

# ТРАНСФОРМАЦИЯ ТРАНСПОРТНО-ЛОГИСТИЧЕСКОГО РЫНКА: ПЕРСПЕКТИВЫ РОССИЙСКО-КИТАЙСКОЙ ИНТЕГРАЦИИ В УСЛОВИЯХ САНКЦИОННЫХ ОГРАНИЧЕНИЙ

Каролина Александровна Сикиринская<sup>а</sup>

DOI: 10.22394/2070-8378-2023-25-3-91-103

<sup>а</sup> Российская академия народного хозяйства и государственной службы при Президенте Российской Федерации

**Аннотация:** Статья посвящена разработке и обоснованию предложений по углублению интеграционных процессов транспортно-логистического рынка России и Китая. Развитие транспортно-логистической системы в рамках российско-китайского приграничного сотрудничества является важным направлением не только с точки зрения экономических перспектив, но и с точки зрения политического сотрудничества. Автором проанализированы текущие тенденции развития мирового рынка транспортно-логистических услуг с акцентом на приграничные регионы России и Китая, определены ключевые проблемы и возможные направления их решения для усиления последующей интеграции между приграничными регионами. Дана оценка эффективности развития транспортной инфраструктуры приграничных регионов России, а также перспектив интеграции России в систему мирохозяйственных связей в Азиатско-Тихоокеанском регионе (АТР).

**Ключевые слова:** транспортно-логистический рынок, транспорт, логистика, приграничное сотрудничество, интеграционные процессы, санкции, российско-китайские отношения, современная экономика России, развитие Азиатско-Тихоокеанского рынка, азиатский вектор сотрудничества, Китай

JEL codes: R12, R41, L92, L98, O18, N75

**Дата поступления статьи в редакцию:** 20 июня 2023 года.

## TRANSPORT AND LOGISTICS MARKET TRANSFORMATION: PROSPECTS FOR RUSSIAN-CHINESE INTEGRATION UNDER SANCTIONS RESTRICTIONS

RESEARCH ARTICLE

Karolina Alexandrovna Sikirinskaya<sup>а</sup>

<sup>а</sup> Russian Presidential Academy of National Economy and Public Administration

**Abstract:** Developing the transport and logistics system in the direction of Russian-Chinese cross-border cooperation is an important direction not only from the point of view of economic prospects, but also from the point of view of political cooperation. The article is devoted to the development and substantiation of proposals for deepening the integration processes of the transport and logistics market in Russia and China. The trends in developing the world market of transport and logistics services are analyzed with an emphasis on the border regions of Russia and China. The author identified the key problems and possible directions for their solution to deepen the additional integration between the border regions and assessed the effectiveness of developing the transport infrastructure of the border regions of Russia, as well as the prospects for integrating Russia into the system of world economic relations in the Asia-Pacific Region (APR).

**Keywords:** transport and logistics market, transport, logistics, cross-border cooperation, integration processes, sanctions, Russian-Chinese relations, the modern economy of Russia, development of the Asia-Pacific market, Asian cooperation vector, China

JEL codes: R12, R41, L92, L98, O18, N75

**Received:** June 20, 2023.

**Международный опыт****Introduction**

In the modern world, the topic of international cooperation between countries in the new conditions of tough political, economic, and military confrontation acquires a special meaning. The Russian Federation, finding itself in a state of confrontation with the United States, is increasingly turning its interests to its Asian neighbors, primarily to China, the most powerful state in Asia region. The trends of Russia's active integration into the Asian region are especially acute on the world's development agenda.

This issue is of relevance in the dramatically changed geopolitical contexts associated with the announcement of economic sanctions and international legal restrictions by the United States and satellite states. The introduction of unprecedented sanction regimes in 2022 disrupted the usual system of transport and logistics delivery chains and significantly hampered the transportation process for logistics operators. In fact, the supply of goods along the old routes turned out to be blocked, which caused a tendency to actively search for substitutes, as well as developing new promising directions of export and import flows to meet the needs of the Russian national economy.

According to the most pessimistic forecasts, it can be assumed that in the event of a complete destabilization of partnerships with countries that commit unfriendly actions against the Russian Federation, the turn towards the Asia-Pacific region will be quite sharp and unambiguous. The deepening of cooperation will take place along several vectors at once: mutual integration (Russia–China) and Russia–EAEU–China. In the case of a negative scenario and a prolonged unstable situation in the world market, capacity building under the two models will be forced to occur faster than expected in the previously adopted strategic concepts of the Russian Federation. Thus, the events in Ukraine will become a kind of trigger for a complete change in the global geopolitical and geo-economic map of the world, and will also affect the deepening of partnerships between Russia and China.

One of the essential directions in implementing mutually beneficial interests between Russia and China is transport and logistics cooperation. Already this year, we are witnessing global changes in the geo-economic map of transport corridors and the logistics of commodity flows.

The transport and logistics industries are of crucial importance in building global economic relations with external trading agents in the world market. Interruptions in the operation of at least one link in the logistics chain cause a sharp change in world commodity flows and reduce the commercial effect of the foreign trade transactions implementation. At the same time, transport and logistics are considered as two separate components,

which give a synergistic effect and are integrated parts into the modern world economy processes of globalization and internationalization. Transport infrastructure is an important component of the life support of all economic sectors at the micro, macro, and meso levels of the state, providing the security and the state integrity. To support such activities, there is logistics, as a link in international deliveries by optimizing the material and intangible flows that were «produced» by transport.

**Materials and methods**

The analysis is based on the methods of socio-economic processes statistical research; comparative analysis of the economic processes' dynamics; historical approaches; dialectical method of optimal search for development of the transport and logistics market solutions in the regions; as well as forecasting methods that make it possible to give short-term and long-term forecasts for developing the transport and logistics market in Russia and China. Historical, economic, and social indicators were combined to obtain the general logical method of data synthesis, which was widely used in the work. Based on these indicators, the author made a forecast on the possibility of an effective turn of the Russian market of transport and logistics activities to Asia, and also analyzed the problems which the domestic market may face with a closer merging of the Russian and Chinese markets. Among the theoretical methods, the author used historical methods to conduct a comprehensive analysis of developing Russian-Chinese trade relations, especially in the railway transport market. A classification method helped us to systematize and structure the received heterogeneous information about the object of study. The empirical method in this work is applied to create models of new routes between Russia and China, level transit zones and additional hub transport systems, as well as describe the main economic opportunities and technological characteristics that made it possible to implement a lot of transport projects in the Russian-Chinese market of transport and logistics services.

**Results and Discussion****Transport and logistics complex of the People's Republic of China: modern achievements**

There are many definitions of transport and logistics [Afanasiev, 1965; Prokofieva, Lopatkin, 2003; Vardomsky, 2015], but in this article, we will consider two components as a set – a transport-logistics complex. The transport-logistics complex is a set of transport infrastructure facilities and business entities which activities aim at moving, accompanying, and marketing material and intangible flows that guarantee the viability of sectors and branches of national economies with their possible subsequent integration into the system of world economic relations.

The formation of the Russian and Chinese market for transport and logistics services took place in different ways and underwent several transformations. The phenomenon of the rapid China's transport infrastructure development is a unique example of competent policy and comprehensive economic decisions of the state. It gave impetus to the rapid development of one of the fundamental sectors of the world economic system [Nosova, 2013].

