

## Title: National background report on Transport for Bosnia and Herzegovina

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### Executive Summary

The fundamental objective of this report is to provide all available information on transport related R&D capacity and infrastructure in Bosnia and Herzegovina (BiH). This should enable cooperation between Western Balkans Countries and researchers from European Union countries, making realization of regional Research & Development priorities more feasible.

Last year, BiH and EU signed the Stabilization and Association Agreement (SAA), which is the first step to EU integration. Integral part of SAA is "Protocol on Land Transport", which should ensure that the land transport between and through the territories of BiH and EU is developed in a coordinate manner. BiH also participate in South East Europe Transport Observatory and implement the Common Aviation Area Agreement.

The most of the R&D projects in the country have been performed by Universities. As there is no national research strategy sustained (both institutional and financial) efforts remain necessary to support coordinated identification of priorities in this sector. As a consequence of such a situation, transport research project in the country mostly depend on limited Governments' budget resources and private companies' funds.

In spite of significant investment during the last decade, the transport infrastructure reconstruction and development is expected to stay among top priorities in the sector for the following period. Other challenges for the country include sustainability of the entire transport system, development of intermodal transport fostering the benefits of each mode of transport as well as transport infrastructure management and traffic management.

According to BH Agency for statistics, the nominal value of the Gross Domestic Product in 2007 was KM 21.64 billion, what is a 13.2% of a nominal growth. The growth trend from previous years has continued stimulating both consumption and investment in the country. On the other hand, growing trade deficit and the significant increase in public spending generate disproportion in the current account, creating the additional financing needs. Improving competitiveness and efficiency of public spending will be some of the most pressing economic reform challenges for BiH.

SWOT analysis of the Transport research capacity in Bosnia and Herzegovina

<b>Strengths:</b> <ul style="list-style-type: none"><li>⊕ <i>Established National Contact Point</i></li><li>⊕ <i>R&amp;D Institutions are willing to improve the current situation</i></li></ul>	<b>Weaknesses:</b> <ul style="list-style-type: none"><li>⊕ <i>Strategic approach is Missing</i></li><li>⊕ <i>Insufficient and fragmented funding</i></li><li>⊕ <i>Poor research infrastructure</i></li></ul>
<b>Opportunities:</b> <ul style="list-style-type: none"><li>⊕ <i>Memorandum of Understanding on the association of Bosnia and Herzegovina to the Seventh European Framework Programme</i></li></ul>	<b>Threats:</b> <ul style="list-style-type: none"><li>⊕ <i>Global financial crisis</i></li></ul>

Transport research priorities for Bosnia and Herzegovina

<ul style="list-style-type: none"><li>⊕ <i>Road Traffic Safety Improvement</i></li><li>⊕ <i>Mitigation of Environmental Impacts</i></li><li>⊕ <i>Improvement of Urban Mobility</i></li></ul>	<ul style="list-style-type: none"><li>⊕ <i>Intermodal Transport Development</i></li><li>⊕ <i>Transport Infrastructure Management</i></li><li>⊕ <i>Traffic Management</i></li></ul>
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## Introduction

According to the “General Framework Agreement for Peace in Bosnia and Herzegovina” (signed in 1995), The Inter-Entity Boundary Line divides Bosnia and Herzegovina (BiH) into two entities, each with a high degree of autonomy: the Federation of Bosnia and Herzegovina (FBiH) and the Republic of Srpska (RS). In addition, in 1999, Brčko District of BiH (BD) was established as a single administrative unit of local self-government existing under the sovereignty of BiH<sup>1</sup>. Consequently, three Governments in BiH have the executive power: the Council of Ministers of BiH and the two Entity Governments.

