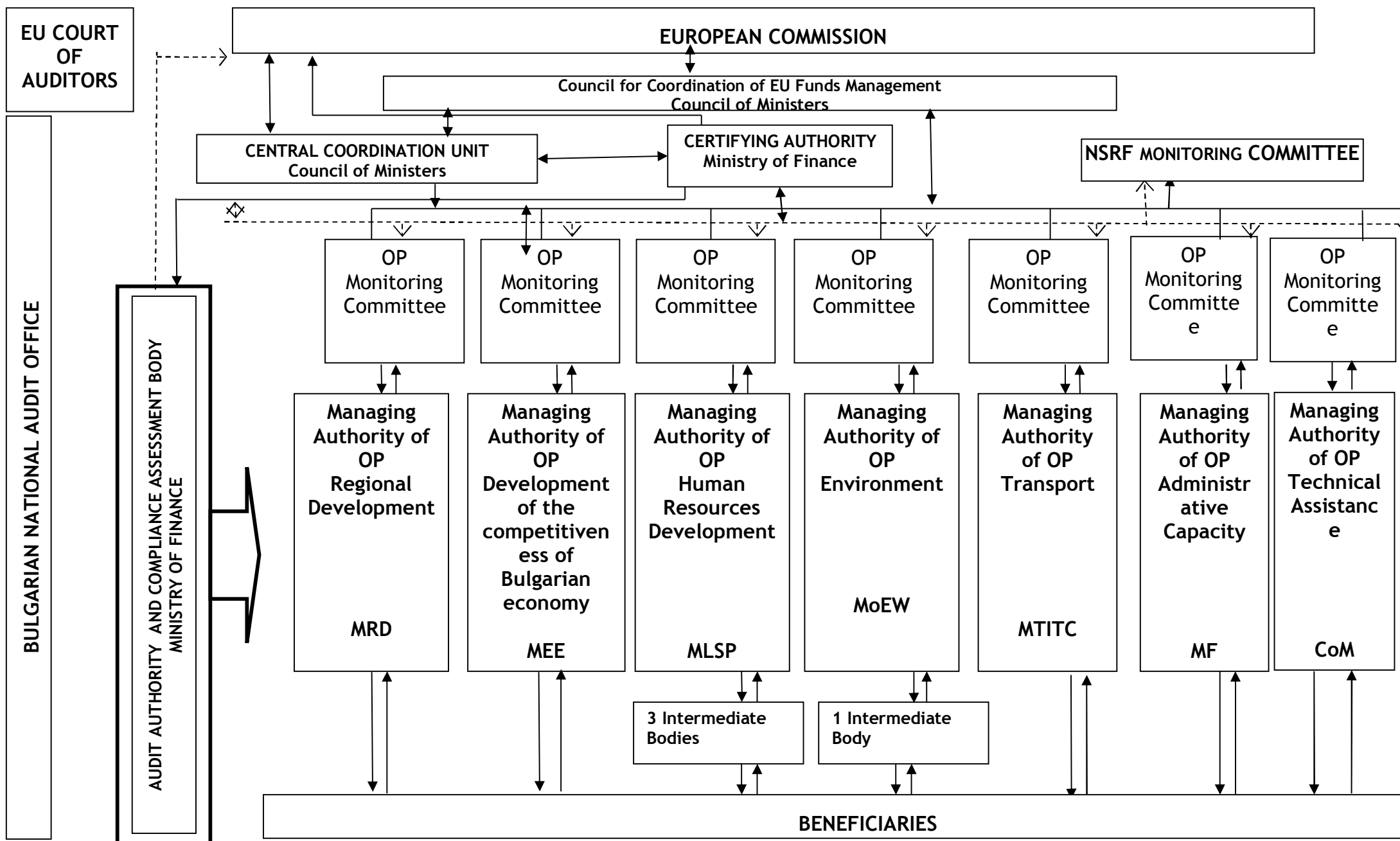
- Discusses on topics concerning Cohesion Policy, Common Agricultural Policy and Common Fisheries Policy reforms for programming period 2014-2020, reviews drafts of operational programmes funded by Structural and Cohesion Funds in programming period 2007-2013, Partnership agreement and operational programmes for programming period 2014-2020 as well as strategic document under Common Agricultural Policy and Common Fisheries Policy and ensures their mutual co-ordination;
- Coordinates the drafts of Indicative Annual Working Programmes of operational programmes and approves the subsequent amendments thereto;
- Reviews proposals for amendments of strategic and programme documents on operational programmes funded by Structural and Cohesion Funds in programming period 2007-2013, Partnership agreement and operational programmes for programming period 2014-2020 as well as strategic document on Common Agricultural Policy and Common Fisheries Policy;
- Discusses on problems concerning implementation of measures of EU funding;

## ***3. Central Coordination Unit (CCU)***

CCU within the administration of Council of Ministers is composed of three directorates – “Programming of EU funds”, “Monitoring of EU funds” and “Information and EU management systems”. Functions of the three directorates are described in Council of Ministers Decree № 229/2009.

The CCU takes the lead in co-coordinating the operations of the SCF; its main responsibilities as per Council of Ministers Decree No 229/2009:

- Coordinates the preparation, evaluation and implementation of NSRF and negotiates with EC its approval and its modification
- Ensures and oversees for the implementation of horizontal policies and principles of EU, including the principles of partnership and additionality in the management of EU funds
- Coordinates actions under the financial instruments JESSICA and JASPERS
- Coordinates preparation and submits to EC major projects in accordance with art. 39 of Regulation 1083/2006
- Develops and operate the Management Information System
- Participate in all OP MC



## **2. Managing Authority**

A Council of Ministers decree (Decree 965/16.12.2005) officially nominated the names and location of the MAs and the respective IBs, which were established during the chapter 21 negotiations. The CCU has given the MAs guidance based on the requirements of the General Regulation on how to prepare the OPs; these are prepared within the scope of the NSRF.

Subsequently, the MA is responsible for managing and implementing their OP in accordance with the principle of sound financial management. These responsibilities are in compliance with those defined in Article 60 of the Regulation No 1083/2006 and include:

- Ensuring that appropriate criteria are used to select operations;
- Drafting and negotiating the OP with the EC;
- Managing the implementation of the OP, taking account of the views of their MC, the terms of the OP and relevant Community and national rules; ;
- Meeting the agreed programme targets as per predefined indicators;
- Verifying the delivery of the co-financed products and services and that the expenditure declared by the beneficiaries for operations has actually been incurred;
- Ensuring that there is a system for collecting, recording and storing accounting records of each operation within the OP;
- Ensuring that the data necessary on the implementation for financial management , monitoring and verification, audits and evaluation is collected;
- Ensuring that beneficiaries and other bodies involved in the implementation of operations maintain a record of all transactions relating to the operation;
- Performing verifications on the spot at the level of IBs / FB / project sites;
- Assessing the capacity of the IBs in order to delegate tasks by an Agreement signed between the parties;
- Ensuring that the OP is evaluated properly;
- Ex-ante control of the activities carried out by the Beneficiaries with regard to : preparation of tender documentation; tendering; preparation of tender evaluation reports, and preparation of contracts
- Setting up procedures to ensure that expenditure and audits are properly documented to ensure an adequate audit trail;
- Monitoring of the N+3 and N+2 rule and reporting on the issue to the OPMC;
- Ensuring that the certifying authority receives all necessary information on the procedures and verifications carried out in relation to expenditure for the purpose of certification. The MA follows instructions issued by the CA in respect to the reliability of the management and control systems in accordance with the principles of sound financial management;
- Submitting to the Certifying Authority a certification report and statement of expenditure certifying that all expenditure included complies with the criteria for eligibility of expenditure and has been incurred by the beneficiaries on the implementation of the operations selected under the OP in accordance with the conditions for granting of public contributions;
- Reporting to the CA of all suspected and/or actual cases of fraud and/or irregularities as well as measures undertaken;
- Signing an Agreement with the CA regulating the relationship between the MA and the CA;
- Ensuring that the principle for granting state aid complies with rules and procedures for EU funded projects;



- Accumulating, managing, administering and payments of funds envisaged under OPT keeping a separate account
- Guiding the work of the MC and providing it with documentary evidence necessary to monitor the quality of the OP's implementation against its goals;
- Drawing up and, after approval by the MC, submitting the annual and final implementation reports to the EC;
- Ensuring compliance with the information and publicity requirements;
- Providing information to the EC thus allowing it to appraise major projects;
- Complying with EC requirements on project value for money so ensuring coherent and targeted support inline with the appropriate strategy;
- Encouraging applicants to work in partnership, and within the framework of regional and local development plans;
- Ensuring appropriate coordination and liaison between two or more programmes benefiting a geographical area thus ensuring compatibility and synergy; and
- Using agreed project appraisal methods to ensure selection of good quality projects that fit strategic objectives.

With regard to the Regions for Economic Change initiative<sup>4</sup> and in the framework of the Regions for Economic Change initiative<sup>5,6</sup> the Managing Authority commits itself to:

1. Make the necessary arrangements to welcome<sup>7</sup> into the mainstream programming process innovative operations related to the results of the networks in which the region is involved;
2. Allow in the Monitoring Committee (or programming committee) the presence of a representative (as an observer) of the network(s) where the Region<sup>8</sup> is involved, to report on the progress of the network's activities;
3. Foresee a point in the agenda of the Monitoring Committee (or programming committee) at least once a year to take note of the network's activities and to discuss relevant suggestions for the mainstream programme concerned.
4. Inform in the Annual Report on the implementation of the regional actions included in the Regions for Economic Change

**The Coordination of Programmes and Projects Directorate was nominated to be a Managing Authority of the Sectoral Operational Programme on Transport** and will be responsible for ensuring efficiency and correctness in the management and implementation of the operations co-financed by the ERDF and Cohesion Funds.

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<sup>3</sup> InfoRegio: [http://ec.europa.eu/regional\\_policy/conferences/regionseconomicchange/index\\_en.cfm](http://ec.europa.eu/regional_policy/conferences/regionseconomicchange/index_en.cfm)

<sup>4</sup> Communication from the Commission "Regions for Economic Change", COM(2006) 675 final, 8.11.2006, {SEC(2006) 1432}, [http://ec.europa.eu/regional\\_policy/conferences/regionseconomicchange/doc/comm\\_en\\_acte.pdf](http://ec.europa.eu/regional_policy/conferences/regionseconomicchange/doc/comm_en_acte.pdf)

<sup>5</sup> Commission Staff Working Document accompanying the Communication from the Commission "Regions for Economic Change", SEC(2006) 1432/2, [http://ec.europa.eu/regional\\_policy/conferences/regionseconomicchange/doc/staffworkingdocument\\_en.pdf](http://ec.europa.eu/regional_policy/conferences/regionseconomicchange/doc/staffworkingdocument_en.pdf)

<sup>6</sup> Create the channel to appropriate priority for financing.