The transport industry development has had a huge impact on most sectors of the Chinese economy. China understood the importance of this factor in the early 1990s. The reserves for the growth of rail traffic were completely exhausted, and the task of the government was aimed at the accelerated development of interconnections between the regions by land transport. The lack of centralized planning and uniform distribution of the infrastructure components led to the formation of disproportions. Therefore, in the period of the planned economy, the main task was to increase the indicators of the volume of transportation of goods over the annual increase in the gross industrial product. By the middle of the 7th five-year plan, this indicator was achieved [Sazonov, Zaklyazminskaya, Wu Zi, Chen Xiao, 2017]. As a result, the volume of cargo indicators began to exceed the transport and logistics capacity for transportation. Throughput in many directions was also limited. Such an imbalance arose due to an absolutely unprepared for such volumes and an undeveloped transport network. China had only 3 % of the world's transport network with such a huge territory – it's only 10 km of roads per 100 sq. km of territory [Avdokushin, 2019; Andronova, Sokolan, 2019].

The irrational use of the constructed railway networks, mainly for defense purposes, also led to an uneven infrastructure and freight flows distribution (to the west of the Beijing-Guangzhou railway). As a result, about 85 % of newly built highways fell on these routes. There was a gap between the western and northeastern regions of China, where the railway service worked with overvoltage. This has led to an increase in the urban population in areas with better infrastructure. Additionally, the tariff system in the country did not consider the difference in cost on different route lines. Analyzing the transport of Chinese railway complex infrastructure until the mid-90s, we can say that it did not have rational support and, as a result, it worked inefficiently [Abramov, 2018].

Due to the influx of investments through four channels: *state, credit, equity financing and through public-private partnerships*, large-scale construction of railways in China began. China has become an innovator in the construction of railway networks as undersea highways since 2015 and has begun construction of the 269 km high-speed rail line (HSR) Hangzhou – Taizhou [Galeza, Chan, 2021]. Today China's high-speed rail net-

work occupies a leading position in the world and has the largest length – over 22 thousand km, which is 65 % of the global length of high-speed highways by 2020 [Vinogradov, 2020].

The total length of high-speed lines should reach 38,000 km by 2025. Such colossal results were achieved due to the improvement of the logistics component quality on the railway network and the constant inflow of investments from the abovementioned four sources, public and private. The multiplier effect of the work of the railway industry in China is associated not only with a competent investment policy, but also with the effect of capital productivity [Volgina, Pengfei, 2020]. Thus, the number of people employed in the railway industry of China exceeds 2.2 million people, and the constant improvement of the technological component creates a demand for highly skilled labor force. By 2045, the Chinese leadership is faced with the task of making China a world industrial power and developing the railway industry can become the main economic driver [Sazonov, Syao, Zakliazminskaya, 2017].

### **A short history of the trade relations development between China and Russia (cross-border cooperation)**

Russian-Chinese relations have a rich and complex history. Trade relations have roots in the heyday of overland trade between Asia and Europe along the Great Silk Road in the 2nd century BC. Thus, the trade relationship between the two countries has a rich history. Mutual integration began with the first Russian embassy in China in 1618, which marked the development of Russian-Chinese trade relations. At the same time, the first overland route was opened from Europe to China through Siberia and Mongolia. Later, in 1689, the Nerchinsk Treaty was signed – the first interstate document that established the border and procedure for trade between the two countries. Several important treaties followed Nerchinsk: the Kyakhta and Burinsky treaties in 1727<sup>1</sup>.

In June 1858, the strategically important Treaty of Tianjin was signed between E.V. Putyatin and the offi-

1 The Nerchinsk Peace Treaty between the Tsardom of Russia and the Qing Empire, which for the first-time determined relations and the border between the two states. Concluded on September 6, 1689, near Nerchinsk. It was the result of the "Albazin War" – the siege by the Manchu army of the Russian fortress Albazin in 1685 and 1686.

Kyakhta Treaty on delimitation and trade between the Russian Empire and the Qing Empire. Prepared during the period of the embassy to China during work on the Burinsky Treaty and signed on October 21, 1727 by the Russian ambassador, S.L. Raguzinsky – Vladislavich, and representatives of the government of the Qing Empire Chabina, Tegut, and Tulishen. Confirmed the terms of the Nerchinsk and Burinsky treaties.

## Международный опыт

cial representatives of the Qing dynasty, Gui Liang and Huashan<sup>2</sup>. According to this document, Russia received the right to trade both by land and by sea. In the 19th century, since 1864, a Russian diplomatic mission has begun to operate in Beijing. At this time, Emperor Alexander III and Finance Minister Sergei Witte were ardent supporters of the policy of rapprochement between Russia and China, and the active promotion of Russian policy in the Far East. Alexander III concluded an agreement on settling the border issues (1881), which resulted in the Kashgar province (western China, Xinjiang) being transferred to China. This decision deepened the policy of Russian-Chinese cooperation. In 1895 the first Russian-Chinese bank opens in St. Petersburg. In 1896, an agreement was signed for the construction of the Chinese Eastern Railway. The agreement also regulates the construction of the railway line «Chita (Russia) – Harbin (China) – Vladivostok (Russia)». The importance of this railroad is difficult to exaggerate [Maslov, 2020].

The 20th century was full of cataclysms and changes in relations between China and Russia, however, the transport and logistics complex, which required many years of serious investment, developed dynamically.

In the 1960s the USSR joined the transcontinental transportation between Europe and Asia along the Trans-Siberian Railway with China's support. From the phase of «friendly relations» in 1992, Russian-Chinese cooperation has transformed into a «strategic partnership» in 1996.

In 2001, Russia and China signed the key Treaty of Good Neighborliness and Friendly Cooperation, which gave a modern dynamic impetus to developing bilateral contacts, primarily in the field of trade, transport infrastructure, and logistics.

Currently, the solid foundation of the contractual base, as well as the accumulated experience, make it possible to more intensively develop social and economic cooperation between Russia and China, especially in the border area. The countries have an extended shared border<sup>3</sup>, almost 70 out of the 85 subjects of Russia in-

teract with the provinces of China. Cross-border cooperation is based on bilateral interests: Russia implements socio-economic programs for developing Zabaikalsk and the Far East, and China revives its border industrial regions [Portyakov, 2002].

On the eve of the 20th anniversary of the Treaty on Good Neighborliness, Treaty and Source between China and Russia, as well as the unexpected official visit of Xi Jinping, the General Communist Party of China to Russia (as part of the first international visit after his re-election as president at the National People's Congress 2023), mutual articles were published in the media of the heads of state, which confirmed the intentions of the parties for friendship and long-term development of cooperation. «The successful holding of 8 thematic years brings friendship and cooperation to new heights» [Chinese President Xi Jinping, 2023].

In turn, Vladimir Putin noted the following: «We met Comrade Xi Jinping in March 2010, when he came to Moscow at the head representative of Chinese delegation. Our first meeting was very business-like and at the same time sincere and friendly. His style of communication personally impresses me deeply. I know that China attaches great importance to friendship and human relationships. It is no coincidence that the sage Confucius said: «Isn't it a joy when a friend comes from afar!» We in Russia also highly appreciate these qualities. For us, a true friend is like a brother. In this, our peoples are very similar» [Vladimir Putin's article in the People's Daily, 2023].

