# INSTRUMENTS OF PUBLIC–PRIVATE PARTNERSHIP AS A FACTOR OF INNOVATIVE DEVELOPMENT OF THE TRANSPORT AND LOGISTICS COMPLEX

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# ABSTRACT

This article shows the state and prospects of innovative development of the transport and logistics sector of the economy of Kazakhstan on the example of the railway mode of transport, as a further effective development of the transport and logistics sector, and suggests tools for public–private partnership. The developed set of recommendations on the use of public–private partnership tools will contribute to the further development of the transport and logistics sector of Kazakhstan. Based on the theoretical assessment of the existing instruments of public–private partnership, the conclusion is made of their effectiveness in the conditions of innovative activity of the subjects of the transport industry of the country.

Therefore, an effective innovation policy carried out by the state is important in this regard, aimed at further development of innovative activities in the transport and logistics sector of the economy of Kazakhstan, based on mutually beneficial cooperation between state bodies and private business entities. The current State Program of infrastructure development Nurly Zhol" for 2020–2025 is aimed at further development of the infrastructure of the transport industry of the state. To implement the main directions of this program, active work is being carried out to expand the capacity of the main railway network, implement road projects, create the necessary logistics infrastructure for transcontinental routes from the Pacific coast to the Persian Gulf and the Baltic States.

**Keywords**: Freight Turnover, Innovation, PPP, Transport Infrastructure, Transportation, Transport and Logistics Complex, Logistics Services **JEL Classifications:** R11 E24 I31 O18

## **INTRODUCTION**

At present, in order to maintain priority sectors of the national economy, any state will enter into mutually beneficial relations with various business entities with the aim of transforming and modernizing them in the context of intensifying innovative processes.

Modern Kazakhstan is a country with a high length of various transport networks (railways, a wide network of highways, water communications, there is a seaport, there are pipeline routes, etc.). It should also be noted that historically the Great Silk Road passed through the territory of present-day Kazakhstan.

Currently, any state, in order to maintain priority sectors of the national economy, will enter into mutually beneficial relations with various business entities in order to transform and modernize them in the conditions of activation of innovative processes.

In Kazakhstan, as part of the revival of the Great Silk Road, there is a process of transformation of land communication routes, an important role in this is played by the infrastructure of the transport and logistics sector of the country. The favorable geographical position of Kazakhstan, located between Europe and Asia, also has a positive impact on the development of the country's transport and logistics industry and the creation of modern border transport and logistics complexes («Khorgos», «Kuryk» and others).

This contributes to the fact that Kazakhstan, as a participant in the world economy, will make a significant contribution to the development of the Eurasian transport space, the formation of global infrastructure integration, and the creation of favorable conditions for international transit.

#### LITERATURE REVIEW

The works of many scientists, such as (Aetdinova et al., 2020; Makarov et al., 2018; Dmitriev, 2019; Evmenchik, 2020; Zhuravleva et al., 2018).

Development of public-private partnership as a factor of innovative development development of transport and logistics. The complex of Kazakhstan is dedicated to the work (Önden et al., 2018; Salko et al., 2020; Shumaev, 2013; Simchenko et al., 2021; Shafieva et al., 2020; Topolšek et al., 2018; Tuzkaya et al., 2020; Varnavsky, 2020).

At present, in order to maintain priority sectors of the national economy, any state will enter into mutually beneficial relations with various business entities with the aim of transforming and modernizing them in the context of the activation of innovative processes.

In the Address of the President of Kazakhstan dated September 2, 2020, it is determined: «... The executive branch should have full and high–quality implementation of the Nurly Zhol program. This is a strategic project through which effective modernization will affect the entire transport infrastructure. For these purposes, until 2022, the state will invest more than 1.2 trillion. KZT investments».

Partnership between government bodies and private entrepreneurship is one of the important organizational and economic mechanisms for enhancing innovation processes based on attracting long-term investments.

The existing mechanisms of public–private partnership have already confirmed their importance and effectiveness in enhancing innovation in various sectors of the economy.

