

Development of international road transport services in the Kyrgyz Republic under the EAEU conditions

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Abstract. The paper considers the development of international road transport services in the prism of digitalization of its processes. The current state of international road transport in the Kyrgyz Republics analyzed. Projects and expected effects of digital transformation are described. The EAEU, including the Kyrgyz Republic, has significant transport and transit potential, for the implementation of which a project on the formation of a digital ecosystem of transport corridors was launched in September 2021. The development of transport corridor services is a key aspect of the development of unhindered movement of goods in the EAEU space and can provide conditions conducive to the restoration of economic activity of the Kyrgyz Republic and its partners in the Union after restrictions due to the spread of coronavirus infection.

1 Introduction

The transport potential can be realized through systematic digitalization as part of the development of international supply chains of goods on the territory of the Union. Digitalization of transport corridors will reduce the time and material logistics costs of international road transport in the Kyrgyz Republic, as well as reduce the administrative burden on businesses [1-3].

2 Materials and methods

Research methods and materials may vary depending on the specific research area in the field of international road transport of the country.

3 Transit potential of the Kyrgyz Republic

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The Kyrgyz Republic has a significant transit potential, connecting transport corridors in Europe and Asia, while bordering four countries – Kazakhstan, China, Tajikistan and Uzbekistan.

All international road corridors in Kyrgyzstan are included in the road network of the Euro–Asian Transport Links (EATL) project. These road corridors provide access to many countries, major ports, transport hubs and terminals, ensuring the diversification of cargo transport routes between Europe and Asia and expanding the use of existing and projected opportunities for inland transport.

Large-scale works are being carried out on the construction of an alternative road "North–South", which will provide road transport links along the route Tajikistan–Kyrgyzstan–Kazakhstan–Russia with an adjunction to the transport corridor «East–West» (China–Kazakhstan–Russia–Western Europe), which also plays an important role in the implementation of the project «Silk Road Economic Belt» and other integration processes. Completion of construction is tentatively scheduled for the end of 2023.

An infrastructure project for the construction of the Almaty – Issyk–Kul highway is under development, which aims to increase the transit potential between Kazakhstan and Kyrgyzstan. At the moment, the project is at the stage of completing the economic analysis. The route will run along the route Almaty–Uzynagash–Kastek pass–Karasay Batyr–Kemin–Issyk–Kul.

As part of the construction, an alternative route of 279 km will be created instead of the existing route of approximately 480 km. In addition, a new section «Uzyngash – Kemin» will be built. According to the Republic of Kazakhstan, the construction of 96 kilometers of the roadbed of the section "Almaty–border of Kyrgyzstan–Issyk–Kul" is planned only by 2035.

Despite the presence of promising projects in the field of automobile infrastructure, the potential for transportation development is reduced by natural conditions.

Transport links in Kyrgyzstan are very limited due to the high–altitude terrain. The lack of access to the sea determines the specifics of international transportation in the Kyrgyz Republic. The costs of international transportation make it difficult to develop the export of goods. First of all, this causes a narrow range of goods and markets, the sale of which can be profitable. The development of road transport in the Kyrgyz Republic should take place in the direction of increasing economic efficiency.

4 Ratio of transportation volumes by type of transport

Features of the relief of the Kyrgyz Republic are the reason for the absolute predominance of road transport over other types. A significant number of regions are located in mountainous areas and are difficult to access for air and rail vehicles.

Table 1 shows statistical data on cargo transportation by all modes of transport for 2020–2021.

In 2021, about 26 million tons of cargo were transported by road, or more than 91 percent of the total number. At the same time, the significant annual growth in the volume of cargo transported is due not so much to the improvement of transportation processes, but rather to the gradual reduction of restrictions associated with the pandemic.

Table 1. Quantitative data on all types of cargo transportation

	In fact, thousand tons		As a percentage of the corresponding period of the previous year	
	2020	2021	2020	2021
Cargo transportation by all modes of transport	24 666.1	28 576.7	72.1	115.9
Railway	2 014.5	2 112.3	89.8	104.9
Automobile	22 394.6	26 158.6	70.6	116.8
Pipeline transport	256.9	305.4	105.8	118.9
Air transport	0.1	0.4	33.3	400.0

Source: URL: <http://www.stat.kg/ru/statistics/transport-i-svyaz/>

5 Trends in improving international road transport

A key trend in 2021 is the rehabilitation of trade volume in the context of the easing of restrictions associated with the pandemic. As a result, the trade turnover between the Russian Federation and the Kyrgyz Republic increased by almost 40 percent compared to 2020.

The obvious imbalance in the transport structure of international transport signals the need to improve the mechanism of transportation by modes of transport other than road. A step towards multimodal transportation was the signing of a trilateral agreement on the construction of the Uzbekistan – Kazakhstan – China railway. It is strategically important to extend the road to Iran in order to gain access to the sea for the Republic of Kyrgyzstan.

In November 2018, the National Development Strategy of the Kyrgyz Republic for 2018–2040 was adopted, according to which Kyrgyzstan should become a transit country with safe and popular corridors for the transit of goods.

Currently, the optimal trajectory for the development of the existing transport situation in the Kyrgyz Republic is the introduction of electronic services for international road transport. Among the most promising services are electronic document submission mechanisms, including preliminary information (TIR–EPD), waybill (e–CMR), as well as digital transit form eTIR.

