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Issues and Objectives of the Transport Sector in the Republic of Macedonia

Summary

Following the Conflict in the Western Balkans, there were many events that led to designing a new approach into developing a new era, with implications on diverting the transportation routes due to embargoes and other newly emerged events. The geopolitical developments in the area affected considerably the area's transport flows and therefore the needs for infrastructures in specific parts. In this context, an effort to create an integrated transport network in the South-West Europe comes up to the stage.

The transport networks have become the main topic of discussions and decisions at all levels of the European "being" for the last few years. In this connection, many changes have been undertaken in Macedonia in its political and economical system.

Key words: transportation route, transport flow, integrated transportation network, transport infrastructures, legislative framework

1. Introduction

Over the time being many changes occurred in the Western Balkans region. New independent states accompanied with economical, political, and structural changes have emerged. There were many events that led to designing a new approach into developing a new era and with implication on diverting the transportation routes due to embargoes and other new non known events ever before. The geopolitical developments in the area affected considerably the area's transport flows and therefore the needs for infrastructures in specific parts.

In this context an effort to create an integrated transportation network in South-east Europe comes up to the stage. Today, more than ever before, the opportunities

and necessary conditions are present for an overall plan concerning development of the transport infrastructure in the whole area of the Balkans, the Adriatic, the Black Sea and Europe in general.

All the projects being carried out so far are leading in this direction. The European Union has given its approval for creation of a European Transportation Network. In the meantime, there were few Pan-European Forums held on Transport and transport infrastructure with co-operation with the EU, whereas nine Pan-European axes were adopted initially. Four of them are directly related to South-east Europe. On the other hand, funding lines are opened to support road infrastructure projects, and in particular for cross border cooperation in the region.

Within this context, Phare-Multy Country Transport Programme has to be mentioned. The key objectives of the Phare Transport Programme were to develop the infrastructure links in and between the Phare countries and between these and the EU, establish a harmonized regulatory and legislative framework, and to develop the human resource capacity of the regions transport institutions through training for all transport modes. The fulfillment of these objectives was carried out by supporting three principal areas:

- pre-investment and strategic studies;
- training;
- approximation of laws and standards.

In the nine years of the Phare Multi-Country Transport Programme, it proved to be a highly effective mechanism for stimulating regional co-operation, for fostering dialogues and consensus, and for establishing the foundations for the closer economic integration required for accession.

It is not accidental that the transport networks have been a main topic of discussions and decisions at all levels of the European “being” for the last few years. The formation and development of the Trans-European Transport Networks (TTN) is mentioned for the first time in the title of the XII Maastricht Treaty 129b, 129c and 129d as well as of the energy’s and telecommunications pointing out the united planning of transport networks, telecommunications and energy.

From its very beginning as an independent state, Macedonia has very clearly declared its readiness and willingness to become a member of a broaden European family. Therefore, many changes in its political, economical system have been undertaken. When it comes to the formatting of its transport network, its connections to the neighbouring countries and with Europe in a wider sense, then one has to recognise the first priority projects that have EU guarantee for their completion.

2. Road Network and Transport Corridors in the Republic of Macedonia

The Republic of Macedonia is a South-East European state, situated in the central part of the Balkan Peninsula with no direct sea exit, but on the distance of 80 km from the sea (from its south side to the Aegean bay). It is one of the smallest countries in Europe with an area of 25.713 m². The river Vardar with its composite valley presents a very powerful potential of integration on the Balkans as a whole. Old geographic dissections enable easy communication with neighbouring physical and geographical regions on the east towards Asia and on the West to Italy. These constellations have led to historic, cultural, civilisational, ethnic and religious mixtures of the west and the east, to the north and south impacts on one hand and on the other hand, to isolated and remote effects. (Fig.1.)



Fig. 1. The position of the Republic of Macedonia in the region

By intensifying its connections on the basis of its preferable geo-transport position, Macedonia has a possibility to use its spatial and functional position very ratio-

nally and effectively with Mediterranean, Middle East, Central and Western European countries.