An important goal of PPP is the participation of private business entities in the implementation of state tasks of the socio–economic development of the country through the provision of services by them on the platform provided and created by the state infrastructure.

The main participants in PPP can be: first of all, it is the state itself; various financial institutions; of course suppliers; depending on the project, there may be design organizations, a production company; there can be project operators and of course.

Buyers of goods, works, services. This list of participants may vary depending on the specifics of PPP projects.

Participants of the PPP system, and their relationship in the process of project implementation are determined depending on the goals and objectives of the project.

#### METHODOLOGY

The analysis of the innovative development of the transport and logistics sector of the economy of Kazakhstan has been reflected in many scientific studies.

Currently, the economy has formed certain methods and approaches in the analysis of the innovative development of the transport and logistics sector of the economy of Kazakhstan.

However, none of them can be considered the most adapted for studying this process.

Dialectical, system-functional, economic-statistical and formal-logical methods were used as a methodological basis.

#### RESULTS

In Kazakhstan, major projects are already being successfully implemented in the construction of transport infrastructure. An important priority in enhancing innovation processes in the country is the need for broad involvement of representatives of business structures for the further development of priority sectors of the national economy. In this regard, the role of the state is to ensure the balance of interests of private entrepreneurship entities with national principles, both in the short term and in the long term. Currently, in Kazakhstan, most projects are being implemented in the field of construction of transport infrastructure.

The introduction of PPP instruments in Kazakhstan began in 2008, when by the Decree of the Government of the Republic of Kazakhstan, a specialized organization for PPP issues was created – the joint–stock company "Kazakhstan Center for Public–Private Partnership" (PPP Center) with 100 percent state participation, the only shareholder of which was the Government of the Republic Kazakhstan. The main direction of the PPP Center was determined to conduct an economic examination of investment projects with the participation of the state (concession projects, budget investment projects, budget investment with the participation of the state in the authorized capital of legal entities).

In 2011, Kazakhstan adopted the first program document on PPP issues – the Program for the Development of PPP in Kazakhstan for 2011–2015, the purpose of which is to develop a legal and institutional framework for the implementation of innovative projects using tools in our country (Zhuravleva et al., 2018).

This goal is feasible when addressing the following issues:

- Improvement of regulatory and legal acts in the field of partnership between government agencies and business structures;
- Development of a set of measures aimed at optimal management of the processes of implementation and implementation of projects using PPP mechanisms and more. One of the main directions of the Program is the introduction of project financing to attract institutional investors both to PPP projects and to the economy of Kazakhstan in the whole. For these purposes, it is planned to introduce the principles of project financing for the implementation, first of all, of concession projects.

The Coordination Council was created to solve existing problems in the field of PPP. Given that PPPs have their own characteristics in various sectors of the economy, this Council pays great attention to each of them.

The Samruk–Kazyna National Welfare Fund (NWF) includes a number of the largest national companies in Kazakhstan that ensure the implementation of the strategic goals of the state, since the country is taking measures to support business entities through the activities of development institutions on the basis of public–private partnerships.

NWF «Samruk–Kazyna» is the main operator in the process of organizing and implementing PPP mechanisms in the implementation of the state's innovation policy in the further development of priority sectors of the national economy. Including in the transport and logistics sector.

PPP has become very popular during the period of instability of world economic processes and elimination of the consequences of the global economic crisis in order to increase the social orientation of the country's state policy to achieve economic growth and increase the welfare of the country's population and increase the competitiveness of the national economy (figure 1).



FIGURE 1 STRUCTURE OF PUBLIC–PRIVATE PARTNERSHIP

Note: compiled by the authors on the basis of the source

The spheres of implementation of PPP mechanisms are quite different. An important place is occupied by the socio–economic sphere, the area of infrastructural transformations, projects and the innovation environment. In our country, one of the important main objects of innovative development is associated with the use of PPP tools to enhance innovative activity.

The transport industry in Kazakhstan consists of almost all existing modes of transport in the world. We list the main types of transport in our country:

- railway transport;
- automobile transport;
- automobile and urban electric transport;
- pipeline transport;
- air Transport;
- inland waterway transport;
- sea transport.

