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# Competitive sustainability of a transport route in the transport service market

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## ABSTRACT

In order for the particular transport route and entities in the production of a transport service on that route to maintain their position in the transport service market, they have to ensure efficiency, orientation towards service users, rationality, environmental friendliness and quality dominance of an offered service. User orientation and flexible reaction to market demands create preconditions for the establishment of a competitive and attractive transport route and accompanying transport and service facilities and entities. Therefore, proper valorization and quality marketing elaboration of these advantages, requires accepting of those standards, criteria and preferences of the transport service users or their intermediaries as fundamental measures for the realization of a competitive sustainability of a transport route on the transport service market, where it is important to be aware of: competitiveness criteria structure, service user preferences, expectations and needs of intermediaries as decision makers about the transport route their customers will address their transport and logistic needs.

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## 1. Introduction

Competitive sustainability of a transport route in the transport service market requires thoughtfulness in creation of the overall offer on the transport route, which will with its attractiveness, speed, safety and total service quality, satisfy the growing demands of users. In other words, this means that success in the transport service market can be realized only by permanent quality assurance, which should provide at least the level of service offered by competitive transport routes and participants involved in the production of transport services on that route (ports, railways, road hauliers, freight forwarders, freight-transport centers, etc.).

As the market becomes more demanding and open to competition by the organizer and executor of the service, the retention of proclaimed quality with the intention of its improvement is required. This is why definition of the quality policy of transport and overall transport service is considered to be the fundamental precondition for building and managing quality of transport system.

Thus, the main purpose of this paper is the analysis of conditionality of competitive sustainability of transport route in the transport service market with a special emphasis on:

- general analysis of the transport route competitiveness criteria and the criteria that influence the choice of an optimum transport route,
- definition of transport service users or intermediaries who appear in the role of decision-makers in choosing the optimum transport route;
- analysis of the structure and transport route competitiveness criteria preference in terms of the service user or in terms of an intermediary (international freight forwarders, logistic operators...), as a decision-maker in choosing the optimum transport route in the organization of a transport-logistic undertaking.<sup>1</sup>

## 2. General analysis of the transport route competitiveness criteria

At times when service rates are becoming more uniform and unique, a critical role in whether or not a job in the market of transport services will be assured, has the quality of the service provided to users.

<sup>1</sup> This article is a result of a research performed by a postgraduate student on the MoS (Motorways of the Sea) project within the obligations of a doctoral study, subject C "Maritime Affairs".

Standpoint shared by many experts is that the price and quality of service are one of the most important factors in the valorization of a transport route in the market of transport services and in the choice of an optimum transport route, transport technology and means of transport. Their divergence of opinion is mostly related to different views in defining the criteria and their importance.

Divergence and inability of uniform definition of qualitative criteria in valorization of a transport route is justified for several reasons. Some of the reasons that can be used for the simplest justification are for example the following:

- different types of cargo prefer different modes of transport;
- characteristics of the transport infrastructure, superstructure, transport organization, possibilities of its planning, transport effects, (...) are different for different modes of transport;

- any mode of transport has its own specific advantages and disadvantages;
- each user of a transport service may have different priorities or requirements, (...).

It is difficult to determine which are the aspects optimal for analysis of criteria weights for competitiveness and quality of transport service so dilemmas occur:

- are these market and service user demands?
- are these advantages or disadvantages of particular transport modes objective and always the same?
- are these demands of the cargo and transport substrate?, etc.

Accordingly, the following table shows criteria analysis in the selection of an optimum transport route in terms of priorities and preferences of transport service users or their intermediaries in the organization of transport (freight forwarders, logistics operators).

