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CETRA 2016
4th International Conference on Road and Rail Infrastructure
23–25 May 2016, Šibenik, Croatia

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TRANSPORT NETWORK DEVELOPMENT
IN SOUTH-EAST EUROPE

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Abstract

Trans-European Transport Network (TEN-T) is a planned set of road, rail, air and water transport networks in the European Union, including multimodal transport. Relevant legal acts define transport corridors, main seaports, river ports and airports together with principal EU border crossings in order to improve internal connectivity and connections to neighbouring countries, as well as to set the foundation for the enlargement of the Union to the Western Balkans countries. The official extension of the TEN-T was intensively prepared during years 2014 and 2015: the network should extend to Albania, Bosnia and Herzegovina, Montenegro, Kosovo, Macedonia and Serbia. The announcement of the expansion contributes to the available financing opportunities, mainly to the possibility of co-financing projects from EU funds and international financial institutions. It is expected that investments in traffic infrastructure are to be intensified, primarily in the road sector, in motorways and expressways, while railways are to follow. This development will have an impact on traffic flows in Croatia since the main corridors in Western Balkan countries continue or supplement the corridors in our country, so it is the right time to re-examine the Croatian strategic spatial and traffic documents and to adapt them to the anticipated new circumstances. Another reason for the interest in capital infrastructure projects in neighbouring countries is the opportunity for Croatian consultants, designers and builders to capitalize their experience and references acquired through the years of intensive motorway construction on domestic market. Paper presents an overview of trends in neighbouring countries which are about to enter a comprehensive and core TEN-T network, as well as the review of the options for co-financing through European funds.

Keywords: TEN-T, transport network, transport corridors, financing, infrastructure

1 Introduction

Investing into transport infrastructure in Croatia, during the programme period 2014-2020, is focused on infrastructure required for modern, competitive and interconnected European economy that will facilitate flow of people and goods not only in Croatia, but towards other parts of Europe as well. According to the national Operational Programme Competitiveness and Cohesion, for the period 2014. – 2020. (OPCC), the investments in the Republic of Croatia will also focus on improving accessibility of towns and isolated areas and on enhancing territorial cohesion [1]. Integration of Croatian transport network into European transport network and enhanced regional connections should promote the development of national economy, improve passenger and freight traffic as well as traffic safety and decrease adverse environmental impacts.

On the other hand, improving connectivity within the Western Balkans, as well as between the Western Balkans and the European Union, is a key factor for growth and jobs and will bring clear benefits for the region’s economies and citizens. The Western Balkans Six (WB6)
Albania, Bosnia and Herzegovina, the former Yugoslav Republic of Macedonia, Kosovo, Montenegro and Serbia, has made the connectivity agenda one of its highest priorities, with a special emphasis on the preparation and financing of regional infrastructure investment projects, but also on the implementation of technical standards and soft measures such as aligning/simplifying border crossing procedures, railway reforms, information systems, road safety and maintenance schemes [2]. The European Commission will, via the Western Balkans Investment Framework (WBIF), co-finance mature transport projects from the TEN-T (Trans-European Transport) Core Network, together with loans from the international financial institutions.

2 Extending the Trans-European Transport Network (TEN-t)

The TEN-T guidelines for the development of the trans-European transport network are defined by the European Parliament Regulation 1315/2013 [8]. The network has two layers: the “core network”, which carries the most important passenger and goods flows; and the “comprehensive network”, which ensures access to the core network. Regulation 1315 contains maps with networks of infrastructure for railway transport, inland waterway transport, road transport, maritime transport, air transport and multimodal transport, both for EU member states and indicative extension to neighbouring countries.

Figure 1 Trans-European Transport Network (TEN-t) – indicative extension to the Core Network Corridors [2]
Corridor approach is intended to be used as an instrument to coordinate different projects on a transnational basis. That instrument should not be understood as a basis for the prioritisation of certain projects on the core network. Core network corridors cover the most important long distance flows in the core network and are intended, in particular, to improve cross-border links within the Union. Core network corridors are to be focused on modal integration, interoperability, and a coordinated development of infrastructure, in particular in cross-border sections and bottlenecks.

