



**NATIONAL BACKGROUND REPORT ON
TRANSPORT FOR KOSOVO
(under UNSCR 1244)**

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Executive Summary

This Report drafted for Transport Sector in Kosovo¹ is primarily intended to provide an overview on developments which took place in the past in transport Sector in Kosovo, which is composed by Road, Railway and Air sub-sectors.

Besides, it provides a description of projects and studies completed mainly by foreign experts in after war period in Kosovo with the attached Annex containing the list of those projects and studies.

The Report contains also data on institutional, social-economic and financial organization on investments in transport sector for past and coming period showing in table format data in detailed and easy to understand way.

Apart from developments it also provides an overview on transport field and infrastructure of institutions dealing with researches in Kosovo as well as the opportunity for cooperation with countries of South East Europe (SEE) and EU countries.

Incorporation of Kosovo in European Transport Research Zone is mentioned briefly due to the low level not to say completely lack of participation of Kosovo by its local experts in research activities in the past years. Thus, local experts participated more in conferences and symposiums of development nature rather than those of research nature organized by regional countries and wider without concrete presentation by them. It should be also noted that some representations took place by institutional responsible transport officials in development projects such is in South-East Europe Transport Observatory (SEETO), in International Railway Community (CIT), European Railway Community (CER) and meetings to implement European Civil Aviation Area Agreement (ECAA).

SWOT analysis on researches in transport sector specifying strength, weaknesses, opportunities and threats is provided afterwards.

Research priorities for Kosovo in transport sector and priorities to develop researches in coming period are also provided.

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Abbreviations

AADT	Annual Average Daily Traffic
CARO	Civilian Aviation Regulatory Authority for Kosovo
CEMT	European Conference of Transport Ministers (part of OECD)
CSP	Comprehensive Proposal for the Kosovo Status Settlement
CER	European Railway Community
DoRI	Department of Road Infrastructure
EAR	European Agency for Reconstruction
EC	European Commission
ECA	Europe and Central Asia, Administrative Region of the World Bank
ECAA	European Civil Aviation Area
ECAC	European Civil Aviation Conference
EBRD	European Bank for Reconstruction and Development
EU	European Union
FME	Faculty of Mechanical Engineering
GDP	Gross Domestic Product
HLG	High Level Group
IBRD	International Bank for Reconstruction and Development
ICAO	International Civil Aviation Organization
IFI	International Financial Institutions
IRU	International Road Union
KCB	Kosovo Consolidated Budget
KCC	Kosovo Chamber of Commerce
KDSP	Kosovo Strategic and Development Plan
KR	Kosovo Railways
KTA	Kosovo Trust Agency
MAP	Multi Annual Plan
MESP	Ministry of Environment and Spatial Planning
MFE	Ministry of Finance and Economy
MoU	Memorandum of Understanding
MTC	Ministry of Transport and Communications
MTFE	Medium Term Framework of Expenditure
PIA	Prishtina International Airport
PISG	Provisional Institutions of Self-Government
PPP	Public-Private Partnership
REBIS	Regional Study of Balkans Infrastructure
RDK	Road Directorate of Kosovo
SAP	Stabilization and Association Process
SEE	South-East Europe
SEETO	South-East Europe Transport Observatory
SOK	Statistical Office of Kosovo
SRSG	Special Representative of Secretary General
TEN-T	Trans-European Transport Network
TPU	Transport Planning Unit
UNMIK	United Nations Mission in Kosovo
UNSC	United Nations Security Council
WB	World Bank

Introduction

Kosovo is situated in South-East Europe (SEE) with central position within Balkans peninsula and the area of 10,887 km² (figure 1).

The Transport Sector takes an important place for economic development of Kosovo and is composed of three sub-sectors: Roads, Railways and Air Transport. Kosovo covers a road network of 8,522 km, classified as public roads, which is mainly single road lane, a railway system of 333 km situated in the North-South and East-West of Prishtina as well as two airports, an International Airport of Prishtina (PIA) and Gjakova Airport for military purposes.

Transport Infrastructure in Kosovo is in poor condition with insufficient road maintenance, rehabilitation and development. It is estimated that over 95% of transport in Kosovo is concentrated in road transport or is related to road movement at beginning or at the end of trip. Railway infrastructure, movement market and general services are of low quality. In the field of Trans-European Transport Network, Kosovo reached some progress and it participates in development of Core Transport Network and in South-East Europe Transport Observatory (SEETO).



Figure 1: Map of Kosovo with main roads

1. Purpose of the national background report and methodology/summary of the consultation process

The purpose of this Report is to provide an overview about the state of affairs or research activities in the field of transport in Kosovo. This Report contains also some data on socio-economic and development trends relevant to the transport sector. As mentioned above, *Transport Sector* in Kosovo is composed of *Road, Railway and Air transport sector, which will be elaborated entirely in this Report*. Besides this, SWOT analysis of

transport research capacities is presented, to follow identification of research priorities in Kosovo.

This Report intends to contribute to participation of Kosovo in the regional cooperation with Western Balkans and EU countries in the field of transport research in order to address issues of importance to the Region.

Important aspect of transport in economic development is followed by considerable economic benefits to Kosovo meaning that *good transport network* provides facilities, expansion of domestic and international markets; reduce of transport prices enabled by decrease of transport costs, attracting foreign investments and increasing employment.

Challenges in this sector are specific but in order to easier meet them there is a requirement to increase contribution of research institutions by completing required studies in this field.

2. The Transport S&T system in Kosovo

2.1 The Kosovo Transport policy framework

Background

The legal system in Kosovo is a combination of legislation adopted by the Kosovo authorities, regulations and administrative directions of the United Nations Interim Administration in Kosovo (UNMIK), and Yugoslav laws in place before 22 March 1989. In March 2007, the UNSG forwarded the Comprehensive Proposal for the Kosovo Status Settlement (CSP) prepared by his special envoy, Martti Ahtisaari, to the United Nations Security Council (UNSC).

Following the failure of the UNSC to reach agreement on CSP, on 17 February 2008, the Assembly of Kosovo declared Kosovo an independent and sovereign state. To date, Kosovo's independence has been recognized by a total of 58 countries, of which 22 are EU Member States. On 9 April, the Assembly adopted the Constitution of the Republic of Kosovo, which entered into force on 15 June 2008. The constitution is based on the CSP and envisages a significant role of the European Union in Kosovo. It also provides for the international civilian representative as ultimate supervisory authority as set out in the CSP. Apart from this, Kosovo is moving from post conflict environment to a development environment passing through new challenges. A considerable effort for reconstruction immediately after conflict of 1999 resulted in reaction of economic activity and significant improvement of physical infrastructure. Nevertheless, in last years contribution of donors dropped while fiscal position and economic development is weakened.

