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Prospects for the development of transport and logistic routes connecting the BRICS Countries

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ABSTRACT This article examines the current metrics and future prospects for the development of transportation and logistics routes connecting BRICS member countries (Brazil, Russia, India, China, South Africa, Egypt, Ethiopia, UAE, Saudi Arabia and Iran). It analyses railway transport indicators, the dynamics and structure of mutual trade, as well as the main destinations of Russian exports. A special focus is placed on infrastructure projects and trends in multimodal transportation. The study highlights the significance of investment in infrastructure and the optimization of logistics processes, emphasizing the potential for enhanced economic cooperation among BRICS members.

KEYWORDS: the BRICS countries; transport and logistics routes; international transport corridors; railway transport; mutual trade; trade turnover; infrastructure projects; economic cooperation; free trade zones

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Доклад

Перспективы развития транспортно-логистических маршрутов, связывающих страны — участницы БРИКС

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АННОТАЦИЯ Рассматриваются текущие показатели и перспективы развития транспортно-логистических маршрутов, связывающих страны-участницы БРИКС (Бразилия, Россия, Индия, Китай, Южная Африка, Египет, Эфиопия, Объединенные Арабские Эмираты, Саудовская Аравия и Иран). Анализируются показатели железнодорожного транспорта, динамика и структура взаимной торговли, а также основные направления экспорта России. Особое внимание уделено инфраструктурным проектам и тенденциям в области мультимодальных перевозок. В исследовании отмечается важность инвестиций в инфраструктуру и оптимизацию логистических процессов, подчеркивается потенциал для расширения экономического сотрудничества между странами БРИКС.

КЛЮЧЕВЫЕ СЛОВА: БРИКС; транспортно-логистические маршруты; международные транспортные коридоры; железнодорожный транспорт; взаимная торговля; товарооборот; инфраструктурные проекты; экономическое сотрудничество; зоны свободной торговли

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INTRODUCTION

A high level of economic development in the BRICS countries provides a favourable environment for investment, including into the development of transport and logistics facilities in the BRICS member countries (Brazil, Russia, India, China, South Africa, Egypt, Ethiopia, the United Arab Emirates, Saudi Arabia, and Iran). In 2023, railway transport in the BRICS countries accounted for a considerable portion of both domestic and international traffic of goods, which reminds us of its importance for sustainable economic growth and development.

The BRICS countries place a significant focus on the development of railway transport and innovative technology that aim at improving the efficiency and environmental safety of transportation.

One of the essential areas of development for BRICS is to develop the existing and plan prospective transport routes between its member countries.

This paper reviews the current status and prospects for the development of transport and logistics routes in the BRICS countries. It presents the key performance metrics for railway transport in the BRICS countries, dynamics and the structure of trade between Russia and BRICS, and the main destinations of Russian exports. It also outlines the projects for the development of infrastructure of international transport corridors (ITCs) in Russia and the main trends in the development of trade relations between the BRICS countries.

MATERIALS AND METHODS

The research was based on an analysis of reports from railway companies and national statistics agencies regarding the development of the transport sector in the BRICS countries.

The following research has been undertaken to assess the economic development of the BRICS countries and development prospects for transport and logistics routes in BRICS:

1. A statistical analysis of trade turnover data for Russia and the BRICS countries using the data of the Federal Customs Service of Russia, UN Comtrade, and ITC/UNCTAD.
2. An analysis of railway infrastructure development in the BRICS countries.
3. An analysis of prospective transport and logistics routes in the BRICS countries.

FINDINGS

The findings achieved in this research are as follows:

1. The growth of trade turnover between the BRICS countries contributes to the active development of transport infrastructure and the expansion of transport routes.
2. The railway infrastructure in the BRICS countries is an important element of the transport sector and has a substantial potential for further development.
3. The development of multimodal transportation and transport routes between the BRICS countries is an important focus area for ensuring efficient operation of the transport system in the BRICS countries.

Economic metrics and railway infrastructure development indicators in the BRICS countries

The geography of ITCs is related to that of commercial traffic flows between countries, regions and micro-regions.

The accession of new members to BRICS in January 2024 will have a number of positive effects on the organization, such as:

- the organization will have more influence on the global economy;
- diversification of trade and economic ties;
- access to new markets and resources;
- expansion of cooperation in the fields of science and high technology.

The stronger positions of BRICS on the world arena is confirmed by the key economic metrics of its member countries.

