Role of the Northern Sea Route in Sustainable Development of Russian Arctic

Olga Podberezkina¹ and Aleksandr Vorotnikov², ³

¹ MGIMO University, 153010, Moscow, Vernadskiy av, 178. Russian Federation
² Russian Presidential Academy of National Economy and Public Administration under the President of the Russian Federation, 119571, Moscow, Vernadsky Prospekt, 82, Building 1, Russian Federation
³ Coordinator of the expert Council of the PORA expert center (Arctic development Project office), 123056, Moscow, Zoologicheskaya st, 26/2, Russian Federation

E-mail: vdep14@yandex.ru

Abstract. The article presents the concept of sustainable development of the Arctic zone of the Russian Federation through the sustainable development of the Northern Sea Route. A concept has been developed for the effective development of the Northern Sea Route and Arctic projects, and mechanisms are envisaged for their sustainable financing. The Russian programmes for the development of the Arctic region, the Transport Strategy of the Russian Federation, the Sustainable Development Goals of the United Nations, projects of state corporations were considered. The approach of sustainable development of the Northern Sea Route for sustainable development of the Arctic zone of the Russian Federation is proposed.

1. Introduction

The development of the Northern Sea Route (hereinafter referred to as NSR), its sustainable development (hereinafter referred to as SD), is one of the most important factors in the development of the entire Arctic zone of Russia. Sustainable development means that development of NSR will fully meet all the needs of the present, also the development of the NSR and its exploitation will not jeopardize the ability of future generations living in the Arctic to meet their own needs. In our view, the NSR should be developed within the framework of the concept of sustainable development, as it is not just an international transport corridor (hereinafter referred to as ITC), which is the shortest route from Asia to Europe. Its role in the development of the Russian Arctic zone is decisive, as its sustainable functioning and sustainable development completely depends on social and economic development, as well as on the preservation of environmental stability of all territories of the regions of the Russian Arctic in the sphere of activity of the NSR.

Use of the Northern Sea Route as a transport corridor linking the Pacific and Atlantic Oceans, has a positive effect on the economy of the state, as intensive use of NSR creates prerequisites for the development of transport and other infrastructure throughout NSR, creation of the icebreaker fleet, the fleet of tankers and bulk carriers with the high level of ice protection, gas carriers, increasing the receipt into the budget of payments from shipping companies using NSR. The NSR is the basis of transport infrastructure of the Russian Arctic, without it extraction of natural resources, supply
of the Arctic zone of the Russian Federation (hereinafter referred to as AZRF) regions (i.e. called northern import) and development of the Russian North are impossible.

Importance of the NSR development was underlined, accented by the Russian President in the Message of 2018 [1]. As a result of the work on the implementation of the Address-2018, the development and adoption of a comprehensive plan for the modernization and expansion of the main infrastructure for the period up to 2024 [2], which includes the federal project "Northern Sea Route" [3]. The project has two objectives. This development of the NSR and increase of cargo flow through NSR to 80 million tons, financing of this project is expected only partially from the federal budget. As well as partially financing of infrastructure development projects of NSR will pass through the federal project "Seaports of Russia". And in accordance with development projects of NSR and the federal project "Seaports of Russia", the main funding of these projects will be from extra-budgetary sources, i.e. from private business. One of the targets of the Comprehensive Plan for Modernization and Expansion of Main Infrastructure for the period up to 2024 is to increase the level of economic connectivity of the territory of the Russian Federation through the expansion and modernization of railway, aviation, road, sea and river infrastructure. Thus, about 587.5 billion rubles were initially allocated for the development of the Northern Sea Route. However, the amount increased by 150 billion rubles – the project significantly increased the price. The demand for an infrastructure project was triggered by the interest of private companies in the development of NSR. Today the cost of the project is 734.9 billion rubles. The bet is in principle made on extrabudgetary financing of the SMP project – funds of Russian companies: Rosatom, Novatek and other investors interested in transportation of cargo along the Arctic route. The goal of the federal project is to increase the capacity of cargo flows to 80 million tons. This quantity directly includes hydrocarbon feedstock oil and gas, as well as coal. However, in order to form a coherent transport infrastructure, it is necessary to build so-called terminals – transhipment points.

A terminal is any place where cargo and passengers either begin or end their movement, or the actions necessary to complete their transportation are performed over them. Thus, in view of the growing demand for oil from Asian States, the presence of improved trans-shipment points and ports in coastal areas of NSR will significantly reduce the cost of logistics, which will affect the price of the final product for the better – it will be bought in large volumes. For example, in Murmansk, which is known for its transport infrastructure – the Murmansk transport hub – at the expense of PPP (hereinafter referred to as PPP), a project is being implemented related to the construction of the Lavna coal reloading complex. The project of construction of the complex is implemented within the framework of the concession agreement between the Government of the Russian Federation and LLC "Sea Trade Port Lavna," according to which the first two facilities are carried out at the expense of the federal budget, while the coal terminal and access roads are built at the expense of private financing. The new coal terminal will significantly increase the cargo turnover of the sea port of Murmansk [4].

