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## FACILITATING CROSS BORDER MOVEMENT OF GOODS IN THE REGION OF WESTERN BALKAN– THE EVIDENCE FROM SERBIA

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**Abstract:** *The authors elaborate problems of border crossing practices in the region of Western Balkan countries with special focus on Serbia. Among the many barriers to the efficient cross-border movement of goods are the complexity of procedures, expenses in both money and time, and insufficiencies in infrastructures and operations. Customs and other border-related controls impose costs on traders and induce considerable frictions in cross-border supply chains. The paper also presents and elaborates some of results of the project Conducting surveys at border crossing points done for the Belgrade Chamber of Commerce as a partner to the ACROSSEE project. The surveys included structured interviews of truck drivers and traffic counting at border crossing points. The research was conducted in 2013 at 7 border crossings with Croatia, Bosnia, Montenegro, Macedonia, Hungary and Romania.*

**Keywords:** *trade flows, transport flows, border crossing, supply chains, Serbia.*

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### 1. INTRODUCTION

Intensifying and facilitating trade and transport flows between Western Balkan countries represents a precondition for the economic development of each of them, as well as, meeting the conditions for entry into the European Union (EU). One of the most important issues concerning trade facilitation is the relationship between trade costs and private sector growth and export competitiveness, especially for countries in transition. Regional economic cooperation, partnerships in forming industrial clusters, mutual support in meeting the requirements of candidacy and then membership in the EU are only a part of the huge agenda of mutual support and cooperation in the region of Western Balkan (WB).

The mutual interdependence of trade and transport flows points to the need for integrated, coordinated and harmonized transport policies. Greater trade integration prior to becoming part of the EU has multiple benefits: (i) countries will need to align to the EU acquis in trade-related areas (free movement of goods, services and people, customs); (ii) firms will be better able to cope with the competitive pressures within the EU; and (iii) national administrations are building up capacity in regional cooperation (Handjiski et al., 2010). Higher interregional trade would lead to, other factors being equal, to a higher level of foreign direct investment as the region would be perceived as one market with a broader potential. Export led growth is the solution for the countries of WB (Vujačić and Petrović Vujačić, 2012).

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Trade and transport facilitation addresses a wide agenda in economic development and trade that may include improving transport infrastructure and services, reducing customs tariffs, and removing non-tariff trade barriers including administrative and regulatory barriers. Business costs may be a direct function of collecting information and submitting declarations or an indirect consequence of border checks in the form of delays and associated time penalties. These costs can result in forgone business opportunities and reduced competitiveness.

## 2. TRADE FLOWS AND TRADE FACILITATION

Serbia, as the others WB countries (Albania, Bosnia and Herzegovina, Croatia, FYR Macedonia, Montenegro, UNMIK-Kosovo) has implemented substantial trade liberalization reforms, including reduction of tariff and non tariff barriers, the elimination of import quotas, the reduction of import licensing requirements and prohibitions, and the restructuring and simplification of customs procedures. In addition, Serbia has also introduced an updated tariff schedule to reduce trade restrictions faced by nearly all agricultural, fish, and food products imported from the EU.

The most important economic partner of Serbia is the EU and then CEFTA which absorb over 90% of Serbian exports and account for 3/4 of Serbian imports (Figure 1 and 2). In December 2006, the countries of the Western Balkans signed the Central European Free Trade (CEFTA), which substituted a network of bilateral free trade agreements. After becoming members of the EU, Romania and Bulgaria left CEFTA in 2007, and Croatia in July 2013. The countries remaining in CEFTA are: Albania, Bosnia and Herzegovina, FYR Macedonia, Montenegro, Serbia, UNMIK-Kosovo and Moldova which make up for a common market of close to 23 million consumers.

