Support in the Implementation of Transport Community Agreement EU-TCA

Multimodal Transport Strategy (2012-2021) and Action Plan (2012-2016)

Version 0.4

February 2012

In association with

* This designation is without prejudice to positions on status, and is in line with UNSCR1244 and the ICJ Opinion on the Kosovo Declaration of Independence
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### General information

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# Acronyms and Abbreviations

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<th>Description</th>
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<tr>
<td>AGTC</td>
<td>Accord General sur le Transport Combiné (European agreement on important international combined transport)</td>
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<td>AI</td>
<td>Administrative Instruction</td>
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<td>C</td>
<td>Centigrade</td>
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<tr>
<td>CEFTA</td>
<td>Central European Free Trade Agreement</td>
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<tr>
<td>CH₄</td>
<td>Methane</td>
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<tr>
<td>CNG</td>
<td>Compressed Natural Gas</td>
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<tr>
<td>CO</td>
<td>Carbon Monoxide</td>
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<tr>
<td>CO₂</td>
<td>Carbon Dioxide</td>
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<tr>
<td>CPC</td>
<td>Certificate of Professional Competence</td>
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<tr>
<td>CT</td>
<td>Combined Transport</td>
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<tr>
<td>DEICP</td>
<td>Department of European Integration and Policy Coordination (of MoInf)</td>
</tr>
<tr>
<td>DG TREN</td>
<td>Directorate General of Transport and Energy (of the European Commission)</td>
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<tr>
<td>DMU</td>
<td>Diesel Multiple Unit</td>
</tr>
<tr>
<td>DOR</td>
<td>Directorate of Roads (under the supervision of DRI)</td>
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<tr>
<td>DPC</td>
<td>Division of Policy Coordination (of DEICP)</td>
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<td>DRI</td>
<td>Department of Road Infrastructure (of the Ministry of Infrastructure)</td>
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<td>DWT</td>
<td>Dead Weight Tonnage (ship carrying capacity)</td>
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<td>EC</td>
<td>European Commission</td>
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<td>ECAC</td>
<td>European Civil Aviation Committee</td>
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<td>ECLO</td>
<td>European Commission Liaison Office (to Kosovo)</td>
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<tr>
<td>EEC</td>
<td>Former European Economic Commission now integrated in EC</td>
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<td>ERF</td>
<td>European Road Federation</td>
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<tr>
<td>ETBE</td>
<td>Ethyl butyl ether</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<td>EULEX</td>
<td>European Union Rule of Law Mission in Kosovo</td>
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<td>EU-TCA</td>
<td>European Union-Transport Community Agreement</td>
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<td>ft</td>
<td>Foot</td>
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<td>FYROM</td>
<td>Former Yugoslav Republic of Macedonia</td>
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<td>Ha (ha)</td>
<td>Hectare</td>
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<td>HDM</td>
<td>Highway Development and Management (Model)</td>
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<td>HGV</td>
<td>Heavy Good Vehicle</td>
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<tr>
<td>Acronym</td>
<td>Definition</td>
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<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
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<td>ICF</td>
<td>Inter Container Frigo</td>
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<td>IFI</td>
<td>International Financing Agency</td>
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<td>ILU</td>
<td>Intermodal Loading Unit</td>
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<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
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<td>IRR</td>
<td>Internal Rate of Return</td>
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<td>ISO</td>
<td>International Standardization Organization</td>
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<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>IUURR</td>
<td>International Union of Combined Transport</td>
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<tr>
<td>KCB</td>
<td>Kosovo Central Budget</td>
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<tr>
<td>kWh</td>
<td>Kilo Watt-hour</td>
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<tr>
<td>LED</td>
<td>Light Emitting Diodes</td>
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<tr>
<td>LPG</td>
<td>Liquid Petroleum Gas</td>
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<tr>
<td>MMT</td>
<td>Multimodal Transport</td>
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<tr>
<td>MoInf</td>
<td>Ministry of Infrastructure</td>
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<tr>
<td>MoU</td>
<td>Memorandum of Understanding</td>
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<tr>
<td>Mt</td>
<td>Million ton</td>
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<tr>
<td>MTC</td>
<td>Former Ministry of Transport and Communication</td>
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<td>MTEF</td>
<td>Mid-Term Expenditure Framework</td>
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<tr>
<td>NOx</td>
<td>Nitrogen Oxides</td>
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<tr>
<td>NPV</td>
<td>Net Present Value</td>
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<tr>
<td>O3</td>
<td>Ozone</td>
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<td>PAK</td>
<td>Privatization Agency of Kosovo</td>
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<td>Pb</td>
<td>Lead</td>
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<tr>
<td>PIA</td>
<td>Pristina International Airport</td>
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<tr>
<td>PM</td>
<td>Particulate Matters</td>
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<tr>
<td>POE</td>
<td>Publicly Owned Enterprise</td>
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<tr>
<td>PPP</td>
<td>Public Private Partnership</td>
</tr>
<tr>
<td>PPP-ISC</td>
<td>PPP Inter-ministerial Steering Committee</td>
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<tr>
<td>PSO</td>
<td>Public Service Obligation</td>
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<tr>
<td>RMG</td>
<td>Rail-mounted Gantry (crane)</td>
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<td>RNE</td>
<td>RailNetEurope (European Railway Network)</td>
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<tr>
<td>ro-ro</td>
<td>Roll-on roll-off (vessel type)</td>
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<td>SC</td>
<td>Supply Chain</td>
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<tr>
<td>Acronym</td>
<td>Definition</td>
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<td>SEETO</td>
<td>South East Europe Transport Observatory</td>
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<tr>
<td>SO₂</td>
<td>Sulfur Dioxide</td>
</tr>
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<td>SOE</td>
<td>Socially Owned Enterprise</td>
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<tr>
<td>TA</td>
<td>Technical Assistance</td>
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<tr>
<td>TEN</td>
<td>Trans-European Networks (Corridors)</td>
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<tr>
<td>TEU</td>
<td>Twenty-foot Equivalent Unit</td>
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<tr>
<td>TIR</td>
<td>Transports Internationaux Routiers (Customs Agreement on the International Road Transport of Goods)</td>
</tr>
<tr>
<td>TOR</td>
<td>Terms of Reference</td>
</tr>
<tr>
<td>UIC</td>
<td>Union Internationale des Chemins de Fer (Railways International Union)</td>
</tr>
<tr>
<td>UIRR</td>
<td>Union Internationale (du Transport Combiné) Rail-Route (International Union of Combined Rail-Road Transport)</td>
</tr>
<tr>
<td>UITP</td>
<td>Union International du Transport Public (International Association of Public Transport)</td>
</tr>
<tr>
<td>UN</td>
<td>United nations</td>
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<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>UNECE</td>
<td>United Nations Economic Commission for Europe</td>
</tr>
<tr>
<td>UNMIK</td>
<td>United Nations (Interim Administration) Mission in Kosovo</td>
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<tr>
<td>UNSCR</td>
<td>United Nations Security Council Resolution</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
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<tr>
<td>W, Wh</td>
<td>Watt, Watt-hour</td>
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<td>WHO</td>
<td>World Health Organization</td>
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Chapter 1 - Objectives of the Transport Strategy and Action Plan

The overall aim of the Ministry of Infrastructure in the transport sector is:

“To contribute to economic growth through the creation of an efficient, low cost and integrated multi-modal system of transport (road, railway and air) that is environmentally safe.”

The Ministry of Infrastructure (MoInf) wishes to generate a fully integrated transport system for all Kosovars that will enable them to choose for themselves the most efficient and cost effective transport mode that meets their domestic, work and leisure transport needs while ensuring that all aspects of the environmental issues are fully considered and that integration with the policies of our neighbouring countries continues through close cooperation with them. The Multi-Modal Transport Strategy and Action Plan is intended to define the long term development of the Transport Sector in Kosovo up to the year 2025.

The strategic and operational objectives of the MoInf was first developed and approved by the former Ministry of Transport and Communication in 2009 as part of the ECLO financed project entitled the ‘National Strategy for Kosovo’. A need for updating the operational objectives was identified and included in the ECLO financed project entitled ‘Support in the Implementation of Transport Community Agreement’. These are specified below together with the strategic objectives remained unchanged.

1.1 Strategic Objectives

- Strategic Objective 1: Integration in Pan-European Corridors
  To improve, develop and maintain transport infrastructure that is integrated in the Pan-European corridors and conforms to international standards.

- Strategic Objective 2: Enhancing the Quality of Services
  To create and ensure a favourable regulatory environment in order to maximize and enhance the quality of services in the area of transport.

- Strategic Objective 3: Improving Traffic Safety
  To improve traffic safety and security, ensuring environmental protection.

- Strategic Objective 4: Cooperation with International Organisations
  To pursue membership and cooperation of Kosovo with international organisations in the area of transport.
Strategic Objective 5: Implementation of a Functional Structure

To implement a functional structure with sufficient, well-motivated and competent human resources for the sectors of Transport.

1.2 Operational Objectives

This section shows the links between the objectives discussed in section 1.1 and the strategic recommendations presented in Chapter 6.

1.2.1 Operational Objectives within Objective 1 Integration in Pan European Corridors

1.2.1.1. Multimodal Transport Integration

- Connecting the proposed multimodal transport system to EU relevant MMT networks through cooperation links with local/regional/International entities and strategic alliances with fellow companies. The Railway Route 10 and Road Route 7 could become in the future alternative routes to Railway Corridors X and VIII. The development of these two corridors is supported by the EU.
- Upgrade the existing multimodal terminal in Miradi to receive 550 m long full trains coming from EU.
- Looking at the possibilities to upgrade/develop additional terminals especially in the North, for further shorter connection to the EU Network (Railway Corridor X) through Belgrade (Serbia).

1.2.1.2. Road Infrastructure and Transport Integration

- Priority sections on Road Routes 6 & 7 upgraded.
- Setting up/improving proper road design and maintenance standards consistent with EU standards.
- Improving freight transport information by transposing European regulation (EC) No. 1172/98 on statistical data collection on road freight transport and establishing the obligation for the road freight transport operators to provide information on their vehicles, their trips and good transported.

1.2.1.3. Railway Infrastructure and Transport Integration

- Implement progressively the recommendations of Railway Route 10 feasibility study, to have this route in good condition for operations.
- Undertake feasibility studies on the interest of developing a rail missing link with Albania, its main centres and ports.
- Undertake market studies to understand the needs for multimodal terminal(s) for Kosovo needs and understand their place in a network of intermodal terminals in the Balkans in relation with the development of distribution and logistics centres in the region.
1.2.1.4. Civil Aviation Integration

- Full enforcement of all safety issues that are regulated and précised in ICAO annexes and European legislations on civil aviation safety should be ensured by all civil aviation actors.

1.2.2 Operational Objectives within Objective 2 Enhancing Quality of Services

1.2.2.1. Enhancement of Multimodal Transport Services Quality

- Create an organisational MMT framework through the creation of an intermodal transport company and related organisation in order to enhance MMT services supply.
- Prepare an operational and business plan for the new intermodal/multimodal operating company to offer intermodal transport products on targeted market segments.
- Building a freight village in Miradi in order to enhance MMT services supply.
- Undertake feasibility studies for the major passenger intermodal investment proposals for Prishtina, Peje and Prizren.
- Prepare the first rail corridor Passenger Intermodality Plan for Route 10 since this project is most advanced.

1.2.2.2. Enhancement of Road Transport Services Quality

- Priority sections of the national roads upgraded.
- Improving capital and maintenance works planning and programming.
- Improving highway engineering practices and construction supervision.
- Improving maintenance contracting.
- Restructuring the interurban bus industry into fewer, larger entities in order to enhance quality of service through:
  - Reducing progressively the number of companies through changes in the law in order to increase minimum requirements for operation in order.
  - Encouraging the companies to band together in order to become stronger and more efficient.
- Easing bus line concession based on the legal environment.
- Progressing intercity bus terminal concession based on the landownership of the terminals and their legal status.
- Issuing guidance to the Municipalities on the elaboration of their local transport plans.
- Easing the resumption of public transport services to Pristina International Airport (PIA).
- In relation to truck drivers
  - Establishing Certificate of Professional Competence (CPC) for truck drivers and compulsory CPC testing accordingly.
  - Establishing compulsory hazardous product transport training and testing centre.
  - Introducing a driver logbook system for all commercial vehicle over 3.5 gross tons.
- In relation to trucks:
  - Strengthen the vehicle testing regime.

1.2.2.3. Enhancement of Railway Transport Services Quality

- Implementing progressively the recommendations of Railway Route 10 feasibility study, to have this route in good condition for operations.
Undertaking feasibility studies on the interest of developing a rail missing link with Albania, its main centres and ports.

Trainkos should develop joint approaches to markets to design, produce and commercialise new transport services for both passengers and freight.

- For passengers: new services using modern rolling stock should be prepared to be ready for operations as soon as railway infrastructure is renovated.
- For freight: new services have to be developed on a commercial basis by Trainkos or any other interested operator authorised to operate in Kosovo. Trainkos should also be very supportive to development of new distribution and logistics companies, especially for consumer goods, domestic equipment, and help them in proposing efficient and competitive transport services.

For both new passenger and freight services, combinations of road and rail modes should be designed to offer the most efficient and attractive services and also to make the best use of existing resources of both modes with the objective of safety and sustainability.

1.2.2.4. Enhancement of Civil Aviation Services Quality

- Quality of air navigation service delivery should be increased.
- Favourable environment for the operation of low cost flight companies should be developed in Kosovo.

1.2.2.5. Enhancement of Sea Transport and Port Services Quality

- In order to improve the use of existing ports, negotiating specific agreements both with the relevant port authorities (i.e. Durres and Thessaloniki Port Authorities) on a commercial basis, and countries (i.e. Albania, Greece and FYROM) on bilateral or multilateral basis, in order to take advantage of trade facilitation and custom agreements. The preparation of such negotiations requires specific studies including the following issues:
  - Identification of port service costs in order to negotiate possible tariff discount based on long term service contracts.
  - Preparation of draft bilateral or multilateral agreements in the framework of usual international regulation aiming at facilitating port transit (e.g. free trade area in the ports, custom facilitation, etc.).
- In long term: further studies on Shengjin Port Development.

1.2.3 Operational Objectives within Objective 3 Improving Traffic Safety

Road safety issues are dealt with in a specific component of the EU-TCA support project and to avoid duplication the related recommendations are not presented in this document. However, strategies aimed at enhancing quality of road transport services (refer to Section 1.2.2.2) also aim at improving traffic safety and are designed consequently.

Similarly, railway transport safety issues are dealt with in another specific component of the project and are not presented in this document. However, strategies aimed at enhancing quality of rail transport services (refer to Section 1.2.2.3) also aim at improving traffic safety and are designed consequently.

As far as civil aviation safety is concerned, full enforcement of all safety issues that are regulated and précised in ICAO annexes and European legislations on civil aviation safety by all civil aviation actors is recommended.
1.2.4 Operational Objectives within Objective 4 Cooperation with International Organizations

The EU-TCA support project includes a specific component related to support in Transport Community Agreement activities related to regional cooperation. In addition to that, the following objectives are proposed in order to enhance international cooperation:

- Cooperation links between the proposed multimodal transport system with relevant MMT networks through and strategic alliances with fellow companies.
- Membership in World Road Association (former PIARC) and European Road Federation (ERF) obtained.
- Bilateral agreements on transport signed with Albania, FYROM and Montenegro and also other countries (e.g. Austria, Bosnia, Bulgaria, Croatia, Greece, Hungary, Slovenia and Turkey).
- Membership in International Union of Railways (UIC), European Railway Committee and European Railway Network (RNE) obtained.
- Membership in International Civil Aviation Organisation (ICAO), European Civil Aviation Committee (ECAC) and Eurocontrol obtained.
- Specific agreements signed with relevant port authorities (e.g. Bar, Durres and Thessaloniki Port Authorities) on a commercial basis.
- Specific agreements signed with relevant countries (e.g. Albania, Greece, FYROM and Montenegro) on bilateral or multilateral basis, in order to take advantage of trade facilitation and custom agreements.

1.2.5 Operational Objectives within Objective 5 Implementation of a Functional Structure

The EU-TCA support project includes a specific component on training of staff of the Ministry of Infrastructure in general and it’s Department of European Integration and Policy Coordination, including the Division of Policy Coordination (DPC, former TPU) aimed at increasing capacity on strategic planning, transport and traffic modelling and forecast, project preparation and programming.
Chapter 2 - Present Situation of the Transport Infrastructure

2.1 The European Context (EU Transport and Environmental Policies)

2.1.1 EU Transport Policy

The White Paper issued by the EU in March 2011 proposes concrete initiatives to build a competitive transport system that will increase mobility and fuel growth and employment in the EU, while reducing EU oil dependency, reducing congestion costs and cutting carbon emissions by 60% by 2050. The Paper includes the following major changes in the transport policy:

- A major overhaul of the regulatory framework for rail with the preparation of a new rail package (in 2012/2013), in order the rail sector becomes more attractive and more capable of carrying an increased share of the market for passenger and freight over middle distances (i.e. more than 300 km) by 2050.
- The definition of a core European “multi-modal” network with new funding possibilities and conditionality.
- The removal of bottlenecks and barriers in other parts of the network (i.e. airports, inland waterway and sea).
- A new approach to transport charges in the direction of a wider application of the “polluter pays” and “user pays” principles. This should lead to the application of infrastructure charges for passenger cars, with internalisation of all costs to all road vehicles to cover the costs of infrastructure as well as the social costs for congestion, CO₂, local pollution, noise and accidents. This approach should be implemented for all modes of transport.
- A fair financial environment and a stable financing for transport, implementing the principle of earmarking revenues collected from transport users for the development of an integrated and efficient network.
- The promotion of the production of clean, safe, quiet vehicles for all transport modes, from road vehicles to ships, barges, rolling stock and aircraft. Key areas will include: alternative fuels, new materials, new propulsion systems and the IT and traffic management tools to manage and integrate complex transport systems.
- A specific attention given to transport in cities promoting urban road user charging and access restriction schemes,
- A major push towards multimodal transport planning and integrated ticketing for passenger services
- A major push towards multimodal transport for freight optimising the performance of multimodal logistic chains, including by making greater use of inherently more resource-efficient transport modes such as rail, inland waterways and coastal shipping, and by developing intermodal land transport with swap bodies or other Intermodal Loading Units (ILUs).

The 2011 EU Transport White Paper clearly sets the following targets:
- By 2030, 30% of road transport over 300 km distance should shift to other modes such as rail or waterborne transport, and more than 50% by 2050.
• By 2050 a European high speed rail network should be completed and a dense railway network maintained in all member states. By 2050, the majority of medium distance passenger transports should be by rail.
• By 2030 a fully functional and EU-wide multimodal TEN-T core network, with a high quality and capacity network by 2050, and a corresponding set of information services should be implemented.
• By 2050 all core network airports should be connected to the rail network, preferably by high speed lines.
• By 2050 it should be ensured that all core sea ports are sufficiently connected to the rail freight network, and where possible with the inland waterway system.

To conclude, the document states the following principles:

- “Action cannot be delayed. Infrastructure takes many years to plan, build and equip -and trains, planes and ships last for decades- the choices we make today will determine transport in 2050.”
- “The objective for the next years is to create a genuine Single European Transport area by eliminating all residual barriers and national systems, and easing the process of integration and facilitating the emergence of multinational and multimodal operators.”
- “The objective is to address the capacity and the quality of the airports.”
- “The priority is to achieve a Single European Railway area, including abolishment of technical, administrative and legal obstacles which still impede entry to national railway markets, harmonization and supervision of safety certification.”
- “The priority is on the core network. It must ensure efficient multi-modal links between the EU capitals and other main cities, ports, airports and key land border crossings, as well as other main economic centres. It should focus on the completion of missing links, on the upgrading of existing infrastructure and on the development of multi-modal, terminals at sea and river ports, and on city logistic consolidation centres. Better rail-airport connections must be devised for long distance travel.”
- “The level of investment for the development and the maintenance of railway infrastructure is not enough to ensure the expansion of the sector and its efficiency.”

