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### Modern Tools for Sustainable Development of Territories. Special Topic: Project Management in the Regions of Russia

#### MANAGEMENT OF INNOVATIVE PROJECTS IN THE ARCTIC ZONE

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#### *Abstract*

One of the priority areas for the development of the Russian economy is the development of the richest natural resources of the Arctic, their further involvement in economic activity, which directly depends on how well the Northern Sea Route functions. The Northern Sea Route is a new transport corridor from Murmansk to Chukotka, subdivided into the Western zone (sector) from Murmansk to Dudinka and the Eastern zone (sector) from Dudinka to Chukotka, which in the future may become one of the most competitive transport systems in the world, but only subject to the provision of year-round regular shipping, taking into account modern requirements for the safety of shipping and minimal impact on the natural landscapes of the northern regions of Russia. In solving this problem, a new icebreaking fleet (including nuclear) and ice class ships will play a decisive role. Currently, cargo transportation along the Northern Sea Transport Highway is carried out only for a limited period of time, and mainly in the Western sector. Currently, a large number of innovative projects, requiring very significant financial outlays and potentially capable of having a significant impact on the country's economy, are being implemented in the Arctic zone of Russia. However, government support measures are not always effective in the long run. In this regard, it is necessary to ensure such a form of public-private partnership in the Arctic zone, which would make it possible to increase the efficiency of the national economy in the strategic period of time.

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**Keywords:** Arctic zone of Russia, icebreakers, ice class vessels, investments, Northern Sea Route, projects.



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## 1. Introduction

The solution of the promising task of accelerated innovative growth in the regions of the Arctic zone of Russia and, accordingly, the Northern Sea Route (NSR) is in the sphere of interests of both the federal executive bodies and many other entities interested in the effective functioning of the Arctic region. Among them are: administrations of the Arctic territories, oil and gas production enterprises, business entities engaged in the extraction and processing of other minerals, shipbuilding enterprises, port facilities. A set of measures for the development of the Arctic zone requires significant financial resources of budgets of all levels of the budget system (Bolshakov, Abramov, Alekhin, Zagorodnikov, & Tkachev, 2018).

At the same time, the main emphasis must be placed on the long-term consequences of innovative and investment decisions. Due to its scale and significance, the implementation of projects in the Arctic zone is impossible without the active assistance of the state, which allows it to require private companies to take into account the strategic consequences of decisions and take an integrated approach to the problem of determining the economic effect. So, the Yamal-LNG project, worth more than \$ 30 billion. received unprecedented support from the state in the form of tax incentives and direct co-financing of individual project activities. However, having provided financial support, the federal authorities, in turn, did not submit counterclaims to the private company for the localization of the equipment used in Russia. Thus, the opportunity to give a much-needed impetus to the development of domestic machine building was lost.

Ansoff (2007) formulates one of the basic principles of strategic control from an economic perspective: due to the uncertainty and inaccuracy of the calculations, a strategic project can easily turn into a waste (Ansoff, 2007). This cannot be allowed, expenses should lead to the planned results. Attention should be focused on cost recovery, and not on budget control. Studying the problem of the development of the Republic of Azerbaijan, it is necessary to consider not individual projects (development of territories, development of mining and processing of minerals, development of infrastructure, development of NSR, etc.), but the set of projects as a whole and their general contribution to the development of the country's economy. By supporting projects of private companies in the Arctic zone, the state should not only ensure the loading of NSR, but also take into account their impact on the development of other sectors of the national economy, primarily machine building.

## 2. Problem Statement

At present, a number of major innovative projects (the project of OJSC «Novatek» Yamal LNG, the project of OJSC «Gazprom» on operation of the first oil producing platform of ice class «Prirazlomnaya»), have already been implemented in the Arctic zone of Russia, even more projects are at various stages of implementation (previously, this is a project of OJSC «Novatek» Arctic LNG-2, a project for the reconstruction of the Arkhangelsk seaport, the seaports of Dudinka and Dikson, the construction of a new seaport of Indiga, a number of projects of OJSC Rosneft, etc.). At the same time, these projects are often implemented haphazardly and without taking into account the long-term consequences, which reduces the effectiveness of budget investments.

Thus, it becomes relevant to solve the problem of maximizing the potential of NSR to ensure the satisfaction of the needs of the national economy and the interests of individual regions of Russia located in the zone.

