Laketa, Marko; Jugoslav, Anicic; Zaric, Mira; Vukotic, Svetlana

Article

Corridors: Development opportunity of Serbia

UTMS Journal of Economics

Provided in Cooperation with:
University of Tourism and Management, Skopje

Suggested Citation: Laketa, Marko; Jugoslav, Anicic; Zaric, Mira; Vukotic, Svetlana (2011) : Corridors: Development opportunity of Serbia, UTMS Journal of Economics, ISSN 1857-6982, University of Tourism and Management, Skopje, Vol. 2, Iss. 2, pp. 125-138

This Version is available at:
http://hdl.handle.net/10419/105350

Standard-Nutzungsbedingungen:
Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:
Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.
CORRIDORS: DEVELOPMENT OPPORTUNITY OF SERBIA

Marko Laketa
Jugoslav Anicic
Mira Zaric
Svetlana Vukotic

Abstract:
Long-term vision of the Republic of Serbia is for it to be: territorially determined and regionally balanced, of sustainable economic growth and competitive, socially coherent and stable, infrastructurally equipped and accessible in terms of transportation, of preserved and protected natural and cultural heritage, high-quality living environment and functionally integrated into environment. High-quality transportation infrastructure is one of the main conditions of linking and integration into a broader environment. The aim of this paper is to show, based on the identification of the effects expected (internal and external), that Corridors 7 and 10, as logistics resources, are a development opportunity of Serbia and that its realization will multiply contribute to the achievement of long-term development goals of Serbia.

Key words: corridors, sustainability, integration, accessibility, balanced development.

INTRODUCTION

Serbia has a favourable transportation-geographic, but simultaneously a very sensitive geo-strategic position. By analyzing and assessing geo-strategic and geo-political, natural and other values, as well as comparative advantages of Serbia in broader European space, there can be drawn conclusions on the significance of Serbia in transportation connecting of Western and Central Europe with South-eastern Europe and Middle East, i.e. significance of Serbia in connecting the countries of Central Europe – Srednje Podunavlje towards South Adriatic, Aegean and Black Sea, i.e. Mediterranean. Serbia is one of the countries in Danube region that insufficiently uses this potential, which is a key development axis that integrates the Republic of Serbia with Europe in the east and west.

Geo-strategic position of Serbia has completely changed in the last twenty years. The disintegration of the former Yugoslavia has enabled regaining of independence and

\[1\] This paper is a part of research on the project no. 47007 “Geography of Serbia”, which is funded by the Ministry of Science and Technological Development of the Republic of Serbia.

\[1\] Marko Laketa, Ph.D., Associate Professor; Jugoslav Anicic, Ph.D.; Svetlana Vukotic, Ph.D., Faculty of Entrepreneurial Business, Belgrade; Mira Zaric, Ph.D., Transport Institute CIP, Belgrade, Serbia.
international legal subjectivity to Serbia, after more than 80 years, but simultaneously it has brought about new neighbours, which significantly influenced on mobilization of strategic territorial potentials, among which geo-strategic position has a very important place.

**Table 1. Basic demographic data of the Republic of Serbia**

<table>
<thead>
<tr>
<th>Territory</th>
<th>Surface in km²</th>
<th>Number of settlements</th>
<th>Population according to census from 1991</th>
<th>Population according to census from 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Republic of Serbia</td>
<td>88361</td>
<td>6167</td>
<td>7576837</td>
<td>7498001</td>
</tr>
<tr>
<td>Central Serbia</td>
<td>55968</td>
<td>4251</td>
<td>5606642</td>
<td>5466009</td>
</tr>
<tr>
<td>AP Vojvodina</td>
<td>21506</td>
<td>467</td>
<td>1970195</td>
<td>2031992</td>
</tr>
</tbody>
</table>

1. Republic of Serbia without the data for AP Kosovo and Metohija
2. Population in census from 1991 was calculated by methodology of census from 2002.
3. Republic of Serbia with data for AP Kosovo and Metohija

Immediate environment of the Republic of Serbia are local and regional territorial units of neighbouring countries that are lying along the border and cooperate with adjacent municipalities in the Republic of Serbia. That is cross-border or trans-border form of international territorial/spatial cooperation. In the wide environment, the Republic of Serbia is situated in South-eastern Europe, i.e. on Balkan Peninsula, which represents a framework for transnational cooperation.

