Chapter 21: Trans-European networks

The European Union policy concerning Trans-European Networks, based on Articles 170-172 of the Treaty on the functioning of the European Union, covers infrastructure in the areas of transport, telecommunications and energy. It aims at establishing and developing networks and ensuring their interconnections and interoperability. For transport (TEN-T) and energy (TEN-E), the following legislation makes up cornerstones: the regulation on TEN financial support (Reg. 680/2007) and the guidelines Decisions for TEN-T (661/2010) and for TEN-E (1364/2006).

As far as transport network is concerned, the trans-European network contributes to a sustainable and multimodal development of transport and to the elimination of bottlenecks. In this regard, the transport networks play a significant role in ensuring a sustainable mobility, combining Europe’s competitiveness with the welfare of its citizens while securing the transports of good and passengers in Europe.

Given the level of investments needed to complete and increase the trans-European networks and bearing in mind the estimated growth in traffic between Member States (according to the Commission's estimations expected to grow, between 2007 and 2020, by 42% for freight and 26% for passenger traffic), a list of priority trans-national projects has been defined at the European level.

Trans-European energy networks cover the transport and storage facilities of gas as well as the electricity transmission and make a significant contribution to the electricity and gas market. TEN-E respond to the growing importance for securing and diversifying the EU's energy supplies, incorporating the energy networks of the Member States and candidate countries, and ensuring the coordinated operation of the energy networks in the EU and in neighbouring countries. The security of energy supply and the functioning of the internal energy market are key policy goals. This is mirrored in the Trans-European Energy guidelines of 2006 aiming at the installation of an electricity and gas network. Two axes for priority projects relevant to Balkan countries have been identified: EL.4 aimed to develop the south-east European electricity market and NG.3 new natural gas pipeline networks to the EU from new sources – Caspian Sea and Middle East – via Turkey and Balkans.

Trans-European telecommunication networks mainly refer to the development of networks and deployment of related services in the framework of specific Community programmes. The ICT Policy Support Programme (or ICT PSP) aims at stimulating innovation and competitiveness through the wider uptake and best use of ICT by citizens, governments and businesses. The programme builds on the aims of the previous e-TEN, Modinis and e-Content programmes and will support the aims of the new integrated strategy i2010 – European Information Society 2010.

I. TRANSPORT NETWORKS

A. Transport infrastructure

Maps of the national network

1. Please provide maps of the national long distance transport network (road, rail, inland waterways including inland waterway, ports, airports). The long distance network will be identified on the basis of the criteria laid down in the draft
Community Guidelines for the development of the Trans-European Transport Network (see Decision n° 661/2010 on Ten-T guidelines).

The maps of the national long distance transport network (road, rail, inland waterways including inland waterway, ports, airports) are presented in Annex 1.

2. Please provide information about the relevant national infrastructure planning and investment procedures (especially master plan, investment and implementation planning for the short, medium and long-term).

The following master documents are used in the process of planning the national infrastructure:

**The General Transport Master Plan for the Republic of Serbia** (endorsed in the National Infrastructure Council session of June 18th 2010) that aims to attract new investments in the region; to improve the quality of life; to improve trade and to contribute to the improved relations with the neighbouring countries. The transport infrastructure of various types of transport is seen as a whole, integrated and consistent with the requirements of the citizens, industry and the region. It is a tool of verification of the effects of the strategic projects in the transport sector and a support to the decision making process in infrastructure development. The flexible investment programmes until 2027 should be implemented in a way to provide to Serbia a balanced infrastructure development of various types of transport which means a balanced use of railway, waterways and intermodal transport in relation to the total goods and passengers requirements for transport (present modal distribution is estimated at 80-85% road, 10-15% railway and around 7% inland waterway transport).

**The National Plan for Road and Railway Infrastructure Construction in the Republic of Serbia for the period 2008 to 2012** (endorsed in the National Council for Infrastructure on September 11th 2008) includes the overview of a key transport infrastructure projects whose implementation is planned in the following eight years, including the implementation schedule and a financing plan.

**The General Plan and the Feasibility Study for Inland Waterways Transport in Serbia** was prepared as a result of the Financial Agreement between the Federal Republic of Yugoslavia, the Government of the Republic of Serbia and the European Commission, signed on April 5th 2002. The General Plan was prepared in line with the Terms of Reference, the technical bid of the Consortium and the Inception Report delivered in February 2004. The project finished at the end of 2006. The General Plan for the Inland Waterways Transport demonstrated that the present conditions of the waterways transport in the Republic of Serbia required urgent activities aimed at an accelerated renewal of previously held level of transport. This includes the following: reconstruction of damaged navigation facilities; removal of unexploded ordinance, wreckages and ruins from the inland waterways, rehabilitation or revitalization of waterways and port facilities that have been damaged due to the unsatisfactory maintenance and replacement of outdated equipment in order to achieve a more efficient functioning, to re-establish an intermittent navigation, to rehabilitate the inland waterways network in the Republic of Serbia and to develop the ports.

**The Strategy for Development of Railway, Road, Waterways, Airway and Intermodal Transport in the Republic of Serbia from 2008 to 2015** endorsed by the Government on 27th December 2007 (Official Gazette of RS No. 4/08). The Strategy identifies conditions in
the transport area, establishes the concept of infrastructure and transport development, defines long term goals and deadlines for transport system development and also includes the Action Plan for the implementation of the goals. The Strategy is goal oriented and developed upon the vision for 2015, taking into consideration the social development, determination of the Republic of Serbia to become the member of the European Union, sustainable transport system development and stable institutions.

The 2010 Implementation Programme for the Strategy of Railways and Intermodal Transport Development in the Republic of Serbia for the period 2008 to 2015, endorsed on April 8th 2010 underlines necessity to systematize and to concentrate activities of all stakeholders in the area of the railway transport for the purpose of EU and IPA funding.


The Agreement foresees establishment of a High Performance Railway Network for passenger, freight and intermodal transport. The term High Performance Railway Network refers to the railways in the South East Europe region, that shall be improved in a way to enable a high quality railway connections, which would considerably decrease the travelling period between the main urban centers.

The Master Plan on Transport Development in the area of passenger infrastructure foresees two scenarios up to 2027, namely a minimum scenario (Table 1) ad a development scenario (Table 2).

The minimum scenario includes only maintenance of the existing passenger network and finalization of a by-pass around Belgrade.

The development scenario includes finalization of construction of Corridor X, construction of a motorway form the border with Romania to Belgrade and form Belgrade to Montenegro and also construction of other motorways as indicated in the Table 2.

Table 1 Minimum scenario

<table>
<thead>
<tr>
<th>Road section</th>
<th>Length</th>
<th>Costs (EUR millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgrade Bypass Sector «A»</td>
<td>10</td>
<td>115</td>
</tr>
<tr>
<td>Belgrade Bypass Sector «5» and «6»</td>
<td>13</td>
<td>221</td>
</tr>
<tr>
<td>Total New Construction</td>
<td>23</td>
<td>336</td>
</tr>
<tr>
<td>Yearly Maintenance of Main Network</td>
<td>14 977</td>
<td>161</td>
</tr>
<tr>
<td>Yearly Maintenance of Municipality Network</td>
<td>22 416</td>
<td>95</td>
</tr>
<tr>
<td>Total 2009 - 2027 Maintenance Costs</td>
<td>37 393</td>
<td>4600</td>
</tr>
<tr>
<td>Total Expenditure 2009-2027 (construction and maintenance)</td>
<td>37 393</td>
<td>4 936</td>
</tr>
</tbody>
</table>

Source General Transport Master Plan for the RS
Table 2 Development scenario

<table>
<thead>
<tr>
<th>No.</th>
<th>Road section</th>
<th>Length (km)</th>
<th>Costs Mil €</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>E – 75 Horgos – novi Sad (second carriageway)</td>
<td>108</td>
<td>132</td>
</tr>
<tr>
<td>2.</td>
<td>E-75 Kelebija – Subotica (South)</td>
<td>22</td>
<td>120</td>
</tr>
<tr>
<td>3.</td>
<td>E-75 Grabovnica – FYRM (Motorway)</td>
<td>98</td>
<td>605</td>
</tr>
<tr>
<td>4.</td>
<td>E-80 Nis – Dimitrovgrad (Motorway)</td>
<td>83</td>
<td>650</td>
</tr>
<tr>
<td>5.</td>
<td>M1.1 Kragujevac – Batocina (Motorway)</td>
<td>25</td>
<td>75</td>
</tr>
<tr>
<td>6.</td>
<td>E-763 Beograd – Pozega (Motorway)</td>
<td>145</td>
<td>850</td>
</tr>
<tr>
<td>7.</td>
<td>E-70 Beograd – Vrsac (Motorway)</td>
<td>92</td>
<td>570</td>
</tr>
<tr>
<td>8.</td>
<td>E-761 Pojate – Preljina (Motorway)</td>
<td>110</td>
<td>413</td>
</tr>
<tr>
<td>9.</td>
<td>E-761 Pozega – Uzice - BIH (Motorway)</td>
<td>60</td>
<td>480</td>
</tr>
<tr>
<td>10.</td>
<td>E-761 Bulgarian border – Zajecar - Paracin (Motorway)</td>
<td>95</td>
<td>670</td>
</tr>
<tr>
<td>11.</td>
<td>E-763 Pozega – Montenegro (Motorway)</td>
<td>110</td>
<td>2 000</td>
</tr>
<tr>
<td>12.</td>
<td>M21, M19 Novi Sad – Ruma – Sabac</td>
<td>120</td>
<td>200</td>
</tr>
</tbody>
</table>

Total New Construction          1 272  6 985
Rehabilitation and Reconstruction of Main and Regional Network 4 305 1 722
Total investment                5 577  8 707

*Source General Transport Master Plan for the RS*

It is foreseen that the funding shall be provided from international loans, the budget of the Republic of Serbia and the EU funds.

