

## **INTRODUCTION & BACKGROUND**

### **PURPOSE OF THE STUDY**

1. This study examines the challenges facing the railways of the Western Balkans region. The region is defined in this study as Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, and Serbia and Montenegro, including Kosovo (hereafter Kosovo). The region's railways have many common problems including their limited size and fragmented nature that are best addressed through common solutions. The similarities of the countries in terms of their shared history, geography, socio-economic characteristics and common aspiration to join the European Union also support a regional approach to addressing shared problems.

2. This perspective can be seen in a number of earlier World Bank initiatives contributing to the reintegration and rebuilding of the regional economy after the conflicts of the 1990s. Within infrastructure, they include the establishment of a regional market for trading in energy<sup>4</sup> and a regional trade and transport facilitation<sup>5</sup> project (TTFSE). Regional initiatives are necessary to address shared problems and reduce barriers to regional transport markets (e.g. regulations inhibiting the through running of locomotives). When they are economically viable and consistent with national priorities, regional initiatives complement, and indeed enhance, national reform initiatives.

3. In 2004, the Bank produced a regional framework paper for Southeast Europe<sup>6</sup>, which synthesized the contents of sector reports in roads, railways and inland waterways together with ongoing work in trade and transport facilitation and road safety. The Framework Paper compared some basic indicators of railway network sustainability in the SEE region with EU averages. Railway network density (and to a lesser extent population density) in the SEE region and in the EU countries are not greatly dissimilar, although wide internal variations exist in both blocs. (See Table 1 which has been reproduced from the earlier paper.) Traffic density, productivity and per capita national income, however, are much lower in the SEE region than in the EU.

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<sup>4</sup> World Bank, (2004d). "*Framework for the Development of Regional Energy Trade in South East Europe*", Energy and Mining Discussion Paper No.12, Washington D.C.

<sup>5</sup> See World Bank, (2004c). "*A Framework for the Development of the Transport Sector in SE Europe*", Europe and Central Asia Region of the World Bank, Washington D.C. for a recent summary of trade and transport facilitation activities in the region.

<sup>6</sup> World Bank, (2004c).

**Table 1 A comparison of the context and performance of EU Railways and SEE Railways (2002)**

	<b>European Union</b>	<b>The Western Balkans</b>
Population density (persons/000sq km)	106	92
Route density (rail route-km/000sq km)	44	42
Traffic density (000 traffic units/rail route-km)	3670	1640
Labor productivity (000 traffic units/rail staff)	650	223
Gross National Income (\$000/capita 2003)	21.1	1.8

Source: WB Railway Database

4. The framework paper starkly illustrated the problem: How to sustain a railway network of much the same network density as Western Europe, with less than half the traffic density, a third of the total labor productivity, and a fraction of the per capita income? Continuing the existing, often substantial, level of operating subsidy and providing for projected investments needs were becoming increasingly incompatible with the fiscal and debt position of the Western Balkans countries.

5. With decision makers unable, or unwilling, to identify and focus resources on those market segments where rail might have a viable future, declining resources were spread ever more thinly on the whole of the existing rail network. The posited outcome was a ‘patchwork approach’, with different levels of efficiency, safety and service across the network. Such an approach was acknowledged as being unlikely to provide the level of service demanded by national and international transporters in a market economy, jeopardizing the sustainability of the whole sector.

