Transport network and transport services in the Krasnoyarsk territory, Russia

A Storozheva1*, E Dadayan1, E Letyagina1
1Krasnoyarsk State Agricultural University, Krasnoyarsk, 117 Lenin Street, Russia
E-mail: storanya@yandex.ru

Abstract. The research described in this article focuses on socioeconomic problems of transport services in the Krasnoyarsk territory. The study examines main pressing problems of regulation of transport services, taking into account competition in the relevant market. In it we consider economic and geographical features of the Krasnoyarsk territory and presence of high-efficiency natural resources in the region, which determine locations of large enterprises of energy, non-ferrous metallurgy, chemical and mining industry, forestry. In conclusion, we suggest solutions to the systemic socioeconomic problems of transport services in the Krasnoyarsk territory.

1. Introduction
In Russia, any market for transport services is formed taking into account the existing route network and the real demand of the population for these services.

Today, the Krasnoyarsk territory is a major transport distribution and transit hub of the Siberian Federal District.

In order to develop competition in the transport services market and comply with the existing law requirements, the Ministry of Transport of the Krasnoyarsk Territory approved the Order of January 9, 2018 No. 6/2-N "On the approval of the transport strategy of the Krasnoyarsk territory until 2030." According to this strategy, it is planned to solve systemic socioeconomic problems, in particular:

- migration outflows and natural population decline;
- dependence on the state of the global commodity market, due to the high concentration of the region's economy on the steel and oil sectors;
- insufficient level of development of innovative entrepreneurship and lack of manpower;
- inconsistency of labor supply and demand in terms of specialties/professions/qualifications by sectors of the economy and the territory of the region;
- low level of small business development [1].

The main goal is to meet the needs of the socially oriented innovation development of the economy and society in competitive transport services, namely:

1. Ensuring the availability, volume and competitiveness of transport services according to quality criteria for cargo owners at the level of innovative development of the region's economy.
2. Ensuring the accessibility and quality of transport services to the public in accordance with social standards.
3. Improving the safety of the transport system.
4. Reducing the harmful impact of transport on the environment.

Quire a few scientific works of Danilchuk M.A., Demianovich I.V., Dadayan E.V. [2], Zakiullin E.A., Plotitsin T.M., Storozheva A.N. [2], Matiushkin V.F., Kinev A.Iu., Franskevich O.P. have been written on this subject. For example, M.V. Rubtsova notes that the Russian Federation is not fully utilizing its competitive advantages, the key problem of non-compliance of transport infrastructure with the needs of foreign trade and the conditions of the global transport services market in particular. The existing system of international transport corridors passing through the territory of the Russian Federation and their arrangement do not allow the full use of domestic transport communications for ensuring international transcontinental links. This is due to disparities in the development of different modes of transport, imbalance and inefficiency of transport and technological infrastructure, lack of modern network of logistics centers, low level of use of progressive transport technologies, in particular container ones, and non-conformity of the quality of transport services to international requirements. Solving these problems is possible only with complex development of transport infrastructure objects, primarily international transport corridors, largest transportation nodes and logistics terminal complexes [3].

Thus, in this study, the authors intend to propose possible solutions to the above-mentioned problems in the region.

2. Materials and Methods

Significant restrictions on the growth of the economy have appeared in Russia due to the insufficient development of its transport system. Volume and quality characteristics of transport of today, especially its infrastructure, do not fully and effectively meet the challenges of a growing economy, including the task of meeting the demand of the innovation sector for high-quality transport and logistics services. All this led to the Order of the Government of the Russian Federation of 22.11.2008 No. 1734-r (ed. 12.05.2018) "On the Transport Strategy of the Russian Federation" [4]. Its choice of directions for the development of the transport system is based on the forecast of long-term socioeconomic development of the Russian Federation for the period up to 2030, the budget messages of the President of the Russian Federation to the Federal Assembly of the Russian Federation, the scenario conditions of the long-term forecast of the socioeconomic development of the Russian Federation until 2030, legislative and other regulations in the field of defense and national security of the Russian Federation. It also takes into account the fact that the Russian Federation is part of the World Trade Organization, strategic documents defining the promising directions of the development of the economy and social sphere of the regions of Russia, sectors of the economy, the country's transport system as a whole and individual modes of transport, prospects for the development of transport and logistics infrastructure, prospects for international transport integration, especially within the framework of the Commonwealth of Independent States, the Eurasian Economic Community and the Single Economic Space of the Russian Federation, the Republic of Belarus and the Republic of Kazakhstan, as well as the experience of developing transport systems in fast-growing countries (China, Brazil, India and South Africa).

