Kilichev Umid Ibadullaevich

Independent researcher of Tashkent State Transport University

IMPROVEMENT OF FREIGHT TRANSPORTATION IN RAILWAY TRANSPORT

Introduction

The development of the transport system of the Republic of Uzbekistan is a process closely related to the development of sectors of the economy, characterized by a special place in the international transport system of the republic. This uniqueness is determined by the fact that Uzbekistan is located on the connecting routes connecting the center and eastern part of the European and Asian continent. This situation is recognized as one of the key factors in the effective functioning of the transport and logistics system in our country.

The current development of international transport and transport system involves the use of several modes of transport and the interaction of vehicles with different stages of life cycle, which determines the adaptability of the transport system at the expense of geographical and functional diversification. The introduction of modern logistics technologies in the railway network will not only reduce costs, improve reliability and safety, but also further improve the delivery process.

Analysis and results

The state and development of the transport system is very important for the Republic of Uzbekistan, as it, along with other infrastructure sectors, provides the basic conditions for the activities of society, serves as an important element in achieving socio-economic and foreign policy goals. Stable and efficient operation of the general railway network is a necessary condition for ensuring a single economic space of the Republic of Uzbekistan, further development of various industries and agriculture in its territory, improving living standards and living conditions, increasing the mobilization of Uzbek citizens.

The correctness of the choice should be confirmed by technical and economic reports based on the analysis of costs associated with transportation by different modes of transport. This selection criterion also serves to some extent in solving the problem of optimizing the cost of delivery of goods in mixed transport (Table 1).

Table 1

Specific features of optimizing the cost of delivery of goods[1]

Selection criteria	Type of transport				
	Railway	**Water**	**Car**	**Pipe**	**The weather**
Speed	average	minimum	high	low	maximum
Cost level	average	lowest	low	low highest	highest
Possible assortment	highest	low highest	minimum	very	partially

[1] Compiled by the author as a result of research.

of goods				limited	limited
Number of markets served	big	limited	unlimited	very limited	partially limited
Delivery reliability	average	low	goof	high	average

Industry experts estimate that while the current average annual economic growth rate of 8% will be maintained until 2030, the volume of freight traffic will increase by an average of about 9.2% annually. In particular, the average growth in rail transport is 5%. In other words, it is 2.3 percent of total traffic. At the same time, the volume of freight traffic in 2013 amounted to 63.7 million. tons to 146 million by 2030. tons. The significant growth of the country's economy, of course, poses new challenges to the transport sector. This, in turn, requires the introduction of a modern logistics system, a radical reform of the system of transportation of goods in various modes of transport.

In recent years, there has been a decrease in the total volume of rail transport. Container transport is a more dynamically developing segment of the freight turnover, accounting for 7.8% of the total freight turnover (Figure 2.1). According to JSC "Uzbekistan Railways", in 2018, the market of container transport of railways in Uzbekistan increased by 11.4% compared to 2016. However, due to the pandemic, in 2019, to some extent, the volume of container traffic decreased by 15.2%. Despite the dynamic development of the transport complex in recent years, it is increasingly becoming a narrow part of economic growth.

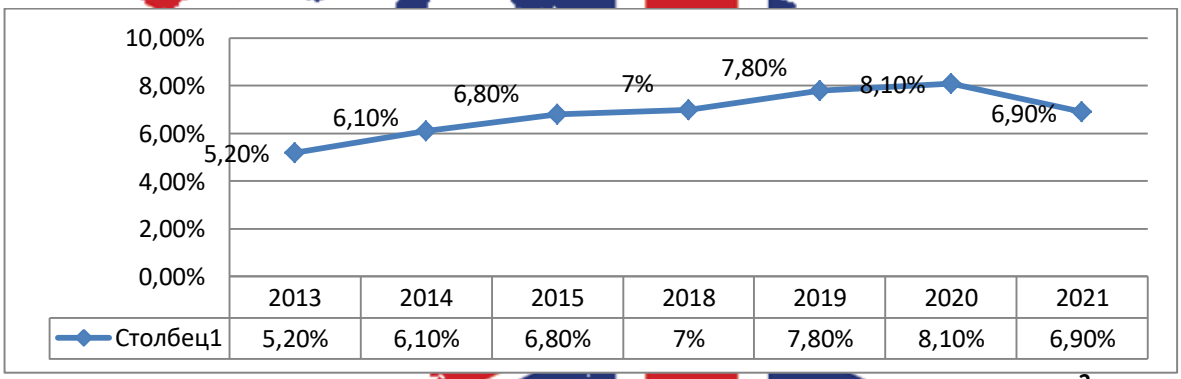

Figure 1. Dynamics of volume of container traffic by rail, in% [2]

