KAZAKHSTAN AND KYRGYZSTAN: TRANSPORT CONNECTIVITY, IMPACT OF THE COVID-19 PANDEMIC AND EURO-ASIAN LINKAGES
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Executive summary

Countries of Central Asia are all landlocked and suffer from high transport and transit costs. However, Central Asia plays a vital role in the context of transport and logistics projects across Eurasia. Due to an important geostrategic significance, huge natural resources, high transit and transport potential, Central Asia has a potential of becoming one of the important land bridges between various regions. The main challenges for the development of the subregion today are associated with the need to implement structural reforms. In many respects, Central Asian economies still face numerous challenges related to them being resource-based economies.

The problem of finding a new model of economic growth is relevant to all countries in the subregion. The evidence shows that there is a widening gap in terms of economic development of the countries of the subregion. For example, the difference between the largest and the smallest GDP in the region is now more than 40 times. The share of trade with neighboring countries ranges from 3% to 7% in the export operations of the Central Asian countries. Central Asia is the least internally interconnected region, where countries are fragmented in many ways. This can be traced, among other things, in intraregional transport links: limited railway connections, which range from 3 to 5 routes between countries within the region.

Improving the efficiency of the supply chain and transit, as well as the development of transport sector are the drivers of the competitiveness of economy and integration into the world economy for the countries in Central Asia. They are also putting significant efforts to realize their potential of becoming the transit and logistics hub in the region, a "bridge" between Europe and Asia. The success of this endeavor directly depends on the development of transport and logistics as the main factor of stimulating industrial growth and the development of the competitive economic system. The further integration of the regional transport systems and the development of the multimodal transport and efficient supply chains require an integrated approach to the development of transport services, infrastructure and logistics.

Kazakhstan and Kyrgyzstan play an important role in Central Asia. They have some similarities like landlockiness, sharing border with China, being members of the Eurasian Economic Union (EAEU) and some major differences like sizes of their economies, achievements in terms of using their transit potential and transport operations. Both countries would benefit greatly from building effective collaboration and further developing multimodal transport, eliminating non-physical barriers, and improving transport and transit management.

Like all nations, Kazakhstan and Kyrgyzstan suffered greatly from the COVID-19 pandemic and associated restrictions. They introduced a range of measures to minimize damage of the pandemic to transport and supply chains and achieve rapid recovery. However, road and rail freight transport has been carried out without or with minimal restrictions. In addition, as members of the EAEU, Kazakhstan and Kyrgyzstan benefited from the agreement with its EAEU partners to use "green corridor" for transit freight traffic during the pandemic for the smooth movement of essential goods like medicines, medical products and foodstuffs.

Apart from membership in the EAEU, both countries are active participants of several transport-related initiatives and agreements such as Almaty-Bishkek Economic Corridor, Asian Highway Network, Belt and Road Initiative, CAREC, Euro-Asian Transport Links, TRACECA, Trans-Asian Railway Network, Kazakhstan-Turkmenistan-Iran (KTI) railway corridor and Kyrgyzstan-Tajikistan-Afghanistan-Islamic Republic of Iran (KTAI) corridor, to name a few.

This study provides an overview and analysis of the impact of the COVID-19 pandemic on the supply chains and transport situation due to COVID-19 pandemic in Kazakhstan and
Kyrgyzstan, it analyzes the transport connectivity relations, as well as bilateral and regional cooperation as part of transit links between Asia and Europe. It also includes assessment of the current railway and road infrastructure, suggestions on developing the network of transport and logistics, and transport facilitation.

The study shows the necessity to increase the efficiency of border-crossing points, particularly through the introduction of modern methods and information and technology systems for control, monitoring and management of freight flows and infrastructure; developing international, integrated, intermodal transport and logistics system; expansion of railways electrification and equipment modernization.

The study concludes that, considering current trends and measures, it is necessary to develop sustainable transport through digital and smart solutions, achieve a greater use of railways as the most environmentally-friendly transport mode, modernize the road and rail infrastructure, including at border crossing points, develop container transport and containerized cargo, pay special attention to dry ports. These actions and stronger regional cooperation can significantly improve the socio-economic development of Kazakhstan and Kyrgyzstan by creating favorable conditions for mutually beneficial trade and economic relations, strengthening regional and international cooperation to ensure sustainable development and economic growth which will have positive impact to Central Asia and beyond.
<table>
<thead>
<tr>
<th>Abbreviations</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<td>AHN</td>
<td>Asian Highway Network</td>
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<td>BCP</td>
<td>Border-Crossing Point</td>
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<td>BRI</td>
<td>Belt and Road Initiative</td>
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<td>CAREC</td>
<td>Central Asia Regional Economic Cooperation</td>
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<tr>
<td>CMR</td>
<td>Convention on the Contract For the International Carriage of Goods by Road</td>
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<tr>
<td>CIS</td>
<td>Commonwealth of Independent States</td>
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<td>EAEU</td>
<td>Eurasian Economic Union</td>
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<td>EATL</td>
<td>Euro-Asian Transport Links</td>
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<td>ECO</td>
<td>Economic Cooperation Organization</td>
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<td>EDB</td>
<td>Eurasian Development Bank</td>
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<td>e-CMR</td>
<td>Electronic Consignment Note</td>
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<td>EDS</td>
<td>Electronic Digital Signature</td>
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<td>ES</td>
<td>Emergency Situation</td>
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<td>ESCAP</td>
<td>United Nations Economic and Social Commission for Asia and the Pacific</td>
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<td>ECE</td>
<td>United Nations Economic Commission for Europe</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>IRU</td>
<td>International Road Transport Union</td>
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<tr>
<td>JSC “NK” KTZ</td>
<td>Joint Stock National Company “Kazakhstan Temir Zholy”</td>
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<td>KTJ</td>
<td>Kyrgyz Temir Jolu</td>
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<td>LPI</td>
<td>Logistics Performance Index</td>
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<tr>
<td>MIID</td>
<td>Ministry of Industry and Infrastructural Development</td>
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<td>MNE</td>
<td>Ministry of National Economy</td>
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<td>MoA</td>
<td>Ministry of Agriculture</td>
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<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
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<td>RSE</td>
<td>Republican State Enterprise</td>
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<td>RSU</td>
<td>Republican State Unit</td>
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<td>RZD</td>
<td>Russian Railways</td>
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<td>SCO</td>
<td>Shanghai Cooperation Organization</td>
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<td>SME</td>
<td>Small and medium enterprises</td>
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<tr>
<td>SPECa</td>
<td>United Nations Special Programme for the Economies of Central Asia</td>
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<tr>
<td>SWC</td>
<td>Single Window Center</td>
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<tr>
<td>TLC</td>
<td>Transport and Logistics Center</td>
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<tr>
<td>TARN</td>
<td>Trans-Asian Railway Network</td>
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<tr>
<td>TIR</td>
<td>Transport international routier</td>
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<td>TITR</td>
<td>Trans-Caspian International Transport Route</td>
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<td>TRACECA</td>
<td>Euro-Asian Transport Corridor</td>
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<td>WEF</td>
<td>World Economic Forum</td>
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<td>WB</td>
<td>World Bank</td>
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<td>World Trade Organization</td>
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Transport connectivity, the impact of and policy responses to the COVID-19 pandemic

I. Transport connectivity in Kazakhstan and Kyrgyzstan

A) Kazakhstan

3. Road network

The length of roads network of international, republican, regional and district significance in Kazakhstan is 95.9 thousand kilometers.

The road network of international and national importance has a length of 24.3 thousand kilometers, of which 87 per cent is in good and satisfactory technical condition (data of 2019).\(^1\)

Within the framework of the State Program for Infrastructure Development "Nurly Zhol", during 2015-2019 eight thousand kilometers of international and national highways have been built, reconstructed and repaired for a total amount of 1.1 trillion tenge ($2.6 billion).

The work was completed on the reconstruction of the international transit corridor "Western Europe - Western China". The sections of the republican roads "Astana - Temirtau", "Almaty - Kapshagai", "Kokshetau - Petropavlovsk", "Beineu - Aktau", "Bypass of the Kordai pass", "Uralsk - Kamenka" were rebuilt. The work continues on 13 projects for the reconstruction of 3.8 thousand kilometers of republican highways with a total cost of 1.9 trillion tenge ($4.6 billion). A system of collection of tolls for along certain roads was put into operation, a significant part of roadside service facilities was brought into compliance with the requirements of national standards.

Currently, there are 4 toll road sections with a length of 682 kilometers in Kazakhstan, including: Nur-Sultan-Shchuchinsk, Nur-Sultan-Temirtau, Almaty-Khorgos, Almaty-Kapshagai. By the end of 2020, revenues from the toll collection amounted to 5,746.4 million tenge ($14 million). Namely: Nur-Sultan - Temirtau - 1,914 million tenge ($4.6 million), Nur-Sultan - Shchuchinsk - 1,672.3 million tenge ($4.05 million), Almaty - Khorgos - 1,121.4 million tenge ($2.7 million) and Almaty - Kapshagay - 1,038.7 million tenge ($2.5 million). In 2020, about 10.7 million vehicles drove along these road sections.\(^2\)

According to the national operator, the funds received were used to repair and maintain highways in the amount of 2.962 billion tenge ($7.2 million), to maintain a software and hardware complex - 1.471 billion tenge ($3.5 million), to pay taxes - 756.7 million tenge ($1.8 million), for the purchase of road maintenance machinery and equipment for the toll collection system - 248.8 million tenge ($602,500), for other expenses - 58.3 million tenge ($141,000), and the remaining 200 million tenge ($484,000) were transferred to the republican budget.\(^3\)

In 2021, another 18 sections of roads of republican significance with a length of 5.8 thousand kilometers became toll roads, which include sections of Shymkent - the border with Uzbekistan, Uralsk - the border with the Russian Federation (Saratov and Samara), Aktobe - the border with the Russian Federation (Orenburg), Shchuchinsk - Petropavlovsk, Shymkent - Kyzylorda,

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\(^1\) [https://www.inform.kz/ru/71-avtodorog-mestnogo-znacheniya-v-rk-nahoditsya-v-horoshem-i-udovletvoritelnom-sostoyaniya_a3775655](https://www.inform.kz/ru/71-avtodorog-mestnogo-znacheniya-v-rk-nahoditsya-v-horoshem-i-udovletvoritelnom-sostoyaniya_a3775655)


\(^3\) [https://ru.qaj.kz/news/novosti/1426/](https://ru.qaj.kz/news/novosti/1426/)

Today, along the roads of republican and international importance, there are 1,838 roadside service facilities, of which 929 meet the requirements of the relevant national standards. In 2020, 58 per cent or 1,070 roadside service facilities were brought to the requirements of the national standard and in 2021 this number will be increased to 66 per cent.

In 2020, 58 new service facilities were built through private investment. This includes gas stations, motels, service stations, car washes, first-aid posts, food and retail outlets, secure parking lots, food points and bathrooms under different categories. In addition, in 2020, 13 units of sanitary hygiene units were installed: within the framework of the reconstruction of roads both by the government and private investments.

In 2019, the coverage of the local road network with repair work amounted to over 4 thousand kilometers. In 2018-2019, the annual target amount of financing of regional and district roads was increased to 150 billion tenge (2018) ($400 million) and to 200 billion tenge (2019) ($526 million) on a parity basis from the republican and local budgets. If this level of funding is maintained, up to 5 thousand kilometers of local roads will be covered annually by repair work, which will improve the operational characteristics of 95 per cent of regional and district roads to a good and satisfactory technical condition by 2025.

Despite the fact that the density of highways in comparison with comparable countries in Kazakhstan remains low (in Kazakhstan it is 28.6 kilometers per 1000 km2 of territory, in the Russian Federation - 44 kilometers/1000 km2, in Canada - 91 kilometers/1000 km2, in Australia - 106 kilometers/1000 km2, in the USA - 670 kilometers/1000 km2), highways, basically, geographically provide the necessary transport links.

During the period of implementation of the State Program for Infrastructure Development "Nurly Zhol" for 2015-2019, the quality indicators of the public road network as a whole have improved significantly, but the problem of the poor technical condition of local roads and artificial structures on them is still acute for many regions of the country.

This problem directly affects the quality of life of the population, making it difficult or restricting year-round access to basic social services, education and health care facilities, markets, jobs, centers for the provision of social, government and service services.

Within the second phase of the State Program of Infrastructure Development "Nurly Zhol" for 2020-2025, construction of 4 thousand kilometers of the republican roads is underway, through the implementation of 112 infrastructure projects. Within the program, in 2020-2025 the republican network of roads is planned to expand and improve by building and reconstructing 10 thousand kilometers of roads, as well as major and medium repairs of 11 thousand kilometers of roads. The implementation of the program will make it possible to bring the share of

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5 https://elorda.info/news/28012021/100347/60920.html


7 https://adilet.zan.kz/rus/docs/P1900001055
republican roads in good and satisfactory condition to 100 per cent, to increase the length of roads of I and II technical quality categories to 60 per cent, the share of toll roads to 45 per cent, with 100 per cent provision of roadside service facilities.

In addition to passenger traffic, the public road network is actively used for interregional and transit cargo transportation. Since 2005, in Kazakhstan, the construction and reconstruction of highways has been carried out with an estimated axle load of up to 13 tons. International road transport corridors are being reconstructed according to parameters not lower than technical category II.

The unsatisfactory technical condition of the roadway, the presence of heavy traffic areas with one lane in one direction and the lack of proper road conditions along the route of vehicles lead to accidents and deaths on the roads. In 2020, 13,515 road accidents were registered in the country (16,614 in 2019), 19,841 people were injured in them (19.3 per cent less than in the same period in 2019 - 24,585).[1]

As part of increasing the efficiency of the institutional model of the road industry, in 2013, JSC "NC" KazAvtoZhol " was created as the designated national operator for the management of roads, whose functions include the implementation of investment projects, repair and maintenance of highways, the collection of tolls, attracting investments for the construction and development of road infrastructure, including roadside service facilities.

To improve the efficiency of the system for maintaining highways of republican significance, Kazakhavtodor LLP in 2019 was transferred to the trust management of a private company with the right of subsequent buy-out.

In order to ensure the quality control of highways, in March 2019, the Republic State Enterprose RSE "National Center for the Quality of Road Assets" was created through the merger and transformation of the Republican State Institution (RSU) "Oblzhollaboratory".

Along with the trend of improving the condition and level of financing for the development and operation of highways, a number of systemic issues remain and require further improvement of the road asset management system in terms of the efficiency of planning road repairs and projects, ensuring the required level of quality of highways at all stages of the life cycle, introduction of new materials and technologies, as well as bringing the regulatory and technical base to the best standards of the OECD countries. Without solving the listed tasks, it will be impossible to implement a systemic state budgeting policy focused on the result.

4. Railways network

The length of Kazakhstan's railways is 21 thousand kilometers (19th place in the world), of which 11.1 thousand kilometers are single-track (69 per cent), 4.9 thousand kilometers are double-track (30.6 per cent ), 32.3 kilometers have more than 2 tracks, 4.2 thousand kilometers of electrified lines (26 per cent). The operational length of the mainline railway network is 16.1 thousand kilometers. The total length of new railway tracks built in the period from 1998 to 2016 was over 2.4 thousand kilometers.

The density of railways in Kazakhstan, which is 5.9 kilometers per 1000 sq. km (2019), shows a significant lag in comparison with other countries of the world and, for example, is 1.5-3 times lower than is such countries like Vietnam, India and dozens of times to European countries.

Accordingly, railway transport development strategy in recent decades has been focused mainly on the new railway transport corridors through the construction of new infrastructure, including straightening routes.9

To date, the development of an optimal railway network has been practically completed with an emphasis on enhancing intra-republican transportation routes by creating direct connections between provinces, including the construction of routes directly connecting Kostanay and Aktobe, as well as Pavlodar and East Kazakhstan regions which have been implemented.

Increasing the attractiveness of Kazakhstan's routes for international transit freight is under special focus as well. As part of the strategy on the improvement of transit potential, a second railway border crossing "Altynkol (Kazakhstan) - Khorgos (China)" was created on the border with China in addition to the existing Dostyk (Kazakhstan) - Alashankou (China) BCP. The new border-crossing point allowed to provide a total throughput of up to 40 million tons of freight per year.

The construction and opening of the Bolashak railway border crossing point at the border of Kazakhstan with Turkmenistan ensured the creation of new railway route through Uzen in the direction of Beineu - Shalkar - Saksaulskaya - Zhezkazgan as part of a new corridor to Turkmenistan and further to Islamic Republic of Iran and the countries of the Persian Gulf.

At the same time, the technical infrastructure of 24 railway BCPs across the state border of Kazakhstan (including with the Russian Federation - 20 BCPs, Uzbekistan - 3 BCPs, Kyrgyzstan - 1 BCP) does not meet the requirements of the Law of the Republic of Kazakhstan "On the State Border" and the Resolution No. 977 on technical equipment and organization of work of BCPs across the State Border of the Republic of Kazakhstan, approved by the Government of Kazakhstan on 17 September 2013, which negatively affects at the throughput of checkpoints.10

The ports on the Caspian Sea were linked to the railway network, and second tracks were built on the Almaty - Shu section, which is part of the transit route China - the countries of Central Asia and the Middle East.