Next, we will consider the dynamics of the main indicators for all types of transport in Kazakhstan over the past five years. Table 1 shows that the dynamics of the main indicators for all types of transport in the Republic of Kazakhstan in 2016–2020 has a positive trend. So, in recent years, the volumes of transported goods, luggage, cargo luggage, cargo turnover and passenger turnover indicators have been increasing. The same trends were observed in terms of cargo turnover. In general, in the current 2020, the outlined positive trends continued.

Table 1 DYNAMICS OF THE MAIN INDICATORS OF TRANSPORT MODES OF THE REPUBLIC OF KAZAKHSTAN IN 2016–2020									
Indicators	2016	2017	2018	2019	2020				
Transported cargo, baggage, cargo baggage, Million tons	3722,6	3916,2	4103,6	4237,9	3 944,8				
Cargo turnover, billion tkm	514,7	555,4	596,1	609,3	584,0				
Passengers transported, million people	22338,2	22720,1	23021,6	23832,1	8396,4				
Passenger turnover, million PKM	264 112,0	272 831,7	281 499,9	295 235,0	108 711,0				
<i>Source:</i> compiled according to the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan <u>https://stat.gov.kz/.</u>									

Railway transport in Kazakhstan is the leading mode of transport in many respects, in particular: in terms of length, in terms of the volume of transported goods, luggage, cargo luggage, freight and passenger turnover. This is due to the geographic location of the country, the length of distances within the regions of Kazakhstan, the presence of bypass territories, and more. In this regard, we will consider the main indicators for this type of transport in the country over the past five years.

The data in Table 2 (below) show that, in general, the dynamics of the main indicators of railway transport in the Republic of Kazakhstan in 2016–2020 has a positive trend. So, in recent years, the volumes of transported goods, luggage, cargo luggage and cargo turnover have been increasing. From 2016 to 2019, the volumes of transported cargo, baggage, cargo luggage did not have the same growth rates, either decreased or increased. The same trends were observed in terms of cargo turnover. In the current 2020, the emerging trend remains unchanged.

In Kazakhstan, the leading role in the transport and logistics sector is played by the National Company JSC "Kazakhstan Temir Zholy" (KTZ), being a leader in the country's railway transport system and an important player in the global logistics market.

Table 2 DYNAMICS OF THE MAIN INDICATORS OF RAILWAY TRANSPORT IN THE REPUBLIC OF KAZAKHSTAN IN 2016–2020.								
Indicators	2016	2017	2018	2019	2020			
Transported cargo, baggage, cargo baggage, million tons	338,9	387,2	397,9	397,0	402,3			
Cargo turnover, billion tkm	239,0	266,6	283,3	286,7	299,2			
Passengers transported, million people	23,1	22,9	23,1	22,4	13,2			
Passenger turnover, million PKM	17 913,9	18 222,2	18 562,2	17 721	9 163,3			
Source: compiled according to the Bureau of National Statistics of the Agency for Strategic Planning and Reforms								
of the Republic of Kazakhstan https://stat.gov.kz/.								

The long-term strategy of KTZ provides for restructuring through the consolidation of assets based on key services and processes: transport logistics, freight transport, passenger transport and transport infrastructure services. Thanks to the measures taken, the transport and logistics sector of our country is becoming a powerful driving force, a real catalyst for the development of the national economy, occupies one of the leading places in the organization of multimodal transportation on the land part of the Eurasian space.

Infrastructure plays an important role for the functioning of railway transport. All of the above is evidenced by the data in Table 3, so the dynamics of the rolling stock of railway transport in the Republic of Kazakhstan in 2016–2020. Quite diverse. From 2016 to 2019, the volumes of transported cargo, baggage, cargo luggage did not have the same growth rates, either decreased or increased. The same trends were observed in terms of cargo turnover.