**VISION OF SPATIAL DEVELOPMENT OF THE REPUBLIC OF SERBIA**

In terms of spatial development, long-term vision of the Republic of Serbia is to be: territorially determined and regionally balanced, of sustainable economic growth and competitive, socially coherent and stable, infrastructurally equipped and accessible in terms of transportation, of preserved and protected natural and cultural heritage, high-quality living environment, and functionally integrated into the environment (Law on Spatial Plan of the Republic of Serbia 2010).

Gradual approach to vision of spatial development of the Republic of Serbia requires the achievement of basic goals, among which the most important, according to their significance, are:

- More balanced regional development and improved social cohesion
- Regional competitiveness and accessibility
- Sustainable use of natural resources and protected and improved living environment
- Protected and sustainable used natural and cultural heritage and landscape
- Spatial-functional integration into the environment.

Functional linking to regions in the environment, i.e. territorial cooperation of the Republic of Serbia, will be developed in accordance with European principles of cross-border, interregional and transnational cooperation.
Acquisition of goals, as well as priorities in critical economic and uncertain political situation can be assumed in the context of two scenarios:

− Scenario of recessive growth;
− Scenario of sustainable spatial development;

Scenario of recessive growth with elements of crisis management implies small structural changes, continuation of negative development movements, slow and partial resolution of problems of spatial development, under the auspices of global economic crisis. This scenario simulates the existing state with the assumption that it will not last longer than 3–4 years;

Scenario of sustainable spatial development implies sustainable economic growth and balanced regional development, regional spatial organizations of cities, rural area, settlement, efficient and rational use of resources, increase of territorial capital, higher standard and development, better living conditions of population, preserved nature and living environment. This scenario simulates the assumed transformed and regulated country that could be expected in pre-accession phase of joining the European Union.

CONCEPT OF SPATIAL DEVELOPMENT OF THE REPUBLIC OF SERBIA

By Spatial plan of the Republic of Serbia (2010-2021), we observe the perspective of long term sustainable spatial development with respecting rather difficult and largely uncertain internal (financial and economic crisis, incomplete legislation) and external factors of development (international relations and attitude of international community towards Kosovo and Metohija). Spatial plan determines the framework of future spatial development oriented towards two temporal horizons. Horizon of real opportunities is observed according to institutional, organizational and financial opportunities until 2014. Horizon of assumed opportunities is observed according to the scenario by which it is expected that Republic of Serbia becomes a member of EU before 2020. In both temporal horizons, Spatial plan enables the achievement of goals aimed at long-term vision, higher balance than economic, demographic, social and physical-environmental development at state and regional level. Basic planning determination is long-term more balanced and sustainable spatial development of a country and all its constitutive territorial units by mobilizing development potentials, greater engagement and development of territorial, social, human and cultural capital and all regional units (regions and areas).

THE IMPORTANCE OF TRANSPORT CORRIDORS FOR THE ACHIEVEMENT OF DEVELOPMENTAL GOALS OF SERBIA

Infrastructure is one of the main instruments of linking and integration into a broader environment. Infrastructural corridors for the countries of Eastern Europe are defined in meetings in 1994 on Cyprus and 1997 in Helsinki – as ten pan-European infrastructural corridors, of which two go through the Republic of Serbia – corridor 7 and corridor 10.

Trans-state cooperation of the Republic of Serbia, i.e. its regions and areas, will be achieved around big trans-state systems in accordance with signed conventions on cooperation of the Republic of Serbia with the countries along those systems. In this
way, the Republic of Serbia should confirm and improve its geo-strategic position in European environment.

Pan-European transport corridors are multimodal corridors, which implies the combination and linking of several forms of transport and means of transport (linking the road, railway, river and air transport) in order to identify, highlight and relate the best characteristics of individual form of transport with basic goal of achieving high-quality services (which particular forms cannot offer independently) with the least possible negative impact on the living environment.

