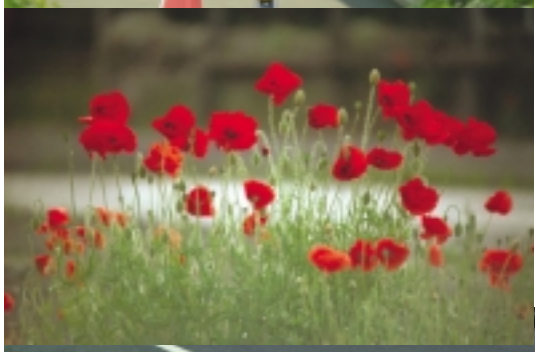


Stability Pact Watch Group

Public Participation in the Reconstruction Process

BALKAN TRANSPORT BLUEPRINTS

September 2004

Stability Pact Watch Group

Public Participation in the Reconstruction Process

BALKAN TRANSPORT BLUEPRINTS

September 2004

Contributions from:

Keti Medarova
Fidanka Bacheva
Ana Colovic
Ionut Apostol
Biliana Baleva

Editing:
Greig Aitken
Ian Transue

Design & Layout:
Maria Matorova/Aspectrum Ltd.
http://a-spectrum.com
Printed on Bulgarian recycled paper.

Table of contents

Executive summary

This publication aims to present national overviews of the transport sector in three Balkan countries - Bulgaria, Macedonia and Romania - and a discussion of the regional incentives of the International Financial Institutions (IFIs) and the European Union (EU) within the Stability Pact for South and Eastern Europe (SEE). On the basis of this presentation, conclusions are drawn and recommendations proposed of how the IFIs should improve their activities in the Balkan region. The study juxtaposes the regional plans for transport infrastructure development of the international community to the realities in the different countries, e.g. existing transport infrastructure, traffic levels, national transport policies, failures to manage the transport systems, environmental impact, etc.

The findings of the publication show that investments provided by the IFIs and the EU for the development of the Trans-European Transport Corridors through these Balkan countries do not correspond to the real demands of the national transport sectors. It points to the fact that national political agendas follow international or regional investment programmes without conducting studies that demonstrate the compatibility of these programmes to local context. Therefore this publication aims to display the need of shifting the focus of investments from large-scale infrastructure to the extension and rehabilitation of the existing system of national roads, railways, public transport and cycle lanes and paths.

This publication is produced by the Stability Pact Watch, a coalition of Balkan environmental non-governmental organisations - Za Zemiata (Bulgaria), Eko-sense (Macedonia) and TERRA Milleniul III (Romania). The coalition was established in 2002 within the CEE Bankwatch Network with the aim to monitor the activities under the Stability Pact for SEE and to call for transparency and public participation in the decision-making processes. One of the overall goals of the coalition regarding the transport sector is to ensure that most of the IFIs investments in Stability Pact countries are used for railway and 2nd and 3rd class road rehabilitation, maintenance and development.

More information about the Stability Pact Watch can be found at: www.stabilitypactwatch.info

Regional plans for development of the transport sector in the Balkans

During the last 10 years, the attention of the international community towards the Balkans has increased tremendously. Following the fall of the communist regimes and later on the Kosovo/a crisis, the EU together with other international organisations and financial institutions launched joint initiatives aiming to bring stability and prosperity to the region.

In June 1999, under the initiative of the EU, the Stability Pact for South Eastern Europe (SEE) was adopted. This was the first attempt by the international community, including more than 40 partner countries and organisations, "*to foster peace, democracy, respect for human rights and economic prosperity in order to achieve stability in the whole region*".[1]

The Pact seeks to encourage stability through support for regional projects, which are implemented through a Southeast European Regional Table consisting of three working tables:
- Working Table I on Democratisation and Human Rights;
- Working Table II on Economic Reconstruction, Development and Co-operation;
- Working Table III on Security.

The importance of economic recovery in Balkan countries is unquestionable, thus, one of the three main objectives of the Pact is increased investment in regional infrastructure. As a result, Working Table II accounts for more than 80% of the planned investments. So far, investments in large infrastructure, mainly in transport, energy and telecommunications, are seen as the most important part of economic recovery.

In the framework of the Stability Pact, the European Investment Bank (EIB) developed a report - "Basic Infrastructure Investments in Southeast Europe"[2], and the World Bank prepared "The Road to Stability and Prosperity to South Eastern Europe". Both were presented to the Regional Funding Conference held in Brussels on 29-30 March 2000.

The aim of these strategies was to give guidance, from a regional perspective, to future decision-making on investments. They included criteria for the selection of projects, which should be determinant for priority project identification and should guide the donor community and the IFIs. The focus was on the transport, energy, water and telecommunications sectors. Out of the 400 initial submissions, 35 projects were chosen for the 'Quick Start Package' (QSP). Most of the projects were proposed by the Southeast European countries and in most cases involved more than one country.

The implementation of the QSP projects was to start within 12 months. Even then, it was evident that the development and implementation of a strategy for a whole region is a long and changing process. *"Therefore developments (e.g., changes in economic activity or in demand patterns) have to be carefully monitored, and results of ongoing studies have to be examined. The Commission services will take into consideration these developments and adapt the present strategy guidelines accordingly - if need be"*.[3]

The European Commission (EC) and World Bank (WB) were appointed to co-ordinate the economic assistance measures for the region, and thus, a Joint Office for Southeast Europe was set up in 1999[4]. They jointly chair a High-Level Steering Group, in which the finance ministers of the G8 countries and the country holding the EU presidency work together with the representatives of IFI and the Special Co-ordinator. Their work consists mainly of facilitating the co-operation among the EC, the WB and the donor community, as well as mobilising and monitoring the investments to SEE.

1 Stability Pact mission, www.stabilitypact.org
2 Basic infrastructure Investments in Southeast Europe, Annual Progress Report on the Quick-start and Near-term Package, Luxembourg, 30th April, 2001
3 **Transport and Energy infrastructure in Southeast Europe**, EUROPEAN COMMISSION, Brussels, October 15, 2001, (Albania, Bosnia-Herzegovina, Croatia, Federal Republic of Yugoslavia, Former Yugoslav Republic of Macedonia), Directorate General for Energy and Transport, Directorate General for External Relations, EuropeAid Co-operation Office.
4 www.seerecon.org

The Infrastructure Steering Group (ISG) was set up to foster sectoral strategies (transport, energy, water supply and environmental protection) for the development of regional infrastructure in SEE. By the end of 2003, the ISG for SEE secured financing for 53 projects with a total value of EUR 4,01 billion.

Availability of infrastructure services - in transport, energy, telecommunications and water - are seen as a key to economic growth. "*Without adequate transport systems linking countries together, trade cannot flourish*", the Pact says. Thus, another institution within the Pact, the Business Advisory Council, was born. It comprises businessmen from private companies in the EU, the USA, Canada, Japan, Turkey and SEE countries. Their task is to "advise" the SP on how to improve the business climate in the Balkans.

The EIB, the EC, the WB and the EBRD reported on the progress achieved in financing and implementing the Quick Start Package of 34 infrastructure projects. The Joint Office of the WB and the EC presented a consolidated report as of the end of September 2000, which underlined that the QSP on infrastructure was well under way. However, they also pointed out that in some cases there was a need to urgently improve the sectoral, regulatory and legislative frameworks and to address specific issues such as expropriation procedures for land acquisition, transparency in tendering procedures and appropriate measures for environmental protection.

At the next Regional Conference, held on 25-26 October 2001 in Bucharest, the key infrastructure sectors - transport, energy and water - were established, and a new set of 27 infrastructure projects received donor financing of EUR 2,4 billion.

In May 2002, the EIB completed the Air Traffic Infrastructure Regional Study (ATIRS)[5], which underpins the EIB's investment programme for the air traffic sector in the region. The study reviewed the air traffic management situation in the Balkans and pointed out the demand for a realistic estimation of the need for new airport infrastructure. Instead, it recommended that investments should be channelled to "*modernisation of the existing installations or maximising their potential*."

In March 2002, the Transport Infrastructure Regional Study (TIRS)[6] for the Balkans was completed. It comprised Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Federal Republic of Yugoslavia, the Former Yugoslav Republic of Macedonia and Romania. The main objectives of the study were "*to identify major international and regional routes in the region; to define a coherent medium term network to be used as a framework for planning, programming and co-ordinating infrastructure investments; and to define short-term priority projects suitable for international financing*."

It is stated in that study that "*development of Road transport networks will be mainly governed by the growth of local traffic, which represents 85% to 98% of the total traffic*" in the region. The forecasts in the study show a more than 200% increase in road traffic before 2015, but national statistics, for example in Romania, show a decrease in traffic. "*Ports and airports currently support much less traffic ... as a consequence, future development of air and maritime transport should only need investment for appropriate modernisation or rehabilitation projects in response to the evolving nature of traffic. Railway lines should not experience any noticeable increase in traffic, and those lines which are already close to their capacity could, with some minor adaptations in signalling and crossings, handle higher levels of traffic if necessary*."

In the evaluation of the long list of projects attached to the study, the Consultant used a multi-criteria analysis focused on the socio-economic return on investment and the functionality and coherence of the network. At the same time, the Consultant admitted that it wasn't possible to check essential elements of critical projects due to lack of relevant documentation. Among the most critical problems identified in the study was the disability of the Balkan countries to apply appropriate infrastructure management in order to generate the necessary funds to operate, maintain and renew transport facilities.

Furthermore, the study underlined that "*the Trans-European Corridor network has clearly been a focus for Balkan countries in the definition of their national highway improvement programmes. The designed routings of these corridors do not necessarily accord with the most trafficked highway in a country. Furthermore, political agendas quite often dictate infrastructure improvements irrespective of real traffic demands, and, as a result, road improvement schemes are undertaken which would not normally be justified by the levels of traffic usage ... In some countries it has been the donors who*

5 Air Traffic Infrastructure Regional Study (ATIRS), Executive ATC Summary Report, prepared by the Nordic Aviation Resources AS, Oslo, Norway, May 2001

6 The Transport Infrastructure Regional Study in the Balkans has been undertaken in the context of the Stability Pact. The French Government, through the "Agence Franucaise de Developpement" (AFD), provided the grant resources, ECMT being responsible for the supervision of the work, January 2002

have made the suggestions for the direction of development of the sector in the last decade or so."

As a logical consequence, the study pointed out that "*national interests for highway infrastructure improvements and those relating to the region therefore are not necessarily the same. One nation's priority adjacent to a border may not accord with the perceived requirements of its neighbour's border infrastructure.*" Typical misunderstandings in this sense were demonstrated by the "II Danube Bridge" and "Sofia-Nis highway" projects, which have been tremendously delayed due to different interests of neighbouring countries.

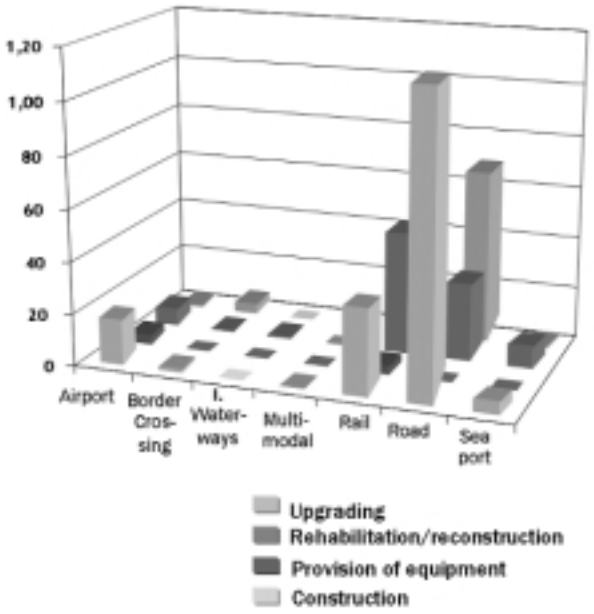
In July 2003 the final transport document "Regional Balkan Infrastructure Study" (REBIS)[7] was released, prepared by the EC and Europe Aid Co-operation Office together with the Infrastructure Steering Group. This time the study comprised the so-called Western Balkan countries (without Bulgaria and Romania). The study provided an assessment of the existing transport network with the aim to identify priority investment in transport infrastructure in the region and prepare pre-feasibility studies for selected project proposals.

Some of the findings showed that the capacity of the majority of roads was sufficient for the existing traffic. On the contrary, findings about the railway lines condition showed that "*86% of the network has single track, 59% of the network is electrified and only 11% of the network is classified as being in good condition, while the remaining sections are in medium or bad condition*". According to the data, railway traffic was expected to grow depending on the economic growth and the impact of European traffic.

After collecting all necessary data, the next step in the REBIS study was to conduct a screening of projects, ranking them with a multi-criteria model. In the end, the core network comprised 58 highway and 43 railway projects.

However, the final policy recommendations of the study were: "*to maintain present infrastructure rather than constructing new links/increase capacity; concentrate investments on most important regional connections; strike a balance between transport modes*".

The total investment costs are EUR 3 693 million for 132 projects. Despite the recommendation stated above, the table on investments costs by transport mode and scope for all projects shows that most of the investments go to road construction.[8]



Investment costs by transport mode and scope for all projects (EUR million)

In February 2004, the latest report - "Transport Project Preparation Facility" (TPPF)[9] - in the Balkan region was completed. It again comprised only the Western Balkan countries with the aim to focus on 5 to 10 projects from the priority ones identified in the REBIS. Thus, the selected projects included:

- Bo-H-01 BiH - Banja Luka to Gradiska Road - Route 2a, Detailed design, (EBRD);
- Cr-H-08 Croatia - Sava River (Gradiska) to Okucani (Corridor X), Road, (EBRD);
- YU-H-19 Montenegro - Podgorica Eastern Bypass, Feasibility Study, (EIB);
- YU-R-07 Serbia and Montenegro - Belgrade Rail Bridges, Design studies, and Zezelj rail bridge at Novi Sad, Feasibility study, (EIB has expressed willingness to consider financing the Corridor X bridges project);
- MA-A-01 FYROM - Skopje Airport, feasibility study for new terminal (EBRD);
- Al-H-12 Albania - Durres - Morine Road , Various technical services;
- Al-H-(new) Albania - By-passes at Girokastra and Tepelene, Feasibility studies (EIB and EBRD);
- BC-R-01 All countries - rail border crossing.

7 "Regional Balkan Infrastructure Study"(REBIS), prepared by the European Commission, Europe Aid Co-operation Office and the Infrastructure Steering Group, July 2003
8 "Regional Balkan Infrastructure Study"
9 "Transport Project Preparation Facility"(TPPF), by Scott Wilson, February 2004

"In conclusion, the above described regional approach towards transport infrastructure in the Balkans shows how large infrastructure projects are identified as priority ones and how investments are committed to them. at the same time the national studies which follow will illustrate the real state of the transport infrastructure in the respective countries, will show the real demands for development and the national governments' policies towards the transport sector. Thus, we will be able to compare to what extent the IFIs and the EU contribute to the development of the respective countries' transport sectors and why their approach should be changed.

Transport sector in Bulgaria

1 Overview

Bulgaria has a population of approximately 8,5 million people and is strategically located in South Eastern Europe on the coast of the Black Sea, bordering Serbia and Montenegro, Macedonia, Greece, Turkey and Romania. The country's land area is 110,994 km^2.

The national currency, the Lev, is pegged to the Euro, and the ultimate aim of the Bulgarian government is full membership in the European Union (EU) in 2007. Under the audices of the World Bank (WB) and a number of other International Financial institutions (IFIs), among which is the European Bank for Reconstruction and Development (IBRD), Bulgaria has introduced financial policies such as privatisation and structural reforms with a special accent on investments in large-scale infrastructure.

European integration and the loans provided through the Stability Pact for SEE and the International Financial Institutions (IFIs) are key factors in the development of the transport sector in Bulgaria. National transport strategies and policies strictly follow the international agenda, focusing on the expansion of Trans-European Corridors mainly through the construction of highways, airports and harbours.