The development and implementation of new technologies for organizing container traffic along the main international routes made it possible to increase the average speed of container trains to 800 - 1000 kilometers per day. At the same time, the growing needs for the transportation of goods and the expectations of shippers dictate the need to further increase the speed of processing and delivery of goods in transit - up to 1150 kilometers per day.

The current stage of reforming the railway industry dates to 2001 from the moment of making RSE "KTZ" a corporation. Over the years of reforms, steps have been taken to separate some non-core activities from JSC NC KTZ, to divide the railway tariff into infrastructure, locomotive, and carriage components, to separate passenger traffic from freight, to introduce a mechanism for subsidizing socially significant passenger transportation routes using the system placing a state order, attracting private companies as operators in the wagon market, as well as significant renewal of the Kazakhstani wagon fleet.

Today, JSC "NC" KTZ" and the group of companies are a railway holding, the main goal of which, along with making profit, to develop infrastructure, tariffs setting and low-cost

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9 https://w3.unece.org/PXWeb/ru/Table?IndicatorCode=47
transportation of goods, as well as implement socially significant responsibilities, such as the transport at of passengers at discounted rates. The main railway network, according to the legislation of Kazakhstan, is a strategic object that is not subject to privatization. Tariffs for services along the main railway network are differentiated by type of freight and are constrained for potential market growth through state macro regulation.

Deterioration of fixed assets, including a high level of depreciation of infrastructure facilities, a significant length of single-track and non-electrified sections create restrictions on the speed and throughput of the main railway network. The existing single-track and non-electrified sections in the mainline railway network cause a large number of bottlenecks that limit the throughput. These factors impede the increase in the mobility of the population and the competitiveness of passenger and freight transportation services by rail, as well as the competitiveness of transit corridors.

B) Kyrgyzstan

1. Road network

According to the Main Directions of Road Sector Development for 2016-2025\(^\text{11}\) of the Government of Kyrgyzstan, the length of highways of international importance is 4100 kilometers, including international road corridors of 2242 kilometers.\(^\text{12}\) They are divided into the following sections\(^\text{13}\):

- Bishkek – Osh (672 kilometers);
- Bishkek – Kordy (former Georgievka) (16 kilometers);
- Bishkek – Chaldovar (section of Kara-Balta – Chaldovar) (31 kilometers);
- Bishkek – Naryn – Tourugart (539 kilometers);
- Taraz – Talas – Suusamyr (199 kilometers);
- Osh – Sary-Tash – Irkeshtam (258 kilometers);
- Osh – Isfana (385 kilometers);
- Sary-Tash – Karamyk (142 kilometers).

The National Development Strategy of Kyrgyzstan for 2018-2040\(^\text{14}\) states that Kyrgyzstan should become a transit country for the transit of passengers and freight by 2040. It stipulates for the repair of at least 550 kilometers of highways annually, including the domestic road network, as well as to rehabilitate about 500 kilometers of highways of international importance.

To connect the northern and southern parts of the country, the project on construction of the alternative North-South road has started in 2014. The total length of the road is 433 kilometers.\(^\text{15}\) The construction divided into three phases. In June 2021, the main construction works on the sections of the first 2 phases of the North-South highway have been completed.\(^\text{16}\) The total project cost is estimated at $850 million, which is totally financed by the Export-Import Bank of China.


\(^{13}\) Ministry of Transport and Commuication of Kyrgyzstan. Available at: http://mtd.gov.kg/strategiya-razvitiya-dorozhnogo-sektora-do-2025-goda/

\(^{14}\) Official Website of the President of Kyrgyzstan. Available at: http://president.kg/ru/sobytiya/12774_uvterghdena_nacionalnaya_strategiya_razvitiya_kirgizskoy_respubliki_n_a_2018_2040_godi

\(^{15}\) Ministry of Road and Communications of Kyrgyzstan. The Group of Investment Projects Realization. Available at: http://piumotc.kg/ru/p1861900/

\(^{16}\) IA ‘Tazabek’. 2021. Available at: https://www.tazabek.kg/news:1713684
The main benefits of the North-South highway construction for the international road transport are that an additional continuous road transport route will be created between the North and the South of the country, which is geographically separated from the existing Bishkek-Osh route by the mountain ranges and the connection of this road with the roads of Kazakhstan and Russian Federation in the north of the country and Tajikistan in the south, will make possible to create a through transit along the route Russian Federation-Kazakhstan-Kyrgyzstan-Tajikistan;

As far as road quality of roads is concerned, as reported by the World Economic Forum Global Competitiveness Index, Kyrgyzstan’s quality of roads value went down by 18 in rank from 2007 to 2017. Its latest rank is 122 out of 137 countries for 2017.\textsuperscript{17}

\textit{Figure 1. Dynamics of Kyrgyzstan’s quality of roads performance}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Dynamics of Kyrgyzstan’s quality of roads performance}
\end{figure}

\textit{Source: World Economic Forum Global Competitiveness Index}

This index is based on diverse parameters that measures the quality of overall infrastructure, quality of roads, quality of railroad infrastructure, quality of electricity supply etc. Kyrgyzstan’s value in some parameters is equal to zero, such as the quality of port infrastructure as the country is landlocked.

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|}
\hline
Parameter & Rank (of 137) & Value \\
\hline
Quality of overall infrastructure & 112 & 3 \\
Quality of roads & 122 & 2.7 \\
Quality of railroad infrastructure & 76 & 2.4 \\
Quality of port infrastructure & 137 & 1.4 \\
\hline
\end{tabular}
\caption{Kyrgyzstan in Quality of Infrastructure Index of Global Competitiveness Index}
\end{table}

\textit{Source: World Economic Forum Global Competitiveness Index}

According to the Ministry of Transport and Communications (MTC) of Kyrgyzstan, out of 2231 kilometers of roads, 502 kilometers (or 22.5 per cent) were in good condition, 133 kilometers (or 0.6 per cent) in satisfactory condition, 250 kilometers (or 0.11 per cent) in unsatisfactory condition, and 1346 kilometers (or 60 per cent) were either in bad or very bad condition.\textsuperscript{18} Thus, more than 70 per cent of roads in Kyrgyzstan require major capital works and reconstruction. As

\textsuperscript{18} Ministry of Transport and Communications of Kyrgyzstan. Available at: http://mtd.gov.kg/dorogi/
the Ministry of Finance of Kyrgyzstan states, country’s climate influences on very rapid deterioration of roads, and it causes constant need of intensive road repairs.\textsuperscript{19}

Almost all investment projects, including transport sector, are financed from external sources (95.5 per cent), and only 4.5 per cent are from the republican budget.\textsuperscript{20} Thus, the main projects with focus on construction or reconstruction in transport sector are financed by the Islamic Development Bank, Saudi Development Bank (construction of the alternative North-South highway, Rehabilitation of the Osh-Batken-Isfana highway), Asian Development Bank (improvement of the CAREC corridors), China (construction of the alternative North-South highway, Phases 1 and 2), World Bank (project on the improvement of road connectivity in Central Asia), JICA (Project on the improvement of international roads), Eurasian Development Bank (reconstruction of the Bishkek-Osh Highway, Phase 4) etc.\textsuperscript{21}

To solve the problem with financing Kyrgyzstan’s Government suggests establishing the Road Fund. It should accumulate budget revenues related to road transport and roads, particularly from taxes levied on transport, fees from movement through tunnels\textsuperscript{22}. In addition, the MTC submitted a draft law on the introduction of toll highways. The main idea is to collect tolls on new roads, while ensuring that there would be an alternative for free movement. The exact amount of fee is not declared, but the Ministry assures that the tariff will be affordable.\textsuperscript{23}

2. Railways network

The railway network of Kyrgyzstan is represented by scattered, unconnected lines, geographically divided into two sections - northern (323.4 kilometers) and southern (101.2 kilometers), providing a connection to the railway network of neighboring states - Kazakhstan and Uzbekistan. The Kyrgyzstan railway serves 424.6 kilometers of main tracks, 220 kilometers of station tracks, 66.4 kilometers of access tracks.\textsuperscript{24} Bilateral and multilateral agreements on the coordination of rail transport are signed with neighboring countries.

The northern highway runs from Issyk-Kul to Kazakhstan, passing through the Kyrgyzstan capital Bishkek, while four lines at Tash-Kumyr, Jalal-Abad, Osh and Kyzyl-Kiya in the southwestern part of the country connect densely populated industrial centers with the Fergana railway network in Uzbekistan.\textsuperscript{25} The sole operator of the railways is the state-owned Kyrgyzstan Railways (Kyrgyz Temir Jolu or KTJ), which is engaged both in passenger and freight transport.

The main railway line is the northern line which runs from Lugovaya station in the Dzhambul region of Kazakhstan along the foothills of the Kyrgyzstan ridge through Bishkek and ends in Balykchy on the western shore of Lake Issyk-Kul. Over 7 million tons of freight are transported annually on this line. In the northern part of Kyrgyzstan, goods such as metals, oil products and mineral fertilizers are transported by rail. Four lines in Tash-Kumyr, Jalal-Abad, Osh and Kyzyl-

\textsuperscript{20} Ibid.
\textsuperscript{22} IA ‘24.kg’. Available at: https://24.kg/vlast/198585_vkirygyzstane_predlagayut_sozdat_dorjnyiy_fond/
\textsuperscript{23} IA ‘Tazabek’. Available at: https://www.tazabek.kg/news:1713277
\textsuperscript{24} Eurasian Economic Commission. 2019. Analysis of the markets of passenger rail transportation of the member states of the Eurasian Economic Union. Moscow, Russian Federation.
Kiya in the southwestern part of the country connect densely populated areas with the Fergana railway ring in Uzbekistan but are not connected to the rest of Kyrgyzstan network.  

International railways are mainly used for the transport of goods like fuels and lubricants, building materials, mineral and industrial raw materials etc. There is almost no rail freight within the country, except for a small amount of coal and sugar. Transport of goods within Kyrgyzstan is carried out mainly by road transport at a higher transport costs.

Kyrgyzstan participates in a number of international initiatives related to railway transport, namely:

- The CIS Central Council for Rail Transport (TSSZHT), established by the Agreement on the coordination of rail transport at the international level and the development of agreed principles of the CIS member states, adopted on 14 February 1992;
- Organization of the Cooperation of Railways (OSJD). Agreement on joining OSJD signed by the Ministry of Transport and Communications of Kyrgyzstan of 30 May 1995 in Hanoi, Vietnam;
- Also, Kyrgyz Railway takes part in the implementation of decisions concerning matters of rail transport, adopted within the Eurasian Economic Union and the Central Asian Regional Economic Cooperation Programme (CAREC) of the ADB.

Kyrgyzstan’s railway transport is characterized by a low sectional speed. In many respects, this is explained by the high degree of depreciation of the most critical sections of the railway infrastructure. So, with a threshold wear out rate of 50-55 per cent, the wear out of fixed assets, including buildings and structures, machinery and equipment, tracks, is 71 per cent, in the power supply system it is 50 per cent, in the signaling and communication system it is 63 per cent. As well, over 30 per cent of the rails in service have tracks that have passed the excess tonnage, more than 50 per cent of the wooden sleepers are worn out. About 30 per cent of the passenger car fleet of the Kyrgyz railway has worked over 30 years (the standard period is 28 years).

The latest program accepted for railway sector development was the Main Directions of Development of Railway Transport in Kyrgyzstan for 2014-2020. Despite the fact that the Program expired last year, the new one has not been accepted yet as of today. Moreover, the implementation of the Program shows that no substantial work has been done for the railway transport development in Kyrgyzstan. The high-priority goals such as creation of an internal network of railway transport and development of the transit potential of the republic or renewal and modernization of the railway infrastructure has not been achieved.

In the first half of 2021, the Kyrgyz Temir Jolu published further steps taken within the framework of the implementation of its strategic development plan that should strengthen and increase the potential of railway transport in Kyrgyzstan. An agreement has already been reached and coordination procedures are being completed with international financial organizations on financing the purchase of 150 freight cars and 3 shunting diesel locomotives. In addition, within the framework of cooperation with international financial organizations, the State Enterprise

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26 IA ‘Azattyk’. Available at: https://rus.azattyk.org/a/31270268.html
27 Ibid.
30 The report was prepared in September 2021
plans to rehabilitate the superstructure of the track (rails, sleepers) and extend the anti-landslide gallery in the Boom Gorge.\textsuperscript{31}

The Kyrgyz Temir Jolu informs about its two investment projects as of high priority. The internal one is the construction of the railway along the route Balykchy - Kochkor - Kara-Keche. Its main goal is to provide the transport of coal by rail from the Kara-Keche brown coal deposit to the thermal power plant in Bishkek and to other regions of the Chui region for that to reduce the transport costs and increase the competitiveness of domestic producers.\textsuperscript{32}

The second investment project is more famous outside the country as there are external interested parties. This is the construction of a railway along the route “China - Kyrgyzstan - Uzbekistan”. More information this investment project is described in the ‘Regional cooperation’ section.

\textbf{II. Ranking in international transport-related indices}

\textbf{A) Kazakhstan}

Logistics Performance Index (LPI) is an interactive benchmarking tool created by the World Bank (WB) to help countries identify the challenges and opportunities they face in their performance on trade logistics and what they can do to improve their performance. In the LPI - 2018, Kazakhstan stood at 71\textsuperscript{st} place among 160 countries of the world, having risen by 6 positions compared to 2016, and ahead of Russian Federation (75), Uzbekistan (99), Kyrgyzstan (108), Georgia (119), Turkmenistan (126) and Tajikistan (134) (Table 2).

In the period from 2016 to 2018, Kazakhstan’s positions improved in the following indicators: timeliness (by 42 positions), the efficiency of customs (by 21 positions), logistics competence (by 2 positions). For the rest of the indicators, there is a slight decrease (Table 3).

Several factors influenced the improvement in the efficiency of logistics, including the implementation of large infrastructure projects in the transport industry, reduction of border crossing time, reduction of documents in the implementation of foreign economic activities, improvement of services provided by private entrepreneurs in all types of transport and in the field of transport logistics.

\textbf{Table 2: Rating of the Member States of the Eurasian Economic Union}

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline
\textbf{№} & \textbf{Country} & \textbf{2007} & \textbf{2016} & \textbf{2018} \\
\hline
1 & Kazakhstan & 133 & 2.12 & 77 & 2.75 & 71 & 2.81 \\
2 & Russian Federation & 99 & 2.37 & 99 & 2.57 & 75 & 2.76 \\
3 & Armenia & 131 & 2.14 & 141 & 2.21 & 92 & 2.61 \\
4 & Belarus & 74 & 2.53 & 120 & 2.40 & 103 & 2.57 \\
5 & Kyrgyzstan & 103 & 2.35 & 146 & 2.16 & 108 & 2.55 \\
\hline
\end{tabular}

Source: World Bank’s LPI. Available at: https://lpi.worldbank.org/international/global

\textbf{Table 3: Position of Kazakhstan in the LPI as per its indicators}

\begin{tabular}{|c|c|c|c|c|c|}
\hline
\textbf{Indicator*} & \textbf{2016} & \textbf{2018} & \textbf{+/-} \\
\hline
& \textbf{rating} & \textbf{score} & \textbf{rating} & \textbf{score} & \textbf{rating} & \textbf{score} \\
Timeliness & 92 & 3.06 & 50 & 3.53 & +42 & +0.47 \\
Customs & 86 & 2.52 & 65 & 2.66 & +21 & +0.14 \\
\hline
\end{tabular}

\textsuperscript{32} Kyrgyz Temir Jolu. Available at http://kjd.kg/ru/investment-projects/stoitelstvo-vnuterei-dorogi/
In order to improve the indicator of the Logistics Performance Index (LPI), the Ministry of Industry and Infrastructure Development of Kazakhstan, together with the State Revenue Committee of the Ministry of Finance of Kazakhstan, the Union of Transport Workers of Kazakhstan “Kazlogistics” and JSC “NC “KTZ”, develop a biennial Action Plan for improving country’s logistics system for each LPI indicator. As a result of the implementation of the Plan on a semi-annual basis, a dialogue with the business community is held within the framework of the Logistics Committee of Atameken National Association.

At the same time, according to the data from the World Economic Forum, Kazakhstan’s rating in the Global Competitiveness Index in terms of infrastructure, which includes all major modes of transport, energy, utilities and ICT infrastructure, dropped from 42nd in 2018 to 59th place (2019) out of 140 countries of the world. In terms of road infrastructure quality, Kazakhstan ranks 93rd (2019) out of 141 countries of the world.

To track the dynamics of trade facilitation in other countries, the United Nations have conducted the Global Survey on Digital and Sustainable Trade Facilitation since 2015 to review the progress of trade facilitation reforms in their respective Member States. Kazakhstan has significantly improved some indicators.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>2019 (%)</th>
<th>2021 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparency</td>
<td>80</td>
<td>86.67</td>
</tr>
<tr>
<td>Formalities</td>
<td>79.17</td>
<td>87.5</td>
</tr>
<tr>
<td>Institutional arrangement and cooperation</td>
<td>88.89</td>
<td>88.89</td>
</tr>
<tr>
<td>Paperless trade</td>
<td>62.96</td>
<td>66.67</td>
</tr>
<tr>
<td>Cross-border paperless trade</td>
<td>27.78</td>
<td>38.89</td>
</tr>
</tbody>
</table>

The rating on the Road Traffic Index remains low (106th place), which indicates that a significant share of the population and businesses at the regional level have problems with transport connectivity with social services, markets, providers of government and other services. The influence on this indicator is also evident from the fact that more than a third of regional and district roads are in poor technical condition.

