Creation of development zones in the Arctic: methodology and practice

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Abstract. The article describes the basic principles and methodological bases of formation and development of the supporting areas of the Russian Arctic. The work emphasizes that the basis of the methodological approach in the formation of the supporting areas is a vector of development of the territory as an integral project on the principle of coordination of all "industrial" activities in the planning, goal-setting, financing and implementation, which will allow to reduce all kinds of costs and expenses, as well as all the projects included in the supporting areas should be aimed at the development of the macro-region as a whole, not just to solve individual tasks of the industry. The article underlines that the formation of the supporting areas is aimed at achieving a single global goal — to encourage efficiency and diversification of the economy of the Arctic zone, oriented to the preservation and development of the Northern Sea Route.

Keywords: Arctic, supporting areas, strategic planning, the NSR, regional economics, spatial development, national security, the government program, the development of the Northern Sea Route

The complex of basic strategic documents of the Arctic zone consists of "Fundamentals of the state policy in the Arctic" (2008), "The Strategy of the development of the Arctic zone of the Russian Federation and national security for the period up to 2020" (2013), and the state program of RF "Social and economic development of the Arctic zone of the Russian Federation for the period up to 2020 "(2014). However, the entire list of basic instruments for achieving the strategic
objectives in the Arctic is much wider. They are reflected in the strategies and programs of the federal and regional level, in the development strategies of branches of economy and social sphere and federal districts. The complex of questions in the frame of the strategic planning includes the issues of budgeting and monitoring, interaction of medium and long-term planning, the implementation of the principles of balance, consistency [1, Smirnova O.O.].

In this regard, it makes sense to analyze not only the strategic documents of ministries, federal districts of the RF for the unity of the strategic objectives of development of the Russian Arctic, and the analysis of all the funds allocated through the federal and regional programs for the development of areas of the Arctic zone, the registry of capital construction projects funded from the budgets of different levels, social programs, and others. [1, Smirnova O.O.]. This allows consolidating the efforts on specific priority areas, creating a multiplier effect of development without any additional federal budget spending, to focus on certain points of growth in the Russian Arctic by implementing the project-based approach.

In September 2016 the Government of RF considered the updated draft of the Action plan for the implementation of the Strategy, which defines the responsible executors, deadlines and arrangements for the implementation of key provisions of the Strategy. In result, the priorities set by the state got its concrete expression in this document. The federal law "On the development of the Russian Arctic" is finalizing. Thus, the Arctic is highlighted as a priority of the state policy, and the activities of state bodies on the Arctic is practically integrated into the framework defined by the strategic and normative documents.

The new edition of the state program "Social and economic development of the Russian Arctic" for the period till 2030

A key tool in the implementation of the integrated development of the Arctic zone is the new edition of the state program "Social and economic development of the Russian Arctic for the period till 2020 and long term". This project of this state program is different from the previous one, which had only the analytical character. The new version of SP provides the allocation of funding, the target indicators will be determined which will allow monitoring its effectiveness. The issues related to the clarification of the list of priority investment projects will be strongly actualized, meaning projects having a significant multiplier effect and able to become "drivers" of the complex social and economic development of the macro-region, linking them with the national, sectoral and corporate strategies, programs and plans.

In new edition of the state program of the Russian Federation it is intended to include among 5 programs the following sub-program "Balanced social and economic development and
national security. Formation of the supporting zones of the Arctic development and maintenance of their functioning" [2, Smirnova O.O.]. As part of the financing of the state program it is necessary to mention the specifics of the Arctic zone. The activity of large companies established in the territory of supporting zones determines the financing structure in the framework of the state program, where extra-budgetary funds constitute the vast majority of funds. Fully legitimate participants in creating the supporting development zones under the SP are regions and businesses operating in the Arctic. We are talking about the projects, which should be implemented with the efforts of all "interested parties": the state (represented by both federal and regional governments), business and the population. The basic difference between the forming state program on social and economic development of the Russian Arctic has become a new, integrated approach to the development of specific areas in the Arctic. Based on the existing administrative territorial division, functioning of transport nodes, including the Northern Sea Route and the resource base, the Russian Ministry of the Economic Development at the meeting of the presidium of the State Commission in March 2016 proposed a new mechanism for regional development — the "supporting zones".

**Eight supporting zones of the Russian Arctic**

Currently we identify eight "supporting zones" in 8 territorial entities of the AZRF. These zones are indicated on the map (Fig. 1).