Necessary condition for realization of multimodality of corridors and multimodal terminals with the philosophy of logistics centres. In addition to standard services (entrance of goods, internal transport, storage, sorting, commissioning and exit of goods), logistics centres also deal with administrative services, then additional services: control and assurance of quality, processing of goods, packaging and repackaging, assembly, recycling, advertising jobs etc. (Georgijevic, Bojic, and Bojanic, 2011).

Water Corridor or Corridor 7 is one of the most important European roads, and along with Rhine and Maine it is the most important waterway on the Continent. Basically, it consists of the river Danube, in the length of 2845 km. The most important ports on this corridor are: Ulm, Regensburg, Passau, Linz, Vienna, Bratislava, Budapest, Novi Sad, Belgrade, Vidin, Rousse, Giurgiu, Braila, Galati and Izmail. Corridor 7 is a part of TEN-T (Trans-European Network for Transport), which consists of networks of roads, railways, river roads and ports, seaports and airports throughout the EU with neighbouring countries and yet non-existent connectors. Projects that should support this network are encouraged by the member countries of EU. Priority are the observation of the existence of “bottlenecks” and organization of projects by which they would be removed, particularly on the Danube, key waterway in TEN-T (Danube Strategy in Serbia).

Figure 1. Corridor 7 – Water Corridor

(© The European Commission TINA VIENNA – Transport Strategies, March 2002)
Corridor 7 is the only connection of Serbia as a continental country with the Black Sea and through the channel Maine-Danube with the Rhine and North Sea, Baltic Sea and Atlantic Ocean. Danube is a connection of Serbia with other Danube countries: Croatia, Hungary, Slovakia, Austria, Germany and downstream, with Romania, Bulgaria, and Ukraine by its stream of 2,845 km, of which 588 km flows through Serbia (sector from Bezdan to Timok). Danube region, according to the “Strategy of EU for Danube region” (Danube Strategy in Serbia), includes 16 countries (8 members of EU and 6 non-members). Having in mind that Danube flows into Black Sea, Strategy should be coherent in relation to the perspective of Black Sea. With more than a hundred million of people, and as one fifth of EU surface, this field is of vital importance for Europe.

By determining the Pan-European Corridor, its international and continental significance is confirmed, and it represents exceptional potential for the Republic of Serbia. Network of inland waterways of Serbia also includes the river Sava with its 207 km of flow through Serbia and the river Tisa in the length of 169 km, as international tributaries to the axis Rhine-Danube. Hydro system Danube-Tisa-Danube, in the length of 600 km, is a local network on inland waterways of Vojvodina, but also an excellent potential of future network of European waterways.

„Strategy of EU for Danube region” is described in two documents: in (1) Announcement of European Commission to other institutions in EU, and (2) accompanying Action Plan which represents an annex to the Announcement (Danube Strategy in Serbia).

Main questions which the Strategy deals with are: Transport, Energy and Culture and tourism.

Four pillars support the main issues. Each includes priority, different fields of action. Those are the following:

1. Connecting the Danube region
   - Improvement of mobility and multimodality of transport
     (a) Inland waterways
     (b) Road, railway and air connections
   - Encouragement of development of sustainable energy sources
   - Promoting the culture and tourism, contacts among the people

2. Protection of living environment of Danube region
   - Filtration and maintaining the quality of waters
   - Environmental risk management
   - Protection of biological species, landscapes and quality of air and land

3. Construction of prosperity in Danube region
   - Development of knowledge society through scientific studies, education and information technologies
   - Support to competitiveness of enterprise, including the development of clusters
   - Investments in people and skills

4. Strengthening the Danube region
   - Strengthening the institutional capacities and cooperation
   - Joint work on the promotion of safety and struggles against organized and major crime.
This strategy encourages integrated approach. For example, in addition to the fact that improvement of transport infrastructure has a positive impact on elements such as business environment, attractiveness of cities and regions or life quality of citizens, it also has the impact of landscapes, biodiversity or air pollution. This cannot be observed separately, but they need to be aligned with each other in order to achieve the most sustainable solution.