“EU accession is a strategic priority for BiH. Aspirations of BiH to acquire full membership in the EU are based on a wide political consensus. The Declaration on Special Relations with the EU was adopted in 1998, and in 1999 Decisions by the BiH Council of Ministers and the Parliamentary Assembly, As well as the statement made by heads of political parties. The Parliamentary Assembly adopted Conclusions which, inter alia, present the presence of a full political consensus that EU membership is the highest possible priority for BiH”<sup>2</sup>. Last year, BiH and EU signed the Stabilization and Association Agreement (SAA), which is the first step to EU integration.

National Agency for Statistics estimates that some 3.8 millions of people live in Bosnia and Herzegovina (the last census was held in 1991!). BiH is a middle-income country, with small economy, where approximately two thirds of GDP is created in the service sector, 25 percent in industry, and less than 10 percent in agriculture, hunting, fishing and forestry. The recent encouraging economic growth may be stopped if there is no progress towards a more democratic and efficient country by implementation of the comprehensive reform agenda.



Figure 1: Map of Bosnia and Herzegovina

<sup>1</sup> The Statute of the Brčko District of BiH: Article 1.

<sup>2</sup> BiH Directorate for EU Integration: EU Integration Strategy, 2006.

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

The fundamental objective of this report is to provide all available information on transport related R&D capacity and infrastructure in Bosnia and Herzegovina. This should enable cooperation between Western Balkans Countries (WBC) and researchers from European Union (EU) countries, making realization of regional Research & Development (R&D) priorities more feasible.

The other objectives of this report are:

- ✦ To identify transport related research priorities in the country;
- ✦ To identify transport related research problems in the country.

This report is based on data collected from many different sources regarding:

- Organisations responsible for R&D funding in the country;
- Main research performers in BiH, both from the public and private sector;
- Reports and studies related to research and transport in BiH.

List of institutions and research performers in the country was prepared on the basis of internet research as well as from the Consultant's personal database (the list of used web sites is given in Appendix 1). The next step was sending out the questionnaire to the research performers in the country, aiming at collection of data from relevant resources (needed for the quantitative assessment).

At the same time, the Consultant was started qualitative assessment procedure. The basis for the qualitative assessment has been the following:

- ✓ Stabilization and Association Agreement between European Commission and Bosnia and Herzegovina;
- ✓ European Commission Working Document: Bosnia and Herzegovina 2008 Progress Report {COM (2008) 674};
- ✓ Document of the European Bank for Reconstruction and Development: Strategy for Bosnia and Herzegovina;
- ✓ The World Bank Strategy in Bosnia and Herzegovina / Country Brief 2008;
- ✓ Transport Policy of Bosnia and Herzegovina from 2007 to 2020 (DRAFT);
- ✓ South-East Europe Core Regional Transport Network Development Plan - Five Year Multi Annual Plan 2009 to 2013;
- ✓ Central Bank of Bosnia and Herzegovina: Annual Report 2008;
- ✓ Agency for statistics of BiH "Thematic Bulletin 10: National Accounts", Sarajevo 2008;
- ✓ Audit Office for the Institutions of FBiH: „Report for 2007 - Ministry of Education and Science of FBiH“;
- ✓ The Supreme Office for the RS public sector auditing "Report for 2007 - Ministry of Science and Technology of RS".

## **2. The Transport S&T system in Bosnia and Herzegovina**

### 2.1 The Bosnia and Herzegovina and Transport policy framework

In 2006, the Ministry of Transport and Communications of BiH (MoTC), with the support from the European Bank for Reconstruction and Development (EBRD) and the World Bank was started preparation of Transport Sector Policy and Strategy for BiH. The both documents were drafted in 2007, but the process of its adjusting is still ongoing.

The Governments in BiH have also been supported by EU and International Financial Institutions (IFIs) through the following different (transport related) project types:

- ✓ Harmonization of transport laws (and bylaws) with European legislation and standards and strengthening of institutions in transport sector (e.g. Twinning Assistance to the Ministry of Communications and Transport of Bosnia and Herzegovina in Implementation of the Bosnia and Herzegovina Law on Railways);
- ✓ Renewal and upgrade of the existing transport infrastructure (e.g. rehabilitation of roads and railway network, marking of the Sava River);
- ✓ Preparation and implementation of new transport infrastructure projects (e.g. Motorway on Corridor Vc through BiH, Čapljina - Podgorica railway line).