2.1.2 EU Environmental Policy related to Transport

The EU environmental policy related to transport policy is focused on the development of an integrated multimodal transport system that is environmentally safe.

Main environmental issues related to transport include:
• Protected areas
• Cultural heritage
• Hydrology and soil erosion
• Air pollution and green house gas emissions
• Alternative energy and technology
• Waste management
• Noise management

Environmental safety shall consider all the above items and developing multimodal transport systems shall minimise air pollution and green house gas emissions, shall produce as less noise as possible, and as less waste as possible, shall use alternative energy and technology, shall not damage water systems, shall protect from soil erosion, and shall take into consideration protected areas and cultural heritage.
2.2 The Regional Context (SEETO)

Kosovo (under UNSCR 1244/99) is a member of the South East Europe Transport Observatory (SEETO). In order to stimulate development of transport infrastructure in South East Europe, the Memorandum of Understanding for the development of the Core Regional Transport Network (MoU) was signed on 11th June 2004 by the Governments of Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Serbia, Montenegro, and the United Nations Mission in Kosovo and the European Commission (EC).

The aim of the Memorandum of Understanding is to co-operate on the development of the main and ancillary infrastructure on the multimodal South East Europe Core Regional Transport Network and to enhance policies in this area which facilitate such development. The development of the Network should include maintenance (including preventive measures and repair), reconstruction, rehabilitation, upgrading and new construction of main and ancillary infrastructure as well as its operation and use with a view to fostering the most efficient and environmentally friendly transport modes on a regional scale. Thus, both infrastructure and related services, including administrative and regulatory procedures, are within the scope of the Memorandum.

The Memorandum of Understanding is expected to be replaced with a legally binding Transport Community Treaty between the EU and the countries of South-Eastern Europe which will establish the South East Europe Transport Community. Investigative talks on cooperation in the field of transport were initiated in 2007 with EU neighbouring countries and an informal ministerial conference was organised in Belgrade on 7 May 2008 entitled ‘The European Union and South-East Europe: a common vision for connecting people’. The conference was organised by the Ministry of Transport of the Republic of Slovenia in cooperation with the South-East Europe Transport Observatory and with the support of the European Commission and presented planned activities related to the ‘transport community’.

From 23rd to 27th April 2009, the European Commission Directorate - General of Energy and Transport (DG TREN) officials and the rail facilitator for the Western Balkans visited Kosovo to assess the state of play in the transport sector. The purpose of the visit, lead by Jean-Eric Paquet, Head of International Transport Relations and Trans-European Transport Network Policy Unit, DG TREN, was to discuss the future Transport Community Treaty between the European Commission and the Western Balkans. The visit, part of the second round of bilateral negotiations, took stock of the two main areas of the future Treaty negotiation: alignment with the EU ‘acquis communautaire’ and enforcement of legislation in the area of transport in Kosovo. The discussions with the Kosovo Government focused on the state of play in the road and rail transport, including the implementation of the railways reform and the future appointment of the Railways Regulator. Concerns were raised over the lack of investment for maintenance of the existing railways infrastructure.

The future Transport Community Treaty will cover all modes of land transport, including road, rail and maritime. It will provide a framework for planning and implementation of reforms and investment in the transport area; it will facilitate market access between partners in the region and with the EU, and offer an effective basis for future investment projects in the transport sector.

In December 2009, the Five Year Multi Annual Plan 2010-2014 was issued. This Multi Annual Plan 2010-14 is the fifth and the second one after the SEETO became a regional transport institution owned by the participants and with valuable support from the European Commission.
The Core Network has been defined in the Memorandum of Understanding as a multimodal network which includes road, rail and inland waterway links in the seven SEETO participating countries, together with a number of designated seaport, river port and airport nodes. Development of the regional Core Network is one of the crucial needs for the economic and social development of South East Europe. It will strengthen links with neighbouring countries, expedite the flow of international trade, and give better connectivity with the South East Europe region remote areas.

The total length of the Core Road Network is 5,975 km, consisting of 3,019 km of Corridors and 2,956 km of Routes. Total length of the Core Rail Network is 4,615 km, including 3,083 km of Corridors and 1,532 km of Routes. The total length of the River Danube (Corridor VII) within Serbia and Croatia is given as 588 km and the navigable length of the River Sava is 593 km. The Core Network also includes seven seaports, two river ports and eleven airports.

2.2.1 The SEETO Core Road Network

The Core Road Network consists of three Corridors (or 8 corridor – branches) and seven Routes (or 9 route – branches). The total length of the network is 5,975 km (3,019 km of Corridors and 2,956 km of Routes). The Core Road Network is shown on the figure on the following page. Within Kosovo, there are no main Corridor, however there are some 250 km of Routes 6 and 7 (refer to Figure 1 below). These routes are important both at the national and regional level.

Route 6 connects Ribarevina (Montenegro) to Skopje (FYROM) through Zubin Potok, Mitrovica, Pristina, Ferizaj and Hani i Elezit (Kosovo). At Ribarevina Route 6 connects to Route 4 connecting the port of Bar (Montenegro) to Belgrade (Serbia) and Vatin (Romanian border).

Route 7 connects Lezhe (Albania) to Dolcevac (Serbia) through Vermica, Prizren, Pristina and Podujevo (Kosovo). Dolcevac is located on Corridor X.

2.2.2 The SEETO Core Railway Network

The Core Rail Network includes 4,615 km of railway lines. It consists of 3 Corridors (or 7 corridor - branches) and 6 Routes. The total length of Corridors is 3,083 km and 1,532 km of Routes. Within Kosovo there are 150 km of the SEETO core network railway route (Route 10). The SEETO Core Rail Network is shown on Figure 2 below.

Route 10 connects Krajevo (Serbia) to Skopje (FYROM) through Kosovo.
2.2.3 The SEETO Core Ports

The SEETO Core Port Network consists of nine seaports of which the following two are located in Kosovo neighbouring countries:

- Bar (Montenegro) has a 2,000 ha port area and 20 berths. It includes area including a container terminal. Its maximum draught is 14 m.
- Durres (Albania) has a 138 ha port area and 11 berths. It includes area including a container terminal. Its maximum draught is 11.5 m.

2.2.4 The SEETO Core Airports

The SEETO Core Airport Network consists of 11 airports including Pristina. The other ten airports are: Banja Luka and Sarajevo (Bosnia Herzegovina), Dubrovnik, Split and Zagreb (Croatia), Podgorica (Montenegro), Tirana (Albania), Skopje (FYROM), Belgrade and Nis (Serbia).
2.3 Existing Road Network

2.3.1 Main and Regional Road Network

The road network in Kosovo is classified into Magistral (National) and regional roads, under administration of the Ministry of Infrastructure (MoInf), and the local roads, including urban and rural roads, under administration of the municipalities. The Network consists of the following approximate road lengths (refer to Table 1).

Table 1 - Current Road Network in Kosovo (km)

<table>
<thead>
<tr>
<th></th>
<th>Paved</th>
<th>Unpaved</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MoInf</td>
<td>1,810</td>
<td>111</td>
<td>1,921</td>
</tr>
<tr>
<td>Motorway</td>
<td>38</td>
<td></td>
<td>38</td>
</tr>
<tr>
<td>National</td>
<td>599</td>
<td>4</td>
<td>603</td>
</tr>
<tr>
<td>Regional</td>
<td>1,173</td>
<td>107</td>
<td>1,280</td>
</tr>
<tr>
<td>Municipal*</td>
<td></td>
<td></td>
<td>5,034</td>
</tr>
<tr>
<td>Urban*</td>
<td></td>
<td></td>
<td>571</td>
</tr>
<tr>
<td>Rural*</td>
<td></td>
<td></td>
<td>4,463</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>6,955</strong></td>
</tr>
</tbody>
</table>

Source: MoInf (* Estimated)
The present Action Plan will focus mainly on the national and regional roads, administered by the Ministry of Infrastructure. A specific action will deal with the reclassification of the local roads.

The **core network** includes the following (also refer to Figure 3):

- Road M2, going from the Northern Border with Serbia, through Pristina, to the Southern border with Republic of Macedonia. This road corresponds to Route 6 of SEETO Core Road Network. In its Southern part, it connects Pristina to the European corridors VII and X (refer to Figure 1).
- Road M25, coming from Nis (Serbia) to the North-Eastern Border with Serbia, through Pristina and Prizren, to the Southern Border with Albania. This road corresponds to Route 6 of SEETO Core Road Network. This road becomes increasingly important in its southern part, at it links Kosovo to Albania, where construction of the Motorway Rreshen – Blinisht – Kukes is under way.
- Road M9, from Eastern border with Serbia, through Pristina, to Peje, and to the Western Border with Montenegro. This road has currently mostly national importance, as it links two important cities in Kosovo. The section towards the border of Montenegro is currently being upgraded, and this will improve the link to Montenegro.
- Additional main roads are M9.1, M22.3, M25.2 and M25.3 that constitute branches of these main links.

The core network is well organised, with Pristina in its centre and connects well all regions of the country to the centre.

The **regional network** includes two types of links:

- Regional roads that have the role of completing the network mapping, and constitute links between the main axis and regions, or link important settlements on a regional basis.
- The other part of Regional roads has only limited national and even regional importance, and connects small settlements to the core network. Part of this network has not been completely constructed, generally leaving unpaved or not existing sections between two existing branches.
Figure 3 - Kosovo National and Regional Road Network

Source: MoInf
2.3.2 Local Road Network

Kosovo is currently divided into 30 municipalities, and these municipalities have all responsibilities regarding their network maintenance, operation and development. The first striking fact is that the situation regarding municipal roads depends highly on the municipality, as well when considering organisation, staffing and knowledge, as well as roads condition.

The second evidence is that the condition of the local roads can not be compared with the condition of the main and regional roads, that are, globally, in acceptable condition, despite lack of maintenance. The regional roads are designed according to (former Yugoslav) standards, with a standard width of 6 m pavement. The design of local roads follows often the standard of the regional roads, as no specific standard exist, but can also be lower, with pavement width of 3 m or even less (mostly for unpaved roads).

The local roads group the main unpaved roads, but even the paved part of the network is often in critical condition, meaning passability is at stake. The condition is obviously largely linked to the absence of proper funding, but the lack of professional staff and road management experience in the municipalities (with exception of larger towns) for this issue in the municipalities is also part of the problem. Most municipalities are not aware of the scope of the network under their responsibility.

The MoInf has a large program of rehabilitation works (investment maintenance) in cooperation with municipalities, and this program has significantly been increased in 2008. The MoInf is acting like investor on the whole Kosovo network, as this seems to justify largely a possible reclassification of the network, including more roads under national responsibility and funding.

2.4 Existing Railway Network

Railway network of Kosovo is extended with the length of 333 km (refer to Figure 4). It includes non electrified standard gauge single tracks lines.

The main line connects the Northern border, North of Mitrovica to Hani i Elezit at the border of FYROM through Fushe Kosovo near Pristina. This 141 km long line is part of SEETO Core Railway Network Route 10 and connects in Skopje (FYROM) to SEETO Corridors VIII and X.

The other lines include Fushe Kosovo-Peje, Kline-Prizren (Kline is located on the line between Fushe Kosovo and Peje), and Fushe Kosovo-Pristina-Podujevo. Some of these lines are not in operation, in particular the lines going to Serbian border and serving important cities such as Podujevo, and the line serving Prizren.

There is no direct railway link between Kosovo on one side, and Montenegro and Albania on the other side.

2.5 Existing Civil Aviation Infrastructure

Pristina International Airport (PIA) is included in the SEETO Core Airport Network. It has a runway of 2,500 m in length by 45 m in width. The terminal building for passenger has a ground area of 3,500 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 Public Private Partnership (PPP) agreement was signed for the operation and extension of PIA in August 2010.
There is another airport in Gjacova which is used by Italian Military Aviation. There are also 12 aviation fields used for agricultural purposes and one sport airport located in Dumosh of Podujevo.

Figure 4 - Kosovo Railway Network

Source: Study for Rehabilitation of Rail Route 10 (Cowi - IPF, October 2010)

2.6 Shengjin Port Project

As landlocked country, Kosovo has no maritime port. It mainly uses ports of neighbouring countries in Durres (Albania), Bar (Montenegro) and Thessaloniki (Greece). However, a bilateral verbal agreement between the Government of Kosovo and Albania allows the future use of the port of Shengjin located about 80 km north of Durres port on Albanian coast, for the benefit of Kosovo. Table 2 below shows a comparison of existing port characteristics between Shengjin and the other ports mainly used by Kosovo.
### Table 2 - Comparison of the characteristics of existing and potential ports for Kosovo

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Shengjin Existing</th>
<th>Shengjin Possible</th>
<th>Durres</th>
<th>Bar</th>
<th>Thessaloniki</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. draught (m)</td>
<td>6.5</td>
<td>8.5</td>
<td>10.0</td>
<td>14.0</td>
<td>15.0</td>
</tr>
<tr>
<td>Berth length (m)</td>
<td>80</td>
<td>710</td>
<td>2,200</td>
<td>3,500</td>
<td>3,900</td>
</tr>
<tr>
<td>Yard (ha)</td>
<td>1</td>
<td>11</td>
<td>60</td>
<td>110</td>
<td>150</td>
</tr>
<tr>
<td>Max. ship size (DWT)</td>
<td>5,000</td>
<td>13,000</td>
<td>25,000</td>
<td>40,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Port capacity (Mt)</td>
<td>0.5</td>
<td>2.0</td>
<td>4.0</td>
<td>5.0</td>
<td>16.0</td>
</tr>
<tr>
<td>Road distance* (km)</td>
<td>207</td>
<td>207</td>
<td>257</td>
<td>427</td>
<td>321</td>
</tr>
<tr>
<td>Rail distance* (km)</td>
<td>-</td>
<td>248(^{\text{f/461}})</td>
<td>281(^{\text{f/387}})</td>
<td>-</td>
<td>329</td>
</tr>
</tbody>
</table>

* From Pristina  
\(^{\text{f}}\) Through Prizren (new construction)  
\(^{\text{s}}\) Through Skopje and Corridor VIII (construction of missing link)
Chapter 3 - Mobility and Transport Services
Demand in Kosovo

3.1 Overview of Demography and Economy of Kosovo

3.1.1 Demography and mobility needs

3.1.1.1. Demography

Kosovo is a country with a high density of population and a young population. This population is living in important cities over the territory, but it is the Balkans’ country with the less urbanized population, many people living outside the major cities. Table 3 shows a comparison of the demographic characteristics of Kosovo with neighbouring countries while Table 4 shows the population of main cities of Kosovo. Figure 5 shows the municipalities and settlements.

Table 3 - Comparison of the demographic characteristics of Kosovo with neighbouring countries

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Kosovo</th>
<th>Albania</th>
<th>Montenegro</th>
<th>FYROM</th>
<th>Serbia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>2,100,000</td>
<td>3,200,000</td>
<td>630,000</td>
<td>2,050,000</td>
<td>7,320,000</td>
</tr>
<tr>
<td>Area (km²)</td>
<td>10,900</td>
<td>28,750</td>
<td>13,812</td>
<td>25,700</td>
<td>83,360</td>
</tr>
<tr>
<td>Density (hab./ km²)</td>
<td>192</td>
<td>111</td>
<td>45</td>
<td>80</td>
<td>88</td>
</tr>
<tr>
<td>Population below 15</td>
<td>28 %</td>
<td>23 %</td>
<td>20 %</td>
<td>20 %</td>
<td>15 %</td>
</tr>
<tr>
<td>Capital city name</td>
<td>Pristina</td>
<td>Tirana</td>
<td>Podgorica</td>
<td>Skopje</td>
<td>Belgrade</td>
</tr>
<tr>
<td>Cap. city population</td>
<td>197,000</td>
<td>764,000</td>
<td>135,000</td>
<td>500,000</td>
<td>1,630,000</td>
</tr>
<tr>
<td>No. of main cities</td>
<td>9</td>
<td>11</td>
<td>2</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Main cit. average pop.</td>
<td>68,500</td>
<td>148,000</td>
<td>50,000</td>
<td>60,000</td>
<td>171,000</td>
</tr>
<tr>
<td>% popul. in main cities</td>
<td>39 %</td>
<td>75 %</td>
<td>37 %</td>
<td>45 %</td>
<td>43 %</td>
</tr>
</tbody>
</table>

Table 4 - Population of main districts and cities of Kosovo (2011)

<table>
<thead>
<tr>
<th>Name</th>
<th>District</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pristina</td>
<td>476,000</td>
<td>197,000</td>
</tr>
<tr>
<td>Prizren</td>
<td>476,000</td>
<td>197,000</td>
</tr>
<tr>
<td>Ferizaj</td>
<td>194,000</td>
<td>88,000</td>
</tr>
<tr>
<td>Gjacova</td>
<td>185,000</td>
<td>81,000</td>
</tr>
<tr>
<td>Peje</td>
<td>172,000</td>
<td>78,000</td>
</tr>
<tr>
<td>Mitrovica</td>
<td>234,000</td>
<td>76,000</td>
</tr>
<tr>
<td>Gjilan</td>
<td>180,000</td>
<td>66,000</td>
</tr>
<tr>
<td>Vushtri</td>
<td>49,000</td>
<td></td>
</tr>
<tr>
<td>Podujevo</td>
<td>47,000</td>
<td></td>
</tr>
</tbody>
</table>
3.1.1.2. Education structures and mobility needs

Main University is in the capital Prishtina with 35,000 students in 2010. An University exists also in Prizren with 1,600 students.

The students of the capital city come from all over Kosovo, live in Prishtina but generally go back home on week ends. No statistics are available showing from which municipality/region they come from.
150 upper secondary schools are open in Kosovo, all over the territory. In total 110,000 pupils and 6,000 teachers have to commute on rather short distances every day to reach their schools and come back home.

3.1.1.3. Health structures and mobility needs

University for medicine is based in Pristina. The University Clinical Centre is the biggest hospital of the country with 2,815 employees, 2,000 beds, and 81,000 patients hospitalized in 2010.

Regional hospitals are open in main Kosovo cities. They employ 2,500 persons, have 2,000 beds and treated in 2010 85,000 patients.

Hospital employees have to commute every day between home and hospital, while hospitalized patients receive visits from their relatives who also have to travel to/from hospitals.

3.1.2 Economy of Kosovo

Table shows a comparison of GDP growth and per capita GDP between Kosovo and its neighbours. GDP per capita in Kosovo was in 2008 the lowest in the western Balkans area.

Since 2005, the GDP in Kosovo increased by 4 to 5% per year, with no significant problem in relation with the world crisis, which may be interpreted as reflecting Kosovo’s limited international integration.

Table 5 - GDP comparison between Kosovo and its neighbours

<table>
<thead>
<tr>
<th>Country</th>
<th>GDP growth</th>
<th>Per capita GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kosovo</td>
<td>4.0 %</td>
<td>1,780 €</td>
</tr>
<tr>
<td>Albania</td>
<td>2.2 %</td>
<td>2,731 €</td>
</tr>
<tr>
<td>Montenegro</td>
<td>-7.0 %</td>
<td>5,391 €</td>
</tr>
<tr>
<td>FYROM</td>
<td>-0.7 %</td>
<td>3,163 €</td>
</tr>
<tr>
<td>Serbia</td>
<td>2.9 %</td>
<td>4,966 €</td>
</tr>
</tbody>
</table>

Source: World Bank

GDP formation by economic activity showed in 2006 (last published analysis by SOK) the following structure:

- very little output (i.e. about 1 % of total GDP) coming from mining and quarrying sector, while Kosovo is considered as a rich country for its mines.
- 17.5% coming out from public administration and defence.
- 15 % coming out from agriculture, manufacturing, and real estate.
- 12% of GDP coming out of wholesale and retail trade.

External trade of Kosovo is very unbalanced, the value of imports (1,900,000 euros in 2009) being more than 10 times the value of exports (165,000 euros in 2009).