Integrated answer to the Main questions – Action Plan is the core of the Strategy suggested. By this we emphasize: better and more intelligent connections for the purpose of mobility, trade and energy; effect on environmental and risk management; cooperation in the field of safety. Common work on innovations is also beneficial, in tourism, information society, institutional capacities, as well as work with marginalized communities.

According to key provisions from Action plan, the projects:
- need to deal with determined priorities and need to have support,
- should have the impact on micro-region (or at least its bigger part),
- should be real and
- need to be coherent and to complement each other.

We should have in mind that suggesting the projects for Action plan is not simultaneously the requirement for financing, so the inclusion into the Plan is not an absolute guarantee for financial means before the feasibility and profitability of the project is achieved.

In recent years, Republic of Serbia was actively included in implementation of Danube strategy. Based on General plan and feasibility studies for inland waterway transport in Serbia (2006.), we have identified development projects on priority water flows: Danube, Sava, Tisa and DTD channel. The realization of 6 such projects (value higher than 150 million of EUR) is in progress. Since June 2010, Serbia with Slovenia coordinates the development of intermodal, railway and air transport in Danube region. In this phase, about 30 projects were nominated (projects in progress or planned projects, which are waiting to be officially adopted from the part of European Commission).

Projects mentioned can be financed from national/regional funds, funds of EU, such as Structural funds2, Instrument for Pre-Accession Assistance (IPA) and European Neighbourhood Policy Instrument (ENPI), international financial institutions or private investors, in accordance with the appropriate frameworks and practice. Recently, for the needs of countries of Western Balkan, additional efforts are invested in order to improve the coordination and association of instruments for subventions and loans through West Balkans Investment Framework (WBIF).

Corridor 10, in its basic direction from Salzburg to Thessaloniki, connects eight, and if we include the branches – another six states. Of the total length, which is 2,360 km, through Republic of Serbia flows 874 km (37% of corridor). Corridor 10 is connected with Corridors 4, 5, 7 and 8.

Corridor 10, as the southeast transport corridor of Europe should also provide:
- Better mutual connections between member countries of EU, as well as the states through which it flows
- High-quality transport route towards southeast of Europe and Middle East to the countries of West Europe
- Relief of the transport route Europe – Russia – Middle East

2 Structural funds are available to all member states
- Benelux countries, with main European ports, achievement of the function of “feeder” for main corridors
- Access to “traditional” markets for French-English part of EU
- The development of economic activity to the countries through which it goes through revival of investment activities.

**Figure 2. Corridor 10 – Road-railway corridor**  
(Copyright © The European Commission TINA VIENNA – Transport Strategies, March 2002)

For us, the reconstruction and, particularly, development of transport activity on Corridor 10 are rather significant, particularly because of the following (Jovanovic, Cvetanovic, and Zaric 1999):

- By the participation in processes of development of transport infrastructure on our part of Corridor 10, we give the undoubted contribution to overall stability, because it is about strategic route of broader European significance;
- Through processes of reconstruction and development of transport infrastructure on Corridor 10, we contribute to the resolution of already traditionally present transport problem of “Balkan’s bottleneck”;
- By the development of Corridor 10, we introduce something new into our own transport system: new standards in technological and business sense, by which the transformation of entire railroad would be improved;
- Initiation of development of secondary network for “powering” the Corridor in order to improve micro availability of services;
- Creation of technical-technological and institutional possibilities for unravelling of intermodalism;
- Opening the possibilities for unravelling of entrepreneurship in the field of service activities by applying contemporary (telematic) technologies in transport and accompanying activities;
- Increase of macro availability of European market (and market in general) with the reduction of costs;
− Entering new technologies into transport sector;
− Contribution to overall ecology.

We should particularly emphasize the following, in our opinion, perhaps the most important function of Corridor 10: contribution to overall stability and development of this area. Corridor 10 connects the following countries: Germany, Austria, Slovenia, Croatia, Hungary, Serbia, Bulgaria, Macedonia and Greece. Diverse countries in the aspect of economic development are connected: countries with about 24-25 thousand US$/per capita (Germany and Austria), countries with 9-12 thousand US$/pc (Slovenia and Greece), countries with 4-5 thousand US$/pc (Croatia and Hungary), then countries with about 1500 US$/pc (Serbia, Macedonia and Bulgaria) - "rich and poor".