The following **railway transport** projects according to the General Transport Master Plan:

<table>
<thead>
<tr>
<th>Railway section</th>
<th>Type of project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Stara Pazova – Subotica <em>(part of Corridor X)</em></td>
<td>Modernization, Construction of second gauge, 160 km/h and ERTMS</td>
</tr>
<tr>
<td>2  Velika Plana – Stalac <em>(part of Corridor X)</em></td>
<td>Modernization, 160 km/h and</td>
</tr>
</tbody>
</table>
The existing inland waterways transport in Serbia requires urgent actions aimed at renewal of transport to a satisfactory level. Accordingly, in compliance with the General plan and the feasibility study for inland waterways transport in Serbia and the General Master plan for transport in Serbia, the Ministry of Infrastructure, Sector for Waterborne Transport and Safety of Navigation, developed the following concept of three waterways transport development programmes:

1. The Programme of implementation of Inland Waterways Master Plan
### 2. The Programme of service improvement in waterways transportation

### 3. The Programme of inland waterways infrastructure conditions improvement

<table>
<thead>
<tr>
<th>PROGRAMME</th>
<th>Projects</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Programme of implementation of Inland Waterways Master Plan</strong></td>
<td>River information services (RIS) on main inland waterways (the Danube 2007-2013; the Sava 2010-2014)</td>
<td>safety enhancement</td>
</tr>
<tr>
<td></td>
<td>Preparation of project and technical documentation for dredging and control works in critical sectors on the river Danube (IPA 2010-2015)</td>
<td>conditionality for safety enhancement</td>
</tr>
<tr>
<td></td>
<td>Investigations and search for UXO in inland waterways of the Republic of Serbia and removal of Unexploded Ordinance (UXO) from inland waterways (2010-2012)</td>
<td>safety enhancement</td>
</tr>
<tr>
<td></td>
<td>Rehabilitation of locks on HP Djerdap 1 and Djerdap 2</td>
<td>safety enhancement</td>
</tr>
<tr>
<td></td>
<td>Cleaning of the river Danube from sunken vessels from the Second World War in the sector of PrahoVo</td>
<td>safety enhancement</td>
</tr>
<tr>
<td></td>
<td>Preparation of project documentation for wintershelters on the river Danube (2012-2014)</td>
<td>creating conditionality for modernization of services on the waterway</td>
</tr>
<tr>
<td></td>
<td>Modernization of existing and construction of new wintershelters on the river Danube, in accordance with the international standards</td>
<td>modernization of services on the waterways in compliance with the Regulation on the conditions that shall be met by the dry marinas open in winter period (Official Gazette SRY, No. 28/29) 28/98)</td>
</tr>
<tr>
<td></td>
<td>Preparation of the Main Design for renewal of navigation on the river Sava</td>
<td>Conditionality for rehabilitation of the Sava</td>
</tr>
<tr>
<td><strong>The Programme of service improvement in waterways transportation</strong></td>
<td>Preparation of technical documentation and construction of 3 passenger terminals</td>
<td>modernization</td>
</tr>
<tr>
<td></td>
<td>Preparation of technical documentation and construction of boat moors for the need of the harbour master offices</td>
<td>modernization</td>
</tr>
<tr>
<td></td>
<td>Establishment of Port Governance Agency</td>
<td>restructuring and modernization of ports</td>
</tr>
<tr>
<td></td>
<td>Modernization of 8 harbour master offices</td>
<td>modernization</td>
</tr>
<tr>
<td><strong>The Programme of inland waterways infrastructure conditions improvement</strong></td>
<td>Terminals for acceptance of ship waste form 3 stations</td>
<td>environmental protection</td>
</tr>
<tr>
<td></td>
<td>Construction of river bank fortifications in critical areas on the river Danube located on the territory of the municipality of Apatin</td>
<td>navigation safety improvement</td>
</tr>
</tbody>
</table>

*Source General Transport Master Plan of RS and the Master Plan for IWP of Serbia*
Financial means required for improvement of inland waterways

According to the estimates presented in the Master Plan, around 300 million Euro is required for modernization and development of ports in the Republic of Serbia. In addition, each year, between 2 and 3 million Euro is required for maintenance, which presently is not the case.

<table>
<thead>
<tr>
<th>Waterway</th>
<th>Total investment (in Euro)</th>
<th>Annual maintenance (in Euro)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANUBE</td>
<td>240,930,688</td>
<td>2,240,336</td>
</tr>
<tr>
<td>SAVA</td>
<td>20,326,208</td>
<td>1,809,366</td>
</tr>
<tr>
<td>TISA</td>
<td>35,951,970</td>
<td>1,028,508</td>
</tr>
<tr>
<td>DTD</td>
<td>46,600,000</td>
<td>930,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td>343,808,866</td>
<td>6,008,210</td>
</tr>
</tbody>
</table>

Source: General Master Plan for Transport in RS

On December 8th, the European Commission adopted the text of the EU Strategy for the Danube Region and the Action Plan. The Republic of Serbia contributed largely to the preparation of the Strategy text, which contributes to the improvement of economy, integration of sector policies of the Republic of Serbia in the development plans of the EU and the improvement of bilateral and multilateral cooperation of the Republic of Serbia with all countries of the Danube basin.

General goal is to use the potential of the Danube as an important resource for a sustainable development of the Republic of Serbia.

The priority areas included in the Strategy that are related to the planning and the development of the national infrastructure in the area of inland waterways transport are as follows:

- Development of transport, energy sector and information and communication technology (ICT) along the Danube current and
- Establishment of the system of safe navigation and affirmation of the rule of law principle in the Danube basin.

In the area of air traffic and regarding the development of the airport network in the Republic of Serbia, the Master Plan, in addition to the primary network (Belgrade, Nis) includes also secondary network (Batajnica, Vrsac, Kraljevo, Uzice, Sombor) and a tertiary network (sports airports). In addition, a particular attention is given to the development of tertiary airports with a number of projects initiated to help maintain and develop sport aviation in the Republic of Serbia.

Main infrastructure improvements in the sector of air transport have been achieved in the sector of Air Traffic Management (ATM). Modernization of services offered in air transport, embodied in the FAMUS project, started in 2002 through development of operational and technical requirements for introduction of a new system. Finalization of the project is expected by the end of 2010 and also in the course of 2011 by setting to operation a new building of the area control center, the air traffic management system and other equipment.

The overview of the projects of the General Master Plan of the Republic of Serbia in the area of air transport, the National Projects in the area of ATM and the overview of the planned investment costs is presented below.
All projects related to the air transport shall be included in a single package: AIR

**The table of the projects included in the AIR package**

<table>
<thead>
<tr>
<th>Project No.</th>
<th>Project description</th>
<th>Location</th>
<th>Type of project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cargo logistic center construction</td>
<td>Nis</td>
<td>New</td>
</tr>
<tr>
<td>2</td>
<td>Headquarter building construction</td>
<td>Belgrade</td>
<td>New</td>
</tr>
<tr>
<td>3</td>
<td>Terminal T3 construction with satellite</td>
<td>Belgrade</td>
<td>New</td>
</tr>
<tr>
<td>4</td>
<td>Alternative runway construction</td>
<td>Belgrade</td>
<td>New</td>
</tr>
<tr>
<td>5</td>
<td>Reconstructed passenger T – 2 terminal also in context with the centralized gate construction</td>
<td>Belgrade</td>
<td>Upgrade</td>
</tr>
<tr>
<td>6</td>
<td>Regional networks development feasibility study</td>
<td>Serbia</td>
<td>New</td>
</tr>
<tr>
<td>7</td>
<td>Investments in navigational aids (NAVAID) (ALS Cat I + ILS + visibility instrumental items; Energetic supply of electric power)</td>
<td>Nis</td>
<td>New</td>
</tr>
<tr>
<td>8</td>
<td>Investments in Ground Support Equipment (Passenger and Cargo Handling Equipment, Accommodation additional services)</td>
<td>Nis</td>
<td>New</td>
</tr>
<tr>
<td>9</td>
<td>Terminal reconstruction in connection with rail terminal (facilitation and commercial activities)</td>
<td>Nis</td>
<td>rehabilitation</td>
</tr>
<tr>
<td>10</td>
<td>Landside investments (parking, surface access facilities, road interchange in connection with rail terminal)</td>
<td>Nis</td>
<td>New</td>
</tr>
<tr>
<td>11</td>
<td>Second taxiway from NW end of RNWY to apron and new apron on airside of cargo terminal extending to existing passenger – terminal – ramp</td>
<td>Nis</td>
<td>New</td>
</tr>
<tr>
<td>12</td>
<td>Investments in airport security system</td>
<td>Nis</td>
<td>Upgrade</td>
</tr>
<tr>
<td>13</td>
<td>Technical block reconstruction</td>
<td>Nis</td>
<td>rehabilitation</td>
</tr>
<tr>
<td>14</td>
<td>New access road construction in connection with highway E – 75 and E - 80</td>
<td>Nis</td>
<td>New</td>
</tr>
</tbody>
</table>

*Source: General Transport Master Plan for the RS*
## Project costs in the area of air transport