The structure of import/export by main products is shown in Table 6 while breakdown by main country is shown in Table 7. Figures 6 and 7 respectively show the main origin countries of import and destination countries of export. The figures are from 2006 but still reflecting the situation.
Table 6 - Import/export by main products (2009)

<table>
<thead>
<tr>
<th>Import</th>
<th>Export</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product</strong></td>
<td><strong>% of total value</strong></td>
</tr>
<tr>
<td>Machinery and transp. equip.</td>
<td>22 %</td>
</tr>
<tr>
<td>Processed goods</td>
<td>19 %</td>
</tr>
<tr>
<td>Food and live animals</td>
<td>17 %</td>
</tr>
<tr>
<td>Fuel</td>
<td>15 %</td>
</tr>
<tr>
<td>Chemical products</td>
<td>10 %</td>
</tr>
<tr>
<td>Other manufactured goods</td>
<td>10 %</td>
</tr>
</tbody>
</table>

Table 7 - Import/export by main countries (2009)

<table>
<thead>
<tr>
<th>Import</th>
<th>Export</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product</strong></td>
<td><strong>% of total value</strong></td>
</tr>
<tr>
<td>25 EU countries</td>
<td>40 %</td>
</tr>
<tr>
<td>FYROM</td>
<td>15 %</td>
</tr>
<tr>
<td>Serbia</td>
<td>11 %</td>
</tr>
<tr>
<td>Turkey</td>
<td>7 %</td>
</tr>
</tbody>
</table>

Figure 6 - Origin countries of import (2006)
3.2 Passenger Mobility Needs and Transport Services

3.2.1 Passenger mobility needs

Several types of needs regarding passengers may be considered as follows:

- Daily short distance mobility for work, school, sport, etc.
- Medium distance mobility inside Kosovo, for administrative, business, health, social, leisure, sport reasons, mainly inter-urban mobility.
• International trips to/from Macedonia, Bulgaria, Albania and Greece, but also to/from Serbia, Montenegro and western Europe, for business, family and social visits, leisure and tourism purposes.

For short term and inter urban mobility, future trends are obviously related to demography, urbanization, development of services all over the territory and growth of standards of living.

For international mobility, future trends are related to the insertion of Kosovo as a Balkan and European country, and to growth of standard of living. Especially links with Serbia and Albania should be important in the future.

3.2.2 Existing passenger transport services

Passenger transport services are mainly provided by cars and buses, except for international long distance transport where airlines are mostly used.

The origin-destination (OD) survey and traffic counts undertaken by end of 2011 to get information on road transport, allowed the creation of a data base. Processing of the collected data enabled the preparation of maps as showing the sections of roads that have the most volumes of car and bus traffic. Figures 8 and 9 respectively show private car and bus daily flows.

Passenger transport services by rail represent only a small market share on the two following corridors:

• North-South corridor between Prishtina and Hani I Elezit.
• East-West corridor between Prishtina and Peje.

3.2.3 Passenger transport industry

In 2009, 379,273 vehicles were registered in Kosovo of which

• 82% passenger cars,
• 1% buses,
• 2% motorcycles, and
• 14% trucks.

This number is increasing, especially because of the increase of private car number.

300 buses companies operate services in Kosovo.

Rail passenger services are operated by TRAINKOS.

For air transport, many foreign airlines operate to/from Kosovo via hubs such as Munich, Vienna, Zurich, Ljubljana, and Istanbul. But few airlines operate direct flights to/from European capitals such as London, Paris, Frankfurt, Berlin, Brussels, Amsterdam, Rome, and Athens.

Low costs airlines operate seasonal services to/from UK, to/from Switzerland, to/from Scandinavia during summer period to allow diasporas to come to Kosovo for holidays.

No national airline has been developed in the recent years.
Figure 8 - 2011 daily private car traffic

Source: MoInf
Figure 9 - 2011 daily bus traffic

Source: MoInf
3.3 Freight Mobility and Transport Services

3.3.1 Freight mobility needs

Several types of needs can be identified as follows:

- National freight transports are short distance transports. They could be massive or not, regular or not:
  - Massive transports, regular or not, are mainly for products such as minerals, stones, lignite. These transports may cause environmental and congestion problems to people living in the area where they take place, and may cause damage to the existing road infrastructure if done by trucks.
  - Non massive transports are normal freight transports. If regular and frequent, they may cause problems if done by road.

- International freight transport are very important for Kosovo mainly at least in the short term for imports!
  - For exports, good connections with the ports of Albania and ports of Thessaloniki and Bar are necessary to export massive flows of minerals and later of agricultural products.
  - For imports, it is necessary to differentiate massive flows, mainly for energetic products (e.g. fuel, LPG, coal) and other products. Massive flows come mainly via the ports, currently Thessaloniki. But Albania shall develop a specialised port for oil products. For other products, they arrive mostly from the Balkan region and from the EU either directly or via distribution companies based in other Balkan countries, mainly Macedonia and Serbia.

To assess the trends for future demand for mobility of goods in Kosovo the following issues related to the future economic development of Kosovo should be analysed:

- Will mine sector be redeveloped? In such a case, efficient transport services to the ports should be necessary for exports of raw materials or semi processed products.
- Will Kosovo diversify its energy sources? Would alternative ports used such as Bar or Albanian ports? New transport services should be then required.
- Will Kosovo continue to import as much as nowadays? In such situation, which distribution systems should be developed in order not to rely on imports via Macedonia or Serbia? Which new transport services would have to be developed?
- What role will play in the future economic relationship with Turkey and Albania?
- Will Kosovo industry be redeveloped in order to export? Which products will be exported? To which countries? Which transport services will be offered to shippers? Which role will play Serbia transit in the future for the economy of Kosovo?

3.3.2 Existing freight transport services

Road transport is currently the main transport mode used to carry freight in Kosovo, whether national or international freight.

The origin-destination (OD) survey and traffic counts undertaken by end of 2011 to get information on road transports enabled the creation of a data base. Figure 10 shows the sections of road in Kosovo with the most important volumes of freight carried. It has to be mentioned that this survey takes into account trucks in transit through Kosovo, especially transit between Macedonia and Albania via Ferizaj and the new motorway in Albania.
3.3.3 Truck industry

Trucks registered in Kosovo cannot go outside the country except countries having bilateral agreements with Kosovo such as FYROM and Albania. Greece and Bulgaria does not have
signed such agreements. Serbia did not accept till end of 2011 goods exported from Kosovo to enter Serbia.

International transports to other countries than Macedonia and Albania are realised by trucks registered in other countries than Kosovo, for example by trucks registered in Macedonia.

Freight forwarders operate also in Kosovo, but they are mainly representative offices or affiliate companies of foreign freight forwarders such as the following ones:

- INTEREUROPA, affiliate of INTEREUROPA from Slovenia, present in Macedonia, mainly involved in transports to/from the Balkans area.
- SHEGAPRO, based in Albania, mainly involved in transports to/from Albania.
**Chapter 4 - Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis of the Transport System**

### 4.1 SWOT Analysis of Multimodal/Intermodal Transport

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Commercial pricing and time targets in the near future are not out of reach (targeted road and rail services for 800 Euros/TEU in three days to Thessaloniki can be reached)</td>
<td>- Multimodal transport services development conditions are lacking because of the deficiencies of supply system (existing infrastructure and technical means)</td>
</tr>
<tr>
<td>- No large investments for the creation of new terminals are required. Few investments are only required to upgrade the terminal and handling equipment in a reduced number of terminals and especially in Miradi</td>
<td>- Poor understanding and knowledge of the potential market for such type of transport mode</td>
</tr>
<tr>
<td>- Existing railway infrastructure with two main North-South and East-West lines</td>
<td>- Poor ability of suppliers, and specially the railways, to organise themselves</td>
</tr>
<tr>
<td></td>
<td>- Lack of appropriate marketing strategies directed at each of the different product/market combinations</td>
</tr>
<tr>
<td></td>
<td>- Very limited existing passenger rail services in Kosovo not in favour of promoting bus-rail intermodality for passenger</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Kosovo overseas trade is more than 300,000 tons (about 12,000 TEU). Continental trade is 3.5 millions tons. These values are above the minimum threshold of 100,000 tons per year.</td>
<td>- Lack of political support to create and implement the necessary framework for industrial development in Kosovo, administrative problems and also unreliable and costly electricity and water supply</td>
</tr>
<tr>
<td>- EU policy based on the development of multimodal transport</td>
<td>- Lack of knowledge by decision makers in Kosovo of EU transport policy willing to develop multimodal transports</td>
</tr>
<tr>
<td>- Bus-rail interchange is likely to be most significant at Prishtina, Peje and Prizren where a higher proportion of longer distance trips may be expected (between Prishtina and Peje/Prizren)</td>
<td>- Potential for intermodal trips constrained by the relatively short length of inter urban trips in Kosovo and the planned frequencies of the rail services compared to the frequencies of interurban bus services</td>
</tr>
</tbody>
</table>
## SWOT Analysis of Road Infrastructure and Transport Services

### Strengths
- Flexibility and reliability of door to door road freight transport services
- Abundant offer of road passenger transport services: buses operate and offer acceptable frequent services on main corridors
- Trucking industry is well developed
- Private car ownership is strongly developed in the country as household revenues has increased
- Very shortly opening to service of the motorway linking Kosovo and Albania
- Population is young and mobile
- High density of population (e.g. about 10 cities other than Prishtina with more than 40 000 inhabitant)
- Possibility to develop road infrastructure with concessions and private capital participation
- Possibilities for development of road transport system with concessions and private capital participation

### Weaknesses
- Deficiencies in road capital and maintenance works planning and programming
- Need in improvement of engineering practices and works supervision
- Insufficient level of traffic safety
- Need in improvement of road information system, including signalling on existing roads
- Need in improvement of road freight transport information system
- Impossibility to drive Kosovo registered trucks/buses into other countries than Albania, FYROM and Montenegro
- No active truck/bus associations to represent the interests of the trucking/bussing industry
- Poor condition of bus terminals
- Lack of public transport services to Pristina International Airport

### Opportunities
- Too much competing trucks/buses that leads to poor quality of service because of the lower profits
- No effective restrictions on access to the profession that also implies poor quality of service
- Trends towards general price increase for fuel for cars and trucks, and possible future toll systems on motorways and main roads as pushed by EU policy
- Time spent at border crossings
- Poor fuel quality
- Deficiencies in local (municipal) transport planning
- Problems with road congestion in Pristina
- Problems with air pollution in Pristina
- Lack of public money to develop new infrastructure, but also to maintain and modernize the existing one

### Threats
- Very shortly opening to service of the motorway linking Kosovo and Albania
- Population is young and mobile
- High density of population (e.g. about 10 cities other than Prishtina with more than 40 000 inhabitant)
- Possibility to develop road infrastructure with concessions and private capital participation
- Possibilities for development of road transport system with concessions and private capital participation

### Opportunities
- Very shortly opening to service of the motorway linking Kosovo and Albania
- Population is young and mobile
- High density of population (e.g. about 10 cities other than Prishtina with more than 40 000 inhabitant)
- Possibility to develop road infrastructure with concessions and private capital participation

### Threats
- Too much competing trucks/buses that leads to poor quality of service because of the lower profits
- No effective restrictions on access to the profession that also implies poor quality of service
- Trends towards general price increase for fuel for cars and trucks, and possible future toll systems on motorways and main roads as pushed by EU policy
- Time spent at border crossings
- Poor fuel quality
- Deficiencies in local (municipal) transport planning
- Problems with road congestion in Pristina
- Problems with air pollution in Pristina
- Lack of public money to develop new infrastructure, but also to maintain and modernize the existing one
### 4.3 SWOT Analysis of Railway Infrastructure and Transport Services

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railway infrastructure with two main North-South and East-West lines, serving the country except the cities of Prizren and Giljan</td>
<td>Two middle size cities (i.e. Prizren and Giljan) are not directly connected to railway infrastructure</td>
</tr>
<tr>
<td>Existing intermodal terminal near Pristina Airport in Miradi</td>
<td>Two neighbouring countries (i.e. Albania and Montenegro including Durres and Bar ports respectively) are not directly connected by railway to Kosovo</td>
</tr>
<tr>
<td>Existing railway infrastructure in Pristina area to be possibly used to improve passenger transport services on the surroundings, including Podujevo and the airport having in mind the objective of developing sustainable transport system</td>
<td>Railway infrastructure is old and needs to be modernized to provide reliable and fast passenger services and capacity for freight transport</td>
</tr>
<tr>
<td>Railway market opening planned in neighboring countries</td>
<td>Pristina is not the railway node which is rather located in Fushe Kosovo</td>
</tr>
<tr>
<td></td>
<td>Railway station and bus terminal in Pristina are not integrated</td>
</tr>
<tr>
<td></td>
<td>There is no intermediate railway station to serve the new commercial area between Pristina and Fushe Kosovo</td>
</tr>
<tr>
<td></td>
<td>There is no rail link with the airport</td>
</tr>
<tr>
<td></td>
<td>There is no enough rolling stock to provide frequent and reliable rail passenger services</td>
</tr>
<tr>
<td></td>
<td>Kosovo is not recognized by international railway organizations that prevent using Kosovo rolling stock for international services and makes conclusion of international agreements more difficult</td>
</tr>
<tr>
<td></td>
<td>Requirement of multilateral agreements with neighbouring countries’ railways organizations with not much leverage to get the best services</td>
</tr>
<tr>
<td></td>
<td>No possible access to international markets via Serbian infrastructure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population is young and mobile</td>
<td>Landlocked country, with mountains all around</td>
</tr>
<tr>
<td>High density of population</td>
<td>Very shortly opening to service of the motorway linking Kosovo and Albania, but also used for transit of trucks as a branch of corridor VII</td>
</tr>
<tr>
<td>Middle size cities or dense population along the North-South and East-West corridors</td>
<td>Strong competition from buses operating on the same routes as trains</td>
</tr>
<tr>
<td>Cultural and economic proximity with Albania and Macedonia</td>
<td></td>
</tr>
<tr>
<td>EU policy is based on the development of</td>
<td></td>
</tr>
<tr>
<td>Opportunities</td>
<td>Threats</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>multimodal transport using the best of each transport mode in an integrated</td>
<td>• Very tough competition from trucking industry</td>
</tr>
<tr>
<td>approach, to reach objectives of less non renewable energy consumption, less</td>
<td>• New train operators could be interested to compete with Trainkos successor of Kosovo Railways for regular industrial traffic or for international/regional/local passenger services</td>
</tr>
<tr>
<td>greenhouse gas emission, less noise, less road accidents</td>
<td>• Lack of political support to create and implement the necessary framework for industrial development in Kosovo, administrative problems and also unreliable and costly electricity and water supply</td>
</tr>
<tr>
<td>• Necessity for Kosovo and Serbia to reach in a midterm future, a political</td>
<td>• Lack of political knowledge and support for railway sector since the end of the war up to now, both at central level of ministries and at regional/municipal levels</td>
</tr>
<tr>
<td>agreement which should allow railway operations in the north of Kosovo and</td>
<td>• Lack of knowledge by decision makers in Kosovo of EU transport policy willing to develop multimodal transports using the best of existing modes of transports, specially railway mode as a more sustainable transport mode than road transport</td>
</tr>
<tr>
<td>transit via Serbia to reach European markets</td>
<td>• Problems with road congestion in Pristina</td>
</tr>
<tr>
<td>• Problems with air pollution in Pristina</td>
<td>• Problems with road congestion in Pristina</td>
</tr>
<tr>
<td>• Trends towards general price increase for fuel for cars and trucks, and</td>
<td>• Trends towards general price increase for fuel for cars and trucks, and possible future toll systems on motorways and main roads as pushed by EU policy</td>
</tr>
<tr>
<td>possible future toll systems on motorways and main roads as pushed by EU</td>
<td>• Development perspectives for the industry and the commerce in Kosovo</td>
</tr>
<tr>
<td>policy</td>
<td>• Support from freight big clients to keep vivid rail services as an alternative to full road transport</td>
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<tr>
<td>• Development perspectives for the industry and the commerce in Kosovo</td>
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<tr>
<td>• Support from freight big clients to keep vivid rail services as an alternative to full road transport</td>
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</tr>
</tbody>
</table>
Chapter 5 - Multi Modal Transport Strategy

5.1 Complementarities and Coordination between Modes

The ministry of infrastructure also in charge of transport issues, as well as the recently created railway entities INFRAKOS and TRAINKOS want to explore the possibilities of setting up multimodal transport systems for both Passenger and Freight activities.

Orientations towards multimodal possible solutions are first described in this chapter as well as the role they could play in the short and medium term to answer the needs for sustainable mobility.

Then this chapter provides a description of the necessary resources for the infrastructure and the transport system in Kosovo to implement such multimodal solutions.

Road based and rail based transport solutions will still in the short and medium term play the major role to answer the transport needs in Kosovo, which means that the necessary resources to develop multimodality have to be coordinated with monomodal resources already developed or in development for the road system, and with monomodal resources to be developed for the rail system.

In Kosovo as in other EU countries, complementarities and coordination between transport modes is, in practice, much more developed in the passenger transport sector than in the freight sector.

In the passenger transport sector, and especially intra-urban level, the public Authorities in charge have traditionally had a large number of prerogatives and tools at their disposal – organisational, regulatory and financial - to intervene for the profit of a largely recognised and accepted general interest for the community: limited number of operators, concession of services for a given period, mandatory routes, regulated level of tariff, coordination of both tariff and itineraries for instance are a common practice.

In contrast, in the freight industrial sector, services are provided on a free market basis and commercial individual decisions. Intervention of the State is focused on promotion and incentives for the development of best practices while regulations are confined to specific aspects such as preventing infrastructures from damages by overloaded vehicles, protecting users from road unsafe behaviours on the public domain, or limiting damages the environment from vehicle pollution, etc. Coordination between modes, tariffs, routes choices, fleet capacity, etc are unlike the passenger sector, little or not regulated.

Thus, it makes sense to strictly separate the analysis made and subsequent recommendations for both passengers and freight sub-sectors.

5.1.1 Multimodal/Intermodal Freight Transport

5.1.1.1. National multimodal/intermodal freight transport

National freight transports are short distance transports. They could be massive, regular or not.
If massive, regular or not, rail is an efficient mode of transport, even if there is a need for a very short collection or delivery trip by truck. It could be the case for minerals, stones or wood products using normal wagons or eventually special intermodal units. It should allow transport with fewer nuisances to the inhabitants of an area, to the roads, and to the environment.

If not massive, the transports are generally realised by truck.

Due to Kosovo geographical size, only the international market appear as relevant for development of multimodal/intermodal transports, at least and as long the multimodal transport is based on present known technologies. And this is valid whatever the technique, including the use of rolling motorways technologies.

5.1.1.2. International multimodal/intermodal freight transport

The following key points summarise the proposed multimodal/intermodal strategy for Kosovo:

- MMT services should not be considered as consisting of a number of separated services which are combined, but as one single product. It is a very efficient mode provided the following four conditions are met:
  - Economic/financial constraints: concentration of a minimum traffic volume at a reduced number of terminals, at least 100,000 tons/year of unitised cargo. These conditions can realistically be met. Kosovo overseas trade is more than 300,000 tons (about 12,000 TEU). Continental trade is 3.5 millions tons.
  - Geographical constrains: to be economically viable, origin and destination “doors” should be separated by at least 350 km distance. For shorter distances, the resulting operating costs are higher than the cost of single modes. Due to Kosovo geographical size, the relevant market is the international transport.
  - Customers' expectation: to be competitive, in terms of pricing and time to market. The diagnosis undertaken in Chapter 3 showed that commercial targets in the near future are not out of reach (targeted road and rail services for 800 Euros/TEU in three days to Thessaloniki can be reached).
  - Other commercial/logistics constraints: by definition, only the boxes (containers, swap bodies, semi-trailers) are handled, from the buyer's “Door” to the seller's “Door”. Costs and risks are transferred from buyer to seller at one of the two doors. Appropriate terms of sales “free delivered” or “Ex-works” (Incoterms) should be applied.