**Table 1** Transport route competitiveness criteria

	Criteria	A	B	C	D	E	F	G	H	I	J	K	Total
1.	Service rate (transport cost-effectiveness)	x	x	x	x	x	x	x	x	x	x	x	12
2.	Investment expenses						x						2
3.	Time	x	x	x	x	x	x		x	x		x	10
4.	Speed									x	x	x	4
5.	Distance											x	2
6.	Reliability	x	x	x	x	x		x	x			x	8
7.	Punctuality	x							x	x	x	x	5
8.	Regularity										x		1
9.	Frequency	x											2
10.	Safety (cargo, transport)	x	x							x	x	x	6
11.	User information	x										x	2
12.	Availability		x						x	x			4
13.	Flexibility		x	x				x	x			x	5
14.	Qualification		x									x	2
15.	Control		x										1
16.	Capacity			x					x		x	x	4
17.	Business relations (participants)			x									1
18.	Additional services (insurance, storage,...)											x	1
19.	Social elements			x									1
20.	Environmental impact (pollution of air, soil, transport noise, ...)						x		x			x	4
21.	Energy consumption						x						2
22.	Traffic accidents						x					x	2

**Source:** Compiled by the authors according to the following references:

A: Development of Asia-Europe Rail Container Transport Through Block-Trains, Northern Corridor of the Trans-Asian Railway, Economic and Social Commission for Asia and Pacific, United Nations

B: "Intermodal Quality", IV Framework Programme of the European Commission, Integrated Transport Chains, 1996-1999.

C: "Taco Trans Case", Rotterdam School of Management, Erasmus University Rotterdam, <http://www.fbk.eur.nl>

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Competitive sustainability of a transport route in the transport service market is dependent on the number of factors. They relate primarily to:

- criteria evaluated and analyzed while making decision on the optimum transport route choice, and
- decision makers who depending on the situation, have different demands, priorities and criteria preferences (weights).

Therefore, it is necessary to analyze the criteria of selecting the optimum transport route with regard to the current and/or potential users of transport route services and regarding decision makers on the choice of the optimum transport route. In so doing, it is necessary to have a significant knowledge about: service user and/or decision-maker in selecting the optimum transport route as well as about the competitiveness criteria preference structure in the selection of the optimum transport route.

### 3. Service user and decision maker in the optimum transport route choice

To define criteria preference structure in the choice of an optimum transport route on behalf of the transport service primarily means to define and to understand: "Who is a service user?" and "What parties are included in decision making on the choice of an optimum transport route?"<sup>2</sup>

Service user is in this case a customer using a transport service or any other traffic service who communicates directly or indirectly over his/her intermediaries with the entities participating in the production of these services. The abovementioned role of the customer includes:

- importer/exporter,
- seller/buyer,
- consignor (shipper)/consignee or
- transporters themselves (carriers).

The abovementioned customers may engage their intermediaries which is mainly related to the engagement of an international freight forwarder, who as a representative of his principal, may be in the role of:

- multimodal transport operator;
- shipper or consignor;
- consignee;
- logistics operator.

These intermediaries are entrusted with a number of basic/specific activities that they regularly/occasionally perform in the organization of transport undertakings and other operations and activities necessary for the over-

all logistic (transport) service and for the organization of shipping, delivery and transit of goods.

For this reason, terms of an international freight forwarder, multimodal transport operator and logistics operator are hereinafter defined:

- International freight forwarder – according to FIATA (*Federation International des Association de Transitaires et Assimiles*)<sup>3</sup> – means "the person concluding a contract of freight forwarding services with a customer (principal) where the freight forwarding services means "services of any kind relating to the carriage, consolidation, storage, handling, packing or distribution of the goods as well as ancillary and advisory services in connection therewith, including but not limited to customs and fiscal matters, declaring the goods for official purposes, procuring insurance of the goods and collecting or procuring payment or documents relating to the goods".
- Multimodal Transport Operator (MTO)<sup>4</sup> is any person who on his own behalf or through another person acting on his behalf concludes a multimodal transport contract and who acts as a principal, not as an agent or on behalf of the consignor or of the carriers participating in the multimodal transport operations, and who assumes the responsibility for the performance of the contract.

According to the UNCTAD (United Nations Conference on Trade and Development) definition, MTO has been categorized as:<sup>5</sup>

- Vessel Operating Multimodal Transport Operators (VO-MTO) – are operators – ship owners who expanded their services at the account of freight transport from port to port including land transport or air transport. They can but need not to have their own transport means (road, rail, air). If they do not own them, they negotiate these types of transport concluding contracts with carriers. Additionally, they can contract land stacking and warehousing services as well as numerous other services.
- Vessel Non-Operating Multimodal Transport Operators (NVO-MTO) – are the remaining transport operators who neither own nor operate ships, but rather contract maritime transport (travel). They usually operate only one type of transport, very often by trucks and rarely by aircraft or trains and in majority of cases only at one end of the (transport) route.
- Logistics operator is a registered and authorized legal or natural person who as a rule on his behalf and for his account performs or organizes numerous logistic activities related to manipulation, carriage, transfer, movement,

<sup>2</sup> Development of Asia-Europe Rail Container Transport Through Block-Trains, Northern Corridor of the Trans-Asian Railway, Economic and Social Commission for Asia and Pacific, United Nations.