<sup>7</sup> A Region can be a Region (NUTS 2) or a Member State (e.g. when no Regional level foreseen in the OP).

### ***3. Intermediate Bodies***

***No intermediate body will be designated for the implementation of the Sectoral Operational Programme on Transport.***

### ***4. Beneficiaries***

The beneficiaries initiate and implement the individual projects and receive public aid. They also have the duty to be informed about the products or services to be delivered under the project, the financing plan, the time-limit for execution, and the financial and other information to be kept and communicated. These requirements are set out in detail in the contracts/ offer letters provided to beneficiaries when their projects have been approved.

The strategic framework of the present OPT identifies under each operation planned the identity of the relevant beneficiary body.

### ***5. Monitoring committees***

The Regulation No 1083/2006 (Articles 63-66) requires that a MC be set up for each operational programme. The Council of Ministers has decided on the establishment of a NSRF monitoring committee (MC) and OP Monitoring Committees which will monitor the progress towards the NSRF's and OP objectives.

Each MC draws up its own rules of procedure and adopts them in agreement with MA whose representative chairs it. The European Commission attends in an advisory capacity, and representatives from EIB and EIF may also attend where they make a contribution to OP.

**The OPT Monitoring Committee (MC)** is described in details in Chapter 14 "Monitoring".

### ***6. Audit Authority***

#### **Functions of the Audit Authority:**

1. The audit authority of an operational programme shall be responsible in particular for:
  - a) ensuring that audits are carried out to verify the effective functioning of the management and control system of the operational programme;
  - b) ensuring that audits are carried out on operations on the basis of an appropriate sample to verify expenditure declared;
  - c) presenting to the Commission within nine months of the approval of the operational programme an audit strategy covering the bodies which will perform the audits referred to under points (a) and (b), the method to be used, the sampling method for audits on operations and the indicative planning of audits to ensure that the main bodies are audited and that audits are spread evenly throughout the programming period.

Where a common system applies to several operational programmes, a single audit strategy may be submitted.
  - (d) by 31 December each year from 2008 to 2015:

- submitting to the Commission an annual control report setting out the findings of the audits carried out during the previous 12 month-period ending on 30 June of the year concerned in accordance with the audit strategy of the operational programme and reporting any shortcomings found in the systems for the management and control of the programme. The first report to be submitted by 31 December 2008 shall cover the period from 1 January 2007 to 30 June 2008. The information concerning the audits carried out after 1 July 2015 shall be included in the final control report supporting the closure declaration referred to in point (e);
  - issuing an opinion, on the basis of the controls and audits that have been carried out under its responsibility, as to whether the management and control system functions effectively, so as to provide a reasonable assurance that statements of expenditure presented to the Commission are correct and as a consequence reasonable assurance that the underlying transactions are legal and regular;
  - submitting, where applicable under Article 88, a declaration for partial closure assessing the legality and regularity of the expenditure concerned. When a common system applies to several operational programmes, the information referred to in point (i) may be grouped in a single report, and the opinion and declaration issued under points (ii) and (iii) may cover all the operational programmes concerned;
- (e) submitting to the Commission at the latest by 31 March 2017 a closure declaration assessing the validity of the application for payment of the final balance and the legality and regularity of the underlying transactions covered by the final statement of expenditure, which shall be supported by a final control report.

Council of Ministers Decree № 300/29.12.2005 designates Audit of EU Funds Directorate within the Ministry of Finance as the body authorized to execute the audit authority functions.

The Audit Authority shall perform audits on appropriate base aiming to ensure that the management and control systems of the operational programs function effectively (Art. 62 of the Regulation No 1083/2006). Two types of audits shall be performed by the Audit Authority: systems audits and audits of operations (Art. 17 of the Implementing Regulation No 1828/2006). The Audit Authority shall elaborate its own Procedure Manual.

## **Control Authorities**

### **Internal Audit**

Internal audit functions are carried out by Internal Auditors in accordance with the Internal Audit Act in its latest manifestation.

The established Central Harmonization Unit within the Ministry of Finance provides methodology and other necessary support to internal auditors of all.

### **External Audit**

- The National Audit Office of the Republic of Bulgaria performs independent audit of the budget and other public funds, including EU funds, and contributes to the sound financial management in the country. The organization, mandate and procedures for carrying out the activities are regulated by the National Audit Office Act in its latest modification.
- The European Court of Auditors examines the accounts of all revenue and expenditure of the Community and can examine the accounts of all bodies managing EU funds. It

examines whether all EU budgetary revenue has been received and the corresponding expenditure incurred in a lawful and regular manner and whether the financial management has been sound.

#### ***7. Certifying Authority (CA)***

The National Fund Directorate in the Ministry of Finance will function as a Certifying Authority and as a body designated to receive payments from the European Commission under the Structural Funds and the Cohesion Fund of the European Union (Decision of Council of Ministers No 988/27.12.2005).

The CA shall be responsible for administering the Irregularity procedure at national level and shall report all actual or suspected cases of fraud or irregularities concerning the SCF to the Commission, OLAF and AFCOS.

The CA is the contact point for the financial information exchanged between the Commission and the Republic of Bulgaria.

#### ***8. Compliance Assessment Body***

The functions of Compliance Assessment Body (single for all Operational Programmes in Bulgaria) under Article 71 of Regulation 1083/2006 will be performed by the “Audit of EU Funds” Directorate within the Ministry of Finance in accordance to CM Decision from August 2006. The “Audit of EU Funds” Directorate is responsible for making an assessment of the systems of the Operational Programmes and giving an opinion on their compliance with the provisions of Regulation 1083/2006. For the performance of the Compliance Assessment (including elaboration of methodology, performance of compliance assessment audits and elaboration of reports) of the Operational Programmes the “Audit of EU Funds” Directorate will be assisted by external experts/auditors.

### ***13. FINANCIAL MANAGEMENT AND CONTROL***

#### ***1. Procedures for the mobilization and circulations of financial flows***

The Community budget allocated to the SOP on Transport will be implemented within the framework of shared management between the Ministry of Transport, Information Technology and Communications, Ministry of Finance and the Commission, in accordance with Article 53, paragraph 1, point b) of Regulation (EC, Euratom) No1605/2002 of the Council, with the exception of the technical assistance referred to in Article 45 of Council Regulation (EC) No 1083/2006

The Ministry of Transport, Information Technology and Communications, Ministry of Finance and the Commission will ensure compliance with the principle of sound financial management.

Payments will be operated at the level of the priorities.

According to Article 75 paragraph 1 of Council Regulation (EC) No 1083/2006 the Community budget commitments in the operational programme on Transport will be effected annually for each Fund during a period between 1 January 2007 and 31 December 2013. The first budget commitment will be made before the adoption by the Commission of the decision approving the operational programme. Each subsequent commitment shall be made by the Commission on the basis of the decision to grant a contribution from the Funds referred to in Article 32 of Council Regulation (EC) No 1083/2006

A request can be made referred to in Article 75 paragraph 2 of Council Regulation (EC) No 1083/2006, by September 30th of the year n at the latest, for the transfer of any commitments in respect of an operational programme to other operational programme if no payment has been made. The benefiting programme should be specified in the request sent to the Commission.

Payments will take the form of **pre-financing, interim payments and payment of the balance.**

### **Accounting system**

Accounting of transactions shall be kept by means of a computerized-based system developed under SAP, which system is currently in use for ISPA projects. The software shall provide the functions necessary for the execution of the accounting procedures and checks. According to Article 60 (c) of Regulation (EC) No 1083/2006 the system shall record and store in computerised form accounting records for each operation under OPT.

The accounting records of operations and the data on implementation shall include the following information:

- OPT CCI code;
- Number of priority;
- Name of Fund (Cohesion and ERDF);
- Code of region or area where operation is located/carried out (NUTS Level);
- Certifying authority;
- Managing Authority;
- Unique code number of operation;
- Short description of operation;
- Starting date of operation;
- Completion date of operation;
- Body issuing approval decision;
- Approval date;
- Reference of beneficiary;
- Currency (in Bulgarian leva);
- Total cost of operation;
- Total eligible expenditure;
- Total public eligible expenditure;
- EIB financing.

The Managing, Certifying and Audit Authorities and the other bodies carrying out audits and controls shall have access to this information.

### **Segregation of functions and duties:**

The following describes the division of responsibilities in the claim and certification processes based upon the current regulations and the new Regulation.