<table>
<thead>
<tr>
<th>Project description</th>
<th>Location</th>
<th>Type of project</th>
<th>Financial investment cost in million Euro</th>
<th>Economic investment cost in million Euro</th>
<th>Investmen t conv. factor</th>
<th>Financial maintenance cost in million Euro</th>
<th>Economic maintenance cost in million Euro</th>
<th>Maintenence conv. factor</th>
<th>No. of construction years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cargo logistic center construction</td>
<td>Nis</td>
<td>New</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Headquarter building construction</td>
<td>Belgrade</td>
<td>New</td>
<td>8</td>
<td>6,35</td>
<td>0,794</td>
<td>0,040</td>
<td>0,032</td>
<td>0,792</td>
<td>1,5</td>
</tr>
<tr>
<td>Terminal T3 construction with satellite</td>
<td>Belgrade</td>
<td>New</td>
<td>70</td>
<td>55,58</td>
<td>0,794</td>
<td>0,350</td>
<td>0,277</td>
<td>0,792</td>
<td>3</td>
</tr>
<tr>
<td>Alternative runway construction</td>
<td>Belgrade</td>
<td>New</td>
<td>25</td>
<td>19,85</td>
<td>0,794</td>
<td>0,125</td>
<td>0,099</td>
<td>0,792</td>
<td>1</td>
</tr>
<tr>
<td>Reconstructed passenger T - 2 terminal also in context with the centralized gate construction</td>
<td>Belgrade</td>
<td>Upgrade</td>
<td>15</td>
<td>11,91</td>
<td>0,794</td>
<td>0,075</td>
<td>0,059</td>
<td>0,792</td>
<td>3</td>
</tr>
<tr>
<td>Regional networks development feasibility study</td>
<td>Serbia</td>
<td>New</td>
<td>1,6</td>
<td>1,27</td>
<td>0,794</td>
<td>0,008</td>
<td>0,006</td>
<td>0,792</td>
<td>3</td>
</tr>
<tr>
<td>Investments in navigational aids (NAVAID) (ALS Cat I +)</td>
<td>Nis</td>
<td>New</td>
<td>2,7</td>
<td>2,14</td>
<td>0,794</td>
<td>0,014</td>
<td>0,011</td>
<td>0,792</td>
<td>3</td>
</tr>
<tr>
<td>Investments in Ground Support Equipment (Passenger and Cargo Handling Equipment, Accommodation and additional services)</td>
<td>Nis</td>
<td>New</td>
<td>2.2</td>
<td>1.75</td>
<td>0.794</td>
<td>0.011</td>
<td>0.009</td>
<td>0.792</td>
<td>2</td>
</tr>
<tr>
<td>Terminal reconstruction in connection with rail terminal (facilitation and commercial activities)</td>
<td>Nis</td>
<td>rehabilition</td>
<td>0.9</td>
<td>0.71</td>
<td>0.794</td>
<td>0.005</td>
<td>0.004</td>
<td>0.792</td>
<td>3</td>
</tr>
<tr>
<td>Landside investments (parking, surface access facilities, road interchange in connection with rail terminal)</td>
<td>Nis</td>
<td>New</td>
<td>0.5</td>
<td>0.40</td>
<td>0.794</td>
<td>0.003</td>
<td>0.002</td>
<td>0.792</td>
<td>2</td>
</tr>
<tr>
<td>Second taxiway from NW end of</td>
<td>Nis</td>
<td>New</td>
<td>2.2</td>
<td>1.75</td>
<td>0.794</td>
<td>0.011</td>
<td>0.009</td>
<td>0.792</td>
<td>3</td>
</tr>
<tr>
<td>Project Description</td>
<td>Nis</td>
<td>Upgrade</td>
<td>1.7</td>
<td>1.35</td>
<td>0.794</td>
<td>0.009</td>
<td>0.007</td>
<td>0.792</td>
<td>3</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------</td>
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<td>-------</td>
<td>----</td>
</tr>
<tr>
<td>Investments in airport security system</td>
<td>Nis</td>
<td>rehabiliation</td>
<td>0.9</td>
<td>0.71</td>
<td>0.794</td>
<td>0.005</td>
<td>0.004</td>
<td>0.792</td>
<td>3</td>
</tr>
<tr>
<td>Reconstructed technical block</td>
<td>Nis</td>
<td>New</td>
<td>4.5</td>
<td>135.2</td>
<td>3.57</td>
<td>107.3</td>
<td>0.794</td>
<td>0.023</td>
<td>0.018</td>
</tr>
<tr>
<td>Construction of new access roads to the highway E-75 and E-80</td>
<td>Nis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: General Transport Master Plan for the RS*
### National ATM projects (in progress)

| FAMUS | May 2007 – April 2011 | 1. New ACC building in Belgrade, design and civil works  
2. Air traffic management system ATM (consisting of DPS, VCS, DVRPS and TRS for Belgrade ACC and SMATSA communication network) – procurement of equipment and installation  
3. NAVAID (navigation equipment), modernization, procurement and installation;  
4. DVRPS for SMATSA control towers, procurement of equipment and installation; | 1. New ACC building in Belgrade, design to be delivered by end of 2007, civil works to be finalized in October 2010  
2. First stage of tendering process in progress; contract signing expected in the third quarter of 2008  
3. Tender documentation for NAVAIDs completed, tender will be launched in mid 2008  
4. Tender documentation for DVRPSs completed, tender will be launched in September 2008  
The project is planned for completion in April 2011 and the ATS provision shall be resumed from the new ACC building in Belgrade |
| Single European Sky, implementation for the HCAA, Phase II | From March 2002 to September 2007 | 1. Delivery of familiarization course to HANSA staff  
2. Legal and technical secretarial support through the special agreement  
3. Development, review and update of the documents  
Project supported through: ASSIST service | 1. 1st part of familiarization session delivered  
2. 4LE recruitment completed  
3. Application letters delivered  
Project to be completed by mid Sept 2007 |

Source: General Transport Master Plan for the RS

Strategic framework for intermodal transport in the Republic of Serbia consists of:
1. The Strategy for Development of Railway, Road, Waterways, Airway and Intermodal Transport in the Republic of Serbia from 2008 to 2015, (Official Gazette of RS No. 04/08). 04/08),
2. The General Transport Master Plan for the Republic of Serbia until 2027 and

Taking into consideration the aforementioned strategic framework, development of intermodal transport requires development of terminal networks (logistic centers) at regional and national – local level, in other words, terminals of different size, characteristics and purpose.

Intermodal terminals (and/or) logistics centres of regional character will be developed in multimodal Corridors X and VII, in large industrial regional centres such as Belgrade, Nis and Novi Sad, while logistics centres at national – local level will be developed in central areas of regional and industrial centres.
In first phase of intermodal transport development, it is planned that a public intermodal terminal shall be built in Belgrade, with the initial capacity of 80,000 TEU/year and a final capacity of 320,000 TEU/year. Simultaneously with the construction of the intermodal terminal in Belgrade, construction of several smaller terminals are planned in Serbia.

In September 2010 the project called Facilitating Intermodal Transport in Serbia (EU/IPA 2008) started and it has following purposes:

- to set up institutional framework and capacity building of all participants (both public and private sector) in intermodal chain of transport
- to prepare the project documentation (preliminary design with the feasibility study and the tender documentation) for construction of an intermodal terminal (logistics centre) in Belgrade

The project will end in March 2010 and it is expected that based upon the prepared project documentation, EU/IPA III funds amounting to 25 million Euro should be approved for the construction of the intermodal terminal.

The investment planned for development of intermodal transport until 2027 (in million Euro):

<table>
<thead>
<tr>
<th></th>
<th>Investments</th>
<th>Maintenance</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>88</td>
<td>48</td>
<td>136</td>
</tr>
</tbody>
</table>

*Source General Transport Master Plan for RS*

**Public expenditure and investments**

3. Please provide data on public expenditure and investments by completing the tables in Annex 2.

Data on public expenditures and investments is presented in a table in Annex 2.

**Regional cooperation**

4. What steps have you taken to implement the Memorandum of Understanding of the South East Europe Core Regional Transport Network? To what extent is the South east European Core Transport network taken into account as the precursor for the future Ten-t network for the country?

The Memorandum of Understanding on the development of the South East Europe Core Regional Transport Network, signed in 2004 in Luxemburg, established basic approach to regional cooperation in the area of transport and established the South East European Observatory - SEETO. The Ministry of Infrastructure is actively involved in implementation of the aforementioned Memorandum, in creation of regional transport policy and in promotion of further development of regional transport network, in cooperation with the Directorate General for Transport and Mobility (DG MOVE) and with other members in the region.
In the 6th Meeting of the Ministers of Transport held on December 1st 2010 in Sarajevo, progress in implementation of the Memorandum of Understanding during the five year period of SEETO operations was presented and a Multi-annual Plan for period 2011 – 2015 was adopted.

Core transport network within the South East European Transport Observatory (SEETO) is a priority transport network, based upon which the Strategy for Development of Railway, Road, Waterways, Airway and Integrated Transport in the Republic of Serbia from 2009 to 2015 was developed. It was also used for development of the General Master Plan until 2027.

The working group for implementation of reforms in the railway sector, consisting of representatives of the Ministry for Infrastructure, the Ministry of Finance, the Directorate for Railways and the Public Undertaking „Serbian Railways“ defined the documents necessary and the Action Plan for their endorsement. In compliance with the plan, the following documents have been adopted:

Regulation on the Methodology for Determination of Full Price of Transport (Official Gazette of RS No. 76/09); the Rulebook on the Contents of Contract on Public Service Obligations (Official Gazette of RS No. 56/10) and the Rulebook on Conditions and Procedures regarding Compensations for Public Service Obligations (Official Gazette of RS No. 58/10).

Please see the answer to the question 30, Chapter 14.

Regulation on the Elements Evaluation Methodology in Setting of Charges for Use of Railway Infrastructure and for Rail Transport Organisation and Regulation (Official Gazette of RS, No. 14/10), based upon the application of a „marginal cost plus“.

Please see the answer to the question 21, Chapter 14.

**Legal framework**

5. **What are the procedures applicable to the development of a transport infrastructure project? Are there differences according to the mode of transport concerned?**

The Law on Planning and Construction (Official Gazette of RS, No. 72/09, 81/09 and a corrigendum 64/10) for which the Ministry of Environmental Protection and Spatial Planning is responsible, defines the conditions and the method of construction of all facilities.

