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Logistics between Russia and Vietnam: Weaknesses and methods to resolve them

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ABSTRACT This article is devoted to the study of logistics relations between Russia and Vietnam, with an emphasis on the consideration of transport routes and the identification of problems in the field of cargo transportation. In the context of the rapid growth of trade and economic ties between the two countries, the issue of optimizing logistics processes is becoming particularly important. Efficient organization of transport chains can not only improve the speed of delivery, but also reduce costs, ensuring the competitiveness of market participants. The article focuses on the main routes connecting Russia and Vietnam and analyses the features of sea routes and networks of rail and road lines. The authors highlight the problematic aspects of the current system's functioning, including difficulties with cargo handling, a lack of information monitoring systems, bottlenecks in coordination between different modes of transport, as well as infrastructural constraints. Special attention is paid not only to the analysis of weak links in logistics between Russia and Vietnam, but also to the development of specific recommendations aimed at their elimination. The authors show that an integrated approach to solving existing logistical problems can have a significant impact on strengthening cooperation between Russia and Vietnam, as well as serve as an incentive for further growth of trade turnover between the countries. The authors conclude that the implementation of the proposed measures will contribute not only to improving the efficiency of cargo transportation, but also to creating favourable conditions for deepening strategic partnership. In this context, the study has not only a theoretical value, but also a high practical significance, as it suggests concrete steps to implement logistical transformations in the near future.

KEYWORDS: international logistics; multimodal transportation; international transport relations, interaction of modes of transport; transport economics; analysis of weaknesses in logistics; transport relations between Russia and Vietnam

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Научная статья

Логистика между Россией и Вьетнамом. Слабые места и методы их решения

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АННОТАЦИЯ Рассмотрены логистические отношения между Россией и Вьетнамом с акцентом на транспортные маршруты и выявление проблем в сфере грузоперевозок. В условиях стремительного роста объема торгово-экономических связей между двумя странами вопрос оптимизации логистических процессов становится особенно значимым. Эффективная организация транспортных цепочек способна не только улучшить скорость доставки, но и снизить издержки, обеспечивая конкурентоспособность участников рынка.

В центре — основные маршруты, связывающие Россию и Вьетнам. Разбираются особенности морских маршрутов, сетей железнодорожных и автомобильных линий. Авторы акцентируют внимание на проблемных аспектах функционирования текущей системы, включая сложности с переработкой грузопотока, недостаток систем информационного мониторинга, узкие места в координации между различными видами транспорта, а также инфраструктурные ограничения. Приведены не только анализ слабых звеньев в логистике между Россией и Вьетнамом, но и конкретные рекомендации, направленные на их устранение.

Показано, что комплексный подход к решению существующих логистических проблем может оказать значительное влияние на укрепление сотрудничества между Россией и Вьетнамом, а также послужить стимулом для дальнейшего роста торгового оборота между странами. Реализация предложенных мер будет способствовать не только повышению эффективности грузоперевозок, но и формированию благоприятных условий для углубления стратегического партнерства. В таком контексте исследование обладает не только теоретической ценностью, но и высокой практической значимостью, предлагая конкретные шаги для реализации логистических преобразований в ближайшей перспективе.

КЛЮЧЕВЫЕ СЛОВА: международная логистика; мультимодальные перевозки; международные транспортные отношения; взаимодействие видов транспорта; экономика транспорта; анализ слабых мест в логистике; транспортные отношения между Россией и Вьетнамом

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INTRODUCTION

In the past decades, the Russian Federation and the Socialist Republic of Vietnam have been strengthening their economic and trade relations, opening the door for the development of logistics between the countries [1–4]. Current global challenges and economic trends require that countries remain flexible and adapt to the changing international trade landscape. Relations in the field of transport play an essential role in the provision of trouble-free exchange of goods, contributing to the development of cooperation in many dimensions.

However, there are also problems that hamper the efficient development of transport logistics between Russia and Vietnam. These, in particular, include a big geographical distance between the countries, differences in the levels of transport development, and various red tape issues [5, 6]. Solving these problems requires innovative approaches and strategies.