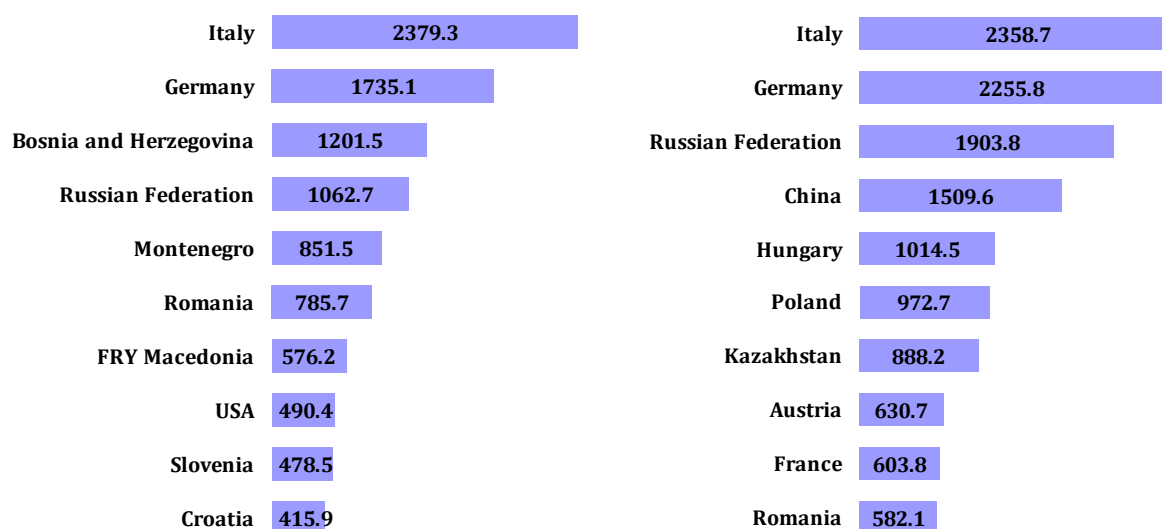


Figure 1: Imports by countries of origin, 2013, USD million

Figure 2: Exports by countries of destination, 2013, USD million

Source: Statistical office databases

The structure of the trade in goods of Serbia with these countries has been fairly constant over the last years. The exports of Serbia to the WB countries are primarily processed foods, agricultural raw materials, electric power, coated metals, chemicals and textiles. On the import side the largest share is taken by oil and derivatives, natural gas, paper, cardboard and cellulose products, vegetables and fruit, iron and steel. Serbia is represented on the WB markets with a broad array of products with which it would not be competitive on the EU markets due to higher standards required there. In this respect Serbian exports are dominated by a small number of products such as iron, steel, raspberries, corn, tires.

In trade with the CEFTA countries Serbia has a trade surplus thanks to a good market position in Bosnia and Herzegovina, Montenegro, the FRY Macedonia and UMNİK Kosovo, while the ratio of exports to imports by country decreases with the geographical distance from Serbia. Trade flows are hindered by too many different types of non-tariff barriers (complicated procedures on border crossings, cumbersome administrative procedures and uncoordinated custom and inspection activities, an inadequate number of internationally accredited certification bodies, as well as, accredited laboratories and institutions, unrecognized certificates of quality, corruption and counter band. It is necessary to upgrade the infrastructure to the level when the Serbian and the product certificates of other WB countries will be recognized in all countries of the EU and CEFTA. There is a lack of institutionalized accreditation bodies due to which it is not possible to consistently apply the CEFTA agreement (Nikolić et al., 2011).

The Enabling Trade Index (ETI) was developed within the context of the World Economic Forum's Industry Partnership Programme for the Logistics and Transport sector. The ETI measures the extent to which individual economies have developed institutions, policies, and services facilitating the free flow of goods over borders and to destination. The ETI categorizes the obstacles into four categories: market access, border administration, infrastructure and operating business environment (Drzeniek Hanouz et al., 2014). These subindexes are composed of the seven pillars: domestic and foreign market access, efficiency and transparency of customs administration, transparency of border administration, availability and quality of transport infrastructure, availability and quality of transport services, availability and use of ICTs, and operating environment.