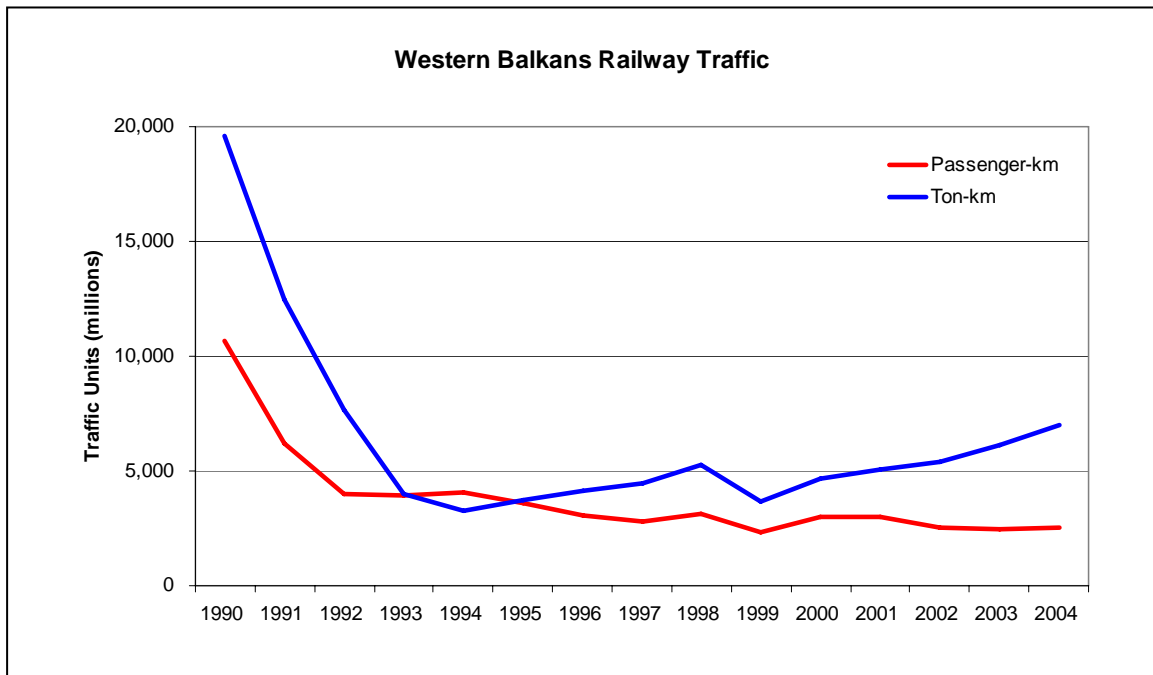
6. This study was commissioned to provide an outline for railway reform in the region. The study reviews the environment in which the railways operate, including the changing demand for rail services, the institutional context and the macroeconomic context. It analyzes the railway’s financial and operational performance, using a number of pre-defined international benchmarks. It reviews the current status of reform in each country, and outlines a broad reform strategy for the railway sector in the Western Balkans.

## **CHANGING TRANSPORT DEMAND**

7. The railways of the Western Balkans countries used to carry about four times as much passenger traffic as they do now—about 10 billion passenger-km in 1990 *vis-a-vis* 2.5 billion passenger-km in 2004. (See Figure 1) In terms of freight carried, they used to carry almost 3 times the traffic as they now do—about 20 billion ton-km in 1990 versus 7 billion ton-km in 2004. As a specific example, the railways in Bosnia and Herzegovina carried 25 million tons of freight, and 13 million passengers in 1990. By 2004 this had fallen to just under 6 million tons and just over 1 million passengers<sup>7</sup>.

<sup>7</sup> Bosnia and Herzegovina Railways Public Corporation (2005).

**Figure 1 Passenger and Freight Traffic of Western Balkans Railways**



Source: Study data

8. Recent studies suggest modest or little growth in rail demand in the region. The Regional Balkans Infrastructure Study (REBIS)<sup>8</sup> estimates that rail traffic will grow at between 60 and 140 percent between 2001 and 2025, or an annual rate of 2.5 to 5.8 percent (which is close to current growth). The earlier Transport Infrastructure Regional Study (TIRS)<sup>9</sup>, which reported in March 2002, projected little growth in rail traffic over the same period. The TIRS projection reflected that much rail traffic volume involved the movement of primary commodities or the output of the heavy industrial sectors, which were undergoing restructuring, privatization and retrenchment.

9. The change in the structure of the market, and the nature of the goods being transported, together with considerable investment in road infrastructure and rapid motorization, means that the scale of the former market is unlikely to be recovered for some time, if ever. Increasing per capita income is also likely to contribute primarily to further increases in vehicle ownership and use, rather than increased demand for rail transport *per se*.