The World Bank (WB) Poverty Assessment Report² indicates that 45% of the Kosovo's population lives below the poverty line with another 18% vulnerable to poverty. On the other hand, 15% of the population is extremely poor defined as individuals who have difficulty to meet their nutritional needs. The unemployment rate is extremely high – 40% - with up to 29,000 job seekers coming to the job market every year.

² World Bank. **Kosovo - Poverty Assessment** (October 2007), <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/KOSOVOEXTN/>

2.1.1. The overall Transport policy framework

Institutional Organization: Transport Sector takes very important place in economic development of Kosovo. An efficient cross border transport network appears to be of crucial importance for a country with no access to sea like Kosovo.

Such a network would bring considerable economic benefits including growing of local and international markets and decrease of transport costs. This would contribute in decrease of general production costs, attraction of foreign investments and creation of more jobs.

Efforts in developing transport policies have started in 2003 through “*Program for development of transport policy in Kosovo*” of MTC to be followed by another MTC document titled “*The Draft Kosovo Transport Policy and Plan*” in 2005.. One of main priorities mentioned in that document was to support development of links with European Transport Network and in this regard to ensure development of priority road network linking to zones of potential economic development.

This will be possible by developing routes 6 and 7 linking Kosovo to SEE road network and to road corridors X and VIII of Trans-European Network described in figure 2. They also link some main towns and economic centers within Kosovo .



Figure 2. Core Network links roads in SEE and connection with Corridors X dhe VIII..

MTC has decided to define timetable for their implementation within the framework of development of economic and strategy policies as well as Spatial Planning for Kosovo. Starting from 2006, the Draft Kosovo Transport Policy and Plan recommends gradual development of multi modal transport strategy and evaluation mechanisms of multi modal transport within MTC. In May 2007 is launched “Technical Support for MTC to continue development of Multi Modal Transport Strategy and Action Plan”. Strategy for Multi Modal Transport” and is defined.

Over 95% of transport in Kosovo is concentrated in road transport⁶ or is related to road movement at beginning or at the end of travel. This is why there is a need to implement “Blocks of constructions” or legal basis according to which operates road transport and other modes taking into account application of best EU standards for Kosovo.

Policies for development of road infrastructure⁷ envisage the following for medium term and long term: implementation of program for improvement of road network; initiation of main projects for core road networks such is construction of motorway “Durrës-Vërmicë-Prishtinë-Merdare-Niš”, construction of new roads; improvement of road maintenance and road safety; development of a road network which integrates Kosovo to the Region and Europe.

A feasibility study and evaluation about impact to environment for route R6 which links Niš with Prishtina and Albania and route R7 which links Montenegro with Prishtina and Skopje is finalized in 2007. These roads are in compliance with priorities of SEETO and are presented as priorities also in the Medium Term Expenditure Framework (MTEF) for Kosovo 2009-2011.

The Government intends to finance route R6 and R7 to be supported by donors and/ or public private partnerships (PPP). However, in the field of transport networks, implementation of projects with priorities indentified by multi annual plan and in annual review there is a permanent need to cooperate with SEETO in order to gain further progress in defining regional priorities and to coordinate investments. As regards routes R6 and R7 there is a need to harmonize political approach with results of feasibility study.

Moreover, Kosovo needs to develop legal framework, institutional administration capacities for major investments by PPP. In order to achieve reasonable planning of transport infrastructure Kosovo needs to strengthen planning and use of land. Law on expropriation is in procedure to be adopted and implemented. Construction of road bypasses in Prishtina is also a priority of Government and a feasibility study for this is ongoing.

A World Bank Report recommends a scenario for financing road maintenance and rehabilitation for period 2007-2015 and further strengthening of institutional management of road assets. Improper attention is paid to road maintenance. Preparations in this field are in initial stage.

⁶ “Technical Support for MTC to continue development of Multimodal Transport Strategy and Action Plan”, egis bceom international &COWI, 2009..

⁷ MTC, Department of Road Infrastructure .

2.1.2. The elements of Transport research policy making

The overall intention of research policies in the field of transport in Kosovo is “*to contribute in economic development through establishment of efficient system of low cost and integrated multi modal transport (roads, railways and air transport) which is not harmful for environment*”.

Kosovo does not have a research strategy in order to identify research priorities for sectors for long term period. Policies to allocate budget for support researches are limited.

In other words it may be emphasized that the field of action of local experts will be increased significantly in coming years with their participation in research projects in the field of transport.

2.2. Overview of Transport research activities

2.2.1 Transport research projects

During the past period there was no fund available from local institutions neither from those international to contribute to development and local human resources for research in type field of transport. All research projects are funded by international institutions whereas contracts are awarded to foreign and well-established companies.

In the future, Kosovo Consolidated Budget (KCB) is expected to allocate special funds also for research projects in the field of transport to enable local experts to provide their contribution. Another expected source of funding is from international cooperation that research institutions from Kosovo have established with institutions from other countries in the Region and EU.

Research projects implemented in recent period by foreign experts in sub-sectors of transport are given in **Annex I**:

2.2.2. Key competences in transport research fields

Key initiatives in the field of research in general belong to the Ministry of Education, Science and Technology of Kosovo. Ministry allocates a budget for various researches including transport. It is well known that research project in transport depend on KCB as well as by limited funds allocated by private companies. Recent data show percentage of allocation of financial means by KCB and funds of companies which is very low not to say zero compared to budget allocated by Government for other sectors.

2.2.3. Transport research Infrastructure

The most relevant institutions (political, administrative, high education, public/ private research institutions) dealing with research in the field of transport in Kosovo are:

1. Faculty of Mechanical Engineering (FME)

Kosovo has a poorly developed system of research in the field of transport, and minor research activity takes place only in the field road transport. The development of this discipline started only in late nineties within the University of Prishtina- Faculty of Mechanical Engineering which offers BS and MS programs in the field of road transport. The Traffic Laboratory of the FME is equipped with few technical types of equipment used to measure some technical parameters in the field of road traffic safety. In total there are 12 staff members working the field of traffic in the FME, six of them holding PhD degrees.