If we compare the ETI index for 2014 (Table 1) and previous years for Serbia we can notice that the situation has become worse, especially from the point of view of market access, availability and quality of transport infrastructure and business/operating environment (Petrović Vujačić and Medar, 2012).

Table 1. Enabling Trade Index (ETI) 2014 for Serbia

Enabling Trade Index 2014	Rank (out of 138)	Score (1-7)
Enabling Trade Index 2014	89	3.7
Subindex A: Market access (25%)	112	3.2
Pillar 1: Domestic market access	107	4.0
Pillar 2: Foreign market access	79	2.3
Subindex B: Border administration (25%)	78	4.2
Pillar 3: Efficiency & transparency of border administration	78	4.2
Subindex C: Infrastructure (25%)	69	3.8
Pillar 4: Availability & quality of transport infrastructure	103	2.6
Pillar 5: Availability & quality of transport services	55	4.3
Pillar 6: Availability & use of ICTs	54	4.4
Subindex D: Operating environment (25%)	104	3.7
Pillar 7: Operating environment	104	3.7

Source: World Economic Forum, 2014, p.276.

The data from the 2014 Report show that Serbia, according to the survey, is ranked 89, while Bosnia and Herzegovina is ranked 78, Albania 69, FYR Macedonia 63, Croatia 56, and Montenegro 49.

### 3. TRANSPORT FLOWS AND BORDER CROSSINGS INEFFICIENCIES

Road transport is the vehicle for the largest part of Serbian foreign trade. In 2013 it accounted for 46.6% of all transport in the import of goods and 60.4% of all transport in the export of

goods. The total volume of international transport of goods was slightly higher in 2013 than in 2012 and amounted to 19.5 million tons of goods: 5.65 million tons in imports, 6.75 million tons in exports (Figure 3) and 7.08 million tons in transit.

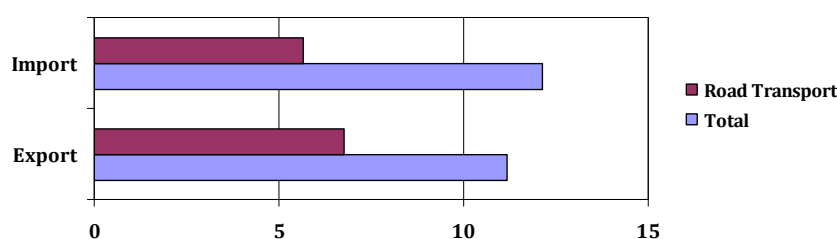


Figure 3: Volume of total trade in goods and road transport, million tons, 2013

Source: Statistical office databases and SORS (2014), p.2

The international haulage is facing many challenges with a direct impact on productivity and quality of the service. One of the most severe is considerable time losses during the transportation process. Studies done in 2007, 2008 and 2011, presented in Medar and Manojlović (2011) and Petrović Vujačić and Medar (2012), highlighted inner customs and border crossings as a major source of considerable time losses. The records of time spent in inner customs and at border crossings (hold-up times) in 2008 were: for border crossings – leaving Serbia was 1 hour and entering Serbia was 6.5 hours. Even though this was a pilot study, the results clearly indicate that hold-up times in Serbia are longer than in other countries. The results from a similar sample in 2011 show a slight improvement, i.e. acceleration of the procedure.

More improvement, specially in entering Serbia, can be detected from the reports of the study *Conducting surveys at border crossing points* (Ipsos Strategic Marketing, 2013) done for the Belgrade Chamber of Commerce as a partner to the ACROSSEE project in which the authors of this paper participated. The research included road and railway transport. The surveys done according to the defined methodology within the ACROSSEE project (ACROSSEE, 2013) included structured interviews (questionnaire) of truck drivers and traffic counting at border crossing points. The research was conducted in June 2013 at 7 border crossings with Croatia (Batrovci), Bosnia and Herzegovina (Mali Zvornik), Montenegro (Gostun), Macedonia (Presevo), Bulgaria (Gradina), Hungary (Horgos) and Romania (Vatin).