Thus, we can summarize that China and Russia adhere to the concept of eternal friendship and cooperation. Bilateral relations are based on the principles of non-alignment, non-confrontation, and non-direction against third parties. The two countries firmly support each other in following the path of growth according to national realities, in implementing development and revival.

### Cross-border Russian-Chinese cooperation

Historically, development of these regions has been a key base for conjugating various Russian-Chinese initiatives, primarily cross-border cooperation. The accumulated historical experience of Russian-Chinese cooperation predetermined the interaction between the two countries and the creation of a single transport and logistics network for moving a wide range of goods and services. There is a constant demand for certain types of goods, such as consumer goods, agricultural products, and natural resources. In addition to import-export trade and economic relations, cross-border cooperation is one of the factors in developing small and medium-sized businesses. Of the 15 existing border economic cooperation zones in China, four are oriented towards Russia: Manchuria, Suifenhe, Hongchun, Heihe [Zhang, Hoekstra, 2020].

2 Gui-liang and his state, head of the inspection chamber, divisional chief of the heavy army of the blue banner with a border, high dignitary Huashan. The aforementioned plenipotentiaries, based on the authority given to them by their governments, agreed and decided on the following articles: Article 1. This treatise confirms the peace and friendship that have existed between the emperors of all Russia and Bogdokhan Daiqing and their subjects. Treaty of Tientsin 1858.

3 The current length is 4209.3 km, including 650.3 km of land, 3489.0 km of rivers, and 70.0 km of lakes. It breaks up into two sections: a long eastern and a short western (about 50 km). Between them lies Mongolia, bordered by Russia to the north and China to the south. The Russian-Chinese border has both river (passes along the fairway of the Argun, Amur, and Ussuri rivers) and land sections.

Mutual trade between Russia and China is growing rapidly. In 2021, trade indicators reached a maximum compared to 2020 and amounted to \$146.88 billion, which is 35.8 % more than the initial year<sup>4</sup>. China is Russia's largest partner in both exports and imports. According to the Federal Customs Service of the Russian Federation, China's share in foreign trade turnover amounted to 18 % in 2021, which is the leading indicator among other partners. According to the General Administration of Customs of China, exports to Russia in 2021 increased by 33.8 %, to \$67.56 billion, and imports to China by 37.5 %, which amounted to \$79.32 billion. In 2022, trade between Russia and China increased by 29.3 % in annual terms. Citing data from the General Administration of Customs of the People's Republic of China, news agencies reported that at the end of the year, the indicator amounted to a record \$190.27 billion.

Imports from Russia to China amounted to \$114.15 billion, which is 43.4 % more than in 2021. Exports from China to Russia grew by 12.8 % to \$76.12. Russia's positive balance almost tripled to \$38 billion [Evgeniy Khvostik, 2023].

### Export-import operations of Russia and China today

Let's take a closer look at the commodity structure between Russia and China in 2021 (see Table 1 and 2).

As can be seen from the dynamics, the indicators are steadily increasing. The main increase in total trade turnover was provided by oil: in May, the Russian Federation came out on top regarding its supplies to the PRC. Large discounts for Chinese buyers explain such dynamics. State-owned companies Sinopec and Zhenhua Oil purchased oil at a discount.

The following product groups accounted for the largest increase in Russian exports to China in 2021 compared to the base year 2020 (Figure 1).

At the same time, a stunning growth is observed in fuel and mineral products, oil, and products of their distillation; bituminous substances – an increase of \$16,664,536,781.

From the presented data, Russian exports to China are of a pronounced raw material nature, while imports are dominated by high value-added products. The largest growth in imports was recorded for the following groups of goods: nuclear reactors, boilers, equipment and mechanical devices; electrical machines and equipment, their parts; sound recording and reproducing equipment, equipment for recording and reproducing television images and sound; means of ground trans-

**Table 1. The volume of foreign trade of the Russian Federation with China, billion dollars**

Indicator	2017	2018	2019	2020	2021
Import	48,0	52,2	54,1	54,9	72,7
Export	38,9	56,1	56,8	49,1	68,0
Trade turnover	86,9	108,3	110,9	104,0	140,7

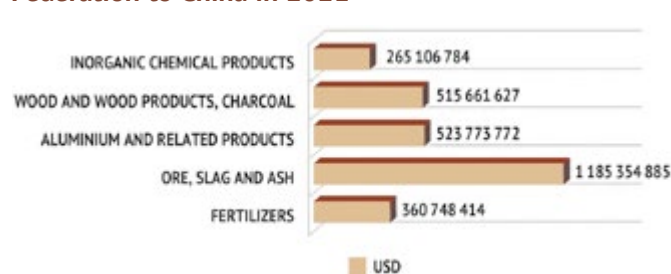
Source: Review of the foreign trade of the Russian Federation with China for August 10, 22, prepared by the Tinkoff journal (<https://journal.tinkoff.ru/china-partnership/>) based on official statistic of the Federal Customs Service (<https://customs.gov.ru/folder/511>)

**Table 2. Structure of Russian-Chinese commodity trade in 2021**

Product	% of total Russian exports to China	% in 2020
Mineral products	74.37	65.45
Wood and pulp and paper products	7.62	8.75
Metals and products from them	5.74	6.07
Food products and agricultural raw materials	4.98	8.07
Products of the chemical industry	3.69	3.83
Machinery, equipment and vehicles	3.44	4.60

Source: Review of the foreign trade of the Russian Federation with China for February 12, 2022, prepared by the Russian Foreign Trade website based on data from the Federal Customs Service of Russia (<https://russian-trade.com/reports-and-reviews/2022-02/torgovlya-mezhdu-rossiy-i-kitaem-v-2021-g/>) and Official website of the Federal Customs Service (<https://customs.gov.ru/folder/511>)

**Figure 1. Commodity export structure of the Russian Federation to China in 2021**



Source: Review of the foreign trade of the Russian Federation with China for February 12, 2022, prepared by the Russian Foreign Trade website based on data from the Federal Customs Service of Russia (<https://russian-trade.com/reports-and-reviews/2022-02/torgovlya-mezhdu-rossiy-i-kitaem-v-2021-g/>)

<sup>4</sup> Results of foreign trade with the main countries. Official website of the Federal Customs Service. <https://customs.gov.ru/folder/511>

## Международный опыт

**Table 3. Export structure of Russia to China in 2021**

Product	% of total Russian exports to China per year	% in 2020
Machinery, equipment, and vehicles	60.77	59.03
Products of the chemical industry	11.03	10.66
Textiles and footwear	9.19	11.32
Metals and products from them	7.44	7.09
Food products and agricultural raw materials	1.99	2.53

Source: Review of the foreign trade of the Russian Federation with China for February 12, 2022, prepared by the Russian Foreign Trade website based on data from the Federal Customs Service of Russia (<https://russian-trade.com/reports-and-reviews/2022-02/torgovlya-mezhdu-rossiye-i-kitaem-v-2021-g/>)

**Table 4. The main indicators of the trade turnover of the Far Eastern and Siberian Federal Districts in 2019–2021 by country**

