

CUSTOMER ASSESSMENT OF QUALITY OF TRANSPORT

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Summary: This article aims to understand the requirements imposed on the quality of passenger transport and public opinion evaluation of the quality of passenger service by the customer. It is intended for providers of public transport as a source of information in present time.

Key words: quality of transport services, quality assessment, customer

INTRODUCTION

With an increase of living standards in the Czech Republic the society is demanding better service and quality. *These* requirements include the quality of public transport as well. Commuting to work or school, travelling with young children or older and less mobile citizens in substandard conditions increasingly discourages potential customers of public transport.

Table 1 - Traffic performance under various modes of public transport in the years 1990-2008

Year:	1990	1995	2000	2005	2006	2007	2008
Passenger cars		54,5	63,94	68,64	69,63	71,54	72,38
Buses, coaches		18,6	16,17	15,61	16,02	16,12	16,09
Tram. metro		7,69	8,07	7,93	7,8	7,75	9,14
Railways	13,31	8,02	7,3	6,67	6,92	6,9	6,8

Value: thousand mio pkm

Source: (1)

According to a public survey on the theme "Quality of Public Transport in the Czech Republic" which took place the 03 -10 January 2011 on the Internet portal Vypĺřito.cz, 64% of respondents reported that choose means of transport with regard to its quality. However, the concept of "quality" is very individual and its determination is difficult.

1. REQUIREMENTS FOR QUALITY OF TRANSPORT SERVICES

The quality of transport services in the Czech Republic meets the European standard ISO 9001:2009 which is partially covered by the standards ČSN EN 13816:2003, ČSN EN 15140:2006, on transport. Furthermore, the concept of quality of transport services and its management has been defined by several books, proceedings and specialized texts. On the

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other hand, it's primarily a customer and his subjective view of things to which should be taken into consideration.

1.1. Relationship between quality of transport and a carrier

For carrier is important the quality of infrastructure, its condition, layout and equipment, which together influence the journey time. Another requirement is an adequate infrastructure capacity. Also the quality of vehicles will affect the final quality of transport.

In terms of operators of transport services is important for what price will be achieved the guarantee of providing quality service or higher quality. From a technological point of view, emphasis is placed primarily on the operation of traffic, it means using the processes which are economical efficient, safe and environmental friendly. Suitability of the technological processes may occur in the external quality of service but its effect may be limited only to economic aspects of services or a social phenomenon in the form of quality in relation to society as a whole.

1.2. Relationship between quality of transport and a customer

In terms of customer evaluating the quality of transport services there are identified following requirements:

- Travel time

From the passengers point of view it is the transportation "from door to door". This means that the travel time with a specific means of transport is added by additional times - time required for a transfer, waiting time for a connection, time needed to reach the boarding location of the vehicle in terminal, station or stop, time needed to transfer from the last transport mean to the destination.(2)

- Reliability

Transport is ensured in accordance with the timetable applicable to the smallest degree of delay. Delay can leads to missing the connection and therefore to customer dissatisfaction.

- Sufficient space availability

In terms of temporal and spatial availability of stop or station it is important to its appropriate location, accessibility and density of the stops network. It is essential to ensure the appropriate equipment in such places. The place should be sheltered from adverse weather conditions.

- The regular connections

Appropriate is implementation of the intervals, to facilitate orientation in the timetable.

- Appropriate frequency and timing of connections

Distribution connections should respond to passenger demand in the characteristic periods of a day, week or year. In the morning trip to work / school, the afternoon trip from work or school to home, Friday and Sunday peaks, summer traffic, holiday traffic etc. This plays an important role in determining the passenger, if he use a public transport, or will prefer a personal service.

- Links to other joints

Links to other joints increases the area serviced by public transport and may attract more customers who might otherwise have used private car traffic. This system is already used by the IDS in different regions.