The purpose of this paper is to study the current status of interactions between Russia and Vietnam in the field of transport, identify the existing obstacles, and make proposals on how to remove them. Its main focus will be on developing a set of recommendations

aimed at upgrading the transport infrastructure and streamlining logistics processes. The implementation of the measures proposed will raise the efficiency of trade relations and strengthen economic cooperation between the countries.

LOGISTICS BETWEEN THE TWO COUNTRIES: AN OVERVIEW

In order to have an idea of whether Russia benefits from cooperation with Vietnam, we need to look at the trade turnover between them, which is an important indicator of relations between the countries. In the recent years, the trade turnover between Russia and Vietnam has changed under the influence of various factors, such as the global economic landscape and political cooperation [7]. The graph in *Fig. 1* shows changes in the trade turnover in the period between 2010 and 2023.

In 2010–2014, Russia and Vietnam showed an active growth of their trade turnover, which was driven by the development of logistics between the countries [8].

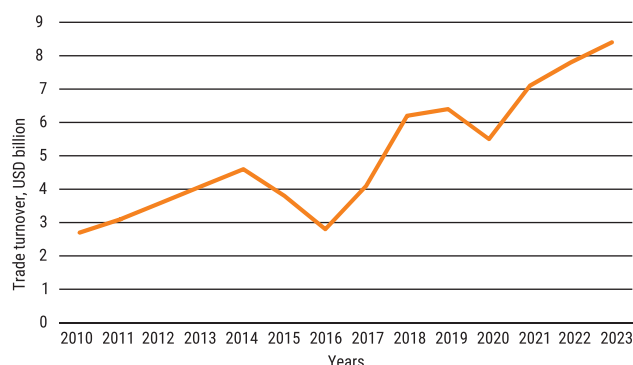


Fig. 1. Changes in trade turnover between Russia and Vietnam

In 2015–2016, there was a small decline in trade caused by the economic sanctions and lower oil prices.

In 2018, the trade turnover between the countries reached USD 6.1 billion. The period was marked by a significant growth in the exchange of goods and services.

In 2019, trade volumes increased to USD 6.4 billion due to the deepening of cooperation in the sectors such as power engineering, agriculture, and industry.

In 2020, Russia and Vietnam continued to maintain trade relations regardless of the effects of the COVID-19 pandemics. The turnover totalled USD 5.5 billion, as temporary difficulties in some market segments and logistics chains had adversely affected the total amount of trade.

The economic recovery after the pandemics began in 2021, leading to the growth of the trade turnover to USD 7.1 billion. The increase was due to the recovery of demand and better coordination of logistics operations. The growth continued through 2022 and 2023.

In order to validate the future growth of the trade turnover between the countries, we need to forecast how it will develop in the future. In this paper, the authors use the simplest approach, involving a linear trend and a gradual increase/decrease of values.

As can be seen from the graph, the growth of turnover is subject to small fluctuations. In order to simplify our analysis, we will ignore the breakdown of the fluctuations and use a linear approach by calculating the average increment. The differences between the consecutive points produce an average increment of 0.385. This shows that the trade turnover will grow on average by the specified value, if not for seasonal and other factors.

Thus, we can conclude that cooperation between Russia and Vietnam contributes to the steady growth of trade turnover.

Based on the foregoing, we should consider the basic routes and projects for the development of infrastructure between the countries. This will give us an

understanding of the extent to which the cooperation in logistics and haulage can be developed.

1. Marine transportation. The main routes of shipping goods from Russia to Vietnam by sea currently depend on the port of origin and the port of destination. The most popular routes are shown in Fig. 2.

It should be noted that in terms of infrastructure, it is essential to develop port facilities in order to increase the trade turnover between Russia and Vietnam [9]. Some important components include the improvement of technical equipment of ports, increasing the number of berths for loading ships with a greater deadweight capacity, and developing new sea routes.