In 2015, WB6 and EU officials tentatively identified three core network corridors to be extended for the Western Balkans as well as priority projects along sections of these corridors for possible EU funding over the next six years [2]. Extending the core network corridors to the Western Balkans should provide closer integration with the EU as well as the basis for leveraging investment in infrastructure, such as EU support through the Western Balkans Investment Framework and the Connecting Europe Facility.

The core network corridors, once completed, will provide quality transport services for citizens and businesses, with seamless integration within the region as well as with the EU. European Coordinators should facilitate the coordinated implementation of the core network corridors. Investments in infrastructure will be primarily financed from European Structural & Investment Funds (ESIF) and the funds available through Connecting Europe Facility (CEF).

Indicative extension of the Core Network Corridors in the Western Balkans, are shown in Figure 1, as presented in Connectivity Agenda in 2015 [2]. The Commission has adopted new maps of the extension of the trans-European transport network (TEN-T) to Iceland, Norway and the countries of the Western Balkans in February 2016. These indicative maps were prepared with the concerned countries and endorsed at the Western Balkans 6 Summit in Vienna on 27 August 2015.

Figure 2 Trans-European Transport Network (TEN-t) map fragment, comprehensive & Core Network: Roads, ports, rail-road terminals and airports, comprehensive and core network [7]
From Croatian perspective, the most important feature of the map presented is anticipated extension of the Mediterranean Corridor, marked in green in Fig 1. The Mediterranean Corridor links the Iberian Peninsula with the Hungarian – Ukrainian border. Its extension into the Western Balkans connects Central Europe, specifically Hungary and eastern Croatia to Bosnia and Herzegovina and the Adriatic sea. New branch of Mediterranean Corridor can be recognized as Adriatic – Ionian Transport Corridor, which officially became the part of priority transport network. For the Western Balkans region, these maps reflect an important agreement with the EU as regards the connectivity within the region and with the EU as a whole. This core network will provide a common reference for deploying and coordinating investments and traffic optimisation measures along strategic transport routes [7]. Possible EU funds that can be used in WB6 are Instruments for Pre-Accession Assistance (IPA), Connecting Europe Facility (CEF), macro regional programmes and The Western Balkans Investment Framework.

3 The Adriatic – Ionian Transport Corridor

The Adriatic-Ionian Transport Corridor (AITC) is historic traffic corridor, which stretches along the Adriatic and Ionian sea coast, parallel with the coastline. The corridor runs from Trieste to Kalamata thus linking seven countries: Italy, Slovenia, Croatia, Bosnia and Herzegovina, Montenegro, Albania and Greece as well as important Adriatic and Ionian ports.

Figure 3  The Adriatic – Ionian Motorway alignment and main seaports along its route, with main transversal corridors towards regional capitals.
AITC involves complementary development of all traffic modes and infrastructures (road, rail, sea, air) and the elements of integrated transport system. However, the road system would initiate development processes and speed up other modes projects. For that reason, the Adriatic – Ionian motorway general alignment is presented in Figure 3 (total length approx. 1550 km). Considering the importance of this corridor for economic development of the Republic of Croatia the sections of some national motorway routes within the corridor have already been completed. Some other sections, which coincide with the future Adriatic-Ionian motorway, are scheduled for construction [3].

Most of the length of the Adriatic – Ionian motorway in Croatia coincides with the route of the most important (but not the busiest) Croatian motorway – A1. It connects two largest Croatian regions and two largest cities – Zagreb and Split, extending southwards towards Dubrovnik. In the future, remaining parts of the highway around the city of Rijeka are to be built, including the connection with the Slovenian transport network in the north. Another part of a new highway along the Adriatic corridor currently under consideration is southern section from the port of Ploče to Dubrovnik and further, to the border with Montenegro. It has not yet been defined whether a southern section of Adriatic motorway will pass through Croatian territory south of Ploče (as it is anticipated in national spatial plans) or through south-east Bosnia and Herzegovina near Trebinje (as it is proposed by some experts).