Out of more than 7000 counted trucks entering and exiting Serbia during the study period, 1823 truck drivers were interviewed. Most of them, 25.5% were at Batrovci border station (Table 2), 54% exiting Serbia and 76% driving heavy goods vehicles. Transit frequency of the same trip is: weekly 39% (average 1.8 times), monthly 46% (2.8 times), and yearly 8% (7.7 times).

Table 2. Truck driver interviews - characteristics of the sample [%]

		Border station						Total	
		Batrovci	Gostun	Horgos	Gradina	Mali Zvornik	Presevo		Vatin
Direction	Entering	20	17	14	14	12	13	10	46
	Exiting	30	15	15	12	14	8	5	54
Vehicle's classification	LGV	14	14	22	11	13	20	6	4
	HGV	25	20	15	7	16	10	7	76
	TIR	31		12	38	1	9	8	20
Total		25.5	16.1	14.6	13.2	12.9	10.2	7.4	

Source: Ipsos Strategic Marketing (2013)

Yearly average is 54.2 trips – almost one every week. For this trip the total average time from origin point to destination point is 53 hours and total approximate distance from origin point to destination point is 1048 km (Ipsos Strategic Marketing, 2013). The shortest trips are associated with crossing the border with Bosnia and Herzegovina, and the longest are crossing border with Hungary (Ipsos Strategic Marketing, 2013). On average they carry 16.3 tones of goods.

According to the methodology defined within the project (ACROSSEE, 2013) waiting times were recorded separately for the period before the beginning of the procedure and for the procedure itself and entire hold-up. The mean of the waiting time in queue before the start of the procedures is 59 minutes and the most perceived is *up to 10 minutes* – 33.1% (Figure 4). Presevo border station has the highest value – 55% of respondents stated *more than 40 minutes*. Vatin is the best with 53% answers *up to 10 minutes*. The mean for the time needed for all the controls is below the queuing time and amounts to 47 minutes. The answer *up to 10 minutes* was given by 37.8% respondents (Figure 5). The results for total waiting time at the border station during this trip reveals problems at Horgos where 70% stated more then 60 minutes. The mean for total waiting time is 69 minutes. Results for hold-ups at border crossing show a better situation compared with previous studies but some of the crossings have results that need the attention of the government.

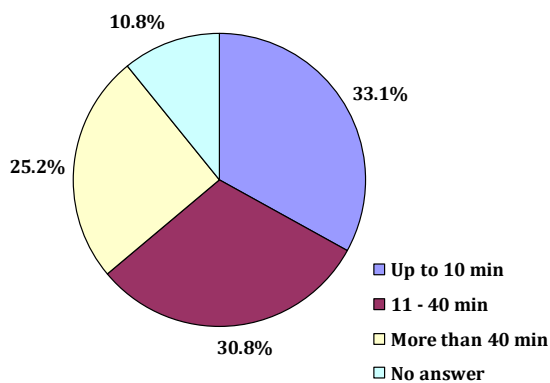


Figure 4: Waiting time in queue before the start of the procedures, %

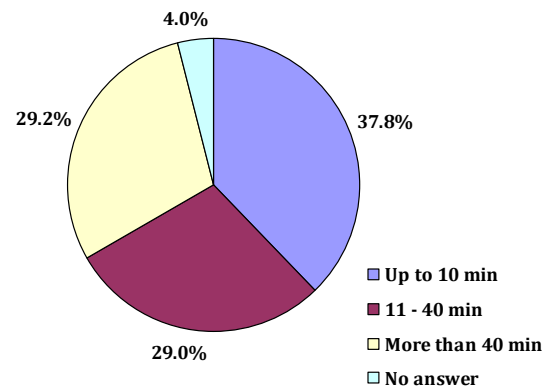


Figure 5: Time needed for all the controls, %

Source: Ipsos Strategic Marketing (2013)

