

## EFFECTIVE MANAGEMENT OF UPPT QUALITY AS A MEAN OF CONTROLLED INFLUENCE ON THE ENVIRONMENT

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### **ABSTRACT**

*This paper gives an overview of urban public transport in Bosnia and Herzegovina with concrete example of KJKP GRAS Sarajevo (Cantonal Public Utility Company GRAS Sarajevo). It points out the most important problems and suggests solutions typical for this region. Special attention has been focused on the effects of urban public passenger transport operation on the environment. It emphasizes the introduction of the system of quality in this field in order to control the situation and to minimize adverse effects.*

**Keywords:** UPPT (Urban Public Passenger Transport), KJKP GRAS Sarajevo, Competitive approach, Standard ISO 9001:2000, Influence on the environment, Interaction of the processes of quality system.

### **1. INTRODUCTION**

Furthermore, the well-known events that happened recently in our wider surroundings had considerable influence on change of characteristics of the cities in Bosnia and Herzegovina. In demographical terms, the population number has significantly changed and the urban structure has been disarranged.

In Sarajevo, the largest city in Bosnia and Herzegovina, population number in 1991 was approximately 600.000, and today this number is about 400.000. According to the same data, the rate of unemployment increased faster than the rate of population growth.

Population number can be also used for a rough estimate of number of journeys, which determines transport capacities, and in the same time determines transport capacities of the urban public transport. Vehicle operations have negative influence on the environment, and the intensity of that influence depends of many factors analyzed in this paper.

### **2. SITUATION IN UPPT<sup>1</sup> IN BIH IN LIGHT OF THE INFLUENCE OF UNSOLVED PROBLEMS ON THE ENVIRONMENT**

#### **2.1. Expected changes in the environment and the process of urbanization**

The process of urbanization will go on, causing increase in number of urban communities and cities in which will be necessary to establish UPPT companies. The population from smaller towns will gravitate toward larger cities if social, economic and transport conditions of the latter are better.

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<sup>1</sup> UPPT – Urban Public Passenger Transport

Systematic urban development is of strategic importance. One of significant prerequisites for that is developed suburban transport which is effectively connected with intercity transport, thus enabling commuting journeys for those needs that cannot be satisfied within one city. In such a way, the usefulness of journeys would be increased at both ends. Urban transport in smaller towns would be less important because of its lower competitiveness in comparison with other transport modes. Numerous processes of population restructuring and movements from villages to towns after the war, resulted in expected further decrease of rural population in favor of urban population. The number and dispersion of urban communities show considerable increase of suburban structure problem. Previous urban developments have shown that because of very slow population growth, this development will be implemented through qualitative changes related to population.

## **2.2. Existing problems in urban public passenger transport functioning**

We cannot speak in a general manner about problems of UPPT, about policy of the Society towards this activity, or about further development and modernization, if we first do not define the place and the importance of this activity in urban transport system.

In spite of passenger vehicles number raise, there was no decrease in UPPT use. If the situation with fuel is not normalized, and standard of citizens and purchasing power do not increase, we can expect considerable increase of urban transport use, while in the meantime the situation in urban transport infrastructure is getting worse.

As a consequence of uncontrolled individual motorization and unfavorable structure of transport systems in our cities, the negativities and unfavorable effects emerge, threatening not only the normal functioning and quality of urban life, but also their economic effectiveness and social relationships.

## **2.3. Experiences of developed European countries regarding UPPT privatization**

Because of current situation in our country characterized with emergence of privatization, it is necessary to consider the following contemporary forms of contractual relations between local authorities and operators in Western European countries.

Though the contractual relations between local authorities and operators always had important role, today they became more important because they dictate conditions for transport service supplying, development and financing of current production. Generally speaking, there are various solutions in practice in various countries worldwide. However, within whole series of different solutions, there are three models that can be identified:

- “Competitive approach”, adopted in Great Britain.
- “Buying the right” to run transport services has been adopted in France, Sweden and London.
- ”Administrative” or license model according to which the operator is licensed on behalf of transport authority to run transport services. This model is used in Germany and Switzerland.

The nature of relationship between local authority and operator, irrespective of its model, is based on closer definition of following parameters:

- Definition of services that will be provided (lines, timetable, fares).
- Financial risk and commercial decisions.
- Capital assets ownership and treatment of investments.
- Control of the level of services and penalties for nonperformance of contracted work.
- Sub-contracted operators’ involvement and question of operators’ responsibility.
- Method of choice of the most favorable offer for transport service providing.

It is supposed that these transformations are in fact a necessary step toward further development of UPPT. Of course, there is another group of experts claiming that all of this is leading to suppression of public transport function.

## **2.4. Privatization of urban public companies**

Is it possible to privatize urban public passenger transport function, and what are the advantages of such an action?