Indicator for the period March, 2019 – March, 2021	Far Eastern Federal District	Siberian Federal District
Trade turnover	\$71.1 billion	\$88.2 billion
Main turnover	«Mineral products» (47 %) «Jewels» (11 %)	«Mineral products» (37 %) «Metals and products from them» (23 %)
In the structure of trade turnover by countries	China ranks first (32 %), South Korea ranks second (24 %)	In first place is China (21 %), in second place is the Netherlands (8 %)
Export	\$53.9 billion	\$68.4 billion
Mainly exported	«Mineral products» (60 %), «Jewellery» (14 %)	«Mineral products» (47 %), «Metals and products from them» (27 %)
In the structure of exports by countries	In first place is South Korea (31 %), in second place is China (26 %)	In first place is China (21 %), in second place is the Netherlands (10 %)
Import	\$17.2 billion	\$19.8 billion
Mostly imported	«Machinery, Equipment and Apparatus» (36 %), «Transport» (17 %)	«Machinery, Equipment and Apparatus» (23 %), «Chemical Industry Products» (22 %)
In the structure of imports by countries	China ranks first (48 %), Japan ranks second (14 %)	In first place is China (22 %), in second place is the United States (11 %)

Source: compiled by the authors based on data from the websites of the Governments of the indicated regions. Official website of the Plenipotentiary Representative of the President of Russia in the Siberian Federal District and the Far Eastern Federal District (<http://www.dfo.gov.ru/district/>)

port; plastics; furniture; bedding, mattresses; prefabricated building structures; shoes, leggings and similar articles; organic chemical compounds [Volgina, Liu Pengfei, 2020].

Over the past few years, cooperation between China and the Russian Far East has been actively developing in the field of energy, sea routes, industry, agriculture, forestry, and the digital economy. Already now, governments of both countries are developing projects to expand the infrastructure between the two states, which will contribute to the logistics development and the transport infrastructure expansion. Countries are also increasing mutual settlements in national currencies. So, in 2021, 25 % of mutual settlements on foreign trade operations were made in rubles and yuan. By the end of 2022 this share will increase due to the agreement reached between the countries.

In 2022, due to joint efforts, trade turnover amounted to a record \$190 billion and increased by 116 % compared to 10 previous years. Interaction in such new industries as scientific and technological innovation and cross-border e-commerce maintains high dynamics. Interregional cooperation is rapidly gaining momentum. All this not only brings real benefits to ordinary people, but also gives an inexhaustible impetus to developing both countries [Chinese President Xi Jinping, 2023].

Considering the direct communication between Russia and China, it is important to note the main border areas. Due to the geographical location of the Russia-China border, China's Heilongjiang Province is adjacent to Primorsky and Khabarovsk Regions, the Amur Region, and the Jewish Autonomous Region. Primorsky Krai borders on the territory of the Chinese province of Jilin, and the territory of the Trans-Baikal Territory is adjacent to the territory of the Autonomous Region – Inner Mongolia, where 50 % of the shares of the Mongolian Railway belong to the Russian side since the time of the Kyakhta Treaty between China, Russia, and Mongolia [Luzyanin, 2016].

Further development of cross-border cooperation will depend on the socio-economic development of Russia and Far Eastern regions development, which will undoubtedly require an efficient transport system [Made in China 2025]. Transport communications unite the Far East and the Baikal region with other country regions, which is a necessary condition for the territorial integrity and economic space unity of Russia. The most important Euro-Asian transport corridors pass through this territory – the Trans-Siberian Railway, Primorye-1, Primorye-2, the Northern Sea Route, as well as other transport communications linking Russia with the countries of the Asia-Pacific region.

Compared to other territories of Russia, the transport infrastructure of the Far East and the Baikal re-

gion is poorly developed. Thus, the density of railways in this territory is 3.6 times lower than the average for Russia, and there are no railways in the Chukotka Autonomous Okrug, Kamchatka Territory, and Magadan Region. The main transport arteries of the Far East and the Baikal region are the Trans-Siberian and Baikal-Amur Mainlines. These transport hubs require strengthening, since after 2010 up to 90 percent of their routes work with a critical load level; primarily on the port's destinations, large industrial areas, and new deposits.

The rapid trade recovery between the Russian Federation and China indicates the sustainability of trade and economic ties between the two countries. In 2024, the volume of trade between the Russian Federation and China is expected to increase by more than 37 % to more than \$200 billion, followed by its growth by 2026–2027 up to 280 billion [Calculation of FANU «Vostokgosplan» according to the data of the General Administration of Customs of the People's Republic of China, 2022]. Thus, according to the Federal Statistics Service of Russia, China has become the main economic partner. The rest of the increase is in the regions: India, United Arab Emirates, Turkey, South Korea, Syria, Nicaragua, Brazil, and Israel.

### **Prospects for developing the transport and logistics complex in Russia in the context of new Chinese initiatives**

As already noted, to implement the Chinese plan, developing the Europe–APR–Europe directions is of greater interest. Such project is the Economic Belt of the Silk Road (SREB). This program focuses on creating a network of its own railway corridors along the route of the Asia-Pacific countries and European countries. Access to regions with high transit potential becomes: firstly, a link between European and Asian markets; secondly, a source for the additional exploitation of natural resources at preferential prices; and thirdly, one of the instruments of regional security and a geostrategic factor for expanding the Chinese employment market. The main task is to connect the Xinjiang Uygur region with Western Europe [Belova, Egorycheva, 2020].

To further develop the railway network, China has adopted a strategic plan for the development of the national transport complex for 2021–2035 [Borokh, Lomanov, 2020]. The plan identifies five priority goals, including: the introduction of innovative systems, strengthening the integration of railways with other modes of transport, improving the quality of services, respect for the environment and international expansion [Murphy, 2021].

The following mechanisms have been developed to implement the plan:

1. *Stimulating the innovation system* by reforming the rail transportation industry with the expansion of Internet + and Internet of Things +, 5G, BB technologies. It is also necessary to create connecting lines to provide a unified system of work on a multimodal route [Ostrovsky, Afonaseva, Kamennov, 2019; Qin, Qi, 2022; Pereira, Saes, 2022].

2. *Developing infrastructure*, including multimodal terminals and storage facilities. In addition to the infrastructure component, the logistics of the flow of goods should be built to optimize the transport process and mobile route adjustment. To improve the quality of rail services, it is necessary to create a system of high-speed rail routes, as well as develop a system of refrigerated freight transportation, prolonging the range of the transportation process, thereby increasing the interconnection between the city and the countryside [Xin, Zheng, Zhou, Han, Tadikamalla, Fan, 2022; Alichleh AL-Ali, Sisodia, Gupta, Venugopalan, 2022; Ma, Cao, Li, 2021].

3. *Improving the safety and environmental friendliness* of rail transportation and standardizing the transportation process will also be an important condition for competitiveness. Ensuring the above criteria will affect the quality of the service market in China through using comprehensive measures to support the industry [Zha, Yang, Wang, Wang, Zhou, 2020; Pan, Xie, Feng, 2020]. According to the new strategic plan, China's high-speed rail network is expected to reach 70,000 km by 2035 [The 2020 SIA Factbook]. To a large extent, the main concentration of developing such routes will be the Jingjinji area near the Yangtze River Delta, and the Chongqing-Chengdu agglomeration [Orange Wang, 2021].