2. Ministry of Transport and Communications (MTC)

Since 2007 Transport Planning Unit functions within the MTC. This Unit has insufficient staff of four persons employed under MTC. Initial capacity building support for this Unit is provided through an EC funded project “Technical Support for MTC to continue Development of Multimodal Transport Strategy and Action Plan” which ran from May 2007 through March 2009. Effects of this project are oriented in:

1. Strengthening of planning capacities in Multi Modal Transport of MTC, and
2. Drafting overall strategy and policy for development of transport sector in Kosovo until 2025, including Priority Action Plan on road infrastructure, road transport, urban and railway transport addressing at the same time gender, minorities and environmental issues.

TPU objectives are to advise MTC by collecting and processing data and to issue recommendations in planning infrastructure and transport regulation.

This means it should be a contact point for knowledge on transport infrastructure, services, means/ inventory and regulation. Normal duties include development and update of medium and long term investment plans, whereas on long run, the TPU is expected to contribute to developing vision of transport system in Kosovo, and also to monitor the implementation.

3. Public/ Private Companies

There is no evidence of research performed in transport field by public and private companies in Kosovo.

In the field of education and training there is an activity to train managers of transport of passengers and goods of road transport with Kosovo Chamber of Commerce (KCC). Training started in 2007 and is ongoing whereas this activity is expected to be extended also to other transport sectors but there is also a possibility in the near future to deal also with research activities. KCC recently is accredited by International Road Transport

Union (IRU) in Geneva, which is a good step in its path toward strengthening capacities in the field of transport research in general for every its sectors etc.

There is an Association of private transport operators within KCC and private road transport operators for passengers and freights member in this organization.

The entire list of research institutions in Kosovo, including their addresses and locations is attached as an **Annex II** to this Report.

2.3. Key drivers of Transport sector research

2.3.1 Main Transport sector trends in Kosovo,

Transport Infrastructure in Kosovo in recent years is damaged due to lack of proper maintenance and lack of investments.

Following is a more detailed description of main trends of transport in Kosovo after the war period 1999 until now. Transport Sector in Kosovo as stated before is consisted by three sub-sectors: road , railways and air transport.

a) Road Transport

Road transport consists of transport of passengers (domestic and international) and transport of goods, also including road transport of dangerous goods. Bus terminals and freight terminals are also part of the road trasnprot infrastructure.

1) Domestic Road Transport of Passengers

In total there are 392⁸ transport operators licenced for road transport of passengers operating in public transport of passengers both to local and international destinations. The number of daily departures to local inter-urban destinations is 1621⁹, with the average of 16 000 passengers.

Table 1 provides comparative data on public and private road transport in Kosovo, public transport including licensed operators regardless of type of vehicles used except taxis which are considered as part of private transport category. Calculation of prices is based on assumption that the cost of public transport is 0.05¹⁰ €per passenger per km and cost of operation for all other private travelling is equal with 0.1017¹¹ €per passenger per km as calculated for transport of passengers by cars.

It is important to state that entire public and private transport in Kosovo is developed on commercial basis apart from some transport lines for ethnic minorities subsidized by KCB.

⁸ MTC-Depratment of Road Transport, 2008.

⁹ MTC-Depratment of Road Transport, 2008.

¹⁰ Institutional Support to MTC, Department of Road Transport “Interurban Road Transpor of Passengers-general study of to pilot corridors, Report 2 ,August 2005, KAMPSAX .

¹¹ The same place.

Table 1: Calculation of passengers' traffic and prices¹²

Traffic of passengers, daily average traffic	Km daily of passenger	Daily hours for passenger	Daily transport cost (Euro)
Public Traffic	2,505,716	78,167	125,286
Private traffic	22,042,775	491,130	2,241,750
Total of traffic	24,548,491	569,297	2,367,036
Share of public transport based on total.	10 %	14 %	5 %

Evaluation of private transport is summarized in table 2 below. Modeling of road network includes all main and regional roads. Regional roads include paved, unpaved and other roads. Local roads and those urban are modeled roughly. Modeling is realized with the "emme2" software.

Length of all local roads in Kosovo is much bigger than the length of local road completed for modeling of requirements. Traffic of passengers' is also calculated approximately and estimation of number of passenges based on this model could be underestimating.

Table 2: Summary of private passengers' traffic in Kosovo¹³

Type of road	Road length (km)	Hours of passengers daily	Km of passengers daily	Average speed, (km/h)	Average traffic, (km of passengers per roads km)
Main road	1,181	156,396	8,809,348	56	14,918
Regional roads	1,776	146,214	7,285,647	50	8,205
Regional unpaved roads	377	15,324	605,984	40	3,215
Other roads also those urban	1,203	173,196	5,341,796	31	8,881
Total of all roads	4,537	491,130	22,042,775	45	9,717

There is road transport association on road transport of passengers with headquarter in Prishtina which is recently functioning under KCC. Most of transport operators are members of this association organized through regional units in entire Kosovo territory. Within road transport of passengers there are 22¹⁴ bus terminals functioning and supplied with licence by MTC according to related categories defined as A, B, C or D. Most of them operate as socially owned enterprises apart from two which are privatized. In the future is intended those terminals change status without changing its destination.

¹² Institutional Support to MTC, Department of Road Transport "Interurban Road Transport of Passengers-general study of to pilot corridors, KAMPSAX (2005),

¹³ The same place.

¹⁴ MTC-Departement of Road Transport,2008.

2) International road transport of passengers

Apart from operating in domestic market, a considerable number of 63¹⁵ transport operators operate in international transport of passengers between Kosovo and other SEE and EU countries.

Significant number of SEE and EU countries has recognized permits issued by Kosovo to local operators and this system functions on sound basis being followed by exchange of permissions with those countries upon requests of transport operators both local and international based on reciprocity. However, there are also states that have not exchanged permits with Kosovo authorities which inevitably affects the international transportation of passengers.

3) Road transport of goods

There are 200¹⁶ licenced operators for transport of goods from which 120 are “self-operating” transport operators.

Other transport operators are licenced for “payment or rent” whereas most of them are small owners and are transporters of building materials in which is also included construction and road maintenance. It is considered that their use is not considerable.

It is also estimated there are over 2,000 operating transport vehicles over 3,5 ton of weight which are not registered as transport operators. Transport vehicles operating in international transport and in transporting goods to Kosovo or from Kosovo are mainly located in neighboring countries, while numbers of them operate in cooperation with Kosovo operators.

There is no constraint in “access to zones” as it is with EU countries. Commercial goods means could be easily purchased in open market and with minimum control by MTC and the licence could be gained easily.