Some con effects of its central position on the Balkans refer to the following:

- No direct exit to the sea: Macedonia is forced to use port services in Thessalonica (Greece) and Durrës (Albania) through rail and road traffic links;
- The dominant role of the Vardar Corridor and its monocentric relevance on the population concentration so far has led to lowering the environmental quality;
- Demographic decrease on the transversal frontier areas and its economic stagnation due to the concentration on the longitudinal axis;
- Exposition to various impacts in war times is a strong negative factor.

An overview of the current road network is given in Table 2.1.

Table 2.1. Road network condition in the Republic of Macedonia

Roads	Total Length (km)	Road Condition	
		Modernized (km)	Non-modernized (km)
Trunk	909	829	80
Regional	3.404	2.592	812
Motorways	144	144	
International "E"			
Roads	584	584	
Local	6.152	2.563	3.589
Total	10.609	6.128	4.481

Source: Statistical Yearbook of Macedonia, 1998.

From the total road network, 57% is modernized. The highest proportion of non-modernized roads (80%) belongs to the local roads.

It is evident that Macedonia can benefit from its complex position by well and systematic spatial planning so as it can integrate itself on the regional and on the European level as well. In this respect, for fully integration of the Republic of Macedonia in European and world transport flows it is necessary that Macedonia should use its preferable geographic position at its best. The fact is that one of the most important transportation corridors, which links the Scandinavian and Baltic region through Central Europe and Middle East, i.e. South Africa runs through this country.

In the system of Trans-European motorways, a particular importance is to be addressed to the future motorway E-75 (North-South). In global frames, this corridor comprises the corridor of fast railways, the waterway, which links the river Danube with the Aegean Sea and the telecommunication corridor that crosses the Trans-Balkan

one in Skopje as well. The central position of Macedonia on the Balkans allows that the most important telecommunication corridors as Trans-Balkan East-West Corridor can go through. Over the Macedonian sky there exist international and intercontinental air traffic corridors with its further development possibilities.

2.1. Analysis of existing transport corridors in the region

The existing transport infrastructure in the area can be characterised as being poorly maintained and in urgent need of rehabilitation.

Road corridors are generally well defined, except in Albania and Romania, and in short sections in Bulgaria. Safety and environmental problems are to be improved.

Rail corridors are extensive in all countries with good coverage except in Albania. The rail network is in urgent need of rehabilitation in many sections. In addition, management and operational issues need to be addressed to improve competitiveness.

Combined transport is mostly based on limited container traffic. Fully multi-modal terminals are required at new sites.

Ports and short sea shipping at all ports with exception of Durres in Albania, Haydarpasa-Istanbul in Turkey and Varna and Burgas in Bulgaria, have sufficient capacity.

The main inland waterway corridor that runs through the Balkans is the River Danube. Ports along the Danube are under-utilised and in urgent need of restructuring. The UN embargo in Serbia has led to great loss in international traffic and will be difficult to bring back to the Danube.

The **main issues regarding the transport corridor bottlenecks** can be summarised as following:

- **Infrastructure bottlenecks:** delays at road and rail border crossings;
- **Institutional bottlenecks:** border crossing issues in terms of improved training and attitude of customs staff, communications both locally and nationally, the complexity of transit documentation, the degree of international co-operation;
- **Commercial practices:** outdated railway commercial practices, the degree of cooperation between railways in terms of tariffs and marketing strategy;
- **Legislative framework:** amount of co-ordination on road user transit charges, level of common policy on fuel taxation to help manage the growth in road transport.