The BRICS countries (Fig. 1) have a considerable economic potential that provides favourable conditions for the development of transport and logistics infrastructure. As at the end of 2023, BRICS countries counted for more than 25 % of total global GDP, which is equivalent to USD 27.4 trillion¹.

Good economic performance provides favourable conditions for investments, including into the development of the transport and logistics sector in the BRICS countries (Fig. 2).

The continuing positive dynamics of social and economic metrics and railway transport development indicators in the BRICS countries will contribute to the improvement of trade ties between members of the association in the future.

The railway infrastructure in most of the BRICS countries is the key component of their national econo-

¹ International Monetary Fund. URL: <https://www.imf.org>



Fig. 1. BRICS member countries

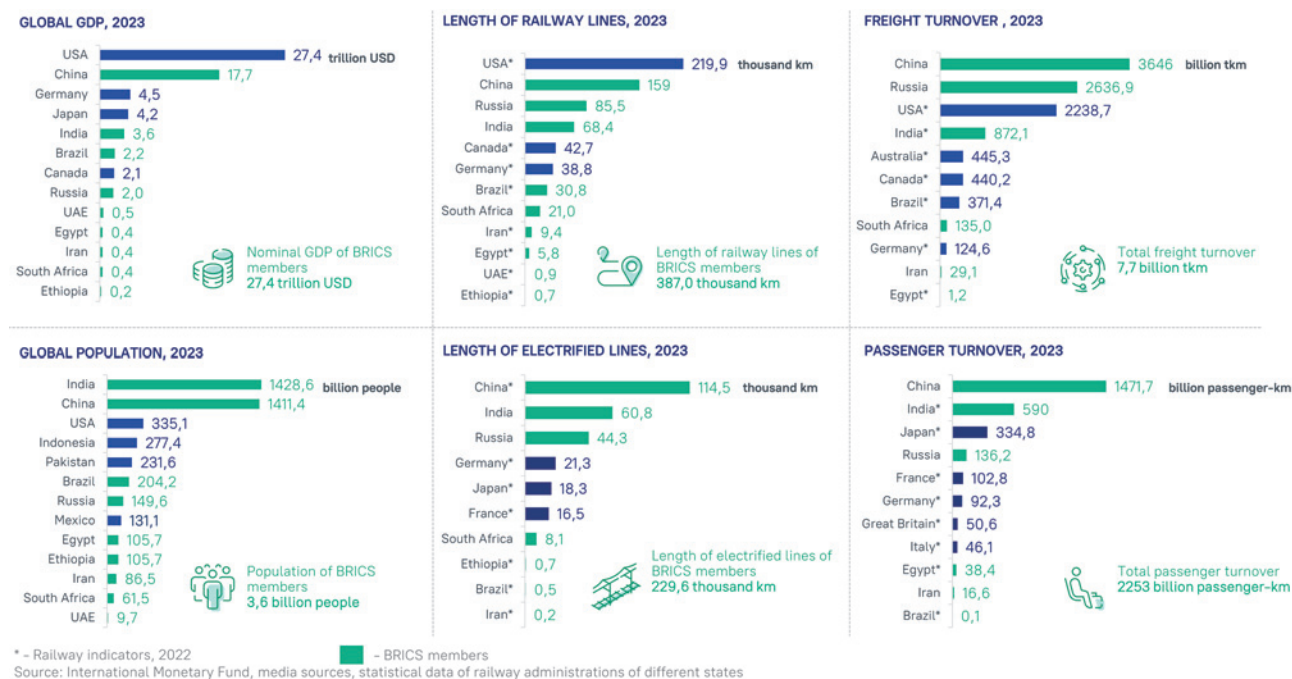


Fig. 2. Development indicators: BRICS versus the leading countries

mies and transport systems, supporting both domestic and international transportation.

In 2023, the total length of railways in the BRICS countries was 387 thousand kilometres, of which 230 thousand kilometres had electrified lines (Fig. 3)².

As at the end of 2023, the total freight traffic on railways was 8.5 billion tonnes, freight traffic load was 7.7 trillion tonne-kilometres, and passenger traffic load was 2.2 trillion passenger-kilometres.

All railway indicators are steadily growing and have a significant potential for further development.

² Statistical data from railway administrations of the BRICS countries.

BRICS RAILWAY INDICATORS FOR 2023

Length of railway lines	387 thousand km
Length of electrified lines	230 thousand km
Volume of freight	8531 million tons
Freight turnover	7692 billion tkm
Passenger turnover	2253 billion passenger-km

Fig. 3. BRICS railway indicators for 2023

Dynamics and structure of mutual trade between Russia and the BRICS countries

Mutual trade between Russia and the BRICS countries has been steadily growing. As at the end of 2023, turnover of goods between Russia and other BRICS

countries was RUB 498 million tonnes³, which is a 47 % increase from the previous year (Fig. 4).

