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THE NORTHERN SEA ROUTE – PROBLEMS OF DEVELOPMENT

Аннотация: в представленной статье исследованы проблемы и перспективы Северного морского пути. В настоящее время маршрут является евроазиатским трансконтинентальным морским транспортным коридором. Это один из приоритетов России. Северный морской путь в качестве международной транспортной системы остается своего рода резервом, который подразумевает огромный потенциал международного сотрудничества и развития российской Арктики.

Ключевые слова: Северный морской путь, Северный Ледовитый океан, субарктические районы, каботаж, климатические риски, минеральные ресурсы, международная транспортная система.

Abstract: this article researched the problems and prospects of the Northern Sea Route. Currently, the Route is Euro-Asian transcontinental maritime transport corridor. It is one of Russian priorities. The Northern Sea Route, as an international transport system, remains a reserve of international transport system, which conceals in itself huge potential of the international cooperation and development of the Russian Arctic.

Keywords: Northern Sea Route, Arctic Ocean, subarctic regions, cabotage traffic, climate risks, mineral resources, international transport system.

The Northern Sea Route (NSR) is the only latitudinal highway that connects all the Arctic and subarctic regions of Russia, having a significant impact on the development of the entire Russian Far North. Together with the numerous rivers, flowing into the Arctic Ocean, the NSR forms a single transport system serving the main industrial complexes of the Arctic and subarctic regions, such as the mining and metallurgical and mining complex of the Kola Peninsula, the West Siberian Oil and Gas Complex, the Norilsk Industrial District, mining industry of Yakutia, etc. The Northern Sea Route has particular importance in the 70–80s of the last century, when the volume of transportation reached more than 4 million tons (for example, only in 1987, 6.6 million tons were transported).

At the same time, the potential attractiveness of the NSR is now explained by the advantage of the distance of transportation, in comparison with other options. So, on the route from Hamburg to Yokohama through the Northern Sea Route, only 6,600 nautical miles, while across the Indian Ocean – as many as 11,400.

At the same time, in the period of radical market transformations in our country, the role of the NSR has fundamentally fallen.

At a new stage of Russia's development, the NSR is gaining a new chance for development in connection with the general trend of the Russian extractive industry moving towards the Arctic and subarctic regions, where a large part of the country's mineral resources have not yet been developed. At the same time, these trends have not yet had a significant impact on the volumes of traditional shipments in the NSR, which have not exceeded the 2 million tons level since 2000 to the present.

Nevertheless, there has been some progress in the western part of the NSR – there has been an increase in exports of crude oil on shuttle tankers with icebreaker escorts through the ports of Arkhangelsk and Vitino. The potential of the NSR is also reinforced by the fact that Russia's fuel and energy resources in the Arctic zone are estimated at more than \$ 62 trillion. The eastern part of the NSR is still in a depressed state, because due to the curtailment of production, the freight base of transportation has decreased more than 4-fold.

Development prospects

In general, it should be noted that the prospects for increasing freight turnover in the NSR are associated with the growth of cabotage traffic, as well as increase with a small share of transit and imports. Thus, the experts of the Council for the Study of the Productive Forces of the Ministry of Economic Development and the Russian Academy of Sciences and ZAO Central Research and Development Institute of the Marine Fleet in the joint monograph «Problems of the Northern Sea Route» give the following forecast for the growth of shipments in the NSR.

Table 1

Forecast estimation of sea arctic cargo flows for the period up to 2020,

thousand Rub. t.

The name of cargo transportation	Variant I	Variant II
Export, total	10 450	16 045
Transit, total (dry cargo)	0	250
Imports, total (dry cargo)	40	55

Indeed, the prospects for transit through the NSR can hardly be compared with the potential of the HSBC or Transsib. Transportation of goods by NSR in some places looks more complicated in comparison with the South Sea Route. This is due to the following factors:

- the need for additional capital investments in the court for their adaptation to the conditions of the north (ice class vessels are needed);
 - additional costs for icebreaking;
- the need to develop infrastructure that is in an uncompetitive state (refers to the development of port infrastructure, building up the icebreaking fleet), etc.;
- the unpredictability of delivery dates due to climate risks, which under certain circumstances can negate all the advantages of the Northern Sea Route over its own;
 - short navigation period (4 months).

Given these factors, it is necessary to understand that the NSR, most likely (in the event that the Arctic does not come to a radical climate change in the next decade), it cannot become a full-fledged alternative to the South Sea Route. At the same time, it can become competitive transport corridor for the transportation of certain types of cargo along the necessary routes. This primarily concerns Russian raw materials extracted in the Arctic region and its processing to the countries of East Asia. Thus, NSP

development cannot be applied to large Russian companies, including on new routes and at more competitive prices.

The idea of reanimating the transport communication along the Northern Sea Route in the light of the growing acuteness of the problem of piracy in the Gulf of Aden is of particular relevance. The sharp increase in risks during the transportation of cargo along the South Sea Route, as well as the huge costs incurred by shipowners and states forced to maintain squadrons of warships in troubled regions, create a good potential for the transition of some transport workers to other routes.

Thus, Russia has the largest icebreaker fleet in the world (4 nuclear powerboats with a capacity of 75 thousand hp), and by 2015, according to the head of Rosmorrechflot A. Davydenko, it is planned to build at least three more. In addition, until 2020, it is planned to build at least 20 more vessels at the expense of resource companies. According to calculations by the authoritative scientist-polar explorer, State Duma deputy A. Chilingarov, NSR can become a profitable project already with the volume of transportation of 4 million tons annually (currently the volume of shipments in the NSR is about 2 million tons). In the event that the development of at least a small number of Arctic fields and the minimal development of the infrastructure can begin, it is safe to say that the volume of traffic along the NSR can significantly exceed this level.

Taking into account all these circumstances, in the opinion of the author, the Northern Sea Route hardly has prospects to completely replace the existing transport arteries, but at the same time it has a powerful potential for transporting certain types of cargo along certain routes. One of the options is transportation of mineral resources mined in the Arctic and products of their primary processing.

Meanwhile, the Northern Sea Route as an international transit highway remains a reserve of the international transport system. Reserve, which conceals a huge potential for international cooperation and development of the Russian Arctic.

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