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FORMATION OF THE COMMUNICATION CENTER FOR IMPLEMENTATION OF NEW PROGRAMS OF THE ARCTIC EXPLORATION

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ФОРМИРОВАНИЕ КОММУНИКАЦИОННОГО ЦЕНТРА ДЛЯ РЕАЛИЗАЦИИ НОВЫХ ПРОГРАММ ОСВОЕНИЯ АРКТИКИ

At the moment the implementation of new large scale programs of the Arctic exploration are under consideration. The article analyzes the conditions and prerequisites for economic cooperation with various groups of interested countries, as well as the nature of the communication technologies that integrate the necessary resources – modern technology, finance, design and manufacturing facilities, etc. – within the concept of the Arctic cluster in the North-West region of Russia with its center in St. Petersburg.

COMMUNICATION; COMMUNICATION CENTER; REGIONAL DEVELOPMENT; ARCTIC CLUSTER; ARCTIC RESOURCES.

Рассматривается вопрос о реализации новых масштабных программ освоения Арктики. Проанализированы условия и предпосылки экономического сотрудничества с различными группами заинтересованных стран, а также технологии коммуникационного характера, позволяющие интегрировать необходимые ресурсы – современные технологии, финансовые средства, проектные и производственные мощности и другое в рамках концепции арктического кластера в Северо-Западном регионе России с центром в Санкт-Петербурге.

КОММУНИКАЦИЯ; КОММУНИКАЦИОННЫЙ ЦЕНТР; ТЕРРИТОРИАЛЬНОЕ РАЗВИТИЕ; АРКТИЧЕСКИЙ КЛАСТЕР; АРКТИЧЕСКИЕ РЕСУРСЫ.

Introduction. The issue of accelerated development of the northern territories of Russia has been recently considered by the expert community and the state authorities. According to some scientists and government officials, updating points of growth of the economic potential associated with the Arctic is a priority for sustainable development of the country. The urgency of developing problems of Arctic areas is connected both with the improvement of the modern approach to territorial development, and the revelation of the coherence of the global vector of investments, – implemented in both cases on the international basis. Comprehensive Development of the Arctic territories, and their importance in the international relations of Russia, as well as the development of certain types of industry and services in the region are considered by such authors as: Agarkov S.A., Avakian S.V., Voronin N.A, Goldin V.I., Dubarenko K.A., Ivanov S.M., Ivashov L.G., Lukin Y.F., Nikora E.V. Polovinkin V.N., Rohchin V.E., Saveliev S.B., Fomichyov A.B., Shiyan G.N. and others. The aspects of creating an Arctic cluster in St. Petersburg and the general questions of the sustainable development of mining regions are covered by the author. The issue of creating a communication center for the exploration of the Arctic has not been considered in scientific literature.

We give definitions of some basic concepts used in this paper:

– arctic resources – fuel and energy and other mineral resources on the territory of the Arctic zone, the economic feasibility of exploration and development of which is the subject of research; Arctic resources include onshore and offshore transportation routed including the Northern Sea Route and its ground support;

– territorial development – the mode of existence of the territory (urban or rural), in which the territory represented by its entities (enterprises, institutions and people) gets the features improved in comparison with those of

the previous period, the quality of life including. The improvement comes through the development of the territory «growth points» and implementation of appropriate policies pursued purposefully in the activities of public authorities, institutions and private companies.

This study is based on the fundamental research in the field of marketing communications, on the materials of the research and practice conferences «Topical issues of protection and security» (Navy Research Center «Naval Academy named after admiral Kuznetsov»), on the works of the research department of the Institute of Military History «Securing Russia's national interests in the Arctic» (vol. 9, part. 2), on the publicly available information in business press, on the author's analysis.

New program for the Arctic exploration. The economic basis of the «new wave» of the Arctic exploration is often called the development of hydrocarbon deposits of the continental shelf, as well as the development of navigation along the Northern Sea Route (NSR). Opportunities for this arise, as indicated by several authors, due to the expected warming by 2020–2030.

According to various estimates, the continental shelf of the Arctic contains 13 to 30 % of all offshore hydrocarbon reserves in the world: 90 billion barrels of oil, 1.669 trillion cubic feet (47.3 trillion cubic meters) of natural gas and 44 billion barrels of gas condensates [1]. Russia's share in the total volume of undiscovered Arctic oil reserves is estimated at 40 percent, natural gas – 70 percent. Industrial development of the Arctic shelf can provide a significant increase in hydrocarbon reserves.