Whilst there are a number of transport bottlenecks on the corridor such as missing links on the railways and poor road corridors, current traffic levels are not high enough to justify major transport infrastructure projects. (From the results of the Balkan Study by GIBB LTD, London, 1997). Therefore, it was suggested that infrastructure development policy in Albania, Macedonia and Bulgaria is to be co-ordinated. Also, short and medium-term transport policy in the corridor should aim to achieve the fol-

lowing objectives:

- Improved maintenance of existing road infrastructure and elimination of corridor bottlenecks;
- Completion of the rail link between Macedonia and Bulgaria;
- Upgrading the road infrastructure connection in the south border region;
- Upgrading the road infrastructure in the corridor No 10

2.2. Analysis of traffic and transport flows at the cross border points in the Republic of Macedonia

An insight into the essential traffic data regarding the roads, the railways in the crossborder region are given. It is particularly the border crossing issue towards Bulgaria and Greece that is being analysed. Traffic volume data of the vehicles crossing the borders are given.

Total road traffic (vehicles) towards neighbouring countries is given in Table 2.2.

ROAD TRAFFIC	1996	1997	1998
Bulgaria	1609	1037	799
Greece	1116	1599	1116

Table 2.2. Overall road traffic volume (in vehicles) towards Bulgaria and Greece

Total railroad traffic (railroad freight wagons) towards Greece is given in Table 2.3.

RAILROAD TRAFFIC	1996	1997	1998
Greece	142	151	196

Table 2.3. Overall railroad traffic (in freight railroad wagons) towards Greece

From the transport significance point of view, following border crossings are of importance:

BORDER CROSSING	1996	1997	1998
Bogorodica	22,6	26,7	23,3
Deve Bair	35,0	73,2	76,6

Table 2.4. Participation in the total transport volume (%)

One can perceive that statistical data are not complete. We consider that statistical data should be accessed at a larger scale to the public.

From the data presented, it is evident that total transport flows in both directions towards Bulgaria and Greece are low compared with developed countries. Traffic flows on domestic roads are of higher values than those at the crossing points. The underlying reason is presumably in the visa regime (towards Greece). Traffic flows of domestic vehicles are low due to the low standard of domestic population, as well as to compulsory foreign insurance and high fuel prices. Also low economic activity and low import/export rate as well as high unemployment rate in the country have negative impact to the total transport volume values at the border crossings.

Besides the overall magnitude of transport flows, the geographic distribution is also a subject of change. It is primarily dependent on the GDP rate that varies across the different regions. It is an important factor in generating the freight transport demand. Higher growth rates of GDP and industrial production are expected in Southern and Eastern Europe.

On the other hand, one should note that the former Eastern block countries became an important trading partner of the EU.

3. Demands and Supply of Transport Needs

An overview of the state-of-the-art demand and supply is going to be given in the tables below (T. 3.1, 3.2, 3.3, 3.4).

	<i>Railway stations</i>	<i>No of passenger departures</i>	<i>Goods in tons</i>	
			<i>Loaded</i>	<i>Unloaded</i>
REPUBLIC OF MACEDONIA	51	1.505.406	285.366	285.262
Skopje	13	578.906	65.767	49.415
Bitola	2	69.762	2.152	3.922
Gevgelija	2	43.461	1.608	3.377
Gostivar	2	85.941	41.834	782
Kicevo		83.001	11.949	3.613
Kocani	3	5.000	5.664	755
Kumanovo	2	22.462	2.739	43.048
Negotino	3	42.503	1.364	9.753
Prilep	4	122.378	152	8.813
Sv. Nikole	4	285	968	1.195
Stip	1	2.480	65.892	1.085
Tetovo	2	96.709	7.257	82.348
Veles	3	352.338	78.020	77.156

Table 3.1. Passengers and goods on railway stations in 1996.

Source: Statistical Yearbook of Macedonia, 1997.

From T. 3.1 it can be seen that the Western part of Macedonia has higher passenger traffic (Skopje, Bitola, Gostivar, tetovo, Kicevo, Prilep, Veles) as well as higher goods traffic comparing with the Eastern part of the country (Kocani, Gevgelija, Stip, Kocani, Sv. Nikole).