B) Kyrgyzstan

Kyrgyzstan had an LPI score 2.55 in 2018, with ranking at 108. The previous indicator was equivalent to 2.16 with LPI ranking of 146 (see Table 2).

Significant progress occurred in all key indicators such as customs, infrastructure, international shipments, logistics competence, tracking and tracing and timeliness.
Table 5: Position of Kyrgyzstan in the LPI as per its indicators

<table>
<thead>
<tr>
<th>Indicator*</th>
<th>2016 rating</th>
<th>2018 rating</th>
<th>+/- rating</th>
<th>2016 score</th>
<th>2018 score</th>
<th>+/- score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timeliness</td>
<td>126</td>
<td>106</td>
<td>+20</td>
<td>2.72</td>
<td>2.94</td>
<td>+0.25</td>
</tr>
<tr>
<td>Customs</td>
<td>156</td>
<td>55</td>
<td>+101</td>
<td>1.8</td>
<td>2.75</td>
<td>+0.95</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>150</td>
<td>103</td>
<td>+47</td>
<td>1.96</td>
<td>2.38</td>
<td>+0.42</td>
</tr>
<tr>
<td>Tracking and tracing</td>
<td>115</td>
<td>99</td>
<td>+16</td>
<td>2.39</td>
<td>2.64</td>
<td>+0.25</td>
</tr>
<tr>
<td>International shipments</td>
<td>152</td>
<td>138</td>
<td>+14</td>
<td>2.1</td>
<td>2.22</td>
<td>+0.12</td>
</tr>
<tr>
<td>Logistics competence</td>
<td>151</td>
<td>114</td>
<td>+37</td>
<td>1.96</td>
<td>2.36</td>
<td>+0.4</td>
</tr>
</tbody>
</table>

In the Global Survey on Digital and Sustainable Trade Facilitation - 2021, Kyrgyzstan has significantly improved in some indicators.

Table 6. Trade Facilitation Scores of Kyrgyzstan in 2019 and 2021

<table>
<thead>
<tr>
<th>Parameter</th>
<th>2019 (%)</th>
<th>2021 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparency</td>
<td>73.33</td>
<td>80</td>
</tr>
<tr>
<td>Formalities</td>
<td>33.33</td>
<td>62.5</td>
</tr>
<tr>
<td>Institutional arrangement and cooperation</td>
<td>44.44</td>
<td>77.78</td>
</tr>
<tr>
<td>Paperless trade</td>
<td>33.33</td>
<td>55.56</td>
</tr>
<tr>
<td>Cross-border paperless trade</td>
<td>11.11</td>
<td>88.89</td>
</tr>
</tbody>
</table>

Source: The United Nations.33

The main improvements occurred due to fact that the National Trade Facilitation Roadmap of Kyrgyzstan 2021-2025 was accepted in 2021. It serves as the guiding framework for comprehensive national trade facilitation reforms over a five-year period. The road map sets out a strategic vision and respective goals and activities for Kyrgyzstan to implement.

In the Global Competitiveness Index of the World Economic Forum, in terms of the infrastructure development, in 2019 Kyrgyzstan was rated at 103rd place out of 140 countries of the world with the score of 55.8. For the road infrastructure quality, Kyrgyzstan was ranked at 113rd.

III. Impact of the COVID-19 pandemic on transport connectivity

A) Kazakhstan

By the end of 2020, which passed under the sign of the Covid-19 pandemic, the decrease in the Gross Domestic Product (GDP) in Kazakhstan amounted to 2.6 per cent. The provision of all types of services decreased by 5.6 per cent.

With the introduction of a state of emergency from 16 March 2020 in Kazakhstan, the pandemic affected the activities of freight transport services. The transport sector's share in GDP decreased by 17.2 per cent. This is mainly due to a decrease in the volume of freight transport, restrictions on passenger traffic, a decrease in the number of employees in the sector and challenges when crossing borders.

Due to the introduction of additional measures by the Chinese side at the Kazakhstan-China border stations (sanitization of wagons, an increase in the time of inspection of trains, thermal control, disinfection of train cabins in the transit) the delivery time of goods has increased, which

33 The United Nations. 2021. Available at: https://www.untfsurvey.org/economy?id=KGZ
was an extremely negative factor that significantly affects the competitiveness of Kazakhstan's transit in comparison with other both land and sea routes between China and Europe.

Since the end of 2020, a difficult situation has developed with the delays in exporting freight trains by the Chinese side at the Dostyk - Alashankou and Khorgos - Altnykol border-crossing point (BCP), which resulted in a massive accumulation of abandoned freight trains on the Kazakhstan side.

Due to a decrease in the volume of traffic, restrictions on the carriage of goods by rail, both within the country and in export-import and transit communications, the national carrier JSC "NC" KTZ "also found itself in a difficult situation. With the introduction of the state of emergency, the passenger traffic of all types of railway communications was canceled in stages and as the situation developed.

International road carriers faced challenges with lost time at international BCPs due to new requirements like change of driver or tractor unit, medical examination of drivers, health checks, questionnaires, submission of a PCR test certificate and others, which decreased the traffic of freight transport by road to the countries of the European Union, and at the Nur Zholy BCP on the border with China, where the queue reached 60 kilometers in length.

For example, when freight vehicles and their drivers passed across the state border of Turkey, the driver from Kazakhstan was placed under 14 days quarantine. The replacement of the driver was also prohibited. As a result, many Kazakhstani trucks accumulated in the city of Batumi. In addition, vehicles did not meet sanitary requirements. These measures resulted in long interruption, additional costs and contract breakdowns. The number of TIR Carnets issued to carriers in the period from January to March 2020 amounted to 2,406, for the same period in 2021 it was 2573, compared to 3568 in the same period in 2019. The decrease was 32 per cent or 1162 TIR Carnets. For each round trip, the budget lost 3.0 million tenge ($6,700).

In terms of waterborne transport, shipowners faced the problem of underloading of the fleet. In the seaports of Kazakhstan, a decrease in transshipment volumes was observed due to the implementation of quarantine measures by the states at the Caspian Sea, which led to an increase in the processing time in ports and, consequently, an increase in travel time and a decrease in the number of calls at ports, which affected their income. Also, the Ministry of Agriculture of Kazakhstan introduced restrictions on the export of wheat to third countries as of 1 April 2020. In this connection, part of the Kazakhstani fleet involved in the transporting of grains was forced to stand idle. According to Kazmortransflot LLP, due additional payments for processing and idle time vessels crews the lost profit was about 1 million US dollars on average per month.

In civil aviation, due to the cancellation of air services and a decrease in passenger traffic, the aviation industry lost their financial stability with revenues from non-aviation activities of airports (rent, advertising, etc.) have been practically reduced to zero. The airlines had to use every possible means to survive. So, for example, in order to resume their activities, the airlines "Air Astana" and "Scat" have re-equipped their passenger boards for freight transport in domestic and international traffic. Before the cancellation of flights, the average price of air transportation in Kazakhstan was from $1.2 to $2- $2.5 per 1 kg of cargo; during pandemics and restrictions, cargo flights running between China and Europe flew with full load due to the increased demand for urgent delivery of goods between China and Europe, thereby increasing demand and raising the rate to $10- $12 per 1 kg.  

34 АО «Эйр Астана»
To ensure the safety of workers in the transport and logistics sector of Kazakhstan, some transport companies transferred their workers to a remote working as much as possible to the spread of coronavirus. In the railway industry, funds were allocated for the purchase of personal protective equipment. Basically, employees who are not involved in production and operational work have been transferred to a remote working.

It can be stated that all transport modes almost equally faced the lack of experience and regulatory frameworks on organizing safe work in a pandemic environment. It should also be noted that the existing system of communication between businesses and government agencies made it possible to work out relevant work policies relatively quickly both at the sectoral and regional levels.

For the 1st quarter of 2021, 0.751 billion tons of cargo were transported, which is 2.7 per cent less than the level of the 1st quarter of 2020 (Figure 2). In 2020, the transport of freight amounted to 3.7 billion tons, which is 12 per cent less than in 2019, and the cargo turnover in 2020 amounted to 335 billion tkm, which is 44 per cent less compared to 2019.

*Figure 2: Freight transported in Kazakhstan (tkm)*

![Graph showing freight transported in Kazakhstan](source)

Freight turnover for this period amounted to 100 billion ton-kilometers (Figure 5).

*Figure 3: Freight turnover in Kazakhstan (bln tkm)*

![Graph showing freight turnover in Kazakhstan](source)

From January to March 2021, the foreign trade turnover of Kazakhstan amounted to $19.5 billion US dollars and, compared to the same period in 2020, decreased by 10.4 per cent (Figure 4), including: exports amounted to $11.5 billion US dollars, decreased by 19.6 per cent compared to the same period in 2020 (Figure 5). Imports amounted to $7.9 billion and increased by 7.5 per cent compared to the same period in 2020 (Figure 6). Thus, at the end of the reporting period,
the trade surplus amounted to $3.6 billion against $6.9 billion in January - March 2020 (decreased 1.9 times).

*Figure 4: Foreign trade turnover of Kazakhstan ($bln)*

![Graph showing foreign trade turnover of Kazakhstan](https://stat.gov.kz/official/industry/18/statistic/6)

Source: Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. Available at: [https://stat.gov.kz/official/industry/18/statistic/6](https://stat.gov.kz/official/industry/18/statistic/6)

*Figure 5: Exports from Kazakhstan ($bln)*

![Graph showing exports from Kazakhstan](https://stat.gov.kz/official/industry/18/statistic/6)

Source: Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. Available at: [https://stat.gov.kz/official/industry/18/statistic/6](https://stat.gov.kz/official/industry/18/statistic/6)

*Figure 6: Imports to Kazakhstan ($bln)*

![Graph showing imports to Kazakhstan](https://stat.gov.kz/official/industry/18/statistic/6)

Source: Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. Available at: [https://stat.gov.kz/official/industry/18/statistic/6](https://stat.gov.kz/official/industry/18/statistic/6)

The main countries where Kazakhstan exports its goods in 2020 were China, Italy and Russian Federation, imports from Russian Federation, China and South Korea prevailed. Mainly, oil and its products, cathodes, copper, ores and gas were exported, household equipment, their spare parts and medicines were imported (Figure 7).
1. Road transport statistics

In the 1st quarter of 2021, about 0.652 billion tons of cargo were transported by road, which is 3.36 per cent less than in the 1st quarter of 2020 (0.675 billion tons) (Figure 8).

Revenues of road transport enterprises from freight traffic in January-March 2021 amounted to 40.5 billion tenge ($95.5 million) (Figure 9).
The decline in traffic and the corresponding drop in revenue clearly demonstrates that the transport sector was one of the worst hit areas by the COVID-19 pandemic. Today Kazakhstan is in a transitional stage, there is an adaptation to the new operating conditions and a gradual recovery after the crisis. Nevertheless, there are still risks associated with the emergence of new waves of the pandemic leading to an increase in the number of cases and the restoration of previously lifted restrictions.

2. Railway transport statistics

Railway transport transported 0.098 billion tons of cargo in the 1st quarter of 2021, which is 1.45 per cent more than in the 1st quarter of 2020 (2020 - 0.097 billion tons) (Figure 10).

*Figure 10: Freight transport by railways in Kazakhstan (bln tons)*

![Figure 10: Freight transport by railways in Kazakhstan (bln tons)](source: Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. Available at: [https://stat.gov.kz/official/industry/18/statistic/6](https://stat.gov.kz/official/industry/18/statistic/6)

The revenues of railway and road transport enterprises for the 1st quarter of 2021 compared to the 1st quarter of 2020 increased by 11 per cent and 2.5 per cent, respectively.

Revenues of railway transport in January-March 2021 amounted to 252 billion tenge ($594.4 million), including from the transport of freight - 240.3 billion tenge ($566.7 million), and passengers - 11.7 billion tenge ($27.6 million) (Figure 11).

*Figure 11: Revenue of railway transport in Kazakhstan (bln tenge)*

![Figure 11: Revenue of railway transport in Kazakhstan (bln tenge)](source: Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. Available at: [https://stat.gov.kz/official/industry/18/statistic/6](https://stat.gov.kz/official/industry/18/statistic/6)
B) Kyrgyzstan

According to the National Statistical Committee of Kyrgyzstan (NSC), in 2019, 34.2 million tons of freight were transported in Kyrgyzstan by all types of transport, which is 3.6 per cent more than in 2018. The main volume of road transport of goods (about 91 per cent) fell on individual entrepreneurs (individuals). The growth in the volume of freight transport by all modes of transport was noted in all regions of the republic, but the most significant - in Bishkek, Talas and Naryn regions.\(^{35}\)

However, in 2020 more than 26 million tons of freight were transported by all modes of transport, which is compared to 2019 is less by 7.4 million tons, or 21.6 per cent. Transport of goods by road transport decreased significantly in 2020, by more than 7 million tons. The same negative dynamics is observed among other types of transport. The bulk of road transport of goods (about 89 per cent) fell on individual entrepreneurs.

### Table 7. Transport of goods by types of transport (mln. tons)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail</td>
<td>2,242.5</td>
<td>2,016.3</td>
<td>99.3</td>
<td>89.9</td>
</tr>
<tr>
<td>Road</td>
<td>31,722.5</td>
<td>24,545</td>
<td>104</td>
<td>77.4</td>
</tr>
<tr>
<td>Air transport</td>
<td>0.3</td>
<td>0.1</td>
<td>30</td>
<td>33.3</td>
</tr>
<tr>
<td>All modes</td>
<td>33,965.3</td>
<td>26,561.4</td>
<td>103.6</td>
<td>78</td>
</tr>
</tbody>
</table>


If we compare transport of goods by types of transport during first six months of 2019-2021, it is seen that the lowest indicators were in 2020, especially by road transport. At the same time, transport of goods by railroad in the first six months of 2021 are much higher than in 2019, by 301 thousand tons.

### Table 8. Transport of goods by types of transport (January-June 2019-2021)(thous. tons)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>All modes</td>
<td>14,671.60</td>
<td>10,441.70</td>
<td>11,946.50</td>
<td>71.5</td>
</tr>
<tr>
<td>Rail</td>
<td>681.1</td>
<td>652.5</td>
<td>982.6</td>
<td>95.8</td>
</tr>
<tr>
<td>Road</td>
<td>13,990.3</td>
<td>9,789.1</td>
<td>10,963.8</td>
<td>70</td>
</tr>
<tr>
<td>Air</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>50</td>
</tr>
</tbody>
</table>


The volume of freight turnover of all types of transport in 2020 compared to 2019 decreased by 533.2 million ton-kilometers, or 19.6 per cent.

### Table 9. Freight turnover by modes of transport (mln tons-km)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail</td>
<td>870.4</td>
<td>938.1</td>
<td>91.6</td>
<td>107.8</td>
</tr>
<tr>
<td>Road</td>
<td>1,841.9</td>
<td>1,242.3</td>
<td>113.4</td>
<td>67.4</td>
</tr>
<tr>
<td>Air transport</td>
<td>8.5</td>
<td>7.2</td>
<td>86.7</td>
<td>84.7</td>
</tr>
<tr>
<td>All modes</td>
<td>2,720.8</td>
<td>2,187.6</td>
<td>105</td>
<td>80</td>
</tr>
</tbody>
</table>


---

If compare freight turnover by modes of transport during the first six months of 2019 – 2021, it is seen that the lowest value was in 2020, 863.8 million tons-km, that is less by 209.4 mln. tons-km than in 2019 and by 151.9 mln. tons-km than in 2021. However, freight turnover by rail as in 2020 as in 2021 is higher in comparison with this value in 2019, by 51.7 and 90 mln. tons-km respectively.

Table 10. Freight turnover by modes of transport in January – June 2019-2021

<table>
<thead>
<tr>
<th></th>
<th>Total, mln. tons-km</th>
<th>per cent from previous period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2020</td>
</tr>
<tr>
<td>All modes</td>
<td>1 073,2</td>
<td>863,8</td>
</tr>
<tr>
<td>Rail</td>
<td>357</td>
<td>408,4</td>
</tr>
<tr>
<td>Road</td>
<td>712,7</td>
<td>452,5</td>
</tr>
<tr>
<td>Air</td>
<td>3,5</td>
<td>2,9</td>
</tr>
</tbody>
</table>


Kyrgyzstan has 12 border border-crossing points (BCPs) for land transport, including eight for road transport and four for railways. The major share of international freight transport fell on road BCPs. The annual freight turnover through the road BCPs was about 1.264 million tons (entry/exit), which is 41.6 per cent lower than the same indicators in 2019, i.e., 2.158 million tons (entry/exit). At the same time, the turnover of goods imported through road BCPs is 2.1 times higher than the share of goods turnover exported through railway BCPs. The share of railway transport of Kyrgyzstan through the railway BCP in 2020 compared to 2019 decreased by 31 per cent and amounted to about 0.61 million tons (entry/exit).