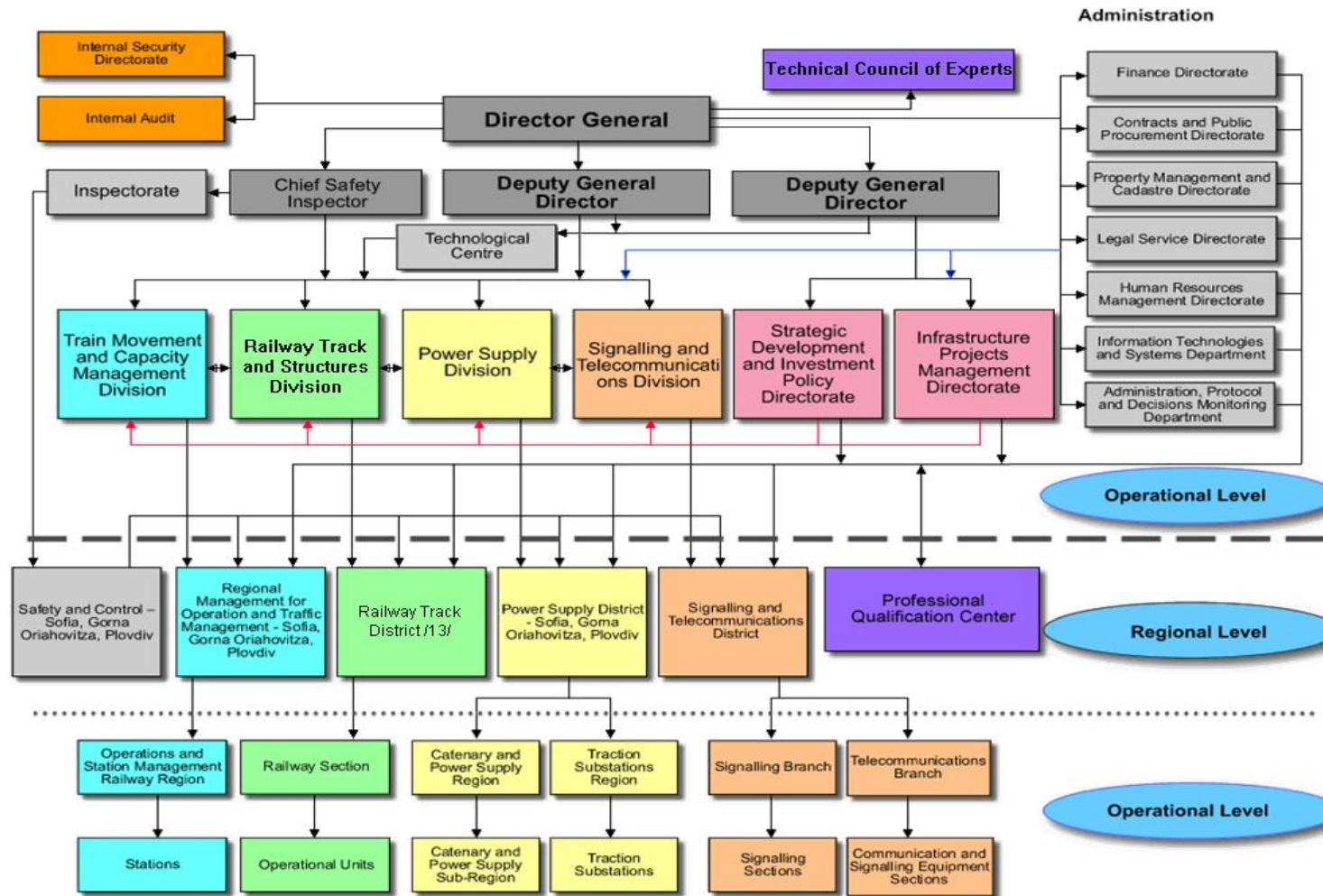
### **Role of the Beneficiary**

In some cases, depending on the specific operation, the Beneficiary is responsible for commissioning projects co-financed under the Structural Funds and Cohesion Fund within the framework of the Operational Programme. Once contracted and service provided, invoices are issued by the private contractor or supplier and submitted to the Beneficiary. After certifying the delivery of goods or services the Beneficiary carries out verification upon relevant Terms of Reference or Specification and pays the invoice with advance payment received by the NF. In this case and in order to ensure the necessary data and report, the BENEFCIARY needs to establish a comprehensive accounting system at contract level. The BENEFCIARY will maintain accounting records in relation to all its projects. This task contains the maintenance (filing and archiving) of financial data, supplementary documents and reports consistent with the requirements of Art 7 of Regulation No 438/2001.

The certification report on the delivery of goods or services together with the invoices is then submitted to the Managing Authority.

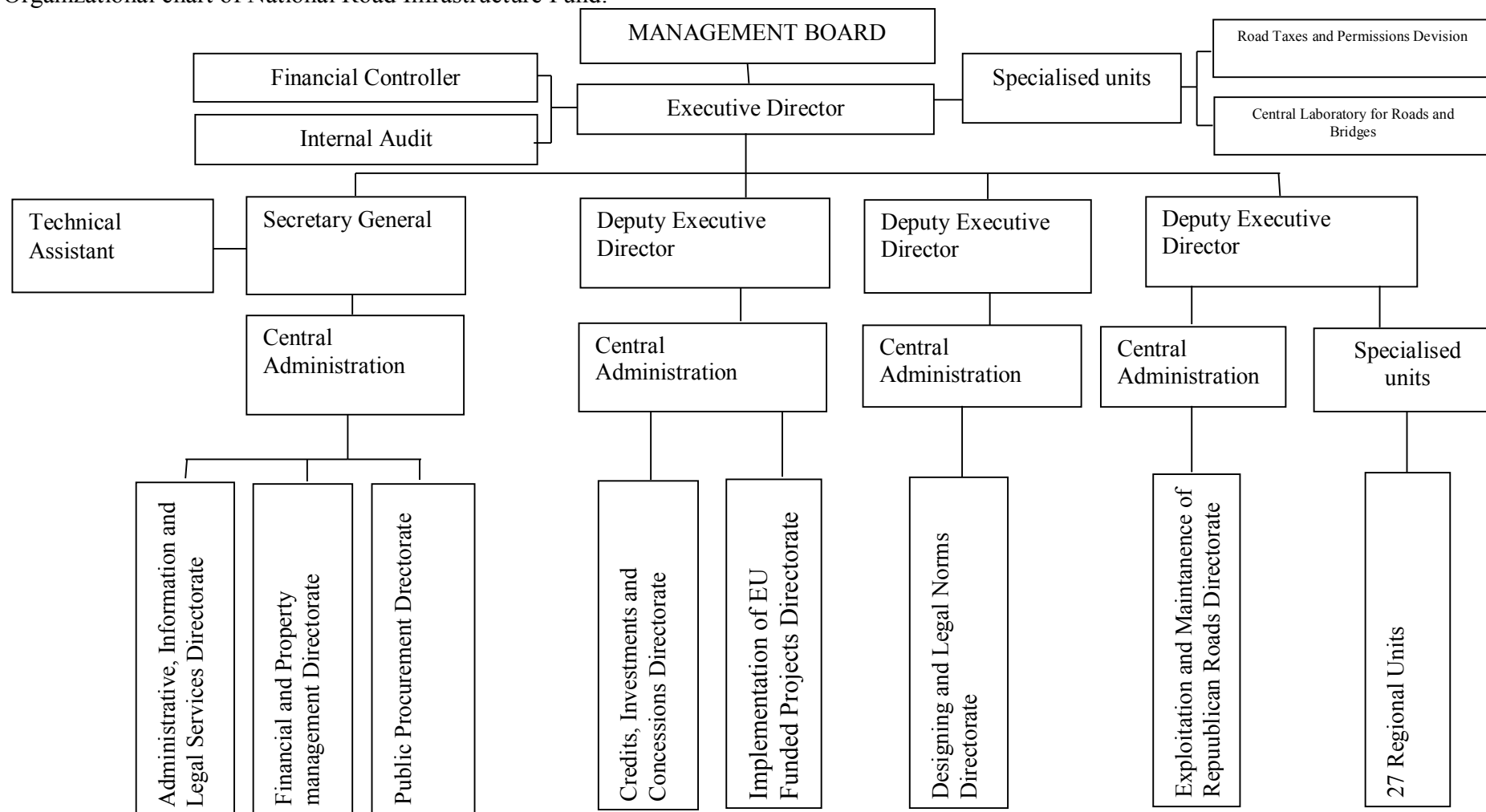


Organizational chart of National Railway Infrastructure Company:





Organizational chart of National Road Infrastructure Fund:



### **Role of the Managing Authority**

The Managing Authority is responsible for the aggregation of information on expenditure supplied to them by Beneficiaries and for certifying such expenditure in certification report. The latter is completed at OP level and submitted to the NF (CA) with the applicable lists of measures or priorities, with references made in the report on certification as well as to reports supplied by the Beneficiaries. The Managing Authority submits to the NF (CA) the report on certification and statement of expenditure on a periodic basis (usually on monthly basis but it depends on the nature of the Programme).

With the certification report the MA confirms that the requirements of Article 60 of Regulation (EC) No 1083/2006 are met as follows:

- Operations are selected in accordance with the criteria and the EU rules;
- Delivery of the service is verified and complies with EU rules;
- Computerised system for accounting records functions properly;
- Beneficiaries and the other bodies involved in the implementation of the operations maintain a separate accounting system or an adequate accounting code for all transactions;
- Evaluations of the operational programmes referred to in Art 48 (3) of Regulation (EC) No 1083/2006 are carried out in accordance with Art. 47 of Regulation (EC) No 1083/2006;
- Setting up procedures for the retention of documents regarding expenditure and audit required to ensure an adequate audit trail in accordance with Art 90 of Regulation (EC) No 1083/2006;
- Ensuring that the CA receives all necessary information on the procedures and verifications carried out in relation to expenditure for the purpose of certification;
- Leading the Monitoring Committee and providing it with the documents required to permit the quality of the implementation of the operation in the relevant Operational Programme;
- Drawing and after approval of the Monitoring Committee submitting to the Commission annual and final reports accordingly;
- Ensuring compliance with the information and publicity requirements of Art 69 of Regulation (EC) No 1083/2006.
- Providing the Commission with information to allow it to appraise major projects.

The content of the statement of expenditure to be submitted by the Managing Authority includes:

- The amount of expenditure;
- Eligibility dates for the expenditure;
- Breakdown of expenditures into required categories (priorities, measures);
- List of invoices;
- Identity (signature) of the persons who prepared/checked/authorised the declaration, in line with the four eyes principle;
- Evidence that the management checks have been conducted (reports on certification);
- Evidence that physical inspection of goods or projects have been conducted where required (reports on certification);