Table 3.2. Passenger and goods road traffic in 1996¹.

	<i>Road transport in .000</i>		<i>Freight transport in .000</i>	
	<i>Passengers carried</i>	<i>Passenger km</i>	<i>Goods transported</i>	<i>Ton-kilometers</i>
REPUBLIC OF MACEDONIA	17.039	887.714	2.161.209	795.658
Skopje	1.401	152.182	681.287	139.003
Berovo	281	15.422	-	-
Bitola	4.334	126.392	69.115	55.777
Vinica	-	-	15.770	10.155
Gevgelija	1.014	38.581	760.061	221.529
Gostivar	974	77.600	44.200	8.560
Delcevo	-	-	170	436
Kavadarci	385	20.983	46.012	68.166
Kicevo	99	6.851	16.652	4.617
Kocani	446	29.507	110.638	44.032
Kriva Palanka	363	16.244	18.301	7.483
Krusevo	129	9.170	8.438	5.007
Kumanovo	1.326	34.011	38.211	29.231
Negotino	343	7.608	14.486	11.254
Ohrid	2.768	167.741	110.236	24.118
Prilep	451	16.877	12.887	5.864
Probistip	1.101	17.310	39.750	10.435
Radovis	319	24.932	20.370	26.182
Resen	250	1.789	-	-
Sv. Nikole	231	11.605	-	-
Struga	235	33.023	2.420	1.327
Strumica	387	67.790	19.119	26.458
Tetovo	-	-	2.032	2.062
Veles	-	-	38.729	28.590
Stp	202	12.096	92.325	65.372

¹ Part of the private sector is included

Source: Statistical Yearbook of Macedonia, 1997.

As for road passengers transported, the cities of Skopje, Bitola, and Ohrid are leading (western part of the country). The freight transport by road is most prominent in Skopje and Gevgelija. The latter is due to being on the very border with Greece.

Table 3.3. Road transport (1992-1996)

	1992	1992	1994	1995	1996
Growth of road passenger transport					
Buses	768	691	659	607	578
Passengers carried in .000	30.540	24.079	22.487	18.505	17.039
Domestic transport	28.189	22.495	21.192	17.452	16.118
International transport	2.351	1.584	1.295	1.053	921
Passenger kms in .000	1.325.650	1.158.273	1.032.764	9.706.646	887.714
Growth of freight transport					
Commercial vehicles	2.496	2.436	2.374	2.069	1.917
Commercial trailers	759	698	658	586	567
Goods carried in .000 tons	4.015	3.801	3.710	3.072	2.161
Domestic transport	2.222	2.726	2.733	2.024	1.368
Export	256	497	436	414	276
Import	441	434	438	543	429
Transit and transport abroad	1.096	144	103	91	88
Ton kms in .000	1.425.000	1.293.000	1.498.000	1.174.000	796.000

Source: Statistical Yearbook of RM, 1997.

Table 3.4. Lake transport of passengers 1991-1996

	1991	1992	1993	1994	1995	1996
Number of passengers	8.747	6.500	14.230	10.098	7.060	5.020
Passengers km in .000	230	161	104	147	319	128

Source: Statistical Yearbook of RM, 1997.

Number of passengers transported by lake has fluctuated through the years due primarily to the variable regulations between Macedonia and Albania.

3.1. Elements of influence on the transport demand and supply

As we entered the 21st century, it is very appropriate to discuss upon the elements influencing the future trends of transport needs in the area of interest (cross border area).

The main elements that influence the transport **demand** could be summarized as following:

- **Socio-political environment:** defined through market forces that regulate the demand and supply of transport services. Our border regions try hard to “catch up” with this trend due to the local and historical attitudes as well as to the new economic system. We just started with re-establishment of private initiatives and new regulations in this respect.
- **The system of societal values:** there has been a shift towards satisfaction of individual rather than collective needs based on “lifestyle choices”.
- **Production process:** new forms of flexible, “just-in-time” production have emerged. Thus, new requirements on freight transport system are being imposed. Problems with establishing road and rail connections for reliable transport systems have occurred.
- **Spatial organisation:** this means greater integration among urban and rural areas in the border regions.

