

INTERNATIONAL ROAD HAULAGE INDUSTRY IN SERBIA: CRITICAL ISSUES ANALYSIS

Mr Olivera Medar*

Faculty of Transport and Traffic Engineering, University of Belgrade

Mr Aleksandar Manojlović

Faculty of Transport and Traffic Engineering, University of Belgrade

The first stage of a transport policy analysis for Serbia's international road haulage sector is presented in the paper. The objective of the research was to define issues, priorities and possible policy instruments, or their combinations, having the most favourable effect, considering the opinion of the main stakeholders – haulage operators. The determination of key issues in the industry, their ranking and prioritizing by the main group of stakeholders are the base for definition of the objectives, policies and instruments that can guide government action in the sector. Relying on the available data sources and haulier survey results, the basic segments of the industry and their characteristics have been described. Key issue identification, selection and ranking methodology are presented, as well as the results of the study. The critical issues for the industry are also identified and described. Finally, the paper explains issues' causes and effects, as well the government actions suggested to eliminate or mitigate their negative impact.

Key words: Policy analysis, International road transport, Hauliers, Survey

INTRODUCTION

The road haulage industry is facing many challenges that might undermine its productivity, efficiency and the quality of transport service. Clearly, market fluctuations and declining transport system performances can make road haulage operations very difficult. A full spectre of challenges would also include not only the regulatory instruments covering safety and environmental protection [7], which are likely to create a potential source of significant costs and disrupt the service delivery process, but also unnecessary administrative burdens, procedural issues and undefined responsibilities. Noteworthy, too, are the challenges specific for countries in transition, such as limited access to the market. Road transport is of vital importance for economy and these challenges clearly demand the attention of the public sector and measures to remove or alleviate their effects.

The study presented in this paper is a part of the research that defines the methodology behind decision-making in the process of development and implementation of transport policy elements relevant to long distance haulage (international road haulage). The methodology based on a

participatory policy analysis is to enable the creators, actors and decision makers to develop options for formal decision making and approval, and to ensure participation by all interested parties in the regulatory processes. This approach will ensure more significant participation of all stakeholders from the start of the process (i.e. the initiative) [15, 5]. Using this framework for transport policy analysis and instruments for its implementation, will ensure the involvement of all stakeholders and make it possible for fundamental challenges, needs and key issues to be taken into consideration. The objective is to define critical issues, priorities and possible policy instruments or their combinations, having the most favourable effects in view of all stakeholders.

The paper presents the characteristics of the international road haulage sector and its segments in Serbia (*Title: Industry overview*), offering the following statistics: the number of hauliers in Serbia, their share in the total international transport of goods by road, number of vehicles and the structure of vehicle fleet size. Chapter 3 describes the methodology and results of the study, covering, more specifically, the identification of key issues, the consideration of critical issues and the synopsis of strategies for further

analysis. Finally, Title Conclusions is offering the concluding remarks.

INDUSTRY OVERVIEW

Road freight transport is a dominant mode of transport in Serbia. According to the 2006 report by the Statistical Office of the Republic of Serbia, the international transport of goods by road (transit excluded) was twice as large as transport by railway and inland waterways measured in transported tonnes [10]. Serbian road hauliers are the most active in international road freight transport, representing just over one half of total performance (in tonnes) [11, 12, 13] (Figure 1). Of foreign hauliers, companies from Bosnia and Herzegovina, Croatia, Montenegro and Slovenia dominate the sector [10]. The Bosnian hauliers aside, those from the states that are involved in a large-scale external trade (Italy and Germany for instance) do not have an adequate share in Serbia's international road transport market. This market is not very attractive to them; there are too many obstacles for the transportation process to develop smoothly.

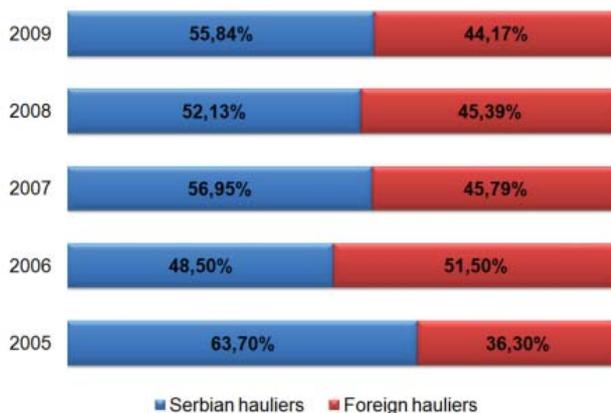


Figure 1. Share in total international road freight transport by the haulier's nationality (based on tonnes) [%], 2005-2009

For the purposes of this paper, Serbian hauliers involved in international road transport of goods (hereinafter: hauliers) include the hauliers that have met the conditions for admission to the occupation of road haulage operator, as defined by the national legislation and perform the activity continually over the year; these include the hauliers that participate in the annual distribution of foreign permits (Annual Permit Distribution Plan), which grant them access to the international road haulage market. The authors have

decided that there is an irrelevant number of other hauliers, whose involvement in international road transport is sporadic, and mostly for their own account, or in a limited market only.