In Russia, in recent years, some modernization of transport infrastructure was done, which allowed to meet the existing demand for passenger and freight transport and create a certain backlog for further development. It is obvious that Russia has all modern modes of transport, the location and structure of its transport communications in general correspond to the country's modern internal and external transport and economic relations, but need to be improved.

According to the Federal Statistics Service of the Russian Federation, development of the transport strategy of the Krasnoyarsk territory coincided with the collapse of the national economy by a quarter, and the revenues of budgets of various levels by 2.5 times in the last two years. To be precise, the weighted average index of industrial production decreased by 23.6%, the development of manufacturing production decreased by 32%, and the mining index by 45.7%. The obvious fact is
the influence of the country's economic dynamics trends on the state of the transport complex, and vice versa. The inconsistency of the development of transport communications and infrastructure with the real needs of economic activities leads to the stalling of important projects, stagnation of key industries, and difficulties in implementing strategic planning goals.

The consequence of these events in the Russian economy was the lack of growth in the field of freight transportation in the country's transport complex, the decrease in the volume of commercial freight traffic by 2.6%; passenger turnover also decreased by 5%. At the same time, there has been a significant increase in export transport services, which have increased by 30%. Analysis of this situation allows us to draw a general conclusion about the preservation and separate growth of the world's economic activities, with the simultaneous stagnation of the Russian economy.

Against the general background of the Russian economy, the economic situation of the Krasnoyarsk territory looks more encouraging, as the industrial production index decreased by only 4% by 2015, while the index of agricultural production grew by 4.6% by 2015. In November of this year, the largest international rating agency "Standard&Poor's" revised the prospects of the Krasnoyarsk territory. Previously, the forecast for the region was assessed as "negative", explained by the unstable and unbalanced Russian system of regional finances and weak economy of the region; now the region has received an assessment of "BB-" ("stable" forecast). From January to September 2016, the Krasnoyarsk territory showed a high rate of growth in tax revenues and was able to control the growth of spending.

At the same time, the region currently has a total debt of 94.7 billion rubles, of which: issued government bonds amount to 43.332 billion rubles, budget loans – 33.5 billion rubles, bank loans – 17.661 billion rubles, and state guarantees – 291.8 million rubles. According to the Ministry of Finance, by January 2017, the regional national debt reached its historic high of 95.9 billion rubles. The growth is due to the placement of bonds of the region totaling 18.2 billion rubles.

The forecast of the region's development until 2019, published by the Ministry of Economic Development and Investment Policy of the Krasnoyarsk Territory, assumes an increase in the industrial production index by 3.8% in 2017 and by 2.9% until 2019. Annual growth of processing industry during 2017–2019 is forecasted at 0.9 to 2.1% annually. According to the Ministry of Economic Development, achieving the above indicators is possible using the strengths of the Krasnoyarsk territory, which are connected with its unique economic and geographical location and large reserves of territories free for business development and population residence, with exceptionally rich natural and resource potential, with developed fuel and energy complex and transport infrastructure of the central and southern regions, with the formation of a multi-industry system of higher education and research institutes, with the region's rich experience of implementing large investment projects, including of federal level of importance, with the provision of the region's budget with its own funds, with a stable social and political situation, and with the absence of inter-ethnic conflicts.

3. Results
The main economic and geographical feature of the Krasnoyarsk territory and Russia as a whole is the considerable length of its territory. This causes increased transport costs for freight and passenger transport, hinders the socioeconomic development of the country as a whole and its individual regions; the same applies to the Krasnoyarsk territory, which is located in the center of the country and is extremely remote from the main economically active regions. More than 3.5 thousand kilometers separate Krasnoyarsk territory from European economic centers, and about as much from the eastern Pacific ports. The territory of the region also has a considerable length from the South to the North, which is more than 2.5 thousand kilometers. All this increases transport costs and hinders the development of the transport complex and the economy of the region. Only the presence of highly efficient natural resources in the region has led to the deployment of large enterprises of energy, non-ferrous metallurgy, chemical and mining industry, and timber industry.
Opportunities for the development of the Krasnoyarsk territory are associated with further expansion of the potential of traditionally strong sectors of the regional economy, which not only create prerequisites for formation of the deep processing sector, but also form the demand for manufacturing products, as well as for increasing the potential of innovative development, introducing innovative technologies and releasing innovative products, forming new areas and directions based on achievements of modern science and production of new knowledge.