In foreign trade exchange, countries that are directly on Corridor 10 are among the first 20 most common partner countries with domestic enterprises and they have a share of about 35% in exports and about 25% in imports of Serbia.

**Table 2.** Achieved export and import of the Republic of Serbia with 20 most common partner countries with domestic enterprises (in 000 Euro)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>7424756</td>
<td>5956390</td>
<td>15408495</td>
<td>11324864</td>
</tr>
<tr>
<td>Total</td>
<td>% 100</td>
<td>% 100</td>
<td>% 100</td>
<td>% 100</td>
</tr>
<tr>
<td>20 first countries</td>
<td>6533040</td>
<td>5093457</td>
<td>9360884</td>
<td>7209188</td>
</tr>
<tr>
<td>Germany</td>
<td>772507</td>
<td>623416</td>
<td>1788414</td>
<td>1313213</td>
</tr>
<tr>
<td>Austria</td>
<td>309818</td>
<td>207652</td>
<td>386932</td>
<td>381774</td>
</tr>
<tr>
<td>Slovenia</td>
<td>338639</td>
<td>245078</td>
<td>425589</td>
<td>376910</td>
</tr>
<tr>
<td>Croatia</td>
<td>294342</td>
<td>199231</td>
<td>375949</td>
<td>304848</td>
</tr>
<tr>
<td>Hungary</td>
<td>221493</td>
<td>182504</td>
<td>548132</td>
<td>460373</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>168792</td>
<td>140891</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Macedonia</td>
<td>333934</td>
<td>306211</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Greece</td>
<td>143283</td>
<td>96365</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>Countries on Corridor 10</td>
<td>2582808</td>
<td>2001348</td>
<td>3525016</td>
<td>2836758</td>
</tr>
</tbody>
</table>


Note: Mark ... does not mean that there was no exchange, but that values are not included in the source mentioned, because the volume of exchange is not achieved to the criteria "the biggest 20".

In realized transport flows in international (remote) land transport in 2008 in Serbia (28.8 million tonnes), the share of export is 30.6%, and import 30.9% and transit 38.5%. In 2009, as one of the consequences of world crisis, it has come to the drop in transport volume by 21.2%, which was largely contributed by the decrease of transit (27.4%).

Of the total international land transport of Serbia, more than 77% of goods are transported through road and railway routes on Corridor 10: 66.8% in export, 73.2% in import and 90.1% in transit (2008).

In total international land goods transport, when it comes to Serbia, road transport still dominates and increases its share from 61.7% in 2008 to 66.0% in 2009 (in
exports from 71.7% to 73.9%, in imports from 60.8 to 65.3%, in transit from 54.4% to 59.6%).

In the spirit of new EU transport policy, Corridor 10 should (with other corridors of Pan-European significance) contribute to the achievement of global goal: change of „modal split“ through the increase of share of railroad in total realized work of all forms of transport.

Table 3. Total international land goods transport – Serbia\(^1\) (in 000 tonnes)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Railroad</td>
<td>2500</td>
<td>1869</td>
<td>3497</td>
<td>2612</td>
<td>5067</td>
<td>3260</td>
<td>11064</td>
<td>7741</td>
</tr>
<tr>
<td>Road transport</td>
<td>6336</td>
<td>5284</td>
<td>5421</td>
<td>4915</td>
<td>6043</td>
<td>4801</td>
<td>17800</td>
<td>15000</td>
</tr>
<tr>
<td>Total</td>
<td>8836</td>
<td>7153</td>
<td>8918</td>
<td>7527</td>
<td>11110</td>
<td>8061</td>
<td>28864</td>
<td>22741</td>
</tr>
</tbody>
</table>

| Railroad   | 1270        | 949         | 2504        | 1870        | 4591         | 2954         | 8365       | 5773       |
| Road transport | 4632    | 3863        | 4028        | 3652        | 5421         | 4306         | 14080      | 11821      |
| Total      | 5902        | 4812        | 6532        | 5522        | 10011        | 7260         | 22445      | 17594      |

| Serbia     | 66.8        | 67.3        | 73.2        | 73.4        | 90.1         | 90.1         | 77.8       | 77.4       |


Note: Mark „...“ does not mean that there was no exchange, but that values are not included in the source mentioned, because the volume of exchange is not achieved to the criteria “the biggest 20”.

