Network Planning versus Corridor Implementation in the Western Balkans Region

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Abstract

The present paper focuses on the problem of missing transport links in the Western Balkans. A brief description of the political background is followed by an indication of the poor state of the region's transport infrastructure. There are two main approaches to solving these infrastructure problems and improving the provision of transport in the region. These are described as the "Corridor approach" and the "Network approach". The analysis evaluates the benefits of each approach and makes suggestions for the future.

1. Problem Statement – Transport in the Western Balkans

The term "Western Balkans" refers to the following six countries: Albania, North Macedonia, Serbia, Montenegro, Bosnia and Herzegovina, and Kosovo. To understand the region's transport problems, some political background is needed. Below is a brief account of the relevant key points.

In 2014 the political leaders of the Western Balkan countries met for the first time in Berlin under the term 'Western Balkans Six '(WB6). The aim of the meeting was to bring a new dynamism to regional cooperation by building and connecting transport and energy infrastructure as one of several drivers for growth and employment. This "Connectivity Agenda" was not only designed to improve links among the Western Balkan countries, but also with the member countries of the European Union. Significantly, the agenda has received EU endorsement and support from the outset. In more precise terms, an indicative extension of the Trans-European Transport network (TEN-T) in the Western Balkans, including the core network, the core network corridors and pre-identified priority projects has been defined since 2017. Extending the TEN-T core network corridors to the Western Balkans ensures better integration with the EU as well as a basis for leveraging investment in infrastructure projects, such as gaining EU support through the Western Balkans Investment Framework (WBIF) and the Connecting Europe Facility (CEF).

Improving connectivity within the Western Balkans, as well as between the Western Balkans and the European Union, is a key factor for growth and employment. It will bring clear benefits to the region's economies and citizens. However, it is not only infrastructure that will enhance connectivity. The implementation of technical standards and soft measures, such as aligning and simplifying border crossing procedures, railway reforms, information systems, road safety and maintenance schemes, railway unbundling, and third-party access are also highly important and should not be ignored.

In 2017, the EU along with the countries of the Western Balkans agreed on the establishment of a "Transport Community" between them. The key objective was the deeper integration of the Western Balkan region with the EU transport market through the implementation of common standards, network efficiency, and improved quality of service offered to citizens and businesses. More specifically, connectivity implies focusing on investments that improve transport systems and their infrastructure, which in turn strengthens the countries' competitiveness. Additionally, infrastructure projects contribute to building metaphorical bridges in the region, fostering positive neighbourly relations that support peace and reconciliation.

2. Trans-European Transport Network (TEN-T)

A direct consequence of the political approach was the extension of the European TEN-T planning into the Western Balkans region. TEN-T is the result of the EU task to build a modern integrated transport system that strengthens the EU's global competitiveness. It should also be able to meet the challenges linked to sustainable, smart, and inclusive growth. The first step towards this goal is ensuring a well-functioning infrastructure that can transport people and goods efficiently, safely, and sustainably. Today, the EU's physical infrastructure counts over 217,000 km of railways, 77,000 km of motorways, 42,000 km of inland waterways, 329 key seaports and 325 airports. Through the Trans-European Transport Network policy, the EU aims to build an effective EU-wide transport infrastructure network. EU funding programmes and initiatives make financial support available to the projects implementing the TEN-T.

As a follow up to various high-level conferences and meetings, EU leaders and the Prime Ministers of the Western Balkans gathered in Brussels on 21 April 2015. They adopted a Joint Statement to reaffirm their commitment to connectivity, good neighborly relations, regional cooperation, and European integration. In this Statement, the extension of the TEN-T to the Western Balkans region was agreed upon. (Western Balkans 6 meeting in Brussels, 2015). Following legal action by the EU, the TEN-T Regulation today includes maps indicating

a general layout of the future multimodal transport network in the Western Balkans. (Connectivity Agenda, 2015)

In 2017, the EU decided to extent the concept of the "core Corridors" also to the region of the Western Balkans. (REGULATION (EU) No 1316/2013, 2013). It should be highlighted that the Corridors' concept, in the meaning of the 1316 Regulation, has to do rather with financing than pure transport planning. In this respect, as far as transport is concerned, lists of projects along priority corridors have been identified. These projects form the core of the transport infrastructure needs of the region that the EU could co-finance. The main instrument in this effort is the 'Western Balkans Investment Framework' (WBIF), which is a regional blending facility supporting EU enlargement and socio-economic development in Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia.