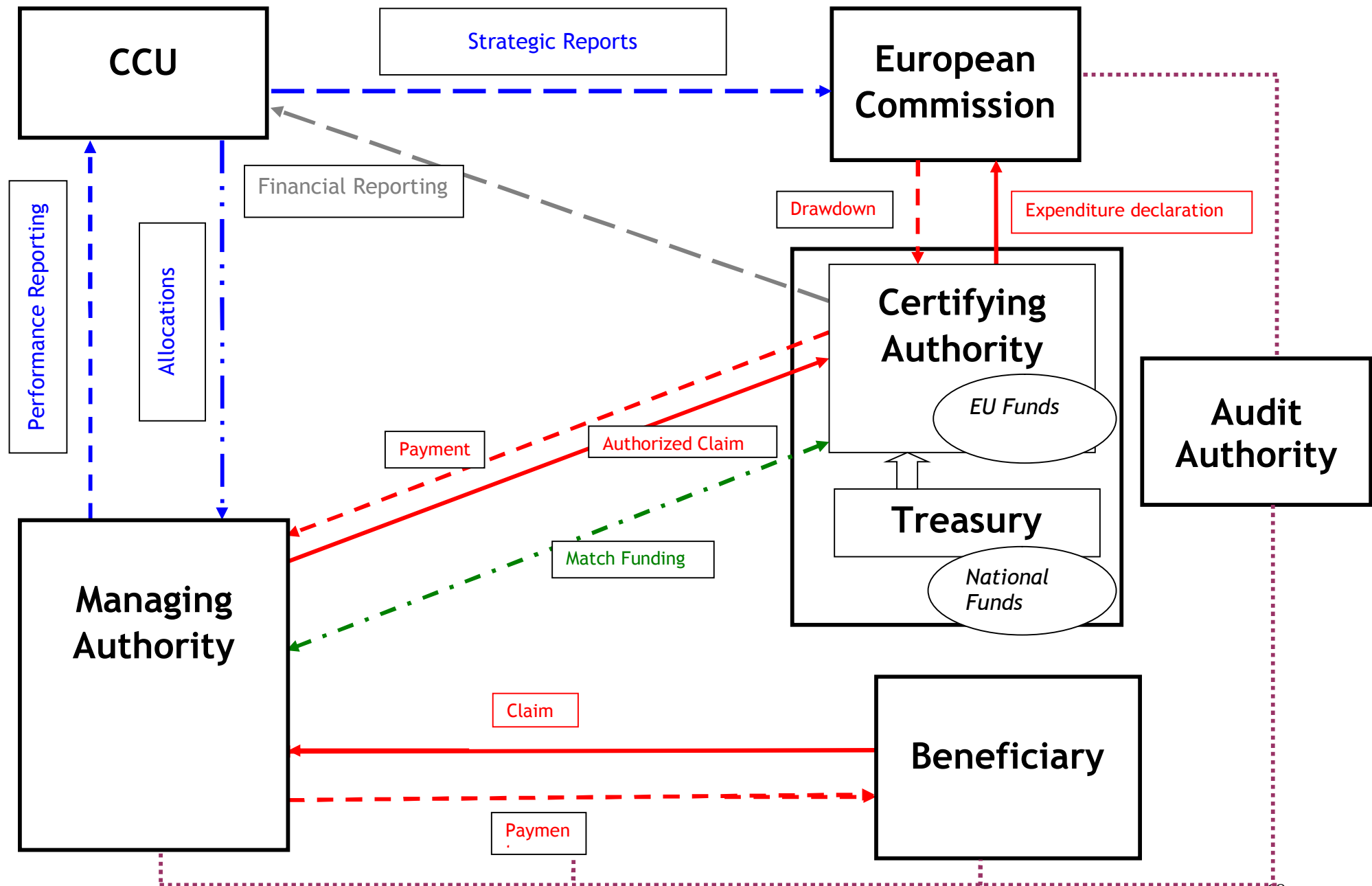
- Location of the supporting original documentation;
- Audit reports on management and control operations (internal audit report of MA and external audit reports);
- Irregularities were detected, corrected and reported (handled) in an appropriate way (report on irregularities);
- Description/modification of management and control procedures.

The Managing Authority arranges the payments to Beneficiaries within the limits granted by the National Fund within the Ministry of Finance.

If the conditions for certifying the expenditure are not fulfilled, the NF (CA) informs the MA on any identified differences/problems. The MA shall provide explanations on the deviations or problems and propose corrective measures with implementation deadlines. Upon receiving from the NF (CA) a reliable explanation of the identified problems, or if the proposed appropriate corrective measures to eliminate the problems are satisfactory, the NF (CA) shall certify the statement of expenditure.

Upon granting the approval of the limit from the NF (CA) the MA arranges without delay for the beneficiaries to receive payment in full with no deductions, retention or further specific charges.

## Financial flows



## ***2. Management Information System (MIS)***

The maintenance of the Unified Management and Monitoring Information System of the Structural Funds in Bulgaria (UMIS), its further development and improvement as well as the coordination of the related activities are assigned to the Central Coordinating Unit (CCU) and in particular to the Monitoring and Reporting Unit at the Ministry of Finance, which is part of the CCU. All these activities could be observed to a certain extent as a part of priority axis one in the Operational Programme “Technical Assistance”, but due to their exceptional importance and specifics, which are determined by the extended functionality of the UMIS, they are defined as a separate priority axis.

The UMIS was developed and installed in 2006 within the framework of a PHARE project for strengthening of the administrative capacity of the Bulgarian Ministry of Finance. The system is in line with the requirements of the European and national legislation and in particular with the provisions of Council Regulation (EC) No1083/2006.

Technically the UMIS is designed and developed as a central database installed at the Bulgarian Ministry of Finance (MoF) which can be accessed through the Internet from any computer with a browser e.g. MS Internet Explorer. This is why the location of the user is not important – he/she can be located everywhere in Bulgaria and even abroad.

Currently, it is envisaged that the UMIS will support the following Operational Programmes:

- OP “Transport”
- OP “Regional Development”
- OP “Environment”
- OP “Administrative capacity”
- OP “Human resources development”
- OP “Technical Assistance”

The OP “Development of the Competitiveness of the Bulgarian Economy” has its own information system and there will be an interface between the two systems. The key components of the interface are already agreed between the Ministry of Finance and the Ministry of Economy and Energy.

Interfaces between UMIS and another three Information systems (SFC 2007, SAP accounting system used by the Certifying Authority and the Information system for monitoring of the EAFRD) will also be developed.

In this respect, it is necessary to emphasize that the UMIS is not an ordinary information system that will just collect and aggregate information from several OPs but it will be a system that will provide support to users and facilitate the execution of their everyday tasks. For that purpose, the system will contain document templates, check lists, lists of eligible costs and activities, steps of procedures adopted by the respective OP MAs, etc. On the one hand, the everyday work with the UMIS will contribute to the adherence to the adopted administrative procedures and on the other hand, it will provide the necessary means for control.

At present, the system has basic functionality. As it was already clarified, in order to use effectively the extended functionalities of the system, it has to be updated and fully adapted to the needs and requirements of the MAs of the Operational Programmes and their IBs. All administrative procedures adopted by the MAs and IBs of the OPs have to be correctly entered into the system as well as all documents’ templates accompanying their

implementation, control lists, monitoring indicators, etc. Since these processes are not yet finalized in Bulgaria, the UMIS has to be further adapted and developed during its launching phase, which is expected to start after the official approval of the NSRF and the OPs by the European Commission.

Although the UMIS will support all bodies on all levels involved in the management, monitoring and evaluation of the implementation of the SF in Bulgaria, at the initial stage of the functioning of the UMIS the users will be mainly from the OP MAs and IBs.

It is envisaged at a later stage when certain stability of the system is achieved additional functionality to be developed in order to give the Beneficiaries opportunity to check the status of their project proposals and upload their application forms into the system.

The Unified information system for management of EU funds in Bulgaria has to be fully operational in the first half of 2008.

After the launching of the system an intensive training for approximately 800 – 1000 users of the UMIS has to be performed. The challenge is the large number of people who will have to be trained in very short time and with limited number of trainers

#### ***14. Monitoring Committee***

**OPT Monitoring Committee (MC)** is to be set up within three months of the decision approving the programme in accordance to Article 63 of the Regulation No 1083/2006.

MC will consist of Chairperson, voting members and observers. The Chairperson of the Monitoring Committee is the Deputy-minister responsible for OPT Managing Authority. Members of the Monitoring Committee are the following: representatives of MoT, MoEW, other Managing Authorities, MoF, and the socio-economic partners. The members of MC are to be appointed by the Minister of Transport, based on proposals made by the institutions involved considering the partnership principle in accordance with the Article 11 of the Regulation No 1083/2006:

- The Head of OPT Managing Authority, the Heads of the Managing Authorities of the other OPs, the Head of the Managing Authority of the Rural Development Programme, the Executive Director of the Agency for Economic Analysis and Forecasting at the Ministry of Finance; the Head of the Central Coordination Unit, the Head of the Certifying Authority,
- Representatives of the Ministries and State Agencies concerned by OPT priorities
- Representative of the National Association of Municipalities in the Republic of Bulgaria;
- Representatives of each Regional Council for Development of the Regions for Planning;
- Representatives of the national organizations of employers, workers and servants, recognized by the Council of Ministries in conformity with the Labor Code;
- Experts on horizontal issues in the following areas: sustainable development, including environment and equal opportunities.

MC may set up, if necessary, temporary and permanent sub-committees on specific and sectoral issues.

MC has to draw up its Rules of procedure and adopt them in agreement with MA. MC will be chaired by the Deputy-minister responsible for MA. At its own initiative, in accordance with Article 64 of Regulation No 1083/2006, a representative of EC may participate in the work of MC in an advisory capacity. Representatives from EIB and EIF may participate in an advisory capacity if there is a contribution to the OP.

The responsibility of MC is to perform supervision over implementation of OPT, particularly ensure compliance with EC regulations and the relevant legislation of the Republic of Bulgaria and to achieve objectives defined in the Operational Programme.

MC will have the following tasks:

- approve the selection criteria within three months after the approval of the Operational Programme but not later than one month after the receiving of financial resources from the Cohesion Fund and European Regional Development Fund. The selection criteria could be revised in accordance with the programming needs;
- periodically review the progress made towards achieving the specific targets of the operational programme on the basis of the documents submitted by the Managing Authority;
- examine the results achieved during the implementation, in particular if the targets set for each priority are met and the evaluations referred to in Article 48( 3);
- consider and approve the annual and final reports on implementation referred to in Article 68 before they are sent to EC;
- assign to OPT MA the task to submit the approved reports to EC;
- receive information of the annual control report, prepared by the Audit Authority and of any internal and external control authorities comments EC may make after examining the report, concerning the findings with high level of risk (if such findings are made);
- adopt time schedules for measures undertaken and approve the report for the implementation of the corrective measures;
- receive information about the results, the conclusions and the recommendations of the reports for financial management and implementation of OPT, prepared by the Certifying Authority;
- propose to the Managing Authority any adjustment or review of OPT likely to make possible the attainment of the Funds' objectives or to improve its management, including its financial management;
- consider and approve any proposal to amend the contents of the Commission Decision on the contribution of the Funds;
- consider and approve, if necessary, proposals for reallocation of funds among the priorities of the programme;
- approve OPT Communication Strategy;
- control the activities of the Managing Authority concerning the horizontal policies, such as state aids, public procurement, sustainable development, including environment and equal opportunities;
- receive information by the Head of the Managing Authority for the results of OPT evaluations carried out, the conclusions and the recommendations made;
- receive information by the Head of the Managing Authority on MIS utilization for monitoring of the financial resources of the Cohesion and Structural Funds;
- take decisions on any problematic issues concerning the contribution of EU funds;
- implement other additional tasks in conformity with the adopted Rules of procedure
- receive information of the Annual Control Report and of the comments EC may make after examining that report;