According to the Annual Permit Distribution Plan, 746 hauliers operated in Serbia at the end of 2010 [9]. In the 2001-2008 period, the number of hauliers more that doubled (Figure 2), but dropped in the following years as the consequence of the global economic crisis; some have left the sector, some have been temporarily blocked. During the same period, similar trends have been noted for a number of drawing vehicles (lorries and road tractors).

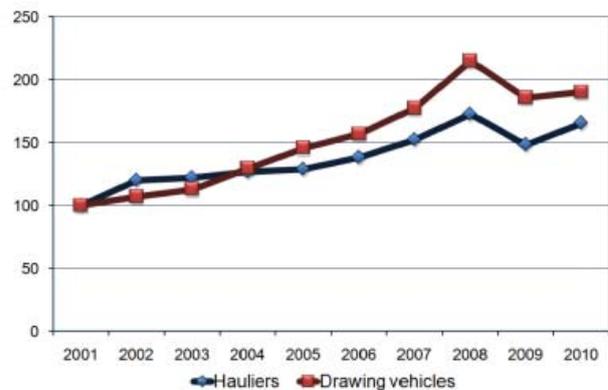


Figure 2. Number of hauliers and drawing vehicles Indexes (2001=100), 2001-2010

Apart from the increase of vehicles in numbers, the fleet structure changed in favour of environmentally friendly vehicles, satisfying Euro III, Euro IV and Euro V standards (Figure 3). While in 2001 the vehicle fleet was largely composed of vehicles that did not meet Euro standards (75%), it is the other way round in 2010 – nearly 80% of vehicles meet Euro III, Euro IV or Euro V standards. The procurement of vehicles meeting the latest standards was largely motivated by the prospect of overcoming severe market access barriers (quotas of bilateral and ECMT multilateral permits). Any addition to the existing quotas was only possible by reshaping fleet structure in favour of environmentally friendly vehicles. The 2007 research (see Chapter 3) showed that the permits motivated 69.2% hauliers to buy better vehicles. The other motives include the company's policy and image (12%), reliability and safety (6.3%), costs (5.7%) and users' requests (3.1%).

Even though the size of vehicle fleet varies, Figure 4 shows that those with more than 20 vehicles account for quite a small share, whereas the

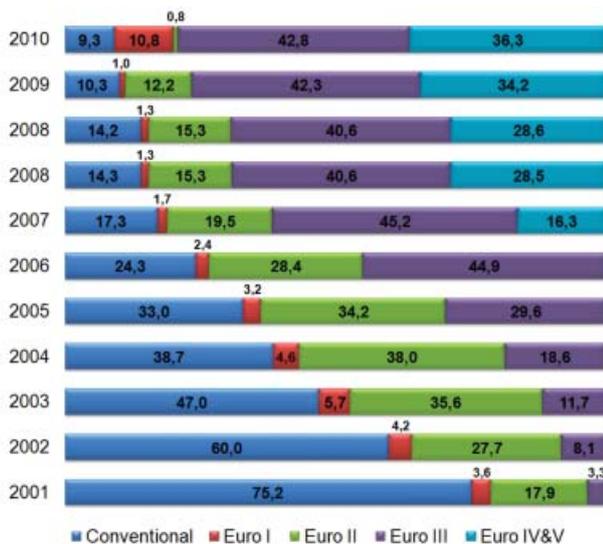


Figure 3. Fleet structure by environmental class [%], 2001–2010

number of vehicle fleets of less than six vehicles is rising again, after a short decline. The average vehicle fleet size increased over the years to 9.8 in 2009. In a 2007 survey (title: Study methodology and results), the hauliers gave the following reasons for expanding the vehicle fleet: a rise in their permanent customers operations (65%); expansion to new markets (12%); positive business results (10%); the fear of losing a market share (9%). In 2010, as the share of “small” vehicle fleet grew, the average vehicle fleet size fell to nine. In close to 95 percent, these include vehicle combination (articulated vehicle or road train), indicating the prevalence of heavy goods vehicles. Articulated vehicles cover over 80%, whereas the payload of more than 95% semi-trailers exceeds 20 tons.

Over 80 percent of all Serbian hauliers are engaged in road transport for hire or reward, less than five percent for their own account; the others are involved in both types of hauling. Most of them are performing international operations only and for nearly 50% of them hauling is the sole business activity. According to the data recorded by the Serbian Business Registries Agency, carriage of goods by road is a dominant business activity for nearly 70 percent of hauliers, followed by different trade operations (17%) and production (7.5%). Based on the transport operations, i.e. international transport services, Serbian hauliers reported a total turnover of 35 billion dinars from October 1, 2009 to September 30, 2010. The average turnover per haulier amounts to 45 million dinars, and the average turnover per vehicle close to four million dinars [9].