2. Railway services. Currently, discussions are underway and steps are being taken to upgrade the railway infrastructure for faster transportation of goods between the countries [9]. One of the significant projects aimed to enhance railway services between Russia and Vietnam is the initiative to create an international transport corridor. The development of the Trans-Siberian Railway, which is considered as the main route for transportation of goods from Russia to Vietnam through China, plays a key role in the project. This will not only reduce the shipping time, but also create new prospects for the development of logistics links.

Below is an approximate calculation of time for shipping goods from Russia to Vietnam by the Trans-Siberian Railway:

1) Delivery by rail: The delivery time from Russia (for example, Moscow) to a Chinese cross-border town (such as, Manchuria) can be about 7 to 10 days, depending on the specific route and conditions;

2) Customs clearance: Customs clearance may take 1 to 3 days.

3) Shipment by sea: Delivery from a Chinese port to Vietnam usually takes 3 to 7 days.

To sum it all up, the total time of delivery of goods from Russia to Vietnam may take from 11 to 20 days, provided no major delays are involved. However, it should be noted that this timing is approximate and may vary depending on specific circumstances.

3. Air transport. Active cooperation in the aviation sector includes increasing the number of direct flights between the countries, and considering the use of Russian aircraft and technology in Vietnam's aviation industry.

4. Road transport. Transportation of goods from Russia to Vietnam by road is a complex transport process which is subject to several factors, such as the chosen route, road conditions, operations at the border, and weather conditions. Travel time estimates may also vary depending on the current condition of the infrastructure and legal requirements in each country along the route.