At the same time, Bulgaria has a relatively well-developed transport infrastructure, which gravely suffers from low maintenance. The problem is partly rooted in the lack of state research of the existing infrastructure, which is needed to establish the demand for its development and maintenance. Conducting adequate studies is a prerequisite to securing investment in local transport networks, e.g., the rehabilitation of 2nd and 3rd class roads, the improvement of railways, the development of proper public transport and the promotion of bicycle lanes and paths.

2 Transport infrastructure

In order to understand the development of the transport sector in Bulgaria, it is necessary to examine the state of the existing transport network, the levels of traffic, the number of Trans-European Corridors passing through Bulgaria and the amount of investment going to transport projects.

Country area: 110,912 km2
Population: 7 801 273 (2003)
Unemployment: 13.70 % (01/03/2004)
GDP: EUR 4118.8 million (Q1 2004)[10]

2.1 Road transport

The total length of the national road network is 37 320 km, and the average density is 0,33 km per square kilometre (somewhat below the EU average). Approximately 90% of the roads are with asphalt surfaces. Most common are the two-lane roads with an overall width between 6 and 7,5 m. Road building in Bulgaria is generally difficult and costly, as some 40% of the country's territory is mountainous.

Table 1. **Road infrastructure in Bulgaria**

Roads	km	%
Motorways:	328	0,9
Category I roads:	3 012	8,1
Category II roads:	3 827	10,2
Category III roads:	11 894	31,9
Category IV roads:	18 235	38,9
Total	37 296	

Source: NSI, MTC [11]

The breakdown of the roads on the routes of the Trans-European Corridors is as follows:
Table 2. **Trans-European Corridor IV**:

Section	Two - lane roads (km)	Four - lane roads (km)	Motor way (km)	Total length (km)	Motorway with one completed lane (km)
Vidin - Sofia - Kulata (Greek border)	352	22	72	446	-
Vidin - Sofia - Kapitan Andreevo (Turkish border)	299	17	220	558	22

10 Data from National Statistical Institute, Bulgaria
11 Data from the National Statistics Institute

Within the Trans-European Corridor IV, the rehabilitation of 110 km and construction of 70 km of motorways sections is forthcoming.

Table 3. **Trans-European Corridor VIII**:

Section	Two - lane roads (km)	Four - lane roads (km)	Motorway (km)	Total length (km)
(Gjuesevo-Sofia-Plovdiv-Burgas-Varna)	461	35	143	639

Rehabilitation of 76 km and construction of a 285 km motorway section is planned within the Trans-European Corridor VIII.

Table 4. **Trans-European Corridor IX:**

Section	Two - lane roads (km)	Four - lane roads (km)	Motor way (km)	Total length (km)
Ruse-Stara Zagora - Makaza / Svilengrad	399	56	143	598

Within the Trans-European Corridor IX, rehabilitation of 82 km and construction of 20 km of new roads, including the construction of a 2 km tunnel under the Shipka Peak, is forthcoming.

And **Trans-European Corridor X**: Section: Kalotina - Voluiak - Sofia 59 km.

The Ministry of Regional Development and Public Works have submitted a project for co-financing by the EIB and ISPA, which plans the rehabilitation of 800 km of 1st class roads on the four Trans-European Corridors. Additionally, it includes the repair of bridges, tunnels, viaducts and over and underpasses along these roads. The cost of the project is EURO 161 million: EURO 81 million loan from EIB and the rest from ISPA. The project claims to contribute to the betterment of road safety, environmental protection and achievement of international road standards.[12]

At the Business Advisory Council meeting in February 2004 in Sofia, Bulgaria, within the Stability Pact for SEE, the chairman of the Council Mr. Manfred Nussbaumber declared that "Bulgaria is lagging behind Romania in road construction and there are limited funds available for secondary roads." More investments in the development of 2nd and 3rd class roads was one of the main recommendations after the meeting.[13]

Approximately 2 500 km of 1st grade roads are part of the European road network. The following **international roads** cross the territory of the country:

- TEM (E80) - total length 370 km, of which 170 km is motorway;
- E79 - Romania - Vidin - Kulata - Greece;
- E83 - Romania - Ruse - Sofia;
- E871 - Sofia - Gueshevo - FYR of Macedonia;
- E772 - Sofia - Varna (Iablanitza - Shumen);
- E70 - Romania - Ruse - Varna;
- E85 - Romania - Ruse - Veliko Tarnovo - Stara Zagora - Khaskovo- Greece;
- E87 - Romania - Durankulak - Varna - Burgas - Malko Tarnovo - Turkey;
- E773 - Burgas - Popovitza (Sofia - Yugoslavia).

2.2 Urban and public transport

Sofia Urban transport

The currently one million inhabitant city of Sofia had a relatively well-developed public transport system currently consisting of bus, trolley, tram, underground transport. The drastic growth of the population of the city in the last decades is combined with the radical increase in the amount of cars and the inadequate maintenance and expansion of public transport in Sofia.

The public transport infrastructure is managed and developed by the Sofia municipally, which has made little efforts to alleviate the difficult traffic congestion in the central part of the city. Hardly any efforts have been made by the Municipality in Sofia for the promotion of bicycle transport by providing cycling infrastructure (lanes, parking racks, etc.). Therefore the traffic and transport situation in Sofia enters the negative spiral of worsening public transport; thus, the number of cars will increase causing congestion, which discourages the use of bicycles.

2.3 Freight transport

Road transport comprises about 55% of freight transport in the combined road plus rail market. It focuses on shorter distance, higher value and often sensitive shipments. In the passenger area, however, road trans-

12 Report of the Minister of Regional Development and Public Works, Mr. Valentin Tserovski, on the business meeting "Trans-European Transport Corridors crossing the territory of Bulgaria" with the participation of Mr. Erhard Busek, Stability Pact Coordinator, Sheraton Hotel, Sofia, 11.02.2004

13 Business Advisory Council, meeting report, February 2004

port competes aggressively with rail transport and has gained a share of about 70% of the intercity transport market. Data from Table 5 shows that road transport is the most often used mode of transportation, implying and the railway and inland waterway transport potentials seem relatively underutilised.

Table 5. **Freight transport by mode and group of goods (%) - data for 2001:**

Railway transport	20,3%
Road transport	41,2%
Inland waterways transport	1,4%
Maritime transport	17,6%
Air transport	0,004%
Pipeline transport	19,5%

Source: NSI[14]

2.4 Railway transport

The Bulgarian railway network consists of about 4 300 km railway lines, of which 4 055 km is standard gauge (1 435 mm), the rest being narrow-gauge (960 mm). About 960 km (22% of the whole network) is double track, and 2 640 km (about 61,4%) is electrified. The system includes around 400 stations and 300 station halts. Freight depots, container terminals and passenger stations are incapable of withstanding a significant increase in traffic.

The major part of the railway network is designed for speeds of 80 - 100 km/hour, with only 150 km of the lines designed for speeds up to 130 km/hour. The maximum speed allowed over the station switches is 100 km/hour, which in turn limits traffic speed through the stations.

During the years of transition, the volume of railway services went down by 50% in freight and 45% in passenger transportation. The increase of tariffs, resulting from the liberalisation of the railway services, had an additional negative impact on the income of the Bulgarian State Railways. [15]

According to the WB, "*Bulgarian State Railway (BDZ) operates very inefficiently: its net income has been negative since the economic transition. BDZ receives a large contribution from the State to cover its deficit - an average of 0,8% of GDP in recent years. These large subsidies have not prevented the serious deterioration of railway assets. To stem the weakening of the railway sector, key priority reforms include a drastic reduction in uneconomic services initiated on the basis of a carefully prepared and properly discussed rationalisation plan.*"

Following the current railway transport optimisation program, the MTC reduced the railway network by 308 km in 2003 and will cut 320 km more by the end of 2004. Additionally, 143 trains were reduced in 2002. As a result of the two phases of railway reduction, the BDZ losses will be cut down altogether by LV 17 545 000. Following further WB recommendations, Bulgaria will have to gradually release up to 30% of BDZ employees.

In conclusion, the BDZ capacity is currently underutilised in both passenger and freight transportation, resulting both from bad management and lack of maintenance and investment.

2.5 Air transport

Bulgaria has ten civil airports, four of which are international. Air transport activity at the moment is concentrated in Sofia, Burgas and Varna, which serve mostly international traffic. The greatest environmental and social concerns regarding the existing airports are posed by Sofia Airport.

Sofia Airport

Sofia airport is situated within the capital city very close to human settlements, thus posing serious problems to the environment and the health of local people. However, the airport has attracted the attention of the international financial institutions as well as the Stability Pact, thus becoming a priority project for investment programmes.[16] In 1997, the development of a project for "Reconstruction, Development and Extension of the Sofia Airport" has started. It consists of LOT B1 New terminal building and related facilities and LOT B2 New runway system, taxiways and related works. The project is part of the Trans-European Transport Corridor IV and VIII. Its total cost is estimated to be around EUR 210 million, from which:

- a EUR 60 million loan from the EIB;
- another 40 million EUR loan form the Kuwait Fund for Arab Economic Development;
- EUR 50 million financial assistance through the ISPA Programme;
- and EUR 7,6 million for technical assistance from PHARE.[17]

14 National Statistics Institute
15 MTC site, http://www.mtc.government.bg/Transport/Documents/Railway/Doklad_Krushkova%2025.09.03.htm
16 Stability Pact web page -- www.stabilitypact.org
17 Sofia Airport web page - www.sofia-airport.bg

The project for the extension of the Sofia airport is more than dubious - it was developed seven years ago in conditions which do not correspond to the reality of the current situation. The assessments on the traffic levels never reached the forecasted passenger traffic since the air transport witnessed a 11% decrease in traffic after the Bulgarian airlines "Balkan" went bankrupt. It is questionable whether it will ever reach the expected 2,5 million passengers.[18]

Moreover, the project is developed without the proper assessment of alternative locations and fails to take in consideration the disability of implementing bodies to manage the project, to undertake the necessary public involvement and to ensure proper mitigation measures. Currently, the cost of the project is constantly increasing, and the large amount of money already lent for the project implementation is not enough, because the ground under the construction site is quite unstable, and more money should be pledged from the Bulgarian national budget.[19]

Keeping in mind the above stated problems, we should conclude that the current levels of air traffic do not justify such investments especially in the form of loans for the extension of the Sofia airport. Moreover, the project will bring new problems to the environment and to nearby human settlements. The current location of the airport is not acceptable and a new location should be studied. The volume of the expansion should correspond to new studies showing the real traffic forecast. Public money from the EU accession funds and public banks, such as the EIB, should not support such environmentally and socially harmful and economically unsustainable projects.

2.6 Water transport

Inland waterway transport

The River Danube is both a Bulgarian and an international waterway, regulated by a number of agreements and conventions preceding the many changes that have taken place in Central and Eastern Europe (CEE). These regulations and conventions have been revised and amended to deal with the changing circumstances, most notably those relating to the Rhine - Main - Danube canal.

The two major ports on this water route are Ruse and Lom. The harbour of Ruse comprises an inter-modal terminal serving the traffic to Germany and Ukraine, while in the harbour of Lom there is the terminal of SOMAT (International Road Transport) for catamarans travelling to Western Europe.

The Port of Ruse-East has a total length of 1 440 m, with 10 separate berths and 16 gantry cranes. The open warehouse area is 27 270 m^2 and the covered warehouse area is 4 042 m^2. The Port has a Ro-Ro ramp, a ferryboat pontoon with a mobile bridge, high capacity gantry and auxiliary equipment. It handles bulk cargo, containers, cars, coal, etc. There is a connection to the Ruse-North railway station.

The Port of Ruse-West has a 1 200 m quay front separated into 11 berths and served by 12 cranes. This port handles mainly general cargo, chemicals, metals and timber. It has 9 800 m^2 of covered warehouse area and 26 140 m^2 of open warehouse area. It is connected to the Ruse-West railway station.

The Port complex of Lom has 13 berths, 26 electric gantry cranes with capacity of 5 to 20 tonnes, as well as other high performance back-up equipment. The port has vast open and covered warehouses and handles domestic and international freight forwarding, together with bulk, general and container cargoes.

The Port of Vidin is the third largest port along the Bulgarian section of the Danube River. Its area is between 785+000 km and 795+000 km. The harbour has three specialised quays for loading and unloading and 8 cranes, as well as direct railway and road connections to the national transport network.

Despite the relatively well-developed harbour infrastructure, only up to 1,4% of the freight transportation passes through the Danube water channel. The underutilised potentials of harbours, coupled with the inconvenient connections linking them with the inside of the country, is a problem which needs special attention.

Sea transport

The two major seaports of Bulgaria, Varna and Burgas handle more than 60% of the national foreign trade freight turnover. These ports have container terminals, Ro-Ro equipment and many berths for different types of bulk and liquid freight. They are spread over a substantial area and are connected with the railway and road networks.

The Port of Varna - East has a total wharf length of 2 072 m, a maximum depth of 11 m and 13 berths. Its covered warehouse area is 24 000 m^2 and the sites for open warehouses total 115 000 sm^2. It specialises in handling general freight, machines, technical equipment, grain and containers.

18 Ministry of Finances, Application form for ISPA funding
19 DNEVNIK newspaper, online, August 5th, 2004

The Port of Varna - West has a total wharf length of 3 432 m, a maximum depth of 10 m and a total number of 19 berths, 17 of which are for loading purposes. It specialises in handling bulk freight, general cargo, cars, timber, containers, liquid fertilisers, etc.

The East Port of Burgas has a wharf length of 1 965 m, a maximum depth between 7 and 10 m, and a total number of 14 berths, 10 of which are in operation. Its covered warehouse area is 44 500 m^2, and its open warehouse area is 50 000 m^2. Vessels up to 25 000 tonnes can be handled in this port, which is also directly connected to the road and railway networks.

The bulk freight Port of Burgas has a total wharf length of 750 m and 5 berths with a maximum depth 11 m. The covered warehouse area is 5 000 m^2, and its open warehouse area is 49 000 m^2. It handles ships of a maximum 60 000 tonnes and is directly connected to the road and railway networks.

The West Port of Burgas has a wharf length of 890 m and 6 berths with a maximum depth of 11 m. The covered warehouse area is 11 000 m^2, and its open warehouse area is 191 000 m^2. It can handle vessels up to 40 000 tonnes and is directly connection to the road and railway networks.

2.7 Inter-modal transport

In December 1997, the Ministry of Transport and Communications accepted a programme for the development of combined transport in the Republic of Bulgaria by 2010. The Ministry needs to update the programme in view of the changes in the European legislation on the promotion of environmentally sound modes of transport and on equal conditions for inter-modal competition. In February 2003, the decree for combined transport as a part of the railway transport law was set in force.

3 Transport policy in Bulgaria

3.1 Administration and structures

The Ministry of Transport and Communications (MTC) and The Ministry of Regional Development and Public Works (MRDPW) are responsible for the implementation of the national strategy in the transport sector. There are several agencies under the two ministries, each of which is responsible for: road infrastructure, maintenance and development; railway infrastructure, maintenance and development; air and water administration:

- The Road Executive Agency, under the Ministry of Regional Development and Public Works (MRDPW);
- "Motorways" AD, under the Ministry of Regional Development and Public Works;
- Executive Agency ISPA, under the MTC and under the MRDPW;
- The Maritime Administration Executive Agency;
- The Civil Aviation Administration Executive Agency;
- Bulgarian State Railway Company;
- Railway Infrastructure Company;
- The Railway Administration Executive Agency.

Agencies are established by law; they work under the Ministries and are independent administrative structures at the same time. They are financed from the state budget and sectoral revenues. For example, the Road Executive Agency is financed by the budget transfers based on: the income from the excise tax (of about US $0,30 per litre of gasoline fuel); transit fees paid by foreign vehicles; the vignette system, which is to be introduced gradually starting in April 2004; and external loans and grants.

3.2 National transport policy (2000-2005)

The Bulgarian transport policy for the period 2000 - 2005 is set up to provide the principles adopted by the Government for the development of the transport sector. It is important to underline the fact that these policy directions are primarily geared towards membership in the European Union and NATO, development of free market relations and democratisation of the processes in the political, economical, cultural and social life of the people.