Accordingly, the **location permit** (Article 54) shall be issued by a competent authority within **15 days** from the day of submitting a complete request comprising conditions and the data that shall be requested in the line of duty. The **location permit** shall be issued in a form of a Decision for the facilities requiring a construction permit and it contains all conditions and the data required for preparation of technical documentation, in compliance with the planning document in force. The location permit for the facilities referred to in the Article 133 of the Law on Planning and Construction shall be issued by the Ministry responsible for urbanism or by the Autonomous Province. The location permit for the facilities related to the transport infrastructure other than those specified in the Article 133 of the Law on Planning and Construction shall be issued by a competent authority of a local government unit. The request for issuing a location permit shall include the following documentation: 1) copy of the plan of the plot 2) copy of the cadastre of underground installation document 3) proof of the ownership.

In event that the conditions and the data for preparation of the technical documentation are not included in a planning document, the competent authority shall obtain the data and the
conditions in the line of duty and at the expense of the investor. The bodies and the organizations authorized for issuing such conditions and the data shall issue the conditions and the data within 30 days from the date of submission of the request by the competent body.

The construction permit shall be issued in a form of a Decision of the competent authority within 8 days from the day of submitting the complete request. The request for issuing a construction permit shall include the following documentation: 1) the location permit; 2) three copies of the main design and a report on technical control of the design; 3) the proof of ownership or the proof of lease right on the construction land; 4) a proof on agreement with regard to payment of construction land equipping fee; 5) a proof on payment of administrative tax. For construction of linear infrastructure facilities, the final Decision on land acquisition shall be taken as a proof on ownership and also the proof that the final user of expropriated land has obtained funds equal to the market value of the real estate, namely the contract on establishing the official rights with the owner of the property that shall be used.

The ministry responsible for the construction shall issue a construction permit for the facilities referred to in Article 133, paragraph 2 of the Law on Planning and Construction and also for the following facilities:

13) Passenger harbors, ports, moors and marinas
14) First and second level state roads, transport facilities and traffic connections to these roads and the border crossings
15) Public railway infrastructure with connections and subways
17) Hydro facilities of inland waterways
18) Navigation channels and locks that are not included in the hydropower systems

The Autonomous Province shall issue construction permit for the construction of facilities referred to in Article 133 of the Law which are located full in the territory of the Autonomous Province.

The local government units shall issue construction permits for construction of the facilities that are not stipulated in Article 133 of the Law.

All means of transport shall be equally treated, in compliance with the Law on Planning and Construction.

With regard to the inland waterways transport, the Law on Navigation and on the Ports on Inland Waters (Official Gazette of RS, No. 73/10) stipulates that a long-term development of inland waterway transport which includes also the projects related to the transport infrastructure, shall be defined in the Waterways Transport Development Strategy of the Republic of Serbia that shall be adopted for a ten-year period.

In compliance with the Strategy, short term, long term and medium term plans for construction and development of inland waterways, ports and harbors shall be adopted, as well as the planned costs and funding proposals for the mentioned plans for construction and development of inland waterways and ports open to public transport. The aforementioned plans shall be harmonized with the water management plans.

Plans relating to the development of international and interstate waterways are defined by the Directorate for Inland Waterways with the approval of the Ministry, on the basis of which their technical maintenance, improvement and transport –technological modernization is performed by the Directorate for Inland Waterways.

Technical maintenance of inland waterways includes planning and execution of the following activities: hydrographic measurements, hydraulic works, marking of inland waterways, as well as setting up, maintaining and securing the proper functioning of the navigation safety facilities. Technical maintenance of the inland waterways shall also include the following activities: maintaining the facilities, equipment and other items used for the
River Information Services (RIS). Technical maintenance of international in inter-state waterways shall be carried out in compliance with the Annual Programme of technical maintenance enacted by the Government at the proposal of the Directorate for Inland Waterways.

In the process of an airport construction, in addition to the documentation common for other means of transport, in compliance with the Articles 110 and 111 of the Law on Air Transport (Official Gazette of RS, No. 73/10 of October 12th 2010) it is necessary to obtain special conditions prescribed by the Civil Aviation Directorate of the Republic of Serbia.

6. What is the project cycle? How are local and/or regional authorities associated with transport infrastructure projects?

In compliance with the Law on Planning and Construction (Article 21), the spatial plan for the special purpose areas shall be enacted for construction of the facilities for which the Ministry responsible for construction issues of the competent body of the Autonomous Province issue a construction permit and it requires a special regime of organization, construction, use and protection of the area which has been identified in the Spatial Plan of the Republic of Serbia.

The Spatial Plan for the special purpose areas shall be enacted by the Government (Article 35) at the proposal of the Ministry responsible for spatial planning and for the areas fully located in the territory of the Autonomous Province, it shall be enacted by the Autonomous Province Parliament.

The decision on preparation of a Special purpose spatial plan shall be enacted by the Government, based upon the opinion of the body responsible for expert control or the planning committee.

The location permit (Article 57) shall be issued in compliance with the special purpose area spatial plan, for the parts of the territory included in the plan for which preparation of an urban plan is not foreseen.

The General Design and the preliminary design, pre-feasibility study and the feasibility study (Article 131) prepared only for transport infrastructure facilities referred to in the Article 133 of the Law on Planning and Construction are subject to the audit (expert control) of the Committee established by the Minister responsible for the construction issues. The Audit Committee for expert control of the transport infrastructure facilities referred to in Article 133 of the Law, which are fully constructed in the territory of the Autonomous Province, shall be established by the Minister responsible for construction issues, at the proposal of the Autonomous Province body responsible for construction issues.

The ministry responsible for the construction issues shall issue a construction permit for the facilities referred to in Article 133, paragraph 2 of the Law on Planning and Construction and also for the following facilities:

13) passenger harbors, ports moors and marinas
14) first and second level state roads, transport facilities and traffic connections to these roads and the border crossings
15) public railway infrastructure with connections and subways
17) hydro facilities of inland waterways
18) navigation channels and locks that are not included in the hydropower systems
The Autonomous Province shall issue a construction permit for the construction of facilities referred to in Article 133 of the Law which are located full in the territory of the Autonomous Province.

The local government units shall issue a construction permit for construction of the transport infrastructure facilities that are not stipulated in Article 133 of the Law on Planning and Construction.

The final stage of the project cycle is issuing the usage permit. The facility may be used subject to the obtained usage permit. The body responsible for issuing the construction permit shall issue a decision on the usage permit within seven days from the day of reception of the technical control committee findings determining that the facility may be used (Article 158).

**In the area of inland waterways transport**, the Law on Navigation and Ports on Inland Waters stipulates that before the commencement of the technical documentation, for the issuance of authorisations for construction, reconstruction, extension, renovation and repair of locks, navigable canals and other hydro technical structures, for the laying of cables and pipelines, as well as for construction of other facilities affecting the safety of navigation in international and interstate waterways, it is necessary, in addition to the approval and opinion of the competent state authorities prescribed by the regulations governing the planning and the construction, and by the regulations governing the water, to obtain nautical requirements issued by the Harbour Master Office and requirements relating to inland waterways issued by the Directorate.

Before the commencement of technical documentation, for the issuance of authorisations for construction of ports, harbours and temporary transshipment sites the approval of the Ministry and of the Port Governance Agency shall be required.

The Waterways Agency shall issue opinion determining that the technical documentation has been prepared in compliance with the conditions set by the Directorate. The Directorate shall issue the approval establishing that the technical documentation has been prepared in accordance with the requirements issued by the Directorate.

The Harbour Master Office shall issue the nautical approval establishing that the technical documentation has been prepared in accordance with nautical requirements issued by the Harbour Master Office.

7. **Is there legislation on:**

a) **environmental impact assessment, nature protection, strategic environmental impact assessment,**

The following legislation applies to the environmental impact assessment procedure:

1. The Law on Environmental Impact Assessment (Official Gazette of RS, No. 135/04, 36/09)
2. Regulation on Determining the List of the Projects for which Environmental Impact Assessment is required (LIST I) and the List of the Projects for which Environmental Impact Assessment may be required (LIST II) (Official Gazette of RS No 114/2008). 114/08).

The detailed contents of the request for determining the need to prepare the environmental impact assessment and the request for determining the scope and the contents of the study; the technical committee operations; the public consultation and the public announcement process and the method of the public book maintenance are further specified in by-laws.
The following legislation applies to the **nature protection**:

- The Law on Nature Protection (Official Gazette of RS, No. 36/09 and 88/10),
- The Regulation of the Criteria for the Method of Calculation and the Method of Fee Collection for Protected Areas Use (Official Gazette of RS No. 43/10),
- The Rulebook on the Criteria for Selection of the Habitat Type, Varieties of Habitat Types, Endangered, Rare and Priority Habitat Types to be Protected and the Protection Measures for Preservation of the Habitat Types. Official Gazette of RS No. 35/10),
- The Rulebook on Compensatory Measures (Official Gazette of RS, No. 20/04).

A more detailed information is included in the first part of the answer to the question 29, Chapter 27 – Environment.

**Environmental impact assessment of particular plans and programmes** is carried out through implementation of the Law on Strategic Environmental Assessment (Official Gazette of RS, No. **135/04 and 88/10**). The Law on Strategic Environmental Assessment was endorsed in December 2004 and has been harmonized with the Directive 2001/42/EC. The Law shall be applied to the plans, programmes, sectoral master plans and strategies.

In May 2010, the Law Ratifying the Strategic Environmental Assessment Protocol (Official Gazette of RS – International Agreements 1/10) was endorsed, to the Convention of the Environmental Impact Assessment in Trans-boundary Context (ESPOO Convention), prepared by the United Nations European Economic Committee.

b) **rules of competition**,  

All sectors including the transport sector are subject to the general rules on protection of competition, as indicated in Chapter 8.

c) **public procurement**

The public procurement system is regulated by the Law on Public Procurement (Official Gazette of RS 118/08) (Hereinafter referred to as: the Law).

As it is a matter of law, as a kind of legal document, it was approved by the National Assembly of the Republic of Serbia on 22 December, 2008.