In the total cargo turnover, container traffic accounts for about 7.8% of the total cargo turnover, while in developed countries this figure is 20-25%. By 2030, it will be necessary to produce 550 containers per year to bring this figure to 20%.

Today, the low share of container traffic in our country is due to the following factors:

– insufficient development of logistics services in the country;

– insufficient warehouse and terminal infrastructure in the country;

– simplicity of logistics chains in our country, which significantly reduces the efficiency of container transportation compared to other types of transportation;

– insufficient development of export transport infrastructure (border crossing

[2] Information of JSC "Uzbekistan Railways"

points);

– lack of integration of logistics services companies in the transport services market.

The project of the China-Kyrgyzstan railway route to Uzbekistan was proposed in 1996. The first talks on the construction of the station were held in December 1996 in Paris with the participation of representatives of Kyrgyzstan, Uzbekistan and China. The main goal of the project is to create a competitor, an alternative to the Trans-Siberian Railway, the only route that unites the Far East and Europe today.

However, the volume of direct transit on the section will depend on the capacity of the China-Uzbekistan railway line through the planned construction of Kyrgyzstan. In addition, the Angren-Pop section has an alternative, a competitor to the Tajik railways, such as the Sogdian section, in the transit of goods from China. Given that the Angren-Pop section passes through the mountains, cargo owners prefer to ship their cargo through the Sogd section. This situation has a negative impact on the country's transit potential (Table 2).

Table 2

Comparative indicators of freight transportation by rail via Sugd and Angren-Pop routes[3]

Indicators	Measurement	Information
Sogd plot		
Route length	km	110,0
Shipping capacity	tons	1 464 222,0
Shipping cost	doll / 10 thousand.	424,4
Cargo turnover	ton-km	161 064,4
The cost of rail transport	thousand ton-km.ming.doll.	1 100,1
Angren-Pop		
Route length	km	122,7
Shipping capacity	tons	1 464 222,0
Shipping cost	doll / 10 thousand.	252,1
Cargo turnover	ton-km	179 718,6
The cost of rail transport	thousand ton-km.ming.doll.	925 249
Difference	km	**174 851**

According to the data, 1,464,222 tons of cargo will be transported through the Sogd region, while the cost of rail transport services will be $ 1,100.1 thousand. If the same amount of cargo is transported through the Angren-Pop section, the cost of transportation services will be $ 925,249. Cargo owners can save up to $ 174,851. Economic efficiency will also be achieved through the transfer of freight from the Sughd section, which belongs to Tajikistan, to the local railway line.

Looking at the 2019 data, the analysis of the transport services market shows that the main transportation is the main type of service in the market with a share

[3] Compiled by the author on the basis of JSC "Uzbekistan Railways".

of 76%. Among other services, forwarding services (tracking) account for 4.5%, warehousing services for 2.8%, integrated logistics 3PL / 4PL services for 1.8%.

Today, the development of the outsourcing logistics service market in the country is slow, the main reasons for this are the complexity of customer-enterprise logistics chains and unmet demand for quality logistics services in the country, including the development of quality providers, including 3PL and 4PL. Another disadvantage is that the share of outsourcing in the overall structure of logistics costs in our country is about 12-15%, while for developed countries the logistics market is 40-45% (Uzbekistan ranks 99th in the world in terms of logistics development).