The total freight turnover of goods exported through all BCPs of Kyrgyzstan (1.413 million tons) in 2020 was 2.55 times higher than the turnover of imported goods through all BCPs of Kyrgyzstan (0.553 million tons).37

Table 11. Data on freight turnover in BCPs through customs borders of Kyrgyzstan

<table>
<thead>
<tr>
<th></th>
<th>Number of transport vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Entry</td>
</tr>
<tr>
<td>As of 01.01.2021</td>
<td></td>
</tr>
<tr>
<td>Road</td>
<td>26,095</td>
</tr>
<tr>
<td>Railway</td>
<td>625</td>
</tr>
<tr>
<td>Air</td>
<td>732</td>
</tr>
<tr>
<td>Total:</td>
<td>27,452</td>
</tr>
<tr>
<td>As of 01.01.2020</td>
<td></td>
</tr>
<tr>
<td>Road</td>
<td>91,003</td>
</tr>
<tr>
<td>Railway</td>
<td>1214</td>
</tr>
<tr>
<td>Air</td>
<td>NA</td>
</tr>
<tr>
<td>Total:</td>
<td>9,2217</td>
</tr>
</tbody>
</table>


As reported by the State Enterprise Kyrgyz Temir Jolu, during the first half of 2021, there has been a stable growth in the transport of goods and passengers by rail in Kyrgyzstan. At the end of the first half of 2021, the KTJ transported freight in the amount of 3,471.7 thousand tons, or

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109.0 per cent compared to the corresponding period of 2020, an increase of 287.8 thousand tons
(for the first half of 2020 3 183.9 thousand tons).

As well, the Kyrgyz Temir Jolu transported 6,503.1 tons of freight during 11 months of 2020. For
the period of 2019 this indicator was 6,267.3 thousand tons or 235.8 thousand tons less. The
volume of freight transport for 11 months of 2020 increased by 103.8 per cent. Also, in 11
months of 2020, 100,048 cars were operated, which is 3,629 cars more than in 2019 (for 11
months in 2019 the mark was 96,419 cars).

As official data of the National Statistic Committee of Kyrgyzstan state, there was the decline in
freight revenues by all types of transport in 2020. The substantial decrease in freight revenue is
observed in motor vehicles type of transport, almost twice less than in 2019. However, due to rail
transport, there is small increase of freight revenues, by 813.1 million Kyrgyzstani som or
around $9.8 million.

Table 12. Freight revenues by types of transport

<table>
<thead>
<tr>
<th>Freight revenues</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>KGZ (bln)</td>
<td>$ (mln)</td>
</tr>
<tr>
<td>Rail</td>
<td>3,833.4</td>
<td>46.4</td>
</tr>
<tr>
<td>Road</td>
<td>7,038.5</td>
<td>85.2</td>
</tr>
<tr>
<td>Air</td>
<td>4.7</td>
<td>0.06</td>
</tr>
<tr>
<td>Total</td>
<td>10,876.6</td>
<td>131.7</td>
</tr>
</tbody>
</table>


Tariffs for freight services by all major modes of transport in December 2020 compared with the
previous month, increased by 4.8 per cent, which is mainly due to their increase (by 5.2 per cent)
for services of freight transport by rail. In January-December 2020, as compared to the
corresponding period of the previous year, tariffs for freight transport services increased by 11.2
per cent. At the same time, an increase in tariffs (by 11.2 per cent) was recorded for services of
freight transport by rail, and a decrease (by 0.3 per cent) was recorded for road transport.

Table 13. Tariff indices for freight transport services in Jan-Dec (per cent of previous year)

<table>
<thead>
<tr>
<th>Transport mode</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail</td>
<td>99.8</td>
<td>112.2</td>
</tr>
<tr>
<td>Road</td>
<td>99.9</td>
<td>99.7</td>
</tr>
<tr>
<td>Water</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Air</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>


1. Foreign trade turnover, exports and imports of goods

The volume of foreign and mutual trade in goods of Kyrgyzstan in January-December 2020
amounted to 5 648.6 million US dollars and compared with January-December 2019 decreased
by 19 per cent. In the structure of trade turnover, exports accounted for 34.8 per cent, imports -
65.2 per cent. Export deliveries amounted to $1 billion 964.5 million and decreased by 1.1 per
cent compared to January-December 2019.

The largest volume of export supplies fell on the United Kingdom (gold - by $905.7 million),
Russian Federation (clothing - by $52.1 million, cotton fiber - by $3.7 million), Kazakhstan (ores

40 National Bank of Kyrgyzstan, $1 = 82.6 Kyrgyz Som in 2020
and concentrates of precious metals - by $139.5$ million, dairy products - by $22.6$ million, Turkey (cotton fiber - by $16.2$ million, vegetables and fruits - by $17.5$ million).\footnote{IA ‘Tazabek’. Available at: https://www.tazabek.kg/news:1683217}

Figure 12. Foreign trade turnover of Kyrgyzstan

![Graph showing foreign trade turnover of Kyrgyzstan from 2006 to 2021.](image)


As it is seen from the Table 14, the foreign trade turnover underwent substantial changes since 2019. Thus, the foreign trade turnover in January-June 2019 was more than $3297$ mln. with export amount in $927$ mln. and $2369$ mln. for import. These figures are almost the same in January-June 2021, while in January-June 2020 the foreign trade turnover was a little bit less than $2700$ mln. with $995.7$ mln. of export and $1704.1$ mln. of import.

<table>
<thead>
<tr>
<th>Table 14. Foreign trade turnover with export/import break-up ($mln.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foreign trade turnover</strong></td>
</tr>
<tr>
<td>January – June 2019</td>
</tr>
<tr>
<td>January - June 2020</td>
</tr>
<tr>
<td>January-June 2021</td>
</tr>
</tbody>
</table>

Source: National Statistic Committee of Kyrgyzstan, (http://www.stat.kg/ru/statistics/vneshneekonomicheskaya-deyatelnost/)

IV. Policy Response to the COVID-19 pandemic

A) Kazakhstan

The Interdepartmental Commission for the Coordination of Measures to Prevent the Emergence and Spread of Coronavirus Infection was established by the Prime Minister of the Republic of Kazakhstan on 27 January 2020. It has decided to suspend:

- from 29 January 2020 - passenger bus transport between Kazakhstan and China. This restriction is still in effect;
- from 1 February 2020 - passenger transport by rail between Kazakhstan and China. This restriction is still in effect;
- from 3 February 2020 - regular flights between Kazakhstan and China. This restriction is still in effect;
- from 1 March 2020 - flights with Islamic Republic of Iran and Republic of Korea. This restriction is still in effect;
- from 5 March 2020, a temporary ban was imposed on the entry of citizens of the Islamic Republic of Iran into Kazakhstan. To date, the entry of Iranian citizens into Kazakhstan and air traffic with Azerbaijan has been suspended.

As of 16 March 2020, after the President of Kazakhstan introduced a state of emergency in the country, restrictions on entry and exit from the territory of the Republic of Kazakhstan were introduced, but the above measures did not apply to cargo transport.

International road freight transport for commodities and foodstuffs did not stop, with the exception of some countries, such as the Islamic Republic of Iran and Turkmenistan, due to the restriction of these countries on the carriage of goods and the closure of interstate borders. However, traffic volumes fell largely due to a reduction or complete stop of production in the EU countries, as well as restrictions on the passage of vehicles performing international transport on the territory of neighboring countries.

From 5 March 2020, vessels arriving from Azerbaijan and the Islamic Republic of Iran were temporarily restricted from entering the ports of Aktau and Kuryk at the Caspian Sea. The transport of passengers and private cars with drivers has been suspended. To date, movement of vehicles from Kuryk to Azerbaijan has been resumed. The transport of passengers with the Islamic Republic of Iran has not been restored, the transport of the vehicle has been resumed.42

By the decision of the State Commission for the state of emergency of 20 March 2020, the movement of freight vehicles and their crews across the state border of Kazakhstan is carried out without restrictions, subject to the compliance to sanitary and epidemiological measures. The Border Service of Kazakhstan, together with other state bodies, determined specific automobile BCPs for passing through for the freight vehicles.

At the same time, the following requirements were introduced:

- Mandatory medical assessment,
- Strictly movement to the temporary storage facilities,
- Remaining in the vehicle cabin,
- Ban on being in public places on own initiative,

The driver had the right to visit gas stations, catering points, grocery stores, specially equipped parking lots for vehicles, or a service station in the case of a vehicle breakdown.

After customs clearance and unloading of the vehicle, the foreign carrier had the right to load the vehicle and carry out customs clearance of the freight under the condition of being strictly at the place of loading and customs clearance. While waiting for loading, the vehicle and the driver could be in a special parking lot for trucks. After loading and customs clearance, the driver had to strictly move to the border checkpoint, through which he had to leave Kazakhstan in

compliance with the same conditions as when entering. As of today, there is no legal act canceling these requirements.

According to the Border Service of the Republic of Kazakhstan, drivers, regardless of citizenship, had to use foreign passports to cross the state border. Upon arrival at the checkpoint for entry into the territory of the Republic of Kazakhstan (including transit traffic), drivers from those countries with high number of coronavirus COVID-19 infection, as well as drivers of other nations who have stayed in such countries for the last 30 days as of 17 March 2020, the further movement of freight was permitted under the condition that the driver was replaced at the BCP in compliance with quarantine and sanitary-epidemiological standards, or with replacement of foreign tractors for Kazakhstani ones.

On March 30, 2020, the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan issued a memo for drivers engaged in international road transport in order to help them comply with the current measures for the prevention of coronavirus infection in the territory of the Republic of Kazakhstan.

On March 30, 2020, 12 road checkpoints were temporarily closed, including ten checkpoints on the border with the Russian Federation and two checkpoints with Uzbekistan. This limitation is still in effect.

On April 14, 2020, by the decision of the Interdepartmental Commission on Preventing the Emergence and Spread of Coronavirus Infection in the Republic of Kazakhstan during the period of the state of emergency, measures were taken to prohibit the transit through the territory of Kazakhstan of foreign citizens and freight vehicles from other countries traveling to third countries in which the ban is established at the entrance. The normative document canceling these requirements was not adopted.

It should be noted that the mandatory sanitary and epidemiological requirements (temperature checks, questionnaires, PCR tests, etc.) at border crossing points have not changed since 16 March 2020, but were gradually supplemented or lessened by the regulations of the Chief State Sanitary Doctor of the Republic of Kazakhstan or By the Interdepartmental Commission to Prevent the Spread of Coronavirus Infection in the Republic of Kazakhstan.

From 10 June 2020, BCPS Kolzhat (Kazakhstan, Almaty region), Bakhty and Maykapchagai (East Kazakhstan region) have remained open for the transport of medical products and medicinal goods, food products and freight moved under investment contracts and humanitarian aid.

The requirements for drivers and vehicles crossing the border of Kazakhstan have changed over the course of the pandemic as follows:

- In accordance with the decision of the Chief State Sanitary Doctor of the Ministry of Health of the Republic of Kazakhstan No. 37-IIIВp dated 22 May 2020, persons associated with transport activities in railway, sea transport, and drivers engaged in international road transport of goods, and also transit drivers were subject to laboratory tests for COVID-19 at border crossings.

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45 https://online.zakon.kz/Document/?doc_id=39529200#pos=26,-52
46 https://online.zakon.kz/Document/?doc_id=36229297
• In accordance with the decision of the Chief State Sanitary Doctor of Kazakhstan No. 54 dated 2 October 2020, persons arriving from abroad into the Republic of Kazakhstan, especially non-citizens, are allowed to enter only upon providing a PCR test for COVID-19, performed at least 72 hours prior to crossing the border of Kazakhstan. Persons with a high body temperature, regardless of the availability of the negative PCR test certificate, are subject to isolation in a quarantine hospital for up to 2 days for laboratory assessment for COVID-19. If the assessment is positive, they are transferred to a hospital of infectious diseases. However, these requirements do not apply to persons engaged in the transit of international freight transport by road.

• As of 5 October 2020, all persons arriving in Kazakhstan by all modes of transport at the BCPs undergo body temperature check, fill out the questionnaires and submit a certificate of negative PCR test, taken at least 72 hours prior to the time of crossing the border of Kazakhstan.47

• As per the decision of the Chief State Sanitary Doctor of the Republic of Kazakhstan No. 59 dated 23 October 2020, drivers from Kazakhstan and other countries arriving from had to undergo body temperature check, fill out the questionnaires and submit a certificate of negative PCR test, taken at the BCP on the border of Kazakhstan. After collecting material for laboratory PCR analysis for COVID-19 by, they could continue the route to the destination.48

• By the decision of the Interdepartmental Commission to Prevent the Spread of Coronavirus Infection in the Republic of Kazakhstan as of 9 November 2020, for drivers both foreign and citizens of Kazakhstan involved in international freight transport operations, mandatory submission of a negative PCR certificate issued no more than 3 days prior to arrival was required. Drivers without such certificate had to undergo a PCR test for COVID-19 on site.

• According to the decision of the Chief State Sanitary Doctor of Kazakhstan No. 65 dated 4 December 2020, as of 8 December 2020, all drivers involved in international cargo transport, undergo body temperature check, fill out the questionnaires and submit a certificate of negative PCR test taken at least 3 days prior to crossing the border of Kazakhstan.49

According to the decision of the Chief State Sanitary Doctor of Kazakhstan No. 25 dated 3 June 2021, all persons arriving in Kazakhstan through all modes of transport (with the exception of government delegations of Kazakhstan; crews on railway, sea and river transport), undergo body temperature check, fill out the questionnaires and submit a certificate of negative PCR test taken at least 3 days prior to crossing the border of Kazakhstan. In the absence of a Certificate and a document on receipt of vaccination against COVID-19, they are subject to isolation in a quarantine hospital for up to 3 days for laboratory PCR test for COVID-19 infection.50

Freight and container movement by rail was carried out as usual. The restrictions associated with the spread of the coronavirus did not directly affect rail container transit through Kazakhstan. Moreover, companies operating in this market segment quickly adapted, absorbing freight from air and road carriers.

47 http://bamap.org/upload/medialibrary/1f4/1f40f97e92e6cd78fa4c7ff546c1e159.docx
48 https://online.zakon.kz/Document/?doc_id=39846259
49 https://online.zakon.kz/Document/?doc_id=31989521
50 https://online.zakon.kz/Document/?doc_id=37872689#pos=4;-108
To prevent the spread of coronavirus infection, the following measures were introduced: mandatory processing and disinfection of containers, the procedure for taking a sample of goods from each transport by the regulatory authorities, the need for daily PCR testing by loaders during transshipment across the border, body temperature checks.

In addition, almost all customs and related operations were transferred online, and this affected the speed of customs clearance of freight. During the pandemic, more than 80 per cent of cargo clearance went in the “red corridor” thus subjected to mandatory customs inspection. Since government agencies engaged only a part of the employees in their work places, the goods were idle at the temporary storage facilities pending inspection and further release. These are also contributed to increased cost of goods.

The State Revenue Committee of the Ministry of Finance of the Republic of Kazakhstan, within the framework of the ongoing digitalization and modernization of customs administration, launched a pilot project "Center for Electronic Declaration" in September 2020, which today is a new unit in the state revenue authorities of Kazakhstan. The goal of the pilot project is to increase the level of customs administration by centralization of customs control and inspection of customs-related and other documents and (or) information at the level of the unit of the Committee when placing freight under the customs procedure for release for domestic consumption.

The project carried out documentary control of the correctness of determining the customs value, classification of goods, as well as the legality of granting benefits and exemptions. At the same time, the participants in foreign economic activity submitted the necessary documents and information for verification through IS ASTANIA-1. At the first stage, the pilot involved customs posts of state revenue departments in Akmola, Atyrau, Kostanay and North Kazakhstan regions.

The advantages of registration in the Electronic Declaration Center are: centralization at the Committee level of the process of control over the customs value of goods, which leads to uniformity of pricing policy and decisions made; exclusion of contact between the checking authorized official and the declarant, since all interaction is carried out through the information system exclusively in electronic form; optimization of the costs of logistics of foreign trade cargo, due to the fact that for the declaration of goods the location of the declarant does not matter, while the goods can be placed at any border terminals.

The government of Kazakhstan has taken the following measures to support the economic entities, including railway transport and building back from the pandemic.

1. On May 20, 2020, the “Comprehensive Plan to Restore Economic Growth by the End of 2020” was adopted. It included:

   1) Granting a deferral for JSC "NC" KTZ "on the deadline for payment of VAT for the 2nd quarter of 2020 until 25 February 2021 without charging a penalty and submitting deposit.

   2) The postponement of the implementation of the project "Start-up complex No 1 for the modernization of the Dostyk-Aktogay-Moiynty railway transport corridor" from 2021 to 2023 to.

   3) Minimization of administrative barriers to transit traffic. Cancellation of customs inspection of container transit trains. In cases of import in the implementation of inspection at the station of destination.

31 https://ru.sputnik.kz/economy/20201120/15521722/china-prigranichnye-stantsii-kazakhstan.html
4) Subsidies for rail carriers based on actual costs within the limits provided by the funding plan due to traffic restrictions caused by coronavirus pandemic.

5) Consideration of the issue of allocating an additional concessional loan to JSC “NC” KTZ in for the purchase from a domestic manufacturer of passenger cars in 2020.

6) Cancellation of the 10-fold fee for storage of idle goods for more than 48 hours from the date of notification for 6 months.