The Law defines the following:
- Lays down the conditions and regulates methods and proceedings for procurement of goods and services and the contracting of works in event that the contracting authority is a government body, organisation or institution or a legal entity as stipulated by the Law;
- Defines the method of keeping records of the contracts and other data concerning the public procurement;
- Defines scope of work and establishment of the Public Procurement Directorate;
- Establishes the Republican Committee for protection of rights in public procurement proceedings;
- Defines the methods of protection of the rights of the bidders and the public interest in the public procurement procedure;

Regulates other matters concerning the public procurement.
d) railway interoperability?

The Law on Railways stipulates that the technical regulations, criteria and standard pertaining to the railway traffic shall be prepared by the Directorate for Railways.

Technical conditions relevant for railway equipment and other railways sub-systems are defined in the Law on Rail Transport Safety and the by-laws. A number of regulations enacted by the former Community of Yugoslav Railways (JZ, in Serbian) are presently in force. These regulations foresee the use of relevant international standards (such as UIC, IEC, ISO and other).

Technical conditions relevant for railway equipment and other railways sub-systems, from point of view of international transport, have been stipulated in the international agreements COTIF (RID), AGC and AGTC that have been ratified and are applied by the Republic of Serbia.

B. Transport research

8. Are there any research programmes on national transport operations?

The Strategy for Scientific and Technological Development, which defines the course of development of science in Serbia and outlines priority scientific areas for the period 2010 – 2015 year, has been adopted at the Government session held on 25th of February 2010.

The research in the transport sector is not a priority activity outlined in The Strategy for Scientific and Technological Development for the period 2010 – 2015.

There is no specific research goal or topics in the area of transport, in other words, there are no previously selected topics by the Ministry of Science and Technological Development. Instead, the Ministry of Science and Technological Development usually publishes a call to submit proposals for the research projects in the area of transport, and based upon the evaluation performed by qualified experts-evaluators, the Ministry approves the implementation of the research projects proposed by various research institutions (groups).

Presently there are 23 ongoing projects in the area of transport, approved within the latest call of the Ministry of Science and Technological Development (Technological Development Programme for the period of 2008-2011). Six research institutions participate in implementation of the transport sector programmes, namely:

1. The Faculty of Transport and Traffic Engineering, Belgrade (14 projects);
2. The Faculty of Technical Sciences in Novi Sad 4;
3. Mihajlo Pupin Institute, Belgrade 2;
4. Kirilo Savic Institute, Belgrade 1;
5. Faculty of Mechanical Engineering, Belgrade University 1;
6. Faculty of Mechanical Engineering, Kragujevac University 1;

Ten out of 23 ongoing research projects in the transport sector are related to the road transport (use of intelligent transportation systems, safety issues, environmental impact, service levels), while 4 are aimed at railway transport (safety, energy efficiency, technological development
and environmental protection). Three projects are related to the area of waterways transport, two to the air traffic and eventually, two to the area of postal services.

The Ministry of Science and Technological Development is currently funding projects in the area of transport and three projects included in the Energy Efficiency Programme.

9. Does research in the field of transport benefit from public and/or private funding, and if yes, what level of funding is allocated to transport related research?

At the national level, research in the transport sector is mainly supported by the Ministry of Science and Technological Development.

Cooperation between the research institutions and the commercial enterprises in the area of transport research projects is insufficient in terms of insufficient initiatives for research demonstrated by the participants in transport and also in terms of practical use of the research results (at operational level). There have been certain initiatives to gather together the industry and the research institutions, such as the programme coordinated by the Chamber of Commerce of Belgrade, yet no specific results have been achieved to date.

In 2008, the total financial support of the Ministry of Science and Technological Development for research and development in the transport sector amounted to 1.73 million Euro, which is around 0.006% of the Serbian GDP in the respective year.

In addition to the projects funded by the Ministry of Science and Technological Development, Serbian research institutions participate in nine projects that are funded within the European Commission Programme (Sixth Framework Programme and Seventh Framework Programme). The total contribution of the EC amounts to Euro 618,465.00.

10. What are the national priorities for transport related research?

One of the research and development priorities, obviously, is to research the possibility for development of sustainable integrated transport system in the Balkans region on one hand and connecting (integration of) the central Southeast Europe and ten new EU members on the other hand, through optimum combinations and various means of transport that would effectively and efficiently provide transport services to its users through competition and in a complementary way. In this regard, sustainable transport system should at the same time adopt technical, technological, operational, economic, social, ecological and institutional performances.

Therefore, the research and development priorities in the transport sector can be divided in two broad categories, namely:

1. Research activities aimed at transport network

These activities should enable efficient integration of Serbian transport network into broader (regional and European) transport networks to ensure a more efficient and ecologically less harmful flow of passengers and goods, not only with regard to terminal traffic (coming from
and/or destinations in Serbia/other Western Balkans countries), but also with regard to transit traffic, bearing in mind dense traffic flows through the region of Western Balkans.

The research in the areas of transport should focus mainly on the issue of inter-modality, interoperability and interconnectivity of the passengers and goods in the European Corridors VII and XX and also in the traffic connections at lower level (regional, national etc.). More precisely, the research efforts should focus on the following:

1.1. Optimum combination of various modes to achieve an efficient chain of transport (in particular with regard to transit). The following various combinations of modes may become issues to research in the surrounding Western Balkans Countries: With regard to the transport of passengers railway/road or air/railway/road transport. With regard to the transport of goods railway/road or waterways/railway/road transport.

1.2. Intelligent transportation systems encompassing all means of transport: railway, road, waterways and air transport;

1.3. Supply chain management, including process terminals;

1.4. How to improve use of transport infrastructure scheme;

2. Research and development activities related to vehicles and vessels.

All research activities should be focused on the opportunity to improve efficiency (in several areas: technical, economic, energy, environmental impact and other) of the transport in the Western Balkans region. More precisely, the following research topics are recommended:

2.1. Small aircraft development;

2.2. River and sea ships development;

2.3. Experimental research including the technical and navigation qualities of the ships, ships drive and convoy pulling aimed to improve efficiency of river traffic.

C. Pipeline transportation

11. Please provide a description of the national network, length and type of pipelines, quantities transported, capacities of existing installations, development policy, regional connections.

Natural gas pipeline transportation

The Republic of Serbia has its own natural gas sources and also an importer of natural gas. A minor part of around 8% of the total demand is supplied from domestic sources while 92% is supplied by means of import from Russia, through Ukraine and Hungary, the only entry point into the gas networks system of the Republic of Serbia. The transportation system is also used for gas transit to Bosnia and Herzegovina. The balance of realized natural gas production and consumption is presented in the Table 1.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Natural gas balance 2004 – 2009.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10^8$ m$^3$</td>
<td>2004</td>
</tr>
<tr>
<td>Domestic production</td>
<td>236.3</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Imported gas (including transit)</td>
<td>2263.5</td>
</tr>
<tr>
<td>Total</td>
<td>2,499.8</td>
</tr>
</tbody>
</table>


Around 1000 industrial consumers and 170,000 households are supplied with gas. The natural gas transport in the Republic of Serbia is performed by two enterprises, namely the PE (Public Enterprises) Srbijagas and the Jugorosgaz AD Belgrade. Natural gas transportation system operation activity of both natural gas transport systems is performed by the PE Srbijagas. Natural gas distribution activity, natural gas distribution system operation activity and trade in natural gas for tariff consumers energy supply activity is performed by 36 energy entities.

Natural gas system in Serbia comprises transmission and distribution gas pipelines main gas metering and regulation stations, compression station and metering and regulating stations. Presently, gas transport system of Serbia provides for transport of around 15 million m$^3$/day including 2 million cubic meters transported to Bosnia and Herzegovina.

1. Transport System
Features of the transport system are as follows:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity of Horgos receiving station</td>
<td>540,000 m$^3$/h (13 mil. m$^3$/day)</td>
</tr>
<tr>
<td>Transport system working pressure</td>
<td>16 to 50 bar</td>
</tr>
<tr>
<td>Length of transport system</td>
<td>2.140 km</td>
</tr>
<tr>
<td>Gas pipeline dimensions</td>
<td>from DN 150 to DN 750</td>
</tr>
<tr>
<td>Average age of the transport system</td>
<td>25 years</td>
</tr>
</tbody>
</table>


2. Distribution gas pipeline system (Table 5):
Features of the distribution pipeline system are as follows:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution system working pressure for industrial consumers</td>
<td>4 to 16 bar</td>
</tr>
<tr>
<td>Length of distribution system</td>
<td>650 km</td>
</tr>
<tr>
<td>Working distribution pressure for general consumption</td>
<td>up to 4 bar</td>
</tr>
<tr>
<td>Length of distribution system</td>
<td>around 3,000 km</td>
</tr>
<tr>
<td>Average age</td>
<td>10 years</td>
</tr>
</tbody>
</table>


The main problem regarding the natural gas supply is how to harmonize balanced production or import and transportation with a very imbalanced consumption of the users. The priority projects in gas industry aimed at ensuring security of supply to consumers in the Republic of Serbia and in the region are as follows: to provide new directions of supply, to build the underground natural gas storages and to build connections to the gas network system in the region.
In 2005, the Republic of Serbia signed the Treaty on Establishing Energy Community of Southeast Europe. The Law on Ratification of the Treaty on Establishing Energy Community between the European Community and the Republic of Albania, the Republic of Bulgaria, Bosnia and Herzegovina, the Republic of Croatia, the former Yugoslav Republic of Macedonia, the Republic of Montenegro, Romania, the Republic of Serbia and the United Nations Interim Administration Mission in Kosovo and Metohija in compliance with the 1244 Resolution of the United Nations Security Council (Official Gazette No 62/06), that established a uniform legal framework for trade in electric power and natural gas in Southeast Europe and EU was enacted in 2006.