- Minimal number of transfers

Passengers prefer the minimum of transfers, which for them mean more comfortable traveling. Minimal number of transfers is important mainly for traveling the elderly, persons with reduced mobility, and mothers with children.

- The corresponding cost for the transport

It is one of the most motivative factors for the passengers. And the adequate price for this service allows the passenger to prefer the public transport rather than a car.

- Clean and comfortable vehicles

Interior and exterior of the vehicle is clean when leaving from a depot (exterior with the exception of cold days, the interior even during a shift), maintained, prepared, without damage of its components, without the repulsive unresolved elements.

- Clean stations and stops

The station area or stops are maintained clean and feasible even the weather gets bad, all information elements, stop timetables and traffic information are easily readable.

- Guaranteed barrier-free connections

The carrier operates certain proportion of wheelchair accessible vehicles. This information is particularly important for older people, people with reduced mobility and mothers with baby carriages. Means of transport, as shown in the schedule of the international symbol for the passenger in a wheelchair are provided throughout the entire length of the transport link connection by a wheelchair-accessible vehicle.

- Sale of tickets at stations and stops

Sales in the occupied space station or stop is marked with appropriate icons allowing the sale of tickets, sales office is open in its intended operating hours. The staff in ticket offices knows the tariffs and provides relevant information. Unification of tickets and in particular the possibility to buy a ticket for the whole journey (e.g. integrated public transport system has a positive experience with the increase the number of passengers compared to the situation where individual carriers on the market for public passenger transport operated separately), use of prepaid season tickets to major discount compared to purchasing tickets for one journey only, etc.

- Information in the vehicle and at stations and stops

The information in the vehicle (inside and outside) and at stations and stops are complete, up-to-date and readable.

- The behaviour of a station staff

Operating staff is behaving well, helpful and friendly without rough infringements of the rules of etiquette. Operational staff is trained and familiar with the rules dealing with the visually handicapped and follow these rules. Staff is willingly and proactively providing information to passengers and assists them with any questions or problems.