4. *Full digitalization*. To date, the digital economy covers a third of the sectors China's GDP and provides an annual growth in employment. In 2017, at the 19th Congress of the CPC, China's digital economy was mentioned in Xi Jinping's speech in the annual report of the Chinese government as one of the most promising development areas that accelerates the growth of China's economic performance. Already today, China occupies a leading position in the world rankings regarding the digital economy development and is one of the most promising countries for further building up digital capacities [Pratap, 2022; Li, Yao, Yan, 2021; Deshpande, Varghese, Kale, Atre, 2021].

In a few years, China has been able to increase human resources and digital competences, enlarge entrepreneurial and innovative activity, increase consumer demand in the high-tech sector, gain access to international capital through the VIE tool, transfer most of the services to the digital automated market, transfer the transport document flow to digital «rails», create a precedent for trade transactions for mutual settlements

## Международный опыт

Table 5. Foreign trade of the Russian Federation by main countries and groups of countries (million US dollars)

	January – January 2021			Share in turnover, %	January – January 2022			Share in turnover, %	RATES OF GROWTH, %		
	Turnover	Export	Import		Turnover	Export	Import		Turnover	Export	Import
The whole world	43813.4	26979.5	16834.0	100.0	69167.3	45842.6	23324.6	100.0	157.9	169.9	138.6
EU	15174.2	10520.0	4654.3	34.6	26891.3	21062.4	5828.9	38.9	177.2	200.2	125.2
APEC	15564.7	7308.0	8256.8	35.5	23218.1	10841.7	12376.4	33.6	149.2	148.4	149.9
CHINA	8697.6	4321.6	4376.0	19.9	13009.4	5804.6	7204.9	18.8	149.6	134.3	164.6
CIS	5352.8	3559.9	1792.9	12.2	6677.9	4531.8	2146.1	9.7	124.8	127.3	119.7
EAEU	4036.6	2636.6	1400.0	9.2	4463.7	2970.0	1493.7	6.5	110.6	112.6	106.7
Other	3316.4	2446.5	869.9	7.6	4177.6	2999.2	1178.4	6.0	126.0	122.6	135.5

Source: Review of the Foreign trade of the Russian Federation by main countries and groups of countries based on Official website of the Federal Customs Service (<https://customs.gov.ru/folder/511>)

using our own payment system UnionPay, WeChat pay [Ajay Bhalla, Bhaskar Chakravorty, Ravi Shankar Chaturvedi, 2020].

In 2019, the Chinese government report noted that expanding research and development ties in the field of Big Data, artificial intelligence, next-generation information technology, high-tech equipment, biomedicine, new sources will become key areas for the Chinese economy in the next ten years. The lightning-fast development of China's digitalization is associated with China's regionalization in this area. For example, the level of GDP of Guangdong province is equal to the GDP of the whole of Russia, while the indicator of the volume of the digital economy of Guangdong is 4 trillion yuan, which is 10 times more than in the Russian Federation [Tiorkina, 2019; Ding, 2020].

Digitalization trends are especially noticeable in transport and logistics projects and affect several adjacent regions at once. The fact is that the pandemic period gave all countries a new look at transport industry problems. In 2021, to increase supply and automate logistics processes, which will be more resilient to external factors, China is issuing a specific directive covering comprehensive measures to further develop the economy through digital transformation. According to the directive, the introduction of artificial intelligence, including in the transport industry, will allow several times to increase the performance of the Chinese economy in the near future. For example, such projects include the Digital Silk Road Project (hereinafter referred to as DSR), developed in cooperation with the border regions of the EAEU countries.

The CSP initiative was proposed back in 2015. However, at that time the EAEU countries were not ready to transform the management system through

Internet technology, fearing China's excessive dominance in this market. Today, the prospect of development has become the most realistic, moreover, highly demanded for Russia. Global trends dictate a deeper study of integration processes between the EAEU countries and China with a significant reorientation of trade relations towards a mutually beneficial market. In the context of the complication of payments between Russia and EU countries, a new window of opportunity is opening for the development of electronic commerce using Chinese payment systems. This system will also be aimed at protecting a single cyberspace, which is a very relevant solution given the current unstable world market conditions [Tian, Zhang, Chi, Cheng, 2021].

For China, the development of this trend is a strategically important direction that will create the hegemony of the technological market in the Eurasian space. Already today, such giants as «Alibaba», «Tencent» and «Huawei» are becoming the most popular marketplaces. Considering the geopolitical situation, the turn to the Asian market will be made automatically, which will allow China to take a confident leading position [Varas, Varadarajan et al. 2021].

The CSP concept is linked to Chinese programs «Made in China – 2025» and «Chinese Standard – 2035» to provide a full cycle from production to marketing and bringing goods and services to the end consumer. Thus, the projects will intertwine initiatives for digital, technological, production, and logistics transformation, which will present a closed system for profiting by the Chinese market and will minimize dependence on the countries of the Western bloc. The pandemic crisis has made the Chinese government aware of the importance of automated and robot-based processes [Gao, Cao, 2020].



Russia has created numerous strategic documents to accelerate the social and economic transformation of the country's transportation and logistics system, especially those in the border areas.

Among the main programs are Program for the Development of the Digital Economy in the Russian Federation until 2035; Transport strategy of the Russian Federation until 2030 with a forecast for the period up to 2035; Strategies for developing the customs service until 2030; Spatial development strategy of the Russian Federation for the period up to 2025. National strategies and programs are supplemented by similar documents of regional development: these are strategies and programs for the socio-economic development of the Far East and the Baikal region for the period up to 2025 and up to 2035; development of Siberia until 2030 and dozens of other programs that define the time frame and resources for creating a base for growth [Wu, Jiang, Liu, Wu, Liu, 2020]. In the face of unprecedented US pressure on all countries of the world, as well as six packages of sanctions from the EU countries, the most difficult thing for those grandiose tasks that are developed in our national and regional documents is their implementation in practice. However, we have to overcome these issues and rely on our own strengths. Regarding the transport and logistics industry in Siberia and the Far East, its modernization is advantageous for both China and Russia. Ahead of us is a rapid transformation led by the Chinese locomotive.

### Short-term and long-term forecasts of interaction between Russia and China

The joint statement signed by both parties on the plan for developing priority areas of economic cooperation until 2030 gives the green light to the development and activation of new systems and mechanisms for trade interaction at the international level. Emphasis will be placed on increasing trade in goods related to energy resources and products of the electrical industry. The declared readiness to strengthen and develop the existing model of trade relations creates a very favorable background for launching processes to improve the transport and logistics sector.

#### Short-term forecasts:

- gradual improvement of international cargo delivery schemes;
- development of the regulatory framework for the elimination of customs formalities;
- transition to the Russian-Chinese document flow;
- formation of the unity of the information platform for combining and processing data on export and import licenses issued by the relevant authorities of Russia and China, certificates of conformity

and other permits in the field of foreign economic activity;

- changing logistics chains and increasing routes through the Asian regions of Russia;
- unification of tariffs;
- increase in throughput;
- the emergence of new logistics and transport companies;
- creation of new border crossings on the border between Russia and China;
- revitalization of the economy of the border regions of Russia and China;
- deepening the diversification of suppliers of raw materials and goods between Russia and China;
- strengthening the Russia-China economic bloc, as well as strategic initiatives within the framework of BRICS and SCO.

