Prospects for implementing support for small and medium businesses in the Arctic zone of the Russian Federation on the example of the republic and Sakha (Yakutia)

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Abstract. The article analyzes the current policy of the Russian Federation in the Arctic on the example of the Republic of Sakha (Yakutia). The perspective of the development of the Arctic zone of Russia of the Russian Federation in the context of 2025 and the implementation of existing investment projects aimed at the development of the Arctic zone of the Republic of Sakha (Yakutia) are considered. The characteristic of the republic as a northern region is given, the Arctic territorial clusters of the Republic of Sakha (Yakutia) are distinguished. A solution to the problem of lack of human resources and increasing the investment attractiveness of the Arctic zone of Russia is proposed, using the experience of China in innovative small and medium-sized businesses. A study of the actions and impact of the territories of advanced development and special economic zones on the development of the region.

1. Introduction
Modern regional politics and geopolitics define the Arctic zone as a territory falling within the interests of not only countries that have direct access to this region, but also a number of countries that at first glance have nothing to do with the Arctic. The Arctic is attractive to many countries, first of all, as a promising raw material region, as well as a transport corridor connecting the largest sea ports of Asia and Europe, an alternative to the traditional route through the Suez Canal. The process of turning the Arctic into a transnational political space - the Trans-Arctic, plays a significant role (This is what was discussed during the work of the VI Summit of Arctic Leaders in November 2019).

In addition to countries geographically expanding to the Arctic, the region attracts the attention of a number of rapidly developing economies in the world. These countries include China, Japan, the Republic of Korea, India, Singapore, whose economies are largely dependent on imports of mineral resources, as well as maintaining close trade relations, primarily with European countries.

The Arctic has significant reserves of mineral resources, biological and other types of natural resources. Especially rich in hydrocarbon reserves in the region, whose role with the depletion of their reserves on current currently fields become very important second.

In 2009, Science magazine published a study of the natural resources of the Arctic. According to the research team, about 83 billion barrels of oil (about 10 billion tons) lie under the ice of the Arctic, which is 13% of the world's undiscovered reserves, and, most importantly, about a third of the Arctic Ocean is about the bottom of the shelf of the Arctic seas of Russia [1].

In addition to hydrocarbons, the region substantially satisfies the needs of Russian mining enterprises specializing in the extraction of copper, nickel, gold, mercury, tungsten, cobalt, platinum and rare earth metals. The Arctic zone contains a large part of the Russian reserves of gold (40%), chromium and
manganese (90%), platinum metals (47%), primary diamonds (100%), vermiculite (100%), coal, nickel, antimony, cobalt, tin, tungsten, mercury, apatite (50%), phlogopite (60-90%) [2]. At the same time, the development of Arctic deposits poses many problems and requires significant investment and new technological solutions and production and transportation technology, guarantees the safety of the surrounding environment of the Arctic.

The destruction of the planned economy strongly influenced the industrial potential of the Arctic regions, the 90s actually led to the destruction of the whole multistructure economy of the Russian Arctic. The Arctic zone now needs reinindustrialization based on the latest technologies, otherwise, due to the growing deterioration of the production base and infrastructure, as well as systemic macroeconomic problems, the macroregion’s economy could completely turn into a “suitcase without a handle”, the region will constantly experience personnel and technical hunger, and the socio-economic infrastructure will be extremely expensive for the Russian economy.

In general, the region produces 11% of Russia’s national income, with a share of the population living here of 1% and up to 22% of the total Russian export [3]. At the beginning of the 20-th of XXI century, the region is actively growing, created monoprole mining industrial and social infrastructure, as well as the military-industrial and transport (the Northern Sea Route - SMP) complexes.

The problem of determining the status of a region as an object of geopolitics, regional planning and management is the establishment of the borders of the Arctic region. There are many approaches in determining the borders of the Arctic, both in our country and abroad. It is proposed to distinguish the region on the basis of various approaches, starting with natural-geographical, ending with the administrative integrity of the regions. A common approach, combining different points of view on this problem, in our opinion, is to draw the southern border of the Arctic at approximately the latitude of the Arctic Circle (66 ° 33 ‘ N) [4].