The considerable growth of goods turnover is largely due to the increase in Russian exports³ to 467 million tonnes (Fig. 5). The highest rates of growth of goods traffic from Russia are recorded for China and India.

On the other hand, in 2023, imports from the BRICS countries to Russia amounted to 31 mln tonnes. About 3/4 of total traffic was accounted for by goods from China (22.9 mln tonnes)³ (Fig. 6).

It is important to note that not only China, but also other BRICS members are expanding their presence on the Russian market. In 2023, the total imports from these countries have increased by 1.4 million tonnes to reach 8.0 million tonnes.

Main destinations of Russian exports

In 2023, Russian exports continued to switch from destinations in the West to eastern and southern regions of the world. The share of Russian exports to the countries that did not join the sanctions against Russia has increased from 57 % in 2022 to 81 % in 2023.

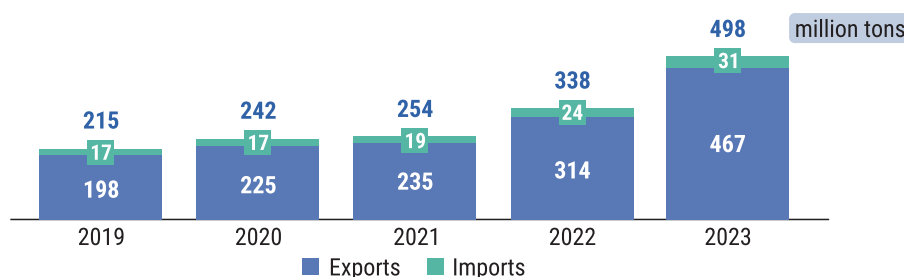


Fig. 4. Goods turnover between Russia and the BRICS countries

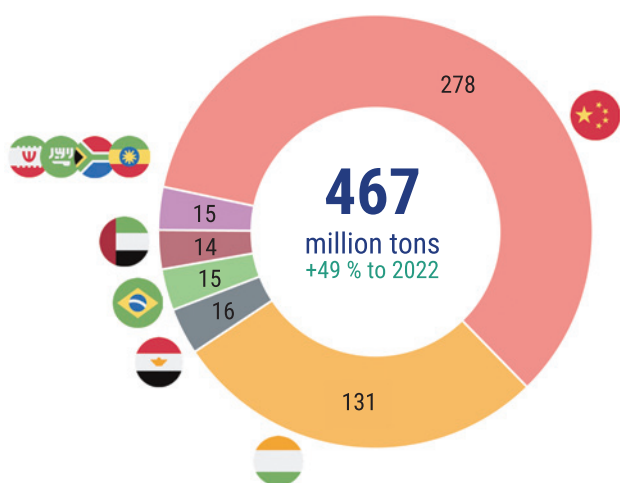


Fig. 5. Exports from Russia to BRICS in 2023

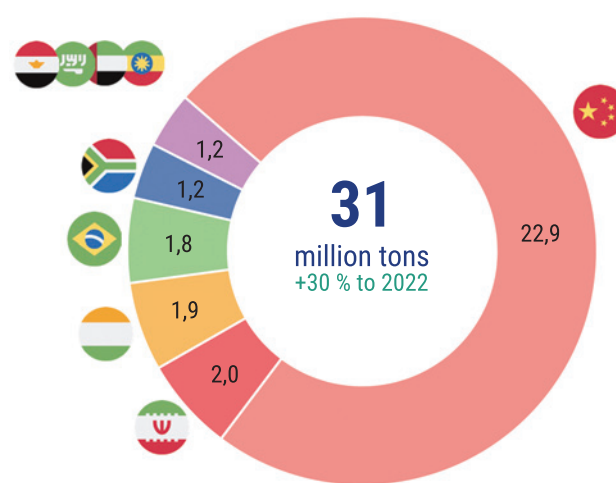


Fig. 6. Imports from BRICS to Russia in 2023

³ UN Comtrade. URL: <https://comtradeplus.un.org/>

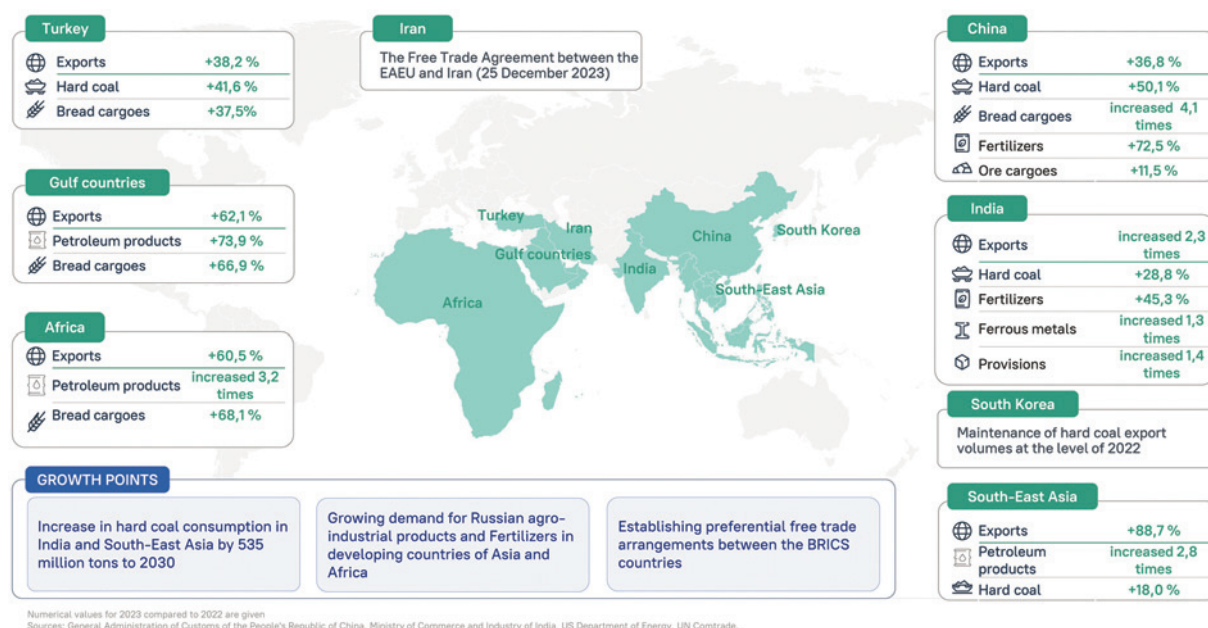


Fig. 7. Main destinations of Russian exports, 2023

Russian exporters increased the amount of supplies to China by 36.8 %, and to Turkey by 38.2 %³, and to India 2.3 times⁵ (Fig. 7).

One of the outcomes of the efforts made to develop commercial and economic ties is the Free Trade Agreement signed between the EAEU and Iran.

In the future, the key drivers of growth for Russian exports may be as follows:

1. Increasing the amount of consumption of coal and petroleum cargoes in India and Southeast Asia.
2. Growth of demand for agricultural products and fertilizers from Russia in the developing countries in Asia and Africa.