The WBIF was established in 2009 as a joint initiative of the European Commission, the Council of Europe Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, and several bilateral donors. The World Bank Group, the KfW Development Bank and the AFD (Agence Française de Développement) subsequently joined the Framework. Accordingly, over the past 10 years, the transport sector in the Western Balkans has received considerable investment.

Despite such backing, a Regional Balkans Infrastructure Study - Transport (REBIS) concluded that 30% of the region's comprehensive road network requires immediate maintenance and/or upgrade. It also identified capacity constraints on more than 30% of the rail network and stressed the urgent need for rail rehabilitation and maintenance. In 2015, the Western Balkans' leaders agreed on the Core Transport Network for the region and the indicative extension of the EU Core Network Corridors in the Western Balkans. This will enhance connectivity within the region and between the region and the EU. The South-East Europe Transport Observatory (SEETO) has estimated priority projects' costs at €13.9 billion, while the Vienna Institute for International Economic Studies found that such a package could boost regional GDP growth by up to one percentage point per year over 15 years and help create more than 200,000 jobs.

The signing of the Transport Community Treaty in 2017 encourages better planning of transport investments and procedural streamlining. The new 'Transport Community Secretariat' (TCS) is based in Belgrade and replaces SEETO.

3. Which Approach? Network Planning Versus Corridor Implementation

Since the WBIF continues to provide grants to prepare and build projects, the key question is not whether projects can be funded, but which approach to the development of transport in the Western Balkans should be considered optimal. This issue could be raised otherwise as follows:

- Should the principal goal be the rapid construction of a transport corridor that would link the main cities of the Western Balkans with the EU to strengthen the growth of the connected poles?
- Or should the main goal be the regional development of the area; with the aim of spreading the relevant social, political, and wider economic benefits to throughout the region?

The term "network" refers to the framework of routes within a system of locations, identified as nodes. A route is a single link between two nodes that are part of a larger network which can refer to tangible routes such as roads and rail lines, or less tangible routes such as air and sea corridors. (Rodrigue et al, 2018).

Alternatively, if we use the terminology of classic Ekistics (Doxiadis and Papaioannou, 1974, p.9):

> a network can be described as the natural and man-made connective system which serves and integrates settlements, such as roads, water supply and sewerage systems, electrical generating and distribution facilities communications facilities, and economic, legal, educational, and political systems.

On the other hand, a transport corridor specifically determines the routes, transport nodes, and their access links that accommodate linear transportation of passengers and freight. In its policy, the European Union provides that corridors are an instrument to facilitate the coordinated implementation of networks (REGULATION (EU) No 1316/2013, 2013).

The EU transport policy currently includes strategies to realize the internal market, and further develop a trans-European network together with major transport corridors aiming at a better-connected Europe. However, there are many reasons to differentiate a network strategy from a corridor strategy. Expected economic impacts have a concrete role in the process. When examining the motivations and reasons for a Network or a Corridor, one may distinguish the varying goals to be met with the application of each of the two alternatives.

An effective transport network aims at realizing a final goal that could satisfy all political, economic, and social expectations of a region. Safety, interoperability, speed and comfort in a network of adequate density can safeguard the best conditions for high level passengers' movements, as well as efficient freight movements. On the other hand, the main advantage of a corridor is usually the simplicity in its operation. The operators of a corridor can establish several mechanisms for the refinement of its function, such as efficient governance ("one-stop-shop" can be a good example of efficient governance), and many other cooperation tools to overcome problems like border crossings, etc. The lack of alternatives in the connection is the most important problem in the operation of a corridor. Any consideration of the problem should look seriously into the economics of the region and the business case for the project. Indeed, the transport sector is an important component of the economy and a common tool used for development. High density transport infrastructure and highly connected networks are commonly associated with high levels of development. When transport systems are efficient, they provide economic and social opportunities

and benefits that result in positive effects including better accessibility to markets, employment opportunities, and additional investments.

The present paper elaborates on the various factors that may describe the study problem, such as the political situation of the region, economic scarcity, availability of funds, etc. The existing infrastructure will be described and the parameters that the EU takes into consideration for planning the "new" TEN-T after 2024 will be examined.