Future development of the projects aiming to improve the connections between countries sharing Adriatic and Ionian shores might be enhanced by the regional strategy. The European Council endorsed the European Union Strategy for the Adriatic and Ionian Region (EUSAIR) in September 2014. The Adriatic and Ionian Region is a functional area primarily defined by the Adriatic and Ionian Sea basin. EUSAIR is built on four thematic pillars, one of them being the “Connecting the Region” [6].

4 Investments in WB6 transport infrastructure

According to SEETO (South-East Europe Transport Observatory) documents, total investments on the TEN-T Comprehensive Network to the Western Balkans in the time period from 2004 to 2015 amount to 12 billion Eur. Approximately half of this amount is already disbursed (projects are completed), while other half is committed (project under execution).

![Figure 4](https://example.com/figure4.png)

**Figure 4** Investments in TEN-T Comprehensive network to the Western Balkans by source of funding (left) and by the transport mode (right).

Trend of high investment in road infrastructure in the Western Balkans is present continuously from 2004, while the trend of rather small investments in rail infrastructure projects is changing slowly [4]. Airport infrastructure, with 3,6% of total investments in the TEN-T Comprehensive Network investments holds the third place, after Road and Rail. The predominant
source of funding is through Concession Agreements. Transport modes with the lowest level of investments are Inland waterway infrastructure and Seaport infrastructure. When observing investments in TEN-T Comprehensive network to the Western Balkans by source of funding, the highest share (39%) is financed through IFI (international financial institutions) loans. EU funds share is expected to grow due to new connectivity agenda and the new IPA 2014-2020 fund, to app. 2%. Concession financing is focused on Airport infrastructure projects (app 3%). Other sources, with a share of 27%, consists mostly of China’s Exim Bank, Russian Loans, Abu Dhabi fund, Kuwait Fund, OPEC are rising in the last years.

5 Programmes and plans in Croatia

Operational Programme Competitiveness and Cohesion (OPCC) defines planned activities which aim to increase territorial cohesion and connectivity to EU road network and eliminate bottlenecks in investment priority 7a – Supporting a multimodal Single European Transport Area by investing in the TEN-T. These activities aim to complete remaining missing links in the network and introduce environmental features where needed. Transport sector in the OPCC is designated as priority 7, Connectivity and Mobility, with the amount of HRK 9,9 billion from EU funds being allocated for the priority goals [1].

The OPCC was developed in accordance with draft National Transport Strategy – a document which determines a medium and long-term development by increasing the quality of transport system and the transport infrastructure in the Republic of Croatia (the Strategy) [5]. The general goal of the Strategy is to define measures which would lead to an efficient and sustainable transport system. The objectives of the Transport Development Strategy are improvements in following areas:

- connectivity and coordination with neighbouring countries
- passengers’ long distance accessibility inside Croatia
- regional connectivity enhancing territorial cohesion
- accessibility to and within the main urban agglomerations
- freight accessibility inside Croatia
- Transport System Organisational and Operational setup.

In order to address the defined objectives, a set of measures has been identified in each transport sector: rail (42 measures), road (35 measures), aviation (27 measures), inland waterways (22 measures), maritime (32 measures), urban and regional (22 measures). Finally, document presents alternative groups of measures for each objective. It could be stated that the document fails in recognizing clear and achievable priorities, ending with complex matrix instead of clear statements.

6 Conclusion

It is clear that the projects which are expected to be implemented in the Republic of Croatia in the transport sector in the years to come need to be based on the National Transport Strategy and should follow the corridors defined by the TEN-T. The financial crisis which had a significant impact on Croatian economy and heavy debt accumulation in the years before the crisis are the key reasons for narrowing the possibility of financing infrastructure projects from the national budget. It is therefore expected that a great majority of investments in infrastructure will be primarily financed from European Structural & Investment Funds (ESIF) and the funds available through Connecting Europe Facility (CEF). Potential projects shall be coordinated with EU strategies aiming to improve the connections between neighbouring countries. Development of traffic infrastructure on main corridors in Western Balkan countries, which supplement corridors in Croatia, gives us the motive to encourage the cooperation between Croatia and WB6 in planning future traffic networks.
References