On the supply side, main elements can be summarized as:

- Development of coherent transport infrastructure: the notion of regional transport network as a subsection to the Trans European Transport networks incorporating road, rail, intermodal network is a leading effort. The process is very slow. It requires changes in funding beyond the government’s availability. New initiatives such “private-public” partnerships are most recommended.
- New technological possibilities: the application of transport telematics in particular for freight transport (logistic systems, network service providers) is important to facilitate the crossings between the countries in the region.

4. Parameters of Road Traffic Safety

The parameters of road traffic safety -the state-of-the-art, are summarized in the Tables below (T. 4.1 - 4.7). Also an overview of traffic accident types, traffic accident causes and counter measures to improve road traffic safety has been presented.

Table 4.1. Population, number of vehicles and number of drivers

	<i>Population</i>	<i>Number of registered motor vehicles</i>	<i>Passenger vehicles</i>	<i>Number of drivers</i>	<i>Number of inhabitants/vehicle</i>	<i>Number of inhabitants/passenger vehicle</i>	<i>Inhabitants/motor vehicle driver</i>
1994	1.936.877	293.323	263.181	503.449	6.6	7.3	3.8
1995	1.936.877	320.660	285.907	589.957	6.0	6.8	3.3
1996	1.991.398	256.770	231.163	622.015	7.8	8.6	3.2
1997	2.005.000	324.631	289.204	633.295	6.2	6.9	3.2

Source: Statistical Yearbook of Macedonia, 1998.

Due to the motor vehicle number increase, the number of inhabitants/vehicle is decreasing over the 1994-1997 period.

Table 4.2. Traffic accidents in R Macedonia over the 1994-1997 period

<i>Years</i>	1994	1995	1996	1997
No of accidents with injuries	2.265	2.436	2.367	2.137
No of accidents with material damage	151	105	113	27
No of fatal accidents	147	157	138	156
Total	2.563	2.541	2.618	2.320

Source: Statistical Yearbook of Macedonia, 1998.

The type of traffic accidents has been changing over the 1994-1997 period. More substantial changes in traffic accidents with material damage have been occurred (a rapid decrease from 151 in 1994 to 27 in 1997).

Table 4.3. Traffic accident causes (1994-1997)

	1994	1995	1996	1997
Speeding	881	752	809	709
Use of alcohol	227	303	263	179
Non-yielding traffic	300	324	357	326
Pedestrians' error	363	349	373	317
Irregular overcoming	117	148	132	116
Other	675	665	684	673
Total	2.563	2.541	2.618	2.320

Source: Statistical Yearbook of Macedonia, 1998.

As main traffic accidents cause, one can perceive that speeding comes to the first place (31% of total traffic accidents occurred). Next to it are *pedestrians' error* and *non-yielding traffic* as traffic causes regarded. *Irregular overcoming* as traffic accidents cause considered comes at last with 5% of the total number of accidents happened. The total number of traffic accidents is decreasing over the 1994-1997 period (22% decrease).

Table 4.4. Type of traffic accident participants (1994-1997)

Type of traffic accident participants	1994	1995	1996	1997
Drivers	3.711	3.826	3.921	3.467
Passengers	1.169	1.250	1.219	880
Pedestrians	1.078	1.051	1.059	1.270
Others	14	10	4	2
Total	5.972	6.137	6.203	5.619

Source: Statistical Yearbook of Macedonia, 1998

The number of pedestrians involved in traffic accidents has increased in 1997 compared with 1994 for about 38.6%. It proves that this category of traffic accident participant is the most vulnerable.