Apart from usual transport of goods there is also transport of dangerous goods. It should be taken into consideration that transport of this kind of goods is done by sub-sectors of transport by roads; railway and air transport. The majority of this transport is done by road. Licencing of operators performing this transport is started and so far there are 55¹⁷ operators licenced and supply of drivers with ADR certificate is started with trainings ongoing in cooperation with KCC, whereas 520¹⁸ drivers are trained and supplied with ADR certificate. Currently there is no entity authorized by MTC to perform supply of ADR certificate on technical status of vehicle, where local transport operators are forced to complete such task outside the country.

There is no association of road transport in Kosovo representing the industry of transport of goods. An association called TIR was registered but it is highly inactive.

Terminals of goods are also part of road transport of goods which are licenced by MTC. Number of them is currently 7 and are mainly located at the Kosovo border crossings.

¹⁵ MTC-Department of Road Transport, 2008.

¹⁶ MTC-Department of Road Transport, 2008.

¹⁷ MTC-Department of Road Transport, 2008.

¹⁸ Chamber Commerce of Kosovo(CCK), April 2009.

4) Road infrastructure

Most of Kosovo roads are constructed or reconstructed in 1960. The total length of road network is 8,522 km. In general MTC is responsible for 1951 km, where 647 km are main roads and 1,304 km are regional roads. There are 6,571 km of roads under responsibility of municipalities, where 571 km are urban roads and about 6000 km are local roads. Unpaved roads account for 90 % of local roads but there are no systematic data on their status. Most of the main and regional roads are two lane roads even though width of roads in both sides often is not in compliance with international standards.

Table.3¹⁹: The length of road network of Kosovo in accordance with categories

Type of road	Length (km)	% of total
Main and regional roads		
Main roads	647	7.6
Regional roads	1,304	15.3
Total (MTC)	1,951	22.9
Local roads		
Urban roads	571	6.7
Rural roads	6,000	70.4
Total (Municipalities)	6,571	77.1
Grant total	8,522	100.0

*Main network*²⁰ includes following roads: Road M2, starts from the North with Serbia, passes through Prishtina and reaches South border with Macedonia. In its south end it links Prishtina with European corridor X. Road M25 coming from Nish until east west border with Serbia, passes through Prishtina and Prizren reaching the border with Albania.

This road is becoming more and more important for its south part linking Kosovo with Albania where road construction of Rrëshen – Blinisht – Kukës is ongoing. Road M9, from east border with Serbia through Prishtina to Peja until the border with Monte Negro.

This road has its national importance because it links two most important cities of Kosovo. Part of it towards Monte Negro is currently under improvement and this will improve link to Monte Negro.

Other additional main roads are M9.1, M22.3, M25.2 and M25.3 which compose branches of main links. Main network is well organized with Prishtina in the center linking all regions with its center.

¹⁹ MTC-Department of Road Infrastructure, Road Directorate 2007.

²⁰ MTC Department of Road Infrastructure, Road Directorate, 2006.

Regional network includes two types of links: a) Regional roads which play a role in completing the map of road network and contain link between main and regional roads or which link most important settlements in regional basis, and b) Regional roads which have limited national importance and even regional linking small settlements with main network part of this network is not fully completed. In general they are left unpaved. Kosovo road network is presented in figure 4.

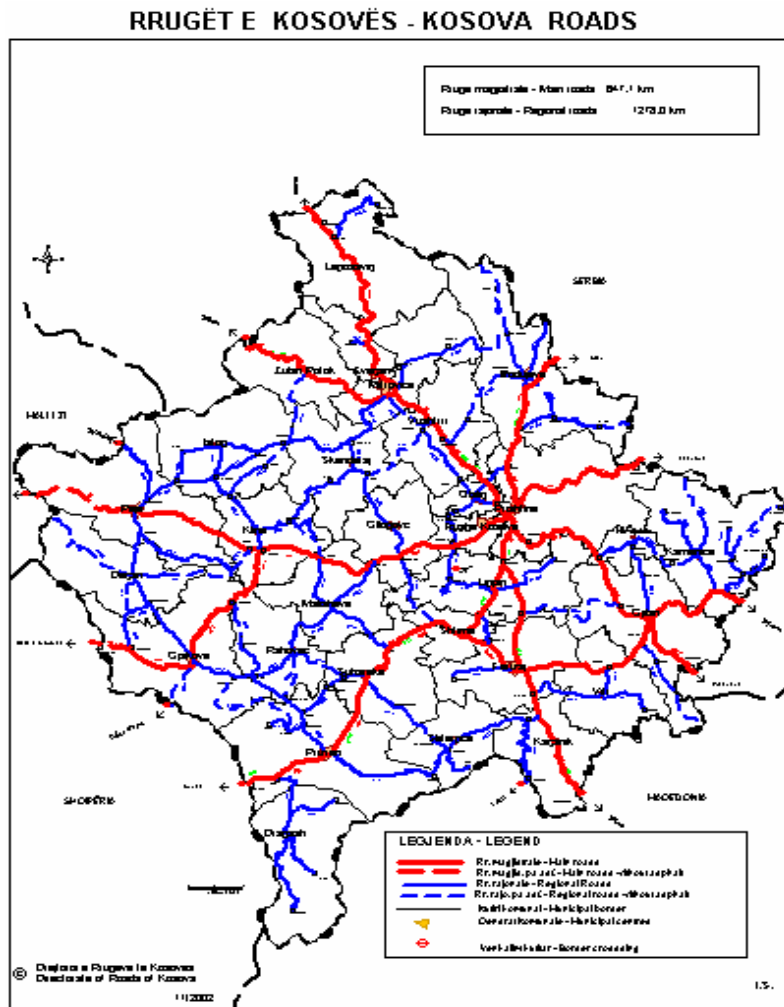


Figure 4. Kosovo road network

As the result of sustainable program in capital investments undertaken since 1999²¹, primary network (main roads and regional ones with more than 3,000 vehicles daily) estimated to carry 60% of all travels by car shows that 88 % of main network and 74 % of regional network is in good conditions. Table 4 provides more completed information on the conditions of the Road Network. Recent evaluations show that 33% of local paved roads needs reconstruction and rehabilitation and 97% of feeder roads s unpaved needs repairments. Many roads need urgent improvements

²¹ World Bank Document (2006): “Kosovo, Public Expenditure and Institutional Review”. Volume II.

Table 4²². Summary of roads status in Kosovo

	Main roads	Regional roads	Local paved roads	Local unpaved roads
Good	88%	74%	67%	3%
Satisfactory	12%	26%	27%	0%
Not in good status	0%	0%	6%	97%
Total	100%	100%	100%	100%

From the perspective of spatial extension. Kosovo has quite good road infrastructure, but lags behind other countries in the Region with regard to road conditions, traffic safety and requirements for high speed roads (high level of service) and motorways. Table 5 below compares certain parameters of road infrastructure in Kosovo with other countries in the Region and in Europe.