- MMT services development conditions are lacking because of the deficiencies of supply system (existing infrastructure and technical means), but above all because of poor understanding and knowledge of the potential market for such transport services. The lack of ability of suppliers to organise themselves and the lack of appropriate marketing strategies directed at each of the different product/market combinations is another reason of the poor development of MMT services.

- If some investments are required to upgrade the terminal and handling equipment in a reduced number of terminals and especially in Miradi, large investments for the creation of new terminals must be avoided as they are not urgently required and can only push up the cost per TEU handled. It would be a mistake to invest large amounts of money in terminal infrastructures in different places in the short term - without ensuring conditions for its optimum use and successful development.

- What appear essential, in the short term, is the improvement of the organisational framework, the knowledge of this business (operational procedures, procedures and markets) supported by a renewed/EU aligned regulatory and policy framework.
Therefore, the strategic recommendations proposed places a greater emphasis on the development of an initial organisation and operational measures, the corresponding transport policy and the lobby and cooperative activities to make the MMT network operational at relevant geographical scope, the European dimension rather than the local market.

The strategic objectives are, thus, summarised as follows:

- **Short term:**
  - Create an organisational MMT framework through the creation of an intermodal transport company and related organisation.
  - Prepare an operational and business plan for the new intermodal/multimodal operating company to offer intermodal transport products on targeted market segments.
  - Connecting the new MMT system to EU relevant MMT networks through cooperation links with local/regional/International entities and strategic alliances with fellow companies. The Route 10 and Route 7 could become in the future alternative routes to Corridor X and Corridor VIII. The development of these two corridors is supported by the EU.
  - Upgrade - only - the existing Terminal in Miradi (feasibility study is required) to receive 550 m long full trains and to deal reliably with the intermodal units quickly.

- **Medium term:**
  - Building a Freight village in Miradi.
  - Looking at the possibilities to upgrade/develop additional terminals especially in the North, for further shorter connection to the EU Network (Corridor X) through Belgrade (Serbia).
  - Looking at the possibilities of private involvement in creation of additional terminals, especially of big distribution companies in Kosovo.

### 5.1.2 Multimodal Passenger Transport

5.1.2.1. Orientations towards multimodal solutions for passenger transport

**i) Road/rail passenger domestic services in the country**

The rail infrastructure exists on two main routes: north-south and east-west but is not serving all main cities and neighbouring countries.

The existing rail infrastructure was designed at the end of the 19th century and is not in good condition. However it can be the bone for new modern passenger services coupled with bus services serving the hinterland and coming to main stations to bring or pick up people. For this purpose the following requirements should be addressed:

- The rail network should be completed to Gjakova and Prizren as well as reopen to Podujevo and the Serbian border.
- The rail services should resume on the northern part of Route 10.
- The rail network should be modernised to offer safe and fast (at least 120 km/h) passenger services.

Discussions should be open between TRAINKOS, or eventually a new railway undertaking, and bus companies to build integrated rail/bus services using the fish bone concept and negotiate strong agreements on services including ticketing and prices.
ii) Road/rail passenger services in Pristina area

Rail infrastructure exists between Pristina and Fushe Kosovo; this infrastructure is serving areas where the city is developing whether with commercial areas or living areas.

This rail infrastructure should be used to offer good public transport services within Pristina area coupled with urban bus services serving the stations existing on the area or to be created to answer the needs. This requires the following conditions:

- The reopening of the line and the related services between Podujevo and Prishtina.
- The launching of suburban services on the line which should be frequent, reliable and well coordinated with urban bus services.
- Studying the opportunity to create new stops and stations on the line to serve commercial centres, education buildings, hospitals, etc.
- Using the tram train concept to build the new services.
- Studying the possibility of an integrated pricing and ticketing system on the area.

iii) Air/rail/road passenger transport needs in Pristina area and further

Rail infrastructure exists near by the airport. Rail infrastructure should be redeveloped on the route Podujevo-Pristine-Fushe Kosovo-Peje.

This redevelopment could be used as an opportunity to create a branch to serve the airport and to organise good connections to offer reliable services for persons leaving on the route between Fushe Kosovo and Peje or Fushe Kosovo and Podujevo, but also Frizaj, Kacanik, and Mitrovica. This short branch line could be operated implementing the concept of short distance shuttle train between the airport and Fushe Kosovo and Pristina.

iv) Road and rail passenger services with neighbouring countries

Today there is a rail connection to Skopje on which 2 services per day are offered.

There are also possible rail connections with Belgrade, Krajcevo and Nis, but today not in operation.

There is no rail infrastructure with Albania and Montenegro.

It could be envisaged:

- To reopen the rail services on existing lines.
- To study the opportunity to create a new rail infrastructure to connect directly Kosovo with Albania and Montenegro.

For the following reasons:

- The needs for connection with neighbouring countries are high for commercial, cultural reasons and in the future for tourism.
- Distances are too short for flights.
- International bus services while possible, international rail services offer more sustainable, reliable and efficient solution. They should be connected in each capital city with efficient urban public bus services.

5.1.2.2. Multimodal Passenger Transport and Bus-Rail Intermodality

Given the very limited existing passenger rail services in Kosovo, promoting bus-rail intermodality for passenger trips has to be a medium/longer term objective linked to the planned investment in improving the railway network and the associated enhancements to passenger
services. In the short term only very low cost measures that address specific problems relating to access to the main stations can be justified.

Even with the planned improvements to rail services the potential for intermodal trips will be constrained by the relatively short length of inter urban trips in Kosovo and the planned frequencies of the rail services compared to the frequencies of interurban bus services.

Bus-rail interchange is likely to be most significant at Prishtina, Peje and Prizren where a higher proportion of longer distance trips may be expected (between Prishtina and Peje/Prizren). Here the development of full scale bus-rail interchanges are proposed: at Prishtina through the provision of a new railway station as put forward in the 2209 MMTS, at Peje by relocating the bus station to a site adjacent to the railway station (as has been proposed by Peje Municipality) and at Prizren by locating the railway station adjacent to the bus station.

These proposals are subject to full feasibility studies being carried out to identify their transport and land use impacts, evaluate their costs and benefits, and assess their ‘value for money’. These studies should be informed by robust data on existing inter urban trip making, and robust forecasts of future patronage.

Fushe Kosovo, Ferizaj, Mitrovice and Podujeve stations will also serve fairly substantial urban/suburban catchment areas. Here, however, the potential for bus-rail interchange will be expected to be lower as average inter urban trip lengths will be shorter. It is recommended that ‘mini interchanges’ be developed adjacent to these railway stations.

Planning and designing for intermodality needs to be an integral part of planning and designing the upgrading of the railway network and services. It is recommended that a Passenger Intermodality Plan be required to be developed for each rail corridor. Since provision for good interchange between modes may influence station locations and layout, these Plans need to be prepared at an early stage in the design process.

While the focus here has been on bus-rail intermodality a corridor intermodality strategy should also consider inter-modality between car and rail (Park and Ride), taxi and rail, and indeed between walk and rail.

The development of an internet-based public transport information resource should be a high priority. In the short term this will focus on the provision of ‘static’ timetable information. In the medium term it should be extended to include an interactive multi-modal trip planning facility and in the longer term could provide real time service information.

Passenger Intermodality Plans will identify where there is the potential for multimodal tickets. Requirements for these may then be incorporated in the specifications for bus line concessions and rail franchises.

Working with the municipalities to develop intermodality is essential. Planning for passenger intermodality requires the integration of inter urban transport planning that is the responsibility of the Molnf, urban and suburban transport planning that is the responsibility of the municipalities, and urban land use planning that is also the responsibility of the municipalities.

Hence progressing plans for passenger intermodality, including feasibility studies for major schemes and the preparation of rail corridor Passenger Intermodality Plans, must be undertaken jointly by the Ministry and the Municipalities. Proposals for passenger intermodal facilities and associated bus service revisions may then be reflected in Local Transport Plans and Urban Development Plans.

In the short term it is suggested that action is required in the following areas:
To update the forecasts of future rail patronage and develop forecasts of the potential bus-rail intermodal trip demand based on the VISUM transport model for Kosovo currently being developed.

To undertake feasibility studies for the major passenger intermodal investment proposals for Prishtina, Peje and Prizren.

To prepare the first rail corridor Passenger Intermodality Plan - since of the rail upgrading schemes that for Route 10 is most advanced, the first Plan should be developed for this route.

5.2 Strategy by Mode

5.2.1 Road Infrastructure Development and Maintenance

5.2.1.1. Organizational and Institutional Aspects

The recent reorganization of the Ministry of Infrastructure has not changed the respective roles of the Department of Road Infrastructure (DRI) and Directorate of Roads (DOR). In accordance with Administrative Instruction No. 2003/4 on Directorate of Roads (as amended by Administrative Instruction No. 2007/1), the ‘Directorate of Roads will be responsible for the supervision of the works accomplished based on signed contracts on as well summer and winter maintenance of the main and regional roads’ (and) ‘... will exercise its competencies under the supervision of the Department of Road Infrastructure within the MTC’ (now the Ministry of Infrastructure). However, the modalities of the supervision of DOR by DRI are not defined. It is desirable to adopt a progressive approach including:

- Preparing an Administrative Instruction to better define the relationship and roles of the Department of Road Infrastructure (DRI) and Directorate of Road (DOR) in road infrastructure development and maintenance respectively.
- Improving the organization and staffing of DRI and DOR according to needs identified.
- Studying the feasibility of creating a Road Agency in charge of road development, maintenance and management. The creation of such an Agency enables to strengthen road sector management and to associate to it road users and other stakeholders.

5.2.1.2. Road Infrastructure Development

The proposed strategy includes:

- Improving capital works planning and programming.
- Improving the coordination and consistency between transit road development and municipal transport development plans.
- Improving highway engineering practices and construction supervision.

Improving capital works planning and programming through:

- Setting up/improving procedures and tools to prepare investment options for the capital works program.
- Using of HDM-4 for the economic evaluation and prioritisation of capital works projects.
- Developing skills in the preparation of feasibility studies.
- Developing skills in the application of Multi-Criteria Analysis.
- Developing skills in road traffic data collection and processing.
- Developing and improving the National Transport Model to assist traffic forecasting for future capital works planning.
- Updating the capital works program based on latest costs and traffic forecasts.

- Improving the coordination and consistency between transit road development and municipal transport development plans by:
  - Developing the awareness and action of the Ministry in charge of transport when municipal planning documents are submitted for approval.
  - Setting up rules for modification of municipal plans when a new transit road is being designed and when its construction is approved.
  - Reviewing the classification of roads and corresponding characteristics and rules for construction along them set up in Administrative Instruction n° 2006/18.
  - Programming pilot action of Inspectorates on construction along Routes 6 and 7

- Improving highway engineering practices and construction supervision by:
  - Setting up/improving proper design standards consistent with EU standards.
  - Improving design standards and construction practices in line with environmental protection.
  - Improving capacity for supervision of large works contracts.

5.2.1.3. Road Maintenance

The proposed strategy includes:

- Improving maintenance works planning and programming.
- Improving maintenance contracting.
- Improving road information database and road surveys.

- Improving maintenance works planning and programming through:
  - Setting up/improving procedures and tools to prepare maintenance strategy and programs.
  - Use of HDM-4 for the economic evaluation and prioritisation of maintenance works.
  - Developing the technical capability for management and supervision of periodic maintenance and rehabilitation works.
  - Examining ways of improving the budget flow for maintenance works (such as using earmarked funds).

- Improving maintenance contracting by setting up procedures and practices for performance based multi-year contracts.

- Improving road information databases and road surveys through:
  - Improving annual updating of network development and road survey data.
  - Developing skills in the use of road survey equipment, notably the bump integrator for measuring road roughness.
  - Introducing regular surveying of pavement strength and pavement condition.
  - Centralizing the responsibility for visual distress surveys with additional survey equipment.
  - Improving user access to road information databases.

5.2.2 Road Transport

5.2.2.1. Freight Transport

The proposed strategy includes:

- In relation to truck drivers
  - Establish Certificate of Professional Competence (CPC) for truck drivers and compulsory CPC testing accordingly.
• Establish compulsory hazardous product transport training and testing centre.
  ▪ In relation to trucks:
    • Strengthen the vehicle testing regime.
  ▪ In relation to road freight transport:
    • Improving transport information by transposing European regulation (EC) No. 1172/98 on statistical data collection on road freight transport and establishing the obligation for the road freight transport operators to provide information on their vehicles, their trips and good transported.

5.2.2.2. Passenger Transport

The proposed strategy addresses the following issues which were identified as having a particular importance:

• Restructuring the interurban bus industry into fewer, larger entities - measures were to be proposed in order to:
  • Reduce progressively the number of companies through changes in the law as regards minimum requirements for operation (e.g. required minimum number of vehicle by each company).
  • Encourage the companies to band together in order to become stronger with the final objective of being sufficiently competitive against the big foreign groups when the market is opened.

• Easing bus line concession based on the legal environment (existing law on concession) and the possible social impact (reduction of employment opportunities because of rationalisation of supply).

• Progressing intercity bus terminal concession based on the landownership of the terminals and their legal status of SOE which does not give another alternative then privatization under PAK and the need to keep public service obligation.

• Issuing guidance to the Municipalities on the elaboration of their local transport plans.

• Easing the resumption of public transport services to Pristina International Airport (PIA).

i) Restructuring the interurban bus industry

The proposed strategy includes:

• Review and improve enforcement practices to ensure current regulations are observed.
• Initiate a programme of engaging operators in discussions on the future vision and strategy for the interurban bus sector.
• Develop further the plan and programme for concessions.
• Identify, in discussion with operators, needs for support and training and develop proposals to meet those needs (in discussion with the Chamber of Commerce).

ii) Easing bus line concession

The proposed strategy includes:

• To initiate the operator engagement process and develop the support services to facilitate the formation of such operating entities.
• To undertake a study of the potential social impacts and the feasibility and costs of the options available to deal with these impacts.
• To work jointly with the PPP-ISC (through a joint Working Group) to define the procedural, financial and technical aspects of the tendering process, including possible Public Service Obligation (PSO) scheme and a timetable for the implementing the concession.
iii) **Progressing intercity bus terminal concession**

The proposed strategy includes:

- First, make the decision at Government level that the bus terminals will be converted to Publicly Owned Enterprises (POE). Then draft the law required specifically to enact the conversion of the bus terminal SOEs to POEs.
- Establish a Bus Terminals Working Group comprising the MoInf and the Association of Municipalities to oversee the process of developing and implementing a programme of concessions.
- Develop a work programme to progress the development of the concessions programme.

iv) **Issuing guidance to the Municipalities on the elaboration of their local transport plans**

While responsibility for the development and implementation of strategies and plans for urban transport rightly rests with the municipalities, the MoInf has an important role in promoting the development of urban public transport as part of integrated multi modal transport plans. To fulfil that role it should:

- Draft guidance to the municipalities on the scope, format, preparation and monitoring of local transport plans, including the achievement of synergy with national transport objectives and introducing in municipal plans provisions to ensure a place for public transport, binding for the investors, and a limitation of the number of parking places in the centre of the cities. This should be done in consultation with the Association of Municipalities.
- Establish formal liaison with municipalities to support them in developing plans for urban transport.
- Prepare and promote further more detailed guidance on key aspects of developing sustainable urban transport systems – such as designing for pedestrians and cyclists, designing for buses, delivering public transport service including Public Service Obligation (PSO), etc.
- Encourage the creation of public parking places, including Park & Ride offers where relevant.
- Organise the enforcement of parking rules by Kosovo Police in relation with the development of parking facilities.

v) **Easing the resumption of public transport services to Pristina International Airport (PIA)**

Preliminary estimates of the potential patronage, revenues and operating costs of bus services to PIA have been made based on the results of passenger surveys. Services from all the main cities of Kosovo have also been assessed. None of the options considered were shown to be likely to be commercially viable with current levels of demand. All would be likely to require annual operating subsidies.

A service between Pristina and the airport operating 12 hours a day was the best option in financial terms. However even this would be likely to require an annual operating subsidy before allowance is made for the cost of vehicles. In this case further feasibility assessments will be required.
5.2.3 Railway Infrastructure and Transport

5.2.3.1 Railway Infrastructure Development

The railway infrastructure in Kosovo is today old, and not in good conditions to meet the needs of both passengers and freight. It does not provide adequate links with neighbouring countries and ports to offer freight and passenger services. It needs urgent modernisation and development to face future needs providing sustainable transport services.

The proposed orientations towards a multimodal strategy requires for railways:

- Implement progressively the recommendations of Route 10 feasibility study, to have at least this route in good condition for operations. Southern part of route 10 has to be considered as a priority, but northern part shall not be forgotten.
- Undertake feasibility studies on the rehabilitation/upgrading of East-West and related Airport and south branch lines to serve areas and important cities such as Podujevo, Jakoba, and Prizren.
- Undertake feasibility studies on the interest of developing a rail missing link with Albania, its main centres and ports.
- Undertake market studies to understand the needs for multimodal terminal(s) for Kosovo needs and understand their place in a network of intermodal terminals in the Balkans in relation with the development of distribution and logistics centres in the region.

If rail solutions are to be developed, it will mean a high level of investment. Feasibility studies are required to evaluate the needs, the opportunities, the economic benefits and the financial possible results and should be realised in the next years (mid term horizon).

5.2.3.2 Railway Transport Services Development

The railway transport landscape is today dramatically changing with the separation of Kosovo Railways into two entities. One of them INFRAKOS will be from 1/9/2011 responsible for railway infrastructure management, maintenance and development. The second entity, TRAINKOS, will at the same date be responsible for production of transport services for passengers and freight. INFRAKOS and TRAINKOS shall be both State Owned Enterprises.

The existing Railway Law adopted in 2007, had planned the opening of the rail sector in Kosovo and the creation of the Railway Regulatory Agency. The new Railway Law, adopted by the Government and now in discussion in Parliament, is based upon the EU acquis and should provide all necessary legal basis to license new operators willing to develop services in Kosovo, to ensure they operate safely, to guarantee them fair, transparent and non-discriminatory treatments. Railway operators such as TRAINKOS will pay access charges to use the railway infrastructure of Kosovo, which will provide revenues to INFRAKOS for maintenance and operation of the network. Development of the network should remain a State responsibility.

Such restructuring of the rail sector in Kosovo should provide opportunities for new railway operators to provide in the future both domestic and international services for passengers and freight.

Rail transport services do exist, but cannot allow the development of the business both internally and internationally. It is only 4 pairs of trains on the southern part of route 10 from Fushe Kosovo (and not Pristina) to Hani I Elezit at the border with Macedonia, with only one direct service per day to/from Skopje. On Peje line, there are only 2 pairs of trains per day.
For freight, the main part of the business is internal transport of raw materials on short distance and some import transport business of oil and gas. Rail transport of containers is not important to day as the only existing railway links are with Skopje and Thessaloniki and as there are many problems in Thessaloniki port, and within OSE, the incumbent Greek Railway company.

To develop rail international transport, the railway operator should be able to operate rolling stock both in Kosovo and in other neighbouring countries. TRAINKOS cannot operate its own wagons and coaches fleet as Kosovo is not registered as a country in railway international organisations, and so cannot number its rolling stock according to international rules. TRAINKOS has to rent or lease rolling stock registered in other countries and authorised in Kosovo, which may increase the costs and the risks.

TRAINKOS should in the future develop joint approaches to markets to design, produce and commercialise new transport services for both passengers and freight.

- For passengers: new services using modern rolling stock should be prepared to be ready for operations as soon as railway infrastructure is renovated; these services should be defined and negotiated with national and local authorities in order to operate under PSOs contracts. Subsidies and loans may be available for rolling stock especially if bought by a public authority.
- For freight: new services have to be developed on a commercial basis by TRAINKOS or any other interested operator authorised to operate in Kosovo. TRAINKOS should also be very supportive to development of new distribution and logistics companies, especially for consumer goods, domestic equipment, and help them in proposing efficient and competitive transport services.