## Monitoring and Reporting

### The Managing Authority:

- Receives and reviews the periodic monitoring reports at the level of operation, submitted by the Beneficiary;
- After approval of the Beneficiary reports, prepares a consolidated monitoring report for the OPT priority axes and the OP as a whole in order to report the progress with OP implementation. The monitoring reports are prepared periodically. When necessary the reports are discussed at a level of MC subcommittee (at the level of priority). The annual and final reports for the OPT implementation are presented to the MC for approval and subsequently to the Commission;
- Collects and processes all the data necessary for monitoring of the OPT priorities and for the Programme as a whole and enters necessary information on priority and OPT level into the MIS;
- Organizes and actively participates in the meetings of the MC and performs the functions of its Secretariat;
- Ensures, if necessary, the execution of on-going evaluations linked to the monitoring of the OPT;

### The Beneficiary:

- Collects and processes the data necessary for the monitoring and the evaluation of the approved project for the purposes of entering of information in the MIS;
- Prepares the necessary periodic monitoring reports - monthly, annual and final (including the indicators) and submits the monitoring reports to the Managing Authority for approval

## ***15. EVALUATION***

Evaluation of OPT is inseparable from the overall OP management and implementation. Evaluations aim to improve the quality, effectiveness and consistency of the assistance from the ERDF and the Cohesion Fund, while taking into account the objective of sustainable development and of the relevant Community legislation concerning environmental impact.

Evaluations will be carried out by experts or bodies, internal or external, functionally independent of the Certifying Authority and the Audit Authority (ref Art. 47 of 1083/2006 - Evaluations shall be carried out by experts or bodies, internal or external, functionally independent of the authorities referred to in Article 59(b) and (c)). The results will be published according to the applicable rules on access to documents. Evaluations will be financed from the budget for Priority Axis 5 - "Technical Assistance".

OPT Managing Authority will provide the resources necessary for carrying out evaluations, organise the production and gathering of the necessary data provided by the monitoring system, including output and result indicators.

Regular monitoring should provide information mainly on the outputs and results achieved, the financial absorption, and on the quality of implementation mechanisms that allows for evaluation to be undertaken, for example, when actual or potential difficulties arise. On certain strategic aspects, such as socio-economic impact or changes in Community, national



or regional priorities affecting OPT, monitoring data could serve as a source of initial/additional information to be further processed and used for analysis and reporting on strategic aspects dealt with by evaluation.

According to Article 48 of Council Regulation (EC) No 1083/2006 the Member State may draw up, where appropriate, under the Convergence objective an Evaluation Plan presenting the indicative evaluation activities which the Member State intends to carry out in the different phases of the implementation. A relevant Evaluation Plan, reflecting the principles, approaches, and recommendations set up in the Commission Working Document No 2 and Working Document No 5 will be elaborated by the end of 2007 and it will be revised on an annual basis. The main purpose of the Evaluation Plan will be to provide an overall framework for the on-going evaluation. It will also define the links between monitoring and evaluation.

The results of evaluations will be discussed during the Monitoring Committee sessions and after that will be sent to EC. Where relevant, they will also be included in the annual and regular monitoring reports.

In accordance with Articles 47, 48 and 49 of the Regulation No 1083/2006 three main types of evaluations will be carried out for OPT:

- Ex-ante evaluation
- Ongoing evaluations, Interim evaluation
- Ex-post evaluation

#### **Ex-ante evaluation**

The purpose of the ex-ante evaluation was to optimise the allocation of financial resources under OPT and to improve the programming quality. The ex-ante evaluation of OPT was accomplished by a Greek evaluation team consisting of 2 experts (Framework contract EUROPEAID/119860/C/SV/multi – LOT N°11 Request for services N° Beremska 11). Their recommendations were incorporated in OPT.

#### **Ongoing evaluations, Interim Evaluation**

During the implementation of OPT, also a number of ongoing evaluations will be carried out. The main purpose will be to follow on a continuous basis the implementation of OPT and changes in its external environment, in order to better understand and analyse outputs and results achieved and progress towards long-term impacts, as well as to recommend, if necessary, corrective actions. Ongoing evaluations will be carried out where programme monitoring reveals significant departure from the objectives initially set or where proposals are made for the revision of OPT. Such evaluations will be carried out also following the indicative Evaluation Plan to be elaborated and agreed by the end of October 2007.

The **Interim** evaluation will support the management process by thoroughly analysing the problems and good practices which would occur in the interim implementation of OPT and will propose specific solutions to improve the operation of the system.

According to Article 33 of Council Regulation (EC) No 1083/2006 in the light of the evaluation OPT may be re-examined and, if necessary, the remainder of the programme revised.

MA will play a key role in the coordination of the ongoing evaluations process. MA should ensure that the monitoring data on financial and physical indicators is collected and available; it should guarantee that evaluation aims are respected and its quality standards observed; it should provide resources from the Technical Assistance budget necessary for carrying out evaluations; and it should submit evaluation results to the Monitoring Committee and the Commission in order to examine them.

Evaluations undertaken during the implementation period should examine the degree of effectiveness and efficiency achieved in the selected area or theme under evaluation on the basis of indicators collected by the monitoring system and/or by an autonomous appropriate field work. It should also assess the quality, relevance and the level of quantification of these indicators.

### **Ex-post evaluation**

The ex-post evaluation shall be carried out by the Commission in close cooperation with the Republic of Bulgaria and OPT MA. It will take into account all evaluation activities performed during the programming and the implementation periods. It will examine the extent to which resources were used, the effectiveness of funds' programming, the socio-economic impact and the impact of the Community's priorities. It will aim to draw conclusions for the policy on economic, social and territorial cohesion. It will identify the factors contributing to the success or failure of the implementation of OPT, including in terms of sustainability and good practice. Ex-post evaluation will be completed by 31 December 2015.

## ***16. INFORMATION, COMMUNICATION AND PUBLICITY***

### ***16.1. Introduction***

Art. 69 of Council Regulation 1083/2006 of 11 July 2006, laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund oblige the Member States to provide information on and publicize EU co-financed programmes and operations. In the new programming period 2007-2013 the rules for information and publicity activities are included in the Commission Regulation 1828/2006 setting out detailed rules for the implementation of Council Regulation 1083/2006. The OPT MA shall be responsible for the publicity in accordance with the implementing rules of this Regulation. The information shall be addressed to the European citizens and to the (potential) beneficiaries. It shall aim to highlight the role of the Community and ensure that assistance from the Funds is transparent.

Publicity and communication is an important aspect of Cohesion and Structural Funds management activity and in particular to the successful design and delivery of the operational programmes, given the partnership basis on which they are undertaken. Communicating for a successful management and implementation of the operational programmes can be broken down into a series of publicity and communication tasks. The EC Regulations define the scope of publicity and communication narrowly, focusing on visibility of the Operational Programmes to the public and the transparency for actual and potential beneficiaries.

### ***16.2. Requirements***

Regarding Article 2 of the Commission Regulation 1828/2006 the Managing Authority of Sectoral Operational Programme on Transport shall elaborate a Communication Plan /CP/ to provide a strategic framework for the envisaged publicity and communication actions. The Communication plan shall cover the entire 2007-2013 programming period. The Managing Authority shall submit the final Communication Plan to the Commission within four months of the date of adoption of the Operational Programme on Transport. As a minimum the CP shall include the following points:

- The aims and target groups
- The strategy and content
- The indicative budget
- The administrative departments
- The criteria used for evaluation

Regarding Commission Regulation 1828/2006 the Managing Authority of OPT shall ensure that the information and publicity measures are implemented in accordance with the Communication plan aiming at the broadest possible media coverage using all suitable forms and methods of communication at the appropriate territorial level.

The Managing authority shall be responsible for organising at least the following information and publicity measures:

- a major information activity publicizing the launch of an operational programme, even in the absence of the final version of the communication plan;
- at least one major information activity a year, as set out in the communication plan, presenting the achievements of the operational programme including major projects;
- flying the European flag during one week starting 9 May, in front of the premises of each managing authority;
- the publication (electronically or otherwise) of the list of beneficiaries, the names of the operations and the amount of public funding allocated to the operations

The Managing authority shall provide potential beneficiaries with clear and detailed information on at least the following:

- the possibility of financing opportunities offered jointly by the Community and the Member State through the OP;
- the conditions of eligibility to be met in order to qualify for financing under an operational programme;
- a description of the procedures for examining applications for funding and of the time periods involved;
- the criteria for selecting the operations to be financed;
- the contacts at national, regional or local level that can provide information on the operational programmes.

### ***16.3. Communication Plan***

The General aim of the Communication plan is the following:

- **To promote the Sectoral Operational Programme on Transport, the EU contribution in developing the transport infrastructure in Bulgaria and to ensure**

**the transparency in the use of the funds, using wide spectrum of communication tools.**

The specific objectives will be developed within the CP, taking into consideration the EU cohesion policy, the OPT priorities and the results and recommendation of the national opinion pool that will identify the existing levels of knowledge and the concrete information needs of each target group.

The information provided by the Managing Authority of Operational Programme on Transport will be addressed to the following target groups:

- **Internal public** - Managing Authority staff, other directorates within the Ministry of Transport, Information Technology and Communications, other relevant ministries and Managing authorities, the EC and the members of the OPT Monitoring committee;
- **Beneficiaries** - National Railway Infrastructure Company; Road Infrastructure Agency; Bulgarian Ports Infrastructure Company; Metropolitan PLC; Executive Agency „Exploration and maintenance of the Danube River“;
- **Basic stakeholders** - national and international transport institutions, socio-economical partners, transport operators, construction companies and consultant firms;
- **General public** - heterogeneous group consisted by the population, the media.

A more precise and detailed analysis of the target groups will be undertaken and it will be incorporated in the CP.

For the purpose of the CP an analysis of the current situation will be prepared. The results will be used for the defining of the CP strategy and content.

For the successful implementation of the Communication plan will be used large scale of communication tools regarding the specific information needs, such as brochures, flyers, public events, press conferences, press releases, TV and radio advertising, billboards, posters etc. A large public event will be organized after the launch of the OPT with the national media partnership.

The CP will be submitted to the Commission as a separate document within two months of the date of adoption of the OPT.