Also, JSC "NC" Kazakhstan Temir Zholy "(letter No. ГП-18-01 / 2161.1 dated April 14, 2020) during the period of the state of emergency, canceled certain fees, fines and payments.

2. Resolution of the Government of the Republic of Kazakhstan No. 224 dated 20 April 2020 on taxation

The resolution made the decision:

1. Establish a correction factor of "0" to the rates of the following taxes and social payments:
   - individual income tax withheld at the source of payment;
   - individual income tax paid independently by a private practitioner;
   - social tax, compulsory pension contributions, compulsory professional pension contributions, social contributions, contributions and deductions for compulsory social health insurance, with the exception of those paid by an individual entrepreneur for himself.

In the field of transport, the decree included the activities of freight road transport and the provision of moving services, air passenger transport and airports.

In addition, the National Bank of Kazakhstan allocated an additional 200 billion tenge ($500 million) for lending to large businesses and entrepreneurs affected by the emergency. As a result, a list of affected activities in the manufacturing and service industries was compiled so that large enterprises could apply to second-tier banks for soft loans. The largest share of allocated funds falls on small and medium-sized businesses in trade - 319 billion tenge (70 per cent), construction - 44.9 billion tenge (9.9 per cent), manufacturing - 39.8 billion tenge (8.7 per cent). Table 15 shows the transport industry enterprises that received government support.52

Table 15: List of activities of large economic entities affected by the pandemic

<table>
<thead>
<tr>
<th>National Classifier of Economic Activities</th>
<th>Type of activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>30.20 Production of railway locomotives and rolling stock (without repair)</td>
</tr>
<tr>
<td>27.</td>
<td>33.12.5 Repair and maintenance of other special purpose machinery and equipment</td>
</tr>
<tr>
<td>29.</td>
<td>33.17.1 Repair of railway rolling stock</td>
</tr>
<tr>
<td>31.</td>
<td>49.1 The activity of passenger rail transport in intercity traffic.</td>
</tr>
<tr>
<td>33.</td>
<td>49.4 Transport activities and provision of services</td>
</tr>
<tr>
<td>34.</td>
<td>51.10 Air passenger transport activities</td>
</tr>
<tr>
<td>35.</td>
<td>52.21.1 Operation of railways</td>
</tr>
</tbody>
</table>

Source: Ministry of National Economy of the Republic of Kazakhstan

B) Kyrgyzstan

The first officially registered cases of COVID-19 in Kyrgyzstan were in March 2020. On 20 March 2020, when 3 cases of COVID-19 infection were detected in Kyrgyzstan the authorities introduced an emergency regime in one of the provinces. In addition, all international flights were canceled.\(^{53}\)

Since 19 March 2020, Kyrgyzstan’s borders were closed for the entry of foreign citizens with some exceptions, including drivers engaged in international freight transport; flight personnel of aircrafts, train crews; etc.

According to the Ministry of Economy and Commerce of Kyrgyzstan, the introduction of an emergency situation, then a state of emergency in certain territories with the restriction on movement of transport delayed freight transport.\(^{54}\)

As of 6 June 2020, at the BCP "Aktilek - Avtodorozhnny" on Kyrgyzstan-Kazakhstan border, more than 500 trucks accumulated, which led to an 8-kilometer traffic jam. The idle time at the border, according to drivers' data, to enter the Republic of Kazakhstan was from 3 to 4 days.\(^{55}\)

Moreover, the reduction in the number of border crossings on Kyrgyzstan-Kazakhstan border, coupled with tightening border controls by Kazakhstan’s authorities, has led to long delays for carriers transporting export products from Kyrgyzstan, including some agricultural products, and triggered a crisis in bilateral relations. This problem was solved by opening some additional BCPs.\(^{56}\)

During pandemic borders closing for freight transport were applied to China only (for short period of time), while borders with other neighboring countries namely Kazakhstan, Uzbekistan and Tajikistan, were open through specified BCPs for the freight transport, including essential good like agricultural products, food and some consumer goods\(^{57}\):

- Kyrgyzstan to Kazakhstan, including goods in transit, was carried out through the BCPs Ak-Tilek and Chon-Kapka;
- Kyrgyzstan to Uzbekistan, including goods in transit, was carried out through the BCPs Dostuk (Kyrgyzstan)-Dustlik (Uzbekistan) and Kyzyl-Kiya (Kyrgyzstan) – Kuvasay (Uzbekistan);
- Kyrgyzstan to Tajikistan, including goods in transit, was carried out through the BCPs Kyzyl-Bel (Kyrgyzstan) - Guliston (Tajikistan) and “Kayragach – border with Tajikistan;

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\(^{56}\) ADB and UNDP. 2020. COVID-19 in Kyrgyzstan: Socioeconomic Impact and Vulnerability Assessment and Policy Responses. Available at: https://kyrgyzstan.un.org/sites/default/files/2020-08/UNDP-ADB per cent2520SEIA _11 per cent2520August per cent2520August per cent2520August per cent2520Rus.pdf

All Kyrgyzstan’s BCPs on the border with China have been closed since January 2020. On 3 February 2020, the government ordered to take operational measures to prevent the spread of COVID-19 in the territory of Kyrgyzstan at BCPs on the Kyrgyzstan-China section of the Irkeshtam state border and Tourugart, and since 3 February 2020 it was temporarily restricted the movement of persons until further notice, with few exceptions, including citizens of Kyrgyzstan engaged in the transport of goods by road.\(^{58}\)

As of 26 March 2020, the Republican Emergency Operation Control center (REOC) considered resuming freight traffic by road across the Kyrgyzstan-China state border. The corresponding note has been sent to China. The relevant state bodies of Kyrgyzstan were instructed to carry out preparatory work with the Chinese side to resume freight traffic at the Tourugart and Irkeshtam BCPs. It was also instructed to develop a mechanism and algorithm for this process, taking into account the creation of conditions for Kyrgyzstan carriers.

Thus, Kyrgyzstan drivers pick up trailers arriving from China in a specially designated “neutral zone” located between Kyrgyzstan and Chinese BCPs. Before the vehicle leaves the BCP towards the neutral zone, the sanitary and epidemiological service inspects the drivers’ general state of health (the driver’s temperature is measured). While in the neutral zone, drivers are not allowed to leave the truck cabin until hitching of the trailer has been completed and they have returned to the BCP. Drivers should also be provided with personal safety equipment (gloves, masks, disinfectants). A disinfection tunnel was installed by efforts of the local emergency service on the Bishkek – Naryn – Tourugart road.\(^{59}\) In April 2020 the decision to cancel passes for trucks and ensure their free movement through sanitary and quarantine posts was accepted.

Freight transport traffic resumed on 14 April 2020 at Irkeshtam BCP and on 8 September 2020 at Tourugart BCP, but the number of vehicles movement was low. In December 2020 there was an attempt to reach an agreement with China on increase of the number of vehicles passing through the Irkeshtam and Tourugart BCPs. As well, the Government of Kyrgyzstan made efforts to renew economic activities in the country. Thus, in May 2020, the second anti-crisis plan to combat the consequences of coronavirus included the component providing assistance. The recipients of lending were, among others, transport sector employees for the renovation of trucks.\(^{60}\)

In June 2020 the Program "Financing of Entrepreneurship Entities" was approved, the implementation of which is aimed at restoring and ensuring economic and social stability. Preferential credit funds were provided for such areas as tourism, light industry, pharmaceutical industry and freight transport etc.

**Additional requirements for international freight transport.** Since 27 April 2020, the decision to toughen inspections of carriers was accepted by the Republican Emergency Operation Headquarter. On 19 May 2020, it was decided to install full control over the movements of freight transport over border crossings.\(^{61}\) Inspection measures for freight carriers entering Kyrgyzstan during the pandemic were intensified.

Thus, the Ministry of Health of Kyrgyzstan on 30 March 2020 ordered that, upon arrival from other countries, drivers, regardless of citizenship, must go to quarantine for 14 days including a

\(^{58}\) Ibid.
\(^{61}\) Ibid.
visit by a primary care physician on the first day arrival, followed by telephone interview and quarantine certificate issued on the last day. In the absence of conditions for compliance with the requirements of home quarantine, drivers were subject to monitoring within 14 days in places specified by the Ministry of Health of Kyrgyzstan. In this case, if clinical manifestations are detected, drivers were subject to hospitalization.\textsuperscript{62}

Since 4 May 2020, easing of some requirements were introduced. Thus, when entering the country, the rapid test and polymerase chain reaction (PCR) test on COVID-19 were required. In case of negative result of the express test, the permission to enter the country was issued. In case of positive results of the express testing, the driver was placed under observation until results of the PCR testing come back. In case of a positive PCR result, the Department of Disease Prevention and State Sanitary and Epidemiological Supervision was notified, and the driver was hospitalized for treatment. If the PCR test result was negative, then the driver was allowed to enter the country but with requirement to observe the 14-days quarantine. In case of driver’s disease by COVID-19, the vehicle was placed to a sanitary parking lot for disinfection and driver replacement.\textsuperscript{63}

Currently, the protocol of freight transport drivers’ entry into the territory of Kyrgyzstan is almost the same and includes the PCR testing upon arrival; in case of absence of signs of COVID-19 (fever, cough, etc.) the driver is allowed to enter the country. If the driver seems unwell, then the driver is hospitalized, and the full disinfection of the transport vehicle is made.\textsuperscript{64}

Currently, all truck drivers crossing the border undergo rapid tests for COVID-19 too. In the case of a positive test result, the driver is placed under observation until the results of the PCR test results are available.\textsuperscript{65}

\textit{Special facilitation measures.} As early as 2016, Kyrgyzstan implemented the Single Window Information System (SWIS) called Tulpar, which, among other things, allows state regulatory bodies to issue permits for foreign economic activity. In order to ensure inter-agency interaction and data exchange through the Tunduk electronic interoperability system, an agreement was made between the Single Window Centre for Foreign Trade (SWC) and the State Enterprise Centre for Electronic Interaction under the State Service for Digital Development under the Government of Kyrgyzstan (operator of the Tunduk system). This should allow for the transferring of data (electronic permits) through the Tunduk system to the Unified Automated Information System of the SCS (UAIS) for customs operations.\textsuperscript{66}

In addition, the Government of Kyrgyzstan has been putting significant efforts to develop electronic exchange of information even before the pandemic. For example, Infodocs electronic document management system was introduced in 2019. This is an information system designed to automate document circulation in government bodies, local governments, state enterprises and institutions and to translate documents into electronic format using electronic digital signatures.

\textsuperscript{65} UNESCAP. 2020. Trade facilitation in times of pandemic: practices from North and Central Asia. Available at: https://www.unescap.org/sites/default/files/AWP_percent20197_per percent20Yelena per percent20Vassilevskaya.pdf
\textsuperscript{66} Ibid.
The goal of the Infodocs system is to reduce the time for sending and delivering letters and other paper correspondence, improve executive discipline and standardize document processing.67

The pandemic has contributed to the further development of digital solutions for transport sector in Kyrgyzstan. By presidential decree of 29 January 2021, the government recommended to transfer part of public services to digital format, as well as to create a unified electronic portal by 31 December 2021 to ensure a fully automated system for issuing licenses and permits be in operation.68

The draft procedure for the issuance of Kyrgyzstan permits to foreign carriers, as well as foreign permits and multilateral permits for Kyrgyzstan carriers, was developed as part of the work of the interdepartmental working group of the Council for the Facilitation of Trade Procedures together with representatives of the State Agency for Road, Water Transport, Weight and Dimension Control. To solve an existing challenge of distributing permits equally between Kyrgyzstani carriers, a formula has been developed for the distribution of permits in automatic mode when digital solution is introduced, which will be applied when the above procedure is approved.69

To alleviate the negative effect of the pandemic, Kyrgyzstan decided to cancel special permits for trucks and ensure their unhindered movement. A pilot project called “Sanarip Tamga” was carried out to exchange preliminary information between regulatory state bodies using software designed to optimize procedures that allow for the sharing of preliminary information between the database of State Customs Service under the Ministry of Economy and Finance of Kyrgyzstan (SCS) with authorized state bodies and to process information about goods and transport faster for information exchange between regulatory state bodies at the Dostyk border crossing point.70 This project helped the state authorities at the border to get access to preliminary information from carriers to the SCS. This information is received at least two hours before the arrival of the goods at the road BCPs. Based on results of the pilot, the procedure for the interaction of government agencies at road BCPs was approved by the Decree of the Government of Kyrgyzstan No.572 on 19 November 202071. Once this preliminary information is received, government agencies should decide in 15 minutes to speed up customs procedures. However, the survey was conducted which showed that required state bodies have not been able to fully deliver their services and that they need financial support for modernization.

Kyrgyzstan also accepted other measures as one of members of the Eurasian Economic Union (EAEU), which also includes Armenia, Belarus, Kazakhstan and Russian Federation. On 31 March 2020, the Government of Kyrgyzstan approved an action plan which, among additional measures, included an agreement with partners of the EAEU a mechanism to ensure a "green corridor" for transit freight traffic for the smooth movement of imports of socially significant goods, medicines, medical products and drugs.72

68 IA ‘Tazabek’. Available at: https://www.tazabek.kg/news:1722241/?f=cp
69 Ibid.
Thus, on 6 November 2020, the Decision of the Eurasian Economic Commission Council dated 1 October 2020, No. 86 declared the duty-free regime of import into the territory of the Union of individual components and materials for the production of medicines and disinfectants, medical products, respirators, goggles, rubber gloves, some medical products and equipment, as well as boxes and a stretcher for transporting patients has been extended until 31 March 2021.73

As for railways, during pandemic, Kyrgyz Temir Jolu did not charge fees or penalties for storing freight on the container site and on the wagon located at Kyrgyz Temir Jolu railway stations. The company also reduced the cost of transport by rail for coal exporters by 30 per cent at a distance of up to 30 kilometers for the Southern branch of the State Enterprise Kyrgyz Temir Jolu.74

V. Cooperation for transport development in North and Central Asia

A) Regional cooperation and integration on sustainable and resilient connectivity

The vulnerability of international transport systems to communicable disease outbreaks was apparent for many years. After the COVID-19 pandemic, the world is likely to remain highly interdependent thus will continue to be highly dependent on the smooth and efficient operation of transport and logistics systems.

Since outbreaks of communicable diseases such as H1N1 and H5N1 viruses, MERS, SARS and Ebola have occurred repeatedly over the past two decades, even before the advent of COVID-19, and are likely to continue in the future, a regional and global efforts are needed to strengthen international cooperation and coordination among inland transport agencies and thereby increase countries' preparedness and resilience for possible future outbreaks.

On road transport, the COVID-19 demonstrated its advantages and disadvantages and, most importantly, gave an opportunity to think about what improvements to do in the future. Better coordination and operational collaboration between control authorities at the border-crossing points, including the “single window” system may significantly reduce the time and cost of freight transport both for bilateral and transit of goods on international transport corridors. Remote screening, online and advance paperless procedures will bring more benefits is integrated as much as possible. These measures may increase the efficiency and resilience of road and railway transport operations, including in cases of disruptive events such as pandemics.

COVID-19 pandemic showcased that freight railway operations are less affected in conditions of pandemics and quarantines in countries and regions. The railway, firstly, increases freight capacity and lowers the cost per ton-kilometers and, secondly, is more resilient to disruptive events due to its distinctive advantages of less crew and low physical contact thus being less affected by the pandemics. Freight by road transport has more limitations with more human contacts, more labour intensity and due to that has lengthier border clearance and crossing procedures.

Considering effect of COVIDS-19, countries in Central Asia have to take stronger measures for increasing the existing legal, operational and technological preparedness and resilience to the outbreaks and pandemic of various communicable diseases, including road and railway

73 Eurasian Economic Commission. Review of the main measures. Available at: http://www.eurasiancommission.org /ru/covid-19/Pages/measures.aspx
74 IA ‘Khabar’. Available at: https://kabar.kg/news/gp-kyrgyz-temir-zholu-snizilo-stoimost-perevozki-uglia/
infrastructure. This should come with stronger institutional collaboration both within country but also at subregional and regional levels.

B) ESCAP initiatives to support transport connectivity development

Asian Highway Network. The Asian Highway Network is a regional transport cooperation platform aimed at enhancing the efficiency and development of the road infrastructure in Asia. It serves as a part of ESCAP’s overall goal to see the development of an international, integrated, intermodal transport and logistics system for the region, with the Asian Highway and Trans-Asian Railway networks and dry ports of international significance as major components. The Asian Highway Network now comprises over 145,000 kilometers of roads passing through 32 countries.

The creation of a network of interconnected highways in ESCAP region currently known as the Asian Highway Network was initiated in 1959 with the formalization of the network beginning in 2002. It resulted in the development of the Intergovernmental Agreement on the Asian Highway Network, which was adopted by the Commission on 18 November 2003 and entered into force on 4 July 2005. The Agreement provides a framework for coordinated development of the international highways in Asia, as well as between Asia and Europe, giving the member countries a platform to discuss technical and institutional issues to improve the quality of the network and increase the efficiency of its operation. The Agreement is an important tool to facilitate international trade, promote regional integration and enhance international cooperation.