For both new passenger and freight services, combinations of road and rail modes should be designed to offer the most efficient and attractive services but also to make the best use of existing resources of both modes with the objective of safety and sustainability.

- For passengers services: with the local authorities, bus services should not compete systematically with rail services but come in addition to rail services for the terminal sections, with coordination and organised connections. Intermodal exchange platforms should be organised in main cities as well as integrated commercial offers with single ticketing system for example.
- For freight services: it is the business of commercial entities, intermodal operators, freight forwarders, logistics companies to propose services on the basis of the best combination of modes taking into account quality, reliability, and economic efficiency.

However, the main problem is the condition and the lack of rail infrastructure linking Kosovo to neighbouring countries. This question is a priority as new trends for flows of goods and passengers are developing especially with Albania and Montenegro, but also with Bulgaria and Turkey.

Regarding international passenger services with neighbouring countries, today there is a rail connection to Skopje on which 2 services per day are offered. There are also possible rail connections with Belgrade, Kraljevo and Nis, but today no services are in operation. There is no rail infrastructure connection with Albania and Montenegro. It should be envisaged to (i) reopen the rail services on existing lines and (ii) to study the opportunity to create a new rail infrastructure to connect directly Kosovo with Albania and Montenegro for the following reasons:

- The needs for connection with neighbouring countries are high for commercial, cultural reasons and in the future for tourism.
- Distances are too short for air flights.
International bus services are possible, but international rail services offer more sustainable, reliable and efficient solution. Whether long distance bus or rail services, they should be connected in each capital city with efficient urban public bus services.

5.2.4 Civil Aviation

5.2.4.1. Infrastructure Development Issues
The operation and extension of Pristina International Airport (PIA) is the subject of a Public-Private Partnership (PPP) Agreement dated on August 12, 2010 and signed on behalf of the Republic of Kosovo by the PPP Inter-Ministerial Steering Committee (ISC). According to this agreement, an Independent Engineer appointed by both parties shall inspect and monitor the construction works. The role of MoInf in the concession monitoring is performed through its participation to the PPP-ISC and its effectiveness shall be insured.

The airport facilities located at Gjakova may be used as an alternative to PIA, in particular in bad weather conditions. Further feasibility studies are required, including land access conditions.

5.2.4.2. Civil Aviation Services
The proposed strategy includes:

- Air navigation service
  Quality of air navigation service delivery should be increased
- Safety
  Full enforcement of all safety issues that are regulated and précised in ICAO annexes and European legislations on civil aviation safety should be ensured by all civil aviation actors.
- Low cost flights
  Favourable environment for the operation of low cost flight companies should be developed in Kosovo.

5.2.5 Maritime Transport and Port Facilities
The analysis of external trade flows of Kosovo showed that in 2009, out of 3.6 million ton of export/import, about only 300,000 tons was requiring maritime transport. As shown in Section 2.5, Table 2 (Comparison of the characteristics of existing and potential ports for Kosovo) the existing capacity in the neighbouring ports of Durres, Thessaloniki and Bar is sufficient to handle Kosovo traffic in the medium term. In addition, the maximum ship size in these ports is over DWT 25,000 while in Shengjin it cannot exceed DWT 13,000 although this requires an investment estimated at Million Euro 109.

Therefore, he proposed strategy consists of:

- In short and medium term using existing ports of Durres and Thessaloniki.
- In long term, carrying out further studies on Shengjin Port development.
- Developing at the same time a strategy to improving land accesses to the neighbouring ports.
5.2.5.1. Short and medium term: using existing ports of Durres and Thessaloniki

The improvement of the use of existing ports requires the negotiation of specific agreements both with the relevant port authorities (i.e. Durres and Thessaloniki Port Authorities) on a commercial basis, and countries (i.e. Albania, Greece and FYROM) on bilateral or multilateral basis, in order to take advantage of trade facilitation and custom agreements. The preparation of such negotiations requires specific studies including the following issues:

- Identification of port service costs in order to negotiate possible tariff discount based on long term service contracts.
- Preparation of draft bilateral or multilateral agreements in the framework of usual international regulation aiming at facilitating port transit (e.g. free trade area in the ports, custom facilitation, etc.).

5.2.5.2. Long term: Further Studies on Shengjin Port Development

It is proposed to deepen the following analyses aiming at developing a dedicated port for Kosovo in Shengjin:

- Further studies on maritime export/import market of Kosovo in order to better assess the related demand.
- Further studies on the maritime transport demand of Northern Albania (i.e. the Albanian hinterland of Shengjin Port) in order to better assess that demand.
- Technical studies in order to assess the maritime condition of the Shengjin Port (e.g; bathymetric survey, sedimentation study, etc.).
- Further analyses of the type of ships calling the Adriatic ports in order to tailor the port depth to the usual ships.
- Comparative assessment of port transit costs between Shengjin and competing ports.
- Technical, economic and financial feasibility studies of the port.
- Institutional issues including the preparation of a bilateral agreement defining the status of the port facilities used by Kosovo in Albania (e.g. terms of a concession agreement) and the custom facilitation agreement.

5.2.5.3. Strategy to improving land accesses to the neighbouring ports

Port land access development strategy will include first improving connection to existing ports and second improving access to Shengjin.

1) Improving Land Access Condition to Existing Ports of Durres and Thessaloniki

The improvement of the land access to existing ports requires both studies to assess the technical and economic feasibility of such improvements and the negotiation of specific agreements with the relevant countries (i.e. Albania, Greece and FYROM) on bilateral or multilateral basis, in order to take improve trade facilitation and custom agreements. In particular, the following issues are to be dealt with:

- Identification of possible road improvement issues (e.g. harmonization of technical and maintenance standards on connecting roads, technical and economic feasibility studies of the required upgrading works.)
- Coordination of SEETO core railway network action plan including Route 10 from Kosovo to Skopje, Corridor VIII from Skopje to Durres, Corridor X from Skopje to Greek border and further to Thessaloniki.
- Further feasibility study of a direct railway line between Kosovo and Albania to be compared with the link through Route 10 and Corridor VIII.
- Preparation of draft bilateral or multilateral agreements in the framework of usual international regulation aiming at facilitating road and rail transit (e.g. traffic facilitation, TIR agreement, custom facilitation, one-border posts, etc.).

**ii) Land Access to Shengjin**

Road connection between Kosovo and Albania will be soon completed with a 2x2 lane highway as well as related one border facilities.

The possible development of Shengjin port requires a specific attention to its local road access. Technical and economic feasibility studies of this access road are to be undertaken.

5.3 Environmental Strategy in Relation to Transport

The following further studies are recommended.

5.3.1 Further studies on pollutant and greenhouse gas emission reduction

Based on the mitigation measures identified, the following study is recommended:

- Diagnosis of the present situation in Kosovo and in Pristina regarding greenhouse gases emission:
  - Estimation of the transport fossil fuel consumption.
  - Estimation of corresponding CO$_2$ emissions.
  - Comparison with emissions of other economic sectors.
- Analysis of the existing mitigation measures in Kosovo and Pristina:
  - Institutional and regulatory aspects (regulation on fuel quality and other, enforcement, incentives).
  - Issues related to users (behaviour, initial and vocational training, awareness).
  - Fleet management aspects (operation, maintenance, driver training, vehicle selection).
  - Urban transport issues (traffic management options, modal transfer policy, etc.).
- Feasibility of possible application:
  - Identification of the Kosovo strategy for the future.
  - Technical and financial feasibility study of each approach.
  - Action plan including financing options.

5.3.2 Further studies on alternative energies and technologies

In order to identify the possible application of the alternative energies and technologies to Kosovo it is recommended to undertake preliminary studies addressing the items listed below. The corresponding study would have to consider the recent draft decision on the use of bio-fuels in the transport sector as a transposition of the EU Directive 2003/30/EC stressing on the use of alternative fuels to reduce CO$_2$ emission.
- Importation or national production of bio-fuels:
  - Technical and economic study of imported bio-fuels.
  - Technical and economic study of locally produced bio-fuels:
    - Possible agricultural capacities.
    - Possible share between bio-alcohol, bio-Diesel and bio-gas.
    - Existing and/or required industrial production paths.
    - Impact on food production.
  - Cost comparison between options.

- Technical and financial abilities of Dealers in implementing the regulation proposed.
- Definition of the awareness process.

5.4 Financing Strategy

The analysis of the Government resources dedicated to transport sector in the past (2005-2010) and projected in the midterm (2011-2013) shows the following:

- Almost all the resources are dedicated to road sector.
- Main capital expenditures include:
  - Highway construction (83 % of total capital budget over 2010-2013, Million Euro 217 per year).
  - Road rehabilitation (11 % of total capital budget over 2010-2013, 13.1 % annual decrease over the same period).
  - No road construction beyond 2011.
  - No fund dedicated to periodic road maintenance.
- MoInf Capital budget represents 2.2 % of GDP over 2005-2010 and 5.7 % over 2011-2013 showing the high impact of highway construction.
- Road routine maintenance is included in operation budget and represents Million Euro 8.6 per year (0.2 % GDP) over 2011-2013.

The main concern arising from this analysis is the lack of fund dedicated to periodic road maintenance which need is estimated at Million Euro 16 per year.

The outline of possible financing strategy includes the following:

- Government resources:
  - Capital expenditure: once the highway construction is completed, priority should be given to road rehabilitation.
  - Secure more funds for road routine and periodic maintenance which total need amounts to about Million Euro 23 per year. Undertake further studies on the feasibility of a Road Fund.

- External (IFIs) loans
  - Identify and present well justified projects to IFIs and negotiate.
  - Take into account public debt limit and borrowing power.

- Grants
  - Identify and present well justified projects to appropriate institutions.

- PPP:
  - Identify projects suitable for different types of PPP.
  - Undertake financial feasibility of these projects in order to define their most effective business and financing plans.
Chapter 6 - Multi Modal Action Plan

6.1 Infrastructure Investment Projects

6.1.1 Road Maintenance and Projects

The proposed action and investment plan is setup to support the MoInf strategy in the roads sector, with the most important objectives being:

- Reducing transport and congestion costs.
- Improving Kosovo’s national and regional network, and giving access to the motorways.
- Improving road safety.
- Maintaining and improving existing roads.

6.1.1.1. Road maintenance

Based on previously described strategy, the following actions have to be implemented in the next five years:

- Preparing an Administrative Instruction to better define the relationship and roles of the Department of Road Infrastructure (DRI) and Directorate of Road (DOR) in road infrastructure development and maintenance respectively.
- Studying the feasibility of creating a Road Agency in charge of road development, maintenance and management. The creation of such an Agency enables to strengthen road sector management and to associate to it road users and other stakeholders.
- Improving maintenance works planning and programming through setting up/improving procedures and tools to prepare maintenance strategy and programs. A specific technical assistance may be required to support this action.
- Improving maintenance contracting by setting up procedures and practices for performance based multi-year contracts. A specific technical assistance may be required to support this action.
- Improving road information databases and road surveys. A specific technical assistance may be required to support this action.
- Securing more funds for road routine and periodic maintenance which total need amounts to about Million Euro 23 per year (i.e. Million Euro 7 for routine maintenance and Million Euro 16 for periodic maintenance) through an improvement in the preparation of the Mid-Term Expenditure Framework (MTEF) which already allows multi-year budgeting. As part of budget reform, introduction of a separate budget line for periodic maintenance is important, and it would also be an improvement to take out routine maintenance from the services, where it doesn’t get enough attention.
- Undertaking further studies on the feasibility of a Road Fund. In such organizations, by law, a part of the resources collected from the road users are automatically and systematically deposited within an organization separated from the main state budget. Although generally, Ministries of Finance and Economy are opposed to the earmarking of funds, this option has the advantage to secure funds for road maintenance and World Bank was supporting strongly Road Fund over the past decades and it is desirable to explore its feasibility.
The following table summarizes the plan of action for road maintenance improvement and the proposed schedule.

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6.1.1.2. Road projects

Based on previously described strategy, the following actions have to be implemented in the next five years in order to supporting road infrastructure development:

- Improving capital works planning and programming.
- Improving the coordination and consistency between transit road development and municipal transport development plans.
- Improving highway engineering practices and construction supervision.

A specific technical assistance may be required to support these three actions.

Based on economic analysis of candidate projects, a priority list of investment options has been set up (i.e. projects yielding a positive NPV). The projects are dealing with the finalisation of the
strategic routes 6 and 7, improvement of main national links and interconnectivity of the regional network. The investments regarding safety improvements, intermodality, or city-by-passes, have not been detailed. Each of such subjects would require specific attention to develop precise investment options.

The main outcome is the fact that wider Pristina area is requiring investments to reduce the important city-traffic. This would include the continuation of Route 7 towards the North Pristina (i.e. Besi), connection of Route 7 and Route 6 (or M2) and finalisation of the by-pass.

Projects have been screened on their likelihood to be financed by donors, IFI loans or grants, and for each project, a preferred financing option has been proposed. As a result, involvement of private sector seems only possible for a very limited number of projects, and even in those cases, the analysis would require careful review. Private investment on Route 6 that was considered feasible in the previous Strategy seems no longer possible, because of lower expected traffic volumes and present international financial situation. However this issue should be examined further.

Because of scarce resources, selection of the financed projects should be done with particular care. The construction of the south part of Route 7 attracted resources usually allocation over several years, and it is possible that no other development project could be considered before several years. Indeed the motorway construction even drained money from other ministries, and this situation is not likely to last much longer.

Currently, it would be recommended that financing from KCB shall only be done on a case-by-case basis, subject to specific feasibility studies.

The following table summarizes the plan of action for road maintenance improvement and the proposed schedule.

Table 9 - Action plan for road infrastructure development

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</thead>
<tbody>
<tr>
<td>Improving capital works planning and programming, coordination and consistency between transit road development and municipal transport development plans and highway engineering practices and construction supervision</td>
<td>Preparation of TOR and securing funds for the TA</td>
<td>Consultant contracting and Technical Assistance provision</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Widening Arilat-Kijeve (Route 6, M9)</td>
<td>Preparation of TOR and securing funds for the study</td>
<td>Consultant contracting and feasibility/ detailed design study</td>
<td>Securing funds for the works and contractor procurement</td>
<td>Construction (2 years)</td>
<td></td>
</tr>
<tr>
<td>New section Besi-Pristina (Route 7, M9)</td>
<td>Preparation of TOR and securing funds for the study</td>
<td>Consultant contracting and feasibility/ detailed design study</td>
<td>Securing funds for the works and contractor procurement</td>
<td>Construction (3 years)</td>
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<tr>
<td>Widening Mitrovica-Vushtrri (M2)</td>
<td>Preparation of TOR and securing funds for the study</td>
<td>Consultant contracting and feasibility/ detailed design study</td>
<td>Securing funds for the works and contractor procurement</td>
<td>Construction (2 years)</td>
<td></td>
</tr>
<tr>
<td>New connection Routes 6 - 7 South Pristina</td>
<td>Preparation of TOR and securing funds for the study</td>
<td>Consultant contracting and feasibility/ detailed design study</td>
<td>Securing funds for the works and contractor procurement</td>
<td>Construction (2 years)</td>
<td></td>
</tr>
<tr>
<td>New Pristina Airport Road</td>
<td>Preparation of TOR and securing funds for the study</td>
<td>Consultant contracting and feasibility/ detailed design study</td>
<td>Securing funds for the works and contractor procurement</td>
<td>Construction starting (2 years)</td>
<td></td>
</tr>
<tr>
<td>Upgrading Gjilani-Ferizaj (M25.3)</td>
<td>Preparation of TOR and securing funds for the study</td>
<td>Consultant contracting and feasibility/ detailed design study</td>
<td>Securing funds for the works and contractor procurement</td>
<td>Construction starting (2 years)</td>
<td></td>
</tr>
<tr>
<td>Upgrading Ferizaj-Shtime (M25.3)</td>
<td>Preparation of TOR and securing funds for the study</td>
<td>Consultant contracting and feasibility/ detailed design study</td>
<td>Securing funds for the works and contractor procurement</td>
<td>Construction starting (2 years)</td>
<td></td>
</tr>
<tr>
<td>Pristina by-pass Besi-Grashitce (M9-M25)</td>
<td>Preparation of TOR and securing funds for the study</td>
<td>Consultant contracting and feasibility/ detailed design study</td>
<td>Securing funds for the works and contractor procurement</td>
<td>Securing funds for the works and contractor procurement</td>
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</tr>
<tr>
<td>Upgrading Gjacova-Prizren (R107)</td>
<td>Preparation of TOR and securing funds for the study</td>
<td>Consultant contracting and feasibility/ detailed design study</td>
<td>Securing funds for the works and contractor procurement</td>
<td>Securing funds for the works and contractor procurement</td>
<td></td>
</tr>
<tr>
<td>Upgrading Gjacova-Peje (R107)</td>
<td>Preparation of TOR and securing funds for the study</td>
<td>Consultant contracting and feasibility/ detailed design study</td>
<td>Securing funds for the works and contractor procurement</td>
<td>Securing funds for the works and contractor procurement</td>
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</tr>
<tr>
<td>Paving Mushtisht-Verbeshtice (R118)</td>
<td>Preparation of TOR and securing funds for the study</td>
<td>Consultant contracting and feasibility/ detailed design study</td>
<td>Securing funds for the works and contractor procurement</td>
<td>Securing funds for the works and contractor procurement</td>
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</tr>
<tr>
<td>Peje by-pass (4-lane) (Route 6, M9)</td>
<td>Preparation of TOR and securing funds for the study</td>
<td>Consultant contracting and feasibility/ detailed design study</td>
<td>Securing funds for the works and contractor procurement</td>
<td>Securing funds for the works and contractor procurement</td>
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</tbody>
</table>
The projects shown in Table 9 are commented below:

- **Widening Arllat-Kijeve (Route 6, M9):** The relatively limited cost of widening and the high traffic in the Pristina area justify immediate investments. The sections could be considered for Donor financing, but design and works are ongoing since 2009 and proceeding from the previous sections implemented.

- **New section Besi-Pristina (Route 7, M9):** This section has the best economic return as it should attract very high traffic levels. Generally speaking, all investments with the aim to reduce the city traffic in Pristina and relocate it to the outskirts have high economic return, as congestion in the city is very high and operating speeds are very low. This analysis does not even fully take into account the environmental and planning benefits, for an ever-increasing urban population.

- **Widening Mitrovica-Vushtri (M2):** With high traffic on most sections of M2, and limited investments, all previous sections of M2 have already been considered by MInf priority list for improvements. It seems strategic to complete the widening on this link up to the end, and the economic benefits fully justify an immediate implementation.

- **New connection Routes 6 - 7 South Pristina:** This project is one branch necessary to complete the routes 6 and 7 and is also part of the general strategy to relieve Pristina from transit and HGV flows. With the connection of Route 7 (M9), access to Route 6 (M2) would necessarily be done through the Pristina suburb without however any direct junction or motorway interchange, according to the current plans. This link is therefore required to avoid the motorway traffic exchanging from one route to the other to go through Pristina. This link should provide connection from Route 7 (M9) west of Pristina to Route 6 (M2) south of Pristina where Route 6 will be constructed as motorway or not. It would at the same time act as part of “Pristina ring road”, which explains its high traffic. It also has to be mentioned that this link has more sense when both Route 6 and Route 7 are constructed, to motorway profile, and only under these assumption, the link is likely to carry higher traffic then the one forecasted in this analysis.

- **New Pristina Airport Road:** Today, there are two possible routes to reach the airport, using M9 through Fushe Kosovo or from the south of Pristina from Lipjan through regional road R120 or/and local roads. The first access is, despite the widening of M9, highly congested, and the second link does only serve the population from the south of Pristina and is not
designed for high traffic. The need for a new link to the airport has been identified by the previous government; however, the cost of this construction is high as expropriation problems are expected. Despite the high costs, it is still with large positive NPV and IRR (which shows how congested Pristina Sub-urban area is), and should be considered as one of the main priorities.