Realization of the potential of the region can be positively influenced by such factors as implementation of new economic policy in the development of the territory of Siberia and the Russian Arctic, construction of new transport corridors in Siberia and the Far East and development of new transport and communication links between Europe and the countries of the Asia-Pacific region, strengthening integration ties of Russian regions.

Today, the main threat to the development of the region is the preservation of the existing structure of the economy with the predominance of the extraction of raw materials sector and the low share of the manufacturing and innovation sector. If it persists, the region will continue to be limited in its development by a high dependence on unstable conditions in the world markets of non-ferrous metals and hydrocarbons. Along with the threat of maintaining an inefficient and highly risky structure of the economy, the long-term development of the region can be negatively affected and slowed down by lack of investment in the economy of the region and low rates of overcoming infrastructure constraints.

The strengths and development opportunities of the Krasnoyarsk territory, combined with the real capabilities of the region to conduct effective economic, social, investment, innovation and environmental policies in order to neutralize weaknesses and potential threats, provide grounds for assessing the competitive positions of the region as very high. At the same time, the Krasnoyarsk territory should consider its future not in the format of increasing competition with other regions for the resources and investments attracted, but as a self-sufficient territory with high development potential and unique specialization, complementing economic complexes of other Siberian regions. Such an integration scenario, which eliminates competitive contradictions, ensures the most effective development and strengthening on a country-wide scale both of separate Siberian regions and Siberia as a whole.

4. Conclusions
Summing up the results of the study, we will outline some proposals for solving socioeconomic problems of transport services.

Firstly, improving the quality of transport services, developing the market for competitive transport services, tariff regulation, antitrust regulation, and the corresponding development of technologies and methods in the transportation industry.

Secondly, ensuring the transport of passengers on socially important routes, including affordability and routes to the Far North. Developing and implementing coordinated schemes for advancement of air transport and road transport support for local social routes in remote regions.

Thirdly, developing and implementing a program that realizes minimum social transport standards to ensure the movement of all segments of the population. Providing their implementation on a progressive scale, taking into account the improved conditions of transport services of the population. Developing urban and suburban passenger transport systems.

Fourthly, regulating access to commercial activities in the field of passenger transport.

Fifthly, reducing the harmful effects of transport on human health by reducing the volume of environmental impact, emissions, the amount of waste of all modes of transport (professional training and rationalization of routes), constructing bypasses of large settlements, replacing transitional road surfaces with enhanced ones on roads passing through settlements.

The expected result at the turn of 2030 is that the transport industry should become a system-forming industry, growing at a rate ahead of the growth rate of the national economy, which should reach a competitive position in terms of specific transport costs, safety, environmental protection.
and quality of transport services. We suppose that it will allow to reach the level of developed countries in terms of commercial speed and timeliness of delivery of goods, access to transport services for the population. The formation of a unified transport system in Russia and its integration into the global transport system will increase the efficiency of transport services within the country, increase their exports, more fully realize the transit potential, meet the needs of the economy and society in high-quality and competitive transport services.

References

[1] The Ministry of Transport of the Krasnoyarsk Territory approved the Order of January 9, 2018 No. 6/2-N "On the approval of the transport strategy of the Krasnoyarsk territory until 2030"

[2] Storozheva A N, Dadayan E V 2016 Responsibility for unfair competition in the field of road transport Collection of materials of the scientific and practical conference "Respecting the rights and legitimate interests of participants in civil traffic" pp. 140–148.

[3] Rubtsova M V 2016 Competition problems in the transport services market Transport law. No 3. pp. 3–6.

[4] Order of the Government of the Russian Federation of 22.11.2008 No. 1734-r (ed. 12.05.2018) "On the Transport Strategy of the Russian Federation" Information and Search System: Garant.