The time losses certainly have an impact on the performance of individual trips, haulers and the international haulage sector, as well as on their users and society as a whole. The reasons for major hold-ups can be categorized in several groups: (i) flaws and deficiencies in the legal framework and its implementation; (ii) poor organization of the customs offices and associated inspection services; (iii) unprofessional and unmotivated staff; (iv) corruption; (v) lack of technical equipment and technology and (vi) the low capacity and poor condition of infrastructure. The interview with truck drivers shows the reasons as long lines / traffic density – 28%, procedures /paperwork/ long processing of documents –18%, slow work – 6%, inactivity/indifference/ unprofessional officers, change of officers/long change of shifts, not enough lanes, organization of work (breaks, number of officers...), inspections (procedures, slowness, working hours...), system error, small crossing capacity, congestion on the other side of the border, corruption (this question has multiple open ended answers).

All this time and money losses in border crossing cause supply chain fragmentation, weaknes links and reduce the efficiency of supply chains. Improving connectivity and reducing fragmentation of supply chains implies a renewed push for national improvements and cross-border integration in such areas as infrastructure standards, trade facilitation, and service regulation.

#### 4. CONCLUSION

In Serbia the legislation and corresponding regulations that ease trade have been passed. Nevertheless, much remains to be done in different areas. In the period ahead until they become EU member states, the countries of the WB would benefit from some measures that would contribute to easier and faster trade and transport flows. These measures should lead to the creation of conditions for trade and transport similar to those in the EU. Substantial assistance in this regard is provided by the EU, World Bank, international donors and other international institutions. Although positive improvements have been made in facilitating cross-border practices and better cross border regional cooperation, joint projects with the goal of further improvement of trade and transport flows in the Western Balkan region are needed. There is still a lot to do in Serbia and other WB countries in the area of economic and institutional reforms which should lead to more efficient supply chains, a better business environment, trade and economic growth.

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#### REFERENCES

- [1] ACROSSEE, (2013). Accessibility improved at border CROSSings for the integration of South East Europe, SEE/D/0093/3.3/X, project co-financed by the EU Transnational Cooperation Programme "South-East Europe".
- [2] Drzeniek Hanouz, M., Geiger. T., Doherty. S. (eds.), (2014). The Global Enabling Trade Report 2014, World Economic Forum, Geneva, Switzerland, [www.weforum.org](http://www.weforum.org)
- [3] Handjiski, B., Lucas, R., Martin, P., Sarisoy Guerin, S., (2010). Enhancing Regional Trade Integration in Southeast Europe, World Bank Working Paper 185, Washington, D.C., International Bank for Reconstruction and Development.
- [4] Ipsos Strategic Marketing, (2013). Conducting surveys at border crossing points, part of the project ACROSSEE: WP.5. Cross Border analysis – Methodology for common standards analysis on cross border points, Belgrade, Serbia.
- [5] Medar, O., Manojlović, A., (2011). International Road Haulage Industry in Serbia: Critical Issues Analysis. *Journal of Applied Engineering Science*, 9(1), 243-252.
- [6] Nikolić, G., Jovanović, N., Todorić V., (2011). CEFTA 2007-2010, Experience, Potential, and Perspective, Belgrade, Serbia: New Policy Center. (In Serbian)
- [7] SORS, (2014). Entry, exit and transit of freight road vehicles, by countries of vehicles registration, 2012 – 2013, Belgrade, Serbia: Statistical Office of the Republic of Serbia. (in Serbian)
- [8] Petrović Vujačić, J., Medar, O., (2012). Towards trade and transport facilitation in the Western Balkans – the case of Serbia. *Conference Proceedings: 15th International Conference on Transport Science*, UL Fakulteta za pomorstvo in promet, Portorož, Slovenia.
- [9] Vujačić, I., Petrović Vujačić, J., (2012). The EU Crisis and Institutional reform. From Global Crisis to Economic Growth – Which Way to Take? Vol. 1, *Economics*, (eds.) B. Cerović, M. Jakšić, Z. Mladenović, A. Prašević, Faculty of Economics, Belgrade. pp. 75-101.