Russia is the leader among other states in the development of the Arctic both in the resource plan and in infrastructure in Russia, the largest icebreaker fleet in the world. Moreover, the Northern Sea Route completely passes through the part of the Arctic controlled by Russia. And this is not only about the Northern Sea Route passing through the northern seas of Russia. It is estimated that by 2040, routes directly through the North Pole in the summer may appear in the Arctic Ocean. Experts also note that the Arctic is a promising region in tourism and research.

![Figure 1. Variants of passage of vessels in the Arctic Ocean.](image)

In order to implement the public policy framework in the Arctic, in May 2014 the President of Russia signed a decree number 296, which established the land areas of the Arctic zone, which included completely or partly in eight Russian regions (Table. 1).
Table 1. List of land territories of the Arctic zone of Russia (in parentheses indicate the number of municipalities of the subject included in the list)

| No. | Name of subject                      | Fully / partially |
|-----|-------------------------------------|-------------------|
| 1   | Arkhangelsk region                  | Partially (7)     |
| 2   | Murmansk region                     | Completely        |
| 3   | Nenets Autonomous Okrug             | Completely        |
| 4   | Krasnoyarsk edge th                 | Partially (3)     |
| 5   | Chukotka Autonomous Okrug           | Completely        |
| 6   | The Republic of Sakha (Yakutia)     | Partially (5)     |
| 7   | Yamal-Nenets Autonomous Okrug       | Completely        |
| 8   | Komi Republic                       | Partially (1)     |

Source: Decree of the President of the Russian Federation, dated May 2, 2014, No. 296 “On land territories of the Arctic zone of the Russian Federation”.

The Government of the Russian Federation, in 2016 approved an Action Plan for the implementation of the Strategy until 2020, which provides for the implementation of 80 activities in six main areas. (Fig. 1) [5].

Figure 2. The main directions of the plan for the implementation of the Development Strategy of the Arctic zone of the Russian Federation

The key issues of the plan are the expansion of the resource base in the region, the development of economic sectors, and the construction of infrastructure. A wide range of activities is aimed at solving problems with transport support in the Arctic: the development of sea transport and the icebreaker fleet, aviation, the expansion of the railway network and the basic road network, which in the future will be integrated with international transport communications.

The plan emphasizes the role of science in solving a number of issues facing the region, the need for a comprehensive study of phenomena and processes, especially in the implementation of large projects in the Arctic. Particular attention is paid to the need for international cooperation in the study of the Arctic.

The Republic of Sakha (Yakutia) is located in the north-eastern part of the Eurasian continent and is part of the Far Eastern Federal District, part of the Far Eastern Economic Region of the Russian Federation. The features of the Republic of Sakha (Yakutia) as a northern region include:

- large territory with a small population,
• absence of polluting industries,
• advantageous geographical position, which provides short routes from European to Asian and American countries,
• rich mineral deposits,
• qualified human resources.

In the ranking of the investment potential of the Russian regions 2016 years, the Republic of Sakha (Yakutia) holds the 20th place, and in terms of resource and natural potential, the 2nd place [6].

The specific weight of the mineral reserves of the Republic of Sakha (Yakutia) in the mineral resource potential of Russia is: for diamonds-77%, for gold-12.3%, for antimony-68%, for uranium-61%, for tin-34.7 %, iron ore-6.2%, mercury-8%, coal-5%. There are significant reserves of rare earth elements, silver, lead, zinc, tungsten.

The Republic has the largest hydropower potential in the Far East. Potential water resources of the main rivers of the republic are 507 billion kWh, which is 1/5 of the total resources of the Russian Federation. On the territory of the republics and grows 2.5% of the world and about 11% of Russian reserves of forest resources. Among the constituent entities of the Russian Federation that are members of the Far Eastern Federal District, it accounts for 50.8% of the forest area or 43.3% of the total timber stock.

The climatic conditions of Yakutia can be described as extreme, it is one of the coldest regions of the country, and most of the republic’s territory is located in the permafrost zone.

In the Republic of Sakha (Yakutia) at the regional level, in order to implement the Strategy for socio-economic development of the Arctic zone of the Russian Federation, a program for the development of the Arctic and northern regions of the Republic of Sakha (Yakutia) has been developed and adopted, until 2020 [7]. The uluses included in the program have specific features [8], which allowed them to be attributed to the Arctic and northern territories:
• climatic conditions;
• natural landscapes;
• conditions of managing and living of the population, which depend almost entirely on seasonal supplies during navigation and winter periods.