The Energy Community promotes regional cooperation in energy sector, thus acting as an initiator in the process of connecting Western Balkans countries with the gas infrastructure through implementation of the Gas Ring concept of the Energy Community. The Republic of Serbia encourages implementation of the Energy Community Ring concept and the projects leading to security of its supply.

The Government of the Republic of Serbia and the Government of the Russian Federation has signed the Agreement on Cooperation in Gas and Oil Industry. The Agreement inter alia aims to found companies for implementation the projects related to the construction of a part of gas transport system in the territory of Serbia, for transit and distribution of natural gas to other European countries from the Russian Federation and for the construction of the underground natural gas storage located at the depleted gas field Banatski Dvor.

The planned construction of the international gas transportation pipeline South Stream Pipeline is certainly the most important project in gas infrastructure. It is expected that the gas pipeline will provide a sufficient capacity and security of supply to consumers in the territory of the Republic of Serbia which would also get the status of the transit country in the process of supplying the European consumers with natural gas form Russia.

The underground natural gas storage in Banatski Dvor (PSG - BD) shall be built as an extension of exploitation of depleted gas field that had the capacity of approximately 3.5 billion m³ of natural gas. Planning documents foresee the construction of PSG – BD in several phases. Fully completed construction would lead to the capacity of 800 million m³ of natural gas.

In addition to this underground storage, construction of the another one should be taken into consideration, due to the increase in gas consumption. The underground gas storage Itebej would be constructed in the location of a partially used natural gas deposit Itebej G3. The estimated capacity of the storage is around one billion cubic meters of gas. Itebej is situated around 40 kilometres to the East of the City of Zrenjanin and presently poses an operational gas field.

**Pipeline oil and oil derivatives transport**

Physical capacity of pipeline transport in Serbia is realized only by using the oil pipeline from Sotin, located at the border with the Republic of Croatia, to Pancevo. Sotin – Novi Sad
pipeline section is 63.3 km long and Novi Sad - Pancevo pipeline section is 91 km long. This oil pipeline forms a part of the main Adriatic pipeline (JANAF) that has been operational since 1979. The infrastructure of the oil pipeline comprises a terminal in Novi Sad located near the Oil Refinery in Novi Sad with its 4 storage reservoirs of 10,000 m$^3$ each, a pump station and a metering station located near the Oil Refinery in Pancevo.

Oil pipeline transport in Serbia (in thousand ton)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Domestic oil</td>
<td>356.8</td>
<td>326.0</td>
<td>310.0</td>
<td>240.0</td>
</tr>
<tr>
<td>Imported oil</td>
<td>2,544.8</td>
<td>2,580.4</td>
<td>2,605.9</td>
<td>2,500.0</td>
</tr>
<tr>
<td>Total</td>
<td>2,901.6</td>
<td>2,906.4</td>
<td>2,915.9</td>
<td>2,800.0</td>
</tr>
</tbody>
</table>


The development goals in oil and oil products pipeline system development are as follows:

- Upgrading and rehabilitation of the existing pipeline;
- Extension of oil and oil derivatives storage capacity;
- Introduction of integrated management and regulation of the pipeline transport system as a whole;
- Creating conditions for implementation of modern communication installations and system (optical cables) along the oil and oil products pipeline;
- Creating conditions for implementation of macro-projects in oil and derivatives pipeline transport;
- Participation in construction of Paneuropean oil pipeline (as an intended interstate project);
- Construction of oil products pipeline system in Serbia.

Serbia is one of the few countries in the Europe and in the surrounding area that has no pipeline system for oil derivatives transport. Accordingly, main goal of the oil products pipeline system construction in Serbia is the construction of a pipeline system by which the largest consumer centres in Serbia will be supplied. In addition, the goal of the oil products pipeline construction form Pancevo to Novi Sad is to achieve higher valorisation effects of the total refinery production by complementary exchange of half-derivatives of the refineries. Construction of oil products pipeline system would, in future, open realistic opportunities to connect the oil product pipeline with the neighbouring markets (marginal areas) of the surrounding countries in the near vicinity.

It is foreseen that the Pan-European oil pipeline shall be built at the pipeline routing from Constanca in Romania (port on the Red Sea) through the territory of the Republic of Serbia, Republic of Croatia, Republic of Slovenia to Trieste in Italy (port in the Adriatic Sea) where by means of pipe to pipe connection it should be connected to the Transalpine oil pipeline though which Central Europe is supplied (and in particular oil refineries in Austria, Germany and potentially also in Check Republic). In addition, there is a possibility to extend this oil pipeline to Genova – port on the Tyrrhenian Sea. The foreseen length of the oil pipeline is around 1319 kilometres.

The implementation of the PEOP project and the construction of a joint regional oil pipeline would provide for a security of supply of oil refineries in the pipeline routing area (by
minimizing investment and operational costs) and would above all reduce transportation costs, increase security of supply and provide for a better international connection of the Republic of Serbia with the countries in the pipeline routing area and also with all oil pipeline users.

12. Is there a specific legal framework for pipeline transportation?

The following legislation governs the sectors of natural gas transport and distribution, oil transport by oil pipelines and oil derivatives by oil products pipelines:

1. The Energy Law (Official Gazette of the Republic of Serbia, No. 84/04 of 24 July 2004)
5. Rulebook on Conditions Natural Gas Transmission and Distribution Entities Shall Meet in Respect of Professional Staff (Official Gazette of the Republic of Serbia No. 93/05 of 20 October 2005)
7. Rulebook on Technical Criteria and Conditions for Safe Transport of Liquid and Gaseous Hydrocarbons by Master Oil and Gas Pipelines and Oil and Gas Pipelines for International Transport (Official Gazette of SFRY No. 26/85 of 6 November 1984)
9. Rulebook on Technical Criteria for Household Gas Connection for working pressure up to 4 bar (Official Gazette of SRY 20/92 of 5 February 1992)

13. What environmental rules are applied?

Pipelines are included in the List 1 and List 2 of the Regulation on Determining the List of the Projects for which Environmental Impact Assessment is Required and the List of the Projects for which Environmental Impact Assessment may be Required (Official Gazette of RS No 114/2008).

List 1, point 16. Pipelines for transport of gas, liquid gas, oil and oil derivatives and chemicals larger than 800mm in diameter and longer than 40 km.
List 2 point 4. Pipelines with the auxiliary facilities for transport of gas, oil, chemical, water steam, hot water or pipelines with no auxiliary facilities; overhead long-distance electric power transmission lines.

1. Pipelines for transport of gas, excluding internal factory pipelines - longer than 10 km and larger than 150mm in diameter;
2. Pipelines for transport of chemicals, excluding the pipelines that constitute part of the facility handling the chemicals - longer than 2 km and larger than 150mm in diameter;
3. Pipelines for transport of water steam or hot water distributed from the facilities listed in point 3.1 excluding the internal factory pipelines - longer than 20 km;
4. Pipelines for transport of waste waters – longer than 10 km;
5. Pipelines for transport of oil and oil derivatives – all projects not listed in List 1;
6. Overhead high – voltage, long—distance electric power lines of nominal voltage equalling to or higher than 110 kV.

II. ENERGY NETWORKS

14. Please, provide information, also in the form of maps, on the current status and on the major needs for energy infrastructures in your country. What are the major gaps/concerns in terms of infrastructures to fulfil with the obligations of security of supply in the internal market?

The natural gas supply has been presented by large in the answer to the question number 11. The major problem regarding the natural gas supply is how to harmonize a balanced production or import and transportation with a very imbalanced consumption by the users, which is caused by availability of only one entry point in the gas distribution system of the Republic of Serbia.

The priority projects in gas industry aimed at ensuring security of supply to consumers in the Republic of Serbia and in the region are as follows: to provide new directions of supply, to build the underground natural gas storages and to build connections to the gas network system in the region.

The electric power transmission system of the Republic of Serbia is via inter-connective transmission lines connected to 8 countries of the region, i.e. neighbouring system operators and it is centrally located in the Southern East Europe.

In the territory of the Republic of Serbia, the electric power transmission and transmission system operation is performed by the PE (Public Enterprises) Elektromreza Srbije (JP EMS). Pursuant to the Energy Law, the PE EMS is the transmission system operation responsible for the technical performance of the electric power system through maintenance of the system operation security and also for reliability of electric energy supply as stipulated in the Rules on Operation of the Transmission System. In addition, PE EMS is responsible for market operations is compliance with the electric power market development in Serbia and with the participation of the electric power system of Serbia in the Southern East Europe market.

Main tasks of the PE EMS in the area of electric power transmission comprise maintenance, planning and construction of the transmission network. Management of the electric power system is performed through use of appropriate technical, telecommunication and information systems that enable control of entire system operations, and application of safety measures and supervision of use of auxiliary system services. Organisation of the electric power market comprises preparation of legal acts in cooperation with the Energy Agency of the Republic of Serbia, use of appropriate technical systems and signing necessary contracts.
The electric power transmission system comprise the 400 kV, 220 kV and part of the 110 kV network and also other electric power facilities, telecommunication system, information system and also other infrastructure necessary for operations of the electric power system. The 400 kV network enables transmission of energy from the largest producers to the transformer substations of largest installed capacity and the cross-border exchange of electric power. The following users are connected to the transmission network mentioned: electric power producers (HP Djerdap 1 TP Kostolac B, TENT A, TENT B and TP Kosovo B) and the neighbouring transmission systems through the inter - connective high - voltage transmission lines (Romania, Bulgaria, Hungary, Croatia, Macedonia, Albania, Montenegro and Bosnia and Herzegovina).

Further intensified development of this network and construction of new transformer stations is foreseen in the following period.

The 220 kV network was mostly developed in the 60-ties of the past century while in recent period its development has almost been stopped. It is connected to the 400 kV network through the 11 400/220 kV transformers located in 7 transformer stations. The 220 kV network is particularly well developed in the route Obrenovac - Bajina Basta - Nis. The following users of the 220 kV transmission network are connected to the network mentioned: electric power producers (TENET A, HP and RHP Bajina Basta, HP Bistrica, TP Bistrica, TP Kosovo A), industrial consumers (TS HIP 2) and also the neighbouring transmission systems (two high – voltage transmission lines both in Montenegro and in Macedonia (out of use at the moment) and in Bosnia and Herzegovina and Albania one in each country.