- **Upgrading Gjilani-Ferizaj and Ferizaj- Shtime (M25.3):** This national road acts as the main access to the eastern region of Kosovo and its main town Gjilani. Its importance is increasing with the opening of Route 7, that does not have an equivalent in the Eastern part of the country. Improvement of this road is essential to give access to the motorway network to a large part of the population. The project consists of widening and upgrading of the road to a 2*2 standard (i.e. 4-lane). Cheaper alternatives could be considered with partial widening, by sections or generally. Implementation is justified for an opening very soon. It could be considered for IFI funding, as part of the development of feeder access to the main network. If funded by donors, the design could include the investigation of different design solutions to possibly improve the service level at lower cost.

- **Pristina by-pass Besi-Grashtice (M9-M25):** If this section has the second best economic return it is explained by a more limited construction cost than other sections in Pristina area or mountain sections, as a 2-lane standard road, for still very high traffic levels. From a spatial development point, it makes sense to complete the by-pass, already opened from Mramor to Grashtice, and to connect it to M25 near Besi. This section has been modeled to be opened in 2017 and the results show that this section still has good economic return even for an earlier implementation. It has however been scheduled after completion of the motorway sections.

- **Upgrading Gjacova-Prizren and Gjacova-Peje (R107):** This regional road acts as an important link between the main regional cities in Kosovo. Its importance for the national traffic is similar to the main roads, although is it not built to the same standard. This project consists of partial widening and upgrading of the road, and to create partly additional lanes to allow overtaking. It is not in the priorities of MoInf, but would be justified for implementation very soon. It could be ideally considered for IFI funding, even starting with design. If funded by donors, the design could include the development of untypical or sub-standard design solutions to ease congestion and improve safety at low cost.

- **Paving Mushtisht-Verbesh tice (R118):** This project has high economic return as the current unpaved section seems to carry even now significant traffic. This is not the case on all unpaved regional roads, but on all of them it can be expected strong increase of traffic once paved. Therefore it can be considered as one of the priorities of MoInf, from congestion, spatial development and safety point of view to achieve the paving of all remaining unpaved regional roads, as soon as possible and compatible with KCB.

- **Peje by-pass (4-lane) (Route 6, M9):** This project shows more economic return than the widening of the adjacent sections. This result is probably justified by the traffic in the city, with significant congestion, whereas the sections on M9 after Kijeve have relatively free flow.

- **New road Prizren-FYROM border towards Tetovo:** This project remained from the priorities of a previous government, and is not part of the priorities presently. Therefore, it has been planned to be implemented in the long-term. However, even though connecting the two cities needs a cross-border project, and it is a severe mountain road, there is sufficient exchange between two main regional cities to justify this investment. Indeed, the main current option to joint Prizren to Tetovo is to use the main roads and Macedonian motorways through Hani Elezit - Skopje, or alternatively, the mountain roads through Brezovice, which both represent a very long detour.
**Widening Peje-Montenegro border to 3-lane (Route 6, M9):** M9 between Peje and the border has only recently been paved. Today, the road is in good condition, and traffic is increasing. With the limited project to up-grade the road to a 3-lane road, with climbing lanes, the investment can be justified in 2022, and even before. As a cross-border project, the actual traffic would of course also depend on investment on the other side of the border. However, as a small land-locked country, importance of cross-border projects, even on less important itineraries should not be underestimated. The economic results on the improvement of the cross-border section are in all cases much better then construction of a new route.

**Improvement of connection to Montenegro (R106):** An existing feasibility study already presented various options to connect Kosovo and Montenegro. Today, most traffic is using R106, but although in a scenic mountain environment, the access is not easy and needs improvement to support the regional transport (passengers and freight) demand. In this area between Kosovo and Montenegro, there is no easy passage; therefore a “south” solution through Deçan was studied comparing it with improvement of R106. This option has been abandoned for political and environmental reasons. A third solution is improvement of the last section before the border of M9 that was presented above. For a project in 2022, the economic benefit of improving and upgrading of the present regional road has positive return.

### 6.1.2 Railway Projects

#### 6.1.2.1. Studies

Based on the previously described strategy, the following studies are to be implemented within the next five years:

- Design of southern section of Route 10 (rehabilitation).
- Design of northern section of Route 10 (rehabilitation).
- Feasibility studies of the rehabilitation/upgrading of East-West line and related Airport and south branch lines to serve areas and important cities such as Produjevo, Jakoba, and Prizren.
- Feasibility study regarding the construction of a new station in Pristina together with the upgrading of Pristina area rail line, serving the bus station and the development of commuter/suburban services.
- Feasibility studies of the interest of developing a rail missing link with Albania, its main centres and ports.

#### 6.1.2.2. Works

Within the next 5 years, the railway shall concentrate on the Rehabilitation of the Southern section of Route 10. One project has been identified and is eligible to ORIO funding (grant from Dutch Government), estimated at 8 Million Euro (16 Million Euro financing is to be provided from the state budget).

The North - South line crosses the Republic of Kosovo from the border with Serbia (Leshak station) to the border with the Macedonia (Hani i Elezit station) for a total of 148 km and is part of the South East European Transport Observatory (SEETO) core rail network, referred to as “Route 10”. It passes through the central nodal station at Fushë Kosovë at 78 km South from Leshak. The proposed project foresees interventions for the improvement of railway infrastructure in the southern part of this corridor from Fushe Kosove to Macedonian border (62 km).
The project will:
- Improve the safety on the line.
- Increase the speed and allow for better services up to the border and further to Skopje.

The Southern Route passes through five major Kosovo towns (Fushe Kosove, Lipjan, Ferizaj, Kacanik and Hani i Elezit) where an estimated total of 328,000 Kosovo citizens live. The population of these towns is mixed in terms of ethnicity and aside from the vast Albanian majority population, they are also home to other ethnic communities including Serbs, Roma, Ashkali and Egyptian (RAE) communities, Croats, Turks and Bosnians. In terms of age, similarly to the rest of Kosovo population, the inhabitants of the areas covered by the project also represent a very young population with around 50% of it being under the age of 35 years old. Poverty and widespread unemployment which depending on the source of information is estimated to be up to 50% of the entire active workforce are the biggest challenges that the local and central government institutions face.

The main limitation in improving the current situation with railway infrastructure in the Southern Route has been the limited resources available to Kosovo Railways and the Government of Kosovo to make capital investments for its improvement. The Mid-Term Expenditures Framework - the policy planning and implementation vehicle used by the Kosovo Government, has in the past years allowed for 1.5 Million Euros to be spent annually for capital investments in the railway sector. The allocation of funding has been made in line with government infrastructure development policies, which, in past years, has left railway sector far behind the road infrastructure that has received greatest attention, resulting in a significant loss of competitiveness and market share.

The project is constituted of the following elements:
- **Lot 1**: Preparation and Execution of Works Contract for Rehabilitation of Tunnels. Activity Cost: 5.15 Mil. € (est.). This contract includes:
  - Reconstruction of 7 tunnels for safety purposes and increase of their gauge for future electrification.
- **Lot 2**: Preparation and Execution of a Works Contract for the Revitalization of Signaling Infrastructure in the Segment Fushe Kosove – Hani i Elezit. Activity Cost: 10.85 Mil. € (est.) Contract includes:
  - Installation of electronic interlocking with axle counters in Fushe Kosove and Miradita.
  - Rehabilitation of interlocking systems in 6 stations between Fushe Kosove and Macedonian border.
  - Modernization of 13 level crossings.
- **Lot 3**: Preparation and Execution of Works Contract for Rehabilitation of Tracks and Civil Works. Activity Cost: 11 Mil. € (est.). This contract includes:
  - Improvement of tracks from Hani i Elezit to Gurez. Length 22 km.
- **Lot 4**: Preparation and Execution of Service Contract for Consulting Services. The exact cost and scope of this contract is to be determined after considering the donor requirements for these processes, but it is foreseen to include:
  - Design Services.
  - Project Management Services and support to the development of railways.
  - Works Supervision Services.

Works for the 40 km long remaining part of the line shall be implemented later.

The proposed intervention is presented in the figure below:
The following table summarizes the plan of action for railway infrastructure development and the proposed schedule.

### Table 10 - Action plan for railway infrastructure development

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<tbody>
<tr>
<td>Route 10 (southern section) rehabilitation</td>
<td>Preparation of TOR for design Preparation of ORIO application file Secure financing</td>
<td>Design Preparation of tender dossier for construction Preparation of tender dossier for FIDIC engineer</td>
<td>Contractor procurement Engineer hiring Construction</td>
<td>Construction</td>
<td>Testing and commissioning</td>
</tr>
<tr>
<td>Route 10 (northern section) rehabilitation</td>
<td>Secure financing Preparation of TOR for design Designer contracting</td>
<td>Design Preparation of tender dossier for construction Preparation of tender dossier for FIDIC engineer</td>
<td>Contractor procurement Engineer hiring Construction</td>
<td>Construction</td>
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<tr>
<td>Rehabilitation/upgrading of East-West line and related Airport and south branch lines to serve areas and important cities such as Podujevo, Jakoba, and Prizren</td>
<td>Preparation of TOR for feasibility Consultant contracting</td>
<td>Feasibility study</td>
<td>Secure the funding of the design Preparation of TOR for design Designer contracting</td>
<td>Design for the selected alternative Preparation of tender dossier for construction Secure the funding of the construction Preparation of tender dossier for FIDIC engineer</td>
<td>Contractor procurement</td>
</tr>
<tr>
<td>Construction of a new station in Pristina together with the upgrading of Pristina area rail line, serving the Bus station and the development of commuter/suburban services</td>
<td>Secure the funding of the study Preparation of TOR for feasibility Consultant contracting</td>
<td>Feasibility study</td>
<td>Secure the funding of the design Preparation of TOR for design Designer contracting</td>
<td>Design for the selected alternative Preparation of tender dossier for construction</td>
<td>Design for the selected alternative Preparation of tender dossier for construction</td>
</tr>
<tr>
<td>Rail missing link with Albania, its main centres and ports</td>
<td>Secure the funding of the study Preparation of TOR for feasibility Consultant contracting</td>
<td>Feasibility study</td>
<td>Secure the funding of the design Preparation of TOR for design Designer contracting</td>
<td>Design for the selected alternative Preparation of tender dossier for construction</td>
<td>Design for the selected alternative Preparation of tender dossier for construction</td>
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</tbody>
</table>

6.1.3 Port Projects

Section 5.2.5.2 discusses further studies required on Shengjin port development including the following:

- Further studies on maritime export/import market of Kosovo in order to better assess the related demand.
- Further studies on the maritime transport demand of Northern Albania (i.e. the Albanian hinterland of Shengjin Port) in order to better assess that demand.
- Technical studies in order to assess the maritime condition of the Shengjin Port (e.g.; bathymetric survey, sedimentation study, etc.).
- Further analyses of the type of ships calling the Adriatic ports in order to tailor the port depth to the usual ships.
- Comparative assessment of port transit costs between Shengjin and competing ports.
- Technical, economic and financial feasibility studies of the port.
- Institutional issues including the preparation of a bilateral agreement defining the status of the port facilities used by Kosovo in Albania (e.g. terms of a concession agreement) and the custom facilitation agreement.

Section 5.2.5.3 discusses land access improvement to the ports used by Kosovo including the following:

- Identification of possible road improvement issues (e.g. harmonization of technical and maintenance standards on roads connecting to Thessaloniki and Durres ports, technical and economic feasibility studies of the required upgrading works.
- Coordination of SEETO core railway network action plan including Route 10 from Kosovo to Skopje, Corridor VIII from Skopje to Durres, Corridor X from Skopje to Greek border and further to Thessaloniki.
- Further feasibility study of a direct railway line between Kosovo and Albania to be compared with the link through Route 10 and Corridor VIII.
- Improvement of local road access to Shengjin.

The following table summarizes the actions to be implemented and their proposed schedule.

Table 11 - Action plan for infrastructure development related to ports

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<tbody>
<tr>
<td>Improved road access to Durres and Thessaloniki ports</td>
<td>ToR for the identification of required improvements and feasibility studies</td>
<td>Prepare bilateral and multilateral negotiations for implementation</td>
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<tr>
<td>Improved rail access to Durres and Thessaloniki ports</td>
<td>Coordination of core SEETO railways action plan (Route 10 and Corridors VIII and X)</td>
<td>Prepare bilateral and multilateral negotiations for implementation</td>
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<tr>
<td>Direct rail access to Albania and Albanian ports</td>
<td>Secure the funding of the study</td>
<td>Prepare ToR for feasibility study and hire consultant</td>
<td>Undertake the study</td>
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<tr>
<td>Further studies on Shengjin port development</td>
<td>Secure the funding of the studies</td>
<td>Prepare ToR for the required studies and hire consultant</td>
<td>Undertake the studies</td>
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</table>

6.1.4 Intermodal Infrastructure Projects

6.1.4.1. Passenger intermodal infrastructure

In the short term, with the sparse and poorly used existing rail services, investment in easing bus-rail passenger interchange should be limited to low cost measures to address specific identified issues at the main stations. Such measures will largely be limited to signing, static information provision, improvements to bus stops and minor improvements to pedestrian linkages between the railway station and bus station/stops. In addition, the development of an internet-based public transport information and trip planning resource can be commenced.

In the medium and longer terms developing intermodality and intermodal passenger facilities will be linked to the investment in improving the railway network and the associated development of passenger services. Planning for intermodality (not just bus-rail but also car-rail and taxi-rail) needs to be an integral part of the planning of the rail network improvements. Passenger Intermodality Plans should be prepared for each rail corridor at an early stage in the planning and design process.

The following short term actions are proposed to advance the planning for passenger intermodality:
- Update the forecasts of future rail patronage and develop forecasts of the potential bus-rail intermodal trip demand.
- Undertake feasibility studies for the major passenger intermodal investment proposals for Pristina, Peje and Prizren.
- Prepare a Passenger Intermodality Plan for the Route 10 rail corridor.

All these actions need to be carried out in partnership with the relevant municipalities.

Table 12 summarizes the proposed action plan.

### Table 12 - Action plan for intermodal passenger infrastructure

<table>
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<th>Action Area</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
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<td>Q1 &amp; Q2</td>
<td>Q3 &amp; Q4</td>
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<tr>
<td>Bus-rail passenger</td>
<td>Update data on existing trips and demand forecasts</td>
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<td>intermodality</td>
<td>Develop public transport information website</td>
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<td></td>
<td>Feasibility study for Pristina intermodal hub</td>
<td>Feasibility studies for Peje and Prizren intermodal hubs</td>
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<tr>
<td></td>
<td>Route 10 intermodality plan</td>
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</table>

#### 6.1.4.2. Freight intermodal infrastructure

The intermodal/multimodal transport comprises several components that build upon/interrelate with the previous components of the proposed plan. Prior to embarking on the process of describing infrastructure projects, it is important to consider the overall plan, the sequence of measures which are proposed are in line with the multimodal/intermodal freight transport strategy defined in Section 5.1.1.

The Action Plan for intermodal/multimodal freight transport identifies the following specific measures that will be taken to achieve the strategic objectives:

- **Action 1**: Create an organisational MMT framework for MMT operations.
- **Action 2**: Prepare an operational/business plan for the new MMT Company.
- **Action 3**: Connecting the new MMT system to EU relevant networks.
- **Action 4**: Feasibility study of upgrading Miradi terminal.
- **Action 5**: Building a freight village in Miradi.

Actions 1 to 3 are described in Section 6.2.6.2 since they relate to transport services while Actions 4 and 5 relate to infrastructure investment projects and are dealt with in the present section. However, the two infrastructure projects (i.e. upgrade Miradi and building a freight village) are not an end in them selves and should only be considered in relation with Actions 1, 2 and 3.

**i) Feasibility study of upgrading Miradi terminal**

As a continuation of Actions 1 to 3, it is proposed, to undertake a feasibility study of upgrading/rebuilding the current shunting station in Miradi, making the layout and handling facilities to fit the requirements of clients and forwarders for handling multimodal transport units.
The proposal of rebuilding/upgrading the terminal is essential as its facilities are the key component of the intermodal transport chain.

The current facility is a shunting area and has not the appropriate layout, handling facilities and technologies to operate as an MMT Terminal. Building the facility in this location (i.e. Miradi) is considered as a good choice as it is situated between the airport and Pristine, already connected to the main motorways and existing railway lines and in an area where important industrial development are taking place.

Furthermore, the location is distant enough from the city centre so that adverse effect from trucks transit is easier to mitigate. The area has space enough for a first development stage and spare capacity for further expansion as need arise. The place seems also be a good location for supplementing the contemplated transhipment facility by a freight village.

Major drawbacks of the current Miradi station are:

- The layout and handling methods do not fit with the requirements of a container terminal:
  - There is a need to separate the handling function of loading/unloading and the functions of storage, delivering and reloading on container wagons.
  - Road lanes should be created between railway tracks to make direct road-to-rail handling possible (trucks must get across from one end of the yard to the other).
- The existing 13 railway tracks are congested with scrap wagons which need to be cleared before layout improvement works.
- The handling equipment, so far limited to a reach-stacker has to be supplemented. Depending on results from a feasibility study, it is recommended to install a gantry crane (mounted on rail or even wheels).

A detailed study should evaluate the feasibility of the suggested works (both infra and superstructure) to make the terminal able to accommodate all types of intermodal loading units (not only container but also swap bodies and as need arise, also semi-trailers). The terminal should be conceived in order to fulfil four basic functions:
1. Administrative handling facilities, in which transport company staff process official documents, check the safety of the load, assign vehicles and suchlike.
2. Loading tracks for freight wagons and loading road sections for trucks, parallel each to one other.
3. Transhipment machines - crane or additional reach stacker - which tranship loading units between trucks and freight wagon.
4. Holding area where loading units can be stored until their connecting train or trucks are ready to take them.

Additional functions, depending on the feasibility study, should include:
- Intermediate buffer for loading units: vehicles.
- Agency functions for railways and operators.
- Storage of loading units (Container-Depot).
- Temperature controlled/dangerous goods.
- Trucking Service.
- Container Repair.
- Customs Services.

The key component, the Transhipment facilities profiles should allow for gradual improvement, as traffic increases, and additional expansion anticipated, as per Figure 11.

Stakeholders involved in the terminal to be rebuilt or enlarged are very dependent on results from the recommended Operational / Business Plan (Action 3) which defines the business models and roles of various actors. With respect to the objective of the feasibility study it is
relevant to identify particularly those actors whom will initiate and implement this action such as the following:

- Terminal owner (could be the MMT operator)
- Land owner
- Rail infrastructure manager (InfraKos)
- Rail transport operator (TrainKos)
- Intermodal service operator (a forwarder, a new company KombiKos or concession to a regional experienced operator such as AdriaKombi)
- Terminal operator operation (may be the MMT operator)
- Shipper / Forwarder
- Financial institutions
- Public authority that deliver the approval and possibly co-finance the investment.

Figure 11 - Recommended upgrading profiles

The common understanding of terminals is based on the following principles:

- Non-discriminative access to terminals (at least for those that have received public funding)
- Rail-side access for all licensed railway undertakings
- Road-side access for all operators
- Transparent capacity allocation and pricing
- Bundling of different cargoes (maritime container, continental cargoes), and market segments (international and domestic relations) and thus improved capacity utilisation.

The project feasibility analyses should follow a typical format and methodology:

- Description of the project.
- Traffic: the present traffic level and forecasts of future traffic are estimated.
- Benefit assessment: the benefits of the investment have to be identified. They include time savings, savings in vehicle operating costs, savings in accidents in terms of persons and equipment, etc.
- Costs have to be assessed in both project situation and reference situation, both for investment costs and annual operating costs.
- Economic analysis: The difference of economic benefits and costs between the project and the reference situation has to be calculated for each year in a 25 year period. Sensitivity analyses will be undertaken to illustrate the incidence of changes in investment costs and changes in future traffic volumes.
- Financial analysis: an analysis/statement/assessment of the potential for user payments to pay for parts of the costs.
- Environmental implications: identifying significant potential environmental problems and benefits related to the project.

The project schedule is summarized in the following table.