<sup>3</sup> Cf. FIATA model Rules for Freight Forwarding Services, Stockholm, January, 1997.

<sup>4</sup> Cf. Zelenika, R., *Prometni sustavi*, Ekonomski fakultet u Rijeci, 2001, p. 421.

<sup>5</sup> Cf. *Multimodal Transport Handbook*, UNCTAD, Geneva, March, 1995.

distribution of raw materials, semi-products, production materials, finished products, goods from the delivery point i.e. raw material basis, (semi)manufacturer, warehouses, terminals, customers, exporters... to the point of receipt i.e. (semi)manufacturer, warehouses, terminals, customers, importers, users, consumers, ... and who, with minimal invested resources (production, financial, human, ...), maximally meets the market requirements (customer, user, consumer requirements) and requirements of his principal, partner.

Defined entities, with respect to their functions and jobs, can directly participate in the selection of an optimum transport route on the basis of request and the criteria selected for the benefit of the principal. This means that as organizers and advisors of the service user, they are directly familiar with their needs and requirements and can be identified as important participants in the decision making process in choosing the optimum transport route.

According to some opinions, depending on the participants involved in the selection of the mode of transport, and thus indirectly in the selection of a transport route, it is possible to distinguish three groups of transport. These are<sup>6</sup>:

- merchant haulage (MH) – transport organized by the merchant,
- carrier haulage (CH) – transport organized by the carrier,
- merchant inspired carrier haulage – transport organized by the carrier inspired by the merchant.

Depending on Incoterms<sup>7</sup> terms and parity according to which transport is organized, a merchant can be:

- salesman,
- consignee (customer), and
- freight forwarder as a representative.

In the merchant haulage (MH), the influence of maritime carriers is limited to the maritime part of transport and guidelines about the handling operations on the port terminal. From this point, a merchant who is usually a shipper or his agent (freight forwarder), takes over the obligation of organizing the remaining transport. Maritime carrier defrays the expenses that are related to the cargo handling on the port terminal. The biggest advantage of this transport (merchant haulage) is that a shipper or consignee can organize cheaper land transport. Conditions for this include that they take over the concern about the organization of transport and delivery of cargo to port terminal. Costs of demurrage and delay are paid separately by the carrier/consignee on the maritime route.

In case when the decision maker is the carrier himself (CH), customer using a land transport service is:

- maritime carrier or
- shipping agency.

Carriers bring a larger amount (volume) of demand in relation to merchants. As a result, they generate high traffic volumes which ensure higher capacity utilization with lower costs. This also gives them a stronger position to negotiate with land transport operators. Moreover, their wide range of activities allows them to use a logistic “door-to-door” concept intended for terminals and empty containers which increases efficiency. The carrier is in charge of the maritime segment of the journey, during transshipment in the port of destination, as well as the land transport segment, including final delivery to customer’s door.

Transport whose holder is the carrier himself, provides the shipper with certain advantages/disadvantages:

- shipper must agree with only one transport party,
- predicted reliability is stronger causing larger amounts of traffic; larger number of operations puts carriers in a position where they can more easily negotiate with the terminal operators; this in turn reduces the waiting time of transport equipment,
- because of all included tariffs that are used, a shipper will not have difficulties with lay days and retention of claims,
- the main disadvantage of such transport are higher costs of transport.