#### Long-term forecasts:

- formation of a reliable potential for strengthening economies;
- development of trade and economic cooperation and growth of mutual trade;
- well-established system of international trade relations;
- formation of a common transport and logistics market with unified technical and technological approaches, as well as a standardized management model;
- changing the structure of the Russian commodity market;
- shift of trade turnover to land modes of transport;
- increasing the role of railway transport and developing the infrastructure of this type of transportation;
- creation of multimodal hubs in the border regions of Russia and China;
- cross-development of border regions and raising the level of Russian-Chinese cooperation;
- strengthening trade cooperation with third countries like Iran, Pakistan, India, the states of the Persian Gulf and Central Asia;
- the prospect of the emergence of new international coalitions, including the participation of such regional leaders as Saudi Arabia, Turkey, Iran, and India;
- strengthening of the Asian-centric market model;
- development of the policy of mutual settlements in national currencies;
- replacement of Western investments, equipment, and technologies;
- development of new route routes between Russia and China.

Thus, it is possible to predict the deepening of mutual transport and logistics for direct routes Russia-

## Международный опыт

China–Russia. To date, several bilateral projects have already been launched, which predicts the expansion of the bilateral geography of services:

- In 2022, the first train went on a new logistics railroad route from the Bayan-Nur district in northern China to Moscow.
- In 2022, the Fesco group, in addition to the Far Eastern ports and border crossings, added an ocean route (deep sea) – through the Black Sea and the Suez Canal.
- Now the FESCO Asia Landborder Train service transports goods from the Chinese cities of Tianjin, Qingdao, Shanghai, Xiamen, Guangzhou to Moscow and St. Petersburg through the Naushki, Dostyk, Altynkol and Zabaikalsk border crossings. Transit time is reduced to 15–25 days and depends on direction.
- In 2023, Mongolia began construction of a 745 km transit corridor that will connect Novosibirsk and China, which will connect the Tsagaannuur and Dayan border crossings.
- In 2022, traffic was launched on a road bridge across the Amur River between Blagoveshchensk and Chinese Heihe.
- Construction of the Europe-Western China transport corridor with the development of the M12 highway is underway.

## Conclusion

Russia and China have a **close historical and geographical proximity**, as well as the **similarity of the ideological model of state development** (the key role of the state), which determines the proximity of the positions of basic economic and political decisions at the international level and mutual understanding in intercountry relations. In the new conditions of global changes in international relations, we see the shift of power balance to the East. Russia's turn to the markets of Asia-Pacific region is possible and quite reasonable.

The historical memory of unified ideological approaches has been preserved both in Russia and in China, despite many unsuccessful attempts to «rebuild» socialism after the collapse of the USSR. Russia began to actively change the vector of development and switched to capitalist modernization, while China began to carry out modernization based on a mixed socialist and capitalist basis.

Both Russians and Chinese revered Lenin and Marx, believed in a brighter future, in equality and brotherhood. The modern part of the population, which makes up the working class, as well as key figures holding the posts of state managers in Russia and China, read the same books, watched the same cartoons and movies. Throughout the period of constructing socialism, both

countries established an industrial foundation that is still in use today. Our cultures are aware of the common slogans about peace, work, and fellowship. And although both countries are now moving in the direction of the West, this common communist past still makes the alliance of Russia and China understandable to most of the population.

An important role in Russian-Chinese relations is played by the role of the leaders of the countries of Russian President Vladimir Putin and Chinese President Xi Jinping, as well as their interaction. The Russian and Chinese people's mentality is still being built. They're building trust, using the leader's model as a guide. The course towards rapprochement was clearly marked by Mr. Xi, who, as part of his first foreign visit after being re-elected, chose Russia, despite the decision taken the day before by the International Criminal Court in The Hague to issue a warrant for the arrest of Russian President Vladimir Putin.

It seems that the Asia-Pacific region will gradually strengthen economic institutions in the ideological coherence of the main hegemon – China. In the emerging realities of unprecedented sanctions pressure from the US and the EU, integration between Russia and China can become rapid and effective with a competent digitalization policy, Russia's basic economic sectors development, and cross-border regions based on the experience of the Chinese model.

Thus, the trend towards strengthening the position of the hegemon in the face of China is no longer a new one. On the sidelines of the annual ASEAN summit on November 15, 2020, the signing of the Regional Comprehensive Economic Partnership was a clear signal to lay the foundation for a new world order in which China will play a key role.

**Improving the transport and logistics efficiency** of the Russia regions will contribute to the deepening of integration processes between the border regions of Russia and China. At the same time, the complex modernization will lead to economic growth not only in the transport system, but also a multiplier effect for other economic sectors of the cross-border regions. Our study shows that in recent years, the rapid modernization of the transport and logistics complex in China has brought a new impetus to developing the border regions and made the regional structure more uniform for the Chinese economy.

In the statement on economic cooperation and deepening partnership between the Russian Federation and China on March 21, 2023, one of the main points was the improvement of logistics for developing bilateral trade, as well as the growth in the scale and optimization of the structure of trade through electronic and innovative tools. Thus, we should expect the development of project initiatives in this direction. It is

planned that, by 2025, repair work will be completed at the Naushki, Pogranichny, Makhalino, and Zabaikalsk checkpoints. According to preliminary estimates of the Ministry of Transport of Russia, by 2026, the capacity of automobile border crossings will increase by 4,400 trucks per day (or 1.62 million per year), as well as by 44 freight trains per day (or almost 16,000 trains per year).

The **main directions for the transport and logistics complex development** in Russia: automation of transportation processes, expansion of the transport and infrastructure network on railway lines in the border regions, auxiliary infrastructure expansion (warehouses, border crossings, transportation and transshipment points, terminals); investments growth in digital technologies in the railway complex; containers modernization; e-commerce system growth, express delivery; Russia's internal transport infrastructure development due to the growth of domestic consumer demand, and others. The result in the short term will be an increase in import flows and the demand for «made in China» goods; the transport and logistics complex demands for ecological systems; entire market modernization of transport and logistics services; implementation of synergistic initiatives of Russia and China in the long term.

We refer to the **key problems of real cooperation** in the transport and logistics sector: imbalance in the development of the Russian and Chinese economies; technological left border Russian regions; the lack of a quality infrastructure component; a sharp increase in the cost of transportation due to unstable market conditions; strengthening the economic «blockade» through sanctions leverage; rising debt of developing countries; lack of carrying capacity; growing shortage of skilled labor.

In modern conditions, it is necessary to develop **multimodal types of freight transport**. Due to the actual blocking of Russian ports in the northwest (St. Petersburg and Ust-Luga), export and import cargo flows actively moved to the Far East. The relationship between the Far Eastern regions of Russia and the border regions of China has sharply deepened. After the departure of international shipping companies, Russian Fesco and Sinokor became the main carriers of goods in the Far East. In addition, the vacated niche is being actively filled by Chinese companies, among which there are many «newcomers»: SITC, Zhonggu, Heung-A Line, OVR Shipping, Gang Tong, Huaxin.