#### 2.1.1 The overall Transport policy framework

Bosnia and Herzegovina's Transport Policy should foster economic and social development of the country enabling sustainable development of the BiH transport system. This means that social, economic and environmental benefits of each mode of transport should be recognized, ensuring the highest possible level of quality. Moreover, the transport system should be based on a healthy competition, where all participants will be protected by an adequate regulatory framework fully harmonized with the regulations and standards of the EU.

The main objective of "Protocol on Land Transport", as an integral part of SAA, is to promote the cooperation between BiH and EU on land transport (particularly on transit traffic) and to ensure that the land transport between and through the territories of BiH and EU is developed in a coordinate manner.

The Protocol also includes the specific section called "Rail and Combined Transport", which stipulates the adoption of coordinated necessary measures by BiH and EU for the development and promotion of rail and combined transport. This section of the Protocol also refers to the aspects of infrastructure in particular to the capacity improvements required to support such development, which may call for substantial investment. However, EU is ready to support this over its financial institutions and lending instruments including the additional resources, which is also clearly expressed in this Protocol.

As long as the country transportation sector does not reach required development level, the regional development is expected to be basis for gradual transition towards European integrations. In that light, BiH participate in South East Europe Transport Observatory (SEETO), which is established by the Memorandum of Understanding for the development of the Core Regional Transport Network (MoU) in 2004. SEETO is a shared platform for governments of Western Balkans Countries and the European Commission to identify development priorities on the "core regional transport network".

BiH has also been successful in implementation of the Common Aviation Area (ECAA) Agreement.

#### 2.1.2 The elements of Transport research policy making

There is no national research strategy and the best way to describe research sector in the country is to quote findings from the "Bosnia and Herzegovina 2008 Progress Report": "There is no integrated research policy and budgetary allocations to support research are very limited. Research policy is still designed and implemented at Entity level, with no real coordination. No progress has been made on

preparing a country-wide policy. The research infrastructure remains poor. Preparations have started in the area of education and research. Sustained efforts remain necessary.”

## 2.2 Overview of Transport research activities

The most of the R&D projects in the country have been performed by Universities. BiH scientific-research organisations participated as partners (within consortia) in Fifth and Sixth Framework Programs (FP5 and FP6). However, out of 46 successfully completed projects and 21 still in the process of implementation, where organizations from the country have participated, there was not a single transport research project.

That means all transport research project in the country mostly depend on limited Governments' budget resources and private companies' funds. It is estimated that international sources participate with just 10% in funding of transport R&D activities in BiH. Appendix 2 of this Report gives review of budget allocations in 2007 for both Entity ministries (Ministry of Science and Technology of RS and Ministry of Education and Science of FBiH).

The National Institute for Accreditation (BATA) has so far granted 14 testing laboratories, five calibration laboratories, two certification bodies and eleven inspection bodies. Unfortunately, none of these are transport research related. Moreover, the existing researchers' databases are not well organized (e.g. [www.registar.nub.ba](http://www.registar.nub.ba)), so it is hard to find the key players in the sector.

The most important relevant institutions (political, administrative, higher education, public/private research institutions) in the country:

	Name	Postal address	Web-site
1.	Ministry of civil affairs of BiH	TRG BiH 1 71000 Sarajevo (Bosnia and Herzegovina)	<a href="http://www.mcp.gov.ba">www.mcp.gov.ba</a>
2.	Ministry of Education and Science of FBiH	Stjepana Radića 33 88000 Mostar (FBiH – BiH)	<a href="http://www.fmon.gov.ba">www.fmon.gov.ba</a>
3.	Ministry of Science and Technology of RS	Trg Republike Srpske 1 78000 Banja Luka (RS - BiH)	<a href="http://www.vladars.net">www.vladars.net</a>
4.	University of Sarajevo Mechanical Engineering Faculty IC Engines and Vehicles	Vilsonovo šetalište 9 71000 Sarajevo (FBiH - BiH)	<a href="http://www.mef.unsa.ba">www.mef.unsa.ba</a>
5.	University of Banja Luka Mechanical Engineering Faculty	Vojvode Stepe Stepanovića 75 78000 Banja Luka (RS - BiH)	<a href="http://www.masinstvobl.rs.sr">www.masinstvobl.rs.sr</a>
6.	University of Sarajevo Civil Engineering Faculty	Patriotske lige 30 71000 Sarajevo (FBiH - BiH)	<a href="http://www.gf.unsa.ba">www.gf.unsa.ba</a>
7.	University of Sarajevo Faculty of Traffic and Communication	Zmaja od Bosne 10 71000 Sarajevo (FBiH - BiH)	<a href="http://www.fsk.unsa.ba">www.fsk.unsa.ba</a>
8.	Faculty of Traffic Doboj	Vojvode Mišića 52 74000 Doboj (RS - BiH)	<a href="http://www.stf.fantasticno.com">www.stf.fantasticno.com</a>
9.	IPSA Institute Sarajevo	Put života bb 71000 Sarajevo (FBiH - BiH)	<a href="http://www.ipsa-institut.com">www.ipsa-institut.com</a>
10.	Civil Engineering Institute "IG"	Kralja Petra I Karađorđevića 92-98 78 000 Banja Luka (RS - BiH)	<a href="http://www.institutig.com">www.institutig.com</a>
11.	CETEOR Sarajevo	Put života bb 71000 Sarajevo (FBiH - BiH)	<a href="http://www.ceteor.ba">www.ceteor.ba</a>

## 2.3 Key drivers of Transport research

### 2.3.1 Main Transport sector trends in Bosnia and Herzegovina

Restructuring of the transport sector in the country, including introduction of a sound transport infrastructure projects funding and harmonization of existing laws and bylaws toward the EU “Acquis”, have been started (e.g. implementation of so called “the First and the Second Railway Package” for the railway sector). This process (supported by EU) should enable more efficient transport operations based on market mechanisms, resulting with a cost efficient transport system.

On the other hand, as the important role of transport in future social and economic development of the country has been recognized, one of the biggest challenges for Governments in BiH for the next period should be to ensure institutional and financial sustainability of the entire sector.

The priorities on a higher, regional level have already been defined through MoU and in TEM and TER Master Plan<sup>3</sup>. Furthermore, the Entities’ Governments have been developing transport infrastructure strategies (setting up the priorities on Entity level). However, in spite of significant investment during the last decade, the overall condition of transport infrastructure in the country is still not at a satisfying level:

- ✓ There are just some 28 km of modern motorways in operation;
- ✓ On the most of the railway network, train speed is limited to 70 km/h for passenger trains and to 50 km/h for freight trains;
- ✓ There are no modern transshipment terminals in the country;
- ✓ The most of the infrastructure in the river ports is obsolete.

Therefore, the transport infrastructure reconstruction and development will stay among top priorities in the sector for the following period. Adequate allocation of competencies among the Governments in the country is a prerequisite for coordinated development of transport infrastructure (as stated in “The Protocol of Land Transport”).

Transport demand has been growing recently, so another challenge for the Governments in the country would be sustainability of the entire transport system, respecting numerous social and environmental aspects.

For example, the motorization rate in the country is relatively high (780 000 registered road vehicles in 2007), but at the same time, road safety is far behind desired level (430 people were killed and almost 12 000 people injured in road traffic accidents in BiH in 2007). This means that positive effects of increased mobility have been decreased by socio economic impacts of road accidents.

Finally, once achieved improvements of transport system (including river Sava navigation) should initiate development of intermodal transport in the country fostering the benefits of each mode of transport (at the lowest possible cost).