#### ***16.4. Indicative budget***

The indicative budget for the Communication plan is 12 million Euros allocated from the TA priority axes budget. It will cover the costs for the publicity and information measures concerning the OPT for the 2007-2013 programming period. The budget allocation per years will be presented in the CP.

#### ***16.5. Management and implementation***

Within the Managing Authority of OPT Information and Communications Unit will be established. One of the main tasks of the Unit is to implement the Communication Plan of SOP on Transport. The tasks of this unit include mainly: to support the head of the OPT MA by negotiation of the Communication Plan with EU Commission; coordinating the Communication Plan of OPT with the Communication Plan of the NSRF; managing and

implementing the Communication Plan of OPT; preparing reports for implementation of the information and publicity measures; preparing products or information on the publicity actions; disseminating the comprehensive information on the financing opportunities offered by joint assistance from the Community and national and other co-financing; organizing opinion pools; elaborating and updating the web page of the OPT, playing the role of the main contact point for potential beneficiaries, coordinating the informal communication network.

The Information and Communication Unit /ICU/ will be composed of 3 civil servants with the following functions and responsibilities:

- Head of Unit and Press officer: managing the ICU; communication with the media; relations and coordination with the Publicity and Information units within the other MAs; elaboration of Annual communication action plans; elaboration, implementation and assessment of OPT CP 2007-2013; represent the OPT MA in DG Regio's INFORM network;

- Information, publications & Event management Officer: responsible for handling enquiries from beneficiaries; for the monitoring and control on the fulfillment the P&I requirements from the beneficiaries; for the development, production and distribution of information materials; for the preparation and implementation of public events;

- Internal Communication and website Officer: responsible for the maintenance the content of OPT website; for liaison with the IT Unit regarding technical maintenance; for the management of out-sourced services; for monitoring the Annual communication action plans and the CP and for the coordination of MA's internal events and trainings.

Some of the information and publicity measures will almost certainly require out-sourcing for professional services (such as design and pre-print, web page, printing, advertising, photography and opinion pools). It will be the responsibility of the ICU to manage such services and ensure they are contracted in accordance with public procurement rules.

#### ***16.6. Monitoring, evaluation and report***

The monitoring, evaluation and report are compulsory requirement for the implementation of the publicity measures included into the Communication plan of the OPT.

The progress made in the implementation of the Communication Plan shall be reported during the meetings of the Monitoring Committee. The Managing Authority shall inform the Monitoring Committee of the information and communication measures carried out and the means of communication used. The Managing Authority shall provide the Monitoring Committee with examples of communication measures carried out.

The annual and final reports on implementation of Sectoral Operational Programme on Transport shall include the following information:

- Examples of information and communication measures for the operational Programme undertaken in implementation of the Communication plan;
- The arrangements for the information and publicity measures concerning the publication electronically or otherwise of the list of beneficiaries, the names of the operations and the amount of public funding allocated to the operations;
- The content of major amendments to the communication plan.

The annual report for the year 2010 and the final implementation report shall contain the evaluation of the publicity measures.

A set of indicators for evaluation of the publicity measures will be included in the Communication plan and represent essential part of the Plan with regard to the assessment of the efficiency and effectiveness of the implemented publicity activities.

The yearly results of the qualitative and quantitative analysis will be used for the elaboration of the Annual communication action plans and if there is a need for the modification of the CP.

### ***16.7. Partnership and networking***

Bodies that can act as relays in the transport sector and widely disseminate the information concerning the general public are the following:

- transport and trade associations and organizations;
- economic and social partners;
- non-governmental organisations;
- educational institutions;
- organisations representing business;
- operators;
- information centres on Europe and Commission representations in Bulgaria;
- other main stakeholders of each priority.

The MA will work in close cooperation with the above-mentioned bodies for the dissemination of information regard OPT and the European transport and cohesion policy.

The formalization of communication network is a new aspect of the communication policy concerning the Structural and Cohesion Funds. The OPT Managing Authority has designated a contact person to be responsible for information and publicity and informs the European Commission and to be a member of the INFORM network, coordinated by DG Regio.

Till the end of 2007 an informal communication network for OPT will be established. Members of this network will be experts from the OPT MA and the OPT beneficiaries. The general aim of the network will be to inform and educate its member for the EC publicity and information requirements, to train them in public communication, to ensure exchange of good practices and to provide good coordination of the communication activities regard to OPT and the projects financed by OPT. Through the network the OPT MA will support the beneficiaries by the implementing of the EC information and publicity requirements. In the same time there the network will create better opportunities for monitoring and control.

### ***16.8. Internet***

The website of the OPT will be linked to the NSRF MA, DG TREN and DG Regio websites and preferably as well with the websites of the other OP's. It will be created according to the following principles:

- **Accessibility to as many users as possible** – ensuring the site has a simple address; registering it on main search engines so it can be found easily; designing it to be

viewable with low specification screens and software; ensuring it is quick to download.

- **Prioritizing fast access to rich information** – the site should be clearly organized so users can find what they are looking for quickly and easily; the information should be available as downloadable PDF documents, where possible.
- **Visual appeal** – strong visual identity through logos, use of colors etc. without limiting the clarity, speed and simplicity
- **Developing as an ongoing resource**
- **Interactive content, exploiting the unique strengths of websites**

## 17. RECOMMENDATIONS OF THE EX-ANTE EVALUATION

### Executive Summary from the Final report “Ex-ante evaluation of the Sectoral operational programme “Transport” within the Bulgarian national development plan 2007-2013

#### Introduction

Republic of Bulgaria joined European Union in 2007 and therefore has been continuously preparing for the future management of EU Structural and Cohesion Fund through a number of ISPA and PHARE funded projects. The activities of the Funds will take the form of Operational Programmes (OPs) within the National Strategic Reference Framework (NSRF).

The National Strategic Reference Framework was approved and it outlined the following operational Programmes through which the future EU assistance will be channeled:

- **National Operational Programme for Regional Development (NOPRD)** - corresponds to the strategic priority for achieving balanced development and regional cohesion and preventing a potential increase in the differences resulting from an aggressive national growth policy;
- **SOP “Increasing of the competitiveness of the Bulgarian Economy”** - corresponds to the strategic priority for enhancing the competitiveness of the Bulgarian economy;
- **SOP “Human Resources Development”** - corresponds to the strategic priority of adapting human resources to market requirements and improving the quality of life;
- **SOP “Environment”** - corresponds to the strategic priority for development of basic infrastructure;
- **SOP “Transport”** - corresponds to the strategic priority for development of basic infrastructure. The Sectoral Operational Programme will set out a strategy for sustainable development of the Bulgarian transport system using a coherent set of priorities to achieve the objectives of the Cohesion Fund and European Regional Development Fund;
- With regard to the European Commission Proposals for new Structural Funds regulations after 2006, the Bulgarian Government started the elaboration of an additional **SOP “Administrative Capacity”**.

**A separate ex-ante evaluation was carried out for each of the OPs.**

Close coherence was ensured between the NSRF and OPs ex-ante evaluation procedures.

The ex-ante evaluation contract for OPT has been awarded to ECO, at the end of March 2006. ECO's working team comprises of two experts Mr. Panos Pikrodimitris (Team Leader) and Mr. Yannis Handanos (Transport Expert) who are the authors of the current report. During the fourth mission the Strategic Environmental Assessment was decided to be part of the ex-ante evaluation. Thus, an environmental expert Dr. Alexander Zacharof was added as a new member of the working team.

### **Aim of the ex-ante evaluation**

The ex-ante evaluation was an interactive process providing judgment and recommendations by experts, separately from the planners, on policy or programme issues. The objective was to improve and strengthen the final quality of Operational Programme.

Ex-ante evaluation aimed to optimise the allocation of budgetary resources under operational programmes and improve programming quality. It identified and appraised medium- and long-term needs, the goals to be achieved, the results expected, the quantified targets, the coherence of the strategy proposed, the Community value-added, the extent to which the Community's priorities have been taken into account and the quality of the procedures for implementation, monitoring, evaluation and financial management.

The OPT ex-ante evaluation was a valuable source of additional expertise, verification, and advice in SOP development. It also assisted the country to cope with the process of putting into operation of the new SF and CF Regulations, and the changes accompanying. The evaluation team ensured that most recent developments and requirements in the reform of EU cohesion policy were taken into account in the process of preparation of the SOP and following Community strategic guidelines for the period 2007-2013. Finally the ex-ante evaluation findings and reflections have been incorporated in the OPT as its integral part.

### **The Operation Programme "Transport"**

The Operational Programme on Transport is Coordinated by the "Coordination of Programmes and Projects" Directorate in the Ministry of Transport, Information Technology and Communications and is a part of the National Strategic Reference Framework, which, on the basis of coordinated sequence of priorities, defined the strategy development of the transport sector for the period 2007 – 2013, with the aim to achieve the EU "Convergence" objective.

Five trans-European transport corridors, cross the Bulgarian territory enforcing additional requirements to the quality of the Bulgarian transport network in order to make the most of the geo-strategical advantage and thus to contribute to the functioning of the Common European Market by providing an effective transport links and facilitate the traffic of people and goods and access to the other countries and markets.

The Sectoral Operational Programme "Transport" aims to facilitate the development of the five trans-European transport corridors (IV, VII, VIII, IX and X) which cross the Bulgarian territory, by providing actions for:

- Rehabilitating and upgrading specific sections of the road or the railway networks, to achieve at least the minimum EU standards for design, operations and safety
- Constructing new sections according to EU standards,
- Providing navigation along Danube River and Black Sea coast
- Enhancing intermodality in freight and passenger transport

The Programme also provides a priority axis for Technical assistance for the implementation of the programme.



The overall goal identified for the Operational Programme of the Transport Sector is the *development of sustainable transport system*.

This has been analyzed in two specific goals:

- Integration of the national transport system into the European Union transport network
- Achievement of balance between the transport modes

Five *priority axes* have been set to achieve these goals; four concern individual transport sectors:

- Development of railway infrastructure along the Trans-European and major national transport axes.
- Development of road infrastructure along the Trans-European and major national transport axes.
- Improvement of intermodality for passengers and freights.
- Improvement of the maritime and inland-waterway navigation.
- Technical assistance to implement the operational programme.

