Northern Sea Route: Formation of Russian Transport Policy in the Arctic

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Abstract. This paper is aimed at a systematic analysis of the international dialogue in the Arctic as a new political space as well as at identifying problematic issues in Russian transport policy formation. The authors suggest considering the prospects for the development of the Northern sea route from two sides: from the point of view of international law and with the use of traditional mechanisms of state barriers and control. The prospects of development of international cargo transportation and the Northern sea route hereinafter — NSR) competitiveness in the near future are ambiguous. Of particular importance are the blocks of the problematic field of NSR development formed by the authors, which mainly concern infrastructure and its provision, as well as the introduction of the Northern sea route into the international shipping market with its tough competition, while NSR does not currently have the necessary quality and quantity of the necessary infrastructure. At the moment, the NSR infrastructure is underdeveloped as a region in the Russian Federation and requires a carefully designed development program, highly qualified employees and supervision of program provisions implementation that will ensure the exact implementation of all development stages. The systematic development of the Northern sea route in the long term will contribute to strengthening the position of Russia in the international arena, its economic growth, import and export of goods and services, as well as its international cooperation with other Arctic countries. The authors believe that the solution of problems with the logistics component is the primary task of the Arctic region development and ensuring the competitiveness of the Russian fleet.

1. Introduction

The modern development of transport (nuclear icebreakers, high-speed trains, deep-water canals, etc.) limits the natural geographical obstacles. Thus, cargo transportation has spread to the Arctic region which used to be unfavorable for transport activity. The main and most developed transport artery of the Arctic is the Northern sea route.

After the collapse of the USSR, a new view of the international transcontinental status of the Northern sea route was formed. And if before the Soviet Union collapse, the full-scale NSR development was primarily associated with an increase in the geopolitical and engineering prestige of the superpower, now it is primarily associated with the economic profitability of servicing the industry of the North and international transportation through the Northern sea route. The modern political transformation of the NSR as an international transport space is a key factor in the formation of the Arctic as a new international region.

Now the modern development of the NSR is not seen in the Soviet scale of mobile transfer of large amounts of resources in order to increase the geopolitical and engineering prestige of the superpower, but in the development of international transit traffic through the Northern sea route.

The implementation of the Arctic’s inclusion in the international transport network already gives Russia, as the leading Arctic state with its high-tech icebreaker fleet, an opportunity to reduce modern foreign economic isolation, helps to overcome the international insularity and limited influence on global processes. In order to protect Russia's interests in the emerging global transport system, and to
ensure its role of the main Arctic freight operator, Russia must develop an effective transport policy in the Arctic. As the President of Russia said at the international forum in 2017, “the Arctic is a territory of dialogue, and it is fundamental to preserve the Arctic as a space of constructive dialogue” [1].

This paper is aimed at a systematic analysis of the international dialogue in the Arctic as a new political space, and at identifying problematic points in the formation of the Russian transport policy. To achieve this goal, like in any political study, it is necessary to analyze interstate and social relations in the Arctic, to identify points of contact with Western partners, to identify problems in the development of Russian transport capacities and the implementation of transport policy in the international space of the Arctic.

2. Transport policy in the Arctic region
At the basic level, international transport policy has two meanings:
1. The activities of individual states aimed at the organization and development of the transport complex (transport facilities, communication routes, logistics schemes, etc.). In this sense, transport and communication routes that affect the development of any social (interstate, governmental, business, individual, etc.) relationships are primary.
2. Geopolitical and foreign economic orientation, where transport and communication routes become a tool for obtaining political and economic benefits that can be used to realize national interests not only in the Arctic, but also on the international platform [2].

Within the framework of the national interests of the Russian Federation, the Arctic transport policy implies the development of transport and the organization of effective transport activities based on the use of the existing and future sea and river fleet, aviation, pipeline, rail and road transport, as well as the coastal Arctic infrastructure.

Specifically, the transport policy of Russia is implemented and declared in the form of international treaties, state plans, road maps, strategies, concepts, doctrines, federal programs, etc. In the Arctic, the implementation of transport policy is complicated by severe natural conditions, the smallest number of settlements that are constantly in conditions of inaccessibility and by trans-boundary features of the Arctic sea space (declared by international agreements [3].

On the one hand, for the development of integration and economic potential of the Russian Arctic, transport policy must be developed within the framework of international law, through the postulates of the ‘four freedoms’ (freedom of movement of goods, persons, services and capital) proclaimed at the Conference of the European Communities in Luxembourg in 1985 with the aim of developing a single economic space), and providing the greatest international welfare in the Arctic. On the other hand, to ensure economic, environmental and geopolitical security, transport policy should be developed with the use of traditional mechanisms of state barriers and control (customs control, state permits, prohibitions on the movement of unfavorable and dangerous goods, services, people, etc.) [4].