Table 5²³ Comparison of the density of road infrastructure in SEE (1997-2003)

Countries	(km/1000 km ²)	(km/1000 persons)
Estonia	1,320	41.2
Hungary	1,733	15.7
Czech Republic	1,646	12.5
Slovenia	1,007	10.2
Croatia	506	6.4
Bosnia and Herzegovina	427	5.6
Serbia & Montenegro	494	4.8
Macedonia	342	4.3
Kosovo	783	4.2
Albania	657	3.5
High incomes: OECD	1,340	17.3
Middle high incomes	1,076	9.2
Europe and central Asia	580	8.6

5. Road Safety

Road safety represents a significant economic and public health problem. Number of accidents in Kosovo for period 2002-2007 is presented in table 6.

Table 6²⁴ Road accidents in Kosovo 2002 -2007.

Year	2002	2003	2004	2005	2006	2007
Fatalities	132	130	170	155	181	110
Injured persons	1,983	2,194	2,697	5,761	4,673	5,235
Total of accidents	9,386	5,416	6,564	13,917	9,852	14,505

²² Roughton International: "Study on payment by road users" financed by the World Bank, 2004.

²³ Data base WDI and IEF according to the Report of the World Bank (2006): Kosovo- public expenditures and institutional review. volume II.

²⁴ Ministry of Interior Affairs (MPB)-Kosovo Police Service (KPS).

In the period 2003 - 2005 there were, in average, 8,633 accidents (with an average of 152 fatalities) every year. Nevertheless, rapid raise of accidents from 2004 to 2005 and other coming years is unproportional and difficult to understand. This trend was expected to increase with increase of number of personal cars. The rate of fatalities in 10 000 vehicles (at 9,5) is over 9 times bigger than in the safest" EU countries, and one of the worst in the region. Moreover the number of accidents in Kosovo is possible to be underestimated reflecting generic under-reporting problems. The economic cost of road traffic accidents has been estimated to amount to nearly 1.2 percent of GDP²⁵.

6) Increase of demand

Continuation in increase of demand in road network. Reliable data on the exact number of registered vehicles is not readily available. According to the Statistical Office of Kosovo, the number of registered vehicles in 2002 was 215,504.²⁶ Most recent estimates have been made suggesting that the fleet in 2005 comprised some 272,500 vehicles.²⁷

This has been estimated to include 231,000 passengers' cars, which represents a rate of car ownership of 105 passengers cars per 1,000 persons. This compares to an average motorization index of 418 passengers cars per 1,000 persons in the EU 25 countries,²⁸ and a rate of 550 passengers cars per 1,000 head of population in the most motorized EU countries. Increases in income and employment are likely lead to a significant boost to transport demand from increased vehicle ownership and usage.

The level and volume of traffic is growing at a significant rate with the highest levels the primary road network around Prishtina. On routes 6 and 7 annual average daily traffic (AADT) levels in 2006 range from 1,900 (on the road sections nearer to the border points) up to congestion 27,200 vehicles (on the road sections near the Prishtina, where road does have reached capacity and heavy congestion is occurring).²⁹

The overall AADT on the main road network in Kosovo over the period 2001 to 2006 using available data is 8255 vehicles per day (vpd). The overall AADT on the regional road network for the same period has been estimated at 4257 vpd.³⁰ Traffic volumes on the local road network are at much lower levels. Recent work has estimated that these flows range from less than 100 vpd on many unpaved roads up to 2000 vpd on local roads leading up to a higher road in the network or urbanized area.

Ownership of vehicles in Kosovo is expected to increase for 3-6 percent annually³¹, with passengers' vehicles dominating as compared to commercial vehicles. For the main and regional road network, using a base traffic set in 2006 of an AADT of 10,538 and 4,448³² respectively, in the moderate growth scenario³³, the AADT by the year 2020 will be about 19,500 on the main road network and 8200 on the regional road network

²⁵ "Development of Sustainable Transport System for Kosovo", page 3, 2008,

²⁶ Kosovo PEIR, Statistical Office of Kosovo, 2006.

²⁷ Consultant's calculations based on base data from Customs and the registration Centre of Kosovo, ECORYS, 2007.

²⁸ European Union Road Federation, European Road Statistics, 2007.

²⁹ Feasibility Study and Environmental Assessment for two main road axes in Kosovo, 2006 (COWI).

³⁰ ECORYS, 2007.

³¹ Quotes ranges for car growth of between 3.5 % and 5.25 %, and for trucks of 2.2 % to 3.3 %, 2003 REBIS, while ECORYS estimates range of 4-6 % annual growth, 2007.

³² Highest observed AADT on regional road network use because of insufficient data in 2006.

³³ Using linear annual growth rate of 4.5 % for all vehicles.

respectively. For the sections where traffic will be heaviest (i.e around Prishtina), traffic forecasts made on the assumption that two Routes (6 and 7) are completed by 2012 yield traffic flows in the range of about 25,000 to 50,000 vehicles per day by the year 2022.³⁴

b) Railway Transport

Institutional Organization: Kosovo Railways (KR) is a company managing railway infrastructure in Kosovo and operates services for passengers and goods on commercial basis. *Railway network:* Railway Network of Kosovo³⁵ is extended in Kosovo territory with the length of 333 km, which is used for public transport and for transport of industrial material. A railway links most important centers of Kosovo apart from Gjakova and Gjilan. Railway lines are directly linked with Macedonia and Serbia and through them with other countries. Railway network in Kosovo is composed of standard single tracks not electrified passing through hilly terrain with lots of bridges and tunnels. Railway network has two main directions North-South and East-West. Only 40 % of network is actually functional. Actually, only main route North South with total 141 km or 42 % of total network provides services for passengers and goods. The map of KR is presented in figure 5.