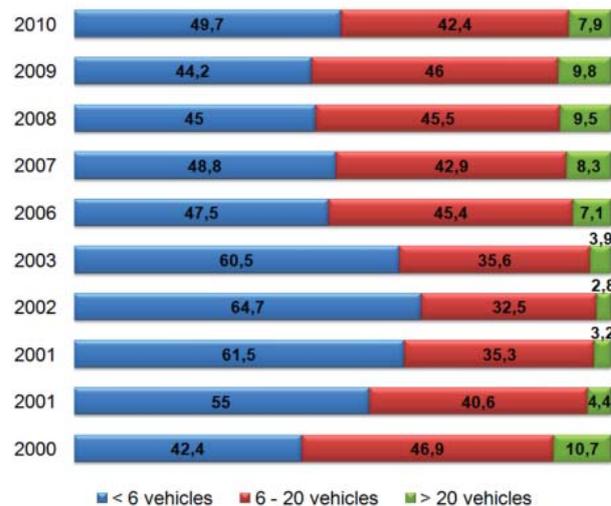


Figure 4. Vehicle fleet size [%], 2000–2010

STUDY METHODOLOGY AND RESULTS

Key issues identification

The screening process was used to identify key issues. A comprehensive list of all issues was based on a review of similar studies and industry trade publications [1, 2, 3, 4, 6, 14], and discussions with industry and university experts. The criteria for assessing the importance of each issue and their respective suitability for the study were identified as follows:

- the issue has potentially significant effects on hauliers' productivity and quality of service,
- the issue has an impact on Serbian hauliers' competitiveness,
- the issue is an existing issue, expected to grow in importance in the future,
- there are opportunities for a public sector reaction to the issue, as well as private sector solutions, where a government role in supporting them is possible, and
- the issue warrants additional study.

A list of potential issues was presented to the industry experts during a workshop organised in December 2006 at the Faculty of Transport and Traffic Engineering in Belgrade. Industry experts (primarily haulage operators' executives) were asked to discuss the issues in terms of importance, and to identify additional issues that were not listed. Then a pilot survey was carried out (March 2007) and 41 hauliers were interviewed. A group of questions was designed to cover key issues.

The workshop debate and pilot survey results served as a basis for the final list of issues prepared for ranking. The 47 issues were arranged in eight groups as shown in Table 1.

Time losses include all waiting times and delays caused by traffic bans on heavy goods vehicles, the capacity and condition of infrastructure, administrative actions and the way they are enforced, and bad working practices at loading/unloading facilities. Consequently, delivery times increase and delivery reliability drops. This in turn leads to productivity declines, underexploited available driving hours, reduced fuel efficiency, and more frequent maintenance interventions; additionally, drivers' turn-over is going up, because time losses diminish their satisfaction and have a direct impact on driver retention. The chain reaction that occurs when one time loss leads to another is a source of additional problems. Some time losses are predictable, allowing for the transport operations to be planned and adjusted accordingly, but some are impossible to predict. In that case, either the risks are taken into account in the planning phase, or the unforeseen loss is covered in the process, usually by disobeying traffic safety regulations (speed, driving hours, rest periods). The costs attached to prolonged waiting times and delays are considerable and unlikely to be transferred to the service user.

Cost increases include the increase and instability of fuel prices, rising insurance premiums, the introduction of new taxes and fees and the increase of the existing ones, drivers' and other costs, which combined constitute an ever-increasing burden on small profit margins in the transportation of goods by road. The cost jumps caused by growing fuel prices, tolls and insurance fall within a global trend the sources of which are unlikely to change in the foreseeable future. A traffic safety policy (prescribing reduced driving times, for instance), charges for the use of infrastructure or a tax policy may also account for these increases, as well as some taxes and charges enforced to compensate for deficiencies in other funding areas. Quite often the fees (i.e. tolls) are too high for the quality of the specific service. Complicated administrative actions keep increasing the costs, and it's not infrequent that different taxes and fees are imposed unexpectedly and for "virtual" services, often discriminating against certain categories of hauliers.

Not only can this create direct cost increases, but also the impression of uncertainty and the lack of confidence in the regulatory framework. Another boost to cost inflation is that the quality of certain products, notably fuel, oil and spare parts, is insufficiently or inadequately regulated and/or controlled.

Part of the problem is that the costs are both considerable and unpredictable; the frequent cost increases, often unexpected, makes it very difficult to carry out proper cost planning. Many hauliers do not possess mechanisms to absorb quick cost fluctuations, especially fuel price jumps. Secondly, in a sector as highly competitive as this one, it is impossible to transfer the costs to the user by increasing the price of transport service. This particularly refers to unpredictable costs. Acutely prone to this are the hauliers whose services are based on long-term contracts, because they are unable to adjust their prices quickly enough to cover the difference. Finally, there is a specific sensitivity to the costs that do not have equal effect on the competition, be they the consequence of different national fiscal and tax policies or discrimination.