Planning the development of transport infrastructure is a complex process conditioned by a series of different factors that are in direct or indirect connection. From the aspect of the concept of development (countries, regions, fields), these systems are also cause and effect. The aim of defining transport corridors, planning and reservations of space for their realization, is the linking of localities, settlements, regions, states, preservation and improvement of environmental values and regional accessibility.

Therefore, it is necessary to adhere to certain principles of developing transport systems:

- Economic feasibility, social feasibility and environmental acceptability;
- Balanced development of network from spatial, technical and technological aspect;
- Orientation to users, providing the availability and competitiveness;
- Integration with the environment and other forms of transport;
- Orientation towards environmental protection.

Guided by such principles, when planning transport systems, it is necessary to take care of linking insufficiently accessible parts of Serbia, occupying as less as possible space and surfaces for building and exploitation of transport systems, environmentally justified and more cost-effective systems. In that sense, it is necessary to encourage the
development of railroad transport and assuming the leading role in flows of the transport of passengers, particularly the load, through development of multimodal node in places where it is possible to connect railroad and river transport.

In transport corridors 7 and 10, which go through Serbia, it is necessary to define other infrastructure systems of electroenergetics, telecommunications, gas transport, oil and other fluids, for the purpose of complete equipping of all transport systems and their facilities, as well as more rational use of space.

Development of interregional connections implies previous achievement of a higher level of coherence and reduction of interregional differences, which can be a serious obstacle for future spatial development of the Republic of Serbia.

In demographically emptied Serbia, strategy of defining transport corridors needs to have in mind the interests of balanced and sustainable development, as well as the significance of accessibility of particular regional units.

Accessibility of territory of the Republic of Serbia and its regional units is one of the key criteria for measuring the success of spatial development and it is one of the most important indicators for determining spatial aspects of transport systems (Law on Spatial Plan of the Republic of Serbia 2010). In the analysis of accessibility, it is necessary to draw a line between local or regional accessibility and interregional and international accessibility. In regional or local accessibility, we analyze shorter distances that reflect regional interdependences and conditionalities of rural and urban areas. Spatial accessibility can be reflected in relation to the use of time, energy and resources. Quantity and quality of the existing regional infrastructure, and distance (travel time) of population, play a major role in it. Here is where secondary networks gain in importance. Development of transport network can differently influence the spatial distribution of population and economic activities. It can, on one hand, contribute to their spatial distribution, through the improvement of transport accessibility in relation to centres of international significance, and on the other hand, improvement of transport network can cause even bigger problems, in sense that long distances to connecting points on transport network lead to the formation of “empty interspaces”. Those spaces have limited possibilities of access, which leads to stagnation in development. Such outcomes will be avoided by adjusting the densities of transport networks, regional and subregional, so that they can follow the expansion of national networks. This means that by increasing the speeds with national networks, dimensions of interspace and significance of secondary network also increase, on one hand, while distances between regions and urban centres serviced by this network proportionately decreases, on the other hand.

Analyzed indicators of regional accessibility in the territory of Serbia are:

- Potential accessibility to roads (describes potential accessibility of area based only on road transport and it is measured by densities of road network);
- Potential accessibility by railroad (describes potential accessibility of area based only on railroad transport and it is measured by densities of railroad network);
- Time to markets, i.e. centres of functional areas (based on accessibility via railroad and road transport and it is measured by time of travelling expressed through a number of citizens in thirty-minutes isochronous from the centres of functional areas);
- Time to the closest regional centres (based on accessibility via road transport and it represents average time of travelling to the closest regional centres).