There are several main priorities set in the transport sector strategy:

1. Harmonisation of national legislation and transport regulations with those of the European Union Member States;
2. Development of transport infrastructure;
3. Implementation of structural reform and privatisation in transport;
4. Participation in the ISPA and PHARE Programmes. It is striking to notice the fact that participation in ISPA and PHARE Programmes are seen as "priority" goals in the National Transport Policy. Participation in these programmes is only an instrument for the achievement of goals such as the development of sustainable transport systems, for example, not a goal itself.

The main issues in the road transport sub-sectors are: the relatively weak capacity of the Road Executive agency to assess its priorities and prepare sound expenditure plans; and the insufficient allocation of funds to road maintenance.

3.3 Legislation in the transport Sector

The following laws were adopted:
• Civil aviation law - approved and in force since January 1, 1999;
• Law on maritime spaces, inland waterways and ports of the Republic of Bulgaria - approved and in force since February 14, 2000;
• Road traffic law - approved and in force since September 1, 1999;
• Road transport law - approved and in force since September 17, 1999;
• Railway transport law - approved and in force since January 2002;
• Law for amendment of the Merchant Shipping Code - adopted in December 2002;
• EU Accession Chapter "Transport policy" opened in June 2001 and closed in June 2003

In the field of *road transport*, amendments to the Law on Roads were adopted in January 2003. According to these amendments, charges for Bulgarian and foreign-registered vehicles will be aligned as of January 2007. The agreement on the international Occasional Carriage of Passengers by Coach and Bus (Interbus Agreement) was ratified in November 2002.

The Law on *railway transport* entered into force in January 2002, abolishing the State monopoly on railway transport. The railway company BDZ was split into two companies, one for infrastructure (the National "Railway Infrastructure" company) and the operator (BDZ plc). The law also established rules on access to railway infrastructure and on separating the income and expenditure accounts of railway enterprises, as well as on the introduction of user charges on railway infrastructure and a licensing regime for railway operators.

On inland waterway, the law amending the Merchant Shipping Code was adopted in December 2002. In regards to maritime transport, the delay in adoption of amendments to the Merchant Shipping Code has slowed further transposition of the acquis. These amendments should cover improved maritime safety and protection of the marine and river environment, as well as providing the framework for further implementing legislation.

In regards to *air transport*, Bulgaria continues to implement legislation for the Civil Aviation Act of 1999. Furthermore, efforts are made to create a friendlier market environment for competition and "step-by-step" liberalisation upon EU accession.

3.4 Privatisation in the transport sector

The MTC policy in the field of privatisation is to keep the current share of state capital for a few companies only, depending on their specific functions and obligations to the state, according to the Constitution of the Republic of Bulgaria and the relevant international agreements. The Ministry has concluded 496 privatisation contracts in total since the beginning of the privatisation process, 353 of which are related to stocks and stakes and 143 to detached companies. There are 218 privatised companies in the field:

Table 6. Privatised transport companies[20]

Field	Privatised companies
Railway Transport	3
Air Transport	9
Maritime and Inland Waterways Transport	5
Road Transport	150
Auto Repairs and Services	26
International Road Transport	1
Projection, transport and road construction	12
Research services, Development activities and Informatics	7
Forwarders' activities	4
Foreign Trade	1

3.4.1 Privatisation of road transport

All companies dealing with vehicle repairs and taxi transport have already been restructured and privatised, as have 89% of the companies for freight and mixed transport. The Directorate General "Road Administration" has been established under the MTC. This directorate is responsible for road policy

20 Bulgarian Ministry of Transport and Communications' web page: http://www.mtc.government.bg/Privatisation/privatization_transport.html

matters including licensing, relations with other countries, etc.

With the entering into force of the new Road transport law on September 17, 1999, the former General Road Directorate (GRD) under the MRDPW was transformed into the Implementing Agency "Roads". It is responsible for the implementation of road infrastructure projects, including ISPA-financed ones. Its statute and responsibilities are covered by the same law. The development and reconstruction of motorways is managed by the State Administration "Motorways" under the MRDPW.

3.4.2 Privatisation of railway transport

In accordance with the Law for the Bulgarian State Railways and the Council Directive 91/440/EEC of 29 July 1991 on the development of the European Community's railways, it is envisaged that only the railway infrastructure (railway lines, electric network, stations, etc.) will remain state-owned.

Railway industry and other sections of the National Company "Bulgarian State Railways", together with the commercial activities of railway transport, is subject to privatisation. The transport of passengers and freight is expected to be given under concession. The new law on railway transport set up the Implementing Agency "Railway Administration".

After January 2002, the Bulgarian State Railway Company was separated into BDZ AD as a railway transporter, and NC "Railway infrastructure" as the railway infrastructure owner. To date, 8 out of 13 railway enterprises dealing with rolling stock repairs and construction have been privatised.

3.4.3 Air transport privatisation

The Implementing Agency "Civil Aviation Administration" was established under the MTC. To date, 87% of the aviation companies have been restructured. The procedure for privatising "Balkan" Bulgarian Airlines was finalised by selling 75% of the company's shares. After the collapse of the Balkan Bulgarian Airlines in 2003, a new national company, "Bulgaria Air", was established. A number of smaller aviation companies are to be privatised in order to fully accomplish the process of privatising agricultural aviation. Some assets of the civil airports, as well as some activities related to land servicing, are to be given under concession.

3.4.4 Maritime transport privatisation

Step-by-step privatisation after restructuring is envisaged for the non-core activities of shipping companies and ports. The separation of the qualification centre from the "Maritime Navigation Bulgaria", plus the separation and subsequent privatisation of the tug fleet and the Bulgarian Register of Shipping, are presently in progress. The draft law on marine areas, inland waterways and ports stipulates that the ports should be restructured and given under concession, either totally or in part.

The Implementation Agency "Maritime Administration" has been established under the Ministry of Transport and Communications, and the General Directorate "Port Administration" will be established after the law on marine areas, inland waterways and ports is enacted. At present, only 12% of the long-term assets scheduled for privatisation before the end of 2000 are still left within the Ministry of Transport and Communications.

4 Projects financed by IFIs and the Ministry of Transport

4.1 State budget

The state budget for the transport sector is shared between the MTC, the MRDPW and the Executive Agencies. In Bulgaria the national budget is one of the main sources for ensuring subsidiaries for the transport sector and co-financing for large infrastructure projects supported by the IFIs. Most of the money from the budget is usually pledged for the construction of road infrastructure along the Trans-European Corridors and mainly for new highways. But the construction of new highways requires financial resources to ensured their maintenance. This is one of the main critiques underlined in the Transport Infrastructure Regional Study (TIRS)[21] - the disability of Balkan governments to generate enough incomes in order to ensure good management and maintenance of transport networks. Related to the poor and slow management of transport projects, their cost usually rises quite above the initially stated

21 The Transport Infrastructure Regional Study in the Balkans has been undertaken in the context of the Stability Pact.

cost. Thus, the national budget is usually used to cover the cost divergence over the years.

Table 7. Transport sector budget[22]

Transport	2000
Incomes (LV thousand)	39 802,3
Outcomes	77 634,5
Subsidiary	27 946,0

Table 8. Transport budget by categories.

For what	2000	2001	2002	2003
Road transport			LV 199,4 m	
Railway transport	LV 40 m	LV 60 m	LV 70 m	LV 70 m
Public transport		LV 20 m	LV 21,5 m	LV 17 m
Total for MTC				680,4 (1,9% from GDP)

4.2 EU projects

One of the main Trans-European Corridors is N 4: Dresden - Praha - Vienna - Budapest - Craiova - Constanta - Sofia - Solun / Plovdiv - Istanbul. The total length of the corridor on the territory of Bulgaria (direction Sofia - "Kulata") is 446 km, and Sofia - Plovdiv - Svilengrad - Kapitan Andreevo) is 277 km. The rehabilitation of 275 km of roads and motorways in this corridor has been finalised in the programme "Transit Roads" 1,2 and 3.

The rehabilitation of 112 km of roads in the same sector, co-financed by the ISPA programme, will start in 2005. The sector Sofia - Orizovo (171 km), which is a part of the Trakia motorway, has been completed.

ISPA

Bulgaria is eligible to submit projects for financing under the ISPA (Instrument for Structural Policies for pre-Accession) programme of the EU. The ISPA is a financial instrument assisting the candidate countries in preparing for EU accession. It provides financial support for investment in the areas of environment and transport in order to speed up the compliance in candidate countries with the EU legislation in these two sectors.

Assistance is provided for large-scale transport infrastructure projects connecting the national transport networks with the Trans-European (TEN) ones, as well as for the construction and renovation of ports and airports. Between 2000 and 2002, five projects in the field of transport for about EUR 669,465 million were agreed upon in the ISPA programme, from which EUR 349,336 million will be in the form of grants.

The budget contracted before the end of 2003 for the ISPA Implementation Agency under the MTC is EUR 130 280 330,43, of which EUR 17 807 976,01 has been spent. The projects under this agency are:

- Reconstruction and development of the Sofia airport - Measure 2000/BG/16/P/PT/002;
- Danube Bridge II - Technical support for designing;
- Modernisation and electrification of railway Plovdiv - Svilengrad.

The ISPA Implementation Agency under the Implementation Agency "Roads" - EUR 188,45 million for 2 projects:

- Program for rehabilitation of "Transit roads 3" - EUR 30 million + EUR 10 million from the state budget;
- Implementation of "Lulin" motorway - EUR 230 million.

The Court of Auditors in Bulgaria produced a report which presented the results of the conducted audit of the implementation of the activities of the Executive Agencies for ISPA Programmes (under the MTC, Ministry of the Environment and Waters, MRDPW and the Executive Agency "Roads"). According to that report, only a very small percentage of the ISPA grants will have been spent by the end of 2004. From the total transport sector budget of EUR 669 465 million, only 24,14% are absorbed.

The report underlines the low capacity of the Implementing Agencies to manage projects and meet deadlines. The overall assessment reveals that project implementation is characterised by poor quality and incompleteness of documentation and tender procedures.

As a consequence of this report, the Bulgarian Parliament voted for the establishment of a temporary commission within the Parliament, which will analyse the absorption of PHARE and ISPA funds for the

Table 10: Transport budget by ISPA.

Sector	no. of projects	Total eligible cost	Total ISPA contribution 2000-03	%	Commitments 2000-03	%	Payments 200-03	%paym/comm
Transport	5	669 465 135	349 335 500	56,8%	205.142.567	47,9%	43.312.532	21,1%

ISPA mini report 2000-2003

22 Decision of the Parliament of the Republic of Bulgaria on the adoption of the national budget report for 2000

period 1999 - 2004.[24] The report also underlines that in most of the projects, transparency and public awareness are not ensured.

PHARE

Each year the European Commission signs Financing Memoranda with candidate countries. At present, according to the national programme for Bulgaria, PHARE aid is concentrated in four main areas: economic reform and the implementation of the acquis communautaire; economic and social cohesion; strengthening public administration; and ethnic integration and civil society. There are a huge number of projects in Bulgaria financed by the PHARE Programme. Additional grants of about EUR 28 million were given for programmes for transnational cooperation - infrastructure projects for the borders of Bulgaria with Romania and Greece.[25]

3.3 IFI projects

3.3.1 Regional infrastructure programme and projects - Stability Pact projects

The Infrastructure Steering Group (ISG) was set up in May 2001 to facilitate the development of regional infrastructure in SEE. Bulgaria received EUR 650 million for 12 projects[26]

3.3.2 EIB

The European Investment Bank (EIB) is one of the biggest loan providers to all Balkan countries, including Bulgaria. the main objectives of the Bank are preparing the accession countries for EU membership and Trans-European Transport and Energy Corridors. The biggest loans pledged to Bulgaria are for the construction of large infrastructure projects particularly in the transport sector.

In May 2002, the EIB developed the Air Traffic Infrastructure Regional Study (ATIRS)[27], which recommended that investments in aviation should be channelled only to "modernisation of the existing installations or maximising their potential." However, the EIB is providing a EUR 60 million for the extension of Sofia airport, a project that is not justified and has negative impact on the local people and environment. Under the transit roads programmes together with the co-financing of the ISPA, a small section of highways are being constructed along the Trans-European Corridors. Although the EIB is one of the largest lenders in countries like Bulgaria, the Bank lacks environmental procedures and effective monitoring mechanisms for the projects it finances and remains one of the most non-transparent public banks.

Table 11. List of projects financed in Bulgaria by the EIB[28]:

Name of the project	Amount of the loan in EUR	Date of Signing
Transit roads iv - afi	60 000 000	25/04/2003
Danube port of lom	17 000 000	06/02/2002
Ten railway	70 000 000	19/12/2001
Road rehabilitation	30 000 000	27/04/2001
Danube bridge	50 000 000	08/12/2000
Trakia motorway	100 000 000	26/07/2000
Ten railway	80 000 000	09/07/1999
Transit roads III	60 000 000	23/09/1998
Cross-border/tens corridors road proj.	40 000 000	12/02/1998
Sofia airport project	60 000 000	09/09/1997
Transit roads II	60 000 000	20/07/1995
Transit roads II	21 000 000	23/07/1993

3.3.3 EBRD

The European Bank for Reconstruction and Development (EBRD) is set up to help countries in transition get closer to a full market economy and democratisation. In Bulgaria, the EBRD is providing financing for the Project "Sofia Public Transport" and thus proposes to extend a loan of EUR 35 million to the city of Sofia to finance an investment programme in the urban transport sector consisting of: (i) the refurbishment of trams; (ii) new buses; (iii) new trolley buses; (iv) a passenger ticket system; (v) a transport control system; and (vi) tram track renewal. It will seek to syndicate part of the loan to a commercial bank.[29]

24 DNEVNIK Newspaper, May 12th, 2004
25 Ministry of Regional Development and Public Works web page, Directorate PHARE Programme
26 Office for South East Europe - European Commission/ World Bank, Regional Infrastructure Projects - Status as of November 2003
27 Air Traffic Infrastructure Regional Study (ATIRS), Executive ATC Summary Report, prepared by the Nordic Aviation Resources AS, Oslo, Norway, May 2001
28 Data from EIB web page
29 European Bank for Reconstruction and Development web page, www.ebrd.org

3.3.4 World Bank Group

Table 12. Projects financed by WBG in Bulgaria:

Name	Committed amount	Product line	Status	Approval date
First Programmatic Adjustment Loan - P067051	150	IBRD/IDA	closed	02/20/03
Trade and Transport Facilitation in Southeast Europe - PO70086	7.4	IBRD/IDA	active	05/25/00
Railway Rehabilitation Project - P008315	95	IBRD/IDA	closed	07/26/95

Programmatic Adjustment Loans
The Bank's involvement in the Bulgarian transport sector is substantial given the seriousness of the problems that the sector faces, and its impact on both the economy and the standard of living. The two main activities underway are: 1) Implementation of the Trade and Transport Facilitation Project, aiming to improve the performance of customs and remove impediments to the international road transport, including an increase in the efficiency of road border crossing points; 2) implementation of a comprehensive programme of railway reforms as a main component of three co-ordinated Programmatic Adjustment Loans.

The Bank is planning a transport sector review for its fiscal year 2005. Recently the Bank started working with the Government on the development of a new Community Services (Roads) Project, focusing on the rehabilitation of secondary roads in economically depressed regions of the country.

Railway Rehabilitation Project, under the umbrella of the Bank/EBRD - 1997

Project has included investments in the infrastructure and rolling stock, major reductions in personnel and divestiture of almost all ancillary activities.

4 Environmental problems related to transport

Transport has a significant contribution to a whole series of environmental problems. Surpassed only by the energy sector, transport is the biggest single consumer of non-renewable fossil fuels. Issues like climate change, air pollution, noise, land take and destruction of natural habitats appear more and more in connection to transport.

Despite declared political will to reduce emissions, in Bulgaria the level of CO2 is currently increasing:

Table 13. Levels of greenhouse gas emissions.