Unfair competition includes breeches of the regulations covering traffic safety, vehicle dimension and mass, driving hours and rest periods or access to the market. It also refers to transport service price cuts based on insufficient knowledge of the costs and the way they are determined, as well as any attempt to create an opportunity to make a profit based on illegal actions; even though these are criminal actions per se, they are rather treated as actions to create unfair advantage in the market. Hauliers can sometimes use this to survive in the market, either because they have been pushed by both the user and the competition, or because they are unable to use their resources to the full advantage. Likewise, in this way they can cover up for the costs they are unable to manage or transfer to the user. What makes matters worse is the lack of knowledge and awareness of the risks and consequences for traffic safety, company business and the reputation of the haulage industry. Working outside the legal framework is often facilitated by complicated regulations, difficult to implement and control, while poor supervision and inappropriate sanctions only add to the problem.

User payment collection covers bad debt, partially collected accounts, delayed payments,

Table 1. Final list of issues for ranking

Group	Issue
Time losses	1. Congestion
	2. Traffic bans
	3. Border-crossing delays
	4. Inner customs delays
	5. Customers' working time limitations
	6. Features of loading/unloading points
	7. Waiting due to incomplete documentation
	8. Idle time during visa issuing procedure
Cost increases	9. Fuel price
	10. Fuel quality
	11. Insurance
	12. Wages
	13. Road charges and tolls
	14. Various taxes and charges
	15. Visas
	16. Vehicle purchasing costs
Unfair competition	17. Hauliers operating without authorisation
	18. Working hours violation
	19. Permits usage violation
	20. Masses and dimensions violation
	21. Criminal intentions
	22. Insufficient cost structure knowledge
Payment collection	23. Bad debt loss
	24. Payment period extension
	25. Imprecise contract details
	26. Contract negligence
	27. Late payment costs
Market access	28. Insufficient quotas for access and transit
	29. Market narrowed by shortage of permits
	30. Third country limitations
	31. Critical permits allocation
	32. Uncritical permits operational limitations
Status	33. Hauliers' status and treatment by government, local authorities, and customers
Legislation	34. Dangerous goods transport
	35. Weights and dimensions
	36. Drivers hours and rest periods
	37. Lack of prompt information
	38. Short implementation periods
	39. Implementation issues
	40. Excess of powers and competencies
	41. Enforcement and control methods
	42. Insufficient foreign operators control
	43. Liability of customers, shippers, agents
	Staff
45. Lack of skilled dispatchers	
46. Lack of skilled sales specialists	
47. Lack of skilled mechanics	

extended due dates and breach of contract; the lack of room to define the terms of covering the losses generated by a breach of contract and the costs arising from the process can limit the development of the sector and threaten hauliers directly. The existing legal and institutional framework is the immediate source of this group of problems – the hauliers, in fear of losing the job, are forced to accept the risks of collection, hardly ever suing their debtors.

Market access has been reduced by a series of obstacles arising from the existing permit quotas for bilateral, transit and cross-trade transport operations. The transport permits make it very difficult, if not impossible, to operate in certain markets, they complicate the organization of transport processes, reduce work efficiency and create additional costs for the hauliers and users alike. The permit quotas include CEMT permits issued to the Serbia within the multilateral system of quotas, and bilateral permits exchanged between the Republic of Serbia and other states. The number of permits available to Serbian hauliers, which are distributed by the competent authority, does not correspond to their needs. The insufficient quotas are the result of many things, including a very restrictive approach the other states have taken to protect national hauliers or the environment; a focus of interest in another field; poor negotiations or even the total lack of engagement by national authorities in this respect. More often than not the status and needs of the market change too rapidly for the national authorities to react. There is also a number of problems lying in the prescribed national criteria for the allocation of permits to individual hauliers, the way these criteria are actually implemented and the amendment procedure.

Status and treatment of hauliers by different levels of the executive authorities, the community and clients are far from satisfying. The executive authorities treat the businesspeople in this sector superficially, casually, largely disrespecting their opinions and views. Even though the average haulier operates with the funds worth close to half a million euros, reports a RSD 45 million turnover based on international transport operations and employs more than 15 people, hardly anyone would treat them as professionals or respected businessmen. On the other hand, what created this attitude is the fact that some hauliers do operate in an unprofessional manner, breaking the rules and destroying the repu-

tation of the majority never behaving like that. Besides, the national hauliers do not have a shared platform with clear goals to send a common message to the government and represent their interests successfully.