Long-term cooperation between the merchant and the carrier and the increasingly rigorous requirements of users (customers) lead to the point where merchants inspire carriers. In doing so, the merchant (customer) stands behind the carrier’s decision about the transport to be used or even about the operating parties that will be involved in the transport of their goods. Turn of the CH to MH occurred due to the emergence of large shippers and freight forwarders who take over the transport and their organization. Development of the current situation shows the consequences of the relationship between the traffic volumes organized by the merchant or by the carrier. Large part of intermodal transport costs is based on the organizational costs of transport. In the past, there were clear conference rules for tariffs in maritime transport of containers from the port to the hinterland (the level of these tariffs depended on the choice of the mode of transport). These published tariffs (European Zone Charges) were fixed for certain areas (transshipment) or the contracting parties. Demurrage and tariffs for retention were also fixed according to these conferences. This is why the tariffs of land transport to the same destination can vary only due to loading areas. At that time, the ratio between the carrier and the merchant (carrier haulage/merchant haulage) was 80/20.

However, after the discovery of possible cost reductions, many large shippers are beginning to self-organize land transport. This happens despite demands for special (additional) costs and agreements with a number of parties. So, the current ratio of the carrier haulage and merchant haulage is 30/70.

<sup>6</sup> Taco Trans Case, Rotterdam School of Management, Erasmus University Rotterdam, <http://www.fb.kur.nl>.

<sup>7</sup> Cf. INCOTERMS 2000, ICC Official Rules for the Interpretation of Trade Terms, Pravila, Croatian Chamber of Commerce, 2000.

**Table 2** An example of advantages and disadvantages of cooperation between the railway and international freight forwarders (logistics operators)

Advantages (+)	Disadvantages (-)
By relying on international freight forwarders railway can fully devote to its main (transport and other) activities.	Large global freight forwarding groups (due to the increase in container traffic) can negotiate on tariffs and the reduced costs of transport and thus directly affect the profitability of transport operators.
Freight forwarder will have a greater responsibility to the shipper's requirements and will try to face the pressures of the market more than, for example, the national railway companies which traditionally operate under the given conventions and conditions.	Freight forwarders represent communication between the shipper and the carrier (maritime, road, rail ...). If the quality of logistic service of a specific freight forwarder is considered to be unsatisfactory, the shipper may possibly choose other freight forwarder and other mode of transport even though the railway performed well its segment of the service.

In this regard, it is important to consider in detail a current position of international freight forwarders as intermediaries in the merchant haulage and the importance of logistics for the quality of transport services.

Although a significant percentage of shippers (36%) prefers the in-house logistics, currently the trend is still to outsource logistics to carriers, international freight forwarders, logistics providers or a combination of several of these (64%).<sup>8</sup>

Obviously, there are new rules and philosophy related to those who are in the service of logistics, and these are a few steps ahead of traditional freight forwarding and customs brokerage. So the "package" of services provided by logistics operators should include the following elements:

- transport management, including optimization of the choice of the carrier based on user demand in terms of quality of service and service costs,
- logistics management, including the tracking of cargo, flexible routing, packing/packaging, storage and distribution as necessary,
- trade and transportation documentation, including the electronic development and transfer of shipping documents, customs clearance, and other regulatory requirements,
- international trade finance,
- payment-related contract,
- insurance.

There is a trend for enhanced and more professional forwarding activities that will not disappear. This will, without a doubt lead to a restructuring process within the international freight forwarding profession, but it will also have consequences on the transport operators who offer transcontinental services. In fact, requirement by shippers in international trade for "one-stop shopping" and to the situation that distribution services are left and will more increasingly be left to freight forwarders who go beyond their traditional function by offering and accepting full responsibility for an integrated transport chain.

The only possible consequence is that the usage of interoperable multimodal services is no longer a shipper's choice, but a considered job of those providing cargo logistics services.

So, for example, connecting and cooperation of railway with international freight forwarders as logistics operators has certain advantages and disadvantages which are illustrated in the table 2.<sup>9</sup>

In the mentioned cooperation, risks for the railway (or any other transport operator who cooperates with freight forwarders) are limited since freight forwarders also have a common interest to achieve good quality. If risks exist, they should not scare the railways away from freight forwarders but only encourage them to associate with well-established freight forwarders.

Cooperation with international freight forwarders to increase traffic will help the railways develop an image of a credible and customer-oriented mode of transport in the eyes of the major companies engaged in the global market by ensuring the elements needed to attract the shippers to make better use of rail. These are:

- market (tariff) effectiveness of services – that respect the competitive market,
- reliability – that reflects the importance of respecting the delivery deadlines in industry,
- speed – that can be compared or improved in relation to the existing transit times of road transport,
- priorities – that reflect economic importance of freight transport,
- service – which respects that the user always selects the transport mode.