The other open issues include transport infrastructure management and traffic management, especially improvement of urban mobility.

### 2.3.2 Main socio-economic challenges in Bosnia and Herzegovina

According to BH Agency for statistics, the nominal value of the Gross Domestic Product (GDP) in 2007 was KM 21.64 billion, what is a 13.2% of a nominal growth (compared to 2006). The estimated growth rate of the real GDP was approximately 6.8%, so the growth trend from previous years has continued. “This growth rate is at the same level as in comparable transition countries and indicates gradual real convergence with the EU, but with a still considerable gap (approximately 33% of average GDP of EU25) in relation to the EU countries’ levels.”<sup>4</sup>

<sup>3</sup> United Nations Economic Commission for Europe: Trans European Motorways (TEM) and Trans European Railways (TER).

<sup>4</sup> CBBH: 2007 Annual Report

Table 2.1: Gross domestic product (GDP) of Bosnia and Herzegovina (current prices)

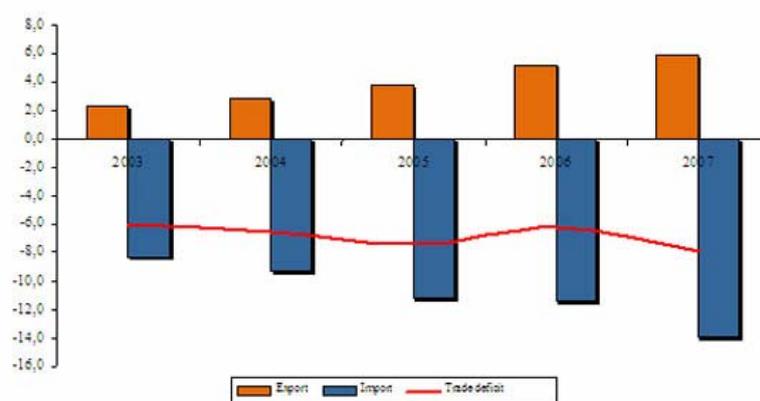
	2003	2004	2005	2006	2007
Nominal GDP (in millions KM)	14,505	15,786	16,927	19,121	21,647
Nominal GDP (in millions USD)	8,367	10,020	10,763	12,262	15,143
GDP per capita (in KM)	3,785	4,109	4,405	4,976	5,634
GDP per capita (in USD)	2,184	2,607	2,800	3,181	3,941
Population (in thousands)	3,832	3,842	3,843	3,843	3,842
Annual average exchange rate KM/USD	1.7335	1.5755	1.5728	1.5594	1.4295
Real GDP (growth rate in %)	3.0	6.3	3.9	6.7	6.8

Source: Agency for statistics of BiH "Thematic Bulletin 10: National Accounts", Sarajevo 2008

The monetary policy of the Central Bank of Bosnia and Herzegovina (CBBH) still remains under the currency board arrangement (*Euro* as the anchor currency) and high growth of real GDP in last years (see Table 2.1) have been stimulating both consumption and investment in the country. On the other hand, growing trade deficit and the significant increase in public spending generate disproportion in the current account, creating the additional (external) financing needs. So, e.g. the BiH trade deficit has raised in 2007 for more than 20% compared to the previous year.

Table 2.2: Import and export figures

Exported from BiH to	2003	2004	2005	2006	2007
EU 27	51,0%	53,4%	54,7%	59,7%	57,3%
CEFTA	35,0%	38,6%	37,2%	32,9%	35,8%
Other countries	14,0%	8,0%	8,1%	7,4%	6,9%



Imported in BiH from	2003	2004	2005	2006	2007
EU 27	55,7%	50,7%	53,9%	53,0%	47,8%
CEFTA	25,9%	28,4%	27,9%	28,0%	29,1%
Other countries	18,4%	20,9%	18,2%	19,0%	23,1%

Source: CBBH

The private sector's contribution to GDP stands low, while privatization of state-owned companies has not been completed yet and the most important trading partners of BiH are European Union and the countries implementing Central European Free Trade Agreement (CEFTA) - (see Table 2.2).

