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# LOGISTICS OF TOURIST DESTINATION

#### ABSTRACT

In tourist destinations, during tourist season, the number of inhabitants multiplies by several times causing qualitative and quantitative changes in products and services demand. Transport requirements for greater quantities of goods, whose structure has been modified, affect the organisation and commercial business of transport enterprises. They have to provide for enlarged transport capacities of suitable structure.

The consequence of higher transport demand, derived from tourist demand consists in better using of transport infrastructure traffic capacity towards tourist destinations and within itself. In order to enable visitors to enjoy all the elements of tourist offer, the optimisation of goods, people, information and energy flows within tourist destination and towards it, is indispensable.

An optimal tourist offer in a tourist destination is possible only if logistics approach is implemented that will lead to a well-organised and functioning system of goods, people, information and energy flows.

### KEY WORDS

logistics, transport, tourist destination

## **1. INTRODUCTION**

For the duration of tourist season, in tourist destinations, the transport demand grows considerably because it depends on the tourist demand. Therefore, the volume of transport demand depends on: emissive market expenditure liability, service price and quality, price of eventual substitutive service and prices of complementary services.

There are some other factors typical for transport activity influencing transport demand such as: availability of certain transportation means, comparative advantages of each transport mode, the integration level of certain transport modes in tourist journeys, their market attractiveness, and so on.

Transport demand can be satisfied only at exact time and on exact transport routes. This fact results in one of the most important problems of transport enterprises dealing with tourist transport – the harmonisation of transport capacity volume with the volume of transport demand. During the tourist season, transport demand can be multiplied several times compared to its volume in off-season period. This is why a transport enterprise should, according to its market position and developing horizon<sup>1</sup>, establish the dimension of transport capacity. A plan containing measures for alleviation of oscillations in transport demand has to be prepared, and if necessary, carried out independently or in co-operation with tourist agencies.<sup>2</sup>

# 2. QUALITATIVE AND QUANTITATIVE CHANGES OF CONSUMPTION STRUCTURE IN TOURIST DESTINATION AND INFLUENCE ON TRANSPORT

During the tourist season, the number of inhabitants in a tourist destination<sup>3</sup> increases several times in relation to local population. Because of that, in proportion to the number of inhabitants, the demand for consumer goods increases – foodstuffs, cosmetics, clothes and footwear, sports equipment in accordance with the profile of tourist offer; petroleum derivatives, electricity, water and so on.

Besides, the demand for services grows, too, especially for: catering, hotel, accommodation, sport and recreation, transport, communication and so on, the production of which is impossible without securing numerous products that additionally burden transport capacities.

In addition to quantitatively enlarged demand, needs for certain products arise, which are not present out of the tourist season. Primarily, this means: objects of artistic value, souvenirs, monographs and other tourist publications, as well as some specific products depending on the profile of the tourist offer.

Quantitative and qualitative changes in transport demand on the territory of tourist destination have an impact upon the business volume of trading enterprises, hotels and accommodation objects, as well as other participants in tourist product. For transport enterprises this means: intensified and greater demands for goods and passengers transport.

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In order to satisfy the increased demand, transport enterprises should have at their disposal transport capacities of sufficient volume, while their structure should be in accordance with the modified structure of goods. Transport enterprises reach their capacity dimension according to the following principles:

- highest demand,
- average demand,
- biggest profit, or
- continuous capacity complement.

According to the principle that has been chosen, always bearing in mind the basic aim of transport enterprise and its market position, the disproportion between capacity and demand could vary from very low to extremely large. When the discrepancy is greater, the need to attend the trend of transport demand and tourist demand as well, gains in importance. This leads to application of forecasting methods in order to anticipate the trend of transport demand in the future.

Transport enterprises that have selected the principle of highest or average demand should adapt their organisation to that business aim – enlarge the number of transportation means and their capacity if possible, enlarge the number of employees in transport and commercial function, accommodate the working timetable to users' needs, and in accordance to that, the policy of transportation means maintenance.

Increased number of transportation means performing goods and passengers transport, has as a consequence larger pressure on transport infrastructure towards tourist destination and within it. This fact has to be taken into consideration when transport infrastructure is being built, because that is the right moment when traffic capacity could be established according to the highest demand, and the adequate reserve of traffic capacity provided for.

There is a difference in technical and technological forming of transport infrastructure and establishing of traffic capacity when it leads to tourist destination or is situated in it. These processes, basically, yield the same pattern, but among them there are some differences derived from assignment, span of oscillations in demand, demand characteristics, type of transport mode and their mutual interaction.