Part of the 110 kV network is used as a transmission network while other part of the network of respective voltage level is practically used as a distribution network. This network is connected to the 400kV and 220kV networks through the 11 400/110 kV transformers or 39 220/110 kV transformers. The following users are connected to the network:

- Electric power producers (14 power plants);
- Industrial facilities (e.g. ironworks US STEEL in Smederevo, cement factory in Beocin, Kosijeric and Popovac and other);
- Collector substations;
- Electric power distribution companies;
- Neighbouring transmission system (totalling to 9 inter - connective high – voltage transmission lines used for mutual support of the system in insulated operations)

It is foreseen that the facilities of 110/x kV capacity shall be transferred to the power distribution companies, however there still is a large number of these facilities for which JP EMS is responsible.

The analysis indicates that the available production capacities are insufficient for the electric power consumption in the Republic of Serbia and therefore lack of construction of new production capacities results in import of electric power and therefore in a need to develop transmission network to enable better connections with the countries of the region. Harmonised operations in ENTSO-E interconnection unquestionably offer advantages related to the increased capacity for exchange of electric power and a minimise risk with regard to supply of the missing quantities of electric power. Improved connections with the neighbouring countries enable participation in the regional market of electric power in Southeast Europe.

Participation in the regional market assumes introduction and increase of capacity of all technical system management functions. In the sector of dispatching management it is necessary to, above all, improve use of all real time management functions that have been implemented through SCADA/EMS system, funded by the Swiss Government grant.
(SCADA, AGC, condition estimator, network analysis), in other words, to fully use the
management system. At the moment, limitations are not set by the use of applications by the
planning and operational staff but by lack of metering mostly by production and distribution
facilities and also by the facilities of the consumers connected to the 110 kV transmission
network. This is the area to which a particular attention has to be given in the following
period. In addition, it is necessary to put an additional effort into improvement of the data
exchange with the neighbouring electric power systems, which would contribute getting an
insight in the power cycle of the neighbouring system in the processes of real system analysis.
The analysis of the transmission network development has been performed in compliance
with the requirements related to the planned increase of consumption in electric power system
in Serbia and also with regard to the conditions for the connectivity and the need to enable
expected transits in the regional energy market.
In addition it was taken into consideration that the region as a whole in the following years
shall probably be decreasing its production capacity (closure of older block in HP Kozleduj in
Bulgaria and cost ineffective plants in Romania, coupled with uncertain construction of new
capacities). Potential surplus of production capacities may be expected in the territory of
Kosovo and Metohija, however its usage is still related to a high political risk, for which
reason it is assumed that the electric power deficit in the Southeast Europe shall mostly be
covered by the production in Central Europe and Ukraine.
In event that new capacities are built in the territory of Kosovo and Metohija, the analysis
performed to date indicates that the transmission system of Serbia has insufficient capacity for
transmission of previously planned 2100 MW from new electric plants. The necessity to build
new transmission capacities for transmission of power from new electric plants may only be
identified by a detailed concordance study for each specific plant construction as the case has
been with the foreseen connections of TP Kolubara B 2x350MW, TENT B3 700 MW and TP-
HP Novi Sad 400MW. Similar studies for determining needs to construct new transmission
capacities are also required in event of connecting larger consumers, such as large industrial
facilities, for which, as well as for connecting new power plants, implementation of the
necessary extension shall be defined in a contract with the investors.
In the process of defining the transmission system development, unforeseen circumstances,
resulting from the potential connections and the necessity to transmit power from the potential
new renewable sources of energy that could be built in the territory of the Republic of Serbia,
have been taken into consideration. By the end of 2008 requests have been submitted for
issuing opinion on the feasibility and conditionality to connect more than 1000 MW of
installed capacity from such resources. However, preparation of transmission system
development plans is subject to presently insufficiently defined treatment of renewable
sources of energy. The issue of expenditures related to the necessary auxiliary system services
is of a particular importance. It is reasonable to assume that in particular high participation of
wind plants in electric power production may lead to very high auxiliary system costs. This
indicates the necessity to prepare studies by which the level of these costs would be
determined and also to enact appropriate legal acts to define the rules for connecting and
operating wind plants. These costs have not been included in the proposed transmission
network plan. Instead, the problem of power transmission was observed from the point of
view of system security.

In addition to fulfilling the criteria for safety of operations of the existing transmission
network in the process of supplying the consumers in Serbia with the electric power, the
impact of the expected transits of the electric power through the transmission network in
Serbia have been analysed in the process of development of transmission network.
15. Indicate what is the status of implementation and planning of the axes for priority projects relevant to the South East Europe region in your country. In particular, indicate what is the level of development of the energy projects which are considered priority under the Energy Community process.

EL 4 axis for priority projects relevant for the Balkans is focused at development of electric power market in South East Europe. The construction of long distance power transmission line 400 kV projects, from Nis to the border with the Former Yugoslav Republic of Macedonia has been supported by the European Union. Construction of the first section of long distance electrical power transmission line form Nis to Leskovac, the total length of which is 40.5 km, was finalized in 2009. Implementation of a second phase of the long distance power transmission line 400 kV, section Leskovac – Vranje – Former Yugoslav Republic of Macedonia, the total length of which is 100 km is ongoing and it is funded by the Delegation of the European Commission (DEC). It is foreseen that the construction of the long distance power transmission line to the border with the FRYM shall be finalized by the end of 2011.

The construction of a long distance power transmission line 400 kV Serbia (Pancevo) – Romania (Resice) project is on the Energy Community list of priority projects, endorsed by the Ministerial Council in December 2009. The preliminary design and the feasibility study have been prepared. The Memoranda of Understanding and the Document on Common Approach concerning the crossing point where of the long distance power transmission line between Serbia and Romania have been signed by both transmission system operators (TSO), namely PE Elektromreža Srbije and Transelektrika S.A.

One of the priority projects in the gas sector of the Republic of Serbia and also a priority project of the South East Europe Energy Community is to connect the gas transport systems of the Republic of Serbia and the Republic of Bulgaria. Construction of the gas pipeline would result in having a second direction of gas supply from the Republic of Bulgaria, which would improve security of supply with the natural gas in Serbian market and also facilitate further development of distribution network of Central, Eastern and Southern Serbia with a possibility to increase the number of general use potential customers. It would additionally unload northern part of the gas transport system, which would increase security of supply of the Bosnia and Herzegovina transit line. In addition, it would establish a new supply corridor with a possibility of further extension and/or introduction of a new source of supply and it would also improve the security of supply of the whole region through integrating present and planned gas storages in the regional gas system. In 2005, the Government of the Republic of Serbia and the Government of the Republic of Bulgaria have signed the Memoranda of Understanding aimed at implementation of the project. In compliance with the Statement on support to forming the working group for the project of connecting gas transport systems of the Republic of Serbia and the Republic of Bulgaria, signed on March 5th 2010 by the General Director of the Directorate for Energy, the Minister of Economy, Energy and Tourism of the Republic of Bulgaria and the Minister of Mining and Energy of the Republic of Serbia, a working group was formed and it consist of the representatives of the Ministry and the entities operating in the energy field. The task of the working group is to provide all information necessary for preparation of the project feasibility study. The feasibility study shall be funded by the Western Balkans investment framework funds.

In addition, the Republic of Serbia supports implementation of the Gas Ring Concept of South East Europe.
16. What are the planning and authorisation procedures applicable to the development of an energy infrastructure project?

The procedures are foreseen and regulated by the following legislation:

<table>
<thead>
<tr>
<th>Legal act</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Energy Law (Official Gazette of the Republic of Serbia, No. 84/04)</td>
</tr>
<tr>
<td>Law on Pipeline Transportation of Gaseous and Liquid Hydrocarbons and Distribution of Gaseous Hydrocarbons (Official Gazette of the Republic of Serbia, No. 104/09).</td>
</tr>
<tr>
<td>Regulation on Conditions of Natural Gas Delivery (Official Gazette of the Republic of Serbia, No. 47/06 and 3/10)</td>
</tr>
<tr>
<td>Rulebook on Criteria for Issuing Energy Permit, Contents of the Requests and Manner of Issuing Energy Permits (Official Gazette of the Republic of Serbia, No. 23/06)</td>
</tr>
<tr>
<td>Rulebook on Criteria for Classification of Natural Gas Customers into Customer Groups (Official Gazette of the Republic of Serbia No. 104/06)</td>
</tr>
<tr>
<td>Rulebook on Conditions Natural Gas Transmission and Distribution Entities Shall Meet in Respect of Professional Staff (Official Gazette of the Republic of Serbia No. 93/05)</td>
</tr>
<tr>
<td>Rulebook on Conditions, Method and Programme for Competency Exams for Persons Performing Activities of Technical Management, Maintenance and for Operators in Facilities for Natural Gas Transport and Distribution (Official Gazette of the Republic of Serbia No. 93/05)</td>
</tr>
<tr>
<td>Rulebook on Technical Criteria and Conditions for Safe Transport of Liquid and Gaseous Hydrocarbons by Master Oil and Gas Pipelines and Oil and Gas Pipelines for International Transport (Official Gazette of SFRY No. 26/85)</td>
</tr>
<tr>
<td>Rulebook on Technical Criteria for Design and Construction of Distribution Polyethylene Gas Pipeline for working pressure up to 4 bar (Official Gazette of SRY 20/92)</td>
</tr>
<tr>
<td>Rulebook on Technical Criteria for Household Gas Connection for working pressure up to 4 bar (Official Gazette of SRY 20/92)</td>
</tr>
</tbody>
</table>

17. The TEN-E policy is currently under revision. What are your expectations towards the new European Energy Security and Infrastructure Instrument which may replace the present TEN-E guidelines?¹

Strengthening the total network in South East Europe will enable Serbia to place on the market its future hydro power surplus energy which is expected following the construction of new hydro power plants and in particular reversible hydro power plants.

