



# Logistics Information Systems (LIS)

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## Introduction

Today, most companies that have been successful in business use not only marketing approaches, but also *methods of managing streaming processes*, such as logistics. **Logistics** is very important for customers, suppliers of the company, its owners and shareholders, since it coordinates all the structures of the company. The following **logistics measures** are considered: *customer service, transportation, inventory management, and information flow management*. Using logistics components avoids crises.

The use of logistics is *necessary* to accelerate the acquisition of information and improve the service level of the production process. The **characteristics of logistics systems** include: *a wide range of products sold; independent and dynamic demand for goods; high maintenance requirements; proximity of the storage network to the consumer; presence of intermediaries*.

## Methods and Materials

The **logistics models** of the *leading LPI rating countries* deserve the greatest interest as a research base at the current stage of the development of the world economy. Today, the LPI (**Logistics Performance Index**) is the most *objective indicator* that determines the level of development of the country's transport and logistics complex based on an assessment of the development of national customs, infrastructure, the international transport system, the system of regulation of logistics activities, transport, uninterrupted and timely delivery of logistics services.

The *maximum possible score* for each of these elements is *5 points*. The average rating for the set of parameters is subsequently ranked between countries, and the rating is published on the official website of the **World Bank** (*Table 1*).

*Germany* ranks first in the world in assessing the activities of customs, the development of market infrastructure, logistical competence, cargo tracking and timely delivery. The *Netherlands* takes *second place* in the LPI rating, with an index value of 4.07 points. In *third place* is *Sweden*, its LPI is also 4.07 points. This is followed by *Belgium* (4.05), *Singapore* (4.05), the *UK* (4.01), *Japan* (3.99), *Austria* (3.99), *Hong Kong* (China) (3.96), closes the top ten *US* logistics system (3.92). Specialists separately noted *Belgium*, leading in the field of international cargo transportation. *China* ranks 27th. **Russia** ranks **eighty-fifth**, with an LPI rating of **2.69 points**. At the same time, the strongest link of the existing logistics system of our country at the moment is the *timeliness of delivery of goods* during the planned or expected delivery period (estimate – 3.23 points). The level of *development of Russian infrastructure* is estimated to be *extremely low* – 2.25 points, which significantly *hinders the development of domestic logistics*.

## Results and Discussion

An important distinguishing feature of the development of **European logistics** is a *high level of its integration* that ensures, on the one hand, the standardization of services, on the other – Customs simplifications. A number of people are active in the European Union large transport and logistics companies with an extensive network of representative offices, warehousing facilities, terminals, complexes on the entire European region and beyond. To optimize traffic flows and facilitate transit customs procedures, they create global associations extending their influence to regions and continents.

In terms of logistics development, **Russia** is currently *far behind developed countries*. Based on this, the *formation of the Russian logistics system* can be significantly *accelerated* by using not only specific logistics models, but also their implementation and functioning experience in advanced foreign countries.

Country	LPI Rank	LPI Score	Customs	Infrastruc ture	Transpor tations	Competence	Tracking	Competence
Germany	1	4,19	4,09	4,38	3,83	4,26	4,22	4,40
Netherlands	2	4,07	3,97	4,23	3,76	4,12	4,08	4,30
Sweden	3	4,07	3,95	4,22	3,88	4,04	4,02	4,32
Belgium	4	4,05	3,74	4,03	3,97	4,10	4,11	4,40
Singapore	5	4,05	4,00	4,14	3,72	4,08	4,05	4,34
Russia	85	2,69	2,25	2,64	2,59	2,74	2,67	3,23

Table 1. LPI Rating

## Conclusion

Summing up, it should be said that more attention and funds are devoted to this problem **abroad**. Thus, **Russia** currently needs to optimize logistics processes through the widespread implementation of LIS in private and public companies.

**Other countries** are making extensive use of supply chain automation and are introducing and developing more and more models of logistics information systems.