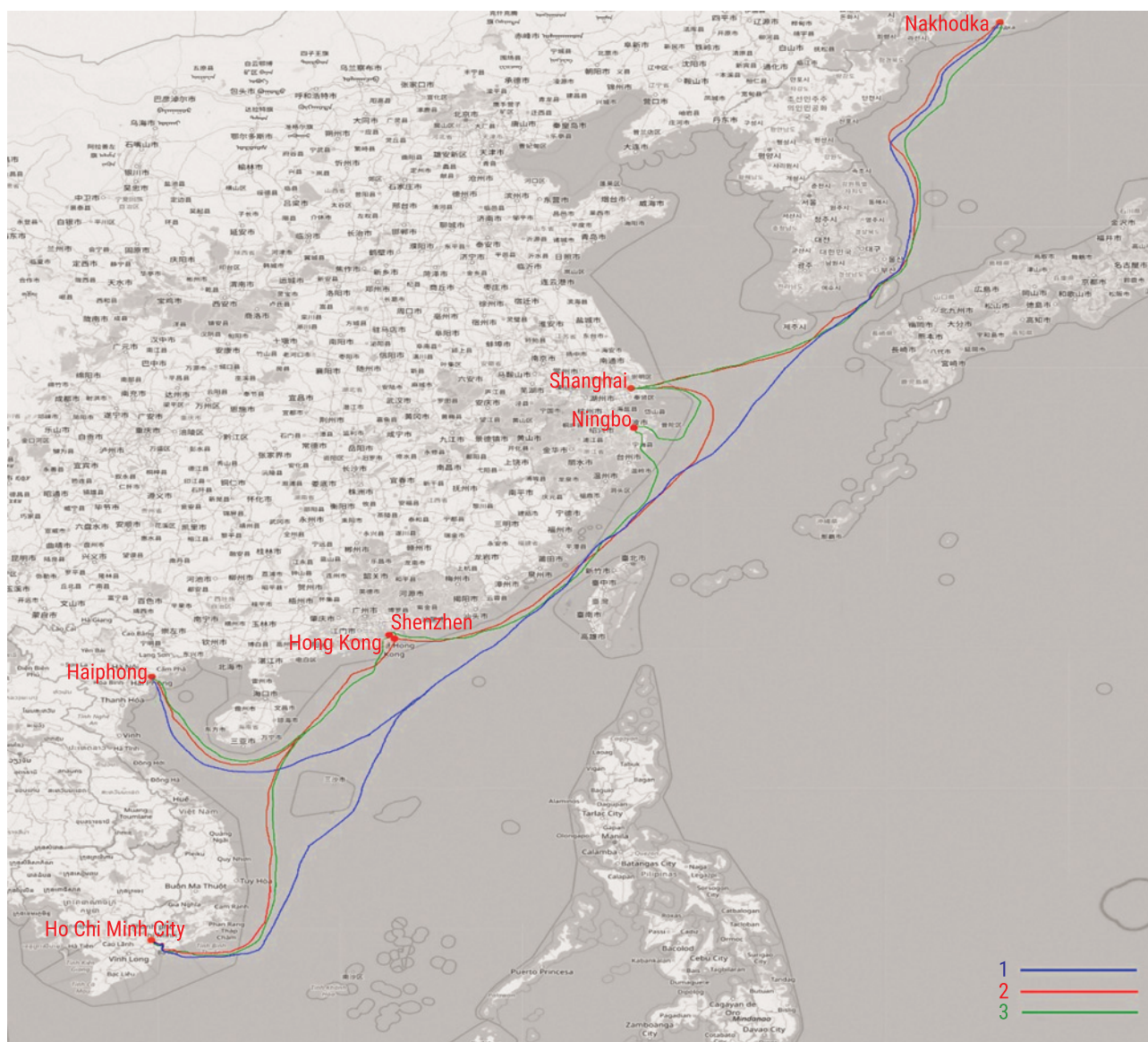


Fig. 2. The most frequently used sea routes from Russia to Vietnam¹: 1 – a route via the South China Sea: the route runs through the Taiwan Strait, or between China and Taiwan, and then via the South China Sea towards Vietnamese ports such as Ho Chi Minh City or Haiphong; 2 – a direct route via the Sea of Japan: the route runs through the East China Sea and the South China Sea; 3 – sometimes cargo can be first sent to large Chinese ports (Shanghai, Ningbo, Shenzhen) before continuing to Vietnam. This may be good for the consolidation of shipments or transportation of small consignments of containers.

An approximate route and impact factors are as follows:

- Russia (the point of origin). The main motorways: M5, M7 and M10 to exit the country and go towards Asia;
- Mongolia (or Kazakhstan, depending on the route). The time of crossing the border will depend on whether there are queues and how fast bureaucratic procedures are completed;

- China. China is a large territory with good road infrastructure, but the travel speed can be lower because of heavy haul vehicles;
- Laos or Cambodia. There are two transit options depending on the actual situation at the time of arrival;
- Vietnam (the point of destination). Crossing the border of Vietnam — the final stage.

In general, with the average speed of trucks of 60–70 km per hour (excluding the waiting time at

¹ Created with OpenRailMap. URL: <https://openrailwaymap.org>



Fig. 3. Route from Moscow to Hanoi by road²

borders), the distance between Moscow and Hanoi (~8,500 km), and additional delays, a journey may take from 10 to 14 days. A route by road is shown in Fig. 3.

There are certain weaknesses in logistics between Russia and Vietnam that need to be considered in this paper as they may slow down or complicate the process of transportation of goods. The *Table* below lists the key weaknesses and possible ways to address them.

Addressing these issues requires that both countries combine their efforts to optimize the transport systems and simplify the processes, which will, in turn, result in better trade relations.

A forecast for the development of logistics relations between Russia and Vietnam requires taking into account a lot of factors, including the economic situation, political relations, global and regional trends, and changes in international trade and logistics. Some of the key aspects that may influence the development of relations in logistics between the two countries in the coming years are listed below:

1. Increasing trade turnover. According to the forecasts, the trade turnover between Russia and Vietnam will continue to grow. This is driven by positive dynamics and mutual interests of the two countries in strengthening their economic partnership, especially in the sectors such as agriculture, power engineering, and information technology.