Table 13 - Action plan for intermodal freight infrastructure

<table>
<thead>
<tr>
<th>Action Area</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feasibility study of upgrading Miradi terminal</td>
<td>Update data on existing MMT traffic and demand forecasts</td>
<td>Feasibility studies for Miradi Prizren intermodal hubs</td>
<td>Phase 1: build/upgrade with two-way for transhipment and 2 reach stacker</td>
</tr>
<tr>
<td></td>
<td>Stakeholders discussions / agreements</td>
<td></td>
<td>Phase 2: gantry crane and fixed 4-way.</td>
</tr>
</tbody>
</table>

The anticipated cost of the study is in the order of 1 million Euros.

The investment in terminal installation itself is in the order of 10 to 20 million Euros (according to the preferred profile).

Past experience gives evidences that without public funds for the required construction or development of terminal infrastructure, the terminal can not operate on a profitable way or the resulting pricing does affect the competiveness of the intermodal transport chain negatively.

**ii) Building a freight village in Miradi**

As part of the proposed regional strategy for the development of a MMT transport system in Miradi, it is recommended to build, in the short/medium term, a logistics centre in Pristina (Miradi) based on common and agreed sector vision between public and private sector.

In this sense, Kosovo concerned transport authorities should have broadly discussed and shared view of the regional strategy to be implemented for developing such a logistics site.

The successful development of logistics centers would involve both private and public stakeholders, both from the landlocked and transit countries.

Planning areas for logistics operations should be initiated in advance, as soon as the feasibility study for the upgrading of the Miradi MMT terminal is completed, to have the areas prepared in due course,

The uniqueness of the activities and services provided by a logistics centre makes it difficult to determine its future needs and investment requirements, especially at the initial planning stage.
However, key elements for the successful setting-up of a logistics centre are provided as follows:

- **Support from the public sector**
  - Draw-up a consistent regional transport policy, which increasingly takes the logistics issues into account.
  - Establish a Governmental strategy for the development of regional logistics networks, based on intermodal logistics networks and partnerships.

- **Public-Private Partnership**
  - Reconcile different expectations of the public and private sectors regarding the setting-up of the logistics centres. This requires a larger use of communication techniques, better identification of relevant partners and the organisation of regular meetings to agree on specific policies and work programmes relating to logistics.
  - Establish stronger coordination between initiatives taken by the public and the private sector.
  - Avoid totally competing initiatives.

- **Financing**: Promote the knowledge of the possibilities of financing investments as part of public-private partnerships (national and regional funds).

- **Implementation**:
  - Create good understanding among leaders of the public sector at the initial investment phase and define the roles and tasks of each stakeholder during this period.
  - Encourage the public sector to set favourable conditions for the construction of logistics centres, based on a widely discussed and approved strategy.
  - Core areas and development plans.
  - Enabling logistics centres to be built.
  - Develop awareness among investors and provide them with relevant information.
  - Programmes of collaboration with investors.

- **Description of the activities**:
  - Detailed analysis of needs and opportunities.
  - Define the infrastructural Logistics Centre layout.
  - Business plan.
  - Design & built the general infrastructures, the warehouses and the integrated services.
  - Leasing activities (warehouses, offices, etc.).
  - Selling activities (warehouses, offices, etc.).
  - Administrative, financial, commercial, operating management of the Logistics Centre.

- **Partners involved**:
  - Public sector: intervention is in planning and initiating the process through “service concept approach”, first, then investing in “facilities building” (PPP) as a second stage of the strategy.
  - Private sector: defined according to a “Service concept approach” to be based on detailed analysis of needs and opportunities & inter modality.

Figure 12 illustrates the principle, based on a “Service concept approach”.

The Centre is to be managed by a single and neutral legal body (preferably by PPP). By combining activities two things can happen:
  - New services can arise and be offered,
  - Existing services can be utilised better.

Successful development of logistics centre in Pristina involves PPP approach. Main expected benefits include the following:
  - Reduction of total transport costs and increase of competitiveness of industrial systems.
- Economies of scale: concentration of transport and logistics activities is more economic and efficient than several smaller intermodal terminals scattered over the territory.
- Environmental protection.

The costs are roughly estimated at 30 to 40 millions Euros. The time scheduled includes starting studies in 2013 for a building delivered by 2017.

Figure 12 - Organisational principles of Miradi freight village

6.2 Transport Services

6.2.1 Road Public Passenger Transport

6.2.1.1. Interurban bus transport
The strategy for improving interurban bus transport set out in Section 5.2.2.2 centred around:
- Encouraging a restructuring of the interurban bus industry into fewer and larger operating entities that would be better placed to invest in the delivery of high quality services.
- Replacing the existing regulatory system with a concession-based system for procuring interurban services.
- Securing the future of the interurban bus terminals in public ownership and letting concessions to the private sector to operate them and invest in their improvement.

The introduction of concessions for interurban bus services is at the core of the strategy and the issue of the structure of the bus industry is largely related to this.
With regard to the bus terminals, the review has confirmed the importance of these facilities being in public ownership in order to ensure their retention as public transport facilities that operate efficiently and provide a good service to the passenger. However, the review does highlight that there are a number of operating models for publicly owned terminals - including concessions - and that the preferred model will not necessarily be the same for all terminals, and will depend on the particular circumstances at each terminal.

The key measures or actions required to take the MMTS forward have been identified as follows:

- With regard to the pilot bus line concession and associated industry restructuring:
  - Define the medium term vision for the procurement of interurban bus services, particularly in terms of the numbers and sizes of concessions and the quality specifications for services.
  - Engage bus operators in discussion on the delivery of that vision - to assist the Ministry in planning and designing the concessions such as to ensure the delivery of its objectives, and to identify potential barriers to the industry restructuring that will be necessary for the successful implementation of the concessions policy.
  - Put in place the support services to operators that may be required to facilitate industry restructuring - it is anticipated that these may include professional advice (business support) and training.
  - Further study the potential social impacts of the concessions policy and the social, financial political and legal considerations attached to the options to mitigate those impacts.
  - In conjunction with the Public Private Partnerships Inter-ministerial Steering Committee, prepare the pilot concession procedures and documentation in accordance with the existing legal framework.

- With regard to the interurban bus terminals
  - Secure a Government decision to convert the SOEs to POEs and remove them from the PAK's privatisation remit.
  - Enact the required legislation/regulation to implement this decision.
  - Establish a joint Working Group with the municipalities to oversee the process of planning the future of the bus terminals.
  - Undertake the necessary studies to establish the future operational and investment requirements for each terminal as the bases for agreeing the optimum model for the future management and operation of each.
  - Initiate a concessions programme, where shown to be appropriate, within the existing legal framework.

Supporting all these actions, and hence a central part of any Action Plan, must be the more effective enforcement of the existing regulations relating to interurban bus transport.

6.2.1.2. Urban public passenger transport

Urban transport strategies are the responsibility of the municipalities, as are the development plans for urban public transport. However, the Ministry of Infrastructure (MoInf) has an overarching responsibility to define the policy and development strategy for road transport and to regulate the transport sector. The municipalities are required by law to draw up, and periodically review and update, local transport plans that accord with Government policies and objectives, and to submit these to the Ministry. However, no municipalities have to date fulfilled this requirement.
To assist both parties in fulfilling their responsibilities with respect to planning urban transport, the MMTS review and update has provided guidance on the scope of local transport plans and urban multi modal transport strategies, and, more specifically, guidelines on the development of urban public transport.

A number of actions have also been identified to allow the MoInf to more effectively exercise its responsibilities in respect of urban transport, and to support the municipalities in exercising theirs. These include:

- Drafting guidance to the municipalities on the scope, format, preparation and monitoring of local transport plans including the achievement of synergy with national transport objectives and introducing in municipal plans provisions to ensure a place for public transport, binding for the investors, and a limitation of the number of parking places in the centre of the cities.
- Establishing formal liaison mechanisms with municipalities to support them in developing plans for urban transport.
- Preparing and promoting more detailed guidance on key aspects of developing sustainable urban transport systems – such as designing for pedestrians and cyclists, designing for buses, etc.
- Encouraging the creation of public parking places, including Park & Ride offers where relevant.
- Organising the enforcement of parking rules by Kosovo Police in relation with the development of parking facilities.

As regards bus connection to Pristina International Airport (PIA), preliminary estimates of the potential patronage, revenues and operating costs of bus services to PIA have been made based on the results of passenger surveys conducted at the airport in May/June 2011. Services from all the main cities of Kosovo have been assessed.

None of the options considered were shown to be likely to be commercially viable with current levels of demand. All would be likely to require annual operating subsidies. The subsidy required for services from outside Pristina would be very substantial.

A service between Prishtina and the airport operating 12 hours a day was the best option in financial terms. However even this would be likely to require an annual operating subsidy before allowance is made for the cost of vehicles.

Hence, further feasibility studies for the introduction of a bus service are not recommended. However, should the Ministry consider that there are wider social benefits from such a service that could justify subsidising it, then a number of actions are identified to progress the concept. These are, however not included in the Action Plan below.

6.2.1.3. Proposed action plan for road public passenger transport

All the actions identified in Sections 6.2.1.1 and 6.2.1.2 are essentially short term actions required to implement more medium/longer term policies. Hence, they are all actions that should be completed or, in some cases initiated, over the period up to the end of 2013.

Table 14 provides a preliminary Action Plan for that period. Of course, delivery to this Plan will depend on the resources available, principally within the Transport Department of MoInf.
Table 14 - Action plan for road public passenger transport

<table>
<thead>
<tr>
<th>Action Area</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enforcement</td>
<td>Improved enforcement of existing regulations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus industry restructuring &amp; bus line concessions</td>
<td>Confirm medium term vision for delivery of inter urban bus services</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Initiate operator consultation</td>
<td>Operator consultation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set up business support &amp; training provision</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evaluate potential social impacts</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bus terminals</td>
<td>Enact legislation/</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Obtain Government decision on conversion of SOEs to POEs</td>
<td>regulation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establish Working Group with municipalities</td>
<td>Undertake studies to prepare detailed proposals and programme</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prepare procedures and documentation for first concession</td>
<td></td>
</tr>
<tr>
<td>Urban Transport Planning</td>
<td>Review and update 2006 Multi Modal Transport Policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establish formal liaison with municipalities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Draft guidance to municipalities on local transport plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prepare and promote detailed guidance on sustainable transport</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.2.2 Road Freight Transport

Section 5.2.2.1 discusses the measures to be applied in order to improve road freight transport conditions. These measures include the following:

- In relation to truck drivers:
  - Establish Certificate of Professional Competence (CPC) for truck drivers and compulsory CPC testing accordingly.
  - Establish compulsory hazardous product transport training and testing centre.
- In relation to trucks:
  - Strengthen the vehicle testing regime.
- In relation to road freight transport:
  - Improving transport information by transposing European regulation (EC) No. 1172/98 on statistical data collection on road freight transport and establishing the obligation for the road freight transport operators to provide information on their vehicles, their trips and good transported.
These measures are all actions that should be completed or, in some cases initiated, over the period up to the end of 2013. Table 15 provides a preliminary Action Plan for that period. Of course, delivery to this Plan will depend on the resources available, principally within the Transport Department of MoInf.

Table 15 - Action plan for road freight transport

<table>
<thead>
<tr>
<th>Action Area</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1 &amp; Q2</td>
<td>Q3 &amp; Q4</td>
</tr>
<tr>
<td>Truck drivers</td>
<td>Establish Certificate of Professional Competence (CPC)</td>
<td>Undertake compulsory testing of CPC</td>
</tr>
<tr>
<td>Truck drivers</td>
<td>Undertake the feasibility study of compulsory hazardous product transport training and testing centre</td>
<td>Establish the centre</td>
</tr>
<tr>
<td>Trucks</td>
<td>Study the means to strengthening the vehicle testing regime</td>
<td>Introduce new regulation accordingly</td>
</tr>
<tr>
<td>Freight transport</td>
<td>Undertake the feasibility study of transposing European regulation (EC) No. 1172/98 on statistical data collection on road freight transport</td>
<td>Introduce new regulation accordingly</td>
</tr>
</tbody>
</table>

### 6.2.3 Rail Transport

Considering the severe shortage of rolling stock affecting Kosovo Railways, most of the investments as regards to Rail operation is concentrated in purchasing:

- Locomotives
- Diesel Multiple Units
- Coaches
- Wagons

Until now, Kosovo railways own rolling stock lied in the fleet left in Kosovo and second-hand rolling stock granted. In the future, opportunities for acquiring second hand rolling stock will still be actively sought. However, in particular as regards to DMUs, limited possibilities are offered on the market.

On the basis of rail infrastructure action plan and current fleet, the proposed action plan (in units to be acquired) is shown in Table 16.
Table 16 - Action plan for railway transport equipment (number of units to be acquired)

<table>
<thead>
<tr>
<th>Action Area</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locomotives</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>DMUs</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Coaches</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Acquisition of wagons will need to be fully in line with the evolution of traffic.

6.2.4 Civil Aviation

Section 5.2.4 discusses some measures aimed at improving civil aviation services, in particular the following:

- Further feasibility studies, including land access conditions, in order to assess the interest of using the airport facilities located at Gjakova as an alternative to PIA, in particular in bad weather conditions.
- Measures in order to increase quality of air navigation service delivery.
- Full enforcement of all safety issues that are regulated and précised in ICAO annexes and European legislations on civil aviation safety.
- Measures in order to creating a favourable environment for the operation of low cost flight companies in Kosovo.

The following table summarizes the actions to be implemented and their proposed schedule.

Table 17 - Action plan for civil aviation

<table>
<thead>
<tr>
<th>Action Area</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of air navigation services</td>
<td>ToR for the identification of required improvements and feasibility studies</td>
<td>Prepare implementation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enforcement of air safety issues</td>
<td>Improved enforcement of existing regulations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of low cost flights</td>
<td>ToR for the identification of supporting measures and feasibility studies</td>
<td>Prepare implementation of measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil use of Gjakova airport</td>
<td>Secure the funding of the study</td>
<td>Prepare ToR for feasibility study and hire consultant</td>
<td>Undertake the study</td>
<td></td>
</tr>
</tbody>
</table>

6.2.5 Maritime Transport and Port Operation

Sections 5.2.5.1 and 5.2.5.3 discuss the following actions aimed at easing port and road transit of goods to/from Kosovo:

- Analysis of port service costs in order to negotiate possible tariff discount based on long term service contracts.
- Preparation of draft bilateral or multilateral agreements in the framework of usual international regulation aiming at facilitating port transit (e.g. free trade area in the ports, custom facilitation, etc.).
- Preparation of draft bilateral or multilateral agreements in the framework of usual international regulation aiming at facilitating road and rail transit (e.g. traffic facilitation, TIR agreement, custom facilitation, one-border posts, etc.).

The following table summarizes these actions and shows their possible implementation schedule.

<table>
<thead>
<tr>
<th>Action Area</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negotiation of special tariffs in Durres and Thessaloniki ports</td>
<td>Analysis of port service costs and identification of possible discount</td>
<td>Prepare bilateral negotiations for tariff discount based on long term agreement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negotiation of agreements aiming at facilitating port transit in Durres and Thessaloniki ports</td>
<td>Analysis of port transit conditions and identification of facilitating measures</td>
<td>Prepare bilateral negotiations for implementation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negotiation of agreements aiming at facilitating road and rail transit to/from Durres and Thessaloniki ports</td>
<td>Analysis of road and rail transit conditions and identification of facilitating measures</td>
<td>Prepare bilateral and/or multilateral negotiations for implementation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.2.6 Multimodal Transport

6.2.6.1. Multimodal passenger transport services

Section 6.1.4.1 discusses the proposed action plan for multimodal passenger infrastructure. Some of the proposed actions include low cost measures to address specific identified issues at the main stations. Such measures will largely be limited to signing, statistic information provision, improvements to bus stops and minor improvements to pedestrian linkages between the railway station and bus station/stops. In addition, the development of an internet-based public transport information and trip planning resource can be commenced. These actions may be considered as both involving infrastructure and services (refer to Table 18).

6.2.6.2. Multimodal freight transport services

As discussed in Section 5.1.4.2, the Action Plan for intermodal/multimodal transport development includes the following specific measures that have to be implemented to achieve the strategic objectives:
- Action 1: Create an organisational MMT framework for MMT operations.
- Action 2: Prepare an operational/ business plan for the new MMT company.
- Action 3: Connecting the new MMT system to EU relevant networks.
- Action 4: Feasibility study of upgrading Miradi terminal.
- Action 5: Building of a freight village in Miradi terminal.

In this Section, the Action Plan for the implementation of Actions 1 to 3 is presented while Actions 4 and 5 were already discussed in Section 6.1.4.2.

i) **Action 1: Create an organisational MMT framework**

As discussed in Section 6.1.4.2, if investments are required to upgrade terminal and handling facilities, what appear essential, in the short term, is the creation/improvement of an organizational framework, supported by a renewed/EU aligned regulatory and policy framework and increased knowledge of this business (operational procedures, legal procedures and markets).

So far, the most essential piece of the MMT operating system, the appointment of an intermodal/multimodal operator acting as the organizer of all the operations on behalf and for the advantage of all involved partners is missing, so that MMT can not be organized.

At an international geographical scope, which is the only relevant market for Kosovo, such an operator is absolutely required. Currently there is no any multimodal transport operator able to organize its own shuttles running between company-owned terminals at EU scale.

Such operators can only be created as a steering company, or joint-venture, so that initial cooperation/discussion/negotiation at local level is needed.

The purpose of this first action is clearly to set up joint venture for business development in the intermodal scene originated from leadership by two groups of players as explained below:

- At the “policy level”, the Ministry of Infrastructure in charge of Transport is the main actor. It is the authority in charge of defining the general transport strategy and policy together with the assistance of professional unions emanating from the sector.
- At the “operating level”, there are three main actors: the carriers (railway companies and shipping companies), the combined transport operators and the customers (freight owners and freight forwarders).

The proposed organizational framework is illustrated in Figure 13.

The partners’ role and their respective role and billing procedures are summarized in Table 19.

The main role is that of the MMT operator (future “KombiKos”) who will be organizing and supervising “door to door” container traffic (swap bodies and semi-trailers as need arises). The MMT operator acts by sub-contracting certain tasks against payment, and selling “door to door” transportation package to individual customers (carriers - forwarding agent - exporters and importers).

The stakeholders have to establish a good degree of cooperation with terminal operators (if the terminal operators come to be different from the MMT operator), TrainKos and InfraKos as well as the intermodal/multimodal service providers in the corridor which will be part of the EU terminal service corridors.
Figure 13 - Proposed intermodal/multimodal organisational framework

1. Initiates the services
2. Purchase the capacity of an entire block train from a rail company (wholesale price)
3. Sell it on to hauliers and forwarders space by space (attractive retail prices).
4. Benefits that allow them to finance new infrastructure themselves.
5. Bears economic risk

Table 19 - Role of partners involved in MMT development

<table>
<thead>
<tr>
<th>Services</th>
<th>Who organises?</th>
<th>Who performs?</th>
<th>Who sells to whom?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container rental</td>
<td>Users / rental or MMT operator</td>
<td>Customer or operator</td>
<td>Rentals to customers/ operator in the overall price</td>
</tr>
<tr>
<td>Set up container at loading site</td>
<td>User / rental or MMT operator</td>
<td>Trucking company</td>
<td>Individual bills or operator in the overall price</td>
</tr>
<tr>
<td>Initial / end trucking</td>
<td>MMT Operator</td>
<td>Trucking company</td>
<td>Operator in the overall price</td>
</tr>
<tr>
<td>Handling (departure)</td>
<td>MMT Operator</td>
<td>Operator if terminal manager</td>
<td>Operator in the overall price</td>
</tr>
<tr>
<td>Railway traction / information</td>
<td>MMT Operator</td>
<td>TrainKos</td>
<td>TrainKos to operator included in the overall price</td>
</tr>
<tr>
<td>Railway access</td>
<td>TrainKos</td>
<td>Infrakos</td>
<td>Infrakos (fee) to Trainkos who passes the bill to operator included in the overall price</td>
</tr>
<tr>
<td>Handling (arrival)</td>
<td>MMT Operator</td>
<td>Operator if at same time terminal manager</td>
<td>Operator in the overall price</td>
</tr>
<tr>
<td>Trucking (arrival)</td>
<td>MMT Operator</td>
<td>Trucking company</td>
<td>Operator in the overall price</td>
</tr>
<tr>
<td>Container delivery / reposition</td>
<td>Users / rental or MMT operator</td>
<td>Trucking company</td>
<td>Operator in the overall price or individual bills</td>
</tr>
</tbody>
</table>

The relevant multimodal/intermodal cooperation network is reminded in the Figure 14.
ii) Action 2: Prepare an operational/business plan for the new MMT Company

As a continuation of the previous Action 1 on the MMT organizational framework, it is recommended to define the functioning principles of the new MMT joint venture, based on a specified traffic, MMT tariff system and specific costs generated by this new organization to work at profit.