Table 4.5. Number of victims in traffic accidents (1994-1997)

Type of injured persons	1994	1995	1996	1997
Injured	3.480	3.600	3.551	2.277
Killed in traffic accidents	167	179	154	178

Source: Statistical Yearbook of Macedonia, 1998

The number of injured persons has decreased since 1995 for about 6%. Despite this, the number of fatally injured in traffic accidents has an average of 170 persons/year.

Table 4.6. Main indicators of road traffic safety (1994-1996)

	Population in the mid-year	Registered motor vehicles	Accidents per .000 vehicles	Victims per accidents	Victims per 10 000 inhabitants
1994	1.946	291.872	8.3	1.4	17.9
1995	1.963	320.660	7.6	1.5	18.3
1996	1.983	318.540	7.9	1.4	17.9

Source: Statistical Yearbook of Macedonia, 1997.

The average number of victims/accident is about 1.4.

Table 4.7. Undertaken preventive and repressive measures in road traffic safety (1994-1997)

	1994	1995	1996	1997
Preventive measures	623.060	619.539	595.493	708.627
Repressive measures				
Against speeding	90.221	67.022	74.998	66.821
Against the use of alcohol	81.933	85.571	102.588	120.217
Against pedestrian's error	17.880	13.014	13.318	15.191
Against non-yielding traffic	4.981	8.755	11.766	6.858
Against irregular overcoming	12.059	14.617	11.641	9.899
Expressed penalties	57.761	47.870	34.965	29.550

The repressive measures against the use of alcohol have been increased by 50% in 1997 compared with 1994. It could be assumed that the major of traffic accidents happen due to the use of alcohol.

The number of the penalties expressed has decreased since 1994, which could show the better quality in driver behaviour, although it could be controversial.

5. State of Environment

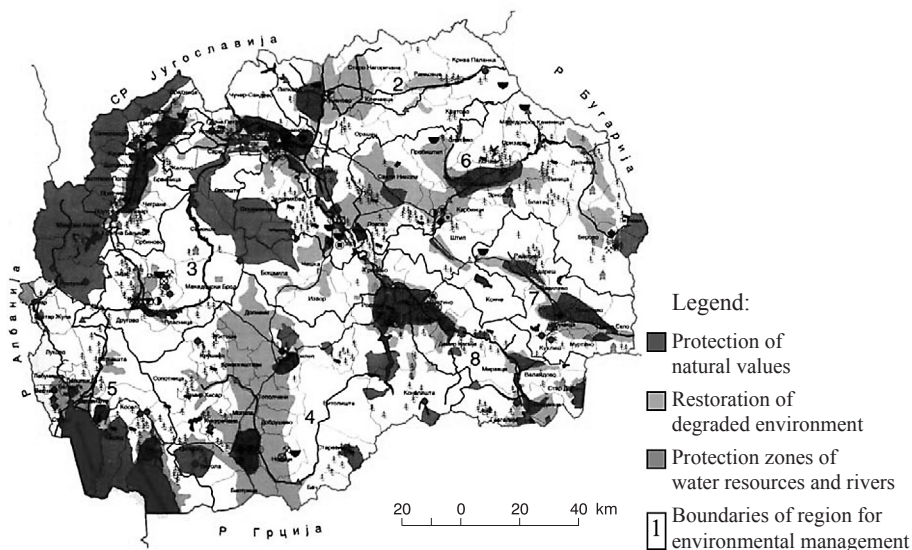
5.1. The Rank of Environmental Problems among Issues of National Importance

In the kind of deteriorating economic situation, environmental problems are the lowest priority in this country. Public pressure through the ecological movement has not yet succeeded in changing the government's environmental policy.

There is no strategy for maintaining a balance between economic demands and ecological needs. It is necessary to make long-term environmental planning as an integrated part of economic and social development strategy.

In the area of land use, its utilization in terms of the citizens' needs, industrial development, agricultural purposes, soil protection, etc. have been taken into account. Significant number of areas with high natural values, as well as species, have been placed under protection (Fig 1.).