- Safety and Security

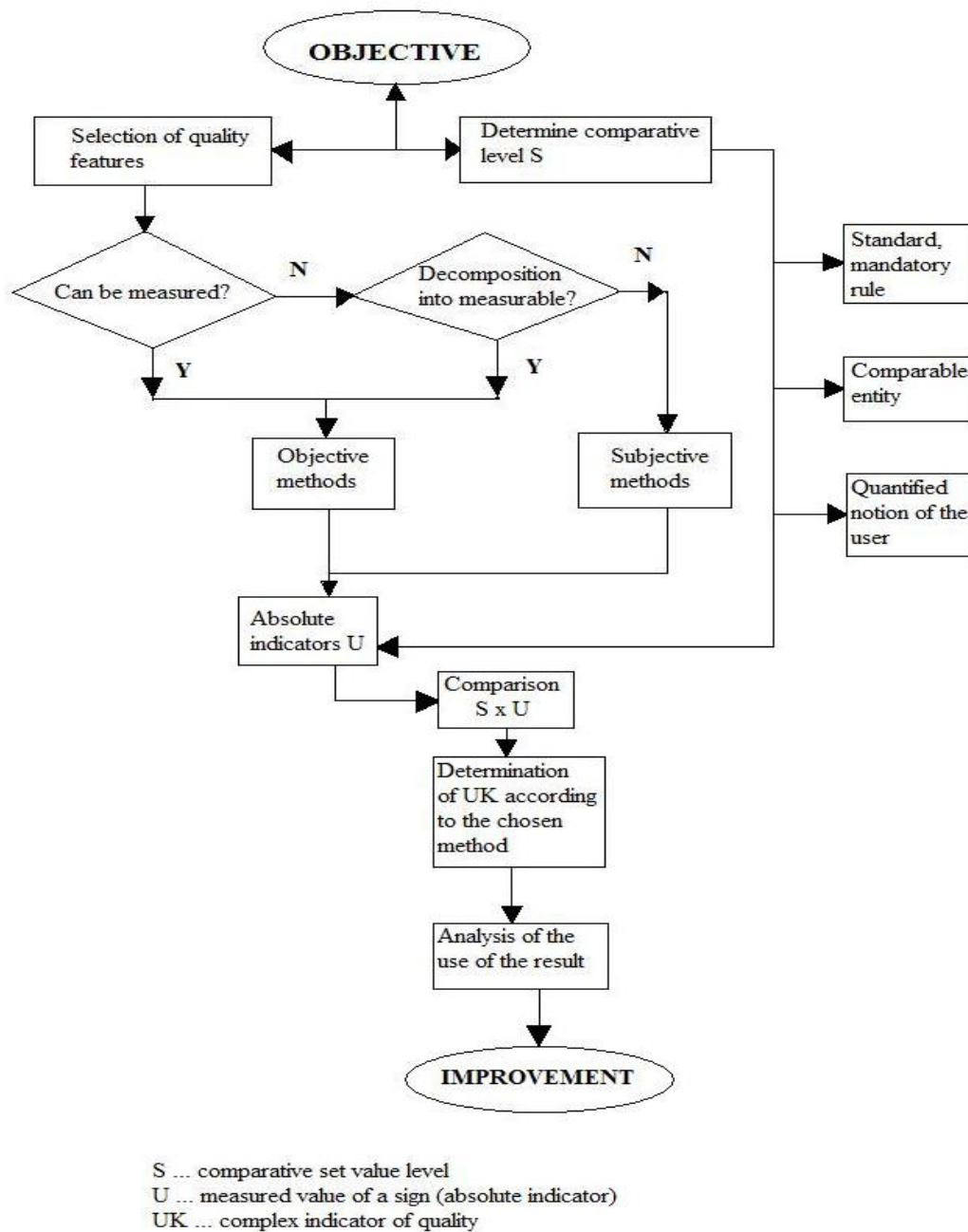
The passenger in the vehicle does not meet the situation which could endanger his safety, health or life. The technical condition of the vehicle complies with the applicable law, any defects are immediately removed.

2. QUALITY ASSESSMENT IN TRANSPORT

It is evident that the quality of service in the Czech Republic has experienced changes, however, is still necessary to respond to customer demands. The aim is to achieve the introduction of quality assessment.

2.1. General procedure for quality assessment

First of all it is necessary to establish quality requirements which the traffic will take to satisfy customers. As a general evaluation of the quality we offer the following procedure published in (2).



Source: (2)

Fig. 1 - General procedure for quality assessment

For the quality assessment is important to compare the current situation with the values that are listed as follows:

- Quality standards for transport: ČSN EN 13816:2003, ČSN EN 15140:2006 that extend the area of transport ISO 9001:2009, Regulation of EP and Instruction of ES n° 1371/2007, the Passenger Charter.
- The value of the services agreed in the contract. For of the passenger it means that the service will acquire such qualities which the carrier undertakes to comply with the published terms and conditions.
- The value of a similar services will be more or less the same
- The customer's concept about the value of the service.