¹ For reference see the Communication "Energy infrastructure priorities for 2020 and beyond - A Blueprint for an integrated European energy network" adopted on 17 November 2010
Taking into account the presented infrastructure priorities until 2020 and with a view to improve the security of supply and to strengthen the electric power market, we expect that in the framework of the new European instrument of the energy security and infrastructure which can replace the existing TEN-E guidelines, the following projects shall be included:

- construction of interconnection transmission line 400 kV Serbia (Pancevo) – Romania (Resica)

- construction of interconnection transmission line 400 kV Serbia (Bajina Basta) – Montenegro and the development of the transmission network in Serbia with a view to develop inter-connective transmission capacities of Italy and South East Europe.

- the voltage level 220 kV in Western Serbia upgrade to 400 kV voltage level that shall enable a more reliable electric power system operations and provide for new inter-connective networks.

- construction of transmission line 400 kV Serbia (Sombor) – Hungary (Pecuj)

The Republic of Serbia shall support all projects whose implementation would enable diversification the sources and directions of supply and which would lead to an increased security of supply of consumers of the whole region. The priority projects are presented in the answer to the question 21 of the sub-group 15 - Energy.

III. TELECOMMUNICATION NETWORKS

18. Is there any intention of joining the ICT PSP specific programme of the CIP?

The Ministry of Telecommunications and Information Society (MTIS) recognized the importance of the Programme for support to the policy of information and communication technology (ICT PSP), which is the reason why the Republic of Serbia joined the Programme. On October 23rd 2009. Jasna Matic, the Minster for Telecommunication and Information society and Vivian Reding, Commissioner of the European Union for Information Society and Media, signed the Memoranda of Understanding between the Republic of Serbia and the European Community, by which Serbia became a member of the ICT PSP in 2010. The Law on Ratification of the Memorandum of Understanding between the Republic of Serbia and the European Community on the Participation of Serbia to the Community Programme ICT Policy Support Programme (ICT PSP) of the Competitiveness and Innovation Framework Programme (2007 to 2013) was endorsed in the Peoples' Assembly session of June 29th 2010 (Official Gazette-International Agreements No 7-10).

19. What are eventually your plans with respect to it?

MTIS has officially appointed the liaison officer at national level and has delegated its representative to the Committee of the ICT PSP programme. The representatives of the MTIS visited the Info day in Brussels dedicated to the coming Call (Call 4) with a view to obtaining as much information as possible regarding the topics and goals for which project proposals may be submitted in the following period.

The role of MTIS shall be focused at delivering a high quality presentation of the advantages of the participation in the ICT PSP programme, to the interested parties in the Republic of
Serbia. In addition, MTIS shall focus its activities on raising interest with the public sector in the Republic of Serbia as well as the state administration and economic entities to take part in ICT PSP programme, bearing in mind that this gives the opportunity to the companies from the Republic of Serbia to be awarded grants for implementation of the programmes and also an excellent opportunity for cooperation with European companies.

Therefore, on February 5th 2010, in cooperation with the Directorate for Information Society and Media of the European Commission, MTIS organized a local Info day dedicated to the Call 4 that officially was opened on January 21st. The purpose of the Info day was to present in detail the Operational Programme for 2010 and to present the process of submitting process proposals, means of funding and partner search method. The Ministry of Telecommunications and Information Society also presented the programme ICT PSP in other three conferences in 2010 in which ICT was discussed. In addition, in 2010, more than 30 individual meetings with interested legal entities and with the representatives of the public sector of the Republic of Serbia were organized with a view to provide a more detailed overview of the ICT PSP programme and to offer assistance in implementation of project ideas.

In June 2010 MTIS presented the Digital Agenda of Serbia for the period up to 2020, where one of the basic goals is to support the development of the ICT and in particularly including opportunity to use the EU programmes. By doing so, MTIS continued to enact legal acts that encourage legal entities in Serbia to use to as much as possible the opportunities arising from the EU programmes in the ICT sector with a view to creating a society in which the citizens and the entrepreneurs use ICT to improve the quality of life and the economic competitiveness in the Republic of Serbia.
ANNEX 1 – National long distance transport network maps as the answer to question no. 1
Source: PC Roads of Serbia
Main and regional road network of the Republic of Serbia

Source: PC Roads of Serbia
MAGISTRAL AND REGIONAL ROADS NETWORK OF THE REPUBLIC OF SERBIA

MAP LEGEND

STATE BOUNDARIES
REPUBLIC BOUNDARIES
PROVINCE BOUNDARIES
ENTERPRISE BOUNDARIES
INTERNATIONAL E ROADS
MOTORWAY
MOTORWAY UNDER CONSTRUCTION
HALF-MOTORWAY
HALF-MOTORWAY UNDER CONSTRUCTION
MAGISTRAL ROAD
IMPASSABLE MAGISTRAL ROAD
REGIONAL ROAD
IMPASSABLE REGIONAL ROAD

REGIONAL CENTER
ROAD DIRECTION MARK

Source of data on length is the database of the Roads Directorate of the Republic of Serbia. Road network development status, December 1997.
Republic of Serbia
Main and regional road network
Technical chart with data on road section length

Source: PC Roads of Serbia
MAGISTRAL AND REGIONAL ROADS NETWORK OF THE REPUBLIC OF SERBIA, TECHNICAL MAP WITH THE RATA ON THE ROUTES LENGTH

MAP LEGEND

STATE BOUNDARIES
REPUBLIC BOUNDARIES
PROVINCE BOUNDARIES
ENTERPRISE BOUNDARIES
INTERNATIONAL E ROADS
MOTORWAY
MOTORWAY UNDER CONSTRUCTION
HALF-MOTORWAY
HALF-MOTORWAY UNDER CONSTRUCTION
MAGISTRAL ROAD
IMPASSABLE MAGISTRAL ROAD
REGIONAL ROAD
IMPASSABLE REGIONAL ROAD
ROUTE LENGTH OF MAGISTRAL ROAD
ROUTE LENGTH OF REGIONAL ROAD

REGIONAL CENTER
MUNICIPAL SETTLEMENT
SETTLEMENT

Source of data on length is the database of the Roads Directorate of the Republic of Serbia. Road network development status, December 1997.
Republic of Serbia
Main and regional road network
Traffic load in 2009

Source: PC Roads of Serbia
MAGISTRAL AND REGIONAL ROADS NETWORK OF THE REPUBLIC OF SERBIA, TRAFFIC DENSITY (PGDS) IN 2009

MAP LEGEND

STATE BOUNDARIES
PROVINCE BOUNDARIES
INTERNATIONAL E ROADS
MOTORWAY
MOTORWAY UNDER CONSTRUCTION
HALF-MOTORWAY
HALF-MOTORWAY UNDER CONSTRUCTION
MAGISTRAL ROAD
REGIONAL ROAD

REGIONAL CENTER
MUNICIPAL SETTLEMENT
SETTLEMENT

Ratio for PGDS

Source of data on length is the database of the Roads Directorate of the Republic of Serbia. Road network development status, December 1997.
Map of railway network

Source: PC Roads of Serbia
MAP OF RAILWAYS NETWORK

RAILWAY NODE BEOGLRADE
RAILWAY NODE NOVI SAD

MAP LEGEND

RAILWAY CLASS MG AND MP
RAILWAY CLASS M-4
RAILWAY CLASS M-8
BORDER…
Inland waterways and ports in the Republic of Serbia

Source: Directorate for Inland Waterways
INLAND WATERWAYS AND PORTS IN THE REPUBLIC OF SERBIA

PORT
LOCK
DANUBE (INTERNATIONAL WATERWAY)
SAVA (INTERNATIONAL WATERWAY)
TISA (INTERSTATE WATERWAY)
STATE WATERWAYS
Source: Civil Aviation Directorate of the Republic of Serbia

AIRPORTS

SPECIAL AIRPORTS

MILITARY AIRPORTS
## ANNEX 2

Public budgets (in million €)
Transport Infrastructure Investments

<table>
<thead>
<tr>
<th>MODES sections</th>
<th>Actual Expenditures</th>
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<tr>
<td>Upgrade</td>
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<tr>
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<td>Conventional links</td>
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<td>National roads</td>
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² Source: Statistics of Public Undertaking „Serbian Railways“ - Sector for Finance and Accountancy
³ Source: PC Serbian Roads, Business Performance Report in the period 2000-2009; the data refers to the motorways and 1st and 2nd level state roads
⁴ Source: PC Serbian Roads, Business Performance Report in the period 2000-2009; the data refers to the motorways and 1st and 2nd level state roads
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*** RWIS Twinning Agreement – Swedish travel administration and the Roads Directorate of the Republic of Serbia, joint knowledge transfer project in the area of roads management, winter maintenance, ecology and traffic safety

5 Source: Directorate for Inland Waterways
6 Source: Airport “Nikola Tesla” Belgrade
7 Source: SMATSA, Serbia and Montenegro Air Traffic Services Agency
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### ANNEX 3
LIST OF LEGISLATION - CHAPTER 21

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| Addendum to the Memorandum of Understanding on the Development of the South East Europe Core Regional Transport Network for a South East European Railway Transport Area | Text version: the-third-annual-meeting-of-ministers-december-4th-2007-addendum-to-the-mou-for-a-south-east-european-railway-transport-area  
CD version: 3rd meeting 2007 transport network |
| Memorandum of Understanding on the development of the Pan-European Transport Corridor X | MoU Corridor X signed 2001 |
| Energy Community Treaty                                                  | Treaty Establishing Energy Community      |
| General Master Plan for transport in Serbia                              | GMPT                                      |