3. Possible establishment of free trade zones between the EAEU and BRICS, which will ensure the mutual integration of commodity markets in the BRICS countries.

Main areas of development of the export potential of Russian trade and economic ties in the period until 2030

In order to support the export potential of the Russian economy, investment projects aimed at the comprehensive development of the railway infrastructure of transport and logistics corridors are implemented in accordance with the current strategic and policy documents for the development of railways in the Russian Federation.

In 2022, the Government of the Russian Federation approved action plans for the development of the

North – South ITC, as well as transport and logistics corridors in the Azov-Black Sea and Eastern areas (Fig. 8).

In order to develop Russia's export potential, JSC Russian Railways is currently implementing the following investment projects:

- the development and upgrading of the railway infrastructure at the approaches to the ports of North – West basin;
- the development and upgrading of the railway infrastructure at the approaches to the ports of the Azov-Black Sea basin;
- the development of the railway infrastructure of the Eastern Operating Domain (Stage III);
- the development of North – South ITC, including the development of a railway entry point Derbent and construction of a new station Samur II.

The comprehensive implementation of the potential of the North – South ITC will result in building a trans-continental route which will be resilient to external challenges and provide access of goods via the Northern Sea Route and ports of Iran to commodity markets of Russia, countries of the Gulf, East and South Asia.

Geography of transport routes connecting the BRICS countries

The Subgroup on Transport and Logistics was set up this year in order to plan the prospective areas of cooperation between the BRICS countries in the field of transport.