10. These trends mean that the railway is likely to be a modest player in the transport sector in the region, except in a few market segments, and that current market share is likely to decline further. Rail currently accounts for 32 percent of public passenger transport in Croatia,<sup>10</sup> 10 percent in Serbia,<sup>11</sup> 3 percent in Albania<sup>12</sup> and low proportions in the remaining

<sup>8</sup> Cowi (2003).

<sup>9</sup> Louis Berger (2002).

<sup>10</sup> Croatia Central Bureau of Statistics, *Statistical Information 2004*.

<sup>11</sup> Serbia and Montenegro Statistical Office, *Statistical Pocket Book 2004*, p. 43.

countries. These shares exclude the use of the private car—which if included would significantly reduce rail market share. The comparable market share for rail, in terms of passenger-km, is 6.6 percent for the EU15 countries, and 3.4 percent in Portugal, 5.5 percent in the United Kingdom, and 7.4 percent in Denmark.

## **INSTITUTIONAL CONTEXT FOR THE RAILWAY SECTOR**

11. The institutional framework for the railway sector in the region is defined to a significant extent by the European Union, and the requirement and desire of the countries to take on the “obligations of membership” and harmonize with the *acquis communautaire*. Approximately 10 percent of the legislation included in the *acquis* is directly related to the transport sector. Preparation for accession not only requires the adoption of this legislation by each of the countries, but also requires that each has an ‘adequate’ level of administrative capacity, and the capacity to prepare for the introduction of forthcoming directives.

12. The transport *acquis communautaire* contains all the relevant Directives, Regulations and Decisions, together with all principles of law and interpretations of the European Court of Justice, all international transport agreements to which the EU is a party, including what is now termed as the ECMT *acquis*<sup>13</sup>, and all relevant Declarations and Resolutions of the Council of Ministers. A review of the components of the *acquis communautaire* and the ECMT *acquis*, as they pertain to the railway sector is presented in Annex A. The following paragraphs summarize the key elements.

13. The *acquis* require that countries must separate railway infrastructure from railway operations. This may be done on an accounting basis—organizational and institutional separation is optional. The infrastructure is operated by an infrastructure manager that must have responsibility for its own management, administration and internal control. The infrastructure manager must have a business plan which is designed to ensure financial equilibrium and the optimum use of infrastructure. The infrastructure manager must publish a network statement, which describes the condition and limitation of the network, details of the charging scheme, rules governing the capacity allocation, and priority rules which apply in case of conflicting demand<sup>14</sup>.

14. The infrastructure manager must charge a track access fee for the use of the railway infrastructure. This fee should be calculated in a non discriminatory manner. The calculation may also take into account the mileage, the composition of the train and any specific requirements in terms of such factors as speed, axle load and the degree or period of utilization of the infrastructure. If the infrastructure manager is independent from railway undertakings, the infrastructure manager can establish the charging framework. If the infrastructure manager is affiliated with a railway undertaking, the charging framework must

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<sup>12</sup> Louis Berger (2005), Executive Summary Page 11.

<sup>13</sup> Which has recently been slimmed down to an essential 120 Resolutions, Declarations, Conclusions and Recommendations etc. See ECMT, (2003) for more information.

<sup>14</sup> The contents of the network statement are defined in Annex 1.

be established by an independent body. Each member state must establish an allocation body that will allocate infrastructure on a fair and non-discriminatory basis.

15. Railway undertakings (passenger and freight operators) must be administered on a commercial basis, with defined public service obligations (PSO), or public service contracts (PSC), for socially necessary services. A safety certificate must be issued for each operator. Railway undertakings meeting a series of conditions, can apply for a license that would be valid throughout the EU territory, with the intention of facilitating international access and hence competition.

16. Railway undertakings that are established in the member states must be granted access to those sections of the network defined as the Trans European Rail Freight Network (TERFN) by March 15, 2008, and to the entire rail network by 2015, for the purpose of operating freight international services.