Conclusions and suggestions

Thus, in order to avoid the above problems, it would be expedient to identify the following main conceptual directions:

– change of tariff setting principles and gradual transition to the new tariff system, reduction of the number of correction factors, reduction of all types of financing of railway transportation;

– formation of a competitive environment in the field of rail freight by creating conditions for the establishment of private companies for freight transportation by rail with their own locomotives and wagons;

– In order to reduce the cost of transportation of goods transported in containers by 10%, it is necessary to increase container traffic by 25-30%.

Expansion of the network of multimodal transport and logistics centers in the regions to increase the management efficiency of the transport and logistics system through:

– harmonization of normative and legal base, technical and technological regulations and standards, logistics centers, freight forwarding activities in accordance with international standards;

– establishment of an integrated information system to ensure the efficiency of multimodal transport;

– formation of a national network of customs logistics centers, ensuring that transport and logistics operations are at least 3PL.

Thus, the effective development of the transport and logistics system will lead to the saving of all production and material resources, the acceleration of production, the reduction of transport costs and the development of sectors of the economy.

List of used literature

1. Ўзбекистон Республикаси Президентининг 2017 йил 7 февралдаги «Ўзбекистон Республикасини янада ривожлантириш бўйича Ҳаракатлар стратегияси тўғрисида»ги ПФ-4947-сонли фармони. // www.lex.uz.

2. Ўзбекистон Республикаси Давлат Статистика қўмитаси. 2019.

3. Fayzullayev J.S. The economic-mathematical model of the organization activity of the modern transport-logistics system. // Бюллетень науки и практики – Bulletin of Science and Pracrice научный журнал (scientific journal). 2018. №5

(4). C. 345-352. DOI:10.5281/zenodo.1147072. Impact Factor (5) GIF – 0.454; (21) Info Base Index – 1.4; (17) OAJI – 0.350, (43) (UIF) – 0.1502; (4) JCR – 1.021. http://oaji.net/articles/2017/3996-1526585902.pdf

4. Fayzullayev J.S. Effective management methodology of integrated transport-logistics system // International Journal of Advance and Innovative Research. 2019. Volume 9, Issue 1 (I). Impact Factor (5) GIF – 0.676.

5. Fayzullayev J.S. Evaluation of efficiency of transport - logistics system. // XLVII International correspondence scientific and practical conference «International scientific review of the problems and prospects of modern science and education» (Boston. Usa. July 24-25, 2018). 62-65. https://scientific-conference.com/images/PDF/2018/49/International-scientific-review-7-49-ISBN.pdf

6. Fayzullayev J.S., Increasing the efficiency management of 3PL and 4PL logistics companies in the railway system. // «Стратегия действий Республики Узбекистан: макроэкономическая стабильность, инвестиционная активность и перспективы инновационного развития» Международная научно-практическая конференция. Тошкент. 2018. 28-29 мая. С.37-42.

7. FayzullayevJ. (2020). Effectiveness of modern methods in the development of the integration transport systems. *Архив научных исследований*, *1*(3). https://tsue.scienceweb.uz/index.php/archive/article/view/3892

8. Fayzullayev J.S. Effectiveness of modern methods in the development of the integration transport systems // Asian Journal of Technology & Management Research (AJTMR) ISSN: 2249 –0892 Vol9 Issue–2, Dec -2019 62-65. https://saarj.com/wp-content/uploads/SAJMMR-JULY-2020-FULL-JOURNAL.pdf

9. Fayzullayev J.S. Theoretical Aspects of the Transport Logistics System Management // Asian Journal of Technology & Management Research (AJTMR) ISSN: 2249 –0892 Special Issue–2, Sep -2019. http://ajtmr.com/papers/SplIss2/SplIss2_8.pdf

10. Файзуллаев Ж.С. Транспорт-логистика тизими: муаммо ва ечимлар // Proceedings of Global Technovation 2 nd International Multidisciplinary Scientific Conference Hosted from London, U.K. https://conferencepublication.com December 28th, 2020.

11. Fayzullayev J.S. Improvement of Economic Efficiency of Development of Railway // Asian Journal of Technology & Management Research (AJTMR) ISSN: 2249 –0892 Vol9 Issue–2, Dec -2019. http://www.ajtmr.com/papers/Vol9Issue2/Vol9Iss2_P9.pdf