Both Kazakhstan and Kyrgyzstan are parties to the Intergovernmental Agreement on the Asian Highway Network. Several AH routes pass through them.75

Trans-Asian Railway Network. The Intergovernmental Agreement on the Trans-Asian Railway Network is a regional transport cooperation platform aimed at enhancing the efficiency and development of the railway infrastructure in Asia.76 The Trans-Asian Railway Network now comprises approximately 125,500 kilometers of railway lines serving 28 member countries. Both Kazakhstan and Kyrgyzstan are not parties to the Agreement but are members of the Intergovernmental Working Group on Trans-Asian Railways which meets biennially to discuss the infrastructure and operational connectivity along the Network.

Dry ports. A dry port of international importance shall refer to a secure inland location for handling, temporary storage, inspection and customs clearance of freight moving in international trade. Kyrgyzstan is not a party to the Intergovernmental Agreement on Dry ports while Kazakhstan is. The use of dry ports could help Kyrgyzstan in tapping into its transport and transport potential by improving supply chain and logistics, reducing transportation cost and ensuring modal shift to a more efficient and sustainable mode of transport. At the national level the intergovernmental agreement provides useful guideline and enable countries to understand minimum requirement of dry ports and assist in making relevant policies to promote the strategically importance dry ports. At the regional level the agreement will enable member states to capture business and investment opportunities through dry ports in other countries. In addition, the dry ports together with Asian Highway and Trans-Asian Railways networks are essential to achieve regional vision of international integrated intermodal transport and logistic system.

76 UNESCAP. Trans-Asian Railway Network. Available at: https://www.unescap.org/our-work/transport/trans-asian-railway-network
International transport connectivity between Asia and Europe

I. Kazakhstan

Because Kazakhstan does not have access to the sea, the country faced great challenges to become a transit state. Kazakhstan has taken efforts of building and restoring transport infrastructure, linking together all the routes required for the movement of freight and passengers. Thus, Kazakhstani international corridors gradually became attractive, which made the routes more competitive.

Today, the rapid development of the economies of Southeast Asian and European countries, including China, and the increase in freight traffic between Asia and Europe, promises a great potential for the development of transit traffic through Kazakhstan.

The transit of goods from Asia to Europe through Kazakhstan dropped significantly during the collapse of the former USSR in the early 1990s, while the country's status in transport links between the two continents showed great promise. The situation stabilized only in 2000, when rail transit increased to 5.6 million tons per year due to the development of international trade relations between Kazakhstan, neighboring CIS countries and the Baltic states. An active transport and investment policy ensured an increase in the volume of transit freight traffic through the territory of the Republic of Kazakhstan in 2012-2014 up to 16 million tons.

In 2020, transit by all modes of transport through the Republic of Kazakhstan amounted to 22.67 million tons, an increase of 16.8 per cent compared to the same period in 2019 (19.4 million tons), of which 20.6 million were tons accounted for rail transport and 2.07 million tons for road transport. The container transit in 2020 increased by 30 per cent compared to 2019.

Even though transport sector was one of the most affected by the COVID-19 pandemic, container transit in Kazakhstan is showing an increase. The volume of container traffic in the direction of China-Europe-China amounted to 554.7 thousand containers, which is 59.6 per cent more than in 2019 (347.5 thousand containers). Thus, container transit traffic shows a good development trend even during an emergency, which limits the activities of many areas.

Kazakhstan currently has modern road and rail corridors, BCPs, cargo terminals, temporary storage facilities, airports, is increasing the capacity of port infrastructure, etc. New transport directions have been launched, which are focused on increasing traffic volumes. Modern termina-logistics centers and bulk-distribution centers have been built, which makes it possible to store, process and distribute goods and products, including preventing food shortages and rising prices for goods.

According to forecasts of international experts, the volume of trade between China and the main markets in Europe in the coming years will grow 1.5 times and exceed $1 trillion per year, incl. $850 billion in the directions China - EU, the Russian Federation, Central Asian countries, Turkey and Islamic Republic of Iran. The positive dynamics is confirmed by the results of 2018 in terms of an increase in the volume of China's foreign trade by 9.7 per cent, reaching the mark of 4.5 trillion. US dollars (in 2010 - 2.97 trillion US dollars).

Exports from the western and central provinces of China are projected to grow even more rapidly through the implementation of the Belt and Road Initiative. Total exports to target countries are
expected to increase by 3.7 per cent between 2018 and 2023, with predominantly ground transport solutions being used to deliver goods to markets.

In his recent address, President Kassym-Jomart Tokayev noted that the development of the transport and logistics complex remains a topical issue, despite the successful implementation of the first stage of the Nurly Zhol State Infrastructure Development Program. It made it possible to connect the capital with the regions. A new infrastructure framework of the transport system has been formed, the country's integration into global transport corridors has been ensured, the historical status of Kazakhstan has been restored as a link between Asia and Europe.

However, the competition in this area is very high. Alternative projects have appeared in the Central Asian region that can reduce the transit potential of Kazakhstan.

Today, the competition between Kazakhstan's transport links between Asia and Europe is manifested from the north by the Russian transport corridors and from the south by the newly formed corridor through Kyrgyzstan and Uzbekistan towards Europe.

For example, the new alternative route China-Kyrgyzstan-Uzbekistan-Turkmenistan-Azerbaijan-Georgia opens up more opportunities for exporting products from South Xinjiang, and will also save about a third of the time compared to conventional road transport.

Recently, 725 tons of cargo from Kyrgyzstan through the Torugart BCP, were delivered to Kashgar first by road, and then by rail. But it is worth noting the disadvantages of this corridor. Firstly, multimodality: on the route, there is a need for two reloading of a container from railway to road at the Kashgar station and from road to railway at Osh station. Secondly, there is an increase in the number of transit states (Kyrgyzstan, Uzbekistan, Turkmenistan) and the crossing of state borders.

In 2020, UTLC ERA, a joint company of China, Russian Federation and Belarus, transported 546.9 thousand TEUs, which is approximately 2.3 - 2.4 per cent of the freight traffic between Europe and China, of which 511 thousand TEUs were loaded. Approximately 75 per cent of freight traffic on the China - Europe - China route passes through the territory of Kazakhstan.

A) Transport infrastructure projects related to the development of transport corridors between Asia and Europe

Currently, the following 5 international railway transport corridors with a total transit capacity of up to 50 million tons have been formed and operate in Kazakhstan: Northern, Southern and Central corridors of the Trans-Asian Railway (TAR), TRACECA and North – South corridor

As far as roads are concerned, there are six main directions (Figure 13) - road transport corridors, the throughput of which is estimated at 10 million tons of transit cargo per year:

1) Tashkent - Shymkent - Taraz - Bishkek - Almaty - Khorgos;
2) Shymkent - Kyzylorda - Aktobe - Uralsk - Samara;
3) Almaty - Karagandy - Nur-Sultan - Petropavlovsk;
4) Astrakhan - Atyrau - Aktau - gr. Turkmenistan;
5) Omsk - Pavlodar - Semey - Maykapshagai;
To ensure the development of Euro-Asian transport corridors, Kazakhstan has invested about US $30 billion in key projects of transport and logistics infrastructure over the past 10 years. New railway lines “Zhetygen - Altynkol”, “Zhezkazgan - Saksaulskaya - Shalkar - Beyneu” have been built, which reduce transit routes by 1000 kilometers and provide connection of the country's regions from East to West. The new Uzen-Bolashak railway line provided a connection with the railway network of Turkmenistan and access to the ports of the Persian Gulf, and potentially - access to trade movements of India.

As part of the implementation of the State Program for Infrastructure Development "Nurly Zhol" for 2015-2019, an optimal logistic chain has been formed: from the East coast of China (port of Lianyungang) to the modern multimodal dry port, located on the territory of the special economic zone "Khorgos - Eastern Gate" on the border of Kazakhstan and China, and further along the system of railways and highways across the Caspian to Turkey and Europe.

In 2021, the opening of a new terminal of Dostyk TransTerminal LLP on the border infrastructure adjacent to Dostyk station significantly improved the traffic situation on this section of the railway and will create additional reserves of throughput on the services of UTLC ERA. The processing and formation of block container trains, the warehouse and terminal operations are provided. The target capacity of the project is 700 thousand TEU.

Investments in the infrastructure of the Caspian logistics hub ensured the quality development of the port of Aktau and the new multimodal ferry complex Kuryk, which were incorporated in the network of international transport corridors in Kazakhstan (Figure 16). Railways and highways are attached to the port zones, international transport is provided between the countries of Central Asia, China, the Caucasus, Turkey and Europe with a total throughput of the Caspian logistics hub at 26 million tons of cargo per year.
The harmonization of infrastructure development priorities with neighbors and other partner countries was successfully carried out. The alignment of the Kazakhstani state program for infrastructure development "Nurly Zhol" and the "One Belt - One Road" initiative of China enhanced the synergy of transport and logistics systems and the formation of a new architecture of transcontinental corridors.

In 2010, regular container trains were launched through the Alashankou-Dostyk border crossing in the direction of the Russian Federation and further to Western Europe for the first time in the history of Kazakhstan. The land route has proven its viability due to the high speed of delivery of goods from East China to Europe (15 days instead of 50 days by sea).

Today, the speed of delivery of goods through the international railway transport corridors of Kazakhstan is three times higher than by traditional maritime transport. At the same time, the cost of transportation is 10 times lower than by air. This made it possible to make the land route through Kazakhstan a new logistics solution with its own niche of goods, preferring to be transported through the Eurasian railway route.

In an effort to maintain roads in good condition and ensure road safety, Kazakhstan has installed about two dozen stationary weight measuring stations vehicles on roads and at BCPs. Moreover, about three dozen mobile weight measuring stations were deployed. Most fixed stations and all mobile stations use appliances that allow measure the weight of vehicles in motion.

The existing infrastructure of BCPs on the Kazakhstani section of the EAEU’s external border does not allow for a uniform and accelerated movement of the increasing transit traffic, which leads to the accumulation of a large number of vehicles and long wait times pending the clearance of documents and the completion of procedures. The low level of technical support and automation of the entire cycle of registration and movement of goods does not allow to improve customs administration and minimizing corruption risks, which in general negatively affects the financial costs of carriers and the country's image. According to 2018 data from the CAREC Corridor Performance Measurement and Monitoring Study, trucks traveling from Uzbekistan to Kazakhstan took an average of 22.2 hours to pass through the Yallama-Konysbayeva BCP. Trucks traveling from Uzbekistan to Tajikistan took an average of 12 hours to pass through the Oybek-Fotekhabod BCP. Freight trains from Kazakhstan to Uzbekistan took an average of 11.5 hours to pass through the Saryagash-Keles BCP. In order to expedite the clearance of goods and/or vehicles through the BCPs of the subregion, drivers often make unofficial payments.

For the development of the transport infrastructure of Kazakhstan, it is planned to develop ICT infrastructure of the transport sub-sectors to automate the processes of creating compound routes, integrate ticketing systems for road and rail transport, and automate the processes of managing freight and commercial operations. A unified information platform will be created for conducting document flow in transport.

The next direction is the introduction of automated control systems for sub-sectors of the transport sector along with the development of a national platform of intelligent transport systems to ensure integration of various intelligent transport systems and their elements with each other, as well as with external information systems.

In particular, in railway transport, it is planned to introduce a complex of information and analytical systems for managing the movement process, diagnostics and repair of assets, intelligent monitoring systems for rolling stock, fail-safe systems for managing freight and
passenger flows, as well as modern automated systems for railway automation, remote mechanics and communications within the IT and digitalization initiatives.

An integrated planning system with elements of machine learning will be introduced, contributing to the optimal allocation of production resources, as well as making effective decisions in the process of investment planning, operational and commercial activities.

Further developed will be ERP systems, including maintenance and repairs management of assets, management of materials flow, separate accounting, planning and management of freight and maneuvering work at the station, management of safety and labor protection, the introduction of an automated positioning system and automated control of the safety of freight along the route based on modern ICT and satellite technologies.

An infrastructural and technological basis will be laid for the introduction of automatic control systems "Automatic driver" and "Automatic dispatcher", eliminating the need for human participation in the control of train traffic. The introduction of these systems will improve the safety and efficiency of operations, reduce wear and tear of infrastructure and rolling stock, as well as fuel and electricity consumption through optimal train management. In addition, the implementation of the "Automatic dispatcher" system will help to improve the efficiency of control processes for train, maneuvering and freight-related operations at the station (including increasing the throughput of sections and stations, reducing the gaps between the standard and actual speed), and automatically informing about the movement of trains in real time, as well as and the state of the management of units actual schedule.

Modernization of railway automatics and remote mechanics will be implemented through the systematic replacement of physically and morally outdated relay electrical interlocking systems with microprocessor systems on the entire backbone network. A train traffic control system based on the principles of automatic optimal control without operator participation will be introduced. For these purposes, basic subsystems for ensuring the safety of train traffic will be installed, including safe computing platforms at the centralization post, as well as a new generation of microprocessor-based floor and on-board devices with built-in advanced diagnostics functions and the ability to control over a radio channel.

With the use of Internet technologies and mobile applications, systems for the provision of logistics services, as well as information-based and interactive communication of shippers, consignees and passengers with carriers in the process of contractual and commercial operations, and the exchange of travel documents, will be further developed.

In the road industry, it is planned to introduce intelligent transport systems (ITS) in large cities and on the busiest sections of the road network of republican significance, to create a unified information system for planning regular passenger traffic, maintaining a register of routes and carriers. It is envisaged to create a transport model of Kazakhstan to increase the efficiency of the planning processes for the development of highways based on the analysis of data on their technical condition, the history of the impacts on repair and maintenance, as well as information on changes in the intensity of traffic flows.

It is planned by 2025 to bring to 100 per cent the share of highways of republican importance to a good and satisfactory condition.

Until 2025, it is planned to reconstruct and modernize 11 road checkpoints on the external border of the EAEU and 25 on the internal border of the EAEU.
B) The main legal instruments related to the Euro-Asian transport links

Since the beginning of its independence, given its geographical position, Kazakhstan has taken a course towards the development of balanced relations with both European and Asian countries. Kazakhstan has ratified the following international conventions and agreements for the development of the transport and logistics industry and introduction into the international supply chain:

1. WTO Agreement on Trade Facilitation.
2. General Agreement on Tariffs and Trade.
4. Convention on Road Traffic (1968)
5. Convention on Road Signs and Signals
9. Customs Convention on Containers (1972)
10. Agreement on the Creation of an International Transport Transit Corridor between the Governments of the Islamic Republic of Iran, the Sultanate of Oman, Turkmenistan, Uzbekistan and the Republic of Kazakhstan.
11. On approval of the Framework Agreement on Trade Cooperation between ECO Countries.
12. Memorandum of Understanding, and as its Annex, the Roadmap on the Implementation of the Cooperation Plan for the Conjugation of the New Economic Policy Nurly Zhol and One Belt - One Road Initiative, etc.

C) Bilateral and multilateral cooperation initiatives

In addition, bilateral agreements have been signed with the countries of the near and far abroad for an unimpeded trade turnover between the countries.

Today, Kazakhstan is taking the initiative to improve the efficiency of operation and maintenance of roads. The quality of road maintenance work can be improved through performance-based contracts. In particular, traffic management can be strengthened and transport costs reduced by creating, through a public-private partnership, intelligent transport systems (ITS) with automated stations for measuring weights and dimensions of vehicles.

Given that the main disadvantage of road transport in Central Asia is the difference in national standards for the weight and dimensions of trucks, Kazakhstan is in favor of harmonizing these standards. Today, for most types of trucks, the maximum permissible gross weight is 38 tons in Kazakhstan and 40 tons in Uzbekistan. Likewise, the maximum permissible axle load in Kazakhstan is lower than in Uzbekistan for most types of truck axles. Therefore, Uzbek road carriers often do not fully load their trucks when delivering to or via Kazakhstan, and their drivers sometimes commit illegal actions to avoid being fined for overloading the axle. This increases the cost of road transport from Uzbekistan to Kazakhstan and through Kazakhstan to other countries. Tajikistan's national regulations do not provide for the differentiation of loads between one-wheel and two-wheel vehicles, which leads to ambiguity and often causes disputes between road carriers and transport police. Coordination and harmonization of national road transport standards in Central Asia will reduce corruption and facilitate international road transport from/to/through Central Asia.
In particular, there is a need to digitize road transport services and therefore to ratify the 2008 Protocol to the CMR Convention, which provides the legal basis and standards for the use of electronic means for registering the CMR consignment note. The low level of digitalization of road transport services is one of the reasons for the relatively uncompetitive international road transport. The ratification of the 2008 CMR protocol and the introduction of the CMR electronic consignment note will stimulate the digitization of transport services in Central Asia and help reduce the cost of international road transport.

Today, paper-based transport between countries takes an enormous amount of time. For example, the annual agreed quota for the exchange of permits is 5 thousand forms between the countries of Central Asia. The process of distributing permissions itself can take up to 60 days, including additional costs in the form of postage etc. But one of the main problems is the human factor, which leads to non-transparency of all procedures and leads to an excess or lack of permits for operators.

To solve this problem, it will be planned to create an electronic system that will speed up the exchange of information between countries, where the number of permits and their distribution will be automatically determined, they will also be fixed and used, etc., including eliminating the human factor, which will allow you to avoid mistakes in this work.