Environmental	tones CO2 per capita				
Total greenhouse gas emissions	51,4	49,4	49,4	:	:
	Kl petrol equivalent for EUR 1 000 from GDP				
Energy intensities on economy	2 229,0	1 986,2	1 917,9	:	:
	as % from the total energy consumption				
Share of renewable energy	8,1	7,7	7,4	:	:
	as % from total freight transport				
Categorised into freight transport	77,0	77,8	52,3	60,5	:

A National Automated System of Environmental Monitoring by environmental component (air, water, land, forests and soils) as well as by factor of impact (waste, noise, ionising and non-ionising radiation) has been put in place.

Unfortunately, there is a problem with incomplete legislation on access to and exchange of information among the various public administration departments. As a result, significant data is left unprocessed and other data is duplicated. In some cases, the decision-making process suffers by the lack of required information or by its inappropriate format. The scope of the information system is limited as regards to the performance of all environmental indicators.

Conclusions

- There is a potential for the development of rail transport, which is currently under-utilised;
- The potential of air transport is overestimated: while it attracts huge investments, traffic levels are quite low, and its negative impact on the environment and local people is tremendous;
- There is a lack of studies demonstrating the need for the development of 2nd and 3rd class roads: all studies, and hence projects, are focused on the development of Trans-European Corridors, i.e., mainly highways, airports and harbours;
- Existing and newly constructed roads demand maintenance, yet no activities and financial resources in this direction are foreseen;

• In big cities, such as the capital city, the state of the public transport is poor, and little is done to improve it and introduce environmentally friendly transport modes;
• The huge loans provided to the Bulgarian government to support large highway, airport and harbour projects oftentimes lack justification and, instead of being beneficial, prove to be environmentally and socially harmful;
• The loans are usually combined with EU financial aid from pre-accession funds in order to increase a project's Internal Rate of Return instead of being absorbed for small scale projects that are more beneficial to people and do not harm the environment;
• The loans for transit roads provide funding for separate sections of highways which do not require the performance of EIA, thus preventing the assessment of the cumulative effect of the overall highway;
• No SEA is performed on strategies, plans and programmes because of missing legislation on this matter.

Transport sector in Romania

1 Overview of Romania

Romania is located in South-Eastern Europe on both sides of the Carpathian Mountains on the lower course of the Danube and with access to the Black Sea. Its relief is defined by three distinctive elements: high-altitude areas - the Carpathian Mountains; medium-altitude areas - constituting the Sub-Carpathians, hills and plateaus; and low-altitude areas - planes, valleys and the Delta of the Danube. With a population of approximately 21 6 million, the country is one of the largest in Europe and three European Transport Corridors - IV, VII and IX - cross its territory. Romania recently became a member of NATO and is expected to enter the European Union in 2007, currently with eight negotiation chapters left open.

For the last four years Romania has been ruled by the Social Democratic Party. According to the Academic Society, 72% of voters want a political change in 2004 (elections year), but only 42% see a real alternative to the current government[30]. The big problem for the country is the rule of law, or lack of it. A survey conducted by Transparency International in 2003 found that Romania was widely considered one of the most corrupt countries in the world, let alone in Europe.

As GDP is growing and inflation and unemployment are decreasing, one may think things are beginning to look bright, yet a large percentage of the population is very poor, and the sets of reforms are not showing the long expected results. According to the World Economic Forum report for 2003-2004, Romania is number 75 this year in the top world competitive economies, eight places down compared to last year.

Country area: 238 391 km^2
Population: 21,68 million (2002)
Population growth: -1,8/1 000 inhabitants (2001)
GDP growth: 4,9% (2002)
Rate of inflation: 22,5% (2002)
Unemployment: 8,1% (2002)
Population below national poverty line: 28,9% (2002)
Gross external debt: USD 15,1 billion (2002)

2 Transport infrastructure

2.1 Road transport

The road network recorded a steady increase starting with 1994, up to over 78 000 km in 2001. This increase is due mainly to the extension of county and communal roads, which also represent the largest share of the network. On the other hand, out of the 63 670 km of county and communal roads, only 6 409 km are modernised[31]. The national roads are 14 822 km with insignificant extension over the last decade, yet the share of modernised national roads is said to have reached approximately 90%.

There are 113 km of motorway (Bucharest-Pitesti) which have lacked proper maintenance and already require repairs. Works were finalised in 2000 and EUR 300 million were invested in rehabilitation and modernisation over the last three years with another EUR 50 million scheduled this year for the same purpose.

Romania has 225 km of motorways under construction, and 554 km are being negotiated. Another 415 km will be built on a contract with the Bechtel company, constructions being scheduled to start this summer. Three segments of the Bucharest - Cernavoda motorway (to the Black Sea), i.e., 97 km, will be operational before the end of 2004.

The priority programme for motorway construction of the Ministry of Transport includes 88,2 km of motorway with ensured financing (EUR 270,3 million), projects to be started by the end of 2004, consisting of 331 km of motorway (EUR 1,540 million), while the projects to be started after 2004 imply 483 km of motorway (EUR 2 198 million)[32]. The total is over EUR 4 billion. Herein we also have to take into consideration

30 "Romanians are looking for a political alternative" - The Romanian Academic Society, March 2004 http://www.sar.org.ro/files_h/docs/publications_pr/Policy%20memo6-engl.pdf
31 "Statistics Yearbook - 2002", The National Institute of Statistics, http://www.insse.ro
32 "The Strategy of the Ministry of Public Works, Transport and Housing" http://www.mt.ro/engleza/strategy.html

the expenses for the rehabilitation of the national roads (needed for 9 400 km, USD 7,49 billion, on a long term).

It is said that the density of public roads (33 km/100 km^2) continues to be much lower than the EU average (116 km/100 km^2). The figures may be different if we calculate the density using the total length of roads (including roads in cities and villages), which is 198 589 km, giving us a density of 83 km/100 km^2.

Road traffic. There has been a significant increase in the number of merchandise motor vehicles between 1990 and 2001 (+76%), but not as spectacular as in the case of private cars (149%) in the same period [appendix 1]. At the same time, road freight transport had a huge decrease (-86%) [appendix 2], as is also the case for road passenger transport (-74%) [appendix 3].

Analysis of need for shift of investment

A recent study made by the Romanian Academic Society, entitled "The Road System Financing Crisis", brings out an interesting overview of the issue; a fragment of which is quoted below:

"The road system is chronically under-financed. With the last few years' resources, the road infrastructure is degrading faster than it is being reconditioned. Money is being allocated through political decisions, either to suspicious priorities with great prestige and visibility, but with low economic efficiency (e.g., motorways or bridges without the supporting traffic) or divided between counties discretionarily, ignoring criteria established by law. The lack of monitoring, control and transparency leads to very different costs per kilometre for similar works in different regions with different contractors. Due to the lack of transparency, the Romanian public only gets partial aspects, often superficial, of the roads policy and not a global image of the priorities and their means of implementation. Thus, Romania lacks real public debates in the infrastructure sector, which will get most of the public investment in the near future.

Approximately EUR 400 million are allocated annually in Romania to road maintenance and expansion; but that is approximately equal to the annual rate of degradation of the road infrastructure. A supplement of EUR 100-200 million per year would represent a step forward, allowing for rehabilitation to surpass degradation. But even this amount of money was hard to find when making the budget for the last few years.

In this context, the construction of two almost parallel motorways (through Arad on the European Corridor IV and through Oradea outside the European and Hungarian networks) with a total combined cost of EUR 6-7 billion represents an option hard to justify. First of all, because we don't have enough traffic west-east in Romania, not even for one motorway, even if there aren't any road access fees. Then, because the amount of money necessary for one of them - approximately EUR 3 billion for the Oradea motorway - could be used for:

- *total rehabilitation of the entire street infrastructure of all the 3 000 settlements in Romania (works estimated by the Government in the "Strategy for Communal Services" to EUR 1,9 billion), and EUR 1 billion would be left for other purposes;*
- *more than half of the 7 000 kilometres of national roads left to rehabilitate (according to the "Strategy in 15 steps" from step III to step X) could be finalised*

The public is not told clearly how expensive a motorway is: it costs EUR 6-7 million/km, while the National Road Administration rehabilitates a heavy traffic national road to European standards with EUR 750 000/km; almost ten times lower in costs. It is not clear why the Government diverts from its own priorities, and, in case it has supplement resources, why it does not invest them either in the national roads rehabilitation programme or in those projects agreed with the EU for which ISPA funding is available and which were delayed by the Romanian part (Corridor IV).

Everywhere in the world politicians are rather attracted by large investments that bring visibility and prestige, such as motorways. But the problem in Romania is that, in the case that the large projects under discussion are finalised (improbable), the network of national, county and local roads, which covers 90% of the traffic, will degrade at accelerated rates. The positive economic impact of motorway construction will not materialise if access to and from them will remain as bad as in the present, as we cannot move the entire population and economic agents on the European Corridors that cross Romania."" [33]

2.2 Urban and public transport

The number of towns with public transport decreased by 34% between 1990 and 2001. On the other hand, the length of trolleybus lines increased by 52%, while tram lines decreased by 5% in the same period. Considerable investments have been made in the Bucharest metro system, and the length of the lines increased from 120 km to 153,7 km. The number of registered vehicles used for public transport generally increased (especially the number of buses), while only the number of trams decreased.

Urban traffic. Urban transport had a general decrease in the number of passengers between 1990 and 2001,

33 "The Road System Financing Crisis" - The Romanian Academic Society, February 2004, www.sar.org.ro

curiously due to a large decrease in the number of people using buses and the metro (there is an increase in the number of passengers using trams and trolleys). There are huge congestion problems, especially in Bucharest, which aren't currently addressed. There is an air quality monitoring system installed at the major crossings, yet relevant information is poorly disseminated to the public by the environmental agency, and the relevant authorities are not called upon to address urban pollution.

2.3 Freight transport

The volume of goods transported decreased to a large extent in the last decade for all modes [appendices 4 and 5]. Road transport is leading, followed by rail transport, which still plays an important role in the picture. Unfortunately, beginning in 1998, the coverage and survey method for the goods road transport data are different from the previous years, and therefore the data is not comparable. If we take a closer look at the data on road transport of goods in Table 1, we see that 98% is represented by national transport and only close to 2% by international transport.

Table 1. Road and rail total freight transport (million tonnes/km)

	1997	1998	1999	2000	2001
Road	21 750	15 785	13 456	14 288	18 544
Railway	22 111	16 619	14 679	16 354	16 102

Source: "Statistical Yearbook on Candidate Countries, data 1997-2001", Eurostat

2.4 Railway transport

The railway system is 11 015 km - 46 km/1 000 km^2 (the EU average is 48 km/1 000 km^2)[34] - with a small decrease over the last decade. The share of electrified lines has shown little increase, from 3 680 km in 1990 to 3 950 km (approximately 35% of the total) in 2001. The railway network is currently being rehabilitated and modernised to allow for speeds of 160 km/h.

The technical condition of the railway network, which is generally bad, implies low average speeds compared to the status in neighbouring countries (there are speed limits on almost 70% of the network). This leads to a low competitiveness of the Romanian railway services as to other national modes of transport and as to the requirements of the European market.

In the period 1990-2001, the length of the railway network in exploitation decreased by 2,93%, while the total length of roads increased by over 7%, which stresses the trend to support the development of road transport to the detriment of railway transport. In the same period, the length of electrified lines increased by 7,1%, compared to an increase of 9% of modernised roads.

The railway system investment programme of the Ministry of Transport for 2002-2010 includes mostly rehabilitation and development projects along Corridors IV and IX, amounting to USD 6,115 billion.

Railway traffic. Freight traffic had a large decrease of 66% between 1990 and 2001 comparable to road freight traffic, though not in net amounts. Passenger traffic in the same period of time was down by 72%, even closer to the figures for road traffic.

2.5 Air transport

There are 17 airports of which 4 are international ones. The Bucharest-Otopeni airport is the most important, covering approximately 75% of the international passenger and goods traffic. The airport infrastructure is very old with repairs and modernisation having taken place in the period 1962-1980 and some works more recently.

Air traffic. Compared to road and railway traffic, which have had a steady decline, air transport shows some fluctuations, the general trend being downwards, though. Freight traffic decreased in the period 1990-2001 by 81% [appendix 4], while passenger traffic decreased by 53% [appendix 6]. On the one hand, the data for 2001 shows that passenger traffic has been 1,278 million passengers; on the other hand, the modernising strategy for the Bucharest-Otopeni international airport envisages tripling the transport capacity so that it reaches 15 million passengers in 2015 and 20 million passengers in 2025.

The estimated cost of the programme for development and modernisation of this airport is USD 225 million. We need to compare the national passenger traffic - 1,278 million passengers - and the current capacity of the Otopeni airport - 4,5 million passengers per year - and the plans to increase the capacity mentioned above. It may also be worth mentioning that the national air transport company, TAROM, had losses of USD 60 million in 2000, yet is foreseen to reach profitability in 2005.

34 "Statistical Yearbook on Candidate Countries, data 1997-2001", Eurostat

2.6 Water transport

The length of the network is 1 779 km, of which a segment of 1 075 km is represented by the Danube, 524 km by navigable channels of the Danube and 91 km of artificial navigable channels (Danube-Black Sea and Poarta Alba-Navodari). The Romanian shore is 245 km long, and the maritime infrastructure includes 3 harbours. With the other 26 fluvial and 6 maritime-fluvial harbours, the entire network numbers 35 harbours. They have approximately 49 000 m of hydro-technical constructions for ship moorage, of which 18,1% is older than 50 years and requires immediate rehabilitation works.

Waterways traffic. Water traffic shows large fluctuations as well, with sea goods transport down by 98%, but only a 5,8% decrease in inland waterway goods traffic [appendix 5]. Yet, waterway passenger traffic is down by 89,9%.

2.7 Vehicles

A spectacular increase in the number of vehicles (mostly private cars) took place after 1989, as during the communist regime it was difficult to get a car even if one had the money to do so. Cars are still considered as important assets nowadays, clearly defining social status. A clear picture of the increase in the number of vehicles can be seen here - from 1,29 million cars in 1990 to 3,2 million in 2001; and from 258 000 to 456 000 merchandise motor vehicles in the same period [appendix 1].

Unfortunately, a large part of the cars are Romanian made, which lack quality and safety. A large proportion are also quite old. The average age of vehicles is close to 12 years - nearly 60% of cars are older than 10 years, and 30% are older than 15 years. A study made by the Romanian Auto Registry shows that 80% of cars do not comply with pollution standards. Thus, the annual lead emissions from road traffic are 2 to 12 times higher than those in EU countries, and the SO2 emissions are 25% higher than those in Germany[35].

For example, the Bucharest Environmental Protection Agency did give a warning regarding the large share of cars that do not correspond to the norms regarding the level of emissions and recommendations were made. Yet there is no clear governmental signal for a switch to a cleaner mode of transport nor solutions for the traffic congestions. We need to state that there has been a certain decrease in the number of accidents and casualties over the last decade.

3 TRANSPORT POLICY

3.1 Administration and structures

The transport infrastructure is public property of the State, and the assets are being administered by national entities/companies/corporations under the jurisdiction of the Ministry of Transport, Constructions and Tourism (MTCT) or the Ministry of Public Administration (MPA), who may award these assets for concession in accordance with the provisions of the Romanian legislation.

The Ministry of Transport is in charge of setting up the general transport strategy and policy, defining the needs in terms of network development, dealing with international organisations and organising the transport operation through the licensing of operators and setting up rules and regulations for the transport sector.

The national roads are administered and managed by the National Administration of Roads (NAR) - an autonomous entity under the MTCT. County roads are administered by county councils and managed by the county technical departments. Communal roads are administered and managed by the village councils aided by the county council technical offices.

Road financing is arranged through a Road Fund, which receives 45% of the fuel excise tax. This income is shared between the national roads (65%) and county roads (35%). The road fund income covers the administrative expenses, routine maintenance, loan service payments and limited rehabilitation costs of the national roads. It also covers most costs of county road rehabilitation and maintenance.