Let's consider the following situation. Freight trains send cargo from Vladivostok to Moscow and St. Petersburg. As a result, we receive the high load

on the Trans-Siberian Railway and its infrastructure capabilities. A lot of cargo goes from China to the Russian Federation and Europe directly, including as part of accelerated container trains. Trying to redistribute cargo flows, logistics companies add vehicles to the transport chain. For example, people are transported to Zabaikalsk by car, and then by rail. A new delivery route through Blagoveshchensk has appeared: cargo is delivered to the port of Dalian from China by sea, then transported by road to the border in Heihe. Then by rail to Moscow, or transported through the Blagoveshchensky Bridge by auto trucks from Russia, and then by rail to China. The transit time of the route is 30–35 days.

The following logistics problems in Russia slow down the development of transport logistics:

- deterioration and obsolescence of vehicles;
- deterioration of transport infrastructure – roads, loading terminals;
- low performance – due to the qualifications of the workers and poor management (low wages, lack of control and incentives);
- incorrect construction of delivery routes;
- legal processes for mutual settlement of the rules of trade;
- low level of coordination between the links in the transport chain.

With the departure of global lines from the ports of the North-West, the main routes of transportation from China to Russia now go through land border crossings and ports of the Far East. The load on infrastructure on these routes remains extremely high.

The market lacks additional transshipment terminals at the border, since the existing border crossings Erlian / Zamyn Uud, Manchuria / Zabaikalsk, Khorgos / Altynkol and Alashankou / Dostyk during peak periods cannot cope with the flow of goods from China towards Russia, Europe and Central Asia. The introduction of bigger shipping companies to the ports of the Far East may lead to a beneficial shift in the market.

China remains the main direction of Russian imports, the importance of which in the current environment is only raising. Currently, one of the most promising projects is developing the infrastructure of the Northern Sea Route, which allows the PRC to optimize the supply of goods to other regions of the world. The growth of cargo transportation will also be facilitated by an increase in the capacity of the Trans-Siberian and Baikal-Amur railways, and the reconstruction of automobile border crossings on the border with China.

## References

- Abramov V.L., Loginov E.L., Shkuta A.A. et al. Realization of Russia's economic interests in interaction with the countries of Asia and the Middle East in the face of new challenges and opportunities for cooperation: collective monograph. Moscow: Finansovyy universitet, 2018. In Russian
- Afanasyev L.L. Automobile transportation. Moscow: Transport, 1965. In Russian
- Ajay Bhalla, Bhaskar Chakravorty, Ravi Shankar Chaturvedi. Harvard business Review. The world's most digitalized countries: 2020 ranking. <http://hbr-russia.ru/innovatsii/trendy/853688>. In Russian
- Alicheh AL-Ali A.S.M., Sisodia G.S., Gupta B., Venugopalan M. Change Management and Innovation Practices during Pandemic in the Middle East E-Commerce Industry. *Sustainability*, 14, 2022. 4566(6-14). <https://doi.org/10.3390/su14084566>. In English
- Andronova I.V., Sokolan D.S. Leading economies of the European Union under pressure from direct Chinese investment. *Vestnik Rostovskogo gosudarstvennogo ekonomicheskogo universiteta (RINKH)*. 2019. No. 2 (66). P. 19–26. In Russian
- Avdokushin E.F. One Belt, One Road Project 2.0. Strategies for stimulating China's global expansion. *Mir novoy ekonomiki*. 2019. Vol. 13. No. 1. P. 67–76. In Russian
- Belova I.N., Egoricheva E.A. One belt, one road project: Prerequisites for the formation of China's foreign economic policy. *Vestnik Rossiyskogo universiteta druzhby narodov. Seriya: Ekonomika*. 2020. Vol. 28. No. 3. P. 620–632. In Russian
- Borokh O., Lomanov A. Chinese path of reforms in the context of globalization. *Mirovaya ekonomika i mezhdunarodnyye otnosheniya*. 2020. Vol. 64. No. 6. P. 66–75. In Russian
- Chinese President Xi Jinping. «Moving forward persistently to new prospects of friendship, cooperation and joint development of China and Russia». 2023. <https://rg.ru/2023/03/20/uporno-dvigatsia-vpered-k-novym-perspektivam-druzhiby-sotrudnichestva-i-sovmestnogo-razvitiia-kitaia-i-rossii.html>. In Russian
- Data from the Eastern State Planning Center of Russia. «Foreign trade: Russia, China, the Far East». 2022. <https://docs.yandex.ru/docs/>. In Russian
- Deshpande T.S., Varghese S., Kale P.D., Atre M.P. Incident classification, prediction of location and casualties // Proceedings of the 2021 8th International Conference on Computing for Sustainable Global Development. 2021. No. 9441087. P. 778–781. <https://doi.org/10.1109/INDIACom51348.2021.00139>. In English
- Ding D. Research on Analytical Methods of Domestic and Foreign Logistics Development Proceedings – 2020. 5th International Conference on Information Science, Computer Technology and Transportation, ISCTT, 2020. Article No. 9363780. P. 633–636. <https://doi.org/10.1109/ISCTT51595.2020.00120>. In English
- Galeza T., Chan J. What is direct investment? / International Monetary Fund. 2021. [https://www.imf.org/external/pubs/ft/fandd/basics/20\\_direct-invest.htm](https://www.imf.org/external/pubs/ft/fandd/basics/20_direct-invest.htm). In English
- Gao X., Cao C. A novel multi-objective scenario-based optimization model for sustainable reverse logistics supply chain network redesign considering facility reconstruction. *Journal of Cleaner Production*, 270. 2020. Article No. 122405. <https://doi.org/10.1016/j.jclepro.2020.122405>. In English
- The State Council Information Office of the Peoples Republic of China. “Sustainable Development of Transport in China”. December 2020. <http://www.scio.gov.cn/zfbps/32832/Document/1695320/1695320.htm>. In English
- Li H., Yao B., Yan X. Data-Driven Public R&D Project Performance Evaluation: Results from China. *Sustainability*, 13, 2021. 7147. (1–5). <https://doi.org/10.3390/su13137147>. In English
- Luzyanin S.G. People's Republic of China; politics, economics, culture. Moscow: Izdatel'stvo RAN, Izdatel'skiy Dom «FORUM», 2016. P. 166–237. In Russian
- Ma W., Cao X., Li J. Impact of Logistics Development Level on International Trade in China. *A Provincial Analysis. Sustainability*, 13, 2107. (4–14). 2021. <https://doi.org/10.3390/su13042107>. In English
- Made in China 2025 plan issued. The State council of The People's Republic of China. 2015. [https://english.www.gov.cn/policies/latest\\_releases/2015/05/19/content\\_281475110703534.htm](https://english.www.gov.cn/policies/latest_releases/2015/05/19/content_281475110703534.htm). In English
- Maslov A.A. China 2020: pandemic, society, and global alternatives. Moscow: RIPOL klassik. 2020. In Russian
- Murphy A. Huawei 5G: European countries playing ‘politics’ with network bans, Chinese company says. 2021. <https://www.euronews.com/next/2021/07/28/huawei-eyes-a-place-within-europe-s-digital-future-despite-5g-bans-in-some-countries>. In English
- Nosova S.S. Regional economy. Fundamentals of theory and research methods. Moscow: KnoRus, 2023. P. 89–93. In Russian
- Official website of the Government of the Sakhalin Region. <https://sakhlin.gov.ru/>. In Russian
- Orange Wang. Macroeconomics of China. 2021. <https://www.scmp.com/economy/china-economy/article/3123151/china-sets-15-year-transport-expansion-plan-it-seeks-double>. In English
- Ostrovsky A.V., Afonaseva A.V., Kamennov P.B. Prospects for the development of science, technology and innovation in the PRC. *Vostochnaya Aziya: fakty i analitika*. 2019. No. 2. P. 6–28. In Russian
- Pan X., Xie Q. Feng Y. Designing recycling networks for construction and demolition waste based on reserve logistics research field *Journal of Cleaner Production*, 260. 2020. No. 120841. <https://doi.org/10.1016/j.jclepro.2020.120841>. In English
- Pereira H.M.F.; Saes M.S.M. Government Support and Institutions' Intermediation throughout Companies' Adaptation to the COVID-19 Crisis. *Sustainability*. 14, 2022. 5450, (8–12). <https://doi.org/10.3390/su14095450>. In English
- Portyakov V. Economic reforms in China (1979–1999). Moscow: Institut Dal'nego Vostoka RAS. 2002. In Russian
- Prajapati D., Chan F.T.S., Chelladurai H., Lakshay L., Pratap S. An Internet of Things Embedded Sustainable Supply Chain Management of B2B E-Commerce. *Sustainability*. 14, 2022. 5066 (5–9). <https://doi.org/10.3390/su14095066>. In English
- Prokofieva T.A., Lopatkin O.M. Logistics of transport and distribution systems: a regional aspect. Moscow: RConsult. 2003. P. 57–90. In Russian
- Qin W., Qi X. Evaluation of Green Logistics Efficiency in Northwest China. *Sustainability (Switzerland)*. 14 (11). 2022. Article No.