The Government's Second Economic and Fiscal Programme for 2008-2010 aimed to consolidate the fiscal position and to improve the quality of public finances, but concrete policy measures (with the exception of National Fiscal Council inauguration) are still missing and the budgets adopted for 2008 have not been in line with the above stated. As a consequence, "fiscal risks are mounting, in particular in the Federation of BiH, where large commitments on social spending were made in a context of decelerating budget revenues. In addition, the public sector wage policy has been relaxed at all government levels through wage increases and wage indexation mechanisms that weaken fiscal sustainability and external competitiveness."<sup>5</sup>

In addition, global financial crisis have already started to reflect on BiH economy, mostly sectors of building/construction and industry. Following the previously presented brief analysis of main socio-economic challenges in BiH, for purpose of getting a wider picture, there is also given a fragment from "The World Bank / Bosnia and Herzegovina / Country Brief 2008".

*BOX 1: The most pressing economic reform challenges can be classified into two broad categories:*

*\* Improving competitiveness and fostering private sector-led growth. Faster reforms are needed for Bosnia and Herzegovina (ranked 119th by Doing Business 2009) to compete with other transition economies, as it strives for deeper integration into European and global markets. These reforms include faster registration of businesses, an improved inspection system, effective implementation of bankruptcy laws, and further privatization of strategic enterprises. The government should continue with the reforms of the tax system and should particularly aim to reduce the rates of social contributions. Further efforts towards the creation of a single economic space and a single domestic market are also needed.*

*\* Improving the effectiveness and efficiency of public spending should also be made a priority. Existing expenditure levels are too high and their structure is largely neither growth nor poverty-reduction oriented. The composition of spending can be improved by introducing better control of the public wage bill, improving the targeting of social assistance to benefit the most needy, and increasing the efficiency and level of public investments. Above all, the efficiency of spending should be enhanced through better controls and performance-based budgeting. To improve public sector efficiency, fiscal coordination ought to be strengthened between various levels of government. The capacity of public administration also ought to be strengthened should it be able to cope with these challenges.*

### **3. Integration of Bosnia and Herzegovina in the European Research Area in the field of Transport**

ERA „is a vision about coordinating national research activities and policies and creating an internal market for research with the free circulation of researchers, ideas and technology“.<sup>6</sup> On November 24, 2008 Bosnia and Herzegovina and EU signed Memorandum of Understanding (MoU) on the association of Bosnia and Herzegovina to the "Seventh European Framework Programme".

National Contact Point in BiH for EU Framework Programmes has been established. This Project supported by the Austrian Development Cooperation, Open Society Fund BiH and Ministry of Civil Affairs of BiH should foster integration of Bosnia and Herzegovina into the European Research Area.

<sup>5</sup> EC Working Document: Bosnia and Herzegovina 2008 Progress Report

<sup>6</sup> EC COM(2007)161: Green Paper 'The European Research Area: New Perspectives'

## 4. SWOT analysis of the Transport research capacity in Bosnia and Herzegovina

### 4.1 Strengths

**Established National Contact Point (NCP):** responsible for the provision of information and advice on participation of BiH researchers from academia and industry, in Europe's largest fund for research and technological development - European Framework Programme for RTD.

**R&D Institutions are willing to improve the current situation:** all stakeholders are ready to support development of transport research in the country.

### 4.2 Weaknesses

**Strategic approach is Missing:** There is no strategy (neither National nor Entity) for development of R&D in transport sector.

**Insufficient and fragmented funding:**

- ⊕ There are no dedicated funding schemes for R&D;
- ⊕ The existing funding schemes are not integrated and allocation of resources is not coordinated between different levels.