The most usual answer to this question is that the function of UPPT is still public, but the company that performs that function may be private, if there is specific interest in that way of work, and if there are possibilities for more effective and more rational operations.

After all, the only possible solution we can make is – privatization is a positive idea, but it has to be carefully implemented in logical sub-phases and always with precisely defined technical and technological parameters and predictable business and legal situations. Regarding the Eastern European countries being in process of restructuring, privatization and modernization of its transport companies, there is still no clear determination regarding the way of definition and realization of goals.

## **2.5. Problems of development in UPPT Companies**

One of characteristics of UPPT in our cities is that planned transport process is to be realized in unfavorable conditions of surface transport, so the influence of the surroundings on it is much stronger than on the other public activities.

That is why the city government and public services have such important influence on its better or worse functioning.

Up-to-date business operations in any field, including urban public passenger transport, cannot be performed without long-term development plans. Except in JKP GRAS, the city of Sarajevo has no development plans, and if there is any, it is no more fresh and applicable because of well known reasons.

## **2.6. Financing and tariff policy in urban public passenger transport**

In Sarajevo, capital of Bosnia and Herzegovina, the tariff system policy is formulated and implemented by Cantonal authorities, determining overall financial position of GRAS company. As a consequence of such a policy, GRAS is now in bad financial situation.

The Canton does not want to accept the strategy of normal company reproduction. First, it does not provide any subsidies for the difference in price of service, and the price that cannot cover the costs of transport exploitation. Second, the Canton provides only minimum funds for investments in necessary development, hindering in such manner the realization of investments. Third, GRAS company is burdened with all taxes and contributions as the rest of economic activities, which was not the case before the war.

## **3. EFFECTIVE MANAGEMENT OF UPPT QUALITY AS A MEAN OF CONTROLLED INFLUENCE ON THE ENVIRONMENT (THE EXAMPLE OF KJKP GRAS SARAJEVO)**

During last thirty years, the concept of quality survived radical transformation, thus today in developed world it presents one of the most important phenomena of our age, with lasting, growing trend of its role and importance in development and advancement of one society in its whole. Having that in mind, it is estimated that this century will be a century of quality (in contrast to last century that was the century of industrial revolution and productivity measured by the scale – quantities of achieved products) with its main motto being as follows:

*Quality = efficiency* or, in other words *Quality = efficient way of problem solving.*

### **3.1. Introducing the system of quality in KJKP GRAS Sarajevo**

In order to realize systematic management of quality, GRAS has entered in complex project of (already accepted worldwide) "Development and introducing system of quality management according to international standard ISO 9001: 2000", with orientation towards the implementation of eight basic principles.

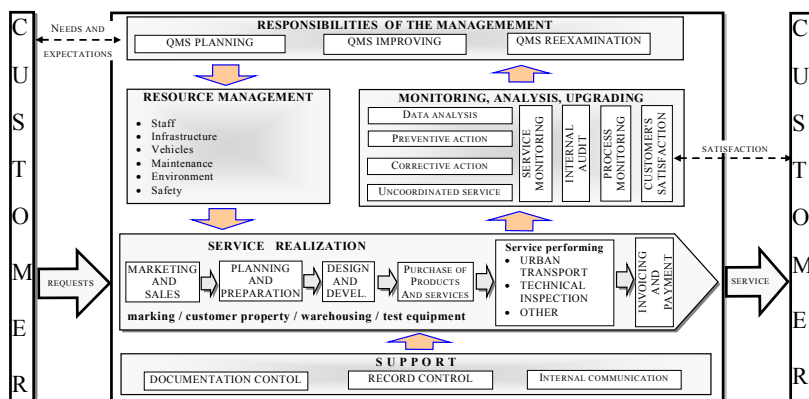


Figure 1. Scheme of interaction of quality system processes at KJKP GRAS

#### 4. GOALS AND STRATEGY OF DEVELOPMENT OF UPPT SYSTEM IN BOSNIA AND HERZEGOVINA

Having in mind the difference in size of our cities and their various problems, the concept includes different strategies of development for the systems in large cities (Sarajevo), cities of medium size (Tuzla, Zenica, Mostar etc.) and the systems in smaller towns as well.

It is necessary to define main goals of these systems.

In larger cities, the main goals could be:

- Maintaining high level of public participation in total passenger transport, as a prerequisite for efficacy and effectiveness of total transport system (congestion, speeds, loss of time, consumption of space and energy resources) and preservation of the natural environment and quality of urban life.
- Raising service quality level.
- Considerable lowering of structure costs and functioning.
- Social goals.

Finally, UPPT systems employ considerable financial resources that must be provided. Therefore it is necessary to make corresponding strategies on the basis of highly specialized and scientifically based elaborates. We are of the opinion that the leaders of local and state transport authorities have to organize and coordinate permanent work of experts in various fields, in order to find solutions for concrete problems within the frame of adopted strategy.

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