The former Romanian Railways National Company was restructured, and Romanian Railways was divided into four companies: the Rail Infrastructure Company, the Passenger Rail Transport Company, the Freight Rail Transport Company and the Railway Information Systems (these companies are fully state-owned). The Company's main income source is the Track Access Charge (TAC) levied on all operating companies. The passenger company provides extensive passenger service at low tariffs. This is supported by the State through Public Service Obligation (PSO). The freight railway company is managed commercially, receives no subsidies and legally has the freedom to manage and set tariffs. The railway information systems company provides the railway companies information for a fee for four subsystems: the infrastructure, maintenance

35 "Transport and Environment in Romania" - Powerful Information & The Romanian Group for Sustainable Transport, 2000

of rolling stock, train circulation and monitoring and the freight operations.

The Ministry of Transport licensed ten private rail freight operators, which share the use of the rail tracks and pay the TAC to the Railways Infrastructure Company. The private operators now have 10-15% of the rail freight market.[36]

In the maritime and inland waterways transport sector, similar principles have been adopted where state-owned bodies or entities are in charge of the port infrastructure and award concessions to private bodies for port operations.

The national airline, TAROM, is fully state-owned, and there are no current plans for its privatisation. The air transport infrastructure is managed by national companies for the international airports with the MTCT as owner and administrator. The other airports (serving only domestic air traffic) are administered by local public companies.

3.2 National Transport Strategy

3.2.1 The Geostrategy of Transport Modes is the programmatic document of the Ministry of Transport. It gives a short history of transport development in Romania, comprehensive information on the status of transport infrastructures and a list of ongoing and planned projects. One of the problems is that the most recent statistical data in the document dates back to 1999.

The vision of the strategy encompasses: (i) reorganisation of the national network to cover the entire territory, hence eliminating the areas which lack volume and quality of transport; (ii) satisfying the citizens mobility needs; (iii) development of intermodal transport; (iv) ensuring safety and environmental protection. The main infrastructure projects (rail, road and waterways) in the Stability Pact are also mentioned among its priorities. The specific objectives envisage maximising the positive effects on the environment and minimising the global and local impact of transport activities.

The modernisation, rehabilitation and development of transport infrastructures include the following priorities: starting the construction of motorways (in conformity with the final TINA report) in order to integrate the Romanian transport infrastructure in the TENs; the construction of bridges and by-passes on Corridors IV and IX in order to increase the mobility of the population, goods and services; the modification of the current tax system in rail and road transport in order to increase accessibility to services and to reach European standards[37].

The energy consumption of different modes of transport, external costs (health impact, accidents, air pollution, climate change, damages to the transport network, loss of biodiversity) are not being taken into consideration in the general framework.

We need to mention that *Chapter IX, Transport of the accession negotiations*, was closed in December 2003 with the request for a transition period regarding the implementation of:

- Council Directive 96/53 laying down the maximum authorised dimensions in national and international traffic and the maximum authorised weights in international traffic for certain road vehicles circulating within the Community;
- Directive 1999/62 of the European Parliament and of the Council on the charging of heavy goods vehicles for the use of certain infrastructures;
- Council Regulation 3921/91 laying down the conditions under which non-resident carriers may transport goods or passengers by inland waterway within a Member State;
- Council Regulation 2407/92 on licensing of air carriers;
- Council Directive 82/714 laying down technical requirements for inland waterway vessels;
- Council Decision 92/143 regarding the radio navigation systems for Europe.

The main financial organisations the Ministry of Transport is working with are the International Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the Japanese Bank for International Co-operation, the European Commission through the PHARE Programme and the ISPA facility. The strategy of the Ministry of Transport also involves the extension of World Bank (WB) or private sources financing.

3.2.2 The National Development Plan for 2004-2006 is a relevant document as to the state of infrastructure and traffic in Romania, yet it does not provide a strategic approach to transport. The transport chapter of the document only presents the current state of affairs in the transport sector and a single

36 "Transport Sector Overview" - The World Bank, http://www.worldbank.org
37 "Geostrategia Cailor de Transport" - The Ministry of Transport, Construction and Tourism http://www.mt.ro

paragraph on the corresponding strategy. We find it necessary to quote this paragraph, entitled "Development trends of transport infrastructure and economic impact", in order to get a clear picture of the strategic thinking in the field:

"In the future it is foreseen the development of roads network, underscoring the development of motorways network, rehabilitation of existing roads, bridges, with all modern coterminous facilities. Romania will appreciably increase its motorways network, which is poorly developed at this moment, with a view to intensify the transport of passengers and freight and to increase its safety. So, important railway sections will be rehabilitated and the main airports will be modernised for the increase of railway and air traffic of passengers and freight.

Development of transport infrastructure has major implications in the economic development of the country, stimulating undeveloped regions and increasing the GDP per inhabitant. Foreign investments attraction, development of industrial parks and tourism stimulation are only some sectors influenced directly by transport infrastructure development. Industry of construction materials and new jobs creation are strongly influenced by transport infrastructure development. Also, transport infrastructure at European standards, connected adequately to European transport network, involves an important increase of internal and external trade."[38]

It would be unfair, though, not to mention the fact that the document takes into consideration environmental issues, again quotation: *"A major concern regarding road transport lies in sustainable development and the reduction of negative effects on the environment generated by chemical and phonic pollution. Consequently, the norms to homologate the vehicles and for periodical technical inspection were aligned with the European Union provisions."*

3.3 Legislation in the transport sector

The most prominent law in the transport sector, which comes up virtually each time discussions are held concerning investments in the sector, is *Law 71/1996 on the Approval of the National Territorial Planning Document - Section I, Communications*. The law encompasses national interest, public utility communications, that is a shopping list actually, containing: 15 motorways, 22 expressways, 8 new bridges on the Danube, 5 new bridges on the river Prut, 33 new rail lines, 18 speed upgrades for existing or new rail lines, 5 high speed upgrades for existing or new rail lines, 14 waterways improvement projects, 12 Danube ferry-boat crossing points, 17 port improvements projects on the Danube, 5 new inland ports, 17 airport infrastructure projects and 4 new airports. One could only be amazed at these titanic plans and think of strategic environmental assessments.

According to the "Regular Report on Romania's progress towards accession 2003", *"Since the last Regular Report, Romania has continued to make progress with the transposition of the transport acquis and with the establishment of the required administrative structures. While Romania has achieved a satisfactory level of alignment with the acquis, it should focus further attention on developing institutions able to enforce the new legislation. It should give priority to defining a realistic strategy for securing the funding to make the heavy investments required by the acquis."*

We should mention the fact that the Romanian government decided in November 2003 to modify the legislation concerning priority motorway projects in order to include the Brasov-Bors route, which was later on presented to the public, deemed "of national interest" and legally provided for (Law 451/2003 on the construction, development and modernisation of the transport network of national and European importance).

3.4 Privatisation in the transport sector

Government Decision No. 1293/2003 establishes the mandate for implementation of the privatisation strategy for the companies operating under the authority of the Ministry of Transport, Constructions and Tourism. The mandate goes to the above-mentioned Ministry, and the objectives of the priority objectives of the restructuring and privatisation strategy are:

- to restructure strategic companies under the authority of the MTCT in order to increase efficiency, reduce subsidies and prepare the privatisation process;
- to continue the restructuring of national autonomous companies;
- to prepare for privatisation the national companies in the rail transport system and the privatisation of the companies established as their subsidiaries;
- to privatise the infrastructure (mainly the companies dealing with repairs, maintenance and associated activities) and transport companies (mainly in waterway transport and the local/regional rail infrastructure administration);
- to prepare the National Freight Rail Transport Company for privatisation;
- to restructure the waterway administrations by externalising some activities to some subsidiaries and/or companies created by separation or privatisation;
- to auction the participation of autonomous and national companies in other companies.

38 "National Development Plan for 2004-2006", http://www.mie.ro

Presently there have been approximately 30 calls for tender, all posted on the web page of the MTCT. No report on the privatisation process has been released so far.

4 Financial projects from International Financial Institutions (IFIs) and the Ministry of Transport (MTCT)

4.1 Administrative budget by years

There is no clear indication so as to the type of investments made by the Ministry in different transport sectors. We can get a picture of this in "The policy, strategy and efficiency document for 2003 and in perspective for 2004-2006" for the MTCT, where:

MTCT Budget - Amounts allocated from external credits (ROL billion) [EUR 1 = ROL 40 334 - May 2004]

	Accomplished 2001	Programme 2002	Proposals 2003
Civil aviation	469	318	111
Civil navigation	376	1 029	1 741
Roads and bridges	3 752	4 955	4 727
Rail transport	1 827	2 848	3 469
Public transport	58	1 044	1 863

Total state budget for 2003 was ROL 241 268 billion. The budget for Transport and Communication for 2003 (ROL billion) was:

Accomplished 2001	Programme 2002	Proposals 2003
14 106	18 439	30 307

The Budget Law for 2003 provides for the following **expenses** (ROL billion):

	Accomplished 2001	Programme 2002	Proposals 2003
Civil aviation	2 056	2 618	3 310
Civil navigation	542	1 151	1 117
Roads and bridges	3 746	5 579	6 036
Rail transport	6 304	6 954	9 333
Public transport	1 124	1 634	1 895

We may also find that the amount of money proposed to be transferred to local budgets for county and communal roads in 2003 was ROL 2 647 billion (8,7% of the budget for transport and communications). Special attention should be paid to the amount of money coming from abroad for road transport. Fortunately, the emphasis in the budget law is on rail transport with road transport not far behind, though.

4.2 European union projects

4.2.1 ISPA

The Instrument for Structural Policies for Pre-Accession (ISPA) finances infrastructure projects in the field of transport and environment between 2000-2006. Its objective is to provide the beneficiary countries with means to catch up with EU environmental standards, to extend and link up their transport systems with the Trans-European transport networks and to familiarise applicants with policies and procedures of the EU Structural and Cohesion Funds.

As of May 2004, with the accession of the first wave on candidate countries in the European Union, the annual allocation from 2004 to 2006 for Romania and Bulgaria increased 20%, 30% and 40% per year. From 2007 onwards, the ISPA support will be converted automatically in Cohesion Funds, and the funding will increase substantially (7-8 times bigger than the ISPA package at the time of accession), challenging the Romanian authorities to set up and strengthen appropriate co-ordination and administrative structures to increase their absorption capacity.[39]

Local authorities do not have access to ISPA funding due to the objectives of the programme (large infrastructure projects). The major beneficiaries are the MTCT, the National Road Administration and the National Railway Company. The total amount of the 38 ISPA Financing Memoranda is EUR 1 943 million out of which 74,3% is the ISPA Grant of EUR 1 443 million. Out of this, EUR 793 million went to transport projects.

There have been two railway projects and five road projects. Both railway projects concerned the rehabilitation of a line on Corridor IV, while the road projects concerned:

- widening to four lanes of a national road linking Bucharest to the Bulgarian border - Corridor IX;
- the Bucharest-Cernavoda motorway, Corridor IV;
- rehabilitation of a national road Craiova-Drobeta - Corridor IV, southern branch;
- the Sibiu motorway by-pass - Corridor IV, northern branch;

39 "ISPA in Romania"- Delegation of the European Commission in Romania, March 2004, http://www.infoeuropa.ro

• rehabilitation of the section Drobeta-Lugoj and by-passes - Corridor IV, southern branch.

The rehabilitation of the Craiova-Drobeta Turnu Severin section of national road No. 6 which objective is to increase capacity in order to deal with growth in international traffic, particularly lorry traffic, which is said to be growing by more than 12% a year and almost double by 2020. Another ISPA information sheet says that the railway from the Hungarian border, Curtici-Arad-Deva-Simeria on Corridor IV transports most of the freight relating to trade with Hungary. In this context, we need to mention again the fact that the overall road freight transport has been declining [appendix 2].

In the government rush to spend the "free money", the role of civil society is to make sure that sustainable development is not just a phrase in a political speech. Transparency and public participation are other battlegrounds. In this respect we need to mention that civil society is not represented in the ISPA Monitoring Committee.

4.2.2 PHARE

PHARE assistance to the transport system initially focused mainly on technical assistance (1991-1994). The programme switched to road rehabilitation investment projects after 1994, co-financed by the IFIs. Funding was granted to the National Road Administration, pilot pre-investment studies, an airports master plan, border crossing improvement and further technical assistance for European integration.

The on-going PHARE National Transport Programmes are: Railway Rehabilitation Programme (EUR 58 million); Road Rehabilitation Programme (EUR 27 million); Large Scale Infrastructure Facility (EUR 25 million); Twinning Project - Maritime Safety (EUR 0,45 million); TAROM Restructuring (EUR 4 million); Railways Restructuring (EUR 5 million); Road Worthiness (EUR 3 million); Twinning Project - Road Safety (EUR 0,65 million); Rehabilitation of the AFER Testing Centre (EUR 6,1 million); Improvement of maritime and inland waterway safety (EUR 5,4 million); Management and professional training for the road, inland waterway and air sectors (EUR 1,2 million); Assistance to implement financial and safety aspects of EU legislation and policy in the field of inland waterway and road transport (EUR 8,1 million).[40]

As one can see, the amount of money is not large, and the projects cover all sectors except public transport. Yet, 6 out of the 11 projects listed above are either on road transport or contain road transport components. At the same time, the PHARE (as well as ISPA) co-financing leads to an increase in the internal rate of return/attractiveness of road projects, and thus we may state that discriminating incentives are being given to road transport.

4.3 International Financial Institutions (IFIs)

4.3.1 EBRD

The current Bank strategy (issued in November 2003) includes support for the transport sector, and the specific activities listed concern the road network (including motorways) and, in addition, investment in rail corridors in co-operation with the ISPA Programme and development and rehabilitation of port infrastructure. The document is consistent with the previous strategy (November 2001), i.e., financing transport infrastructure projects is one of the priorities of the bank. We need to state that an emphasis is laid upon public/private partnerships, and that the private/public portfolio ratio improved since the previous strategy from 53/47 to 66/34. The strategy also states that all operations in Romania are subject to the Bank's environmental policy and procedures.

Between 1991 and 2003, EBRD financing mobilised EUR 5 billion in addition to its own investment (EUR 2,3 billion). We need to emphasise here the importance of bank involvement in infrastructure projects, thus providing credibility and attracting co-financing. The transport infrastructure projects, four on roads and two on railways, involved EUR 331 million in the form of loans from the Bank (total projects value being EUR 1 589 million), i.e., 14% of commitments. There aren't any transport projects in the pipeline, although the Romanian government held discussions with the Bank concerning its involvement in a motorway project.

The Bucuresti-Pitesti motorway upgrade and modernisation project + by-pass project

The loan for a by-pass along the Bucharest-Pitesti motorway - The environmental summary says that none of the studied impacts appear to be significant,

40 "Sector Fiche - Transport" - Delegation of the European Commission in Romania, http://www.infoeuropa.ro

and that the by-pass is expected to bring environmental benefits to the city of Pitesti.

Another EBRD loan had gone previously to an upgrading and toll project for this motorway. It is actually an isolated sector of a planned connection to Hungary along Corridor IV. The Romanian government is going ahead now with the construction of a motorway to Hungary that has nothing to do with the Bucharest-Pitesti sector, which received EBRD money.

We need to underline the fact that after completion between 2000 and 2003, about EUR 300 million was spent for rehabilitation and modernisation of this motorway, with another EUR 50 million currently needed for the same purpose. In April 2003, it was found that the National Road Administration had spent over EUR 30 million illegally on the motorway; the technical-economical indicators provided by law, along with other issues, were disregarded.

The bottom line is that the actual traffic is lower than expected, and public money is being spent on an unsustainable project. The environmental benefits of the by-pass are thus questionable.

No environmental impact assessment is available on the Bank website, and the country strategy and disclosure policies are not available in Romanian as yet. There are no summaries for all the projects on the website, apparently because of the date of release of the reviewed public information policy (April 2003). There are environmental summaries for some projects, one of them showing a proper public participation process.

4.3.2 EIB

Transport is the key sector of EIB, which accounts for the largest share of the Bank's portfolio in Romania (the other sectors are SME financing, environment, energy, telecommunications, health and education). Its lending in Romania for transport infrastructure projects was of EUR 2 050 million between 1993 and 2003 (26 projects, 63,5% of commitments as to volume and 53% as to the number of projects financed). More than EUR 1 200 million went to the road sector in this period; according to the bank lending strategy, the EIB has an equal interest in supporting rail projects. We need to state here that the task of the EIB, the European Union's financing institution, is to contribute towards integration, balanced development and economic and social cohesion of the Member States.

