



## ЭКОНОМИКА И МЕНЕДЖМЕНТ

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### IMPROVING THE MANAGEMENT OF TRANSPORT INFRASTRUCTURE PROJECTS

*\*B. Baitarakova, N. Korabaeva*

*Zhetysu University n.a. I. Zhansugurov, Taldykorgan, Kazakhstan*

*e-mail: king\_bar@mail.ru*

**Annotation.** *Today, it is important to use alternative methods and approaches that allow for more efficient and high-quality management of projects that take into account the real cost and duration of construction stages. The main idea of this study is to improve the process support of companies to increase the management efficiency indicators during the construction of transport facilities. The research is based on a systematic approach and software applied to construction processes. The combination of management relationships with properly selected and used resources, in the presence of innovative technologies, will allow achieving visible results in the implementation of projects. Project management based on a systematic approach, using modern software, is recommended for implementation and use in construction organizations, as it allows you to optimize calendar planning and increase economic efficiency, even in periods of uncertainty; it allows you to reduce resource costs and reduce construction time; take into account the risks of the project, as well as monitor and track the actual implementation of projects for the construction of transport infrastructure facilities.*

**Keywords:** *economic development, regional economy, integration, planning, economic, transport infrastructure, project management.*

**Main provisions of the article.** The services of the transport industry are necessary at almost every stage of production and consumption of products, starting with the extraction and processing of raw materials and resources and ending with the delivery of finished products to its final consumer, including to foreign markets.

Transport makes a huge contribution to the formation of value chains and production costs and, thus, has a significant impact on the competitiveness of products and the economy of the state as a whole. At the same time, the functioning of the transport industry is impossible without providing the population and business with an effective and sufficient public transport infrastructure, which is a direct responsibility and function of the state.

A significant part of the transport infrastructure has a high level of wear and tear. In many localities, there are no service points, making it impossible to organize a year-round regular service. At the same time, in a number of cities there is an excessive number of such points, some of which are located near shopping areas and markets.

Facilitating the attraction of "Big Transit" and the implementation of export policy through the development of effective transit, export and logistics infrastructure.

Improving the economic efficiency and competitiveness of transport infrastructure entities and carriers.

Improving the technological, scientific, methodological and resource security of the infrastructure complex.



**Introduction.** The transport industry is one of the most important sectors of the economy of Kazakhstan, whose share in the gdp structure in 2020 amounted to 9.4%, while the gross value added of transport services in annual terms almost reached 5 trillion tenge [1].

Over the past 10 years, the volume of transported goods by all modes of transport has increased 1.9 times from 2.1 billion. Tons in 2007 to 4.1 billion . T in 2020. Cargo turnover for the same period increased 1.7 times from 350,453.6 million th.k. To 609,533.2 million th.k., on average increasing by 5.3% annually.

The growth of passenger transportation amounted to 1.9 times from 11,807 million people in 2009 to 23,013 million people in 2018. Passenger turnover during this period increased 2.2 times from 1,300,834 million th.k. To 281,484.1 million th.k.. The observed trend of steadily growing demand for transport services from the population and business indicates the most important socio-economic role of the transport industry in the development of the republic of kazakhstan [2].

In the fourth direction of the message of first president n. Nazarbayev to the people of kazakhstan "new opportunities of development in the conditions of the fourth industrial revolution" the elbasy set a task to bring the annual income from transit in 2020 to 5 billion dollars. The break-even point designated by the first president will allow the state to return the funds spent on the infrastructure as soon as possible and will ensure the country's quality of development in the conditions of the sunset of the "era of oil abundance".

**Methodology.** The theoretical and methodological basis of the study was the works of domestic and foreign scientists on the management of innovative projects and the improvement of methodological foundations for the development of transport infrastructure. In solving theoretical and applied problems, general scientific research methods were used, including the analytical method, the method of expert assessments, methods of systems theory, forecasting, planning, program-targeted and management of innovative projects, economic and mathematical modeling and complex economic analysis, methods of scientific abstraction, comparison and analogy.

The information and empirical base of the study was made up of republican and regional regulatory legal acts on project management and transport infrastructure development, official statistics data, Ministries, Government, program documents and projects of targeted integrated programs, facts, conclusions and provisions published in scientific publications of Kazakhstan and other countries, data from the global Internet information network, analytical reports of investment experts, as well as the results of research and calculations by the authors of the study.

**Results.** In international terms, the solution of these issues is also in demand due to the fact that the development of transit and logistics between East and West is a very important issue, since Kazakhstan is located on the path of all land routes from Asia to Europe, which will eliminate barriers to international cargo transportation [3].

As a result of the performed analysis, the authors came to the following results:

1) kazakhstan's accession to intergovernmental free trade agreements will require timely adaptation and harmonization of domestic legislation, as well as bringing the technological level of transport infrastructure in line with the requirements of such agreements.