Most of the tourist destinations are accessible by several transport modes. Transport infrastructure is being modernised, in order to meet the needs with adequate technical and technological characteristics as well as with the amount of traffic capacity according even to the highest needs. There are usually wide possibilities of route and location choice at disposal. Combined all together in financially and temporarily well balanced and defined traffic policy they can result in good accessibility of tourist destination. The proportion of this problem can be shown on a Croatian example, which was, in market research considered a very attractive tourist destination especially with regard to preserved environmental and cultural and historic monuments, but at the same time its biggest disadvantage was the lacking transport accessibility. In actual circumstances, when tourism is assigned the role of the prime-mover of the whole Croatian economy development, and the results of 2000 tourist season confirm those expectations, more distinctive effects could be achieved if the traffic system were more modernised.

In tourist destination, transport possibilities are often limited, and determined by transport infrastructure of insufficient traffic capacity. The possibilities to extend traffic capacity are poor or do not exist at all. Area placement of transport infrastructure is, as a rule, determined by locations of cultural and historical monuments, hotels and accommodation objects, hotel, sports, commercial, recreational and other facilities of tourist interest.

In most tourist destinations there is no area available for transport purposes, or if there is, area assignment to transport would degrade the view of the scenery. Therefore, it is more difficult to secure an adequate transport infrastructure network and sufficient traffic capacity during tourist season in the tourist destination than towards it, although the lowest investment funds are needed.

In the world, various ways of solving this problem have been verified such as: adapted traffic regulation during tourist season, closing the town centre for individual traffic and offering alternative ways of transport from classic urban traffic in larger tourist destinations to tourist attractive ways of transport (tourist trains, tourist buses, cable and funicular railways and so on), as well as providing enough parking capacity that is easily and quickly connected with the town centre.

In order to enable regularly supply of tourist destination, a distributive centre near the tourist destination (town of village) has to be build up. Owing to the distance of tourist destination and the amount of potential needs for supply, the same distributive centre can be functionally connected only with one tourist destination or with several ones.

Supply of shops, hotel and accommodation facilities can be organised mainly during night hours, in order not to overburden the low traffic capacity of transport infrastructure in daytime period. Such a concept leads to high security level of supplying, and freight vehicles have no need to enter the area of tourist resort, when they have at their disposal a distributive centre with warehouses and all other services indispensable for successful completion of a transport process.

# 3. LOGISTICS CONCEPT OF TOURIST DESTINATION

In order to enable visitors of a tourist destination to use tourist services without being disturbed, it is necessary to provide:

- supply of hotels, accommodation and other tourist facilities,
- supply of shops,
- accessibility of accommodation and hotel objects, and shops as well,
- accessibility of cultural, historical, sports and recreational objects,
- accessibility of tourist agencies, post offices, health and dentist services,
- accessibility of passenger terminals and other transport infrastructure objects important for passenger traffic.

Efficient connections between all the infrastructure elements in a tourist destination in order to make them easily accessible to tourists and integrated in a unique supplying system is provided only by transport. Since the co-ordination of flows in time and space in tourist destination is indispensable in order to offer the highest quality of tourist service, a wider organisational concept of traffic is needed in the form of **logistics.** 

Beside scientifically verified and accepted optimisation of material flows (raw materials, semi-products, final products and waste) and information flows on restricted or extended geographical area (micro logistics, macro logistics), as well as energy flows, the logistics of tourist destination should include passenger flows, too.

Therefore, logistics of tourist destination embraces optimisation of materials, people, information and energy flows in a restricted geographical area.

As consequence to elaborated principles of traffic organisation towards and in tourist destination, a distinction between macro logistics and micro logistics concept of tourist destination is possible.

# 3.1. Macro logistic concept of tourist destination

Macro logistic concept of tourist destination consists in optimising materials, people, information and energy flows in a place of tourist interest in a restricted geographical area. Optimisation of energy flows and water supply is determined by principles out of transport influence. However, flows of agricultural and industrial products can be optimised using logistic concept. A tourist destination can be organised according to logistic principles only if flows towards it have already been optimised.

The limits of geographical area comprehended by macro logistics concept can be defined in several different ways. They can encircle the whole territory from emissive market to tourist destination as well as the tourist destination itself, or only the tourist destination. Regardless the extent of the territory, it has to be taken into consideration that principles of traffic organisation in the tourist destination differ from those present on the territory from emissive market to tourist destination

The first step in optimisation is based on the idea of integration of warehouse function for the same type of products. Wholesale enterprises dispose of their own warehouses, but still the majority of material flows are up to each subject linked to tourism activity. (Fig. 1)

Although the concentration of goods is related to a smaller number of locations, non-productive movement of vehicles overburdens the transport infrastructure. Transportation means spending much time waiting for handling operations and still many transport cycles are performed with empty capacity. Separation between passenger and goods flows is missing, while freight vehicles usually move through tourist destina-



Figure 1 - Macro logistic concept of tourist destination (first step)



Figure 2 - Macro logistic concept of tourist destination (second step)

tions. All these results have a negative impact on tourist flows, because people moving is performed slowly and therefore at a low quality level.