Fig. 5.1. Environment of the Republic of Macedonia



(Source: *Spatial Plan of the Republic of Macedonia, Skopje, 1999*)

5.2. Current Policy Initiative

Environmental concerns are supposed to be integrated into the newly undertaken land-use planning strategy and the new water management policy. The current environmental policy follows the guidelines of the European Union, attempting to adapt them to the specific circumstances in the country.

The Law on Environment and Nature Protection and Improvement (adopted in 1996), is a frame one and mainly based on the right of each citizen to a healthy environment, and the obligation to protect the environment. This Law contains economical instruments. Financing is settled with the funds from the Environmental Fund, central government, as well as with the support by PHARE, governments of some countries and the World Bank.

Public opinion is present in all segments and stages of the decision-making process. This is provided especially in the Law on Environmental Impact Assessment.

There is no organized information system; data is gathered on an ad hoc basis, without any systematized methodology or procedures. Regulations requiring the creation of environmental databases are not yet defined. Inter-ministerial environmental cooperation is poor.

Among the current initiatives are:

- Creation of a program for nature conservation within the framework of the 1995 European Year of Nature Conservation.
- Creation of an environmental information database.

The Statistical Office of Macedonia has recently created a department for collecting environmental information. Such an information system does not exist in either the Department of Environment or in other ministries.

6. Cross Border Co-operation (CBC) – Bottlenecks Identification

Whilst there are a number of transport bottlenecks on the corridor such as missing links on the railways and poor road corridors, current traffic levels are not high enough to justify major transport infrastructure projects. (From the results of the Balkan Study by GIBB LTD, London, 1997). Therefore, it was suggested that infrastructure development policy in Albania, Macedonia and Bulgaria is to be co-ordinated. Also, short and medium-term transport policy in the corridor should aim to achieve the following objectives:

- Improved maintenance of existing road infrastructure and elimination of corridor bottlenecks;
- Completion of the rail link between Macedonia and Bulgaria;
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- Upgrading the road infrastructure in the corridor No 10

The liberalisation process in the European market should be a guide to the countries in the region that are becoming candidates to adhering the EU. Things, which are going to be borne in mind by the countries in the region could be listed as following:

- No border checks for road freight
- No quota restrictions for road freight transport with exception for Eco-points system
- Liberalisation of road transport profession
- Separation of rail infrastructure from rail railway services operation

Transport field is one of the first issues of co-operation and progress in the region. Basic economic and social habits, human behaviour, preferences are of great importance in achieving sustainable co-operation. Deregulation and privatisation are emerging for policy formulation in economic activities. The environment tends to change into competitive and deregulated.

Some key issues of the CBC policy could be listed as following:

- Close work on: developing and renovating transport infrastructure,
- Removing administrative and legal obstacles to the movement of people and

goods

- Implementing new technologies and transport systems

Concerning all mentioned above, we hope that transport issues will be the first field of cooperation and progress among the countries in the region, and thus when considering the CBC. But we are witnesses of delicate and very changeable political and social issues occurring in this part of the Balkans.

Finally, transport can bring people together in developing good relationships by promoting descent co-operation between the countries in the region.

7. Research Needs in Near Future- a Step Forward

Several key points should be highlighted in order to establish the needs analysis for further research and development.

- In the Republic of Macedonia, a well comprehensive and long-term strategic orientation with clearly defined goals for an optimal and sustainable transport has been lacking.
- Republic of Macedonia has not yet defined its traffic and transport strategy. It is quite necessary that the National Strategy for Transportation System Development should be designed. Since Macedonia is a part of European transport system, it has to adopt all recommendations, norms, and regulations of the EU.
- The National Programme has to aim towards a multimodal transport system incorporating all modes of transport as well as its integration into the unified system (road, railway, air, multimodal transportation terminals). A particular emphasis has been given to European transport corridors that cross the Republic of Macedonia. The optimisation evaluation should embed the external costs for a real validation for expected costs and benefits of a particular transport mode to take place.
- The National Action Plan for Environmental Protection and Transport is a particular need. Thus, the directions for sustainable transport system development to support the development of the country as well as to preserve and advance the human environment and the cultural and natural resources of Macedonia could be defined.
- A transport system design to minimize the harmful impact of transport to the environment
- Upgrading the process of realisation and implementation of infrastructure projects.
- Regarding traffic problems in urban areas, an integrated approach in carrying out the traffic studies and research is suggested. In this respect, harmonization with the European regulations and norms in the domain of traffic signs and