2) reducing the dependence of the kazakh transport industry on global and regional trade wars will require a real diversification of service activities and significant efforts to increase the sustainability and competitiveness of both individual operators and the industry as a whole [4].

3) in order for the share of transit cargo traffic through kazakhstan in the total volume of transit in the direction "europe-asia" to grow, at least in proportion to the growth of trade volumes, and as an optimal scenario – to outpace it, it is necessary to create a technically sufficient, technologically equipped and service-competitive transport infrastructure in the mode of advanced de-



velopment, along with the constant simplification of internal procedures and the elimination of non-physical barriers to trade and transit.

4) the rapid development of e-commerce will require the transport industry of kazakhstan to advance the development of technologies to ensure the technical capability of electronic transactions and meet the expectations of even the most active and technologically advanced consumers of this service.

5) support of kazakhstani companies in the face of competitive pressure from global megacorporations and transnational transport and logistics companies will require state support in the form of institutional reforms, creation of favorable conditions for functioning and development, removal of legislative and procedural barriers, including regulatory restrictions, allocation of targeted subsidies, subsidies, etc., along with lobbying the interests of national operators in the framework of cross-border and transcontinental integration processes.

6) the shift of the market towards the joint use of the material and technical base of its participants is an additional factor of competitive pressure on kazakhstani operators. The demand for this segment of services will lead to the emergence of new effective schemes, in order to fully participate in which domestic companies will need the ability to adapt quickly. The task of the state is to provide businesses with legal, institutional and financial flexibility.

7) being an oil economy, kazakhstan should create conditions that protect the transport complex from the negative impact of significant fluctuations in energy prices by stimulating the diversification of services and active participation in the implementation of trend projects in those areas that will arise in the country due to the departure from traditional fuels and materials.

8) the expectations and preferences of consumers of transport and logistics services, including road users, railway shippers, transit operators and transport and logistics companies, should become the main strategic driver for the development of transport infrastructure and services for kazakhstan.

9) taking equal care of its citizens, kazakhstan as a state should legislatively ensure the inclusiveness of transport services, taking into account the physical capabilities and specific needs of various social groups (elderly citizens, persons with disabilities, etc.).

10) the problem of the shortage of qualified personnel in the transport industry has been exaggerated since the early 2000s, but to date it has not been found an effective solution, while the structure of demand for labor resources changes annually. Kazakhstan needs a strategy of advanced development of the educational system that takes into account the current and future trends of technological transformation of the transport industry and meets the needs of the state and business in qualified personnel, including completely new specialties and branches of science and technology.

11) in order to prevent possible terrorist acts on transport, kazakhstan needs to actively develop transport security technologies using modern achievements of science and technology, study and implement international experience, cooperate with specialized services of partner countries.

12) in order to reduce the technological lag of kazakhstan in the transport industry, it is necessary to more actively develop the knowledge base and improve the institutional environment for the introduction of cutting-edge and highly intelligent technologies with minimal time delay from the moment of their introduction in more developed countries.

13) in order to fully participate in the competition for attracting transit cargo flows, the transport and logistics complex of kazakhstan should develop ahead of schedule, including the creation of a logistics infrastructure of sufficient capacity and the provision of high-quality services.



14) in order to minimize the damage caused by restrictions on the operation of rolling stock and technologies that do not comply with global environmental trends, kazakhstan should conduct timely harmonization of national legislation and technical regulations in order to ensure systematic compliance of national operators with new requirements in the field of emission reduction and environmental protection. An important task is also the introduction of "green technologies" at the stage of implementation of projects for the construction of transport infrastructure.

15) improving the accuracy of weather forecasts and constant monitoring of the dynamics of changes are an important condition for minimizing the consequences of negative weather events. Timely informing vehicle operators about changing and dangerous weather conditions through the deployment of appropriate elements of an intelligent transport system in kazakhstan, along with increasing the effectiveness of restrictive and preventive measures, will help prevent an increase in incidents due to weather conditions.

16) kazakhstan's legislation should stimulate the development of technologies and culture of waste recycling among the population and business, since this brings not only environmental, but also economic benefits for society.

17) strict tariff regulation of the activities of transport companies in some cases creates insurmountable obstacles to the development of their business and limits investment opportunities. In order to increase the efficiency of operators and provide them with opportunities for timely technological modernization, it is necessary to revise the existing mechanisms in kazakhstan with the introduction of a new model of market relations, at least in certain segments of the transport industry. In addition, the advancing pace of development of market relations dictate the need for a timely response by the state through the formation of appropriate institutional conditions in order to avoid distortions in sectoral development.

The program also provides for measures to increase regular bus routes. At the moment, 75% of rural settlements with more than 100 people are covered by regular bus routes. By 2025, it is planned to provide 100% coverage by opening 300 additional routes. In addition, it is planned to bring all bus stations and bus stations into compliance with the requirements of national standards [5].