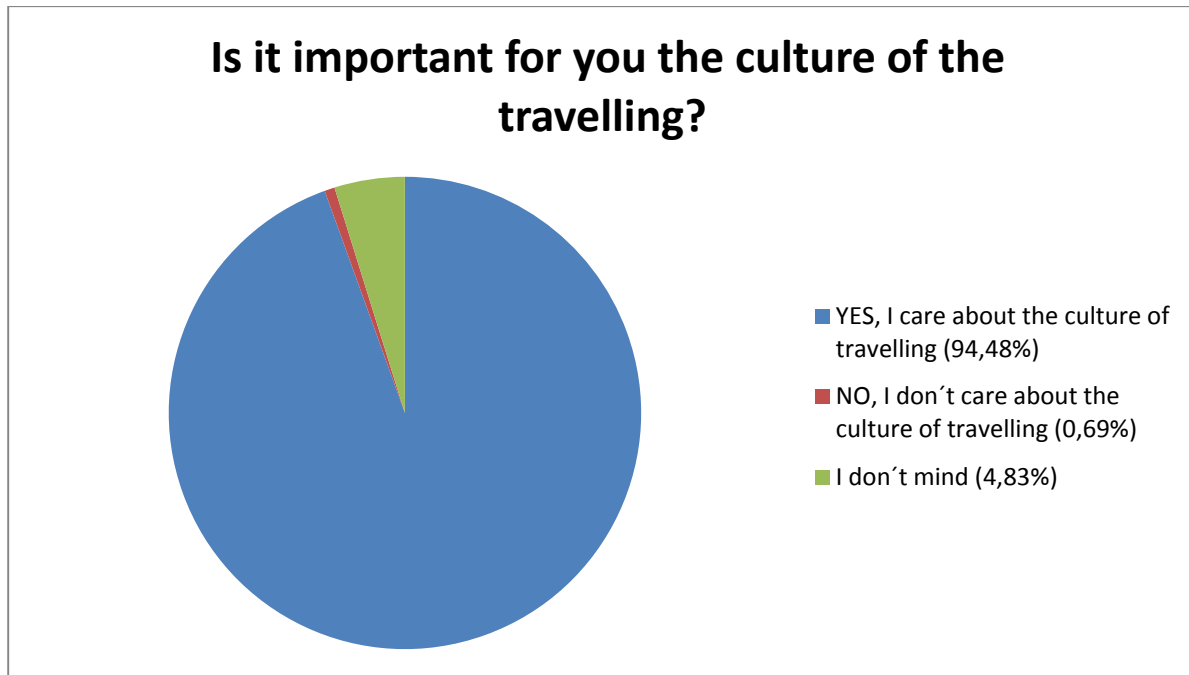
2.2. Quality of the transport services and its evaluation by a customer

In addition to objective measuring and comparing values, there are methods to detect the subjective views of customers. For this theme I used a character-oriented method to analyze global view. In the above-mentioned questionnaire, I asked the following questions:

- Is it important for you the culture of the travelling?
- What is your definition for the concept of quality of service?
- Are you satisfied with the quality of public transport in the Czech Republic?
- Do you choose the mode of transport with respect to its quality?
- According to which criteria do you choose the mode of transport?
 - a) Travelling time
 - b) The ticket price
 - c) Number of transfers
 - d) Comfort and Safety
 - e) Reliability of the connection time
 - f) Travel speed
 - g) The time waiting for transfers
 - h) Information and Customer Care
 - i) Environmental impact
 - j) Other

2.2.1. Question n°1.: Is it important for you the culture of the travelling?

Who of the passengers would not want to get the best for their money or at least reasonable comfort in a vehicle? Therefore, the answer is not surprising 94.48% of respondents answered positively. Rather, the behaviour of some carriers is perplexing, like they did not realize what are the customer's needs: „on the way from Prague to Moravia the toilet was in a state that I was unable to use it, I was ashamed before German woman, who were sitting with me in the coupe ...” and „perhaps enough time has passed since the Velvet Revolution, in order to be seen on trains” (3).



Source: (3)