signals is a prime issue.

- The need for adoption the possibilities offered by intelligent technologies in traffic management and control is emphasized, having in mind its benefits in the area of traffic safety, environmental protection, energy saving, mobility.
- The public urban transportation as a mode of transport has to gain its proper role in urban areas.
- In the area of traffic safety the need for national traffic accidents database is emphasized. When transporting dangerous goods an integrated approach in respect of environmental protection and safety according to the EU norms and regulations has been proposed.
- When doing traffic accidents reconstruction expertise a professional approach has been lacking so far. Thus, code of ethics for traffic accident reconstructionists has to be designed.
- Since the Republic of Macedonia is a crossroad between the West and East, it is necessary to develop the combined transport for better connecting of Macedonia within the unified European transport market.
- The need for national legislative and regulations according to the international standards, recommendations in the area of civil aviation is present. That is, the Act of new Law for Civil Aviation and other general legal issues has to be designed and put into force.
- Further development of integrated transport and communication system in a way to support modal split and to optimise transport needs and communications.
- Transport intermodal centres design as a prerequisite for efficient, flexible and economic transport system.
- Reconstruction and design of new transport networks.
- Dynamic realization of infrastructure upon the priorities based on economic and transport criteria.
- Access to the whole territory of the country as for development equity of all regions to be achieved.
- Maximum usage of traditional transport corridors for locating main transport corridors.

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Problemi i ciljevi prijevoznog sektora u Republici Makedoniji

Sažetak

Nakon sukoba na području zapadnoga Balkana razni su događaji potakli kreiranje novog pristupa razvoju jednog novog razdoblja, s implikacijama na preusmjeravanje prometnih pravaca radi embarga i drugih novostvorenih uvjeta. Geopolitički događaji na tom području znatno su utjecali na njegov prometni tijek a time i na potrebu za infrastrukturom na pojedinim djelovima.

U tome kontekstu se pojavljuju nastojanja na ostvarenju integrirane prometne mreže u jugozapadnoj Europi.

Prometne mreže su postale glavna tema rasprava i odlučivanja na razini europskoga bića posljednjih nekoliko godina. S time u svezi, Makedonija provodi razne promjene u svome političkom i gospodarskom sustavu.

Ključne riječi: prometni pravac, prometni tijek, integrirana prometna mreža, prometna infrastruktura, pravni okvir

Problemi ed obiettivi del settore di trasporto nella Repubblica di Macedonia

Sommario

In seguito al conflitto nell'area dei Balcani occidentali vari fattori hanno concorso alla creazione di nuovi criteri di sviluppo che implicano il riassetto delle vie di scambio dovuto all'embargo e alla comparsa di nuove condizioni. Gli eventi geopolitici della regione hanno avuto un impatto notevole sul flusso di scambio creando in particolari segmenti un'esigenza di adeguata infrastruttura.

In questo ambito sono emersi vari tentativi di creare per l'Europa sudoccidentale una rete di comunicazione integrata.

Negli ultimi anni le reti di comunicazione sono divenute in ambito europeo oggetto principale di dibattito e di decisione politica.

È a questo scopo che la Macedonia sta apportando vari cambiamenti al suo sistema politico ed economico.

Parole chiave: via di scambio, flusso di scambio, rete di comunicazione integrata, infrastruttura viaria, contesto legale