Also, it is planned to create International Centre for Trade and Economic Cooperation (ICTEC) "Central Asia", which will be located in the area of BCP "Zhibek Zholy" (Kazakhstan) and "Gisht Kuprik" (Uzbekistan). The total area of the Center will be 400 hectares, the throughput capacity is 35 thousand people and 5 thousand trucks per day in both directions. The center is intended to become a large industrial, trade and logistics hub for the implementation of joint investment projects of Kazakhstan and Uzbekistan. In turn, Kazakhstan expresses interest in creating a single commodity distribution system between Kazakhstan and Uzbekistan by opening three wholesale distribution centers in the Surkhandarya and Fergana regions of Uzbekistan with a total investment of $22.5 million and a transshipment capacity of 67 thousand tons per year.

On national level, Kazakhstan has done the following to develop Euro-Asian connectivity:

1. Information system "Satti Sapar" (sattisapar.gov.kz) was introduced. It is intended for preliminary notification by the carrier about transit travel through Kazakhstan. The system will allow the carriers to increase the speed of the vehicle, reduce the delivery time of goods in transit traffic, by eliminating checks along the route. This removes administrative barriers and creates favorable conditions for carriers.

2. In cooperation with OSJD, application of the CIM/SMGS consignment note on the territory of Kazakhstan.

3. The implementation of the project on the application of mobile diagnostic tools within the framework of the automated control system. The purpose of the project is to monitor information received from mobile diagnostic tools at any time of the day. This will make it possible to maintain the tracks based on the actual state and carry out component-by-component track repairs.

4. The "Digital Railway" strategy is also being implemented, which includes the "Control Center for Train Traffic " project. Under the project it is planned to introduce a microprocessor-based automated train traffic control, as well as a signaling and communication management system, with the modernization of regional communication units. This will facilitate the real time monitoring the movement of trains and will increase the throughput and ensure safety.
5. From 1 November 2019, the airports of 12 cities of Kazakhstan, including the airport of Nur-Sultan, the "open skies" regime have been introduced on a bilateral basis with each country whose carriers intend to run flights to the above airports, provided that relevant Air Services Agreements, Memorandums of Understanding and Protocols are signed.

6. On 1 August 2019, the Ministry of Industry and Infrastructure Development of Kazakhstan introduced a new approach to regulating the civil aviation industry, based on the British and advanced European management models.

7. As part of the process for digitalization of the logistics, the integration with the customs authorities has been improved for advance submission of information about freight entering Kazakhstan. CRM tool for storing information about customers and the history of interactions with them has been introduced.

8. Agreements on electronic data exchange were signed with the railway administrations of Kyrgyzstan, Azerbaijan and China. Since the beginning of July 2019, a paperless exchange of shipping documents in export and import communications with the Russian Federation has been carried out in several stages.

II. Kyrgyzstan

Geographic location of Kyrgyzstan provides it with a potential of becoming the bridge between Europe and Asia. Therefore, the most important objective is to tap into this potential and build up its transit capacity. However, due to its mountainous landscape the cost of construction and maintenance of transport infrastructure would be high. This will require tapping into both traditional financing mechanisms, including domestic public funds and international technical and financial assistance, as well as new ones like public-private partnership.

Kyrgyzstan has taken numerous initiatives to develop its transit potential, with primary focus on the international cooperation through various organizations and agreements. It is interested in developing the transit traffic on the Europe-Asia route given that it has a common border with China as well as Kazakhstan. In addition, Kazakhstan and Kyrgyzstan are both members of the Eurasian Economic Union (EAEU).

Bearing in mind that railways play an important role in container transit freight transport, Kyrgyzstan is not able to take full advantage of its transit position without a developed railway network. The most significant work on the development of transport corridors and transit potential between Asia and Europe has been carried out by Kazakhstan and its experience could be useful for Kyrgyzstan if there is political will and appropriate conditions.

A) The main legal instruments related to the Euro-Asian transport links

Kyrgyzstan has taken noteworthy efforts on acceding to international conventions and agreements for the development of the transport and logistics industry and introduction into the international supply chain, including but not limited to:

1. WTO Agreement on Trade Facilitation.
2. Kyoto WCO Convention.
3. Convention on Road Traffic (1968)
4. Convention on Road Signs and Signals
9. Customs Convention on Containers (1972)
11. On approval of the Framework Agreement on Trade Cooperation between ECO Countries.

B) Bilateral and multilateral cooperation initiatives

Besides cooperation with member-states of the Eurasian Economic Union, Kyrgyzstan endeavors to boost trade and transport relations with other countries, with specific focus on cooperation with China.

Within the framework of the Cross-Border Cooperation Program between the Government of Kyrgyzstan and the Government of China for 2015-2020\textsuperscript{77}, since 2015 green lanes have been established at BCPs on the Kyrgyzstan-China state border for transporting agricultural products. As it was agreed by both sides, special logos, special windows and dedicated traffic lanes have been established to simplify and speed up the movement of agricultural products, including through priority inspection, if needed. However, during the pandemic, BCPs on the Kyrgyzstan-China section of the state border were temporarily closed and did not allow the movement of persons, vehicles and freight, except for emergency relief consignment.\textsuperscript{78}

Transport operation with China have received a boost recently. As reported by Kyrgyz Temir Jolu, on 8 February 2021 the first express train with 47 containers arrived from Urumqi (China) to the station “Alamedin” in Bishkek, Kyrgyzstan. There agreement was reached with businesses in China to deliver about 1,000 containers per month. Until then, there was no such transport operations by rail, there had been only single trains that carried raw materials and materials for Kyrgyzstan entrepreneurs.\textsuperscript{79}

In addition, a memorandum of cooperation was signed between the state enterprise Kyrgyz Temir Jolu and LLC "Engineering Corporation No. 3 Railways of China". Under the memorandum, it is planned to implement two infrastructure projects for the construction of the Balykchy - Kochkor - Kara-Keche railway line and the electrification of the Lugovaya - Balykchy railway line.

As far as road transport is concerned, the existing transport of containers by road through Kyrgyzstan is mainly a component of multimodal transport and one of the links along with rail transport.

There are few initiatives related to multilateral cooperation in the development of Kyrgyzstan’s transport and transit capacity. One of the main ones is the China-Kyrgyzstan-Uzbekistan transport corridor. Considering that almost all transit is made up mainly of container rail

\textsuperscript{77}The Cabinet of Ministers of Kyrgyzstan. Available at: https://www.gov.kg/ru/post/s/russkiy-v-ramkah-ofitsialnogo-vizita-premer-ministra-temira-sarieva-v-kitay-sostovalas-podpisanie-sovmestnogo-kommyunike
\textsuperscript{78}UNECE. 2021. National Trade Facilitation Roadmap of Kyrgyzstan 2021-2025. Available at: https://unecce.org/sites/default/files/2021-06/ECE_TRADE_464E.pdf
transport, without a developed railway network, Kyrgyzstan is not able to take full advantage of its transit position. In the future, the task is to increase transit traffic, for which the China-Kyrgyzstan-Uzbekistan corridor can play an important role if it is launched. Although discussions started since the beginning of 2000s, there hasn’t been much progress in its implementation despite few feasibility studies being conducted with the assistance from the development partners. The corridor envisages the railway routes through the territory of Kyrgyzstan, including:

- Northern: Dostuk option: Tourugart - Jalal-Abad which is 432.78 kilometers long;
- Southern: Tourugart - KaraSuu which is 278 kilometers long.

The Northern route seems the most optimal for Kyrgyzstan, taking into account the prospective connection of country’s north and south by railways and the creation of a united railway network. It is considered that the new railway corridor will become the southern branch of the Eurasian continental bridge and should open access to the markets of number of regions of the world. This route should be able to ensure the delivery of goods from China to Kyrgyzstan, and then to the countries of the EAEU, as well as to the countries of Europe, the Middle East, including Turkey and beyond. Estimated cost of the project 4.8 billion US dollars.\(^{80}\)

However, there are two challenges. Firstly, Chinese authorities suggest that when the line reaches the Kara-Suu district (Osh region) in Kyrgyzstan, it will go further for more than three thousand kilometers through the mountains where there is no infrastructure. So related very costly infrastructure must be built. Unfortunately, Kyrgyzstan does not have the funds to build that section without outside help. Secondly, another controversial issue is the gauge size. Discussions about what it should be on the territory of Kyrgyzstan have been held for years. Kyrgyzstan has the railway gauge of 1520 mm as other post-Soviet countries, while China’s gauge is 1435 mm.\(^{81}\)

### III. Kazakhstan and Kyrgyzstan: International initiatives on Euro-Asian connectivity

**CAREC**

The six corridors under the Central Asia Regional Economic Cooperation Program (CAREC) of the Asian Development Bank link the region’s key economic hubs to each other and connect the landlocked CAREC countries to other Eurasian and global markets. The strategic framework for the CAREC Transport Program lays out the next phase of priority investments in transport infrastructure along the corridors.

Being one of 11 CAREC participating countries, Kyrgyzstan contributes to four corridors:\(^{82}\)

- **Corridor 1**: links Europe to East Asia, crossing the Russian Federation border to China via Kazakhstan and Kyrgyzstan;
- **Corridor 2**: links the economies of East Asia to Central Asia, the Caucasus, and the Mediterranean, with China in the east and Georgia in the west. This corridor was revised in 2017 after Georgia joined the CAREC program.
- **Corridor 3**: links the eastern part of the Russian Federation to the Middle East through Central Asia;

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\(^{80}\)Eurasian Economic Commission, 2020. Monitoring of the implementation in the member states of the list of joint projects in the field of transport and infrastructure.


• **Corridor 5**: connects Central and East Asia to South Asia, providing potential routes to access all-weather seaports at Karachi, Pakistan for the landlocked countries.

For the development of these corridors CAREC designed and implemented the Corridor Performance Measurement and Monitoring mechanism which is an empirical tool designed by the to assess and track the time and cost of moving goods across borders and along these six corridors.

**Belt and Road Initiative**

The Belt and Road initiatives (BRI) was declared in 2013 by the Government of China is a long-term plan to deepen economic integration, support trade, investment and infrastructure development in Asia and across Europe and Asia. One of the goals is to develop economic corridors which include the existing Asian Highway routes connecting Asia to Europe.

As part of the BRI, in 2016 the transport and transit cooperation between China and the EAEU member-states was declared. In its framework 39 mutual projects were agreed upon, including the construction of new and modernization of existing roads, creation of transport and logistics centers, and the development of key transport hubs. The Agreement on Economic and Trade Cooperation Between the Eurasian Economic Union and its Member States and the People’s Republic of China, was signed in 2018 and in its framework there were discussions on launching negotiations on a free trade agreement and actively practicing trilateral China-EAEU-EU cooperation in the field of transport logistics and trade facilitation through Eurasia.

**Eurasian Economic Union**

Kazakhstan and Kyrgyzstan are members of the Eurasian Economic Union (EAEU) but did not harness its potential within the Union equally. The main transit routes via EAEU go through Kazakhstan, namely via China – Russian Federation - Europe, China - Kazakhstan – Russian Federation - Europe, China - Kazakhstan - the countries of the Middle East/Europe, the Baltic - the Middle East. However, there are some initiatives of the Government of Kyrgyzstan for the transport of goods within the EAEU and beyond. They include setting up two container railway routes, namely 1420/19 "Baltic transit 2" on the Estonia – Russian Federation - Kazakhstan – Kyrgyzstan route and train 1293/94 on route Kyrgyzstan - Kazakhstan – Russian Federation.

Both countries are also engaged in the processes related to transport and transit development of the EAEU region. Namely, they include:

- On 21 August 2021 the roadmap for the implementation of coordinated transport policy of the EAEU member states for 2021-2023 was signed by all members. The main components of the roadmap include integration of transport networks of the EAEU member-states into regional and global transport system, effective use of transit potential

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83 UNESCAP. 2017. Development of strategies to promote and facilitate the implementation of the Asian Highway design standards. Available at: https://www.unescap.org/sites/default/files/5-Asian percent20Highway percent20strategy percent20development.pdf
85 Eurasian Economic Commission. 2021. Available at: http://www.eurasiancommission.org/ru/act/energetikainfr/transport/transportnaya_politika/Documents/ per centd0 per centa0 per centd0 per cent0 per centd1 per cent81 per centd0 per centb1 per centd0 per centbe per cent1 per cent80 per centd1 per cent8f per centd0 per centb6 per centd0 per centbd per centd0 per centb8 per centd0 per centb5 per cent2015.pdf
via proper management of modal split and the development of containerized transport.

- Other priorities include establishment and development of the Eurasian transport corridors. In this context, the road transport infrastructure cluster includes the development and implementation of an agreed mechanism for monitoring the arrival/departure through borders and movement of large and heavy vehicles on the roads and with due consideration to the legislation of the EAEU member-states. The initiative stipulates for the preparation and signing of an agreement on permissible weights, including axle loads, and dimensions of vehicles when driving on those roads included in the list of Eurasian transport corridors.86 A regular meeting of the Subcommittee on Road Transport and Road Facilities was held on 12 March 2021. During the meeting, the draft agreement was further discussed.

- In addition, the Eurasian Intergovernmental Council approved an action plan for the digitalization of freight rail transport in the interests of developing trade and transit from China.87 The plan includes measures to ensure quality information exchange between railways, between railways and regulatory authorities, transition to contactless and paperless solutions in relation to transport and shipping documents for moving freight within the union, shift to electronic documents for international transport, as well as building electronic system for interaction between businesses engaged in foreign trade and regulatory, including veterinary and phytosanitary control authorities of the Member States. The action plan is expected to be fully implemented by March 2023 making it possible to shift to an integrated electronic system for the transport of goods by rail in bilateral and transit traffic between the EAEU states, and in the future - with other countries outside the Union.

- Plans for the development of an international treaty on a unified transit system for the Union and the creation within the EAEU of a system for tracking goods using electronic navigation seals have been ongoing for a quite some time now and recently have been included in the Strategic Directions for the Development of Eurasian Economic Integration until 2025, which were approved by the Heads of States of the EAEU on 11 December 2020.

The Euro-Asian Transport Links (EATL)

The Euro-Asian Transport Links (EATL) project started with Phase I (2002-2007) as a joint undertaking between UNECE and ESCAP. In close cooperation with designated national focal points in the Euro-Asian region, the EATL project has identified main Euro-Asian road and rail routes for priority development and cooperation. An Expert Group established under the project proved to be a useful cooperation platform for the coordinated development of coherent Euro-Asian inland transport links.88

It is considered that by operationalizing Euro-Asian inland transport routes, countries and people of both continents would be able to participate more effectively in global production networks, global distribution and value chains.

Kazakhstan and Kyrgyzstan are involved into EATL Routes 2, 3, 4, and 5:

- EATL Road Route 2 starts in China (Lianyungang and Shanghai ports) up to the borders

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86 Ibid.
87 IA ‘Tazabek’. Available at: www.tazabek.kg/news:1724931?fb=cp
of Belarus and the Russian Federation with Europe, going through eastern China, Kazakhstan and the Russian Federation.

- EATL Road Route 3 starts on the eastern borders of the European Union at Ukraine and ends in China (Lianyungang and Shanghai ports), going through eastern China, Kazakhstan, Kyrgyzstan and the Russian Federation.
- EATL Road Route 4 connects Southeastern Europe to the Lianyungang and Shanghai ports, passing through Romania – Georgia – Azerbaijan – Kazakhstan – Uzbekistan – Kyrgyzstan before reaching eastern China.
- EATL Road Route 5 connects Southeastern Europe to the Lianyungang and Shanghai ports, starting at the Serbian-Bulgarian border and continuing through Bulgaria, Turkey, Iran (Islamic Republic of), Afghanistan, Uzbekistan and Kyrgyzstan.

Among EATL Rail Routes, Kazakhstan and Kyrgyzstan participate in the West routes - European Union (Hungary, Romania, Bulgaria) through Caucasus and Central Asia to China, passing through Republic of Moldova, Turkey, Georgia, Azerbaijan, Armenia, Turkmenistan, Uzbekistan, Tajikistan, Kyrgyzstan, Kazakhstan and finally reaching China.

**International Road Transport Union**

Both countries are members of the International Road Transport Union (IRU). IRU manages Transports Internationaux Routiers (TIR) under the UN mandate. The Customs Convention on the International Transport of Goods under Cover of TIR Carnets (TIR Convention, 1975) is one of the most successful international United Nations transport conventions. To date, it has 77 Contracting Parties, including the European Union. It covers the whole of Europe and reaches out to North Africa, Middle East and Asia. More than 33,000 operators are authorized to use the TIR system and around 1.5 million TIR transports are carried out per year. It is the easiest, safest and most reliable way to move goods across multiple international borders, saving time and money for transport operators and customs authorities.89

Thus, in August 2020, the first transport under TIR was successfully undertaken from Islamic Republic of Iran to Kyrgyzstan via Kyrgyzstan-Tajikistan-Afghanistan-Islamic Republic of Iran (KTAI) corridor. The new TIR corridor provides the shortest route between Islamic Republic of Iran and Kyrgyzstan, and therefore will facilitate trade by reducing both the time and financial costs of transport. A major port in the Iranian city of Bandar Abbas is the starting point for the new trade corridor, which means that transport operators will also benefit from intermodal TIR transport.90

**Quadrilateral Traffic in Transit Agreement (QTTA)**

Both countries are also parties to the Quadrilateral Traffic in Transit Agreement (QTTA) between China, Kazakhstan, Kyrgyzstan and Pakistan. All parties to the agreement agreed to multimodal transport operations and the transit of goods along mutually agreed routes in their respective countries. The parties also agreed that the cost of transport by different modes of transport, port and other charges will be favourable, and the transit goods of the Contracting Party will be transported on the same conditions as the domestic freight of their country.