### **3. Research Questions**

The article discusses the problems of increasing the efficiency of implementing innovative projects in the Arctic zone of Russia, taking into account the need to maximize the use of its resource potential and balanced economic development of individual constituent entities of the Russian Federation.

In essence, the development of the Arctic zone is a major innovative task that has no analogues in the scale of activity, territorial extent and the amount of resources attracted. At the same time, solving this problem is able to guarantee our country national security and economic sovereignty through the use of a huge base of natural resources of the Arctic regions.

### **4. Purpose of the Study**

The aim of this work is to develop recommendations for improving the efficiency of budget investments in the implementation of innovative projects in the Arctic zone of Russia, taking into account the need to maximize the potential of the Northern Sea Route, and create conditions for the integrated socio-economic development of the polar regions of the country.

### **5. Research Methods**

The main research method is a comparative analysis that allows you to objectively evaluate the decisions that are made on the development of the Arctic zone of Russia and ensuring its stable functioning in the current economic conditions, taking into account the needs of long-term growth of the national economy as a whole and its individual regions.

The systematic approach has found its application in the article, which makes it possible to comprehensively take into account the totality of both natural and economic factors that have a significant impact on the development of the Arctic.

### **6. Findings**

In the current economic conditions, NSR is a promising transport route in Russia, which forms the conditions for the development of the Arctic regions of the country both in the short and especially in the long term. Without NSR it is impossible to ensure the growth of the gross regional product of the Arctic territories, the maximum use of their natural resources. The project for the development of the Arctic zone of Russia, including the Northern Sea Route, as well as the technical and technological solutions that ensure its effective functioning, form the innovative high-tech sector of the national economy during its implementation.

With the development of the Arctic zone of Russia, ensuring the vital activity of its territories, building, operating and selling the products of enterprises located on this territory (for exploration,

production and processing of minerals, fisheries, etc.) is possible only with the presence and development of the NSR system, formation effective infrastructure for the transportation and maintenance of goods (Otsuka, Izumiyama, & Furuichi, 2013). With this approach, all the regions of the Arctic zone of Russia, economic entities located on their territory, as well as sea-going and river-sea-class vessels that support them, participate in the creation of a new value chain. Consequently, when assessing the economic effect, an integrated approach is necessary, taking into account the totality of the added value in the process of implementing state support measures (Keupp, 2015).

It should be noted that all types of economic activity in the Arctic zone of Russia need to be provided with various life support goods, including raw materials and components (Pastusiak, 2016). At the same time, it is necessary to ensure the export of finished products. For this, the NSR and the icebreaking ships supporting it are used. In solving the problem of the effective functioning of the Arctic transport system, it is necessary to carry out strategic planning activities to ensure its vital functions and at the same time develop the entire Arctic zone of Russia. In this case, the synergistic effect arising from joint activities should be taken into account.

At the same time, the successful development of NSR requires a large amount of investment, not only at the expense of budgets of all levels, but also with the involvement of private investors (Maitakov, Merkulov, Petrenko, & Yafasov, 2018). In this regard, the most important task of the federal authorities is to balance the interests of the state, individual regions and private investors in the process of implementing a set of innovative projects for the development of the northern transport corridor.

The problems of the development of NSR were reflected in such important documents as “The strategy for the development of the Arctic zone of the Russian Federation and ensuring national security for the period until 2020”, (The strategy for the development of the Arctic zone of the Russian Federation and ensuring national security for the period until 2020, 2013) and “The action plan for the implementation of the Strategy for the development of the Arctic zone of the Russian Federation and ensuring national security for the period until 2020”, 2016. However, despite the importance and significance of these documents, they contain a certain inconsistency of target indicators, a lack of consistency in the selection of development goals of the Arctic zone and methods for their achievement (Smirnov, 2019).

In our opinion, the application of the methodological foundations of strategic planning in relation to high-tech projects, such as optimizing the functioning of the AZR, should be based on a set of principles that take into account the specifics of the Arctic as a special economic and natural region.

Prospects. Project life cycle research is aimed at the long term. Sea freight play a decisive role in international trade and, in connection with the steady development of the global economy, the volume of freight traffic will become more significant. As for the Arctic zone of Russia, its industrial development is only in its infancy and in the future it will inevitably increase cargo flows both for the delivery of livelihoods goods and production development in the Arctic region, and for the export of finished products for consumers (Firsova & Khmara, 2019).