Regulations cover the issues of harmonization, implementation, enforcement and supervision, which are all of vital importance to hauliers. There is a flood of regulations in Serbia's road transportation, ranging from those defining conditions for the performance of the business to those covering daily operations, such as allowed driving hours. Discrepancies between national laws in certain areas, i.e., the transport of dangerous goods, create many impediments in everyday business: it is necessary to conform to both national and international regulations, which, predictably, increases the costs. There are also situations when this is entirely impossible, and a breach is inevitable. As a result, confusion surrounds both transport operations and supervision by inspectors. Apart from the harmonization of regulations that have not been transposed into national legislation, the national laws are also to be harmonized with *acquis communautaire*, which, in itself, is not a problem for the haulier community as it strives to make business conditions equal for all. The problem however lies in the very preparation of regulations – the process allows for little involvement by the public and clearly disregards the impact analysis of certain solutions. The public usually learns about the changes only after a draft has been sent for adoption or after the adoption, so there is not enough time for adjustment. Moreover, implementation is often inconsistent, which intricate administrative actions and corruption only complicate further. Controls and supervision are ill-organised, often sporadic. In addition, it happens that supervisors are neither properly trained nor committed. Even though regulated by myriad complex rules, there are several areas in the industry that are clearly under-regulated. This has proven to be instrumental in defining the responsibility for the losses occurred due to bad working practice by the user, or a breach by the haulier which is the result of the fault or intention of the user/distributor (i.e. overloaded vehicle).

The lack of professional and trained staff: Declining career interest in the sector and the increasing turn-over of drivers and other staff

are two ever-increasing problems that will gain in importance in the future. This is a very complex issue resulting from the growing needs of the sector. The growing external trade of goods and more stringent requirements for drivers' working and driving hours directly increase the number of drivers needed. The economic environment has generally improved and produced more employment alternatives, which, coupled with hard working conditions, diminished the interest of potential employees and raised the number of drivers abandoning the sector. The possibility of higher earnings with EU hauliers has additionally cut the number of available drivers, professionals and well-trained staff in particular. The training system for drivers is unsatisfactory and obsolete, and training facilities covering special skills far below the existing needs. Facing the decreasing numbers, the hauliers tend to employ undertrained and undereducated staff, training them as they go and taking the risk of the consequences that insufficiently trained and even medically incompetent drivers might produce. The lack of professional drivers directly increases the costs of recruitment, employment and training of potential staff, as well as the costs of their retention in the sector.

Survey

Further study was performed in the form of a personal interview survey. Four-category rating scale was used (0 – no impact, 1 – moderate impact, 2 – intermediate impact, and 3 – extreme impact) for rankings to be assigned to the groups of issues and particular issues. The study was carried out from March to September 2007 in the hauliers' offices. Most of the respondents (90%) were owners/top managers. Apart from ranking the issues with an impact on the effectiveness, productivity and quality of the service, the purpose of the study was to identify characteristics of the sector and its segments (see Chapter 2) along with the overall conditions and *modus operandi* in the industry. The population whose features and views were the target of the research is composed of the hauliers offering their services in international road transportation. Since there are also hauliers that engage in this business activity occasionally, the sample frame for this research has been based on the following criteria:

- The haulier has a permit distribution plan for 2007 and

- The haulier averagely performs more than two journeys per vehicle per month to or via a neighbouring state.

Based on these criteria, the sample frame includes 460 of 623 hauliers with the fixed annual distribution plan for 2007. A stratified random sample has been established within this framework – within the defined regions, which cover one or more administrative counties (Figure 5), a random choice of hauliers was made from among the hauliers classified by the size of vehicle fleet (small – up to five vehicles; and medium – between six and 20 vehicles) (Table 2). The hauliers with vehicle fleets of over 20 vehicles were the least represented and it was impossible to define a regional random sample, so they were chosen based on the location close to the randomly chosen small and medium ones. The sample included 177 hauliers: 38.5 percent of the hauliers that made up the sample frame and 41.7 percent of the number of vehicles owned by the hauliers.

Critical issues

The hauliers described the Time losses group as the one that affects their operations the most. The following two were Cost increases and Unfair competition (Table 3). Having studied the in-

Table 2. Hauliers in the sample classified by vehicle fleet size

Vehicle fleet size	Total	Sample frame	Sample	
< 6	296	194	47	(24.2 %)
6-20	283	224	104	(46.4 %)
> 20	44	42	26	(61.9 %)