⁴ Main Customers Directorate of PRC. URL: <http://english.customs.gov.cn/>

⁵ Ministry of Trade and Industry of India. URL: <http://www.commerce.nic.in/>

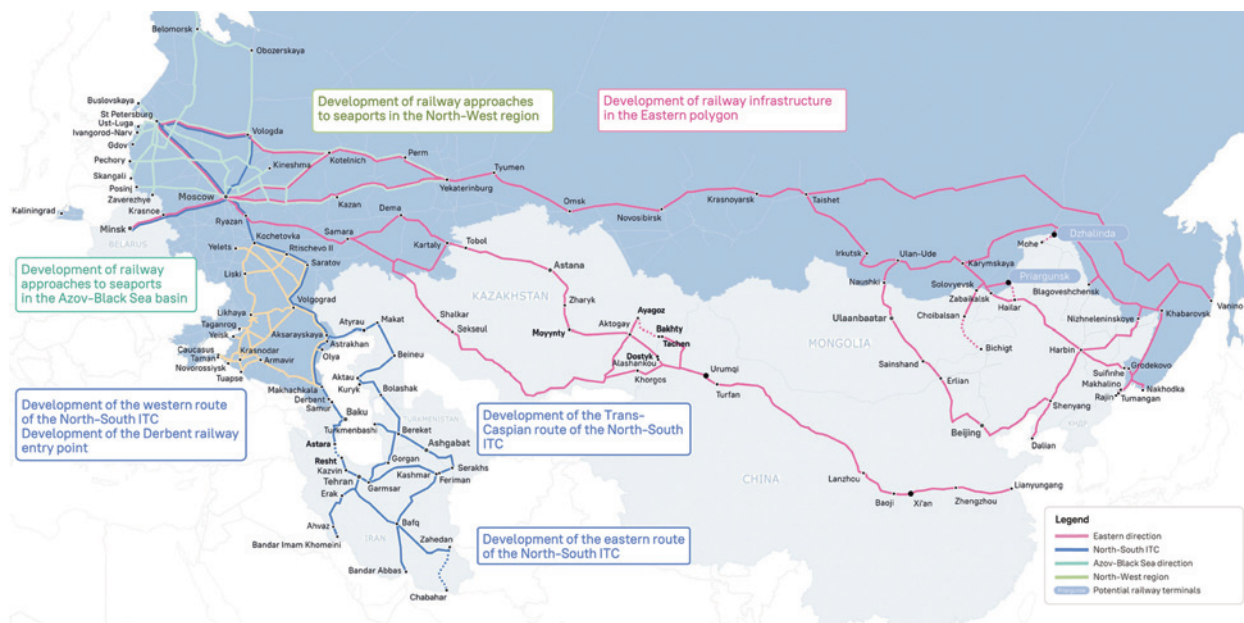


Fig. 8. Main areas of development of the export potential of Russian trade and economic ties

One of the focus areas of the Subgroup is to develop the existing and plan prospective transport routes between the BRICS countries. The Subgroup is planning six main transport and logistics routes between the BRICS countries (Fig. 9).

The development of international ties within the BRICS space enable countries of the African continent to join transportation by developing the BRICS route No. 1, the North – South ITC, which runs across Russia, Iran and India.

The implementation of the potential of the route will in many respects facilitate the creation of integral

railway infrastructure by implementing the Rasht — Astara project.

The development of transport for foreign trade between China, Russia and European countries will ensure the development of the BRICS route No. 2, the East – West ITC, some sections of which run through Russia and China.

In the eastern part of the East – West corridor, JSC Russian Railways is developing the infrastructure for the main route of Transsib.

The development of BRICS routes No. 3 and No. 4 to connect the Russian ports on the Baltic, Barents and