17. A first step towards interoperability was taken for the trans-European high-speed rail system.<sup>15</sup> This network must meet a common set of essential requirements, so as to achieve interoperability, improved safety, and reduced environmental nuisance.

18. The cost of harmonizing with the *acquis*, both in terms of building capacity to take on the obligations of membership and meeting the standards for infrastructure enhancement, can be high for applicant and candidate countries. One recent estimate is that the fiscal cost of harmonizing with the *acquis* averaged 3.2 percent of GDP annually in the EU8 countries<sup>16</sup>. Whilst the respective national timetables for movement towards membership partially alleviate some of these concerns, an inherent conflict exists between a country wishing to progress quickly towards membership and improve their ‘core’ transport networks, and their capacity to implement and pay for the required reforms, given their respective fiscal space.

#### **‘CORE RAILWAY NETWORK’ IN SOUTH EAST EUROPE**

19. The concept of a ‘*core network*’, or ‘strategic network’, for transport infrastructure in the five countries was originally proposed by the European Commission in its Strategy Paper<sup>17</sup>, published in October 2001. This paper detailed the guiding principles for the definition of the SEE ‘strategic transport network’, and added that priority was to be given to the use of existing infrastructure, by repairing and rehabilitating it, and **upgrading or new infrastructure components should be kept to a minimum** (authors’ emphasis).

20. This paper was followed by two studies. The Transport Infrastructure Regional Study (TIRS)<sup>18</sup>, covering Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Serbia and Montenegro, and Romania was completed in March 2002. The TIRS reviewed the SEE

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<sup>15</sup> Defined in Annex 1 of the same directive.

<sup>16</sup> World Bank (2005h).

<sup>17</sup> European Commission, (2001), *Transport and Energy Infrastructure for South Eastern Europe*. Brussels. Available from: [http://europa.eu.int/comm/ten/infrastructure/doc/tren\\_se\\_en.pdf](http://europa.eu.int/comm/ten/infrastructure/doc/tren_se_en.pdf).

<sup>18</sup> Louis Berger SA (2002).

governments’<sup>19</sup> plans for establishing the basic regional infrastructure network and offered a first technical elaboration of a long term development plan for the Core Network. It included recommendations on the nature of investments in the various sectors (e.g., rehabilitation rather than development investments, sustainable funding of maintenance, and sector reform issues). The TIRS also provided a multi-criteria assessment of proposed transport projects, a priority ranking of these projects, and a short/medium/long term investment plan for the region.

21. The second study was the Regional Balkans Infrastructure Study - Transport (REBIS)<sup>20</sup>, funded by the EU under the CARDS Program. It encompassed Albania, Bosnia and Herzegovina, Croatia, FYR Macedonia, and Serbia and Montenegro (including Kosovo) and was completed in July 2003. The REBIS study was conceived as a “...*continuation and deepening of the TIRS*”, (according to the interpretation of the ISG<sup>21</sup>). It aimed to assist the Balkans countries to develop coherent strategies for transport infrastructure development and identify priority investment in transport infrastructure. According to the REBIS study, an estimated US\$14.5 billion (€12 billion) was required to upgrade the core railway network to a level compatible with forecast traffic by 2015.

22. A Memorandum of Understanding (MoU) on the development of the South East Europe Core Regional Transport Network, was signed on June 11, 2004 in Luxembourg. The signatories included the European Commission, the Governments of Albania, Bosnia and Herzegovina, Croatia, FYR Macedonia, Serbia and Montenegro, and the United Mission in Kosovo (UNMIK) for Kosovo, which remains under international administration according to United Nations Security Council Resolution 1244.