Information on the projects is more than scarce on the EIB web page, and the communication flow with the public information department (there is no country office) is also poor.

The EIB is financing part of the Bucuresti - Constanta motorway, linking the capital with the main Romanian harbour at the Black Sea. The project faced serious land issues with a large amount of money being paid to purchase the necessary land twice, an operation involving a consultancy which was hired afterwards to prepare the studies for the Brasov-Bors motorway.

The most recent transport project was signed in December 2003. The project consists in the construction of a new motorway in western Romania (Trans-European Transport Corridor IV). The project represents the first phase of the development and comprises a 65 km section of motorway connecting the cities of Arad and Timisoara. Upon request for information on this project, the information office said it would "return to you in due course" at the beginning of March this year. There has been no news as yet.

4.3.3 The World Bank Group

The World Bank is Romania's larger creditor, and its assistance covers practically all areas of the economy. The Bank's investment and programmatic adjustment loans focus on three areas: 1) promoting the private sector and the growth of efficient markets; 2) building public sector institutions and improving governance; 3) and building human capital and improving social protection. In addition, rural development and poverty alleviation programmes aim at improving rural infrastructure (including irrigation systems, social services and the rural finance system) through a participatory process.

The World Bank lent USD 388 million for transport infrastructure projects between 1991 and 2003 (10% of total commitments of USD 3,8 billion). There were three projects in the transport sector in the period: one on roads, one on railways and one on both roads and rail. There is a USD 150 million transport restructuring loan in the pipeline on roads and highways (65%) and railways (35%).

5 Environmental problems

A document released on an annual basis by the Ministry of Environment, *"The State of Environment 2003"*, states that at present, the transport sector is a major pollution source. The yearly increase in the number of motor vehicles, correlated with the rudimentary technical state of most of them, results in an increasing negative impact on the environmental factors. The most affected environmental factor is air due to the emissions of NOx CO, CO2, VOC, deposited powders and lead. Transport is also the main source of sound pollution and stress for urban population.

Unfortunately, the document or any other documents released by the Ministry does not point to the concrete environmental impact, the number of deaths caused by transport or to any external costs.

A document entitled *"Priority Objectives of the Development Strategy"* states that the transport sector contributes to the green house effect generated by CO2 emissions from combustion of fossil fuels as it generates 25% of these emissions, and that 80%-90% of transport pollution is produced by road transport.

According to another document, *"The National Green House Gas Inventory"*, the transport sector is responsible for 11% of CO2 emissions from fossil fuel combustion in Romania.

Source	**CO2 (t CO2e)**	**CH4 (t CO2e)**	**N2O (t CO2e)**
Energy Industry	62 179,56	22,37	209,53
Manufacturing Industries and Constructions	23 715,39	44,67	62,63
Transport	11 625,35	38,02	33,00
Other Sectors	7 291,97	514,42	105,11
Total emissions	104 812,28	11 879,56	410,26

Source: The National Green House Gas Inventory, 2001

The final energy consumption of the transport sector has recorded a fluctuation during the last few years, currently on an upward trend and representing 10,4% of gross domestic energy consumption.

Energy Consumption (1 000 tonnes oil equivalent)

	1996	1997	1998	1999	2000	2001
Gross domestic energy consumption	50 365	45 505	40 983	36 567	36 374	37 971
Final energy consumption						
Industry and Constructions	14 653	12 577	9 904	8 208	9 017	9 351
Agriculture, Forestry and Fishing	872	912	766	464	395	286
Transport and Communications	4 226	4 284	3 985	3 139	3 508	3 975
Other activities	1 159	992	1 066	794	812	1 629
Population	10 618	9 673	9 412	8 757	8 433	7 197

Source: The National Institute of Statistics - "Statistics Yearbook 2002"

The number of traffic accidents and associated casualties has had a relatively steady decrease [appendix 7]. Data that gives a good image to the sector is easily found; only disparate data shows the level and severity of pollution caused by the transport sector. A study made by the Institute of Public Health in Bucharest on lead pollution monitored nine major intersections in Bucharest, discovering that the daily average lead concentration in the air exceed the maximum admissible concentration in half of them. Moreover, 57% of children in Bucharest, Constanta and Tulcea had lead concentrations in their blood exceeding the safety limit recommended by the Centre for Disease Control - USA.

We could say it is the general approach in Romania to disregard environmental and health issues as they are of secondary importance or worse, as there are other, more serious problems - economic growth, large investments, etc.

6 Conclusions and recommendations

Unfortunately, the conclusions are grim. There is no strategic approach to transport, and a lot of investments are made without good justification and without bringing real benefits. Environmental issues are only approached in writing (the latest trend is to include the word "environment" in speeches), and there is no such thing as internalisation of the external costs (including environment and health). Moreover, there are no intentions for it either, e.g., the transition period requested for charging of heavy goods vehicles.

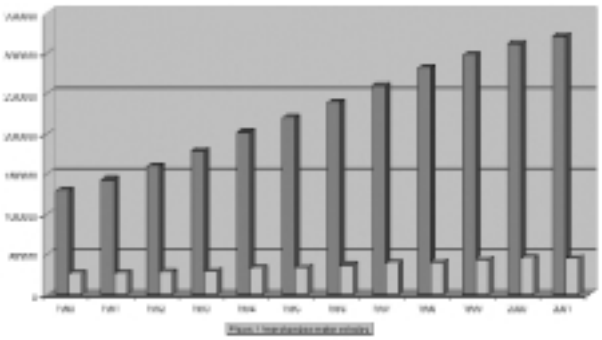
In this context it is difficult to make recommendations as the list should be long, but we need to call on:

- strategic environmental assessment (SEA) of the transport strategy;
- real co-ordination between governmental bodies in order to link strategies and include an environmental approach;
- re-consideration of the sustainable development concept in the transport sector.

8 Appendices

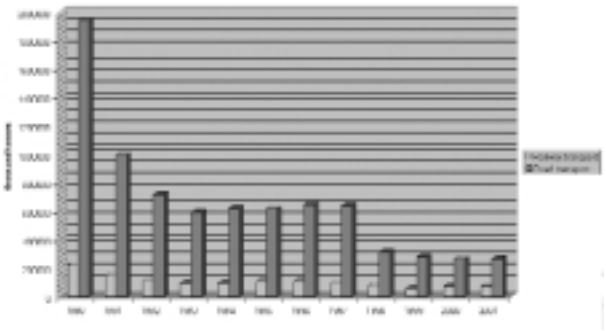
Appendix 1

Registered motor vehicles



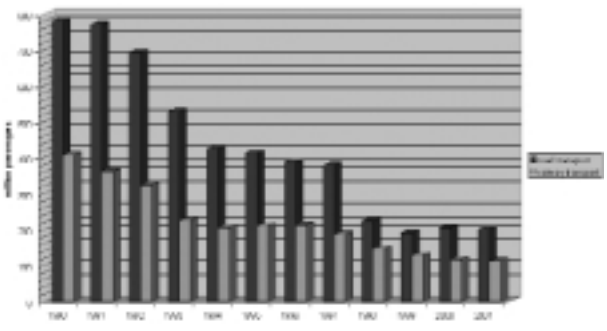
Appendix 2

Freight transport



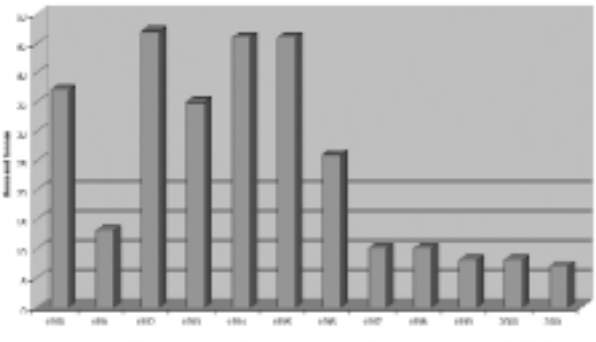
Appendix 3

Passenger transport



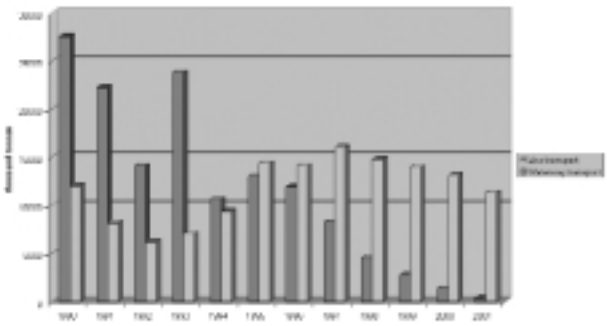
Appendix 4

Air freight transport



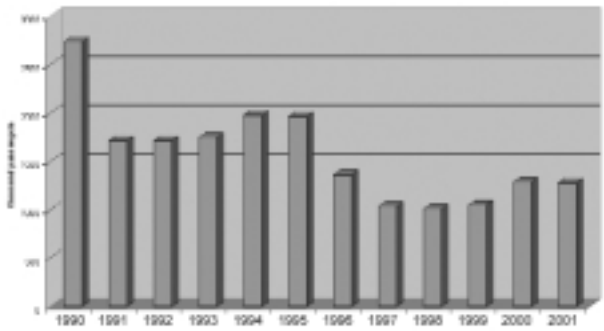
Appendix 5

Sea and waterway freight transport



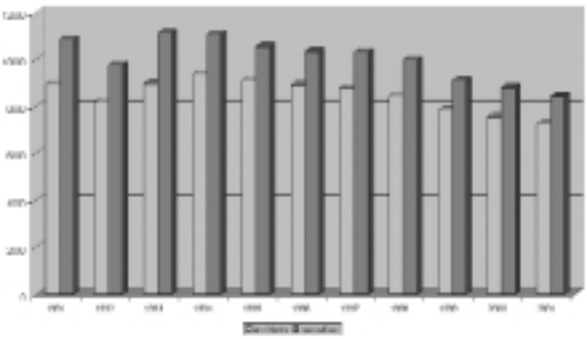
Appendix 6

Air passenger transport



Appendix 7

Serious road traffic accidents



Transport sector in Macedonia

1 Overview

General information
Macedonia, located in the south-central part of the Balkan Peninsula, is bounded by the Federal Republic of Yugoslavia (FRY) in the north, Bulgaria in the east, Greece in the south and Albania in the west. The country is divided into 123 municipalities including 30 urban areas and 1 614 rural communities.[41] The terrain consists of mountains covered with deep basins and valleys. There are large lakes and rivers as well.

Population
According to the 1994 census, the population of Macedonia as of June 20, 1994 was 1 945 932. An estimated 60% of the population lived in urban areas. In 2002, the total population estimate was 2,0 million. The major cities in Macedonia are: Skopje (445 000); Bitola (86 000); Prilep (72 000); Kumanovo (95 000) Tetovo (65 000) and Veles (57 000).[42]

About 24% of the population is in the age range of 0-14; 67% is in the age range of 15-64; and 9% is above the age of 64. Life expectancy is 73 years. Major ethnic groups are Macedonian: 67%, Albanian: 21%, Turkish: 4%, Gypsies: 3% and Serb: 2%.

Economy
The national currency in Macedonia is the denar (MKD) of 100 deni. The exchange rate in 2000 was 65,19 denars for 1 USD.

At its independence in November 1991, Macedonia was the least developed of the Yugoslav republics, producing a mere 5% of the total federal output of goods and services. The collapse of Yugoslavia ended central transfer payments and eliminated advantages from inclusion in a de facto free trade area. Absence of infrastructure, UN sanctions on Macedonia's largest market Yugoslavia and Greek economic embargo hindered economic growth until 1996.

Since then the GDP has subsequently increased each year, rising by 5% in 2000. Privatisation in 2000 boosted the country's reserves to over USD 700 million. Inflation jumped to 11% in 2000, largely due to higher oil prices. The GDP per capita was estimated to USD 1 924 in 2000 and USD 1 830 in 2001. The major exports are food, beverages, tobacco, machinery and transport equipment. Over 38% of the population works in industry. Presently the unemployment rate in Macedonia is 30%.

Country area: 25 713 km^2
Population: 2 009 387 (2002)
Population growth: 0,1 % (2002)
Unemployment: 30%
GDP: 1 830 (2001)
Present value of debt: USD 1,3 billion (2002)[43]

The Macedonian government has demonstrated a continuing commitment to economic reform, free trade and regional integration. Macedonia signed the Trade Co-operation agreement with the EU in November 1997 and the Stabilisation and Association agreement in April 2001.

2 Transport infrastructure

2.1 Road transport

Table 2. Roads in Macedonia

Area (000 km^2)	Arterial roads (km)	Local roads (km)	Regional roads (km)	Earth surfacing (km)	Modernised		Total road network (km)
					km	%	
26	915	4 690	2 611	3 300	4 900	33	8 216

In addition to the national classification, about 520 km of the arterial roads are part of the European road network ("E" Roads). The arterial network serves seven major corridors in the country. Historically the most important corridor is the 174 km arterial road

41 Transport Infrastructure Regional Study in the Balkans Final Report
42 Transport Infrastructure Regional Study in the Balkans Final Report
43 World Development Indicators database, April 2004

No. 1, a section of the Trans-European E-75 highway. It runs north-south across the country from the border with the Federal Republic of Yugoslavia (Serbia/Montenegro) to the border with Greece. This road is the spine of the system and until 1990 was the most heavily trafficked road.

The next most important arterial road, serving both international and national traffic, is the East-West corridor. It connects Skopje with Sofia, the capital of Bulgaria, and Tirana, the capital of Albania, as well as linking the Republic of Macedonia with ports on the Black Sea. The 302 km road runs from the Bulgarian border at Deve Bair through Skopje, Gostivar and Ohrid to the Albanian border.

The third most important corridor also runs in the direction east-west and is served by a 330 km arterial road from the Bulgarian border near Delcevo through Veles, Bitola and Ohrid to the Albanian and Greek borders. This alignment passes though the central region of the Republic, but due to difficult terrain and poor geometric standards, it does not serve international traffic well.[44]

Table 3. Corridors in Macedonia

Corridor		Length (km)	Status	Traffic level
Corridor VIII	From Kafasan at the Albanian border up to Deve Bair at the Bulgarian border, through Struga, Gostivar, Skopje and Kumanovo, with a stretch in common with Corridor X , from Miladinovci to Kumanovo.	304	Part of this link already has motorway status, either constructed on a new alignment (section Gostivar-Tetovo) or upgraded as mentioned above (section Tetovo-Skopje)	1500/ 2500 vehicles per day
Corridor X	Tabanovce (at the Yugoslavian border) - Bogorodica (at the Greek border) through Kumanovo and Veles.	174,2	Upgraded to motorway status on a total of 109 km	3 300 vehicles per day
Corridor X, Branch C	From Gradsko to Medzitlija, at the Greek border, through Bitola	127	Two-lane highway reconstructed 15 years ago at its most trafficked section	
Skopje-Blace	At the FRY border (Kosovo)	40,3	Low standards and poor conditions	4 000 vehicles per day

2.2 Urban and public transport

The public transport in Macedonia is operated exclusively with bus transport by Public Transport Companies, each in every town where public transport is present. Although these companies are publicly owned, they receive finance from neither the town nor the state budget. Efforts made by the local authorities to introduce metro transport have been unsuccessful due to the large number of underwater channels in Skopje.

Table 4. Urban transport in Macedonia [45]

Year	2000	2001	2002
Number of lines	208	205	213
Number of vehicles	894	915	889
Passengers carried (in thousands)	111 408	98 474	101 709

In general, buses are old and heavily pollute the environment. Research has shown that 60% of air pollution in Skopje is generated by public buses. The situation became even worse when a private consortium started operating the same bus lines with private, even older buses. Additionally, the steady increase of personal vehicles contributes to the traffic picture in the capital being characterised by excessive road congestions, an increased number of road accidents and pollution.