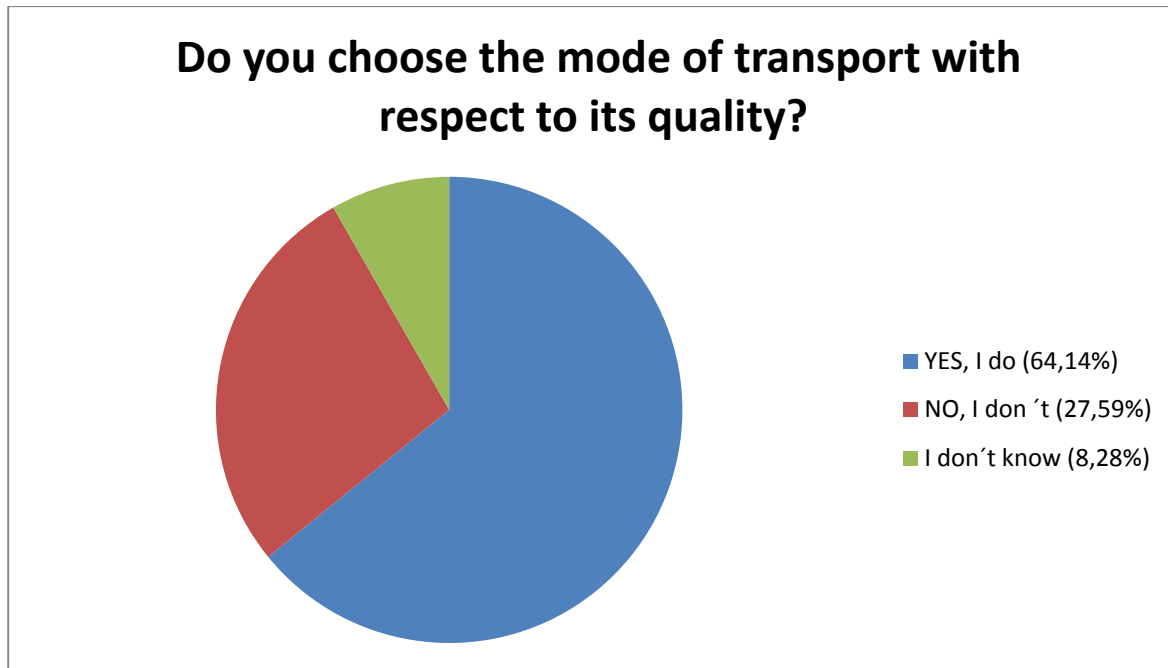
Fig. 2 - Percentage distribution of responses to the question n°1

2.2.2. Question n°2.: What is your definition for the concept of quality of service?

I included this question because the concept of quality of service is very individual and it is difficult to determine it. It was an optional open-ended question, to which the respondent did not have to answer. If he would like to express his view, he formulated it in the designated box. Of the 145 respondents, answered this question 65 (which is 44.82%) and at the same time 45 of them mentioned accuracy and running on schedule and time reliability of connections. There were included also other factors that passengers perceive during the journey and that for example: „working heating in winter, air conditioning in summer, or the ability to open the window”, „trains on Sunday which are on the way Olomouc - Prague have enough coaches, in order that most passengers don't have to stand” (3).

2.2.3. Question n°3.: Do you choose the mode of transport with respect to its quality?

Answer this question is not so clear. As demonstrated the survey throughout 27.59% of passengers does not require, or don't have chance to use high-quality services. The question is if the criteria of quality combine with the current state of public transport. If they had more demands than are established in accordance with EU standards then it would be difficult to satisfy their needs even in otherwise high-quality means of transport.