![Figure 1. The map of the supporting zones of the AZRF.](image)

1. **Kola supporting zone.** The advantages of this zone are favorable geographical location, ice-free year-round ports, the presence of mineral resources, as well as a relatively well-developed transport, energy, industrial, scientific and educational infrastructure.
2. **Arkhangelsk supporting zone** is characterized by favorable geographical position, associated with a well-developed railway infrastructure and year-round port (November - March are only for ice-class vessels or with icebreaker assistance).

3. **Nenets supporting zone** includes a number of promising areas of the economy, primarily related to the development of the Northern Sea Route and mining.

4. **Vorkuta supporting zone** includes municipality Vorkuta of the Komi Republic.

5. **Yamal-Nenets supporting zone** is one of the most promising and capable to ensure ports of the Northern Sea Route with stable cargo traffic.

6. **Taimyr-Turukhansk supporting zone** at the territory of Krasnoyarsk region has extracting and industrial orientation. It comprises the largest metropolitan area in the Arctic - Norilsk industrial district (with the center in Norilsk).

7. **North Yakut supporting zone** in the Republic of Sakha (Yakutia), the center of which is one of the key points of the eastern part of the Northern Sea Route - the port Tiksi.

8. **Chukotka supporting zone**, where a number of systemically important objects of transport infrastructure of Chukotka autonomous area are located, which can become the main points of growth in the eastern sector of the North Sea Route and the Arctic zone of the Russian Federation.

Formation of "supporting zones of the Arctic provides the approach to the development of the territory as an integral project with principle of insuring of coordination of all industrial activities at the stages of planning, goal-setting, financing and implementation, which will allow to reduce all kinds of costs and expenses. It will be federal projects, as first of all they should be aimed at the development of the Arctic macro-region as a whole, but not just at the decision of the individual sectoral objectives. The supporting zones will influence on the development of "neighbouring territories", whose economic activities directly depends on the state of the Russian Arctic and its infrastructure. Orientation of supporting zones to sea ports of the Northern Sea Route will enhance the activity of shipbuilding and ship-repairing enterprises of the Arctic zone and other regions of Russia. Complex projects provide linkages between activities to create the Arctic transport system, the development of energy infrastructure, industrial facilities, synchronized interlinked use of existing tools of territorial development and mechanisms of support of the investment projects. Each project is a contribution to issues of the development of

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1 A.V. Ulyukayev, speaking at a meeting with members of the Government in the Kremlin on 07.09.2016, noted: "To match the projects, in order to use the synergies that can occur here, the concept of the supporting zones of the Arctic region was accepted. They are Kola, Chukotka, North Yakutian, Yamal, Taimyr, Nenets, where the development of projects at the basis of common infrastructure can occur, and this significantly saves the initial financial costs."
the supporting zone and the Northern Sea Route "[2, Smirnova O.O.]. Such an integrated approach in practice is very difficult not so much financially as in terms of the coordination of all participants in order not to miss any single detail. That is why, the main task of the formation of the state program "Social and economic development of the Russian Arctic for the period up to 2020 and long term" is a synchronization of events in periods for the production of complex and inter-regional effects during the implementation of the program.

**The Arctic projects in the supporting zones**

Nowadays so-called "anchor projects" are defined, as well as the sources and amounts of funding. On the basis of the proposals of the authorities and management at the federal and regional levels, as well as Russian Railways, Norilsk Nickel, ALROSA, Gazprom, LUKOIL, NOVATEK, the list of projects implemented or planned for implementation on the territory of the Russian Arctic has been formed, consisting of 145 projects in the following areas: mining and processing of mineral resources — 38.9%; transport — 18%; mining and processing of diamonds — more than 15%; exploration — 7%; industry — 5%; energy — 5%; fishing industry and agriculture — more than 4%; ecology — 2%; telecommunications — 1.5%; tourism — less than 1%; social services — less than 1%; others — 2%.

17 priority projects among 145 have been allocated: the creation of the Northern latitudinal way, complex development of Murmansk transport hub and the construction of seaport in Sabetta, "Yamal LNG", the development of oil field Prirazlomnoe, etc. At the same time, the projects for the construction of the railway Belkomur and the deepwater seaport area of the Arkhangelsk sea port, construction of the deepwater port of Indiga and the railway to it, though have been included in the Transport strategy, strategy of social and economic development of the Northwest Federal district, but have not had necessary studies and accurate calculations on them, so the final decisions about their implementation have not been accepted.