**Poor research infrastructure, especially for technological R&D.**

### 4.3 Opportunities

**Memorandum of Understanding on the association of Bosnia and Herzegovina to the Seventh European Framework Programme** enables:

- ⊕ Dedicated funding (without the country budgets' restrains);
- ⊕ International cooperation of researchers from the country;
- ⊕ Identification and dissemination of EU best practices.

### 4.4 Threats

**Global financial crisis**

## 5. Transport research priorities for Bosnia and Herzegovina

### 5.1 Transport Research priorities on the basis of the country's readiness\*

#### 5.1.1 Road Traffic Safety Improvement

More than 400 people get killed in road traffic accidents in the country. Socio economic costs of road traffic accidents are significant (up to 2% of GDP in some European countries). On the other hand, there are appropriate human resources and research infrastructures ready to pursue basic research and development in the country e.g. statistical analysis of existing road traffic accident data, "black spots" (road sections, intersections and tunnels) audits etc.

#### 5.1.2 Mitigation of Transport Related Environmental Impacts

Transport is one of the biggest sources of unwanted noise, especially in the urban areas. Moreover, transport significantly contributes to air pollution (including greenhouse gas emission). Although, there have been a lot of transport infrastructure projects in the country, where mitigation measures are proposed, the existing level of applied measures is not satisfying. As some of the key R&D institutions in the country already have the equipment for noise level and air quality measuring, this could be the starting point of research in this area.

#### 5.1.3 Improvement of Urban mobility

It is estimated that around one third of BiH population live in urban areas. Transport infrastructure in urban areas has not been developed in line with growing motorization and mobility in the country. So, comprehensive urban transport study would be prepared (for Sarajevo and Banja Luka as soon as possible) aiming to provide quality public transport solutions (e.g. integration of rail passenger transport into a sustainable urban transportation system). The local researchers have already participated in preparation of numerous traffic studies using the methodology and tools (software) recommended by research institutions from EU.

### 5.2 Transport Research priorities on the basis of future potential\*\*

#### 5.2.1 Intermodal Transport Development

Albeit the most of the freight in BiH has been transported by land, a recent study<sup>7</sup> results have shown "de-facto non-existence of intermodal transport in the country". Experiences from abroad would be more than welcome in order to continue work on development of intermodal transport in the country.

#### 5.2.2 Transport Infrastructure Management

Research on improvement of infrastructure and asset management, introduction of new concepts of design, construction and maintenance as well as new technologies (e.g. information systems for road condition) has been ignored so far. This should change in the following period and the regional cooperation could be the key to start research in this area.

#### 5.2.3 Traffic Management

Introduction of Intelligent Transport Systems (for management of traffic flows) should improve traffic safety and reduce emission. Optimization of transport networks including parking areas and pedestrians traffic is another area of expertise where regional cooperation should be promoted.

\* Definition: **Readiness**: priorities for which the country has the appropriate human resources and research infrastructures in order to pursue research and development

\*\* **Potential**: priorities that are considered attractive for the country and have future potential.

However, the level of readiness and capacity to pursue research and development is currently low.

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<sup>7</sup> „Study on Intermodal Transport in BiH“ DB International GmbH, Vienna Consult, 2008

Appendix 1

List of visited web sites (for the purpose of quantitative assessment)

<http://www.ncp-fp.ba>

<http://www.westbalkanresearch.net/>

<http://www.erawestbalkanplus.net/>

<http://registar.nub.ba>

<http://aida.developmentgateway.org/aida/SearchDo.do?sourcePage=countrySector&iso3=BIH&sector=7900>