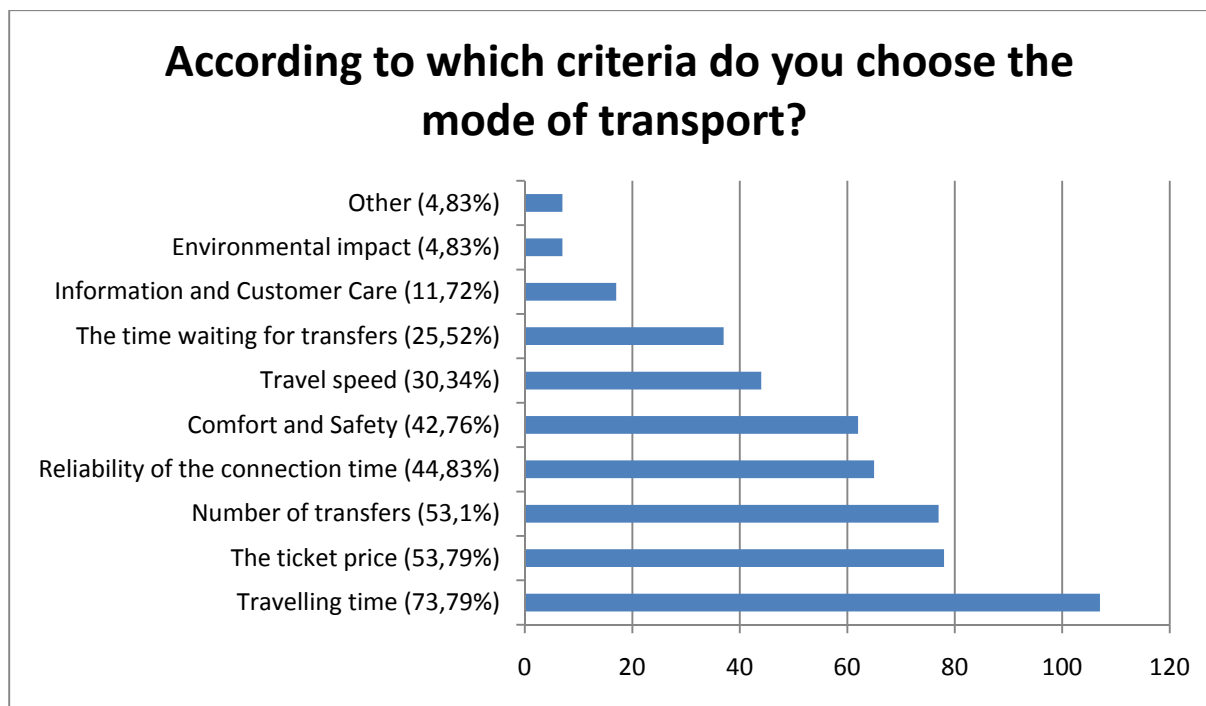
Source: (3)

Fig. 3 - Percentage distribution of responses to the question n°3

2.2.4. Question n°4.: According to which criteria do you choose the mode of transport?

According to a survey of the European Union (see Table 1.) we are increasingly encountering with reality that people choose rather individual transport instead of public transport. It is comfortable and in most cases even faster. Even though on the other hand in this direction, we can now observe the effect stated "the paradox of immobility". This is mainly affected by large cities, main roads, etc. during rush hour when people are using cars trying to be more agile and faster than public transport, remain in congestion and thereby they are becoming immobile.

This question is built in order that everyone could choose the appropriate criterion of importance that he attaches (1st, 2nd, etc. ...). In a survey on this question 103 respondents replied that they choose the means of transport according to the time of the transportation. The notional second place is sharing with ticket price (78 respondents) and number of transfers (77 respondents). The ecological impact on the environment is important only for minimum respondents (7 respondents). It shows that if the carriers want to retain or attract new passengers, it will depend not only on the quality of connections, their cleanliness and punctuality, but also the appropriate fare and the time to be spent in a vehicle.