In this regard, the formation of transport policy should be as balanced as possible, so as not to come to drastic political decisions that contribute to the absolute isolation of the Russian Arctic. Or in the opposite sense, when political decisions can allow the subsequent loss of sovereignty over the NSR and the development of uncontrolled and dangerous actions on the Russian Arctic sectors (cross-border crime, smuggling, the transportation of prohibited goods, international terrorism, large-scale environmental risks, etc.). In 2018, the first draft law prohibiting the transportation of hydrocarbons (oil, liquefied natural gas and coal) by foreign vessels through the NSR was already discussed. Here it is necessary to introduce restrictions in the most balanced way, avoiding negative consequences; first of all, these are retaliatory mirror measures against our country and restrictions for our exporters, who also use foreign transportation services.

3. Prospects for the Northern Sea route development
The development of political influence in the international use of the Northern sea route is one of the strategically important tasks of the Russian transport policy. The volume of planned financing for the NSR development will be 35 423 031 9 thousand rubles for the period from 2021 to 2025 [5]. Without going into details, most of the funding is aimed at ensuring safety and effective transcontinental transportation in the Arctic with minimal economic and environmental damage to Russia.

In addition to international transcontinental transportation by NSR, there are a huge number of formed international sea routes in the world. They are generally divided into continental and regional, river and sea, transit and coastal, year-round and seasonal. In this study, the NSR is of scientific interest as a way of intercontinental importance, which, therefore, raises the issue of ensuring international security of Russia. So it is advisable to use a systematic approach for the forecast of the
development of potential threats to Russian interests in the waters of the NSR as a transport space of international importance. Seeing the object as a system is at the heart of this approach, that is, a holistic set of interdependent elements with their links, structure and functions [6]. The systematization of the Northern sea route includes (within its waters) the ordering of the geographically adjacent infrastructure, activities and relationships in certain concepts, institutions, documents and organizations. According to this concept, the Northern Sea Route is a transport system of interrelated institutional, infrastructure, production and consumer elements forming an integral unity. The definition of a complete system involves the structure — the internal hierarchy of the elements. The structure with the same composition of the elements implies different functioning depending on the studied sphere; in this paper the political and partially economic spheres are put to the fore.

The NSR functions are of opposite importance. The first function has a clear expression of the Russian transport policy, which is the formation of political decisions on the production and financial need for institutional and infrastructure components (development of logistics schemes, management organizations, transport facilities, etc.). The second function of the NSR has a geopolitical expression, which is to use the transport system to influence global international processes. The latter function has a significant scientific interest for this work, as it can be used by political representatives in the international arena as a "lever" of pressure on international players, which will affect the behavior of strategically important partners (for example, Russia can influence the adoption of certain decisions regarding the sanctions regime by expanding or limiting the right of participants to use the NSR).

It is worth noting that the future use of the NSR transport system with the aim of influencing political processes depends not only on a huge number of external factors (the interests of foreign states, international cooperation, world energy markets, threats to global cargo flows, etc.), but also internal factors (the export potential of the Arctic regions, the integration of internal logistics, the development of icebreaking, tanker and container fleet, and, of course, the maintenance of the necessary port infrastructure). In this regard, the priority for the transport policy formation is the identification and solution of internal institutional and infrastructure problems on the Russian Arctic ways.

4. Problems of development of infrastructure and institutional capacities of the Northern Sea route

The most common systemic problems in the development of infrastructure and institutional capacities of the Northern sea route can be divided into the following blocks:

* formation of a unified Arctic transport system — creation of meridian communication of latitudinal routes;
* modernization and expansion of the Arctic fleet and port infrastructure;
* development of the economic incentives system for international shipping;
* increase of cargo flows due to export potential of regions and foreign transit cargo;
* development of container transportation system (loading, unloading, cargo storage in the port);

4.1 A Federal law draft

The draft of a Federal law “On the development of the Arctic zone of the Russian Federation” declares: “the main connecting factor of the territories of the Arctic zone belonging to the Russian Federation is the creation of a unified Arctic transport system” [7]. In this sense, the creation of a unified Arctic transport system (ATS) consists in the formation of infrastructure and logistics of meridian links between the two main thoroughfares: the Northern sea route and the Northern latitudinal route. However, the systematic postponement of the creation of communications between large cities and production centers of the Arctic regions limits the development of transport policy. The urgent need for the development of road, water and rail communications, airports, the latest navigation systems and, most importantly, the development of the Eastern part of the transport system of the Russian Arctic (the North of the Tyumen region, the Krasnoyarsk territory and Yakutia) will give Russia proper integration into the new configuration of international transport networks [8].

4.2 A Federal law draft

Modernization of the port infrastructure and the Arctic fleet increase are also important factors of Russian Arctic transport system integration into the new system of international transport networks. Russia is the only country with a high-tech icebreaker fleet. But in practice, the monopoly of Russia
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4.4. A Federal law draft
Increase of cargo flows due to the export potential of regions and foreign transit cargo. In the Russian foreign policy, the increase in international cargo flows is considered primarily through the export potential of the Russian Arctic producing regions (Tyumen region, Krasnoyarsk territory, Chukotka) and then through foreign transit cargo.