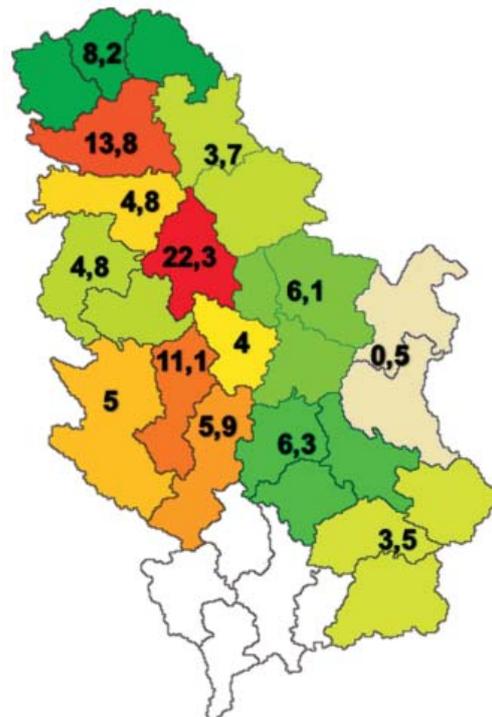


Figure 5. Hauliers by place of establishment in the regions as determined by the study [%]

dividual issues and their rankings and the average group ratings based on these assessments (Figure 6) the negative impact of most individual issues is readily observable in the following groups: Market access, Payment collection and Lack of professional and trained staff.

Following the analysis of the results, the decision was made to denote as critical those problems which more than 50 percent of respondents say were making their operations very difficult, i.e. having extreme impact (Figure 7, Table 4). The insufficient permit quotas come first, with the average grade 2.65. Seventy-four percent of the

Table 3. Groups of issues – Average and Frequencies of Ratings

Group of issues		Average	Extreme impact	Intermediate impact	Moderate impact	No impact
I	Time losses	2,43	102	50	22	2
II	Cost increases	2,33	78	77	19	1
III	Unfair competition	2,02	66	62	27	18
V	Market access	1,89	53	66	44	14
VII	Legislation	1,84	46	64	49	12
IV	Payment collection	1,75	54	49	46	26
VI	Status	1,72	48	45	45	24
VIII	Staff	1,51	40	51	43	41

interviewed gave it a grade 3 (extreme impact). The two following issues were inner customs delays and border-crossing delays, rated 2.62 and 2.57, respectively. The rest of the list includes tolls, fuel prices, permit allocation to individual hauliers, a shortage of drivers and unfair competition based on insufficient knowledge of costs.

Each of the critical issues, including their causes and effects on the haulage industry, as well as potential solutions that could help avoid or mitigate some of the negative effects on productivity and service quality should be discussed in detail.

In addition, they are recapitulated [8]:

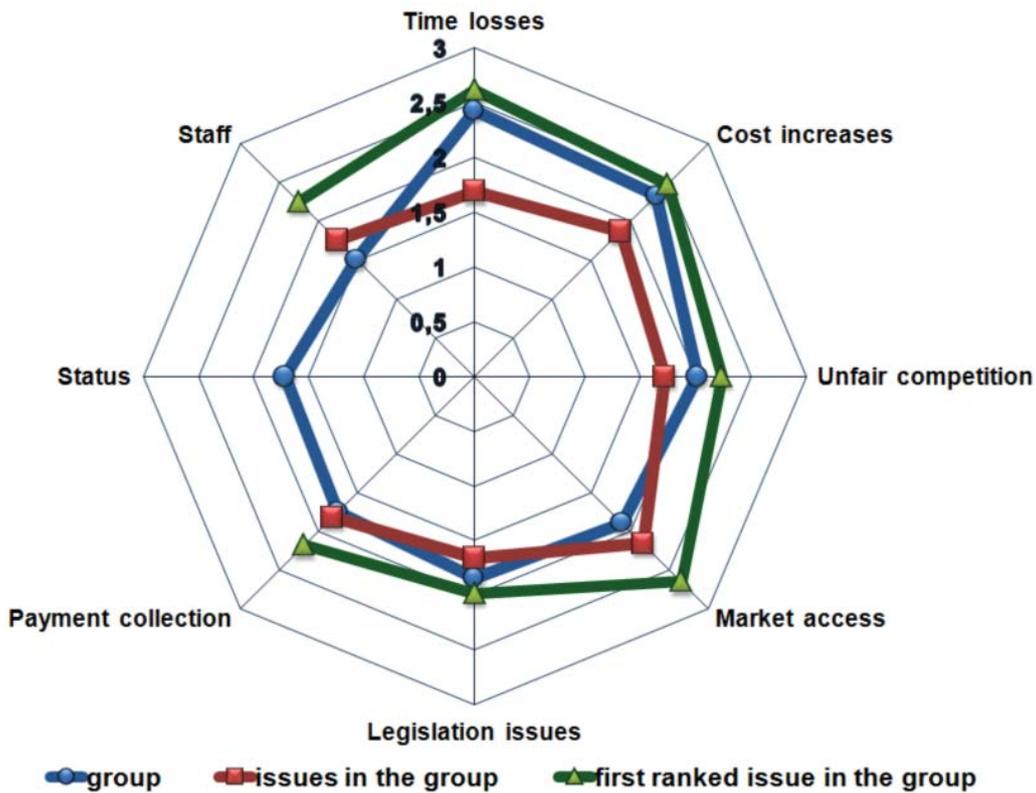


Figure 6. Issues group average rankings based on average ranking of the group and rankings of the issues in the group