The coordination process driven by MMT owners/operators would mainly be bi- or trilateral negotiations between terminals involved in the same MMT services, along international transport corridors. The owners and operators, which serve numerous intermodal trains, would have to communicate with quite a large number of corresponding terminals.

Description of the main activities:

- Define the minimum level of traffic available to balance the operating costs.
- Identify and bring together all the partners involved in multimodal transport.
- Generate an “Operational Plan” for Transport, which specifies the role of each participant and defines working procedures.
- Implement the “Operational Plan” and carry out regular monitoring of progress.

The minimum traffic for a financially viable system should be as follows:

- 81 TEU/train
- 3 trips/week
- 144 trips/year equivalent to 11,664 TEU/year (140,000 tons/year)
Stakeholders involved include:

- Relevant Ministries in Kosovo (in charge of Transport, Interior Matters, Finance, Trade, etc.).
- Trainkos as well as Infrakos, together in narrow consultation with Macedonia Railways and RNE.
- Road haulers and forwarders, including the largest companies active in Kosovo.
- Intermodal/combined transport operators with support from the IURR (including the most active members in SEE Europe such as AdriaKombi, Kombiverkher, Novatrans, etc.).

Organization:
The Terminal and MMT operators should be organized to serve two intermodal traffic models:

- Conventional model: Shipping companies organize sea transport, port transshipment companies take care of container transshipment in the sea port, and haulers and land transport companies carry the container from the port to its hinterland destination.
- Intermodal traffic model involves grouping many individual loads together into large transport units, the combined transport operator, in a sense works as a consolidator company.

The following figure summarizes the market to be considered and worked out within the Operation Plan of the MMT Company.

**Figure 15 - Market of the MMT Company**

Possible services to be offered by “KosCombi”, under minimum traffic conditions are based on multiple sales channels. Possible packages are shown in the following table.

**Table 20 - Possible services to be offered by the MMT Company**

<table>
<thead>
<tr>
<th>Packages</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Package for exclusive agents (partnerships)</td>
<td>“Terminal-to-terminal” service, plus equipment, wholesale to retailers</td>
</tr>
</tbody>
</table>
### Packages

<table>
<thead>
<tr>
<th>Packages</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Package for large road hauliers</td>
<td>Terminal-to-terminal services, plus equipment, pre- and end-haul services additional, wholesale to retailers</td>
</tr>
<tr>
<td>Package for retail start-ups (including smaller road hauliers)</td>
<td>“Door-to-door” service including pre- and end-haul transport, plus equipment, retailing</td>
</tr>
<tr>
<td>“door-to-door” package for wholesalers</td>
<td>“Door-to-door” service including pre- and end-haul transport, plus equipment, wholesale to retailers</td>
</tr>
<tr>
<td>Package for shipping lines</td>
<td>“Terminal-to-terminal” service, equipment optional, wholesale to wholesalers</td>
</tr>
</tbody>
</table>

**Main drivers for success and growth include the following:**

- Integrated shuttle network.
- Hub systems in continental combined transport (CT).
- Dry Ports in container hinterland CT.
- High-quality CT services.
- Consistent price policy.
- Capacity management systems.
- Quality management systems.
- Interoperable cross border services.
- Terminal “last mille” logistics.

**Expected result:** As an output of this process, the stakeholders should agree on detailed mutual plans for operation and on how a renovated system must be able to cover generated costs and provide profits enough to invest and develop the system.

The project implementation should result in the creation of multimodal management structures which will be capable of managing regional multimodal services, connected with the Pan-European network, via the main corridors VIII and X.

**Main Benefits:** A MMT operating plan for efficient MMT services serving Kosovo foreign trade.

**Budget/Time:** An operational / Business plan elaboration carried out under the form of technical assistance. The study is to be carried out in one year, ending by the end of 2012. The required input is estimated at 10 persons-months.

### iii) Action 3: Connecting the new MMT system to EU relevant networks

**Introduction and objectives**

MMT in Europe is a patchwork of different countries networks and trading in many directions and cross border. The MMT system’s role lays in carrying long distance shipments across EU, through international networks corridors built by alliances of a large number of operators.

Connecting the new Kosovo MMT system to EU relevant networks requires cooperation. The aim of this action is to guide the MMT transport’s partners to begin and develop international cooperation in Europe to organize transport services for long international routes and bring them onto the market.
Description

After having created a multimodal transport framework (Action 1) at the national and bilateral level, the MMT has to continue cooperating with different players working on the European arena to be able to integrate the inter-modal activities in an international community of interests at the relevant corridors level.

With regards to the maritime as well as continental transport, efficient and capable transport chains especially in the hinterland of the ports are indispensable. This concerns in particular the ports of Thessaloniki (Greece) and Durres (Albania) with their hinterland corridors VIII and X as well as inland corridors, connection to corridor X, via Skopje and further services operating hubs in Belgrade, Vienna and Sopron (Hungary) connected with main European industrial and production areas as well as with centers of high consumption especially in EU.

The recommended action activities are as follows:

- Discussions / agreements with Macedonian railways, terminal operators and managers (AdriaKombi) in order to insure the required synchronization and coordination of infrastructure slots and service along the whole corridor X.
- Begin discussions for further application and possible membership with the most important cooperation instruments / entities / organizations, in particular:
  - The UIRR, the International Union of Combined Transport operators and its members.
  - Railnet Europe and its members.
- Monitoring of the realization of all foreseen and planned coordination measures.
- Improvement and intensification of the cooperation between all actors in order to optimize efficiency and quality.
- Implementation of a Terminal Operator Panel to improve the efficiency of terminal operation.
- Development of an “incentive” program for the improvement of terminals services in connection to all Pan-European corridors being serviced by large UIRR operators and other competing groups.
- Implementation of general Multimodal operation time schedule along the whole involved corridor.
- Improvement and intensification of the cooperation.

Relevant partner for coordination of services at EU Level (UIRR, the most important competing group) are shown in the Figure 16.

Kosovo (Infrakos) is also to establish coordination links with international institutions such as RailNetEurope which coordinate and promote the development of the different national networks into an international railway network.

Of particular interest for Kosovo is the option of applying to a part of the SEEIS (South East European Intermodal Services) network managed by the CT operators Adria Kombi (operational coordinator, Slovenia), with Cemat (Italy), Kombiverkehr (Germany) and Rocombi (Romania). At the moment, this group is providing 5 Intermodal trains from Slovenia (Ljubljana as nodal point) to countries of south-eastern Europe (Bulgaria, Greece, Romania, Serbia and Turkey).

A strong advantage of these services is the Information systems which is capable of letting their customers know about the locations of their loading units during transport from one worksite to another as these trains are incorporated into the CESAR system, which is the monitoring interface used every day by more than 500 CT customers.

Relevant partner for coordination of infrastructures and track access at EU Level are shown in Figure 17.
Figure 16 - Relevant partner for coordination of MMT services at EU Level

Figure 17 - Relevant partner for coordination of infrastructures and track access at EU Level

Source: EU Infrastructure Managers. RailNetEurope : www.railneteurope.com
6.3 Environmental issues

Section 5.3 discusses environmental strategy in relation to transport and proposes the following further actions:

- Studies on pollutant and greenhouse gas emission reduction:
  - Diagnosis of the present situation in Kosovo and in Pristina regarding greenhouse gases emission:
    - Estimation of the transport fossil fuel consumption.
    - Estimation of corresponding CO₂ emissions.
    - Comparison with emissions of other economic sectors.
  - Analysis of the existing mitigation measures in Kosovo and Pristina:
    - Institutional and regulatory aspects (regulation on fuel quality and other, enforcement, incentives).
    - Issues related to users (behaviour, initial and vocational training, awareness).
    - Fleet management aspects (operation, maintenance, driver training, vehicle selection).
    - Urban transport issues (traffic management options, modal transfer policy, etc.).
  - Feasibility of possible application:
    - Identification of the Kosovo strategy for the future.
    - Technical and financial feasibility study of each approach.
    - Action plan including financing options.
- Studies on alternative energies and technologies:
  - Importation or national production of bio-fuels:
    - Technical and economic study of imported bio-fuels.
    - Technical and economic study of locally produced bio-fuels:
      - Possible agricultural capacities.
      - Possible share between bio-alcohol, bio-Diesel and bio-gas.
      - Existing and/or required industrial production paths.
      - Impact on food production.
  - Cost comparison between options.
  - Technical and financial abilities of Dealers in implementing the regulation proposed.
  - Definition of the awareness process.

The following table summarizes the actions to be implemented and their proposed schedule.
Table 21 - Action plan for environmental issues related to transport

<table>
<thead>
<tr>
<th>Action Area</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pollutant and greenhouse gas</td>
<td>Secure the funding of the</td>
<td>Prepare ToR for feasibility study</td>
<td>Undertake the study</td>
<td></td>
</tr>
<tr>
<td>emission reduction</td>
<td>study</td>
<td>and hire consultant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative energies and technologies</td>
<td>Secure the funding of the</td>
<td>Prepare ToR for feasibility study</td>
<td>Undertake the study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>study</td>
<td>and hire consultant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.4 Summary of Action Plan

The following tables summarize the proposed action plan and shows the scheduling, costs, implementation responsibility and implementation indicator. The costs are financial costs including all taxes. Cost of feasibility and detailed studies of roads are estimated as a percentage of construction cost.
Chapter 7 - Implementation, Transport Data Collection and Monitoring Indicators

7.1 Implementation of the Multimodal Transport Strategy and Action Plan

The implementation of the Multimodal Transport Strategy and Action Plan (MMTSAP) requires on one hand, the mobilization of the stakeholders and on the other hand the coordination a by a specific structure that is the Division of Policies Coordination (DPC) of the Department of European Integration and Policies Coordination (DEIPC) of the Ministry of Infrastructure.

7.1.1 Stakeholders

The stakeholders of the Multimodal Transport Strategy and Action Plan include the following:

- Direct beneficiaries under the responsibility of the Ministry of Infrastructure:
  - Department of Transport
  - Department of Road Infrastructure and Directorate of Roads
  - Department of Civil Aviation
- Other beneficiaries and target groups:
  - Railway Regulatory Authority (RRA), Infrakos and Trainkos
  - Civil Aviation Authority (CAA)
  - Ministry of Economic Development (MED)
  - Ministry of Finance (MoF)
  - Ministry of Environment and Spatial Planning (MESP)
  - Local Governments
- Final beneficiaries represented by Non Government Organizations (NGO)

All these stakeholders were consulted during the updating process of the MMTSAP in the occasion of thematic and general workshops.

7.1.2 Periodic Updating and Following Up of the MMTSAP

In a changing economic and political environment, the Multi-modal Transport Strategy and Action Plan in Kosovo must be adapted to the evolution of the economic context.

Actually, the Multimodal Transport Strategy and Action Plan must be:

- Assessed frequently from the point of view of projects realized and measures implemented, and;
- Updated on a periodic basis.

It is proposed to carry out an assessment of the Multimodal Transport Strategy and Action Plan on a yearly basis. A report presenting achievements and difficulties should be issued each year.

It is also proposed to update the Multimodal Transport Strategy and Action Plan each 5 years. This update will include updated forecasts for the transport demand, updated project definition and an updated implementation schedule, according to the availability of finance.
As indicated in Section 7.1.3 below, it is proposed that the Division of Policies Coordination (DPC) will be in charge of the assessment and the updating of the Multi-modal Transport Strategy and Action Plan.

7.1.3 Role of the Division of Policies Coordination (DPC)

Traditionally, two types of planning level can be distinguished: the strategic level and the operational level.

- Strategic planning is the expression of main choices of the transport policy (transport sector liberalization, public transport development, transport regulation, harmonization with European transport acquis, etc.) in terms of investment programs, fiscal policy or transport regulation. Strategic planning is concerned more with long-term than short-term planning.
- The aim of operational planning is to implement the strategic planning. Operational planning is focused on day to day short term actions.

Therefore, the work of the Division of Policies Coordination must be focused on strategic planning. All the planning tasks should not be carried out by the DPC; rather the Operational Divisions of the MoInf must be in charge of the operational planning. The exact split of the scope of activities between the DPC and other services must be defined at the highest Ministerial level.

In order to fulfill its mission in terms of strategic planning, the main tasks to be carried out by the DPC are as follows:

1. Collect all available statistical data in the transport field, as well as socio-economic data related to transport demand and release this information to the public (yearbook, website etc.).
2. Define and implement (or sub-contract) necessary complementary surveys in order to have a good knowledge of the transport sector.
3. Define, implement and update on a regular basis a database for the transport sector, using all the relevant tools, including a Geographical Information System.
4. Collect all documents related to the transport sector in Kosovo (regulation, tariffs, etc.) as well as all documents of international interest (European regulations, transport agreements, etc.).
5. Produce, on a regular basis, performance indicators for the transport sector, including all land-based modes.
6. Consult various stakeholders (transport companies, users groups, etc.) about action to be carried out and give account of all actions implemented by the Ministry of Infrastructure using all relevant mean (e.g. website).
7. Carry out all planning studies requested by the Permanent Secretary, in relation to needs expressed by operational Divisions of the MoInf:
   - either using the staff of the DPC, or;
   - by sub-contracting to consulting companies. Then, the TPU will define Term of Reference, launch the bidding process in consultation with the relevant service and ensure the follow-up of the study.
8. Implement the necessary planning modeling tools (e.g. transport model, HDM 4).
The DPC could be also in charge of the follow-up, if not the carrying out, of studies related to transport for other bodies outside the Ministry (e.g. urban transport studies for Municipalities, for example) and this only after a specific request issued by the external body.

The DPC has, of course, a strategic position for multimodal planning, i.e. making choices between investments in various transport modes.

7.2 Transport Data Collection and Information System

Proposals on transport information database are dealt with in a separate report. The proposed measures include the following:

- Improving the coordination between the Division of Policies Coordination (DPC) and the different entities in order to defining the type and format of the data and the periodicity of its provision to DPC.
- Processing the data periodically.
- Summarizing the data in a format suitable for its dissemination.

In particular, the data concerned include the following types:

- Road traffic data.
- Passenger public transport data.
- Railway traffic data.
- Airport traffic data.
- Custom statistics.

7.3 Monitoring Indicators

7.3.1 Role of the indicators

During the implementation of the Multimodal Transport Strategy, indicators will be used for monitoring purposes. They are important tools to measure progress of the projects, implementation of the Actions Plans and to evaluate the expected results and benefits.

The list of indicators can not be exhaustive: for each sector, a set of indicators is proposed, considering sector objectives, expected results, data availability, sustainability, etc.

Most objectives are the same for all transport sectors. For transport users these are: low prices, service quality, and accessibility; for non-users and regulators (third parties): safety and environment quality. These objectives should guide the development of performance indicators for each mode.

7.3.2 Types of indicators

Different types if indicators can be considered:

- Indicators to follow activities and implementation of the Multimodal Transport Strategy

These indicators provide a quantitative evaluation of the project without given information about the results. They focus on progress of the project and how efficient is the carrying out, for example the number of kilometres of roads improved and paved, kilometres of railway lines electrified, number of multimodal stations developed.
Indicators to assess outcome and results of the Multimodal Transport Strategy

These indicators of results of the Multimodal Transport Strategy evaluate goods and services provided to users and beneficiaries. For example the better condition of roads assessed with the index of roughness, the improvement of the railway lines with the speed of train.

Indicators to evaluate the achievement of the overall objective of the Multimodal Strategy

These indicators are used to evaluate the improvements at the project level (purpose of the project) and at the sector level.

The overall objective of the project is:

“to improve and develop transport infrastructure and services to support economic development, provide freedom of movement to all communities, provide access for safety and security systems, and ensure that public transport services are available for all citizens of Kosovo, addressing the particular needs of women and minorities”

Therefore most of improvements will be evaluated with the previous indicators and some indicators could also be defined to assess economic development (for example the increasing of cargo transported could achieve the objective of the project to support economic development).

7.3.3 Choice and use of indicators

Most of the indicators could be obtained by using data from the database and updated with the statistical sources available. Nevertheless, specific surveys could be necessary to calculate others indicators, like for example prices for goods transport.

To choose the monitoring indicators, it is necessary to ensure that:

- They can be easily evaluated;
- They are directly linked to the Multimodal Transport Strategy.

Indeed, the development of a monitoring indicator has to be analysed to ensure that it was not determined by an external cause of the Multimodal Strategy. For example if the relations with Serbia are improved, as a consequence the traffic with Serbia will increase, but it will no be a consequence of the improvement of roads condition and the Multimodal transport Strategy.

7.3.3.1. Proposed road indicators

In all modes, different agencies are responsible for providing and operating the infrastructure and the vehicle fleet. In these circumstances, different specific sets of indicators are relevant for each subsector’s infrastructure and services.

But the indicators for road sector (infrastructure) and road haulage (services of transport) are part of the same group of indicators.

The following indicators could be used to follow the outcome of the Multimodal Transport Strategy:

- Indicators to follow activities and implementation of the Strategy
  - Number of calls for proposals for road works
  - Number and amount of contracts signed
  - Number of kilometres of roads built for each type of project:
    - Pavement of remaining unpaved roads
- Widening of roads
- Construction of full or semi-motorway profile
- Rehabilitation of roads
- Construction of regional roads improving connectivity
- Number of bus stations conceded
- Number of technical control for bus companies

Indicators to assess outcome and results of the Multimodal Transport Strategy
- Condition and characteristics of roads:
  - Roughness index
  - Percentage of paved roads
  - Repartition of roads by categories (using the new categorisation)
- Accessibility:
  - Network density (road km/sq km)
  - Kilometres of paved roads/inhabitant
  - Population per standard bus
  - Number of seat*km available
- Users cost:
  - Vehicle operating cost
  - Price of ticket (passenger*km)
  - Transport price for one ton*km for goods
- Mobility:
  - Average travel speed
  - Traffic flow
- Safety
  - Injuries and fatalities per vehicle and per vehicle-km
  - Number of fatalities
  - Number of minor injuries
  - Number of serious injuries
- Economic and financial:
  - Road Sector budget
  - Routine maintenance budget
- Institutional:
  - Transferred taxes/Expenditure
  - Kilometres maintained/Overall
  - Cost per km constructed and cost per lane maintained
- Environmental:
  - Bus emission standard ("euro 4")

7.3.3.2. Proposed rail indicators
The following indicators could be used to follow the outcome of the Multimodal Transport Strategy:

Indicators to follow activities and implementation of the Strategy
- Number of kilometres of railway line for each type of project
  - Upgrading: double track
  - Electrification
  - New line constructed
- Investment costs in rolling stock
Indicators to assess outcome and results of the Multimodal Transport Strategy

- **Accessibility:**
  - Network density (km/sq km)
  - Train station/km of rail

- **Mobility:**
  - Number of passenger*km per railway line
  - Tons*km per line
  - Average time for a trip
  - Traffic flows

- **Network condition:**
  - Average train speed

- **Cost for user:**
  - Freight cost/ ton km
  - Price of tickets passenger/km

- **Economic and financial:**
  - Road traffic/ rail traffic
  - Freight revenues/ton*km
  - Passenger revenues/passenger*km