

# THE ROLE OF LOGISTICS IN THE MARKET FOR TRANSPORTATION AND TOURIST SERVICES

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**Abstract:** *There is increasing in the market for transportation and tourist services the interest in logistics, which is aimed at continuous optimization of material and information flows management, defining the any kind of peculiarities of these flows. The tourism logistics is the science of planning, control and management of operations carrying out during the process of preparing the travel offers, delivery of finished product to consumer in compliance with his/her interests and requirements, as well as during the process transfer, storage and processing of information concerned.*

**KEY WORDS:** MARKET, TRANSPORT AND TOURIST SERVICES, LOGISTICS, CONVEYANCE OF TOURISTS, TOURIST FLOWS.

## 1. Introduction

There is increasing in the market for transportation and tourist services the interest in logistics, which is aimed at continuous optimization of material and information flows management, defining the any kind of peculiarities of these flows [1]. Logistics is a corporate activity of different tourist companies aiming at integration of all processes concerning with attaining the objectives of their businesses. The tourism logistics is the science of planning, control and management of operations carrying out during the process of preparing the travel offers, delivery of finished product to customer in compliance with his/her interests and requirements, as well as during the process transfer, storage and processing of information concerned. It follows from this definition that logistics is a system containing the functional areas, each of which solves some problems [2]. Importance of tourism logistics, wherein are involved such major parties as customer- travel agent-supplier of transportation and tourist services, where it is important to properly plan, manage and operatively control the complex material and informational process of preparing and implementing the travel in compliance with interests and requirements of customer [1].

The important component elements of this system are the following ones:

1. Information – planning of travels, order processing and forecasting of demand;
2. Conveyance of tourists – means of transport and carrier company selection;
3. Tourist service staff;
4. Service supporting sector –logistics departments, which support the process of preparing the travel offers and provision of services to customer: production capacity and economic amativeness of tourist companies are of topical importance for functioning of logistics system.

## 2. Preconditions and means for resolving the problem

Integrated logistics structure of tourism covers its component, regional and functional structures.

The component structure includes the following elements:

1. Recreation and tourism resources (tourism resource base);
2. Tourism material and technical base logistics, including logistics of the spheres of tourists accommodation facilities (lodging establishment) and food catering (restaurant facilities) for tourists;
3. Logistics and information infrastructures (information logistics in tourism);
4. Logistics and transport infrastructure of tourism (tourist traffic logistics);
5. Sightseeing logistics;
6. Logistics of tourism related services;
7. Logistics of tourism products production and sales.

The regional structure of tourism logistics reflects its regional (geospatial) systems of six levels:

1. Local level (tour logistics);
2. Micro-level (tour operator logistics);

3. Mesoscale level (tourist and resort zones and tourist district logistics);
4. Macro-level (country's tourism industry logistics);
5. Mega-level (world macro-regions logistics);
6. Meta-level (world tourism logistics).

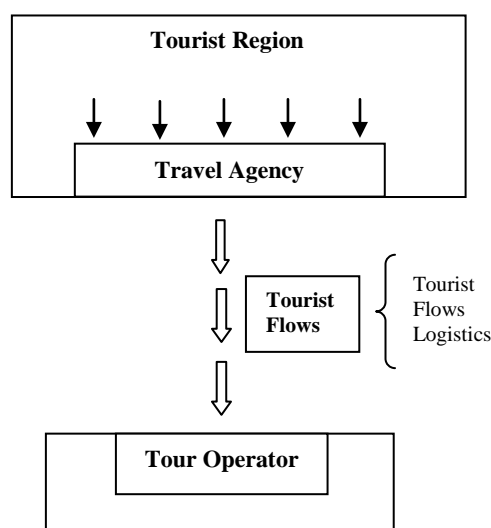


Fig.1. Tourist Flows in Tourism Logistics

Aims and tasks of tourism logistics are different on various regional levels. If the introduction of logistical principles in the management of the travel company (micro level) to reduce costs and thus increase the efficiency of tourist enterprise activities and increase its profits, the logistic approaches at higher taxonomic levels (macro, mesoscale) provides an opportunity to ensure the sustainable development of tourism business in the tourist-and-recreational zones, areas and country as a whole. On mega- and meta-level of the regional logistics systems there is considered the tourism sustainable development within the scales of world tourism macro-regions, and emphasized the World Tourism Organization, global issues of the balanced development of tourism industry