The Arctic project management is assumed by the statement of D.O Rogozin 13.10.2016: "Creating of the project offices in frames of each Arctic subject, linked together by a single control system, as well as the economic, transport and social infrastructure".

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3 Ibid.

The Arctic National Educational Consortium

External and internal challenges, creating of supporting zones, comprehensive development of the Russian Arctic set new tasks for science, require modern, innovative technologies for effective management in the extreme conditions. The role of the human resourcing in the context of the project approach to the social and economic development of the Russian Arctic becomes decisive in the life of a project, the Arctic projects actually form the order for the staff, it is expected to create conditions for the development of primarily those areas that have the potential of human resources [3, Tsybulsky A.V., Fishkin D.O., p.43].

Consolidating force for scientific and professional development of the Arctic is the "Arctic National Educational Consortium", created on the basis of NArFU named after M.V. Lomonosov. [4, Kudryashova E.V., p. 25]. The activity of the Consortium aims to create conditions for inter-agency coordination of educational, scientific and industrial organizations, cooperation with the authorities, business community in the Arctic, combining all available resources of all interested parties [5, Kudryashova E.V., Tyukina S.L., p. 179]. This project has all grounds and opportunities to become one of the priority mega-projects within the framework of the new edition of the State Program on social and economic development of the Russian Arctic at all three stages of its development: 2017-2020, 2021-2025, 2026-2030.

The Northern Sea Route — the key national megaproject

One of the large-scale national projects in the Arctic, the key element connecting all eight supporting zones is, of course, the Northern Sea Route and major seaports on its way.

V.V. Putin said about its significance at the International Arctic Forum in Arkhangelsk in 2011: "The Northern Sea Route ... we are going to turn into one of the key trade routes, with global importance and global scale. ... In general, I think that it is transport — the creation of new sea and air corridors is capable of becoming one of the breakthrough projects uniting the Arctic states”5.

In June 2015 the Government of the RF approved comprehensive project of the development of the NSR, providing a wide range of activities: from the development of the port infrastructure and navigational support to emergency measures and the construction of the modern marine equipment6.

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Ministry for Development of Russian Far East with the participation of the analytical center of the Russian Government designed in 2016 the financial and economic model of the Northern Sea Route (NSR FEM) as a competitive transport corridor of global importance, including for the container transportations. This model has been discussed in the framework of the 2nd Eastern Economic Forum in Vladivostok. The investment costs for the implementation of only the main part of the conversion of the project into the transportation corridor of global significance are 114.5 billion rubles\(^7\). NSR FEM has been transferred to the Japan Bank for International Cooperation (JBIC), it will allow the Ministry for Development of Russian Far East to go to concrete investment decisions.

Modernization and reconstruction of the entire system of the NSR as the main latitudinal transport route in the Arctic, a link between the Russian Far East and the western parts of the country, certainly also aims at the implementation of the effective inter-continental transport links between Europe, Asia and America. One of the challenges of the innovative development of the NSR is the development of the Arctic integrated geographic informational system, where the modernization of navigation, including the military and boundary infrastructure of dual use is becoming the main component [6, Lipina S.A., p. 72].

**Conclusion**

An integrated approach, balancing of sectoral and territorial approaches are designed to provide a synergistic effect of the development of the Northern territories (supporting zones of the Russian Arctic), and revitalization of the NSR, especially in its eastern sector. Solving the set tasks, already today the supporting zones and the development of the NSR should be considered as links of one chain, because the growth of the volume of cargoes and transit growth through the NSR involves the use of port capacities in the Arctic Ocean basin.

The partnership of business and government and municipal management is extremely important, coordination of plans of large companies, corporations and other strategic documents of the federal and regional levels of social and economic development of the Russian Arctic due to the fact that investments are made on the implementation of the priority projects in the supporting areas.

During the development of promising hydrocarbon projects in the supporting zones, especially those related to the production of hydrocarbons on the continental shelf in the Arctic, today it is necessary to take into account that the progressive development of world energy is

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accompanied by a restructuring of the energy balance, the change of the role and importance of certain energy carriers. Cost of goods and services produced in the high latitudes, is much higher, which creates certain difficulties in their competitiveness [7, Lipina S.A., Smirnova O.O.]. We can not ignore the social and economic consequences of global climate change, reducing the area of ice and changes in the conditions of navigation of the seas of the Arctic Ocean.

References