6848. P. 5–7. <https://doi.org/10.3390/su14116848>. In English  
Results of foreign trade with the main countries. Official website of the Federal Customs Service. <https://customs.gov.ru/folder/511>. In Russian
- Sazonov S.L., Zaklyazminskaya E.O., Wu Zi, Chen Xiao. The «Belt and Road» project as a decisive factor in the development of the Chinese economy. *Problemy Dal'nego Vostoka*. 2017. No. 3. P. 83–85. In Russian
- Sustainable Development of Transport in China. <http://www.scio.gov.cn/zfbps/32832/Document/1695320/1695320.htm> In English
- The 2020 SIA Factbook: Your Source for Semiconductor Industry Data / Semiconductor Industry Association. 2020. <https://www.semiconductors.org/the-2020-sia-factbook-your-source-for-semiconductor-industry-data/>. In English
- Tian X., Zhang Q., Chi Y., Cheng Y. Purchase willingness of new energy vehicles: A case study in Jinan City of China Regional Sustainability, 2 (1). 2021. P. 12–22. <https://doi.org/10.1016/j.regus.2020.12.003>. In English
- Tiorkina D. Chinese experience of digital transformation. 2019. <https://russiancouncil.ru/analytics-and-comments/columns/asian-kaleidoscope/kitayskiy-opyt-tsifrovoy-transformatsii-ekonomiki/>. In Russian
- Varas A., Varadarajan R., Palma R., Goodrich J., Yinug F. Strengthening the Global Semiconductor Supply Chain in an Uncertain Era / Boston Consulting Group, Semiconductor Industry Association. 2021. [https://www.semiconductors.org/wp-content/uploads/2021/05/BCG-x-SIA-Strengthening-the-Global-Semiconductor-Value-Chain-April-2021\\_1.pdf](https://www.semiconductors.org/wp-content/uploads/2021/05/BCG-x-SIA-Strengthening-the-Global-Semiconductor-Value-Chain-April-2021_1.pdf). In English
- Vardomsky L.B. Economic interaction of the CIS member countries in the context of the Eurasian economic project. Moscow: Izdatel'sto RAN, 2015. P.136–170. In Russian
- Vinogradov A.O., Isaev A.S., Safonova E.I. et al. Russia – China: chances and challenges of the «new era» relations: monograph. Moscow: Izdatel'sto RAN, 2020. In Russian
- Vladimir Filatov. Asian direction: roads and rails. <https://expert.ru/2022/09/20/aziatskoye-napravleniye-dorogi-i-rely/>. In Russian
- Vladimir Putin's article in the People's Daily «Russia and China – a partnership looking to the future». 2023. <http://kremlin.ru/events/president/news/70743>. In Russian
- Volgina N.A., Liu Pengfei. China in global value chains: some facts / Proceedings of the Far Eastern Federal University. *Ekonomika i upravleniye*. 2020. No. 4. P. 20–27. In Russian
- Wu X., Jiang Y., Liu Q., Wu H., Liu X. A Fast Classification Approach to Upper-Limb Posture Recognition // Proceedings – IEEE Congress on Cybermatics: 2020 IEEE International Conferences on Internet of Things. 2020. No. 9291534. P. 680–683. <https://doi.org/10.1109/50389.2020.0011813>. In English
- Xin Y., Zheng K., Zhou Y., Han Y., Tadikamalla P.R., Fan Q. Logistics Efficiency under Carbon Constraints Based on a Super SBM Model with Undesirable Output: Empirical Evidence from China's Logistics Industry. *Sustainability*. 14. 2022. 5142 (18–23). <https://doi.org/10.3390/su14095142>. In English
- Zha D., Yang G., Wang W., Wang Q., Zhou D. Appliance energy labels and consumer heterogeneity: A latent class approach based on a discrete choice experiment in China Energy Economics, 90. 2020. No. 1048391. (7–10). <https://doi.org/10.1016/j.eneco.2020.1048391>. In English
- Zhang Q., Hoekstra J. Policies towards migrants in the Yangtze river delta urban region, China: Does local hukou still matter after the hukou reform? *Sustainability*. 12 (24). 2020. Article No. 10448. P. 1–24. <https://doi.org/10.3390/su122410448>. In English

#### ИНФОРМАЦИЯ ОБ АВТОРЕ:

**Каролина Александровна Сикиринская**, руководитель отдела международного сотрудничества, заместитель директора Российско-итальянского центра ИГСУ РАНХиГС, преподаватель факультета МРиРУ, кафедра регионального управления  
Российская академия народного хозяйства и государственной службы при Президенте Российской Федерации (Российская Федерация, 119571, Москва, проспект Вернадского, 82). E-mail: sikirinskaya-ka@ranepa.ru

**Для цитирования:** Сикиринская К.А. Трансформация транспортно-логистического рынка: перспективы российско-китайской интеграции в условиях санкционных ограничений. *Государственная служба*. 2023. № 3. С. 91–103.

#### INFORMATION ABOUT THE AUTHOR:

**Karolina Alexandrovna Sikirinskaya**, Head of International Cooperation Department, Deputy Director of the Russian-Italian Center of the IPACS RANEPА,  
Lecturer at the MRIRU Faculty, Department of Regional Management  
Russian Presidential Academy of National Economy and Public Administration (82, Vernadsky Prospekt, Moscow, 119571, Russian Federation). E-mail: sikirinskaya-ka@ranepa.ru

**For citation** Sikirinskaya K.A. Transport and logistics market transformation: prospects for Russian-Chinese integration under sanctions restrictions. *Gosudarstvennaya sluzhba*. 2023. No. 3. P. 91–103.