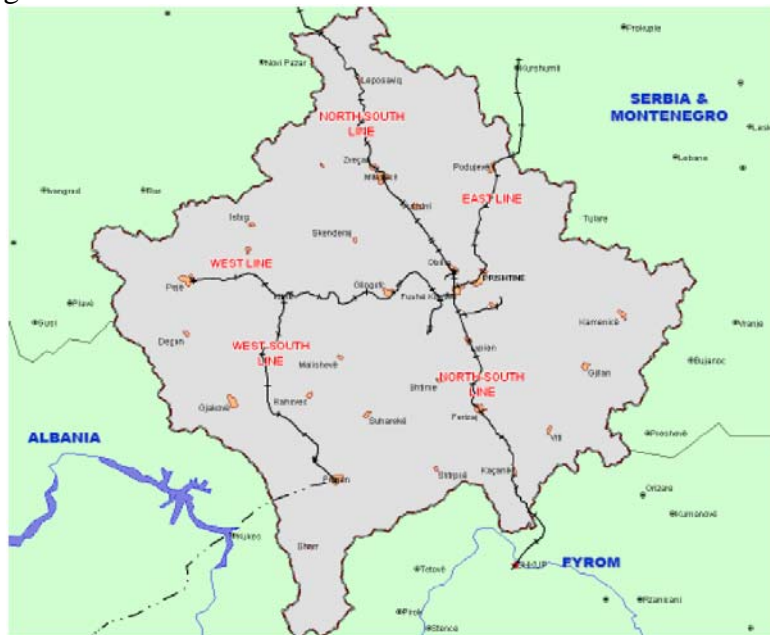


Figure 5: Map of Railways Network in Kosovo.

In the railway sector freight transport by volume has recently increased to 345,000 tons in 2006, and 588,000 tons in 2007. Around 80 % of the total KR freight traffic is imports (mainly petroleum from FYR Macedonia, but also building materials and other general cargo) with exports amounting for the remainder. Whilst passenger traffic volumes on the railway network have also recovered a little, the sustainability of the improvement seems questionable. Passengers' number has increased from approximately 400,000 in 2006 to 417,000 to 2007, but at cost of a significant increase in subsidy. The main passenger

³⁴ Calculation assumes an 80 %:20% split between passengers cars and commercial vehicles with a pcu unit equivalent of 1 and 2 respectively.

³⁵ MTC, Department of Civil Aviation and Railway Transport and Kosovo Railways.

service since 2001 has been Freedom of Movement Train (FomT)³⁶, a service providing an essential link between dispersed communities. Passenger services have also been reintroduced to Skopje and Peje, but heavy subsidy is required to keep these services running, as passenger volumes and revenues are insufficient. The intense and increasing competition with the road based modes, and the modest size of the country, suggests that passenger volumes are unlikely to return to anywhere near the pre-war levels. Volume and change in Freight and pasangers Traffic on Kosovo Railways for period 2001-2007 are presents in figure 6.

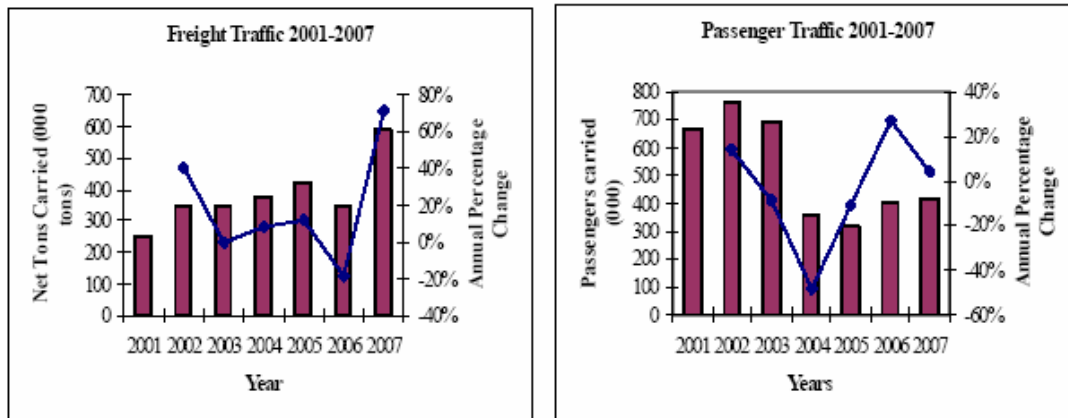


Figure 6. Volume and change in Freight and Passenger Traffic on Kosovo Railways 2001-2007.

In general railway network is not in good condition. Railway's rolling stock is old, apart from locomotives and passengers wagon donated by donors. The entire fleet amounts to nine locomotives, four sets of Diesel Multiple Units (DMUs), and ten passenger carriages, and 70 freight wagons. Limited resources are currently being expanded on maintenance and investments on the railway network, in large part due to sustained financial losses arising from low traffic levels on the network. However, the opening strategic regional networks or the development of new extractive industries, and the need to move heavy bulk freight, are expected to realize increased demands for investments in railway infrastructure.

c) Air transport

Kosovo has an international airport of civil aviation³⁷, which is Prishtina International Airport (PIA). PIA is licenced by the international civil aviation organization (ICAO). The airport currently has a runway of 2500 meters in length by 45 meters in width. The terminal building for passengers has a ground area of 3500 m², while the airplane platform covers a ground area of 24,700 m², which can receive 5 medium sized airplanes at the same time. A holding company was established as a Joint Stock Company in June 2005, entirely owned by the Kosovo Trust Agency (KTA), which took over the old liabilities, together with the assets and operating liabilities, of former publicly owned airport. While in the future Gjakova is meant to become also international airport of civil

³⁶ FoMT provides safe transport between the Serb and Roamn enclaves in Kosovo

³⁷ MTC – Department of Civil Aviation and Railway Transport

aviation. PIA serves for civilian and military purposes, while Gjakova Airport is used by Italian Military Aviation after some adaptations. There are 12 aviation fields in Kosovo territory for agricultural purposes which are property of Agro Kosova and one Sport Airport of Kosovo Aeronautical Federation located in Dumosh of Podujeva.

Kosovo has signed onto the agreement that established the European Common Aviation Area (ECAA). Implementation of the first phase of this agreement is currently underway.

The Civil Aviation Regulatory Office for Kosovo (CARO) has drafted an Administrative Direction on insurance requirements for air carriers and aircraft operators. CARO has also submitted to UNMIK for approval an Aviation Security Training Program and an Aviation Security Quality Control Program for Kosovo. Both documents are in line with the *acquis* and with the European Civil Aviation Conference (ECAC) Document 30.

The PIA Completed investments amount to some Euro 15.2 million, including the surfacing of the runway and the extension of the apron, the installation of a perimeter fence, airfield electrics to permit 24 hour operation, and improvements to terminal.

d) Public expenditures in transport sector

1. Analysis of trend of expenditures

Data related to public *expenditures in the transport sector*³⁸ show that expenditures change during 2000 until 2005 taking into account financing by donors with expenditures completed by KCB. High level of expenditures in transport sector reached amount 55 million € (2, 2 of GDP) in 2001, mainly by donors. In 2002 and 2003 due to reduced donor funding, KCB started to take leading role and expenditures were stabilized in the amount 35-40 million euros per year (about 1.5% of GDP).