At the moment, there are no strictly defined data on the total number and nomenclature of goods transported under the NSR. Some general data on transit and freight traffic are published by the federal state unitary enterprise ‘Atomflot’, the administration of the Northern sea route and the...
Institute of Economic problems named after Luzin KSC RAS. ‘NOVATEK’ public stock company publishes partial data on the volume of cargo transportation from the village of Sabetta.

According to the research of academician A.G Granberg, the increase of shipping in general along NSR intensified since the beginning of the 1960s. The increase was primarily due to the emergence of infrastructure facilities (nuclear icebreaking shipbuilding and the development of natural resources), the development of oil and gas fields in North-Western Siberia and the development of a metallurgical plant in North-Eastern Siberia. Only in one year (1988) 535 thousand tons of cargo were delivered to Yamalo-Nenets Autonomous Okrug through Kharasaway and the New port, providing supply of energy complexes construction works with fuel. Currently, the strengthening of cargo transportation flow through the NSR is due to:

- Transportation of coal from Bereng port to consumers in Chukotka (until 2008);
- Export of logs and sawn wood to Japan and Europe from Tiksi settlement;
- Export of aluminum products from Krasnoyarsk through Igarka town (‘RUSAL’ united company);
- Export of non-ferrous metallurgy: palladium, nickel, cobalt, platinum, gold and other (more than 30 metals). Transportation is carried out from the production sites located on the Taimyr Peninsula. The list includes: Norilsk, Talnakh, Kayerkan, and Dudinka (‘MMC Norilsk Nickel’ JSC);
- Export of oil produced in Novoportovskoye field through Kamenny Cape village (‘Gazpromneft-Yamal’ LLC);
- Delivery of materials to Salamanovskoye (Utrennee) field port (‘NOVATEK’ JSC — Arctic LNG 2);
- Delivery of building materials to Sabetta village (NOVATEK’ JSC - Yamal LNG);
- Export of liquefied natural gas from Sabetta village. Transportations have been the most voluminous since the beginning of 2017 — about 17 million tons of products annually;

The current increase in transit cargo does not yet play a significant role for the Arctic regions, as there is no direct transport communication and coordinated transport policy. To integrate the Arctic regions of Russia into the emerging configuration of international transport networks, it is necessary to develop container transportation in the regions, i.e. the construction of terminals for unloading containers. Otherwise, in the short term, the development of the Arctic transport policy represents only the export of natural resources from the Eastern regions of the Arctic and the maintenance of Russia's current status in the Arctic

4.5. A Federal law draft

The global container transport industry is unstable. The main factor of instability is demand. Demand generated supply and served as a causal increase in tonnage — the number of ships increased 4 times in the period from 2002 to 2016. In the period from 2010 to 2015, the ship owners ordered 1450 new ships per year. According to Vessels Value, the number of orders fell to 293 vessels in the first half of 2016 [15]. Global trends do not make a positive effect for the development of container cargo transportation along the Northern sea route. The reason for this was the dependence on the international shipbuilding market, as there is a certain number of ships on the market, and there are no favorable conditions for cargo transportation through the NSR, although it would seem that there is a benefit, but for foreign companies it is not obvious. It should be understood that during the winter navigation transportation requires a nuclear icebreaker for free passage through the NSR, and during the summer navigation (4 months) an icebreaker is not required, and as we described above, this path will be 34% shorter than the path through the Suez Canal. Investing into the construction of terminals will allow to use the Northern sea route not only within the country (the Russian Federation), but it also will be a profitable investment being further used by Western and Eastern partners.

In addition, the example of the Yamal-Nenets Autonomous Okrug proved that the planned creation of container terminals (in the port of Sabetta) is not effective without the creation of meridian communications of the region (Sabetta-Bovanenkovo-Obskaya) connecting latitudinal communications of federal significance: the future Northern latitudinal passage (Salekhard-Nalyms-Novy Urengoy) and the Trans-Siberian railway. The existing Arctic transport system is not focused on social consumption of goods and services, which form the main part of container transportation. In this sense, container terminals in the near future are not economically feasible without developed internal communications in the Arctic regions. Paradoxically, the planned construction of communications for container transport is not relevant, but without its development, the consumption of goods and services
will not grow in the region. To solve this problem, it is necessary to have effective management in the transport sector and highly qualified personnel to monitor the implementation of the program provisions.

5. Conclusion
Summing up the results of the consideration of the formation of international transport networks new configuration, the integration of the NSR and the adjacent Arctic regions of Russia, it is worth saying that at the present stage of the NSR due to the underdevelopment of port infrastructure, limiting factors for the development of container cargo, as well as other institutional and infrastructure problems outlined above in the five main points, does not imply a serious geopolitical importance that could be used in the national interests of Russia. In this regard, Russia's main task concerning the NSR, is to form a political and legal regime that will help attract foreign investment for the development of the Arctic infrastructure and ensure the environmental safety of the region, which will also allow Russia to maintain control over the Northern sea route.

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