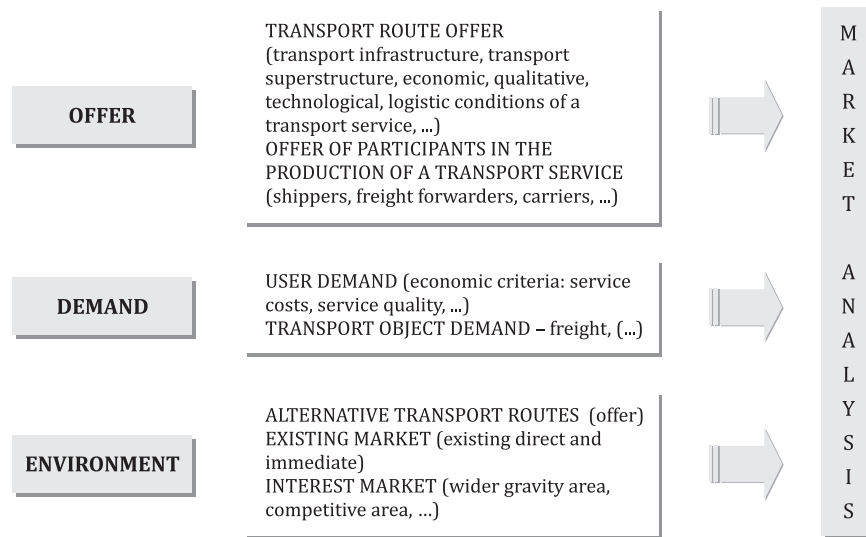
Such a railway or railway that delivers goods "on time", "all the time", can offer significant benefits to shippers and international freight forwarders, such as:

- better realization of those benefits that have been identified and are valid for road transport, when the railway is used for transport of large amounts of cargo as close as possible to the shipper's and the consignee's premises,
- in some cases safety benefits,
- possibility for a shipper to be considered as environmentally-friendly because of the usage of a railway as an environmentally more acceptable mode transport,

<sup>8</sup> Development of Asia-Europe Rail..., op. cit.

<sup>9</sup> More about the transformation of a classic freight forwarder into "logistic operator" cf.: Zelenika, R., Prometni sustavi, op. cit., p. 408.

Figure 1 Aspects of a transport route market research



Source: Compiled by the authors

- reliability for the pick-up and delivery services,
- lower expenses of the supply chain with high volume movements.

From all the above, it can be concluded that an increase in the number of medium-sized and large companies, which are included in general trade by doing their core business activities, international freight forwarder (logistics operator) becomes the “man in the center” of “door-to-door” transport, standing as he is at the point of convergence of all the constituents of the transport chain (transport, take-over/delivery, logistics, insurance and finance).

In this role, his responsibility in the choice of an “optimum transport route” for the particular type of cargo is highlighted i.e. in the selection of an optimum transport route which is with regard to certain criteria (in accordance with the user requirements and needs) better than the alternative transport routes and thus more competitive in the transport service market.

### 3. Criteria preference structure in the optimum transport route choice in terms of a transport service user

Transport service market and transport and logistic demands of a transport service user represent a dynamic and a constant evolutionary process. The result of this is the need of transport and logistics operators to meet market demands for the benefit of their customers and to always be aware of the criteria and the criteria preference structure upon which depends a decision about the transport route users will address their transport and logistic needs.

This specifically means a transport service market research in relation to (Figure 1):

- offer,

- demand, and
- environment.