Table 5. Registered vehicles and trailers[46]

Type of vehicle	2000	2001	2002
Motor cycles	3 729	4 483	2 918
Cars	299 588	309 562	307 581
Buses	2 498	2 620	2 497
Commercial vehicles	20 763	21 727	20 213
Special vehicles and road tractors	8 552	9 554	10 292
Tractors and working vehicles	1 417	1 560	918
Trailers	5 921	6 270	5 965

In 2002, it was estimated that Skopje had 119 139 vehicles or more than 200 vehicles per 1 000 inhabitants. Surprisingly, the number of private cars has increased, e.g., from 299 588 in 2000 to 309 562 in

44 Information from the World Bank website
45 Statistical data from the Institute for Statistics of Macedonia
46 Information from the Institute for Statistics of Macedonia

2001, in spite of the fact that the GDP has decreased from USD 1 924 per capita in 2000 to USD 1 830 per capita in 2001.

2.3 Freight and passenger transport

The Statistics Institute of Macedonia disclosed the following information concerning the freight and passenger transport. The information for 2003 was not available.

Table 6. Freight transport

Year	Rail transport in thousand tonnes	Air transport in thousand tonnes	Road transport in thousand tonnes
2000	3 231	3 512	2 123
2001	2 799	2 329	6 661
2002	2 208	2 139	7 359

We can see in the table that the rail and air transport of freight has decreased between 2000 and 2002. However, due to large investments and development, the road transport of freight tripled in the same period.

Table 7. Passenger transport (thousand passengers)

Year	Rail transport	Lake transport	Air transport	Road transport	Urban transport
2000	1 862	10	1 009	15 407	111 408
2001	1 344	3	508	13 724	98 474
2002	930	6	556	13 854	101 709

Table 6 shows that all types of passenger transport suffered a decrease in the number of passengers carried.

2.4 Railway transport

Railways are managed by Macedonian Railways (MR), a state-owned company under the control of the Ministry of Transport and Communications. The company is in charge of all aspects of infrastructure management, development and maintenance of facilities and equipment, as well as all transport operations. According to the law, when required, the State pays a subsidy for the public service costs of the railway from the general budget.

Table 8. Railways in Macedonia

Area (thousand km^2)	Population (Mmillion)	Double track (km)	Single track (km)	Total (km)	Electrified tracks		Track density (km per 1 000 km2)
					km	%	
26	2,0	0	699	699	233	33	27

Table 9. Railway corridors in Macedonia

Railway Corridor	Location	Status	Speed km/h
Corridor X	Tabanovci-Gevgelija - through Skopje and Veles	Single-track line, electrified. Its last renovation on most sections is already 30 years old.	110
Corridor VIII	Gorce Petrov-Kicevo	This line was constructed in 1952/1969 and has good characteristics	60-80
Skopje-General Jankovic	continues to Pristina and connects with the Yugoslav network		60-80
Branch D of Corridor X	Veles-Bitola-Medzitlija at the Greek border and connects further with the Greek system	Secondary and low standard lines. It was constructed in 1939, but has been closed for the last 5 years.	60-80
Kumanovo-Beljakovce	towards the Bulgarian border to the east	This branch may be the first section of the link between the Macedonian Railways and the Bulgarian Railways on Corridor VIII. Since the beginning of the construction of the new line, this line has been closed.	60-80

With the exception of Corridor X, all lines above are single-track and non-electrified. Both freight and passenger rail traffic note a dramatic decrease in recent years: from 6,5 million tonnes and 5,0 million passengers in 1990 to approximately 2 million tonnes and 1 million passengers in 2002 (see table 10). Reduction of costs, however, is not proportional.

Rail tariffs remain low. Passenger fares are kept affordable for social reasons, although it is assessed that they cover less than 15% of the total cost of a trip. Freight tariffs are kept low in order to assure competitiveness with road transport (25% less than the latter) and to compensate for the additional costs at both ends of a trip.

Table 10. Rail transport of goods and passengers[47]

Transport of goods (thousand tonnes)			
Year	Loaded	Unloaded	Total
2000	738	2 462	3 200
2001	669	1 978	2 647
2002	455	1 503	1 958

47 Statistical data from the Institute for Statistics of Macedonia

Transport of passengers (thousands)			
Year	Departures in national transport	Departures abroad	Total
2000	1 848	14	1 862
2001	1 320	24	1 344
2002	897	33	930

Traffic on the central line of the railway system, which corresponds to Corridor X, represents 80% of the net t/km transported by the company. Some of the branches are reported to cover only 4% of their total costs with their traffic revenues. Due to this sudden drop in business, some structural inefficiencies and external pressures (on pricing and staffing decisions), the railways financial situation is especially acute.

MR was identified as one of the main money losing enterprises in Macedonia under the WB financed Financial and Public Enterprise Restructuring Project. As a result of the project, MR substantially adjusted tariffs upward, reduced the labour force by about 20% (about 900 people) and divested from nine subsidiaries providing non-core services.

In addition, a new Railway Law approved in February 1998 established a clear relationship between the State as owner of the infrastructure and MR as the provider of services. In addition, the new law gives MR sufficient independence in terms of tariffs and staffing decisions to permit it to operate on a commercial basis. However, MR requires substantial restructuring in order to actually achieve a "commercial" culture.

The restructuring of MR and improvement of its financial viability is important, not just for the efficiency of the transport sector, but also on macroeconomic grounds. The Government of FYR Macedonia is aware of the magnitude of the railways' problems and is committed to continuing the process of railway restructuring, which started under the Special Restructuring Program. MR is to be downsized, its non-core business unit spin-offs privatised or liquidated and the company reorganised along profit centres.

More specifically, the program to restructure MR includes the following: (i) establishment of the conditions for effective reform, including the separation of infrastructure management and transport operations into distinct business activities; (ii) transparent contractual compensation for unprofitable public services and/or infrastructure support; and (iii) improving operational efficiency.[48]

2.5 Air transport

The Skopje International Airport and Ohrid Airport are Macedonian state-owned assets run by public enterprises. The airports were operated by the military under Yugoslavian jurisdiction before becoming regional airports in 1992. The airport infrastructure is run partly by the Civil Aviation Authority (e.g., runway) and partly by the "Public Enterprise for Airport Services" (PEAS). PEAS is responsible for provision of an integrated airport operation including all ground handling, passenger services, car-parks, food and beverage and airport terminal administration services at both airports. Two concessions have been awarded for refuelling services (one operational with Makpetrol). It is estimated that 75% of PEAS income is derived from handling passengers and cargo and 25% from services and concessions.

Passenger levels are currently at low levels, but potential for expansion exists as the regional economies regain momentum. Although the airfield infrastructure is assessed as adequate for the medium term, the airport terminal facilities, originally constructed for the Yugoslav military, are limited. Airside passenger dwell space is inadequate and passenger congestion occurs in the mornings and evenings when most flights are at their highest concentration. The airport has little influence over airlines in scheduling flights, as carriers prefer early and late slots, which mesh better with their regional hub operations.

Studies carried out so far

Currently (2003/2004) a restructuring study financed by German bilateral funds is underway focusing on: separation of air navigation and regulatory functions; establishment of an air navigation company; and modernisation of the role of the Civil Aviation Authority. Under this restructuring, the runway is to pass into the possession of the airport company. Refurbishment of the runway and airfield lighting at the Skopje Airport was recently undertaken under an EBRD funded project.

Two Feasibility Studies were carried out earlier by Wilbur Smith Associates (1996) and by Parsons (2000). Reliable traffic forecasts are not available, but the study stated that "*improved capacity and efficiency in terminal operation is required in the short term*". The Wilbur Smith Study formed the basis for development planning by the Government.

The financial situation of PEAS was not sufficiently strong enough to enable it to face new infrastructure development. In 2000, a public competition was an-

48 Information from the World Bank website and Transport Infrastructure Regional Study for the Balkans 2002

nounced for financing and re-development of a one million passenger per annum airport complex (CAT A) or a 2 million complex (CAT C). The competition resulted in an award, and the construction commenced. However, the contract was cancelled in 2001 with the works only partialy completed.

International airports in Macedonia
The main airport in Macedonia is the Skopje International Airport. The second, Ohrid Airport, also serves as an international airport, but mainly for tourist traffic. PEAS is responsible for managing and operating the airports in the country; their operations being financed by the Government. Management and maintenance of the facilities, runways, taxiways, aprons, lighting system and air navigation facilities are provided by DGCA.

The independence of Macedonia has totally changed the vocation and the utilisation of Skopje Airport. Passenger traffic has multiplied by a factor of 2,3. Therefore, the Government has considered reconstruction and expansion, and the EBRD has shown interest in investing in this project. A study examining the demand for upgrading the airport is under way, the final report of which is to be completed by December 2004. The main objective of the assignment is to prepare proposals for the modernisation of Skopje Airport, in particular the passenger terminal facilities, through provision of a new terminal building, improved operation and the cost efficiency of PEAS.[49]

3 Transport policy

The transport policy for Macedonia has not been updated since the time of Yugoslavia (before 1991). The policy that existed at that time is now invalid; however, a new policy was never prepared. The Government's vision for the development of the transport sector is often mistaken with the Public Investment Programme (PIP), which is developed every year.

The PIP has a validity of three years and presents the overall intentions and priorities of the Government concerning investments in different sectors: energy, transport, health, culture, etc. However, it can be seen clearly that the projects identified as priorities in 2001 are still present in the 2003 PIP. It can also be noticed that many of the "priority" projects listed in the PIP have never even started, and that there is very little chance that financing for them will ever be found. Thus, it can be concluded that the PIP has no particular importance and presents only a "wish list" of the different ministries and agencies (see appendix 2).

Table 12 below shows the financing plan for the transport sector for the period 2003-2005. The prevailing percentage for the transport sector is expected to come from foreign grants or loans (for details see appendix 2).

Table 12. Financing the transport sector[50]

Year	2003	2004	2005	Total (EUR million)
Total amount of finances needed for the transport sector	91,68	156,45	174,60	422,73
Allocation of foreign credits	32,91	96,80	124,76	61,38 %

3.1 Administration, structures and decision-making mechanisms

Ministry of Transport and Communications (MTC)
The National Inspectorate of Transport under the MTC consists of Inspectors who monitor the various parts of the transport sector and are divided into 5 groups: Inspection of road transport, Inspection of roads, Inspection of railway transport, Inspection of mailing services and Inspection of ski lifts. The legislation according to which the inspectors act can be found in **chapter 3.3. Legislation in the transport sector**.

The Inspection of road transport consists of 11 inspectors based in the National Inspectorate in Skopje and the regional offices of the MTC in 11 more towns. The Inspection of roads comprises 11 inspectors based in the National Inspectorate in Skopje and the regional offices of the MTC in 9 other towns. The Inspection of railway transport consists of 2 inspectors based in the National Inspectorate for transport in Skopje. The inspection for mailing service consists of 1 inspector based in the National Inspectorate for transport in Skopje. The Inspectorate for ski lifts also has only 1 inspector based in the National Inspectorate for transport in Skopje.

Concerning financing, the MTC reassigns finances to the Fund for National and Regional Roads, to MR and

49 Information from the TIRS, World Bank website and the Appendix IV Terms of Reference for the Skopje Airport Modernisation Project
50 Public Investment Program for 2003-2005

to municipalities for the maintenance and construction of local roads, water sewerage and supply, etc. The Minister approves all actions that are to be undertaken by the MTC (money transfers, project approval, etc). Concerning project implementation, the Minister assigns the responsibility to the general director or chief of the sector, who then functions as the contact person concerning the various projects.[51]

Fund for National and Regional Roads (FNRR)
Under the MTC, the highway sector is handled by the FNRR, which is responsible for the construction and maintenance of all roads throughout the country. Local roads are the responsibility of the municipalities. The FNRR is also responsible for preparing road development programmes and financing plans, as well as implementing policy directives given by Parliament and/or the MTC.

Under the control of the FNRR, a state-owned company, "Makedonija Pat" (Macedonian Roads), deals with the maintenance of 4 400 km of national and regional roads, the municipalities (123 in total) being directly responsible for the maintenance of local roads, with funds pledged through the MTC. The Fund director is responsible for the implementation of all projects. However, the responsibility for particular projects is usually assigned to the Fund civil engineers, who are in charge of project implementation.[52]

Macedonian Railways (MR)
The Ministry of Finance finances MR by transferring finances to the MTC. The decision making body within MR is the Executive Board, which consists of five members. Two of them are internal representatives appointed by the syndicates, and the other three are appointed by the Government.

Currently there are six Unions. Four are legal and two are illegal because of the small number of members (according to the law, a union must contain at least 250 members). The Unions meet whenever needed and discuss issues of mutual interest as well as of the interest of MR. Conclusions of the meetings are then presented to the Executive Board, which makes the final decision. However, the final decisions are usually not made according to the proposals of all of the Unions, but of one only since one of the members of the Executive Board is at the same time the president of the biggest Union.

Centre for Civil Navigation
The Centre for Civil Navigation works under the MTC. According to the law on organisation and operation of the departments of the state administration, the General Director is in charge of preparing the regulations, plans, programmes and other actions described by the law. The Director is also responsible for all projects completed under the Centre.

3.2 National transport policy strategy

Macedonia has just prepared its application for accession to the EU. The Macedonian Government is currently revising the "National Strategy for the Integration of the Republic of Macedonia in the EU", which also includes the development of the transport sector. As the Strategy has to be approved by the Government in June 2004, the document is currently not publicly available. However, foreign experts say that this strategy is very broad and needs to be elaborated on further before it is approved. Macedonian authorities state that the National Strategy needn't be very specific since particular issues are to be addressed by the Action Plan for the implementation of the Strategy. Before the elaboration of this strategy, Macedonia did not have any kind of national transport strategy.

3.3 Legislation in the transport sector[53]

The legislation in the transport sector in Macedonia is comprised of various laws grouped in different categories:

Road transport:
- Law of passengers transport (1999);
- Regulations defining the following: ways for marking and supplying bus stops and stations for city, national and international transport (1997); the form and content of the license for passenger transport (1997); various regulations defining the public and international transport, etc.
- Law on public roads (1996);
- Laws for changes of the Law for public roads (1999, 2000, 2002);
- Law on the changes and amendments to the Law on physical and urban planning (1999);
- Law for construction investment (1990);

51 Ministry of Transport and Communications web site
52 Information from the Transport Infrastructure Regional Study for the Balkans 2002 and the Fund for National and Regional Roads of Macedonia
53 Information on the legislation in the Transport Sector was obtained from the website of the Macedonian Ministry of Transport and Communications. Legislation on the air navigation was not provided by the Centre for Civil Navigation during the preparation of the study.

• Law on changes and amendments to the Law for construction investment;
• Law on road safety(1998);

Railway transport:
• Law on Macedonian Railways (1998);
• Regulation 1- Signal regulation (1981);
• Regulation 2- Transport regulation (1981);

Air transport:
• Law on civil aviation (1998);
• Law on the Centre for Civil Navigation (1995 and 2001);
• Law on obligatory and basic material-legal relations (1977 and 1985).

3.4 Privatisation in the transport sector

The process of privatisation in the transport sector has begun with the privatisation of MR. It is planned to be completed by a WB project that is still being developed and should be launched at the end of 2004.

Privatisation of the Macedonian Railways (MR)
With a part of the WB credit, the MR is conducting the transformation of the company. Several studies have been completed in order to provide the guidelines for further transformation of the company. The Macedonian Government has decided to divide the company in two subjects: Public Infrastructure Company (owned by the State) and a Public Transport Company (later to be transformed to a stock company).

The Action Plan for the restructuring of MR deals with the division of the company, decreasing the number of employees, defining the financing of the infrastructure and the responsibilities of the Government towards the company, development of a five year business plan and removal of the debts of MR, which amount to EUR 136,50 million.

At the moment the most important issue is the new legislation for MR, which includes the EU directives on railways. The law has been developed together with the six Unions of the MR, and most of the activities defined in the Action Plan require a functional law on the railways before being accomplished.

However, the process of privatisation of the Company has not proceeded smoothly. Today MR counts 3 850 employees, which should be down-sized to nearly 900. "*The syndicates have asked the Government to consider providing a social package for employees, which includes a EUR 7 000 payment/person, and the possibility for them to utilise a number of the MR's offices for private purposes,*" says one employee and member of one Union. "*They should also allow early retirement for people in MR because of their specific occupation.*"

The Unions from MR and the Government have signed the Memorandum of Understanding in order to settle the relations between the Government, the Unions and the Executive Board. It has been agreed upon that the Government will disburse the payments for the employees, and MR will later reimburse them. As of April 2004 the payments have not been made, and the Unions have gone on strike again.