Table 3									
DYNAMICS OF ROLLING STOCK OF RAILWAY TRANSPORT IN THE REPUBLIC OF									
KAZAKHSTAN IN 2016–2020									
Indicators	2016	2017	2018	2019	2020				
Locomotives, total	1 725,0	1 732,0	1 714,0	1 722,0	1 733,0				
Auto tracks, total	287,0	291,0	288,0	288,0	282,0				
Passenger cars, total	2 630,0	2 661,0	2 597,0	2 490,0	2 684,0				
Baggage cars, total	28,0	28,0	28,0	28,0	24,0				
Freight cars owned by the railway, total	56 504,0	54 925,0	54 656,0	54 596,0	54 584,0				
Wagons owned by private companies and enterprises	72 848,0	75 496,0	80 050,0	83 917,0	83 917,0				

*Source:* compiled according to the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan <u>https://stat.gov.kz/.</u>

Figure 2 shows the dynamics of the rolling stock of the railway transport of the Republic of Kazakhstan for 2015–2019 in units.

Thus, in recent years, the number of locomotives and railcars has decreased, while the number of passenger cars and wagons owned by private companies and enterprises has been steadily increasing. During the analyzed period, the number of baggage cars is approximately at the same level and amounts to 24 in 2020. It should be noted that freight cars belonging to the railway decreased and amounted to 54,656 by the end of 2018. In 2019, the emerging trend continued and these indicators increased.



## FIGURE 2 DYNAMICS OF THE ROLLING STOCK OF THE RAILWAY TRANSPORT OF THE REPUBLIC OF KAZAKHSTAN IN 2015–2019, IN PIECES,

Website of the bureau of national statistics of the agency for strategic planning and reforms of the Republic of Kazakhstan <u>https://stat.gov.kz/</u>

Determining further prospects for the development of the transport and logistics sector in Kazakhstan, let us focus on the speech of our President of Kazakhstan K–Zh.K. Tokayev on meeting of the Valdai International Discussion Club in Sochi, where he noted that in two years the transport and logistics industry will bring USD 5 billion to the country's budget, and that by 2025 it is planned to invest an additional USD 20 billion in transport and logistics projects.

## CONCLUSION AND RECOMMENDATIONS

Determining the future prospects for the development of the transport and logistics sector of Kazakhstan, we will focus on the speech of our President of Kazakhstan K–Zh. K. Tokayev at the meeting of the Valdai International discussion Club in Sochi, where he noted that the transport and logistics industry will bring \$ 5 billion to the country's budget in two years, and that it is planned to invest an additional \$ 20 billion in transport and logistics projects until 2025.

The President of Kazakhstan also noted: «... that Kazakhstan is a transit trade bridge between Asia and Europe. At the same time, over the past 10 years, the country has invested

more than \$ 30 billion in transport infrastructure. More than 2 thousand km of railways were built, 7 thousand km of highways were reconstructed, the port capacity in the Caspian Sea increased to 27 million tons. Five railways and six highways of the international corridor pass through Kazakhstan..».

The existing innovative activity in the transport and logistics sector of Kazakhstan cannot develop without such new objects of innovative infrastructure as transport and logistics complexes, logistics hubs, high-tech terminals and others.

Based on the conducted scientific research of PPP as a management tool in the transport and logistics sector of Kazakhstan, it was revealed:

- 1. Analysis of the current state and the role of the transport and logistics sector in the economy of Kazakhstan shows that the volumes of its main indicators are growing significantly in the context of economic globalization.
- 2. In the Republic of Kazakhstan there is a significant increase in investments in transport and logistics projects.
- 3. Development of innovative activities in the transport and logistics industry of the country is carried out systematically, in certain priority areas.
- 4. The introduction of PPP tools into the practice of interaction between government bodies and business structures in the transport and logistics sector will give a new impetus to the development of innovative activities in the industry.
- 5. At the same time, there is a need to develop a clear policy to harmonize relations between government bodies and the business class for the further development of effective partnership in the transport and logistics sector of Kazakhstan.

Thus, at present, Kazakhstan, like many countries, is increasingly giving priority to innovative development, as there is a significant expansion of the formation of the most competitive sectors. The active measures taken to activate the innovation process are aimed at support from private entrepreneurship. So, within the framework of the fourth industrial revolution in Kazakhstan, there is a balance in the development of strategic directions and sectors of the national economy as a whole, including in the transport and logistics sector.

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