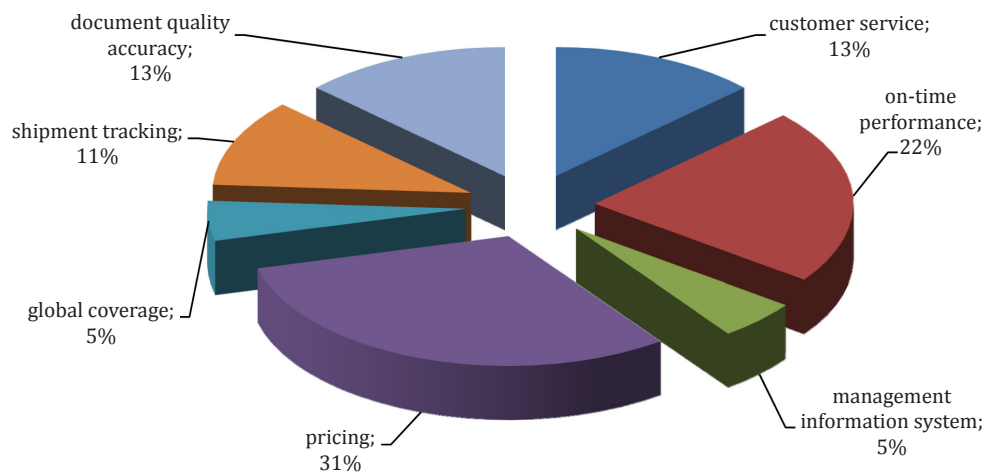
In so doing, on the basis of the general quality definition, research of offer would concern the internal quality research which is determined and realized by the entities that participate in the transport service production (carriers, logistics operators...), transport infrastructure and superstructure and transport conditions and other related activities, (...) on a particular transport route. In other words, the abovementioned offer refers to the transport potential which should reflect the diversity of the market and should have developed a wide range of solutions and customer-oriented conditions.

Supply research would refer to external quality research determined by the specific demands (economic, qualitative, ...) of service users who also represent the criteria and indicators of transport route competitiveness. Given that this most often includes different needs and criteria of different market segments, it is of great importance to define the most common priority criteria of competitiveness and preference structures (weight of each criterion). It is necessary to analyze specified internal and external quality in the environmental conditions and with regard to internal and external quality of competition.

Current trends in the way shippers operate and their future strategies in buying capacity from freight operators were indicated in a recent survey of 1000 shippers world-wide.<sup>10</sup>

For the purposes of an analysis of the conditions and demands in organizing transport and logistic services, and thus demand (criteria) preference structure, some of the following important conclusions are hereby listed:

<sup>10</sup> Cf. Containerisation International, “CI pool shows shipper priority”, November, 1999.

**Figure 2** Criteria significant for the transport route choice (according to the shippers' opinion)

Source: Containerisation International, November, 1999, compiled by the authors

- 50% of shippers loads in conditions which allow them the choice of the carrier, while 37% of shippers loads in combined conditions that give them a partial control in the choice of the carrier,
- when they negotiate land transport, shippers prefer to give over the organization of transport (land) in 30% of cases to maritime carriers, and in 19% of cases to international freight forwarders; a trend is confirmed by shippers' preferences in the provision of total supply chain logistics services,
- share of involvement of individual entities in the organization of transport is for maritime carriers – 23%, international freight forwarders – only 12%, and specialist logistics operators – 13%,
- The preference for distribution requirements still went to in-house logistics departments (36%),
- 88% of shippers states that (global) general commercial contracts in the future are important for them, which confirms the shipper's need for an integrated service.

In relation to the priorities in the ranking of carrier services on top of the scale of service quality indicators in 43% of cases (responses) is the reliability criterion referring to accuracy (with respect to the timetable), while the transit time is represented in 12% of responses. This demonstrates the fact that the reliability of the proposed timetables will be a more important element (criterion) than the element of transit times in the selection of the carrier among a number of competitive carriers.

In the current cost-sensitive times, 38% of shippers designated freight rates (tariffs) as their most important consideration. Surprisingly, other elements of service such as cargo tracking and tracing, Electronic-commerce and reliable booking and documentation received very low priority (4%), if any.

Previously stated data indicate the following conclusions on indicators that are important to shippers:

- reliability and rates remain among the top-scoring determinants in the selection of a transport mode,
- transport time – it is not a high priority criterion if transit time among maritime carriers is compared which differs in most cases only in 1 or 2 days, which is not reflected on the transport cost; however if this difference in time (time savings) is greater than 7 days then it will be significant for the shippers,
- understanding that cargo tracking and tracing, Electronic-commerce, reliable booking and documentation have a low priority is misleading; in fact they have a low priority just because they are already in place and because they have become transparent as they are not subject to operational vagaries, like for instance is the case of reliability criterion and economic criterion of transport costs; this confirms the fact that if the shipper is in a situation to spend a day or two more in transport (a day or two longer transport time) and with lower costs, he certainly would not accept the fact of being deprived of the quantity and quality of information.