In developing the authors of the program were based on the location of the uluses to the basins of the rivers Anabar, Lena, Yana, and Kolyma Indigirka flowing into the Arctic Ocean, which allows the use of the approach (“cluster” in the development programs of these areas Fig 2).

Figure 3. Arctic territorial clusters of the Republic of Sakha (Yakutia)

Despite the impressive resource potential of the Arctic zone of the Russian Federation, the economic development model, focused only on the extraction and sale of raw materials, is losing its relevance. According to experts, the country cannot develop due to the export of raw materials, the volatility of prices for which determines the instability and the need for constant redistribution of funds from the low-resource, in terms of employment of the raw materials sector of the economy, to low-efficient sectors with high employment. This leads to the hypertrophied role of the state in the economy, the suppression and distortion of market incentives. The dominance of rent-oriented and dependent attitudes in society [9]. In the new macroeconomic realities, a transition to a new model of economic development - innovation, is necessary.
The problems of innovative development and improving the competitiveness of the economy are complex problems that concern not only industry and investment, but also the social sphere. In the new economy, human capital is becoming the most important factor in economic development, and the social sphere, respectively, is the main area of reproduction of this valuable resource. Without initiative, organized and highly qualified human resources, neither innovative development of the economy, nor the implementation of large-scale projects (especially in such a harsh region as the Arctic) are simply impossible.

Innovative business in the world continues to be used more and more intensively. Small and medium-sized businesses are actively expanding their intensification by increasing the innovative component of their activities. The Asia-Pacific region is increasing its influence on the world market not only by increasing the number of multinational corporations, but also by introducing small and medium-sized companies to the international market, which comprise 99.2 % of all enterprises in the region.

The mechanism of socio-economic development of the northern territories, both for business and human resources, can be the development of small and medium-sized innovative businesses and entrepreneurship.

In China, for example, small and medium-sized enterprises are important active participants in innovation processes. The contribution of small and medium enterprises to the aggregate of technological innovations of the country is more than 70%; they have become the most important factor stimulating the development of this sphere in the country. There are industries in which the innovative activity of SMEs is characterized by the highest level. For example, in the areas of software development, manufacturing of computers and the creation of biological medicines, mobile commerce and others. Technological innovation of small and medium-sized enterprises are even more active, creative, riskiness, as a result, they have notable advantages to large companies and provide substantial assistance to the development of a number of industries.

A special place in the innovation activity in China is held by the venture industry. In 2019, according to the Chinese consulting agency Aizhui Zixun, there were 5429 business incubators in China, with 225,000 startups resident in China. By 2015, their number has doubled, and the number of startups is almost 100 times. The boom of startups and, in general, the venture capital industry has contributed to the modernization of the Chinese economy, its digitalization and has become a response to the challenges of the “4th Industrial Revolution”.

The activities of SMEs play an important role in the implementation of the One Belt, One Way initiative. It is precisely with its development that the rise in living standards and the modernization of the backward northwestern regions of China, i.e. where the vector of “belt and path” passes - the economic belt of the Silk Road”.

Chinese leadership since the mid-10s. The 21st century attaches particular importance to the development of small and medium enterprises of all types of ownership, seeking to fully reveal the creative role of the entrepreneurial spirit of Chinese innovators. “The broad masses have become entrepreneurs, all have to come up with innovations - as the driving force for the great rejuvenation of the Chinese nation,” according to documents 13 Five-Year Plan (2016-2020). Chinese entrepreneurs are enthusiastic about this call, in the country in recent years, every day there is 18 thousand companies, many of which are innovative.

The success of innovative SMEs is associated not only with the enthusiasm of Chinese innovators, it is based on the thought-out policy of the PRC government, aimed at creating a favorable, stimulating climate for unlocking the innovative, entrepreneurial potential of the Chinese people. The complex of policies of the PRC government includes a number of measures of tax, financial, and administrative encouragement of the development of entrepreneurship, especially its innovative segment.