The second step in optimisation is achieved by organising a distribution centre near the tourist destination, which assumes the warehousing function for agricultural and industrial products, with or without mediation of wholesale, as well as the function of goods distribution towards local warehouses in the centre of the tourist destination.

Such macro logistic concept enables optimisation of goods towards tourist destination, better transport capacity utilisation, keeping freight vehicles out of the tourist destination centre area, and separation between goods and passenger flows. Although, macro logistic concept deals with optimisation of goods flows, the advantage mentioned above paves the way to optimisation of passenger flows towards tourist destination and within it.

Macro logistic concept including distribution centre in order to optimise goods flows, and indirectly passenger flows can be used as a starting point for logistics approach of tourist destination. If such an organisational level of goods transport including unloading in distribution centre warehouses, without freight vehicles entering the town or village centre, is not present, micro logistic concept is not possible either.

Besides, an adequate traffic infrastructure and traffic organisation is needed. Traffic concept should enable undisturbed passenger flows between all the elements of tourist destination, as well as goods flows between distribution centre and other elements of macro logistics system. Only in tourist destination organised according to logistics concept, tourists can freely enjoy the services at their disposal, traffic infrastructure can fulfil all the needs by engaging the planned traffic capacity, and there may be sufficient transport capacities for passengers as well as parking places.

# 3.2. Micro logistic concept of tourist destination

Micro logistic concept of tourist destination consists in logistically organised tourist enterprises and other subjects dealing with tourism. These enterprises can offer high quality service at the reasonable price only if costs are maximally reduced owing to optimisation of goods, people, information and energy flows.

The optimisation level of macro logistic system has an impact on enterprises by means of logistic functions of purchase and sale which represent a link between enterprise and its surrounding. The main and basic goal of micro logistics – logistics of tourist enterprises is always the same and consists in economical production of material products or services. However, when it comes to a particular aim, considerable differences can be noticed.

For a tourist enterprise, whose aim is to offer accommodation, catering and other services, the most important is logistically organised purchase function. The main goal to be fulfilled is to supply a hotel with all the materials and services needed for production of a complex hotel service, including maintaining the optimum level of provisions. Better financial results can be obtained if incoming and leaving tourist flows are harmonised according to: the way of coming (individual or group), type of tourist service, possible usage of additional services at the tourist destination, type of transport mode etc.

Tourist agency deals with tourist journey organisation on a selected market segment. In order to achieve the aim, the information flows should be organised at a high-quality level. Owing to that, a tourist agency will create its marketing policy, predict the quantity of services that will be sold, and plan the transportation means capacity (own or hired) needed during a certain period of time.

The goal of a trading enterprise is to supply shops and stores with foodstuffs, consumer goods and other products that can be of tourists' interest. In order to fulfil that aim the quantity of goods on stock should guarantee undisturbed supply at lowest coasts.

As one of the most important components of logistics is transport, in circumstances when the organisation of transport is at a certain quality level, tourist enterprises and other enterprises in tourist destination are able to act efficiently. Hotels can, with considerable certainty plan their capacity utilisation, and according to that plan supply dynamics and quantities. Restaurants and other objects offering food and beverage services are able to plan the minimal amount of foodstuff supplies necessary for undisturbed work. Shops and stores can act on the basis of prompt delivery of various products on stock at distribution centres situated near the tourist destination.

Thus, optimisation of people and goods flows on the territory of tourist destination is a starting point for cost reduction in business activities of each enterprise, which leads to higher quality and cheaper tourist service.

# 4. LOGISTICS AND CROATIAN TOURIST DESTINATIONS

In order to define the role of logistic concept in Croatian tourist destinations, the fact needs to be taken into consideration that for the majority of tourists visiting Croatia during the summer period, villages on the coast and islands are tourist destinations.

Many of these villages usually have an old cultural centre representing the main or sometimes the only tourist attraction, with traffic infrastructure whose capacity and other characteristics are based on traffic needs that existed a hundred years ago. For some time now, these village streets have been asphalted and linked to national road network. As a rule, the city and village centres are accessible to road vehicles, but neither was the city road traffic regulated systematically nor are there enough parking places for tourists.

Supplying is up to the accommodation and trade enterprise or other enterprises connected to tourism, and is, generally, not organised at a city or village level, but depends on the needs and possibilities of each enterprise. Island tourist destinations, more than others have to deal with numerous difficulties in regular supply, securing adequate warehouses for foodstuffs, dimensioning of optimum stock, etc.