4 Financial projects from IFIs and the MTC

Projects of the MTC
Roads
• Projects from the Telecom programmes
Construction, rehabilitation, reconstruction of 33 roads
Financed by the central budget (finances from selling the telecommunication company).

Projects financed by the EBRD
Air transport
• Civil aviation upgrading project
Financed by: EBRD loan EUR 11,2 million, Grant from Germany (technical assistance) EUR 2,8 million.
Roads
• Demir Kapija- Udovo- Smokvica
Upgrading of a highway 33,1 km long
Financed by: EBRD/EIB credit;
• Smokvica- Gevgelija
Upgrading of a highway 11,0 km long
Financed by: EBRD credit EUR 15 million;
• Skopje Bypass Phase 2
Construction of a bypass around Skopje with 12,5 km length
Financed by: EBRD credit EUR 25 million.

Projects financed by the WB
Roads and Railways
• Trade and Transport Facilitation in Southeast Europe Programme (TTFSE)
Total cost of the project USD 14,5 million, IDA Credit USD 9,3 million (64%), US Government Grant USD 2,1 million, Macedonian Government USD 3,1 million (21%).

Railways

- Transport project for Macedonian Railways and the Fund for National and Regional Roads
- Restructuring of the Railways

To be financed by: WB credit EUR 10 million.

Projects financed by the EIB

Roads

- Demir Kapija- Udovo- Smokvica

Upgrading of a highway 33,1 km long
Financed by: EBRD/EIB credit;

- Skopje Bypass Phase 1

Construction of a bypass around Skopje 12,5 km in length
Financed by: EIB credit EUR 50 million.

4.1 Administrative budget by years

Highway development and maintenance is financed by the state budget (57,6% of revenues), which derives its revenues mainly from the tax on sales of petroleum products (20% of selling prices). Additional resources come from a tax on registration of vehicles (19,2% of total revenues), tolls (20,9%) and a tax levied on foreign vehicles entering the country (1,7%). Total yearly revenues amount to some EUR 48 million at present, which are spent mostly on new construction or rehabilitation, routine and periodic maintenance, which absorbs some EUR 22,3 million, including EUR 13,9 million for national and regional roads.

As seen in appendix 1, each year the FNRR spends EUR 9,9 million for the maintenance of local and EUR 14,9 million for the maintenance of regional and national roads (average amounts). EUR 4,2 million are allocated for reconstruction of the roads. This amounts to a total of EUR 29 million for maintenance and reconstruction of roads per year.

Each year the Fund spends EUR 21,6 million (average amount) for the construction of new highways. If the Fund allocated this amount of EUR 21,6 million to the maintenance and reconstruction of roads in Macedonia, then the budget for maintenance and reconstruction would reach EUR 50,1 million, which, according to the EIB's Basic Infrastructure Investments in South - Eastern Europe - Regional Project Review, would be enough to cover all costs for the maintenance of 8 216 km of roads.

Table 14. Estimation of finances needed for the maintenance of roads [54]

Estimated required road maintenance expenditure (EUR million)	Percent of Government Budget	Average expenditure on road maintenance (EUR million)	Percent of present Government budget
50	4%	12,4	1,0%

Table 15. Budget allocations for the transport sector

Expenditures by institution	2001	2002	2003
Macedonian Railways			
Railway construction Macedonia-Bulgaria	3,4	4,2	7,5
Total expenditure (EUR million)	**3,4**	**4,2**	**7,5**
MTC			
Local Road Construction Projects	3,1	9,6	4,3
Transfers to the Road Fund (see appendix 1)	27,3	21,4	26,3
Total expenditures (EUR million)	**30,4**	**31,0**	**30,6**
Centre for Civil Aviation			
Rehabilitation of the Ohrid airport			3,49
MSSR (mono-pulse secondary surveillance radar)			0,51
Total expenditures (EUR million)			**4,0**
Total (EUR million)	**87,6**	**78,1**	**99,6**

4.2 EU projects

Roads

Completed projects:

- Upgrading and modernisation of border crossings at Medsitlija, Bogorodica; construction of a terminal for heavy vehicles (Bogorodica); upgrading and modernisation of the existing equipment at border crossings according to European standards.

Total cost: EUR 1,7 million PHARE grant;

- Construction of a highway between Gevgelija and the Greek border;

Construction of a 4 km, 2 x 2 lane highway
Total cost: EUR 6,2 million - PHARE grant.

Current projects:

- Tetovo East - Tetovo South

Construction of Tetovo bypass - 3,6 km
Financed by: PHARE grant, EUR 8,7 million;

54 According to the Basic Infrastructure Investments in South- Eastern Europe, Regional Project Review, prepared by European Investment Bank 2000.

- Negotino - Demir Kapija Phase 1
  Upgrading of a highway with 5,6 km length
  Financed by: PHARE grant, EUR 7,65 million
- Negotino- Demir Kapija Phase 2
  Upgrading of 3,9 km of highway
  Financed by: PHARE grant, EUR 6,0 million;
- Upgrading of border crossing Blace
  Construction of a terminal for heavy transport vehicles at the Blace border crossing as well as approaching roads
  Financed by: EU, EUR 4,0 million.

Projects to be implemented:

- Negotino - Demir Kapija Phase 3
  Upgrading of the highway - 6,2 km
  Financed by: EU/ CARDS EUR 11 million and Macedonian Government EUR 5 million.

Table 16. CARDS grants for Macedonia

Year	2001	2002	2003
CARDS grants (EUR million)	56,20	41,50	43,50

5 Environmental problems

Data from the Ministry of Environment and Territorial Planning for the emissions from the transport sector are incomplete due to lack of concrete information from the measurements of emission in this sector. The Ministry disclosed the following information only for the total amounts of pollutants from all sectors:

Table 17. Air pollution in Macedonia[55]

Year/ Total for all sectors	SO2 tonne/year	NOx tonne/year	CO tonne/year	Dust tonne/year
2001	105 595,9	28 832,0	75 094,0	27 529,0
2002	137 127,5	31 841,7	76 059,0	5 672,4
2003	138 974,5	35 045,7	76 529,0	26 744,0

The Ministry's Report on air pollution in 2002 divides the pollution into sectors. In 2002, almost 65% of the carbon monoxide emitted came from the transport sector.

The Ministry did not disclose information on CO2 emissions during the preparation of this study. From the tables it can be easily noticed that air pollution is increasing over the years, and the standards for air pollution haven't been harmonised with those of the EU.

Table 18. Air pollution for the transport sector in 2002[56]

Type of emission	SO2 tonne/year	NOx tonne/year	CO tonne/year	Dust tonne/year
Emissions from transport in 2002	514,0	11 348,0	49 305,0	67,0
Total emissions in 2002	137127,5	31 841,7	76 059,0	5 672,4
Percentage from total	0,3	35,6	64,8	1,2

Concerning traffic accidents, there has been an increase in accidents and victims since 1999 with a drop of the number of accidents and victims in 2001 (probably due to a decrease in overall transportation because of conflict incidents in Macedonia).

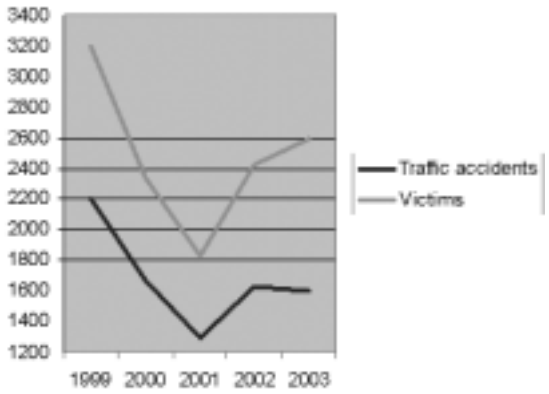
Table 19. Traffic accidents in Macedonia[57]

Year	Traffic accidents	Casualties					Heavily and lightly injured
			Killed				
			All	Drivers	Passengers	Pedestrians and others	
2000	1 667	2 502	162	67	46	49	1 340
2001	1 300	1 937	107	43	35	29	1 830
2002	1 628	1 628	176	76	66	34	2 424

From the information shown, it can be concluded that environmental problems and traffic accidents have been increasing over the years. We have to highlight the lack of a strict law and proper penalties in transport whenever laws are disobeyed (wearing the safety belt, regular check of the vehicle, driving within the allowed speed limit only, following the signs and regulations on the road, etc) as the main reasons for the increase in traffic accidents and casualties. It is of great importance that the Macedonian laws are harmonised with the EU laws on transport in order to ensure safety as well as reaching the destination without an unnecessary delay when traveling.

55 Ministry of Environment and Territorial? Planning
56 Report of the Ministry of Environment and Territorial? Planning for the air pollutants 2002
57 Institute for Statistics of Macedonia

Graph 1. Traffic accidents in comparison with number of victims



6 Conclusions and recommendations

Since 1991, the year when Macedonia became independent, the Government has not created any vision for the development of the country in various sectors, especially in the transport sector. It is of great importance that the Government defines the Action Plan for the implementation of the National Strategy for EU integration and specifies the directions for future development. Without it Macedonia cannot foresee any success in the future.

Since the IFIs and the EU have decided to cease any large projects in Macedonia unless proper reforms of the system are completed and the legislation incorporates EU standards, Macedonia has to work on meeting these demands. However, the Government has to bear in mind that foreign funds should be provided for the bare necessities of the country.

The construction of the new railway line to Bulgaria has proceeded poorly because of lack of funding. The Macedonian Government should place the railway construction as a priority project rather than new highway construction. The cost spent and the benefits gained from constructing a railway line in a country like Macedonia would represent much more for the economy and the whole development of the country. On the contrary, the construction of a new highway would push Macedonia into more debts and a difficult economic situation.

As the country has a quite well-developed road network that does not need to be expanded upon because it meets the demands, the funds allocated for new constructions should be, in fact, re-allocated for the maintenance of the existing network. So far the budget for the maintenance of roads accounts for only 1/4 of the amount it should contain. If the Road Fund allocates the amount used for new constructions of highways to the budget for road maintenance, the amount collected will be enough to cover all costs for the maintenance of 8 126 km of roads in Macedonia.

Concerning the preparation of this study, it was more than clear that better mechanisms for transparency and disclosure of documents and information need to be introduced in most of the Macedonian Ministries. With some exceptions, the Ministries usually needed 2-6 weeks for disclosing the demanded information or document. When speaking of standardising our legislation and practices with those of the EU, transparency and good communication are issues that shouldn't be forgotten.

7 Appendices

Appendix 1

Table 1. Expenditures of the Fund for National and Regional Roads

Year	2001	2002	2003
National/Regional Roads Maintenance	15,2	14,8	14,9
Local Roads Maintenance	9,9	8,7	11,1
Reconstruction	0,8	0,4	11,4
Regional Roads Construction	2,1	0,0	0,0
Highway Construction	25,8	19,0	20,1
Total Expenditures (EUR million)	53,8	42,9	57,5

Appendix 2

Table 1. Projects planned to be financed by the Public Investment Programme 2003-2005

Transport Projects to be financed 2003-2005	Total amount	Civil Aviation Administration	Fund for National and Regional Roads	PHARE	EBRD	EIB	Unknown foreign
New highway constructions	**1 032,21**		**290,94**	**1,63**		**10,00**	**729,77**
Udovo-Smokvica, construction of new roadway	32,30		15,45	0,48			16,38
M - 1 Motorway construction Tabanovci - Kumanovo	17,14		17,14				
Demir Kapija - Udovo, construction of a new highway	106,02		45,8	0,95		10,00	49,39
M-5 Bitola-Medjitlija	26,75		12,55	0,20			14,00
Construction of highway solution for the non-commenced road sections from Corridor - 8	850,00		200,00				650,00
Aviation	**23,35**	**0,52**			**1,6**		**21,23**
CIDIN (training)	0,53	0,20			0,33		
Upgrading with MSSR "Mono-pulse Secondary Surveillance Radar"	1,59	0,32			1,27		
Enlarging and reconstruction of the Skopje airport	21,23						21,23
Border crossings	**2,2**						**2,2**
Medjitlija	0,35						0,35
Novo Selo	0,66						0,66
Star Dojran	0,47						0,47
Kafasan	0,30						0,30
Blace	0,42						0,42
Railways	**4,25**						**4,25**
Equipment for maintenance of railway lines and installations	4,25						4,25
Total (EUR million)	1 062,02	0.52	290.82	1,63	1,6	10,0	757,45

Conclusions and recommendations

Conclusions from the national studies

Although the transport sectors in the three Balkan countries develop differently, they witness similar problems and obstacles. IFIs and the EU, united in the Stability Pact initiative, designed to bring stability and prosperity through support to the regional project, provide large loans and financial assistance to these countries.

According to all regional studies and findings in the national reports, one of the most obvious problems is that investments in transport infrastructure are mostly provided according to external plans for the development of the Trans-European Transport Corridors rather than in accordance to real local demands. Although existing transport networks cover the current levels of traffic, large amounts from IFIs loans and EU grants are pledged for the construction of new highways and airports.

One issue is the lack of proper maintenance of transport infrastructure. There are no analyses of the needs for investment and improvement of 2nd and 3rd class roads, which are important for the accessibility and development of regions within a country. The interest in rehabilitation of the present infrastructure and development of railway transport is low.

Balkan countries have launched institutional reforms in order to be able to apply for and absorb financial assistance and loans from the EU financial instruments and international institutions such as the EIB, WB and EBRD. Nevertheless, these structures show a lack of capacity to develop and implement projects.

Lack of proper control and monitoring systems on money absorption and project implementation is another problem to be solved. Moreover, relevant information regarding plans for extensive transport constructions is not disclosed to interested or affected people, nor are public concerns taken into account. Although sites of institutions provide some basic information on projects, studies or audits scrutinising the efficiency of spending are not available. In countries like ours, where white-collar corruption is still a serious problem, the lack of transparency and access to information creates the suspicion that public and national interest are gambled for ambiguous gains.

The transport sector, and particularly motorways and airports, obviously gets the most investments. At the same time, it should not be forgotten that the transport sector is one of the most polluting ones. Oftentimes environmental issues are underestimated or not addressed at all in the implementation of transport projects. So far no clear intentions for internalisation of the costs of transport regarding environment and health has been apparent in the policy-making process

Recommendations

- The development of the transport sector should be based on real traffic demands;
- There should be no more EU and IFIs investments in the construction of new highways and airports in the Balkan region;
- EU and IFIs investments should be shifted to 2nd and 3rd class roads' maintenance and rehabilitation and to more environmentally sustainable transport modes such as railways, public transport and bicycle lanes and paths;
- Effective monitoring mechanisms should be established with the participation of all interested and affected parties;
- SEA should be applied to the transport strategies, and EU regulations on EIA should be applied to all transport projects in the Balkan countries;
- Transparency, disclosure of project documents and public dialogue should be enforced, and public participation should be ensured at an early stage of project development and implementation.

Index of abbreviations

ATIRS	Air Traffic Infrastructure Regional Study
CEE	Central and Eastern Europe
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EIB	European Investment Bank
IFI	International Financial Institution
ISPA	Instrument for Structural Policies for Pre-Accession Aid
QSP	Quick Start Package
SEA	Strategic Environmental Assessment
SEE	South and Eastern Europe
WB	World Bank

The Stability Pact Watch is a coalition of environmental non-governmental organisations across the Balkan countries - Za Zemiata (Bulgaria), TERRA Milleniul III (Romania), Eco-sense (Macedonia), Young Researchers from Banja Luka (Bosnia and Herzegovina) and Center for Ecology and Sustainable Development (Serbia and Montenegro).

The SPW was established in September 2002 within the CEE Bankwatch Network with the goal of monitoring Balkan Stability Pact activities and calling for transparency and public participation in the decision-making processes surrounding the reconstruction process in the Balkans.

www.stabilitypactwatch.info