In Russia, the problem of developing a small innovative business is also solved by supporting the formation and development of various kinds of venture enterprises. This support is provided mainly by the state, as well as by individual universities. The flagship of achievements in the field of formation and development of small innovative businesses is the Skolkovo project, in which they actively support various startups.

At the same time, according to various estimates, the share of innovative enterprises in the general structure of small business in Russia is from 1.4 to 3.5%, which is extremely small not only in comparison
with developed countries, but also with China, despite the fact that technologically advanced enterprises SMEs in Russia, according to the research company Boston Consulting Group (BCG), create new jobs faster and increase revenue 15% faster.

The possibility of accelerated development of small and medium-sized enterprises appeared during the creation of TASED (territories of advanced social and economic development) or simply TAD. The Republic of Sakha (Yakutia) took an active part in the development of amendments to the legislation on TASED. So, on the initiative of Yakutia, the federal law included a clause crucial for the republic that the TAD can be created only with its approval by local authorities. SMEs can act in areas TASED for the development of such sectors: tourism, spa, and port and transport infrastructure. TASED creates conditions for the use of land and infrastructure of the economic zone. If in the TAD this use is strictly defined on a lease basis, then in the TASED the resident has the right to buy the site into ownership. The tax base allows commercial companies to gain commercial advantages, the absence of unscheduled inspections, the absence of a quota for attracting foreign labor, and accelerated and facilitated administrative procedures are also important.

TASED also helps to increase jobs and improve the socio-economic status of the region. For the first five years, residents of TASED are provided with a zero rate on key types of taxes, namely: income tax, property tax, land tax, transport tax, zero rate of import and export customs duties, zero VAT rate on imports for processing and an accelerated VAT refund procedure.

Riding the “innovation wave”, Chinese SMEs are striving to internationalize their business and, above all, on the “belt and path” routes. In this regard, it is very important for Russian entrepreneurs to use the potential of cooperation with Chinese partners. As you know, one of the directions in the implementation of the “one belt, one way” project is the formation of the “Ice Silk Road”, i.e. on the routes of the Northern Sea Route (NSR), which runs through the Russian Arctic. As the NSR passes through the water area of the Republic of Sakha-Yakutia, the Yakut representatives of SMEs have a significant field for cooperation with the Chinese side. China, declaring it a "near-arctic" state, advocates equal access and the principle of "common benefit" for all countries interested in the development of the Arctic region. Chinese investment in the exploitation of mineral deposits in Yakutia, as well as in transport infrastructure in the NSR will contribute to the revitalization of the SMEs of the line e-commerce, transport and logistics areas of port facilities, Schering economy, circular economy, and others. The Arctic region wills gradually transnationalizing, using Chinese capital. And here the main task is to use these investments both for the development of the Yakut innovation business, and for the development of the economy of the republic as a whole.

2. Conclusion
Despite the large gap between large and small and medium-sized enterprises so far regarding the volume of capital, the accumulation of technology and actual opportunities, the collection of information and analysis, as well as the ability to respond to risks, however, in terms of efficiency and vitality in relation to technological innovations in comparison with large enterprises, SMEs have their own advantages. Usually the organizational structure of medium and small enterprises is quite simple, with a small number of linear structural units and vertical levels of management. For this reason, contact and coordination is easier.

In addition, the incentive methods used at SMEs are easier to apply, since the incentive methods are direct aimed at specific employees, therefore it is easier to increase the activity and creativity of technical staff and employees of the enterprise with their help. In addition, SMEs are more susceptible to competitive pressure and changes in the market, they are more susceptible call s from the sphere of innovations. A number of important technological innovations start 21 century was carried out to SMEs.

The Far Eastern hectare project, as well as the implementation of TASED projects, will help attract the necessary human resources and entrepreneurial capital to the Far East and the Arctic regions of Russia, which will provide the Arctic zone of Russia with the growth of new industries and a constant influx of population both into the Arctic regions and the Far East.

Cooperation with the innovative business of China and other countries of Southeast Asia should not be discounted. A special role in the development of SMEs in Yakutia can be played by the implementation of
the Chinese initiative “one belt, one path” with its Arctic vector “Ice Silk Road”, through the activation of a number of areas of business activity, including in the innovation field.

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