Future orientation. Management, which is based on the implementation of the project life cycle schedule, is focused on the future of this manufacturer and consumer. The solution of current problems is

being carried out from the point of view of the future sustainable development of individual administrative-territorial entities of the Arctic zone.

With an increase in production volumes in the Arctic region, there is a need for year-round support of the transport component, which requires the involvement of new innovative equipment and an appropriate level of transport and logistics operations.

Feasibility. When studying the life cycle of projects for the creation and consumption of a new or improved product, the real capabilities of the product manufacturer are taken into account. The feasibility problem has been particularly acute for domestic manufacturers in recent years, in connection with the sanctions imposed by a number of countries on Russian shipbuilding enterprises. This provision necessitates the activation of import-substituting programs, in particular during the construction of ice-class gas carriers serving transportation via NSR.

Phasing. The introduction of a new idea into the production process and operation takes place in stages along the phases of the project life cycle. In this regard, the development of the Arctic zone should be carried out gradually, taking into account the willingness of individual regions to solve existing problems of ensuring year-round navigation and maintenance of sea vessels carrying cargo via NSR.

In this regard, when implementing innovative projects in the Arctic zone of Russia, it is necessary to take into account the comprehensive long-term economic results that determine not only and not so much the increase in the financial efficiency of individual companies, but also the increase in the effectiveness of the functioning of the entire national economy.

## **7. Conclusion**

The strategic planning for the development of the effective functioning of the Arctic Transport System of the Russian Federation is based on the selection of investment projects aimed at achieving future expected results. Moreover, these results should not be considered as individual successes, but in the aggregate of results leading to the achievement of the ultimate goal - the development of the Arctic zone of Russia. That is, it is advisable to use the methodology of target-oriented planning in order to develop a development strategy for the Arctic zone of Russia and increase the transportation of goods along the Northern Sea Route. The essence of target-oriented planning is that it allows you to implement the sequence of planning from setting goals (development of the Arctic zone of Russia, growth in freight traffic via NSR, creation of a new transit transport corridor between Europe and Asia) to determining specific practical actions (increase in volume transport operations, providing the route with icebreaking and transport vessels, creating a modern navigation service system along the entire NSR, etc.).

The needs for the icebreaking fleet and for modern ice-class transport vessels will vary depending on the possible transportation scenarios (taking into account the possible transportation of goods via NSR), depending on a number of external conditions for the development of the Russian economy, as well as the world economy. Western sanctions are not a determining factor in the development of the Arctic zone of Russia, however, their lifting will contribute to the growth of transit freight traffic in NSR and, as a result, the emergence of new projects in the Arctic zone of Russia.

The development of NSR and, as a result, the implementation of investment projects in the Arctic zone of Russia should be carried out in stages. At the first stage (conditionally until 2022), the western

direction of NSR should be given priority, the development of which is proceeding at a faster pace and which at the moment is more mastered with a trend of steady growth in traffic in a simpler ice situation. At the second stage, the eastern direction of NSR should be given priority, the availability of which for shipping will increase as global climate changes entail melting ice in the Kara Sea and the Laptev Sea.

For all its importance, significance and enormous extent, the NSR is only a tool designed to ensure the development of the Arctic zone of Russia, attracting investments to the development of natural resources of the Arctic regions. Implementation of innovative projects in the Arctic zone of Russia cannot be carried out without tax incentives and other support methods from federal executive bodies. Such support should be focused on obtaining a long-term economic effect through the implementation of public-private partnerships. At the same time, the resulting economic effect will be determined not only and not so much by the growth of profit of innovation producers in the Arctic zone of Russia, by the increase in cargo transportation via the NSR, but also by the degree of influence of innovative projects on the development of other sectors of the national economy. In particular, the state should stipulate the provision of financial support with a certain level of localization of investments, the acquisition of products of domestic enterprises, which will give the necessary impetus to the development of engineering, which until now has not completely overcome the consequences of the crises of the 90s of the 20th century.

The long-term growth of industrial production should be considered as the main criterion for evaluating the effectiveness of budget investments in the implementation of innovative projects in the Arctic zone of Russia.

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