Functional structure of tourism logistics includes such traditional elements as the procurement logistics; manufacturing and selling logistics. They relate to all the component and regional elements of tourism logistics.

Tourist flow is a main object of study in tourism logistics. Feature of tourism logistics as a service industry consist in defining the tourist flows as the main object of studies. This explained by fact that the travels pertain to those types of services, when the consumers move towards manufacturer, but not manufacturers with their products – to the consumer.

The latter situation is typical, in particular, of trade in consumer goods, when demand and consumption geographically drawn together, unlike the territorial localization of production. Thus, the aim of logistics system of tourist product in trade marketing consists in the delivery of products to the tourism production and consumption areas. Therefore, the tourism product

sales system envisages the process of moving consumers (tourists) from demand regions products to the tourism products production and consumption areas. That's why the tourist flow is a main object of study in tourism logistics. Since the first ones are discussed in detail within Tourism Marketing course, but at the same time they are interested in Tourism Logistics and (as streaming phenomena), in our view, there should be a section in Tourism Marketing Logistics, which can be studied as a discipline of Tourism Marketing, as well as in Tourism Logistics.

There are discussed in turn in tourist flows logistics the following elements:

1. Regular tourist flows, in particular: tourist group and single tourist (so-called VIP-tourism) flows;
2. Irregular 'wild' tourist flows, which also apply a load to recreation-tourist resources in the recreation area.

For example, in Svaneti, mountainous region of Georgia, by some estimates, the share of "wild" tourists exceeds 1/3 of total number of holiday-makers (100 000 people in 2011-2012). Among the most popular destinations of "wild" holiday-makers in Georgia there are emphasized the Green Cape near Batumi (for family outing), mountainous regions Racha, Khevsureti, Mta-Tusheti, town-museum Mtskheta near Tbilisi, and Rabati Castle in Akhalatsikhe. Thus and so, the following objects must be studied in Tourism Logistics:

- a) Regular tourist flows;
- b) Irregular ("wild") tourist flows (there are some difficulties with statistics).

Herewith, the main object of tourism logistics is represented by regular tourist flows. Let us find out what is the essence of the meaning of "Regular Tourist". According to the new edition of the Law of Georgia on Tourism, tourist is a person, who travels over Georgia or in other countries with the purpose not prohibited by law of the host country for periods ranging from 24 hours up to a year without any paid activity and with obligation to leave the country within a specified period.

The main criteria for defining the person as a tourist are the following ones:

- 1) Duration of travel (from 24 hours up to a year);
- 2) Unpaid activities (tourist does not earn money, but spend them);
- 3) Obligation to leave the country or destination within a specified period.

Other citizens, who do not meet these requirements, but who are traveling, pertain to the category of travelers (they are not counted in Tourism logistics).

However, there are mentioned as well in the Law on Tourism the people traveling within 24 hours, and they are called one-day visitors [3]. One-day visitor is a person whose duration of stay in visiting area does not exceed 24 hours, and at the same time there is no envisaged overnight stop in visiting area. It consists of: holiday-makers; passengers who are in round trip (persons who enter the country on cruise ships spend the night on the ship, but they can make excursions ashore); vehicle crews whose members are foreigners and are located in a particular country during the day; transit visitors, they do not stay for the night and travel through the territory of a particular country to their destinations in another country. One-day visitor logistic flows are counted in tourism logistics in a main flow, since they effect on the recreational and tourist resources as well.