*Table.7: Public expenditures in transport sector for period 2000- 2005 in Kosovo*³⁹

€million								
Agency	2000	2001	2002	2003	2004	2005	2000-05 Total	Average (2000-05)
DDG	0.00	8.30	2.50	4.50	0.50	0.00	15.80	2.63
Donors	37.20	40.20	18.50	7.70	1.50	0.00	105.10	17.52
PISG (municipalities)	0.20	1.50	3.10	5.00	7.70	3.70	21.20	3.53
PISG (MTC)	0.00	0.00	10.60	20.10	48.90	32.20	111.80	18.63
UNMIK	5.50	4.40	0.00	0.00	0.00	0.00	9.90	1.65
Total	42.9	54.4	34.7	37.3	58.6	35.9	263.8	44.0
UNMIK+PISG	5.70	5.90	13.70	25.10	56.60	35.90	142.90	23.82
% e GDP								

³⁸ Medium Term Framework Expenditures 2008-2010, Volume II: Strategy of sectorial expenditures” MFE (2007)“

³⁹ “Medium Term Framework Expenditures 2008-2010, Volume II) note: 2000-2002 (actual), 2003-2004 (actual aparat from final budget for railways) and 2005 (tentative). MFE

Agency	2000	2001	2002	2003	2004	2005	2000-05 Total	Average (2000-05)
DDG	0.0%	0.3%	0.1%	0.2%	0.0%	0.0%	0.1%	0.1%
Donors	2.1%	1.7%	0.7%	0.3%	0.1%	0.0%	0.7%	0.7%
PISG (municipalities)	0.0%	0.1%	0.1%	0.2%	0.3%	0.2%	0.1%	0.1%
PISG (MTC)	0.0%	0.0%	0.4%	0.8%	1.9%	1.3%	0.8%	0.8%
UNMIK	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%
Total	2.5%	2.2%	1.4%	1.5%	2.3%	1.5%	1.9%	1.9%
UNMIK+PISG	0.3%	0.2%	0.6%	1.0%	2.2%	1.5%	1.0%	1.0%

2. Funding of Transport Sector 2008-2011

Mid-term objective of Government in this sector is to improve transport infrastructure, in particular roads in long term, to improve other transport modes and to assure Kosovo integration to international transport network. Moreover, this sector from the point of view of funding is identified as of high priority of Government.

Road sub-sector: Capital investments are required to fund road infrastructure in the lack of investments in new roads due to the list of rehabilitation projects uncompleted. Functioning of railway transport in particular for transport of goods is of essential importance in order to cope with expected demand of industry and economy. The level of subvention is determined by WB sectorail experts based on expected demand for railway services. In table 8 is financial proposal transport sector to be provided by regular budget during the period of MTEF 2009-2011.

Table 8. Financial proposal for transport sector (in millions of €) ⁴⁰

Economic categories	Budget of 2008	2009	2010	2011	Total 2009-2011
Operative expenditures	11.6	13.5	15.0	16.5	45.0
Capital expenditures	99.8	70.0	82.0	139.3	291.3
Total	111.4	83.5	97.0	155.8	336.3
Sources of funding					
MTEF	111.4	83.5	97.0	155.8	336.3
Priority requirements from Donors	0.0	40.0			40.0
Other potential donors' financing	0.0	17.4	68.1	11.3	96.8
Total	111.4	140.9	165.1	167.1	473.1

⁴⁰ Kosovo Medium Term Expenditure 2009-2011 ,MFE, 2008.

Railway sub-sector: There is high demand for funding of railway sector. A study on transport system in Kosovo identifies requirements for expenditures in railway sector in medium term of 19.5 million euro. The Government supports funding of Kosovo Railways as regards improvements and maintenance of existing infrastructure. Maintenance of infrastructure is considered as mandatory in order to attract inclusion of private sector in railway transport. Therefore, the intention is to enable inclusion of private sector in providing railway transport lines and to finance the future purchase and maintenance of locomotives and wagons to possibly meet raised demand for railway transport in particular of freight transport. Funding for railway transport is to be done through KTA. In table 9 is shown a proposal for funding railway sector in accordance with MTEF 2009-2011.

Table 9: Financing proposal for the railway sub-sector, expressed in million €

Economic categories	Budget 2008	2009	2010	2011	Total 2009-11
Operative expenditures	0.3	0.5	0.5	0.5	1.5
Capital expenditures	3.0	4.0	5.0	6.0	15.0
Total	3.3	4.5	5.5	6.5	16.5
Financial Sources					
MTEF	3.3	4.5	5.5	6.5	16.5
Priority requirements for Donors'		2.0	1.5	1.0	4.5
Total		6.5	7.0	7.5	21.0

Air transport sub-sector: Investments in the PIA are funded from the airport revenues and will continue this way. At the same time, the process leading to the concession of the airport is developing and is expected to be finalized during the year 2009.

The government objective is to create a market oriented and competitive international airport that provides easy air access to Kosovo and abroad. This will improve the operational and financial performance of the airport and increase its capacity. As a result, air-travel cost to and from Kosovo will fall and volume of travel will increase, which will contribute to the overall government goal of economic growth.

2.3.2. Main socio-economic challenges in Kosovo

Economic/ Social Environment

Due to the many difficulties over the last two decades and in particular through the post conflict period, Kosovo faces many economic developmental challenges. Underlying economic growth potential in Kosovo is roughly 3.0 – 4.0 per cent per annum.

Unemployment is of the order of 35 – 40 per cent. Currently some 29,000 young people are entering the labour market every year. Even if the economy could move to a permanent growth rate of say 6.0 per cent, in ten to fifteen years time, unemployment will only have halved. This simple observation defines the real economic development challenge for Kosovo.

At the same time, it is estimated by the World Bank (WB) that perhaps as much as 45 percent of the population may well live in a broadly defined state of poverty. Thus it is clear that even if economic growth is increased markedly and sustained through the longer term, there will be an underlying and continuing social challenge that must be addressed. In a very real sense, this is what can be called a ‘baseline’ policy priority.

Kosovo’s initial position contains a number of strengths. It has a young population, and significant natural resources. The social structure is characterized by the existence of networks both formal and informal that provide safety nets for the poor and the unemployed. The foundations for a liberal market economy and modern system of accountability are in place and international partners are supporting many dimensions of the developmental process. The main economic indicators and macroeconomic indicators for period 2004-2007 are presented in the table 10 and table 11.