23. The MoU defined in broad but clear terms the alignments of the network and the fields in which cooperation will be carried out. It also envisaged the establishment of a regional mechanism for coordination – a Regional Steering Committee (RSC) composed of junior Ministers or senior civil servants from the signatory countries and the European Commission. The RSC would stimulate and monitor the action needed to implement the goals of the MoU in practice, and report back to the ministers at their regular meetings. The RSC will be composed of members who are well-anchored in their national administrations and able to ensure that the Core Network is fully integrated in the national transport plan and the infrastructure budget of their countries.

24. The Core Network, as defined in the MoU, comprises 4,300 km of railway lines and 6,000 km of roads. It includes the Pan-European Corridors within the region (the “backbone” of the core network), adding to these the interconnections between the five capitals of the region and the cities of Banja Luka, Podgorica and Pristina. It also links these with the capitals of the neighboring countries and provides connections with the Adriatic ports of Rijeka, Split, Dubrovnik, Ploce, Bar, Durres, and Vlore.

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<sup>19</sup> The TIRS encompassed seven countries – Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Yugoslavia, Macedonia, and Romania (e.g., also two EU candidate states).

<sup>20</sup> Cowi (2003).

<sup>21</sup> ISG (2003), “*Developing Regional Infrastructure Strategic Approach and Implementation of Projects*”, Stability Pact Regional Table, Thessaloniki December 16, 2002.

25. The MoU also provides for the establishment of a South East Europe Transport Observatory (SEETO), headquartered in Belgrade. Important functions are expected to be collection of data, preparation of annual and multi-annual work plans for the implementation of the projects defined in the REBIS Study (Core Network), and coordination with the existing task forces on specific transport corridors.

26. The next section provides an overview of the macroeconomic context for the SEE countries. Given the limited fiscal space described, the development of the core network to a defined European standard not necessary for national needs, would be imprudent.

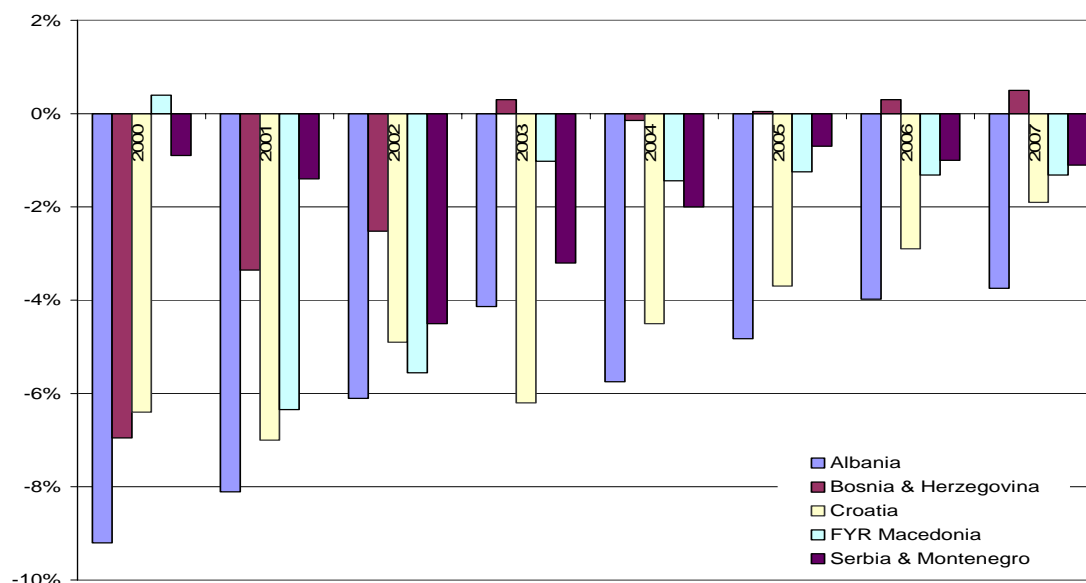
## **MACROECONOMIC CONTEXT**

27. In the last ten years, the countries of the Western Balkans have endured political turmoil, civil unrest and military strife. These events have had a significant impact on the direction and volume of trade and passenger flows in the region, which were still recovering from the upheaval engendered by the break-up of the Former Soviet Union (FSU) and the concomitant changes in the orientation of the regional economy.