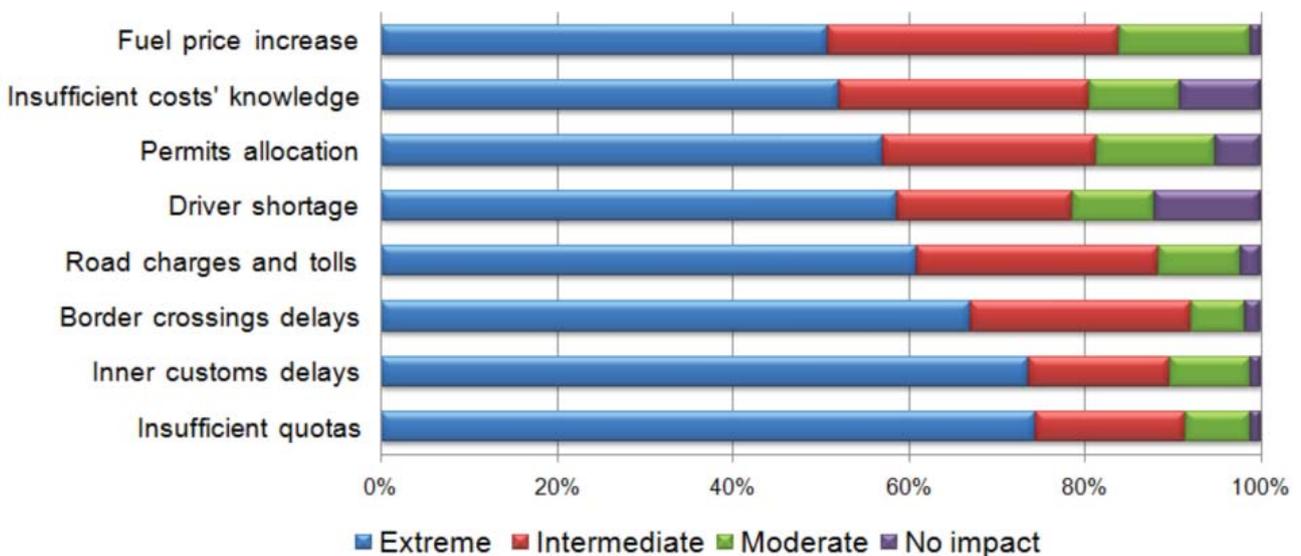


Figure 7. Distribution of ratings for the critical issues

Table 4. Critical issues averages

Rank	Issue	Average
1.	Insufficient quotas of permits	2,65
2.	Inner customs delays	2,62
3.	Border-crossing delays	2,57
4.	Road charges and tolls	2,47
5.	Fuel price increase	2,34
6.	Permits allocation to hauliers	2,33
7.	Driver shortage	2,25
8.	Insufficient knowledge of costs	2,24

- Insufficient quotas exchanged between Serbia and some other countries and the allocation of permits to hauliers are highly ranked issues. By positioning insufficient quotas before the number of permits allocated to each haulier, the interviewed actually unveiled a clear attitude toward the allocation procedure: the biggest problem is what is allocated, not how it is done. The long-term strategy is harmonization and integration, while the short-term solutions are activities to upgrade the present position of Serbia in negotiations. Apart from that, permit allocation procedure should be fully transparent and any amendments should be known well in advance.
- Inner customs and border-crossing delays represent a severe problem in Serbia, as well as in other transition economies. In addition to documentation processing and control activities performed by custom officers, delays are prolonged by the absence of non-stop specific inspections, such as ecological, veterinary, and phytosanitary controls, and by additional controls of doubtful necessity, such as radioactivity controls. During one journey, vehicles are trapped for a couple of days causing inefficient vehicle utilisation (average mileage per year of 110 000 km) and poor quality of service (unreliable delivery). These are problems that demand serious state action to improve facilities, simplify control procedures, improve coordination between different administrations, train and motivate control personnel and fight corruption.
- Road charging continues to be a controversial issue for the haulage industry, and the emerging charges, together with the costs not easily transferable to customers – a main concern for hauliers. In Serbia, the rates are

not adjusted to the level of services that infrastructure provides, because, in this way, the government is trying to compensate for the lack of funds elsewhere. Possible government and public actions are to minimize highway funding diversions and develop alternative highway funding/pricing options – new and different tax allocation approaches.

- The increase and instability of fuel prices is a global trend and affects all hauliers equally. Many hauliers have little or no ability to absorb rapid changes in fuel costs. One of the possible strategies is to promote a program to improve hauliers' fuel efficiency and make savings in fuel costs.
- Driver shortage has been one of the top three issues in the European and USA haulage industry over the past several years. Driver recruitment, retention and turn-over are the major problems. This issue is looming large in Serbia - drivers are already joining foreign employers (most often Slovenia's) or leaving the profession altogether due to harsh working conditions. The government should introduce provisions on driver professional competence and establish the criteria for training facilities, as well as adequate testing procedures. Likewise, a government-funded program should be designed to support non-compulsory continuous training initiatives and retention campaigns on non-traditional labour sources.
- The lack of correct costing has forced many hauliers to perform illegal operations, including driver's hours violations, wages in cash, illegal use of fuel or lack of insurance cover. Continuous financial training, particularly in basic costing procedures, should be a mandatory requirement for holding a road operators license.