The following categories of tourists are highlighted in tourist flows:

1. Domestic tourism – visitor - resident, who travels within the territory of own country, but outside his/her usual environment. This person travels over Georgia and in inhabitancy areas;
2. Foreign (incoming) tourist – non-resident visitor; this is a person, who travels in Georgia, but is nonresident of it;
3. Foreign (outgoing) tourist – resident visitor, who makes travel outside his/her country. i.e. a person, who travels outside the customs territory of Georgia, but is a resident of it;
4. Transit visitor – a person, who stays in a particular area or country during his/her way to the destination (duration of stay over 24 hours).

The essence of the meaning of "tourist flow" is defined as a permanent arrival of tourists in the country or region. The following features are typical of this meaning:

- total number of tourists (including regular and irregular ones);
- number of tour days (number of overnight stops or bed-days);
- average duration of stay of tourists in the country or in the region.

The main indicators of tourist flows are the following ones: number of incoming (outgoing) tourists and duration of stay. The number of arrivals (departures) tourists means the number of registered visitors, who came from a certain country (or left it) for a certain period, typically, for the calendar year. Since a tourist during the year and even during one trip may visit different countries, and the number of arrivals exceed the actual number of tourists. In addition to absolute figures of tourist flows there are used the number of arrivals (departures) per thousand of population (relative index of tourist flow).

The duration of stay is determined in overnight stops for tourists and in hours for visitors. One overnight stop is made by tourist in a certain country or destination. The duration of stay of all tourists in the country for some period (i.e. total number of overnight stops) I calculated as a product of number of tourist arrivals and average duration of stay of each tourist in the country. The following formula is used for calculation:

$$N = T.M \quad (1)$$

where, T – is a number of tour days; M – number of tourists.

Depending on the duration of stay (number of overnight stops) there are emphasized the following tours:

- short trips (1-3 overnight stops), made for recreation and entertainment purposes in week-ends and nonworking days and holidays (week-end tours), as well as for business purposes;
- short trips (4-7 overnight stops), envisaging trips with various purposes;
- medium trips (8-28 overnight stops) – long vacation, mostly for recreation purpose;
- long trips (29-91 bed and 92-365 overnight stops), which are used for recreation, entertainment or medical purposes, as well as for round trips, business and professional tourism.

Thus and so, from arrivals statistics, when the volume of tourist flows is determined, statistics of the duration of stays characterizes the tourist travels.

Tourist flow is characterized by irregularity, which is expressed by irregularity coefficient. The following expressions are used for its calculation:

$$K_1 = \frac{T_{\max}}{T_{\min}} \cdot 100(\%); \quad (2)$$

$$K_2 = \frac{T_{\max}}{T_{d\check{r}\check{e}}} \cdot 100(\%); \quad (3)$$

$$K_3 = \frac{T_{\max}}{T_{\check{n}\check{e}}} \cdot 100(\%); \quad (4)$$

$$T_{\check{n}\check{e}} = \frac{T_{d\check{c}\check{e}}}{12}. \quad (5)$$

where,  $K_1, K_2, K_3$  – are the irregularity coefficients of tourist flow;  
 $T_{\max}$  –;  
 $T_{\text{мин}}$  - number of tour days during the month with minimum tourist flow, man-days;

$T_{\text{гнк}}$  – yearly number of tour days, man-days;

$T_{\text{см}}$  - average monthly number of tour days, man-days.

### 3. Conclusion

1. Importance of tourism logistics in market of transportation and tourist services in Georgia is high, wherein are involved such major parties as customer- travel agent-supplier of transportation and tourist services, where it is important to properly plan, manage and operatively control the complex material and informational process of preparing and implementing the travel in compliance with interests and requirements of customer.

2. Tourist flow is a main object of study in tourism logistics. Tourist flow is characterized by irregularity, which is expressed by irregularity coefficient. Several equations were used for its calculation.

### 4. Literature

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