Table 10: Main economic indicators, 2004-2007⁴¹

	2004	2005 (v)	2006 (v)	2007 (p)
Country accounts				
Real increase of GDP	3.2	0.6	4.2	3.6
GDP per capita (euro)	1,152	1,115	1,136	1,168
Investments (% of GDP)	29.9	30.2	31.1	34.6
Gross domestic saving (% of GDP)	-19.3	-23.0	-23.3	-24.3
Overall Government Budget				
Overall balance % of GDP)	-6.1	-3.1	3.5	3.9
Foreign accounts trade ballance tregtar	-43.4	-47.4	-50.1	-53.6
Actual account balance (% of GDP)	-37.8	-38.7	-38.2	-42.9
Foreign assistance (% of GDP)	25.0	22.8	20.9	19.5
Deliveries from outside (% of GDP)	10.3	13.1	14.5	14.5
Prices Inflation CPI	-14	-1.4	1.5	2.0
Memorandum GDP (million Euro)	2,263	2,228	2,310	2,415

(Note: data for 2004 -06 are stimations, data for 2007 are forecasts. Current balance presents an amount before receive of international assistance. Sources: Clculations by World Bank Experts).

⁴¹ World Bank Report „Kosovo Interim Strategy”,2007.

Table 11: Macro economic indicators for period 2004-2007,⁴²

	2004	2005	2006	2007
GDP per capita	964.0	1,438.0	1,476.0	1,573.0
Increase of GDP	3.2	2.0	3.9	4.4
Rate of unemployment	39.7	41.4	44.9	43.6
Budget revenues	634.8	638.4	712.0	896.4
Budget spending	769.4	696.1	635.5	662.7
Balance of Government budget	-134.6	-57.7	76.5	233.7
Size of foreign trade	1,086.9	1,156.3	1,363.7	1,671.3

3. Integration of Kosovo in the European Research Area in field of Transport

Regarding integration of Kosovo in the European Research Area in the field of transport it was very low recently. Kosovo was not member of any Memorandum of Understanding regarding education and technology in particular in area of transport research.

.Experts from Kosovo have participated in some conferences and symposiums of development nature held in SEE and EU countries in most of cases in observer's capacity.

Kosovo is an *active partner* to a platform supported by EU for implementation of Core Regional Transport Network for South East Europe (SEETO) within which road and railway transport is included.

As regards *air transport*⁴³ UNMIK on behalf of Kosovo is a signatory of agreement for establishment of European Common Aviation Area (ECAA), whereas implementation of the first phase has started.

⁴² KCB, MFE, KSC, IMF

⁴³ MTC Department of Civil Aviation and Railway Transport

4. SWOT analysis of the Transport research capacities in Kosovo (Strengths, Weaknesses, Opportunities and Threats).

4.1 Strengths:

- Department of Traffic operates within the FME,
- Establishment of Transport Planning Unit within MTC,
- Participation in scientific conferences on level of SEE and EU countries,
- Participation of research in international research bulletins.

4.2 Weaknesses:

- Lack of commitment of research funds,
- Very low number of research in recent period,
- Lack of experts in the field of railways and air transport,
- Lack of cooperation with related research institutions of SEE and EU countries,
- Lack of skills in developing project proposals to be funded by EU .

4.3 Opportunities

- Transport sector is seen as national priority by institutions,
- Ongoing development of the National Research Program 2010-2015,
- Participation in EU research schemes,
- Integration of Kosovo into the European Research Area ,

4.4 Threats

- Economic crisis resulting in shortage of funds for R&D,
- Failure to earmark funds for research projects,
- Lack of organizational stability and stable policies,
- Lack of long-term political and economic stability the South East Europe,

5. Transport Research Priorities for Kosovo

5.1 Transport research priorities on the basis of the country's readiness

It is considered that local experts would be mainly involved in transport sub-sector as follows:

1. Regulation of traffic with emphasizes in urban zones,
2. Traffic Safety,
3. Mobility and traffic urban plans,
4. Maintenance and development of traffic infrastructure,
5. Traffic planning and designing,
6. Stationary traffic including buses and bus terminals,
7. Traffic management,
8. Traffic logistics,
9. Road traffic and circulation capacity,
10. Technology systems in integral and intermodal transport,
11. Development of railway transport,
12. Upgrade and quality level of air navigation,
13. Impact of traffic in environment,
14. Development of transport legal infrastructure in compliance with acqius communitare.

5.2 Transport research priorities on the basis of future potential

Priority 1: Development of integral and intermodal transport,

Priority 2: Management of transport infrastructure,

Priority 3: Management of traffic through intelligent transport systems including all transport modes,

Priority 4: Development of IT for collection and processing of transport data,

Priority 5: Research on telematic applications for transport,

Priority 6: Research on new type of fuels ,

Annex I: List of projects for research and support which are realized from foreign companies.

1. Development of Interurban Transport of Kosovo, 2000, (VCDH).
2. Drawing and implementation of concessions for acting and service of buses in Kosovo, April 2002(SAFAGE),
3. Institutional Support to MTC, Department of Road Transport “Interurban Road Transport of Passengers- general study of two pilot corridors, KAMPSAX (2005),
4. Master Plan for the Maintenance and Development of the Road Network in Kosovo 2001/2010, Final Report, July 2002, by BCEOM.
5. Regional Balkans Infrastructure Study - Transport, July 2003, by COWI A/S,
1. Kosovo Urgent Road Project, Consulting Services for Road User Charges Study, Final Report and Appendices, January 2004, by Roughton International.
2. “Feasibility study and environment impact for two main road network in Kosovo”. COWI (2006) ,
3. Strengthening of financial resilience of road sector in Kosovo (2007),
4. Study to Assess the Viability and Options for Public Private Participation in the Highway Sector in Kosovo, May 2007(The World Bank/PPIAF),
5. Technical Support for MTC to continue development of Multi Modal Transport Strategy and Action Plan, (egis bceom international-COWI), April 2009.

Annex II: List of Transport Institutions for R&D

No.	Name	Address	Website
1	Faculty of Mechanical Engineering- Department of Traffic	Sunny Hill, p.n , 10 000 Prishtina	www.uni-pr.edu/fim
2	Ministry of Transport and Communications-TPU	Mother Theresa Street, p.n 10 000 Prishtinë	www.mtpt.org
3	Chamber Commerce of Kosovo	Mother Theresa Street, p.n 10 000 Prishtinë	www.oek-kcc.org