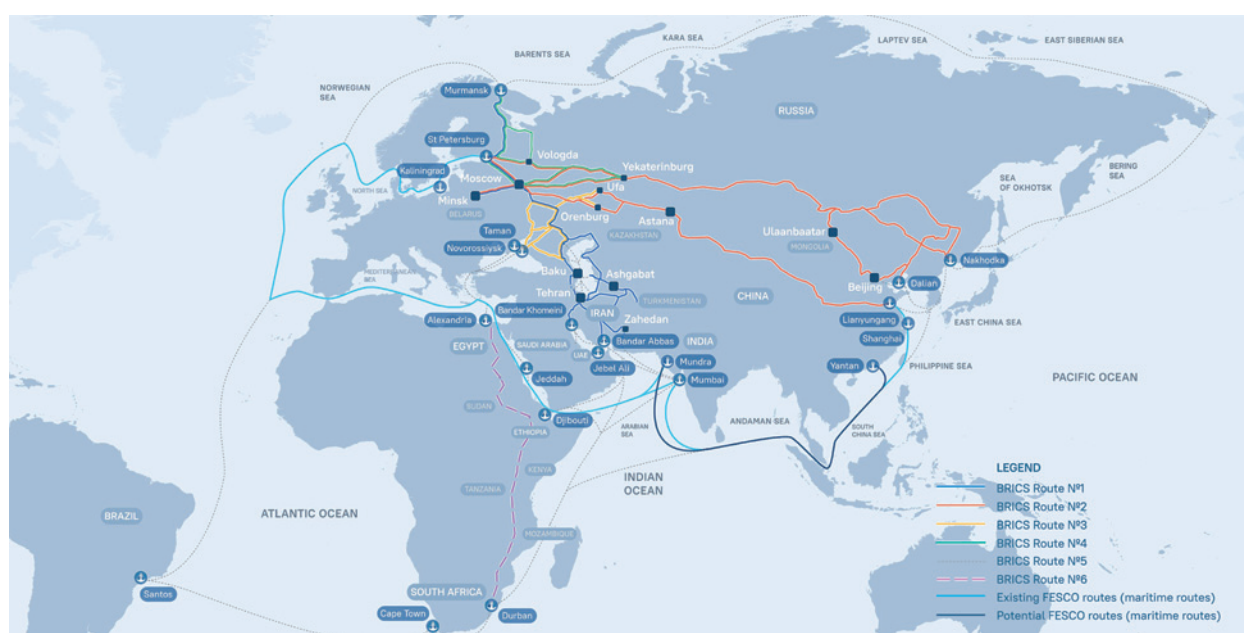


Fig. 9. Geography of transport routes connecting the BRICS countries

Black Seas and the ports in Turkey, Saudi Arabia, the UAE, India, Africa, and Latin America, will have a substantial influence on strengthening the trade and economic connections of the BRICS countries.

Large geographical distances to the BRICS countries necessitate the creation of a comprehensive approach to addressing logistics issues. The Subgroup on Transport and Logistics plans international sea routes (such as BRICS route No. 5) that will be optimal in terms of costs and delivery times. They will connect the ports in all of the BRICS countries and will thus contribute to the integration processes between BRICS members.

The increasing urbanization and industrialization in African countries provide an environment for the development of trade and economic cooperation between the BRICS countries which can be contributed to by a new prospective route on the African continent.

The future trans-African route (route BRICS No. 6) will contribute to the creation of a railway corridor between the Alexandria Port in Egypt, the capital of Ethiopia Addis Ababa, and the Port of Durban in South Africa.

According to preliminary assessments, this route may be as long as 10 thousand kilometres and include about 8 thousand kilometres of the existing railway lines in Egypt, Sudan, Ethiopia, Kenya, Mozambique, and South Africa.

Main trends in the development of trade relations between the BRICS countries

Worth mentioning are some of the key drivers of the future economic cooperation and further development of commercial relationships within the BRICS space, such as:

- the development of transport routes for the enhancement of economic cooperation and improvement of the efficiency of logistics;
- accession of new members and expansion of socio-economic cooperation with the developing countries opening new opportunities for trade;
- the development of e-commerce and logistics via simplification of customs procedures and development of goods tracking systems;

- more intensive cooperation in the energy sector, including long-term contracts and energy security measures;
- the development of multimodal transportation to optimize routes and time of delivery, integrate logistics networks, and create terminal and logistics centres.

These factors and trends will have positive influence on the deepening of relationship between the trading parties and the development of transport routes between BRICS members.

CONCLUSION

The development of transport and logistics routes between the BRICS countries is key to strengthening economic ties and improving trade performance.

Railways in the BRICS countries have a potential for further development, which is supported by the increasing trade turnover and active expansion of transport routes.

The Subgroup on Transport and Logistics of the Infrastructure Group at the Business Council of BRICS is currently working on six prospective transport and logistics corridors which include both land and marine routes.

Further coordination of actions of the BRICS countries with respect to the balanced development of transport and logistics corridors along with the attraction of a required amount of investment in the development of their infrastructure will enable the BRICS countries to increase the volume of transportation related to foreign trade.

The current level of cooperation between the BRICS countries provides promising trends for deepening trade relations within the member countries, including the development of transport lines, expansion of socio-economic cooperation, development of e-commerce and logistics, and deepening of cooperation in the energy sector.

Bionotes

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