Appendix B

Funding of R&D activities in Bosnia and Herzegovina

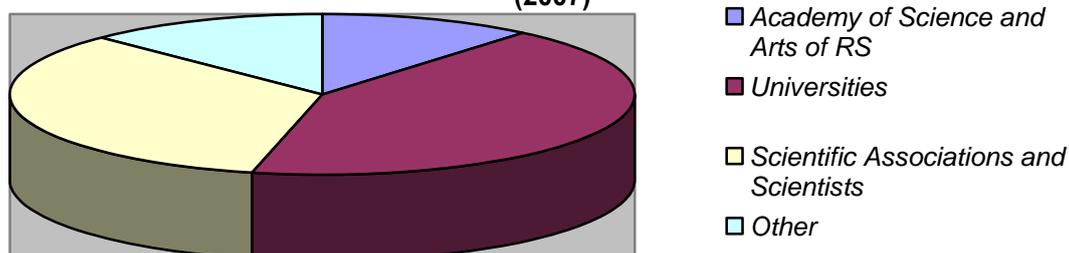
Republic of Srpska

B1: Ministry of Science and Technology of RS – Excerpt from Annual Budget for 2007

	<b>Current Expenditures</b>	<b>424.053 KM</b>	<b>216.812 €</b>
614100	Agency for Information Society	410.000 KM	209.627 €
614100	Academic and Research Network of RS - SARNET	1.200.000 KM	613.543 €
614100	Scientific Institutions related Projects: - Academy of Science and arts of RS - Universities - Public and University Library of RS - Scientific/Research Institutes - Scientific Associations and Scientists	2.725.000 KM	1.393.254 €
614100	Technology related Projects - Innovations - Equipment for Technological Development - Other Technology related activities	283.300 KM	144.847 €
	<b>Current Grants</b>	<b>4.618.300 KM</b>	<b>2.361.272 €</b>
	<b>Capital Expenditures</b>	<b>45.000 KM</b>	<b>23.008 €</b>
	<b>TOTAL:</b>	<b>5.087.353 KM</b>	<b>2.601.092 €</b>

Source: <http://www.vladars.net/sr-SP-Latn/Vlada/Ministarstva/mnk/PPP/Pages/GodisnjiPlanIBudzet.aspx>

**Current Grants for Scientific Institutions related Projects in RS (2007)**



Source: <http://www.gsr-rs.org/izvjestaji/2008/RI025-08.pdf>  
(The Supreme Office for the RS public sector auditing)

Federation of BiH

B2: Ministry of Education and Science of FBiH – Excerpt from Annual Budget for 2007

	<b>Current Expenditures</b>	<b>1.680.283 KM</b>	<b>859.105 €</b>
	<b>Current Grants</b>	<b>7.693.482</b>	<b>3.933.570 €</b>
1.	Grants to the other Governments <sup>8</sup>	3.134.389	1.602.570 €
2.	Grants to non-profit organizations	4.559.093	2.331.000 €
	<b>Capital Grants</b>	<b>6.430.000</b>	<b>3.287.568 €</b>
1.	Grants to the other Governments	1.430.000	731.139 €
2.	Grants to non-profit organizations	5.000.000	2.556.429 €
	<b>Capital Expenditures</b>	<b>99.398</b>	<b>50.821 €</b>
	<b>TOTAL:</b>	<b>15.903.163</b>	<b>8.131.062 €</b>

Source: [http://saifbih.ba/javni-izvj/budzet/pdf/Izvj\\_FM\\_Obr\\_nauka\\_2007.pdf](http://saifbih.ba/javni-izvj/budzet/pdf/Izvj_FM_Obr_nauka_2007.pdf)  
(Audit Office for the Institutions of FBiH)

The biggest grants for the Science in FBiH in 2007 were as follows:

- ⊕ 909.199 KM for scientific/research and R&D projects in FBiH.
- ⊕ 550.000 KM to foster scientific institutions and “research of importance for FBiH”.
- ⊕ 200.853 KM for the scientific/research institutions’ infrastructure (out of 1.772.897 KM total for “the scientific work of importance for FBiH” in 2007).

The rest of the grants presented in the previous table (especially capital grants) have been mostly used for the purpose of Education (e.g. reconstruction of schools, subsidies for students, etc.).

<sup>8</sup> Mostly to the Cantonal Governments (FBiH consist of 10 administration units - Cantons).