Level of potential accessibility by the regions, as a set of four indicators (combined indicator) in aggregate ranking has given the following results, by the regions:
- Severnobacki, Juznobacki, Juznobanatski, Sremski, City of Belgrade, Podunavski and Pomoravski region are evaluated as the regions with accessibility far above the average;
- Accessibility above the average have the Srednjebanatski, Rasinski and Nisavski region;
- Average values for accessibility characterize Severnobanatski, Zapadnobacki, Kolubarski, Sumadijski, Braničevski, Topolicki and Jablanicki region;
- Below the average are Zlatiborski, Moravicki, Raski, Pirotski amd Pcinjski region and
- Far below the average are Macvanski, Borski and Zajecarski region.

Corridor 10 will be crucial for South Serbia in connecting a big number of villages (municipality of Leskovac) and development and functional integration of municipalities Trgovište, Presevo and Bujanovac into social and economic system with environment, it will be crucial for South Serbia. Developmental projects at regional level, with the inclusion of all local communities in their realization can contribute to economic and social revitalization of this area, which will also require special efforts of the Republic in strengthening the system of social infrastructure.

City of Belgrade, the strongest administrative and functional area of the Republic of Serbia, with intellectual, scientific and professional capacities of the highest rank in the Republic of Serbia, with relatively developed infrastructure and economic potentials, particularly in the sector of information technologies, communications and high accumulation industries, transport economy and tourism and particularly significant geostrategic position on Danube and Sava.

City of Novi Sad will have the role of developmental centre on intersecting the corridors 7 and 10, with the assumed functional linking to the city of Belgrade, by which this area will be one of the “gates” in this part of Europe, rather significant for overall development of the Republic of Serbia;

Three important urban centres (Jagodina, Cuprija and Paracin), stronger functionally linked in urban whole, and with stronger role of Despotovac and Svilajnac should support the development of Eastern Serbia, its connection in the direction of Corridor 10 and connection into an organic whole of regions of exceptional regional qualities, from Beljanica, Kučajski Mountains, Resava and Resavski Cave to the monasteries and other natural and cultural resources for development of high class tourism, with limitation that represents military training polygon Pasuljanske livade.

Spatial integration and functional connectedness of regional units, necessary for achieving bigger territorial cohesion of the Republic and for strengthening developmental capacities and bigger competitiveness of all its constituent parts, points to the identification of developmental zones that are already formed or expected in the future. In that aspect, three developmental zones will be dominant:

1. Danube zone, i.e. wider space is functionally oriented or aimed at the river Danube, including the zones along the rivers Sava, Tisa and Morava, as its tributaries. Space that is inextricably linked with Podunavlje in the West, in the direction of Hungary, Croatia, Slovakia, Austria and Germany, and in the East, in the direction of Bulgaria, Romania, Ukraine and Moldavia, and through tributaries with other surrounding countries, represents a key development axis for spatial integration of the Republic of Serbia with Europe. Economy, transport, tourism, cultural cooperation and other forms of connecting the population along this development axis will be supported by plans and projects linked to Corridor 7, i.e. common development strategy, based on
interstate cooperation of Danube countries and regions. Key points in this developmental direction will be Danube gates, i.e. cities of Novi Sad, Belgrade, Pancevo and Smederevo (Projekt: Platforma logistike i intermodalnog transporta u gravitacionoj zoni luke Smederevo) with their port potentials and other systems relied on Danube river. Port of Belgrade should have a special role in that system as logistics centre for organization and distribution of integral transport, functionally related with ports in Novi Sad, Pancevo and Smederevo. In addition to transport, important place will also have the projects and cooperation in protecting natural and cultural goods between the Republic of Serbia and the Republic of Croatia in zone of Apatin and Sombor, i.e. Osijek, and national parks Djerdap and Iron Gate between Serbia and Romania;