2. Sustainable development of the Arctic

Thus, according to the authors, one of the most important problems of sustainable development of the Arctic is sustainable financing of projects related to the Northern Sea Route, which is fully in line with the Goals 14 and 17 of the United Nations Sustainable Development Goals (hereinafter referred to as SDGs). The Goal 14 of the SDG is the conservation and management of oceans, seas and marine resources for sustainable development [5]. And here, in the development of NSR preserves the biodiversity of the Arctic Ocean, which serves not only the population of AZRF, but is important for the entire population of Russia. And the Goal 17 of the SDG is strengthening the means of implementation and revitalizing the work of the Global Partnership for Sustainable Development [6]. And as part of that goal, it’s important to take urgent action to mobilize, redirect and release the transformative power of trillions of dollars owned by private companies. In critical sectors, particularly in developing countries there is a need of long-term investment, including foreign direct investment. And therefore, attracting private, extrabudgetary funds to finance the development of NSR is consistent with SDGs. Diversification is needed as a result of import substitution policies. However, in
order to implement the latter, it is necessary to form an environment that will benefit both business and the state – an investment climate mediated by the diversity of economic actors ready to invest in infrastructure projects. In turn, investments will contribute to the multiplier effect in the economy, which will allow to involve all interested persons, including business and the state. The development of any of the infrastructure projects (including Arctic ones) is unsustainable to the state budget, so the need for public-private partnership is only increasing. And, according to the authorities, PPPs in the framework of projects, for example, in the Arctic will be mediated not only by domestic business, but also by foreign business.

One of the relevant mechanisms for attracting investments in projects is public-private partnership. PPP – favorable "scheme" which in Russia became current practically in all spheres of human activity and was fixed in standard and legal understanding by federal law No. 224-FZ "About public-private partnership, municipal and private partnership in the Russian Federation and introduction of amendments to separate acts of the Russian Federation" [7]. The PPP also represents the mechanism at which there is an implementation of vital projects regarding increase in welfare of civil society with mediation of the state and business – on mutually advantageous conditions. The state and commercial alliance is extremely favorable to both interested parties as it allows to level significantly expenses, – as a rule, state. While businesses receive special privileges, which, for example, aim to reduce tax pressure: that is, benefits are provided to compensate for "possible" business losses from participation in infrastructure projects. Thus, entrepreneurs, using state support, have the opportunity to profit from the project on favorable terms: for example, by reducing the VAT quota. In general, the partnership between business and the state is based on the distribution of risks in the implementation of investment projects. That is, all the benefits transferred by the state to business – there is compensation for possible losses that can be associated with large-scale infrastructure projects. With regard to the benefits of PPPs on the part of the State, it had particular benefits from management approaches, namely, recognizing the high efficiency of private management due to competition in the capital market and the requirements for return on investment, which contributed to the optimal use of resources. Besides rational allocation of resources, business is famous for flexibility of the structure regarding a personal initiative and responsibility – it less bureaucratically: this approach to management allows to optimize in the best way use of personnel and other resources. However, undoubtedly more significant part – is assigned to the state it much is authorized: The PPP is carried out in a zone of responsibility of the state which also has the specific forms of distribution of responsibility between partners – that is the state acts as "regulator" of a vector of activity of partners [8].

Currently, PPP is receiving new development in Russia. A mechanism such as an "infrastructure mortgage," in particular when creating the Murmansk transport hub, is beginning to form and is already being used. Project bonds are used in the implementation of this project, which is a rather new financial instrument for Russia. The use of bonds as a financial instrument to finance SD of the NSR projects makes sustainable financing of these projects more realistic. Especially, this contributes to the implementation of ESG principles (ESG – Environmental, Social, and Governance) in investment activities. And such principles are already being implemented in Russia. The first green bond issues appeared in the country [9]. According to the authors, in the near future, green bonds will become an instrument, financing sustainable development of NSR.

3. Infrastructure and fleet as means of sustainable Arctic development
Sustainable development of the Northern Sea Route is impossible without sustainable fleet funding. Investments in the necessary infrastructure at Sevmorputi are estimated at $7 billion, and a large part of the funds is planned to be spent on the acquisition of the fleet.

In 2027, the Russian state corporation Rosatom plans to start transit freight transportation from Asia to Europe through NSR. Rosatom intends to enter a new maritime transport business and become one of the 15 largest maritime carriers in the world.
The terms of reference for the forthcoming works explain that Rosatom initiated the Northern Maritime Transit Corridor (NMTC) project as part of its new business direction "International Logistics" to ensure the competitiveness of SMP as an international transport highway. The subsidiary "Rosatom" – "Rusatom Cargo" should become the leader in the logistics services market by attracting international transit cargo traffic to the NMTC highway.

The NMTC is a new marine Arctic route between Northern Europe and East Asia, which is formed by providing services for the transit of goods through SMP through transit ports-hubs on the western and eastern borders of Russia.