The majority of Croatian tourist destination is far away from implementing logistic principles in order to raise the quality level of tourist service and reduce the costs of tourist products. Croatian tourism is making its "first steps" on a long way of recovery and expanding in order to reach the pre-war level. At the same time it is expected to be a prime mover of the whole Croatian economy development.

Concerning macro logistics, Croatian destinations more than anything require modern traffic infrastructure that could make them easily accessible to the European emissive market. They are facing again the problem of inadequate traffic infrastructure and traffic regulation in the very tourist destinations, the consequence of which is often a blockage of city or village centre during summer period. Such traffic situation reduces the possibility to easily reach all cultural, historical and other objects of tourist interest at the destination, resulting in a lower quality of the tourist product as a whole.

Tourist enterprises and other enterprises involved in tourism are not organised according to logistics concept, and eventual application of micro logistics principles without larger macro logistics would produce limited effects.

On the long-term basis, the Croatian traffic infrastructure system and the actual state of traffic infrastructure and regulation in tourist destinations cannot persist in being the basis for tourism development. Their standards are below those present in other European countries that form the majority of Croatian tourist emissive market. It can be expected very soon that Croatian tourist destination will be forced to adapt a macro logistic concept, because the European market will insist on higher quality and lower prices of tourist services, and this situation will continue until some tourist flows begin to change their direction from Croatia to other Mediterranean tourist destinations.

The lack of interest in Croatian destinations and the whole traffic system for logistic concept would certainly lead to losing the chance for tourism development for which Croatia had been waiting for ten years. The majority of well-known European and world tourist destinations have already accepted logistic principles, and it is up to the Croatian tourism, traffic and economic policy to make a step forward towards higher level of tourist services.

# 5. CONCLUSION

During tourist season, transport demand grows considerably because it depends on the tourist demand. In proportion to the number of inhabitants, the demand for consumer goods and services increases.

In order to satisfy such growth of demand, transport enterprises should have at their disposal transport capacities of sufficient volume, while their structure should be in accordance with the modified goods flow structure.

In tourist destinations, transport possibilities are usually limited and determined by transport infrastructure of insufficient traffic capacity. The possibilities to expand traffic capacity are poor or do not exist at all. The area of locating transport infrastructure is, as a rule, determined by locations of cultural and historical monuments, hotels and accommodation facilities; sport, commercial, recreational and other objects of tourist interest. Therefore, it is more difficult to secure adequate transport infrastructure and sufficient traffic capacity in tourist destination than towards it.

With the aim of enabling the visitors of tourist destinations to use tourist services without being disturbed, it is necessary to provide optimisation of materials, information, people and energy in restricted geographical areas. This is achieved by logistics.

Macro logistic concept of tourist destination consists in optimisation of materials, people, information and energy flows in the place of tourist interest and towards it, in the restricted geographical area. Micro logistic concept of tourist destination consists in logistically organised enterprises involved in tourism.

Croatian tourist destinations are far from being organised according to logistics in order to perform higher quality of tourist services at lower costs. In the field of macro logistics they most of all need modern transport infrastructure to connect them easily and quickly to the emissive market. At the same time effective concept of goods flows is needed, with no freight vehicles entering the area of tourist resorts, and unloading performed in the distribution centre near the tourist destination.

Transport infrastructure in a tourist resort has to make all the elements of tourist offer easily accessible, and has to provide the application of micro logistics in enterprises involved in tourism.

## SAŽETAK

### LOGISTIKA TURISTIČKE DESTINACIJE

U turističkoj se destinaciji, u pojedinim vremenskim razdobljima za trajanja turističke sezone mnogostruko povećava broj ljudi što uvjetuje kvantitativne i kvalitativne promjene u potražnji za materijalnim proizvodima i uslugama.

Potrebe za prijevozom većih količina tereta modificirane strukture utječu na organizaciju i komercijalno poslovanje prometnih poduzeća, koja trebaju osigurati veće prijevozne kapacitete i odgovarajuću strukturu voznog parka. Posljedica povećane prometne potražnje izvedene iz turističke potražnje je i viša razina iskorištenja propusne moći prometne infrastrukture prema turističkoj destinaciji i u njoj samoj. Da bi posjetitelji turističke destinacije mogli na kvalitetan način koristiti sve elemente turističke ponude neophodno je optimiranje tokova tereta, informacija i ljudi u turističkoj destinaciji i njenom okruženju.

Funkcionalno povezivanje svih subjekata turističke ponude u optimalan sustav turističke destinacije moguće je jedino logističkim pristupom organiziranja teretnih i informacijskih tokova te tokova ljudi.

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