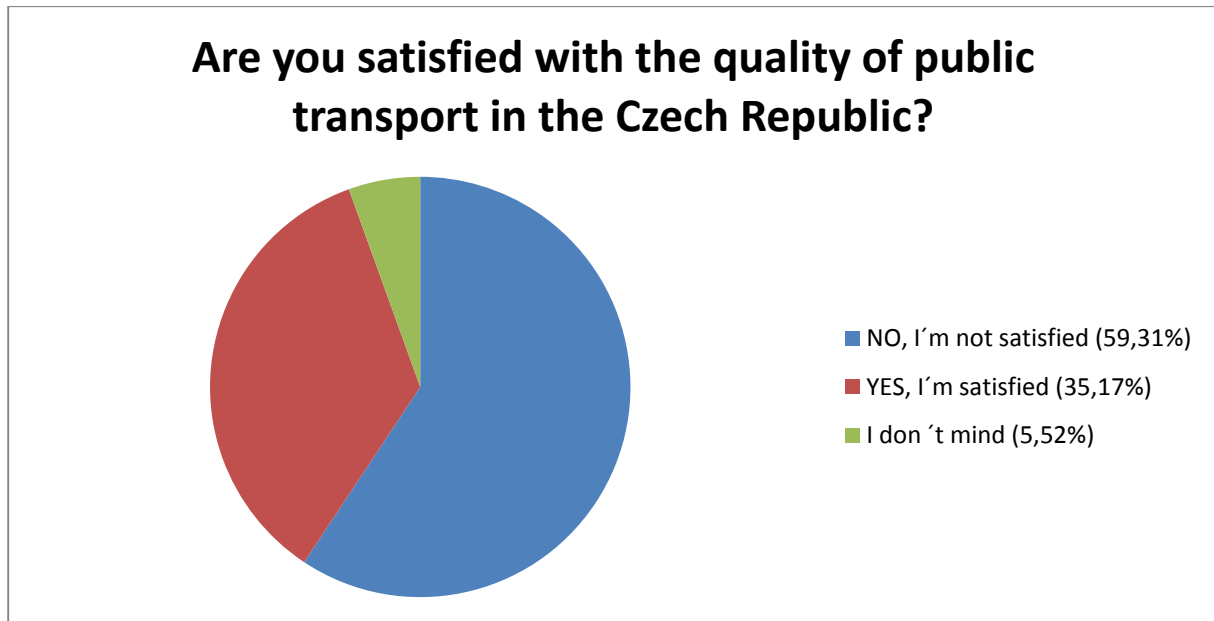
Source: (3)

Fig. 4 - Percentage distribution of responses to the question n°4

2.2.5. Question n°5.: Are you satisfied with the quality of public transport in the Czech Republic?

Some might say that this is confusing the issue, although it should be noted here because the answers do not turn up so sad. According to the results of the survey the negative public opinion about the quality of public transport is prevailing. 59.31% of those are not satisfied with it. On the other hand, in the space for statement of passengers appeared several observations of positive assessment of the current situation. E.g. "Public transport in the Czech Republic is not so bad, but there is always something to improve ...", "Quality of public transport over the past 10 years has improved a lot, but there is still much to do", "over the past few years I have used mostly bus, travelling for me was very pleasant"(3)

But I have to indicate that the negative responses are there for some reason. This is particularly cleanliness in transport, delays and inconvenience to passengers traveling as much matters. Here I can cite a number of responses: "I comment on the cleanliness in public transport and the density of public transport (as transport networks and transport equipment), which in my opinion in relation to its range before the year 1989 decreased about a huge percentage, and some areas are by public transport virtually unattainable, or up to 2x per day“, "Public transport in Prague bothers me the most by the overcrowding, it can completely ruin the mood, then I have more negative view on the quality of public transport, though it is not so bad"(3)



Source: (3)

Fig. 5 - Percentage distribution of responses to the question n°5

3. CONCLUSION

The public should not perceive public transport as a necessary evil, an anachronism, or social services. It should be seen as a kind of business that supports the development and quality of life. To be considered like that there are some requirements for reliability, availability, quality and other customer needs. If these factors are ignored, there is an outflow of passengers and reducing of the service. This deteriorates even the quality of life in this few communities and regions served. People usually resolves this problem by using a car, or moving to the cities, where transport services are at better levels. This implies an increase in private car traffic, congestion, increased accidents, etc. Therefore, is important to note that public transport is a valuable contribution to society. By the improving of the quality of public transport we can achieve reducing the amount of cars from the inner city to avoid traffic congestion and improving the quality of life.

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