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89 IRU. Available at: https://www.iru.org/what-we-do/facilitating-trade-and-transit/tir/what-tir

90 IRU. 2021. Available at: https://www.iru.org/ru/ per centD0 per centA0 per centD0 per centD0 per centB5 per centD1 per cent81 per centD1 per cent83 per centD1 per cent80 per centD1 per cent81 per centD1 per cent83B/ per centD0 per cent9D per centD0 per centBE per centD0 per centB2 per centD0 per centBE per centD1 per cent81 per centD1 per cent82 per centD0 per centB8/pilotnaya-perevozka-mdp-iz-irana-v-kyrgyzstan-s-uspekhom-zavershena
However, despite all efforts at national and international levels, the Agreement does not work effectively due to various reasons.\textsuperscript{91} However, the accession of China to the TIR system created some new opportunities for the fastest possible road transit from China to Pakistani seaports and then further to Middle East and partly Europe.\textsuperscript{92} The effective implementation of the agreement depends on political will and operation of the corridor, especially border crossing points in all four countries with the proper information exchange systems and efficient customs clearance practices. The governments and business communities must try to solve the remaining issues that would make this transit technically possible and economically viable.\textsuperscript{93}

\textit{Trans-Caspian International Transport Route}

The Trans-Caspian Transport Route (TITR) is the most important link in the formation of the Eurasian transport system. It originates in China, runs through Kazakhstan, the Caspian Sea, Azerbaijan, Georgia and follows on to Turkey and the countries of Southern and Eastern Europe through the Black Sea.

The main incentive for its development was the TITR Coordination Committee, formed in 2014, transformed in 2017 into the Association of Legal Entities International Association “Trans-Caspian International Transport Route”. The founders of the Association at that time were the railway and maritime administrations of three countries - Azerbaijan, Georgia and Kazakhstan.

Today, in addition to the founder countries, the TITR Association also includes transport and logistics companies from China, Turkey, Poland, Ukraine and Romania. In 2019, 25.9 thousand containers were transported through TITR, of which 7.4 thousand containers were transported in transit traffic (an increase of 89 per cent compared to 2018 - 3.9 thousand containers). At the same time, most of the goods were transported in the western direction (77 per cent), while the remaining 27 per cent were transported in the eastern direction.

In 2020, 8.1 thousand containers were transported, which is 9 per cent more than the volume of the same period in 2019 (7.4 thousand containers). In 2020, there is also a strong trend towards the west (Figure 15).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{TITR_freight_transport_performance.png}
\caption{TITR freight transport performance}
\end{figure}

Source: Concept for the development of container transport in the TRACECA countries until 2030


\textsuperscript{92} University of Central Asia. 2020. Available at: https://ucentralasia.org/media/4iibszlr/ippapb-kgz-pak-agrifood-eng.pdf

\textsuperscript{93} University of Central Asia. 2020. Available at: https://ucentralasia.org/media/4iibszlr/ippapb-kgz-pak-agrifood-eng.pdf
**TRACECA**

TRACECA is an internationally recognized program aimed at the development of economic, trade and transport links in the regions of the Black Sea basin, the South Caucasus and Central Asia, through actions based on the political will and common aspirations of all participating countries.

In September 1998, at the historic Summit in Baku, 12 TRACECA countries signed the "Basic Multilateral Agreement on International Transport for the Development of the Europe-Caucasus-Asia Corridor" in order to fully realize their geopolitical and economic potential.

Today the international transport corridor TRACECA includes the transport system of 13 countries-participants for the development of the corridor Europe-Caucasus-Asia, namely: Azerbaijan, Armenia, Bulgaria, Georgia, Islamic Republic of Iran, Kazakhstan, Kyrgyzstan, Moldova, Romania, Tajikistan, Turkey, Ukraine and Uzbekistan.

Upon completion of with the assistance of technical assistance projects of the European Union the implementation of the IGC TRACECA Strategy until 2015, the TRACECA countries have embarked on a new stage in the development of the Europe-Caucasus-Asia corridor. Today, the TRACECA Member States are gradually implementing the IGC TRACECA Strategy for 2016-2026.
Conclusions and recommendations

The location of Central Asia is one of the fundamental advantages that can bring considerable economic benefits to Central Asian countries, primarily through the implementation of the transit potential, the use of the special position of Kazakhstan and Kyrgyzstan as a transport bridge between Europe and Asia.

Given that the Central Asian countries are landlocked, integration into the international markets will require stronger bilateral and multilateral cooperation in the field of transport and transit to bring benefits to whole subregion in general and their national economies in particular.

In addition, there is a room for tapping into the potential of the Eurasian Economic Union. A single EAEU transport space is being established covering the territories of the Russian Federation, Belarus and Kazakhstan and Kyrgyzstan. Road transport companies of the Member States of the Union are able to freely move goods and provide road transport services on the territory of the Union thus providing opportunities for Kyrgyzstani carriers to move across EAEU borders seamlessly.

To receive real benefits from the international and inter-regional transport and transit, coordinated and long-term work is required to expand the networks of roads, railways, and air routes, build logistics and transport hubs or dry ports in key locations and subsequently create efficient and improved transport corridors.

Based on the existing transport structure with most of the freight traffic is transported on roads, the development of roads and roadside infrastructure is vital to not only satisfy internal demand but have access to international markets. The main problems of the existing transport infrastructure are its low quality and therefore low traffic capacity. The roadside service facilities are not developed, most of them do not meet the minimum requirements for the quality of service and are not able to fully provide them with both international transit traffic and domestic demand.

COVID-19 has not only changed the lives of people, but also made changes to the global and regional supply chains. The transport of passengers and cargo has suffered significantly, but freight transport is gradually recovering. The measures applied by the Governments of Kazakhstan and Kyrgyzstan to contain the spread of the coronavirus increased the delivery time of goods and the transport cost. In particular, the introduced border restrictions and additional control measures made it harder to ensure unhindered transportation of freight, which negatively affected the economic situation of the countries. 2020 and 2021 were characterized by a decrease of the total volume of transport of goods, freight turnover, and freight revenue as compared to 2019 due to the pandemic.

In rail transport, the elimination of customs inspection of container transit trains at border stations, subsidies to rail carriers showed a good trend for the development of containerization in the country, including increased freight transit on the route China-Europe-China. The railway sector experienced progress in 2020 and 2021 in comparison with pre-pandemic years. In road transport, the provision of a 24/7 freight movement regime at BCPs, limiting border crossing only to certain BCPs, automatic information exchanges on transit have created more acceptable conditions for road freight transport. At the same time, given the difficult situation on the border-crossing points for the movement of freight transport, the electronic and digital solutions helped to eliminate the congestion of freight vehicles and people in the border area.
At the same time, we can say that the governments were not fully ready for such disruptive event at the beginning of the pandemic when and restrictions for cross-border freight traffic were imposed. The clarity of the rules and the availability of documents during the movement through BCPs made process lengthy. Nevertheless, effective work with representatives of the association and businesses, the creation of working groups, quick coordination and finding ways to solve the problems, etc. gave a positive effect for the development of freight transport both to/from Kazakhstan and within the country.

Even though COVID-19 hit hard on the economies of countries, it showed further possible ways for the development of the transport industry. Stronger cooperation is needed between Kazakhstan and Kyrgyzstan, as well as with the neighbors, especially China. Development of transport infrastructure and facilitation, stronger integration of transport systems into world transport system, effective usage of transit potential and more sustainable modal split, development of container transport.

To overcome the consequences of pandemics of coronavirus infections and the development of transport connectivity, including the transport Euro-Asian links, the countries are recommended the following:

1. Strengthen bilateral, multilateral and regional cooperation in transport and transit, including through various platforms like EAEU, SCO, UN, based on relevant transport-related legal instruments.

2. Reinforce the relationship of both countries and their neighbors both in economic and trade terms, which in the future will give an even greater effect of the turnover of goods and services.

3. Intensify improvement of transit routes by upgrading the transport infrastructure, both road and railway, establishing transport and logistic hubs and dry ports to achieve international, integrated, intermodal transport and logistics system;

4. To improve operational transport, bottlenecks in transit routes must be eliminated and the efficiency of border-crossing points enhanced, including through the introduction of modern methods and IT systems for control, monitoring and management of freight flows and infrastructure.

5. Accelerate digitalization and automation in transport and logistics. Today, it is necessary to use new technologies in transport to achieve good long-term results. The introduction of such technologies as e-commerce, transition to paperless workflow, the use of ICT solutions, the introduction of green corridors and electronic queues at checkpoints, etc. can speed up the delivery process, reduce the time, including providing the ability to track the freight and vehicle.

6. Ensure road safety on the domestic and international road network by installing special protective equipment, in accordance with international conventions and ESCAP Regional Action Programme on road safety, signs and signals etc.

7. It is needed to accelerate the development of inland dry ports and container terminals/hubs. The strategically located inland dry ports will provide useful logistics support both for the international transport of goods but also to markets and production centers (both industrial and agricultural) in close vicinity. The efficiency of dry ports has been proven both regionally and globally in terms of reducing logistics costs and streamlining the flow of freight. In addition, modern refrigerated warehouses will allow farmers to sell their products during the off-peak season at a better price.
8. In addition, the availability of modern storage facilities will allow to consolidate goods and ensure their shipment. With the launch of permanent container trains in the direction of Asia-Europe-Asia, it is also possible to use them to send goods to different countries, which will be processed in logistics centers.

9. In railway transport, it is necessary to modernize transit corridors through the construction of new lines and missing links, especially in places of congestion and overloading of trains, as well as renovate border stations. Also, considering the trend in container transport traffic around the world, it is necessary to advance container traffic in the Europe-Asia route along international railway transport corridors, including towards the Caspian, Black Seas and the Persian Gulf.

10. Another important issue is to increase the attractiveness and the competitiveness of railway transport as a sustainable and most efficient transport and transit mode. Taking into account that the leading role in this logistics chain in terms of cost and delivery time is the railway component, the efficiency and attractiveness of the railway network, as well as train speeds should be increased through both infrastructure building to eliminate missing links and connect two separate networks in the North and South of Kyrgyzstan, rehabilitation and better maintenance of track, streamlining border-crossing procedures and other facilitation measures.

11. Another challenge is to address the break of gauge between Central Asian countries and China. For historical reasons, technical standards and track gauges are compatible between Kazakhstan, Kyrgyzstan, but incompatible with the railway network of the neighboring China. Therefore, efficient transshipment facilities are needed to facilitate the growing international flow of goods to and from the China through Kyrgyzstan.

12. Own resources of countries for construction and maintenance of transport infrastructure are insufficient. Financing these projects can only be done through external sources. However, borrowing levels from the international financial organizations are also limited so are private sector investment opportunities. Under these conditions one of the possible instruments of attracting investment is the public-private partnership (PPP).
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References


2) Kazakhstan Land Transport Infrastructure Resilience Study Report, UN 2021

3) Analysis of the current state of the railway network of Kazakhstan https://cyberleninka.ru/article/n/analiz-sovremennogo-sostoyaniya-zheleznodorozhnoy-seti-kazahstana


5) https://www.stat.gov.kz


7) https://chinalogist.ru/news/zapolnyaemost-konteynerov-na-marshrute-kitay-evropa-kitay-stala-rekordnoy-21127/?fbclid=IwAR0WgsXpau2voIkP6wyKnufYhbpn4aGuXMFE4TkY37V357zCc4fgkQmoNxY


10) https://www.facebook.com/dinmuhamed.absattarov/posts/4159296577446718

11) Agency for Automobile, Water Transport and Weight and Dimension Control. Available at: http://aat.gov.kg/regulations/per_centD1_per_cent8F1/


16) CASA-1000. Available at: https://casa-1000.kg/countries

17) Economist.kg. 2021. ‘Only 22 per cent of roads in Kyrgyzstan are in good condition - Ministry of Transport’. Available at: https://economist.kg/novosti/2021/06/28/only-22-dorog-kyrgyzstana-nahodyatsya-v-horoshem-sostoyanii-mintrans/


20) Eurasian Economic Commission. 2020. Monitoring of the measures taken by the EAEU member states aimed at overcoming the negative consequences of the spread of coronavirus


vCI/CIDD4_analysis_DCI_2021.pdf

26) Eurasian Economic Commission. Available at: http://www.eurasiancommission.org/ru/covid-19/Pages/measures.aspx

27) IA ‘Akipress’. 2021. ‘Day 29 September: The electricity has run out’. Available at: https://kg.akipress.org/news:1733433/?from=kgnews&place=search&sth=ad027f268ab6a64af50cd593eb76061e

28) IA ‘Azattyk’. 2021. ‘Not a kilometer in all the years of independence ... How Kyrgyzstan railways are dying’. Available at: https://rus.azattyk.org/a/31270268.html

29) IA ‘Azattyk’. 2021. ‘Kyrgyzstan closes border with Tajikistan’. Available at: https://rus.azattyk.org/a/31274364.html


33) IA ‘Tazabek’. 2021. ‘Foreign trade - 148 states with whom Kyrgyzstan trades (export + import)’. Available at: https://www.tazabek.kg/news:1683217

34) IA ‘Tazabek’. 2021. ‘Ministry of Transport proposed to approve the Procedure for issuing Kyrgyzstan permits to foreign carriers’. Available at: https://www.tazabek.kg/news:1722241/?f=cp

35) IA ‘Tazabek’. 2021. ‘It is necessary to get away from paper document flow to intensify transit

58
traffic by rail, - Minister of the EEC’. Available at: www.tazabek.kg/news:1724931?f=cp

37) IA ‘Tazabek’. 2021. ‘We lack 2.9 billion kWh of electricity, - the head of the National Energy Holding calls on to save electricity’. Available at: www.tazabek.kg/news:1733314?f=cp

38) IA ‘Tazabek’. 2021. ‘Only new roads will be paid, - Deputy Head of the Ministry of Transport N. Kayynbayev’. Available at: https://www.tazabek.kg/news:1713277

39) IA ‘Vechnernii Bishkek’. 2016. ‘The Ministry of Transport has launched the mobile application "Zholdor.Kg" in a pilot mode’. Available at: https://www.vb.kg/doc/351781_mintransporta_zapystilo_v_pilotnom_rejime_mobilnoe_prio

40) IA ‘Vechernii Bishkek’. 2016. ‘The Ministry of Transport has launched the mobile application "Zholdor.Kg" in a pilot mode’. Available at: https://www.vb.kg/doc/351781_mintransporta_zapystilo_v_pilotnom_rejime_mobilnoe_prio

41) IA ‘24.kg’. 2021. ‘Disagreements on the use of navigation seals in the EAEU countries have been eliminated’. Available at: https://24.kg/ekonomika/208110_raznoglasiya_oprimenenii_navigatsionnyih_plomb_vstra

42) IA ‘24.kg’. 2021. ‘Kyrgyzstan plans to electrify Lugovaya-Balykchy railway’. Available at: https://24.kg/obschestvo/207919_vkyirgyizstane_planiruyut_elektrifitsirovat_jeleznuyu_do

43) IA ‘24.kg’. 2021. ‘For the transit of goods through Kazakhstan, carriers from Kyrgyzstan pay $5 thousand’. Available at: https://24.kg/vlast/197128_zatranzit_gruzov_cherez_kazahstan_perevozchiki_izkyirgyizstana_platyat_5tyisyach/

44) IA “Azattyk”, 2021. ‘Is Kyrgyzstan “probing” the Taliban government?’ Available at: https://rus.azat


46) IRU. 2021. Available at: https://www.iru.org/ru/ per centD0 per centA0 per centD0 per centB5 per centD1 per cent81 per centD1 per cent83 per centD1 per cent80 per centD1 per cent81 per centD1 per cent88B/ per centD0 per cent9D per centD0 per centBE per centD0 per centB2 per centD0 per centBE per centD1 per cent81 per centD1 per cent82 per centD0 per centB8/pilotnaya-perevozka-mdp-iz-irana-v-kyrgyzstan-s-uspekhom

47) IRU. Available at: https://www.iru.org/what-we-do/facilitating-trade-and-transit/tir/what-tir


61) Official Website of the President of Kyrgyzstan. Available at: http://president.kg/ru/sobytiya/12774_utverzhdena_nacionalnaya_strategiya_razvitiya_kirgizskoy_republiki_na_2018_2040_godi


63) The World Bank. Available at: https://lpi.worldbank.org/


68) UNESCAP. 2017. Development of Strategies to Promote and Facilitate the Implementation of the Asian Highway Design Standards. Available at: https://www.unescap.org/sites/default/d8files/5-Asian_per cent20Highway_per cent20strategy_per cent20development.pdf


70) UNESCAP. 2020. Trade facilitation in times of pandemic: practices from North and Central Asia. Available at: https://www.unescap.org/sites/default/files/AWP_per_cent20197_per cent20Yelena_per cent20Vassilevskaya.pdf

71) UNESCAP. 2021. Available at: https://www.untfsurvey.org/economy?id=KGZ