Setting goals for digitalization of road transport is impossible without understanding the expected effects of its implementation. "Main directions for implementing the digital agenda of the Eurasian Economic Union until 2025", approved by the Decision of the Supreme Eurasian Economic Council No. 12 of October 11, 2017, provides estimates of the potential economic effect of implementing the digital agenda:

1. Increase the total GDP of the Member States by 11 per cent of the total expected growth of the total GDP of the Member States by 2025. This potential effect is almost twice as large as the possible increase in the total GDP of the member States as a result of digital development without implementing a joint digital agenda.
2. According to experts, the most significant sources of growth in the aggregate GDP of member States due to the implementation of the joint digital agenda may be factors such as the removal of obstacles and the development of the data industry, each of which will provide annual GDP growth of 0.3 percent and 0.2 percent, respectively.

The Action Plan for Implementing the Main Directions and stages of implementing the coordinated (coordinated) transport policy, approved by the Order of the Eurasian Intergovernmental Council No. 15 of August 20, 2021, includes measures aimed at improving the quality of road transport services and the efficiency of using the transit potential of the Union's member states.

Paragraph 30 of section 4 of the action plan for improving the quality of road transport services and the efficiency of using the transit potential of Member States prescribes «the development of proposals for a phased transition to the use of electronic documents in international road transport of goods».

Despite the fact that document flow in international road cargo transportation is carried out between transport market entities (commercial companies) in the B2B («Business–To–Business» – English) and B2C ("Business–To–Customer" – English) link and does not provide for the participation of state bodies, the presentation of data on international freight traffic to the State authorities through which it is carried out in the G B2g («Business–To–Government») and G2BG2b («Government–To–Business») links is of paramount importance for the development of the ecosystem of international transport corridors.

This is why the Digital Transport Corridor Ecosystem Development Plan) places so much emphasis on developing and approving standards, formats, and data structures not only for B2B и BB2B and B2C, but also for G2B and B2G services. G2B и B2G The information exchange of all these services should be standardized at the national (Member States) and supranational (EAEU) levels.

According to the Concept of Development of the Customs Service of the Kyrgyz Republic for 2022–2024, it is planned to introduce a system for exchanging electronic preliminary information with partner countries, which will allow:

- significantly reduce errors in the mirror comparison of foreign trade data between trading parties;
- identify signs of customs crimes and offenses;
- determine the groups of goods that were the subject of a customs offense and their causes for the formation of preventive measures by state bodies.

A positive effect of implementing the e–CMR implementation practice is possible both for the EAEU member states and for businesses. While reducing the time, energy and financial costs of state bodies in the framework of monitoring, the effectiveness and transparency of verification activities are also increasing.

Among the benefits and opportunities for the business community are:

- improved handling of the e–CMR consignment note (certification of acceptance and delivery of goods, receipt of confirmation of deliveries, presentation of requirements, formulation and execution of reservations, issuing instructions, etc.);
- acceleration of cash turnover (due to real–time transactions and faster billing);
- minimization of financial and time costs for the document movement cycle in the company's document flow;
- improving the accuracy of calculations using the data contained in e–CMR;
- reduce the energy consumption of people working with the document (through the use of multilingual electronic applications to support e–CMR turnover);
- the ability to integrate into the company's information system along with other digital products (financial management, material values, transportation, etc.);
- improve communication with partner databases (banking operations, confirmation of delivery of goods, customs declaration, eTIR);
- embeddability in existing digital systems (including ITS);
- improving the competitiveness of road transport companies (by increasing the level of their informatization).

The implementation of the transit potential of the Kyrgyz Republic should be based on the principles of digitalization. eTIR digital transit is closely interlinked with the submission of preliminary information within the TIR–epd framework. If preliminary information is submitted in the scope of a transit declaration, an electronic copy of the transit declaration is not required for submission to the customs authorities. This fact makes it possible to carry out electronic declaration by means of the TIR Carnet and TIR–epd, but

does not solve the problem of filing a declaration when such prior information is not possible.

According to the eTIR concept, the declaration is submitted to the departure authority, then it is registered in the eTIR international system, from where it arrives at the customs offices of all countries en route. Thus, data exchange is carried out directly between customs authorities through the eTIR international system by transmitting the necessary messages provided for in the specifications (customs-to-customs connection, or C2C).

Effective implementation of the pre-notification mechanism requires ensuring the quality of data provided, which remains a challenge for both customs administrations and businesses. Automation is one of the main factors for improving data quality, and its implementation should be a priority for all stakeholders [4-28].

At the same time, for all digital services, the rule of a single multiple data entry and its subsequent distribution among the process participants should be observed as much as possible.

6 Conclusions

Based on the above, it can be concluded that the digitalization of road transport services within the framework of traffic along international transport corridors is a cost-effective process that brings a positive impact to both the transport control authorities and the state, as well as to controlled persons.

The process of transition to a digital ecosystem is at the initial stage of its development. It is necessary to transform existing approaches to submitting documents and information. An electronic document can be called digital only when it ceases to be derived from a printed document. At the same time, the information, stated in the digital document should not be duplicated and overlap with other documents accompanying the transportation and goods.

Such significant changes are possible only in the cooperation of the state, regulatory authorities and business within the framework of a single goal – the creation of an effectively functioning digital international transport corridor.

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