### **Analysis of previous evaluation results**

Bulgaria has used pre-accession funds to implement infrastructure projects, through Phare and ISPA programmes. At this stage non-previous ex-ante evaluation has been available for analysis to be included in the current report. All previous and concluded Phare programmes have been subject to ex-post evaluation. There is an on-going ex-post evaluation for 1999-2001 Phare programmes concluded before January 2006. According to information provided by NAC services, there is no an ex-post evaluation for ISPA projects as not a single project has been completed up to date. Concerning Phare interim evaluations, there has always been uninterrupted and continuous interim evaluation process for each of the sectors, as well as thematic reports for the Programme as a whole. EMS and ECOTEC have been independent interim evaluators appointed by EC on a centralized basis. NAC services have undertaken the necessary steps to launch a tender for independent interim evaluation of Phare covering the last part of the Programme implementation.

### **The presentation of the Programme**

Under the priorities identified, *operations* have been postulated under which the various *projects* will be further developed.

These operations cover the entire Bulgarian network, distinguishing the Trans- European and TINA corridors, which are directly linked to the EU strategy.

A short **description of operations** has been provided, presenting their **rationale** and proving their **relevance** to the EU strategy and the National Strategic Reference Framework.

The section of OPT that analyses “The current situation of the transport sector in the republic of Bulgaria” includes a list of the projects (on-going, completed or forthcoming), which are **complementary** to OPT, as they form part of the above operations, under the ISPA, PHARE and cross-border cooperation programmes. The funding source used and their operational status is also stated.

This provides an integrated picture of the network status, which has been also presented on maps.

### **Evaluation of former interventions**

There is lack of evaluation results for projects funded under PHARE and ISPA programmes. This fact deprived the possibility for reference comparison.

### **SWOT Analysis**

The strategy proposed by NSRF and materialised for the Transport sector through OPT,

- builds on the strengths of the transport environment (existing network, geographical location) and
- provides the background to exploit the opportunities that arise with the expansion of the European Union, either to provide services to a wider range of clients, or make best use of the available funds through CF and SF

The weaknesses can be over passed by efficient coordination, monitoring quick decision procedures and administrative actions. The operation “Preparation, evaluation, monitoring & control for OPT”, funded under the Technical assistance priority axis, helps in this direction.

The major components that may impose threats to the implementation of OPT refer to the efficient preparation of every project’s dossier that should include all the required studies (technical, feasibility, environmental), accurate budget, and approvals on the Environmental Impact Assessment and mitigation measures proposed.

The administrative framework exists and the challenge is to operate effectively. Funds are foreseen under the operations “Strengthening of the Administrative Capacity” and “Administrative Management of OPT” under the Technical Assistance Priority Axis.

It seems necessary for the country, to conduct a National Transport Study, in order to better prioritise the various projects not only for the programming period 2007-2013, but also for future horizons. This study has been included as independent operation in the Priority Axis of the Technical Assistance, under the title “General Transport Master Plan”.

### **Evaluation of the rationale of the strategy and its consistency**

The transport strategic initiatives, which have been included as priorities axes and the respective operations in the Sectoral Operation Programme “Transport” have been found to be consistent with the National Development Plan and the draft National Transport Strategy, as presented in the National Strategic Reference Framework.

The Guidelines regarding cohesion have been respected and the proposed operations meet the selection criteria for financing under the regulation for the 4th programming period. Therefore is concluded that the overall goals and objectives are consistent and in line with the European Union priorities.

The ex-ante evaluation has been limited to a qualitative “Priority Axis” and “Operation” level.

The operations will be further supported by the feasibility studies and the environmental impact assessment of the projects to be implemented. This documentation will be ready for inclusion in the project’s dossiers.

### **Evaluation of Impacts**

The assessment of impacts that derive from the implementation of the operations foreseen for the priority axes, takes into account the different elements mentioned in the **guidelines for impact assessment**: economic, social and environmental impacts.

In order to evaluate the various impacts in the best manner specific quantitative indicators have been defined. In general there are three different levels of indicators.

1. **Output** indicators; the deliverables that the policy is expected to produce. The achievement is under direct control of the policy and can directly be verified.

2. **Result** indicators; the immediate objective of a policy. The target that needs to be reached in order to achieve the general goal. They are expressed in direct and short term effects of the policies and can also be influenced by other objectives.
3. **Impact** indicators; expressed in terms of the ultimate desired impact. They are usually measured in global indicators and can be influenced by other objectives as well.

The different types of indicators can be identified, taking into account the robustness and availability of data. The indicators, which have been identified in the OPT, were based on the Guidelines for indicators of Bulgarian NDP and its Operational Programmes, issued by the Ministry of Finance. For each of the objectives serving the OPT priorities, indicators have been proposed to monitor and measure the progress of the implementation of the programme.

These indicators are presented in chapter 9 of the Transport Sector Operational Program. The MA accepted and further developed the modifications on the indicators proposed by the ex-ante evaluation, in collaboration with the team that supports the drafting of OPT, based on the concept that these indicators should be easily quantified, reflect the progress of the operations' implementation and directly associated to them. The indicators have been set on the priority axis level and refer directly to the proposed operations.

The following table presents the ex-ante evaluators' proposal for the indicators used in OPT, which are directly related to the Operations foreseen under the Priority Axes and can be easily measured or calculated for monitoring purposes.

**Figure I.** Proposed Indicators by Priority Axis

	Output	Result	Impact
<b>Priority</b>	Length of rail track	Average speed	Time Savings
<b>Axis 1</b>	Rehabilitated track	Traffic Capacity	Operating Cost Savings
	Electrified track		
<b>Priority</b>	Length of Motorways		Time Savings
<b>Axis 2</b>	Rehabilitated length of Motorways	Average speed on Trans-European network	Operating Cost Savings
	Rehabilitated length of Class I roads		Decrease in accidents
<b>Priority</b>	VTMIS	Supervised coast length	Reduction of incidents

**Axis 3**

	RIS	Supervised river length	Reduction of incidents
	Length of bottleneck sections	Navigability time period (%)	
			Reduction in delays
		Navigation Capacity	

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	Length of Metro line	Average travel speed for	Time Savings
	Number of metro stations	urban transport	People using the metro
<b>Priority</b>	Rail tracks for transport		
<b>Axis 4</b>	terminals	Capacity of metro system	Number of Containers handle
	Number of Intermodal		
	terminals	Capacity for handling	Number of wagons
	Area prepared for freight	intermodal transport	loaded/unloaded

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	Transport Master Plan		
<b>Priority</b>		Consumption of Technical	Size of the targeted people by the communication plan
<b>Axis 5</b>	Communication Plan	assistance	
			Number of trained people
	% use of funds allocated to		
	Capacity Building Actions		

**Assessment of Major Economic Impacts**

The analysis of impacts integrates the estimation of major economic benefits through the implementation of the various projects.

This analysis has been based on some basic assumptions concerning the expected results from the implementation of OPT priority axes. In more detail, depending on the available data and

indicators for the operations included in the priorities, the expected major benefits like time savings and reduction in vehicle operating costs have been quantified.

**Table I.** Major Annual Economic Benefits by Priority Axis for base year (2005)

		<b>Priority Axis 1</b>	<b>Priority Axis 2</b>	<b>Priority Axis 3</b>
		Rail	Road	Urban
Passengers	thousand	33.800	*	260
Passenger - kilometres	mio	2.389	46.407	
Average Speed Increase	km/h	11,3	35 to 40	26,0
Average Speed Increase	%	11%	40%	186%
time saving / passenger	min	4,1	*	14,0
<hr/>				
SAVINGS				
Pas-Hours	mio	2,3	487,8	20
Veh-km	mio	-	-	5,5
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psg-timesavings	mio Euro	1,57	342	12,8
VOC Savings	mio Euro	*	285	6,2

Accident Savings	mio Euro	*	*	1,15
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\* Not Defined

### ***Assessment of the Major Environmental Impacts***

The environmental impact of the priority interventions, were rated against the defined parameters, and a brief macroscopic justification was presented.

The Road and Rail Projects proposed to be included in the SOP Transport were examined according to the potential environmental problems that may appear concerning the existing protected areas and potential NATURA 2000 sites.

Furthermore, a Strategic Environmental Assessment (SEA) was undertaken in accordance with Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (the SEA Directive). The Directive requires that environmental authorities and the public must be consulted as part of the SEA process. The environmental authorities and the public likely to be affected or with a particular interest in the environmental effects of implementing the programme must be given an early opportunity to express their opinions. The consultation period for the OPT SEA Environmental Report, started on 15th September 2006 and run until 6th October 2006. After this period responses to the OPT SEA consultation were reviewed. The nature of the OPT is such that it is not possible to predict the exact location, nature and impact of the actions. Therefore the SEA does not assess the exact environmental impacts of the programme, rather it provides an indication of that impact and suggests ways that negative impacts can be mitigated.

To ensure that each action and initiative implemented within the OPT is sustainable and delivers the desired environmental benefits, the SEA has identified potential environmental impacts which could result from the implementation of specific actions and suggested various mitigation strategies and measures which could be used to minimise or negate the impacts of these actions.

### ***Assessment of the Major Important Social Impacts***

Social impacts were considered not by each priority axis independently, but for the general implementation of the programme.

The infrastructure development has a very positive effect at the socio-economic condition of the population, as it helps at the development and the improvement of the quality of life both at local and national level. Thus, the first 3 priority axes (rail, road and intermodality) will help at the improvement of the accessibility between different areas.

Concerning gender issues, the proposed major projects under all priority axes of the OPT, do not create any gender or other discrimination issues and they do not affect the equality between the sexes.

Concerning the employment, during the construction period of the projects, new job positions will be created.

In general, it is expected that there will be a positive effect of the whole investment on transport infrastructure at the employment and the human resources of other sectors as well.

## **Appraisal of the proposed implementation Systems**

Objective of this task was the evaluation of the sufficiency of the proposed Monitoring Systems, in order to help the Authorities responsible for the project planning and decision making to identify and determine the necessary improvements, based on previous experience, to examine whether transparent and competitive procedure have been predicted as well as project selection criteria, with main objective the success of the Program's objectives with the most sufficient in terms of cost manner and to propose to the Monitoring Committees certain procedures and project selection criteria.

The Managing Authority responsible for the management and implementation of the SOP on Transport efficiently, effectively and correctly, will be involved together with six beneficiaries of OPT's operations, which are: the National Road Infrastructure Fund, the Maritime Administration Executive Agency, the Exploration and Maintenance of the Danube River Executive Agency, the Bulgarian Ports Authority, the National Railway Infrastructure Company within the Ministry of Transport and the Municipality of Sofia. No intermediate bodies were considered necessary.