28. Since the end of the Kosovo crisis in 1999 and the emergence of political stability, good fiscal progress has been made in all the countries of the region. All are in the process of transition, undertaking significant fiscal adjustment as they seek to move to a path of sustainable growth. Previous high debt has been reduced and restructured, and the countries have committed themselves to a path of fiscal responsibility as one of the key ingredients in the recovery process. Consolidation is also necessary to prepare the ground for future entry into the European Union (EU), including the requirement to take on the 'obligations of membership', under the *acquis communautaire*, as discussed earlier.

29. Fiscal consolidation in the West Balkan countries has been largely achieved through expenditure cuts, which are advancing at an uneven pace throughout the region. After impressive progress in most countries in 2004, fiscal trends display different profiles in 2005, with public deficits expected on average at 2 percent of GDP after grants (see Figure 2).

**Figure 2 Fiscal deficit in the Western Balkans countries 2000-2007 (% of GDP)**



Source: Study data

30. In 2004, real GDP growth resumed to 5 percent in the region and is projected to remain at a regional average of almost 5 percent in 2006 (see further Table 2). The main positive changes against the performance of 2003 come from Bosnia and Herzegovina and Serbia and Montenegro. Albania remains on a sustained growth track, with projected GDP growth of around 6 percent.

**Table 2 Western Balkans Countries – Actual and Projected Real GDP Growth 2002-2006 (%)**

	2002	2003	2004	2005	2006
Albania	3.4%	6.0%	5.9%	6.0%	6.0%
Bosnia & Herzegovina	5.3%	4.0%	5.7%	5.4%	5.7%
Croatia	5.2%	4.3%	3.8%	3.4%	3.9%
FYR Macedonia	0.9%	3.5%	2.4%	3.8%	3.7%
Serbia & Montenegro	3.8%	2.7%	7.2%	4.6%	4.8%
Regional average	<b>3.7%</b>	<b>4.1%</b>	<b>5.0%</b>	<b>4.6%</b>	<b>4.8%</b>

Source: IMF, World Economic Outlook

31. Despite this positive outlook, a recent study<sup>22</sup> noted that key vulnerabilities remain. These include high or very high debt to GDP ratios<sup>23</sup> (except for FYR Macedonia), current account deficits and external financing needs (all countries), government expenditures relative to GDP (except Albania), and external debt to GDP (SaM). These vulnerabilities are

<sup>22</sup> World Bank, (2005).

<sup>23</sup> Serbia 58.4% Public Debt and Interest Payments as a % of GDP, Bosnia 78.1%, Albania 55.6%, Croatia 53.7% in 2004, compared to an average amongst the EU7 countries of 31%.

expected to decline only gradually, through continued fiscal consolidation efforts and structural policy reform. External financing needs are expected to remain high, and new gross borrowing, including for servicing and refinancing current loans, will be contracted on hardening terms. Prospective pre-accession costs as well as the need to meet future EU fiscal targets will also need to be factored into fiscal sustainability calculations.

32. Given this fiscal situation, the level of public funds spent on railways is a serious concern. As discussed in paragraph 110, the level of subsidy for Western Balkans railways is comparable to benchmark European railways. Nonetheless, given that the state sector is overlarge in Western Balkans countries, and that governments have many other pressing priorities, a European level of subsidy for railways is not affordable. The World Bank and other International Financial Institutions (IFIs) need to ensure that their lending remains prudent and supports high yielding investments which help the railways to improve efficiency and reduce costs. For this reason, any proposed investment must be carefully scrutinized and found to satisfy quality standards within an adequate framework of sectoral reforms, regulation, and cross-country cooperation. Even after these microeconomic criteria have been met, lending decisions will also need to take into consideration the country's macro-fiscal constraints and capacity to incur additional debt. Investments which meet these criteria should help shrink railway subsidy over time, gradually reducing the governments' financial commitments for railways, while improving economic efficiency and growth prospects.