In 2019, Rosatom ice breakers conducted the wiring of 510 vessels with a total gross capacity of 30.28 million tons; In 2018, there were 331 vessels and 12.7 million tons. Growth is ensured by Yamal LNG. With the launch of new projects, the main task will be the early ice-breaker fleet. At the same time, the Court of Accounts considered that the cash execution of the budgets of federal logistics projects ("Seaports of Russia," Sevmorput, "Railway transport and transit") as of 01.11.2019 amounted to 57.3%. The regulatory framework is poorly developed. The terms of work have not been agreed. Investment documents are poorly developed. All this gives rise to some concern that NSR's planned cargo turnover may not be achieved [10].

So far, official estimates based on requests from companies, including foreign ones, are rather modest. Maximum 3 million tons per year by 2035. In 2019, transit along the Northern Sea Route amounted to just under 700 thousand tons. The development of the Northern Sea Route depends on the construction of port infrastructure and transport and logistics centers in Murmansk and Petropavlovsk-Kamchatsky, transhipment bases to reduce the cost of transportation, which is necessary to attract large sea carriers with services: replacement of ship’s spare parts, change of crew, prompt resolution of customs issues.

An important transport and infrastructure project to be implemented in the Arctic is the Northern Latitude Road – a railway highway under construction in the Yamalo-Nenets Autonomous District with a length of 707 km along the route Obskaya-Split-Nadymy-Novaya Urengoy-Korotchayevo – from 2018 to 2022. For the development of industry in Yamalo-Nenets Autonomous District and Ural Federal District [11].

Thus, the transport and infrastructure development of the Russian Arctic depends directly on the implementation of LNG projects. The construction of LNG plants requires foreign investment and modern technology, which is complicated by anti-Russian sanctions.

The Concept of a Centralized Information System for Fleet Planning in the Arctic, a unified system for monitoring and planning ships and ice breakers in the Arctic is being developed.

4. Conclusion

In summary, it should be noted that:

The NSR should develop within the framework of the concept of sustainable development, as its role in the development of the Arctic zone of Russia is decisive. All territories of the regions of the Russian Arctic are completely dependent on sustainable functioning and sustainable development of the NSR, as well as are their socio-economic development and preservation of environmental stability.

One of the most important issues of sustainable development in the Arctic is the sustainable financing of projects related to the Northern Sea Route, which is fully in line with UN Sustainable Development Goals 14 and 17.

Sustainable development of the Northern Sea Route is impossible without sustainable fleet funding. Investments in the necessary infrastructure at NSR are estimated at $7 billion, and a large part of the funds is planned to be spent on the acquisition of the fleet.

In 2027, the Russian state corporation Rosatom plans to start transit freight transportation from Asia to Europe through the NSR which will give a needed boost to infrastructure and logistic development in the Arctic needed for social and economic development of the region.
References

[1] Korotnikov A M 2018 On Priority Directions of Development of the Arctic Zone of the Russian Federation in the Address of the President to the Federal Assembly of 2018: Budgetary, Legal and Organizational Aspects Journal of Legal Research 1 pp 27–39.

[2] On Approval of the Comprehensive Plan for Modernization and Expansion of the Main Infrastructure for the Period up to 2024 Order of the Government of the Russian Federation No. 2101-r dated 30.09.2018 (ed. 13.03.2020)

[3] Northern Sea Route Federal project

[4] Isayev A P and Fomina I A 2018 Priority projects for the development of the Arctic zone. Restoration of the Northern Sea Route Management Consultation 8 (116) pp 96–105

[5] UN Sustainable Development Goal 14: Conservation and management of oceans, seas and marine resources for sustainable development URL: https://www.un.org/sustainabledevelopment/ru/oceans/

[6] UN Sustainable Development Goal 17: Strengthen the means of implementation and strengthen the work of the Global Partnership for Sustainable Development URL: https://www.un.org/sustainabledevelopment/ru/globalpartnerships/

[7] On Public-Private Partnership, Municipal-Private Partnership in the Russian Federation and Amendments to Certain Legislative Acts of the Russian Federation Federal Law dated 13.07.2015 N 224-ФЗ (latest version)

[8] Vorotnikov A and Tarasov B 2019 Public-private partnership as a mechanism of the Russian Arctic zone's sustainable development IOP Conf. Ser.: Earth Environ. Sci. 302 012146

[9] Central dispatching management of energy industry Access mode: http://www.cdu.ru/catalog/statistic/eksport_spg_po_stranam/

[10] Government approves project of Transport strategy till 2035 Access mode: https://tass.ru/ekonomika/8104107

[11] Podberezkina O A 2019 Transport and Infrastructure Projects in the Russian Arctic: International Cooperation Proceedings of the VII International Canadian Studies Conference Russia and Canada: the Arctic Giants pp 61–77.

[12] National Goals and Strategic Objectives of Russian Federation 2024 President signs Decree Access mode: http://www.kremlin.ru/events/president/news/57425

Published under licence in Journal IOP Conference Series Earth and Environmental Science