Other bodies, which are going to undertake the implementation of the OPT, are the Central Coordination Unit, the NSRF Monitoring Committee, the Audit Authority and the Certifying Authority.

The necessary requirements for the successful implementation of the projects are:

- Modern organisational diagram adapted to the projects' needs
- Qualitative and quantitative upgrade of the projects' site supervision
- Use of advanced project management and monitoring methods (both for time and cost)
- Development of an Information System for all the operations
- Establishment of a Quality Assurance System (ISO 9001)
- Institution of flexible regulations for the conduction of studies and construction of projects and full harmonisation with the European legal framework
- Establishment of prototypes for designs, studies and terms of reference
- Budget estimation of projects based on accurate data of cost and time from the recent past
- Establishment of an environmental policy in order that the projects' implementation to create the minimum negative impacts at the environment and when possible to achieve its protection and improvement
- Efficient exploitation of the consultants' expertise and transfer of his knowledge to the local staff
- Cooperation and coordination of all the involved parties

## **Conclusions and recommendations taken into consideration by the Managing Authority**

During the implementation of the project "Ex-ante evaluation of the Sectoral Operational Programme on Transport within the Bulgarian National Development plan 2007-2013" the project "Technical assistance for the preparation of Sectoral Operational programme Transport 2007-2013" was carried out in parallel. The interactive approach was used during the implementation of the two projects.

SOP “Transport” - corresponds to the strategic priority for development of basic infrastructure. The Sectoral Operational Programme sets out a strategy for sustainable development of the Bulgarian transport system using a coherent set of priority axes to achieve the objectives of the Cohesion Fund and European Regional Development Fund.

Under the priorities identified, operations have been postulated under which the various projects will be further developed. These operations cover the entire Bulgarian network, distinguishing the Trans-European and TINA corridors, which are directly linked to the EU strategy. A short description of operations has been provided, presenting their rationale and proving their relevance to the EU strategy and the National Strategic Reference Framework. The section of OPT that analyses “The current situation of the transport sector in the republic of Bulgaria” includes a list of the projects (on-going, completed or forthcoming), which are complementary to OPT, as they form part of the above operations, under the ISPA, PHARE and cross-border cooperation programmes. The funding source used and their operational status is also stated. This provides an integrated picture of the network status, which has been also presented on maps. There is lack of evaluation results for projects funded under PHARE and ISPA programmes. This fact deprives the possibility for reference comparison.

The strategy proposed by NSRF and materialised for the Transport sector through OPT, builds on the strengths of the transport environment and provides the background to exploit the opportunities that arise with the expansion of the European Union, either to provide services to a wider range of clients, or make best use of the available funds through CF and SF. The weaknesses can be over passed by efficient coordination, monitoring quick decision procedures and administrative actions. The operation “Preparation, evaluation, monitoring & control for OPT”, under the priority axis of technical assistance, helps in this direction. The major components that may impose threats to the implementation of OPT refer to the efficient preparation of every project’s dossier that should include all the required studies (technical, feasibility, environmental), accurate budget and approvals on the Environmental Impact Assessment and mitigation measures proposed. Funds are foreseen under the operations “Strengthening of the Administrative Capacity” and “Administrative Management of OPT”, under the Technical Assistance Priority Axis, in order to strengthen the administrative capacity. Finally, it seems necessary for the country, to conduct a National Transport Study, in order to better prioritise the various projects not only for the programming period 2007-2013, but also for future horizons. This study has been included as independent operation in the Priority Axis of the Technical Assistance, under the title “General Transport Master Plan”.

The transport strategic initiatives, which have been included as priorities axes and the respective operations in the Sectoral Operation Programme “Transport” have been found to be consistent with the National Development Plan and the adopted National Transport Strategy, as presented in the National Strategic Reference Framework. The Guidelines regarding cohesion have been respected and the proposed operations meet the selection criteria for financing under the regulation for the 4th programming period. Therefore, it was concluded that the overall goals and objectives are consistent and in line with the European Union priorities.

The ex ante evaluation has been limited to a qualitative “Priority Axis” and “Operation” level. The operations will be further supported by the feasibility studies and the environmental impact assessment of the projects to be implemented. This documentation will be ready for inclusion in the project’s dossiers.

Output, result and Impact indicators have been estimated for the year 2013 and for each priority. This will allow the monitoring and the on-going evaluation of the program’s performance.



From the experience of the implementation of other operational programs at the previous programming periods, the most important requirements for the successful implementation of the projects include the well organised supervision of projects using advanced project management and monitoring methods (both for time and cost), usually under an integrated Information System. The establishment of a Quality Assurance System (ISO 9001) is also very crucial as well as the institution of flexible regulations for the conduction of studies and construction of projects and full harmonisation with the European legal framework and the establishment of prototypes for designs, studies and terms of reference. The success of the program will be also based on good cooperation and coordination of all the involved parties and the efficient exploitation of the consultants' expertise and transfer of their knowledge to the local staff.

Considering the current and the foreseen implementation system the programming, management and monitoring mechanisms that will be involved in the management system of OPT, will ensure clear responsibilities and roles between involved partners, decentralisation of management and monitoring of programmes, enlargement of the social stakeholders participation, measurement of the implemented results and strict monitoring based on targeted indicators and of course strict fiscal control.

Further information was given for the organisational structure of the Managing Authority and the procedures to be followed by the final beneficiaries. An organisational chart representing all the involved bodies and the relations between them and with other bodies out of the Ministry of Transport, Information Technology and Communications was included in the OPT, giving emphasis to the level between Managing Authority and the Beneficiaries. This organisational chart helps at the identification of necessary legislative or other kind of modifications in order to achieve a successful monitoring mechanism.

Last, but not least, the complementarity with transport related projects funded by other OP's have been identified and the % of funds for technical assistance have been increased. The recommendation of the ex-ante evaluation regarding this priority axis was to increase the budget up to 4%. The scope of activities in the Technical Assistance priority axis fully reflects the recommendations of the ex-ante evaluators and after preliminary calculations for those activities, the Managing Authority decided to allocate – 3.29 % (65.95 MEUR) for the Priority axis “Technical assistance”.

The Environmental Assessment Report (EAR) was part of the Final Ex-ante report of OPT under the project “Ex-ante evaluation of OPT within the Bulgarian National Development Plan 2007-2013”. During the implementation of SEA all procedures required by the SEA Directive and transposed into the Bulgarian legislation were met. As a result of public consultations motivated objections on the grounds of legal conformity have not been received.

During the SEA implementation the continuation of the public consultation was 21 days.

The public consultations were carried out:

1. Within the Working Group (WG) because of the wide representation of the WG and well known OPT activities by its members;
2. Public access to the documentation has been ensured through the Web-site of the Ministry of Transport ;
3. The free access was ensured to the Environmental Assessment Report (WAR) at the premises of the Ministry of Transport. (The information where to find the report was put on the information desk of the Ministry of Transport).

The following documents were published on the Web-site of the Ministry of Transport:

- The Environmental Assessment Report;
- OPT;
- Environmental questionnaires

In order to reflect the opinion of the of the Working Group, WG members were invited on meeting to express their opinion on the environmental impact of OPT by filling Strategic Environmental Assessment of the OPT – Environmental Assessment Matrix.

The expressed opinions of Members of WG and Public during the consultations were incorporated into the final version of the EAR .

**As a result of public consultations motivated objections on the grounds of legal conformity have not been received.**

**In general, the emphasis will be put on the fulfillment of the requirements regarding EIA for the specific projects.**

**The SEA results are in compliance with OPT priorities axes. The SEA results do not lead to changes in priorities axes of the OPT.**

This environmental report provides an assessment of the environmental impacts of the Priority actions of the Sectoral Operational Programme on Transport.

The purpose of this report has been to document the environmental assessment of the policies and strategies that are outlined in the OPT and to document the how the SEA process has been integrated into its development.

The assessment of the Sectoral Operational Programme on Transport shows that the policies and strategies that have been developed, support the SEA Objectives for improving air quality, reducing congestion, and improving the quality of life. The OPT promotes improvement to transport infrastructure towards a more sustainable transport and advocates the use and expansion of shared and public transport and modes, which are anticipated to result in more socially inclusive communities, accessible essential services and health benefits.

In general environmental considerations have been taken into account in the development of OPT. The evaluation methodology and prioritization of projects was developed by an expert working group based on multi-criteria analysis including environmental criteria. The projects were evaluated using criteria with different weight an environmental criteria had a weight of 20%.

An integrated approach to land use and transport planning will be promoted throughout the OPT together with the actions provided aimed at improving infrastructure and tackling congestion, in order to enhance the image of Bulgaria as a place to invest and live in. Through the successful achievement of the strategies being promoted through the OPT it is anticipated Bulgaria will realise its ambitions for economic growth and sustainable development.

That said, some potential adverse effects have been highlighted. These relate to the potential infrastructure building activities being promoted. Strategic route planning and thorough assessment of the potential effects of the infrastructure schemes will be required to ensure that the beneficial effects of reduced congestion, improved local air quality and improved

accessibility will be realised and that adverse effects relating to the natural and historic environment are minimised and thoroughly mitigated for. In order to ensure that any adverse effects are minimised environmental enhancements will be considered and implemented within scheme delivery.

It was strongly recommended that in the Technical Assistance measures are included that answer to the main needs of support for programme environmental monitoring.

These specific actions of the Technical Assistance priority axis have been included as follows:

- The establishment of a General Environmental Monitoring Plan
- Monitoring of the Environmental Performance – Railways
- Monitoring of the Environmental Performance – Road Transport
- Monitoring of the Environmental Performance – Waterborne Transport
- Monitoring of the Environmental Performance – Inter-modal Transport
- Environmental Monitoring and performance – Information and Publicity

The consultation period for the OPT SEA Environmental Report started on 15<sup>th</sup> September 2006 and ran until 6<sup>th</sup> October 2006. A presentation of the Environmental Report to the OPT Working Group was held on the 28 September 2006 which was followed by a discussion. After the consultation period, responses to the OPT SEA consultation were reviewed. In light of these comments, the Environmental Report was amended with the final version being published 12 October 2006.

Finally, all recommendations received by ex-ante evaluators after each of their five missions were accepted by the Managing Authority and incorporated in OPT with the support of the consultants under the above mentioned TA project.

**OPT is in compliance with all** ex-ante recommendations except the recommendation concerning the budget for Priority axis “Technical assistance” which was partially accepted.

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