4. Preliminary Results

The analysis of the optimum strategy for the transport development in the Western Balkans should concentrate on an approach that would ensure the compliance with a wide variety of parameters as follows:

For the whole transport system

- Administration building to eliminate all operational barriers
- Integration among transport modes (inter-modality)

For railways

- Measures to achieve safety and interoperability

For roads

- Increase of capacity - elimination of bottlenecks along critical sections

Air and maritime

- Increase of technical and administrative capacity

The realization of transport infrastructure, especially in the region of the Western Balkans where there is a significant delay in investments on transport, is based on the existence of proper financing. As a first step, a project list must be proposed, which should have the acceptance of the States of the Western Balkans. Then, the involvement of the interested International Financial Institutions (IFIs) should be ensured to safeguard a smooth financing curve for at least 10 years.

This strategy would allow reaching the targets set by the EU and the Western Balkans States for 2030.
Nevertheless, two main issues related to the Western Balkans planned projects should be considered:

- Firstly, the foreseen end date of several planned projects is unknown, mainly due to uncertainties over the financing sources. In these cases, 2030 has been assumed as the expected completion date.

- Secondly, the expected impacts of the projects on the infrastructure technical parameters must be clearly defined.

Today, the building of the Western Balkans infrastructure is based on a strategy that foresees the realization of Corridors, and the main reason is the lack of sufficient financing.

- The creation of one main Corridor is a first priority: Extension of the Orient-East Corridor/OEM into the Western Balkans territory. (European Commission DGMOVE, December 2017)
- A second priority is the creation of a second Corridor: the Mediterranean Core Network Corridor. (European Commission DGMOVE, January 2018)

Both Corridors are important for the region, but the main goal to develop a balanced transport network in the whole area of the Western Balkans is put on hold. That is, for at least 10-15 years the main goal of creating the proper transport environment needed to achieve the critical parameters mentioned above will remain secondary.

An in-depth analysis of the consequences of this strategy would underline a number of results that might have serious consequences for the global development of the region. The results would naturally show that any planning decision focusing solely on the construction of one or two transport Corridors linking the region of the Western Balkans with Central and Western Europe will have mainly monetary benefits for the latter. The orientation of this strategy towards freight movements will result in sufficient rates of profitability, as infrastructure of lower standards and cost will serve large volumes of goods. On the other hand, more costly solutions that will create a complete transport network in the region of the Western Balkans will serve the wider economic and social needs of the region, by contributing to the smooth development of the global economy promoting efficient trade, passengers and freight movement, environment, etc.

5. Conclusion

The main conclusions of this paper are as follows:

Transport is a principal factor for the economic development of the area, at both microeconomic and macroeconomic levels. It also has important social effects, which should not be ignored.

A strategy that directs the investments to projects which aim solely at building transport corridors can be effective from a monetary point of view (as it promotes "bankable" projects), however it neglects the fundamental needs of the region.

The "bankability" of projects along a main transport corridor can be considered as most likely because they refer to (a) high transportation volumes (mainly international and transit) but also (b) to freight transportation, that can be served with infrastructure of lower quality.

Other projects, such as city bypasses, connections of main nodes within the territory of the Western Balkans (not serving international flows), construction of a safe secondary road network, are not - for the moment at least - eligible for international funding in the context of the today's strategy.

The goal of the development of a complete transport network as a first priority would have considerable positive impacts, such as:

- Creation of routes enabling new interactions between economic entities in the region.
- Improvements in the time performance, notably in terms of reliability; this would be a major improvement of the quality of passenger transport, also implying a better utilization of existing transportation assets.
- Access to a wider market range where economies of scale in production, distribution and consumption can be improved. Increase in productivity from the access to a larger and more diverse base of inputs (raw materials, parts, energy or labor) and broader markets for diverse outputs (intermediate and finished goods).

In this paper we have addressed the question of which approach would be optimal for the region of the Western Balkans. Given the above analysis, we may conclude that an appropriate strategy for the promotion of projects for the development of a complete network, together with the development of transport corridors, would be a better solution for both its economy and societies. It is evident, however, that the strategy of developing transport corridors alone, while neglecting other important projects is more feasible for the decision-makers of the EU. Further, we must also take into consideration "western" interests and the monetary effectiveness of this strategy for the International Financial Institutions that have the financial burden of this strategy.

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Keywords

Western Balkans; EU Transport Policy; Trans-European Transport Network (TEN-T); Network planning; Corridor development; social needs; monetary effectiveness