Traditionally there are three main elements which in a "package" determine whether the user will be attracted or not, and these are:

- (transport) service cost,
- (transport) service time<sup>11</sup>,
- level-quality of (transport) service.

In order to illustrate the difficulty and importance of certain elements for the choice of transport mode, Figure 2

<sup>11</sup> Speed and time necessary for transport/traffic service performance are often considered as qualitative criteria.

shows the results of a survey of American shippers on the subject.<sup>12</sup>

As shown in Figure 2, it is clear that almost one third (31%) of shippers has the view that the price of the service is an essential element in the choice of the means of transport and transport route. For this reason, it is important to understand the system of tariffs and prices of transport and traffic services for all transport sectors. However, a substantial number of shippers are aware of the great importance of other criteria which, unlike the price as economic criterion, belong to the group of criteria that determine the level and quality of the service. In terms of priority, qualitative criteria include in particular the criteria of reliability (accuracy) which include the on-time performance (22%), criterion which implies meeting the required level of customer service (13%) and document quality accuracy (13%). This is followed by the other criteria: tracking of shipments (11%), global coverage (5%) and management information system (5%).

In addition to understanding the criteria and their weights it is important to be familiar with the segmentation of the market due to the fact that user demands in terms of preference of certain criteria can be differentiated with regard to, for example, type of cargo, existence of long-term contracts and similar.

#### 4. Conclusion

Business operations of organizations and entities participating in the production of transport and logistic services on a particular route, utilization of transport infrastructure and superstructure capacities and competitive advantage in the market of transport services depend primarily on the service user requirements, needs and interests.

Not having customer and service users indicates offering a service that no one needs and accordingly a competitive sustainability of the transport route in the market of transport services is questionable if the fundamental business principles are not based on the realization and fulfillment of service user requirements.

In conditions when transport business has become a highly competitive business, an important role in the transport route competitiveness, in addition to costs of transport services, has the quality of transport/traffic service. As the totality of transport service characteristics, quality of transport service is determined by a number of qualitative indicators and criteria of competitiveness. In terms of internal quality, qualitative criteria are determined by the quality of an offer generated by the participants involved in the production of transport service on a transport route, their strategies, operational systems and capacities (transport infrastructure, superstructure, terminals, ...), while in terms of external quality, they are determined by the needs, requirements and assessments of transport service users, which imply transport demand.

Therefore, for achieving positive results in attracting users of transport/traffic services and cargo flows on a transport route, increasing the volume of transport, income and the valorization of a transport route, taking into account the criteria of competitiveness and preference criteria structure is essential prerequisite for sustainability of a transport route and for its valorization in the market of transport services.

In order to ensure a system of planning, implementation, control and improvement of the quality of transport services, it is necessary to be acquainted with the economic and qualitative criteria of transport service competitiveness and their specificities with regard to the mode of transport and the importance of certain criteria in terms of the user's priorities. With their definition it is possible to define certain activities and guidelines that can be used to affect these criteria, in order to increase the transport route competitiveness in the market. However, in addition to this and for the purpose of defining the priority criteria, it is necessary to know the weight of each criterion that should be determined by the preference structure of the user. This includes a direct market research of transport services including market segmentation as an essential element of the transport service market with regard to the specificities of requirements in relation to various factors (type of cargo, interests of users, mode of transport, business relations, ...).

Only then, that is by knowing the offer of a specific transport route in terms of the competitiveness criteria and by knowing the competitiveness criteria preference structure from the point of view of transport service user and the environment it is possible to objectively distinguish and conclude the degree of competitiveness of the transport route as well as all those measures and activities that can be targeted at specific criteria in order to increase the transport route competitiveness on the transport service market and consequently in the function of positive effects on the transport and economic system of the national economy or region, as well as areas which the associated transport route transits.

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<sup>12</sup> Cf. Containerisation International, November, 1999.



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