The capacity of seaports will increase by 40% by 2025, reaching 20.5 million tons.

Achieving these indicators will increase cargo turnover by 1.6 times, passenger turnover by 1.5 times, and the volume of transit cargo by 2 times. At the same time, kazakhstan will rise from 86th to 40th place in the lpi logistics efficiency index.

To this end, it was instructed to allocate 81 billion tenge in 2020 to complete the construction of the first complex of the "dry port", the infrastructure of the special economic zones "khorgos – eastern gate" [6].

**Discussion.** Efficient and competitive infrastructure plays a crucial role in improving the management of transport infrastructure projects and the development of exports of kazakhstani goods and services to foreign markets and is a fundamental condition for achieving stable growth of transit cargo flows and increasing the price competitiveness of export industries. The planning of projects for the development of transit transport infrastructure should be carried out taking into account regional integration initiatives with the participation of the republic of kazakhstan, including the "one belt, one road" initiative. Within the framework of solving this problem in the field of road infrastructure, it is necessary to continue the implementation of priority projects for the construction, reconstruction and overhaul of public roads of international and national significance. During 2020-2025, within the framework of this direction, it is necessary to implement investment projects for the construction and reconstruction of 6.9 thousand km of roads of international and national significance.



**Conclusions.** The main vectors of improving the system of transport infrastructure project management on the part of the state should be the provision of state support, as well as the creation of institutional conditions for the development of transport entities and transport infrastructure, increasing their competitiveness, economic and technological efficiency. As part of the implementation of this initiative, it is necessary to develop and implement a set of measures to ensure state support for the development of transport infrastructure facilities using ppp mechanisms, as well as updating the rolling stock fleet using financial instruments, such as subsidizing the interest rate on loans and leasing, and allocating targeted subsidies to cover the costs of socially significant passenger transportation. In particular, it is proposed to expand and improve subsidy mechanisms in the process of updating the fleet of vehicles with the active participation of the state, financing organizations and domestic manufacturers, as well as to improve approaches and principles of tariff regulation in the field of transportation, taking into account modern forms of financial and economic relations. In the field of road transport, it is necessary to continue implementing state support measures in the form of providing preferential leasing financing, subsidizing the interest rate on loans and passenger transportation tariffs, as well as maintaining temporary allowances for the payment of registration and disposal fees when registering new cargo vehicles. As a matter of priority, such support should be provided to carriers replenishing their fleet with kazakh-made vehicles. Similar measures of state support and priority criteria should be applied to municipal enterprises engaged in the purchase of special-purpose vehicles (including road vehicles and tractor fleets).

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## КӨЛІК ИНФРАҚҰРЫЛЫМЫ ЖОБАЛАРЫН БАСҚАРУДЫ ЖЕТІЛДІРУ

**\*Б. Байтарақова, Н. Қорабаева**

*І. Жансүгіров атындағы Жетісу университеті, Талдықорған, Қазақстан*  
**e-mail:** [king\\_bara@mail.ru](mailto:king_bara@mail.ru)

**Түйін.** Мақала көлік инфрақұрылымы туралы теориялық түсініктерді кеңейтеді. Қазақстанның көлік инфрақұрылымының ағымдағы жағдайы талданды. Әр түрлі басқару деңгейлері арасында функцияларды бөлуге негізделген аймақтың көлік инфрақұрылымын басқару моделі ұсынылған. Бұл модель жобаларды әртүрлі деңгейлерде үйлестіре іске асыруға және өңірлердің бәсекеге қабілеттілігін арттыруға мүмкіндік береді.

**Түйін сөздер:** экономикалық даму, аймақтық экономика, интеграция, жоспарлау, экономика, көлік инфрақұрылымы, жобаларды басқару.

## СОВЕРШЕНСТВОВАНИЕ УПРАВЛЕНИЯ ПРОЕКТАМИ ТРАНСПОРТНОЙ ИНФРАСТРУКТУРЫ

**\*Б. Байтарақова, Н. Қорабаева**

*Жетісуский университет им.И. Жансугурова, Талдықорған, Казахстан*  
**e-mail:** [king\\_bara@mail.ru](mailto:king_bara@mail.ru)

**Резюме.** Статья расширяет теоретические представления о транспортной инфраструктуре. Проанализировано текущее состояние и развитие транспортной инфраструктуры в Казахстане. Предложена структурная модель управления транспортной региональной инфраструктурой, основанная на распределении функционала между разными уровнями менеджмента. Предложенная модель позволяет структурированно реализовывать проекты на любых уровнях и повышать конкурентоспособность в региональном разрезе.

**Ключевые слова:** экономическое развитие, региональная экономика, интеграция, планирование, экономика, транспортная инфраструктура, управление проектами.