CONCLUSIONS

In spite of its considerable economic role, road transport is constantly challenged by largely interdependable, short-term and long-term problems. It is a highly competitive industry where operators work with low profit margins and high barriers, which makes it necessary for the public sector to use different mechanisms to solve these problems or at least diminish their effects. For this purpose, it is necessary to define a set of priorities for the sector, rank the critical issues in the industry and explore different mechanisms

to address them.

The outcome of the study discussed in this paper is that major problems in the sector have been defined and the critical ones underlined. These can be used in the subsequent steps to prepare the options for formal assessment, consultation and decision making. Involvement by all stakeholders at the beginning of the process can allow for the problems to be identified and described properly. It can also open a realistic opportunity for feasible solutions to be identified in order to reach a higher level of confidence in the public sector. This is very important for countries in transition, where a policy impact assessment and relevant decision-making process are usually based on incomplete and unreliable information.

It is common knowledge that hauliers are not interested in academic research and do not trust public sector initiatives. The approach described above might help overcome the problem.

REFERENCES

- 1) American Transportation Research Institute (2007). Top Industry Issues 2006: Critical Issues in the U.S. Trucking Industry – 2006, Research Summary for ATA, <http://www.atr-online.org/research/results/>
- 2) American Transportation Research Institute (2006). Top Industry Issues 2005: Critical Issues for the Trucking Industry – Today and Tomorrow, Research Summary for ATA, <http://www.atr-online.org/research/results/>
- 3) Burns R. (2005). Burns Freight Taxes Inquiry Report, <http://www.freight-taxes.co.uk/docs/index.jsp>
- 4) Fleet Management (2004). The Twelve Economic ills facing the Irish Transport Industry, Transport Magazine, <http://www.fleet.ie/news.htm>
- 5) Geurts J.L.A., Joldersma C. (2001) Methodology for participatory policy analysis. European Journal of Operational Research, 128 (2), 300-310.
- 6) ICF Consulting (2003). Evaluation of U.S. Commercial Motor Carrier Industry Challenges and Opportunities, Study Final Report, Washington, DC: U.S. DOT, FHWA, Office of Freight Management and Operations.
- 7) Kaplanović, S. (2007). Porez na pogonska goriva u transportnom sektoru – instrument u funkciji zaštite životne sredine, Istraživanja i projektovanja za privredu, Vol 16, pp 39-46
- 8) Medar O., Manojlović A. (2007). Transport policy analysis: Identification and evaluation of critical issues for the trucking industry, Proceedings, The International Conference Transport Science & Technology Congress TRANSTEC, Prague, 13-15 September 2007, 89-93.
- 9) Ministry of Infrastructure (2010) Annually Distribution Plan of Permits for 2011: Hauliers Singular Plans (in Serbian), <http://www.mi.gov.rs/sektor%20za%20drumski%20transport.html>
- 10) Statistical Office of the Republic of Serbia. International flows of goods by modes of transport on the territory of the Republic of Serbia, 2006. <http://webzrs.stat.gov.rs/axd/en/drugastrana.php?Sifra=0005&izbor=odel&tab=49>
- 11) Statistical Office of the Republic of Serbia (2006) Entry, exit and transit of freight road vehicles, by countries of vehicles registration, 2005. COMMUNICATION SV31, LVI (82), Statistics of Transport and Communications. Belgrade: Statistical Office of the Republic of Serbia.
- 12) Statistical Office of the Republic of Serbia (2008) Entry, exit and transit of freight road vehicles, by countries of vehicles registration, 2006 – 2007. COMMUNICATION SV31, LVIII (170), Statistics of Transport and Communications. Belgrade: Statistical Office of the Republic of Serbia.
- 13) Statistical Office of the Republic of Serbia (2010) Entry, exit and transit of freight road vehicles, by countries of vehicles registration, 2008 – 2009. COMMUNICATION SV31, LXI (159), Statistics of Transport and Communications. Belgrade: Statistical Office of the Republic of Serbia.
- 14) Strange N., Michaelis C. (2003). Impact Assessment of the Freight Element of Transport Energy Best Practice - Final Report, Birmingham, UK: DATABUILD Research & Solutions.
- 15) Walters L.C., Aydelotte J., Miller J. (2000). Putting More Public in Policy Analysis. Public Administration Review, 60 (4), 349-359.

Paper sent to revision: 01.02.2011.

Paper ready for publication: 16.03.2011.