2. **Zone of Corridor 10 along the Morava river**, which connects the most developed parts and urban centres of the Republic of Serbia, with the perspective of relating the Republic of Serbia in the direction of North (towards the node in Budapest) and South (towards Skopje and Thessaloniki). Industry, tourism and contemporary services are concentrated in this zone and they will be developed on the principles of sustainable development and make a cohesion spine of the Republic. In that aspect, particular emphasis will be on development of integral system of development and use of the valley of Velika Morava and strengthening developmental capacities in that zone. The completion of Corridor 10 in the southern direction and quality linking with local and regional units will be spatial-developmental priority, where the biggest urban centres Novi Sad, Belgrade, Kragujevac and Nis will be crucial from the standpoint of development of integral transport and overall economy. Smaller urban centres such as Subotica, Pancevo, three cities Jagodina-Cuprija-Paracin, Leskovac and Vranje will complete development capacity of this axis;

3. **Zone of Zapadna Morava towards Corridor 10 along Nisava river**, which wasn’t sufficiently articulated and linked until now, will look for additional investments both on the direction along Zapadna Morava and on the completion of Corridor 10 from Nis to Dimitrovgrad. This zone strengthens the possibility of spatial integration of the Republic of Serbia in the direction of Bosnia and Herzegovina in the west, i.e. Bulgaria and Corridor 4 in the east. Development of tourism, industry, forestry and smaller economic branches relied on this zone, will also contribute to overall spatial development of west and east Serbia. Role of urban centres along this zone, Uzice, Cacak, Kraljevo, Krusevac, Nis and Pirot, will be significant for activating economic potentials and mobilization of territorial capital of interest for spatial development of the Republic of Serbia.

In addition to these three dominant zones, the following should also acquire developmental role:

4. **Zone along Tisa river**, with five poorly developed municipalities and possible bigger role of Senta, as well as

5. **Zone in the direction Belgrade-Pozega-South Adriatic** which will be more articulated by constructing the highway in the future and oriented in the direction of cooperation with Montenegro, i.e. port of Bar, linking Corridor 4 in Romania with Bari in Italy. This route, from our standpoint, deserves attention for more reasons:
   - By including this route in EU network of routes (Corridor 11 or as a branch of Corridor 10), eastern part of Europe gains transversal transport route “north-south” which would link significant potentials,
   - Port of Bar would obtain better connections with a significant part of the
background and thus influenced the natural balance in distribution of flows between Adriatic ports (Trieste, Koper, Rijeka, Ploce) and the port of Thessaloniki, rather than their unnatural redirecting,

- By reactivating the connecting link of Albania to the railroad Belgrade-Bar, it would come to incorporation of Albania into Balkan and European space with wider positive repercussions.
- The city of Belgrade and Serbia would gain even bigger European importance as a "gateway" of the Balkans and South-eastern Europe: hydro-geographic node of Balkans with potential of Morava, Belgrade railway node as the biggest railway intersection of the Balkans, highway as the most significant part of European network of highways, airport of Belgrade, port of Belgrade, Pancevo, Smederevo and intermodal terminals,
- Republic of Italy (EU) would obtain another quality strategic route for the exit to Danube and entrance to the area Odra-Danube.

CONCLUSION

Previous analysis confirms that the existing Corridors 7 and 10, as well as potential Corridor 11 are really a developmental chance of Serbia, which is provided by its geo-strategic position. In order to valorise it as well, it is necessary:

- To approach according to the plan to the complementation of Corridor 10
- Implement Danube strategy through specific projects
- Implement activities in realization of the project "Italbalk" which promotes logistics and transport integration of Italy and Balkans.

For the activities mentioned, there are defined developmental concepts. It is clear what should be done in domain of particular forms of transport. Funds necessary for their implementation are also evaluated. Having in mind that it is about big investments that are expressed in billions of EUR: railway infrastructure 4.6 billion, road infrastructure 1.8 billion of EUR, water transport 350 million of EUR, when planning their implementation, it is very important to:

1. Respect the principles mentioned: economic feasibility, balanced development, orientation to users, integration with the environment and orientation towards environmental protection,
2. having in mind that it is about big investments with long-term effects, it is necessary to choose adequate model of funding (give the advantage to concessions and partnership of private and public property instead of loans, provide the conditions for obtaining grants of EU).

And for all of this, it is necessary to have good projects, good staff (knowledge economy) and achieve planning and partner cooperation with countries in region regarding the use of European funds.
REFERENCES