2. Economic agreements. The existing and planned free trade and economic cooperation agreements will contribute to reducing trade barriers and improving the logistics environment.

3. Modernization of the transport infrastructure. Growth of investment in transport infrastructures of both countries, especially the development of ports, railways and airports, will create new opportunities in logistics. Important steps will include projects to expand transport corridors and develop multimodal transportation.

4. Developing alternative routes and logistics. Taking into account changes in global supply chains, routes for delivery of goods can be diversified. Vietnam is potentially capable of becoming a large logistics hub

² Created with YandexMaps. URL: <https://yandex.ru/maps/>

Table

Weaknesses in logistics between Russia and Vietnam and ways to resolve them

No.	Problem	Description	Solution proposed
1	Long delivery times	The time required to transport goods, especially by sea, is lengthy. This has particularly critical for goods with limited shelf lives	Streamline routes. To this end, use intermodal transports more frequently in order to reduce delivery times. Achieve an increase in the frequency of journeys, such as regular sailings, to be operated by ships with a greater deadweight capacity
2	Inefficient infrastructure	In some regions of Vietnam, infrastructure may be not in line with the planned amount of shipments, which will lead to delays in transit	Attract investors to infrastructure projects in order to increase the throughput capacity of routes
3	Customs barriers	Difficulties with customs clearance of goods and differences in rules and requirements between the countries	Simplify the procedure by introducing electronic declarations and creating uniform standard documents. Create a unified information base for data exchange between customs authorities
4	Lack of communication and coordination	Lack of information and coordination which may lead to delays and misunderstandings between different supply chain participants	Introduce digital tools, such as unified platforms, to track cargoes and manage logistics in real time. Improve communication by holding regular meetings and workshops for all supply chain participants
5	High transportation costs	High transportation costs may result in higher prices for goods	Streamline cargo traffic flows by consolidating goods and using multimodal routes to reduce costs. Involve more transport companies to create a competitive environment, which will also contribute to reducing the margin on transportation of goods

for shipments to Asia, which will enable Russia to use it as a transit route for entering other markets.

5. Digitalization of logistics. The use of modern technology, such as process automation and cargo tracking systems, in logistics will improve the efficiency of transport operations and reduce costs.

6. Regulation and standardization. The introduction of international standards and improvement of legal regulation in logistics and customs procedures will create conditions for increasing trade and improving interactions in the field of logistics.

In general, taking into account all these factors, we can expect that the relations between Russia and Vietnam in logistics will develop positively, providing smoother and more efficient flows of goods and services between the countries. Nevertheless, it is important to carefully follow both global and local changes that may affect these dynamics.

CONCLUSION

Logistics ties between Russia and Vietnam play an essential role in strengthening economic cooperation and political relations between them [10]. Amid the rapidly growing trade turnover and the increasing number of joint projects, both countries show their commitment to establishing modern, sustainable and effective logistics chains that could meet the requirements of both parties. The growth of cooperation is

based on a comprehensive approach, involving the development of modern technology, modernization and expansion of the transport infrastructure to accelerate and optimize deliveries, as well as overall support in simplification of customs and trade regulation.

Active introduction of digital tools opens up broad prospects for the creation of transparent and highly effective logistics solutions. In addition to the economic component, logistics play an important role in cultural and social convergence of the peoples of Russia and Vietnam. Transport corridors that connect the two countries facilitate the exchange of not only goods, but also ideas, cultural experience and skills, thereby enhancing friendship, mutual understanding and cooperation at the community level. The prospects of cooperation in logistics between Russia and Vietnam are particularly significant in the current geopolitical context. The use of the latest international standards, the expansion of transport corridors and diversification of routes will provide more flexibility and resilience to external change.

Thanks to its geographical location, Vietnam can become an important hub in the supply chain from Russia to Asian markets. In the future, logistics cooperation may be the centrepiece of strategic partnership between Russia and Vietnam, acting as a catalyst for growth, implementing the idea of mutual benefits and prosperity, and strengthening ties at all levels, from economics to human relations.

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