In view of these facts, as well as the growing activity of other economies in the Arctic region, by the President's Decree of February 20, 2013 was approved the «Strategy of the Russian Arctic development and national security protection for the period up to 2020» (hereinafter – the Strategy). [2] According to the Strategy, the purpose of the Russian Arctic development – is to ensure the national security onshore and offshore within the macro-region, to consolidate the role and place of the Arctic in the national economy on the basis of innovative modernization of economy and sustainable economic growth. In this case further on we are talking about the way «to ensure the global competitiveness of the Arctic zone of the Russian Federation ... by switching to the principles of self-development and use of internal (endogenous) capacity, of interregional and international cooperation development « (Strategy, 3rd stage).

To achieve the goals of the Strategy, Department of Regional Development (Minregion) has developed a draft for a state program «Socio-economic development of the Arctic zone of the Russian Federation for the period until 2020», which was submitted to the State Duma for approval in late 2013.

The funding for implementation of the program in the optimal version in the period of 2014 to 2020, according the project, was about $ 1.8 trillion rubles, including more than $ 1 trillion rubles invested by business, 650 billion rubles – by the federal budget, 63 billion – by the budgets of the seven Arctic entities (subjects) of the Russian Federation [3]. As collaborators of the program in addition to ministries and entities of the Russian Federation have been appointed the largest domestic companies: «Vnesheconombank», «VTB-Leasing», «Gazprom», «Lukoil», «United Shipbuilding Corporation» (USC), «Rosneft», «Rusnano» «Rosatom» RZD «Sberbank».

According to the draft of the program, by 2020:

– the share of the Arctic zone of Russia's GDP is expected to increase from the present level of 5.6 % to 14 %, which is almost three times;

– the volume of freight traffic along the NSR is expected to increase from 3 to 63.7 million tons, which is more than twenty times;

– per capita income of the Arctic zone should increase by more than 2.5 times, exceeding 76 thousand rubles.

However, after six months of discussion, this government program was adopted in the version excluding the budgetary funding and without collaborators – co-executers (look at State Program of the Russian Federation, «Socio-economic development of the Arctic zone of the Russian Federation for the period up to 2020» approved by the RF Government Decree of April 21, 2014 N 366). Thus, to date, the goals and objectives have been established by the Strategy for the Development of the Arctic zone of the Russian Federation and the program of its social and economic development in the current

version, but at the federal level there have not been approved any mechanisms (activities, the volume of financial resources, responsible executors) to achieve them. The intensity of development of the Arctic resources in such a situation will be more dependent on the interest of the major companies operating in the region, and on the implementation of certain public projects in the sphere of defense, development of icebreaker communications over NSR, infrastructure, etc., which receive state funding at the moment.

It should also be specified that a number of scientists believe inconsistent the expectation of the prompt warming and improving the availability of economic resources of the Arctic. So, Avakian S.V., Voronin N.A., Dubarenko K.A. point out: «The concept of global warming and melting ice in the Arctic Ocean have created an illusory assumption that modern climate processes over the coming decades could open the Arctic zone for maritime navigation and mining, which will form a new geostrategic reality. This scenario is the only one offered in the «Strategy...» ... while none is provided for the case of the climate cooling in the coming decades ... In the absence of reliable forecasts of the global climate we should be prepared for the different scenarios of the development of processes in the marine Arctic, including the climate cooling» [4, p. 68, 71]. These considerations may also explain the allocation waiving of the public funding for the implementation of the mentioned above program of activities of the Ministry of Regional Development (at least in 2014–2016).

There are also other factors affecting the choice that the programs of intensive development of Arctic resources under development may be delayed or «clipped.» So, if there are more available and cheaper sources of hydrocarbons than the resources of the Arctic shelf, preference will be given to the first. When the cost of oil extraction on the Arctic shelf is about $ 170 per barrel [5, p. 170] preference, in particular, may be given to *shale* technology of gas and oil extraction. Besides, there should be considered the emergence of alternative sources or methods of energy generation, switching to which may be preferable from an environmental point of view in comparison with the traditional raw hydrocarbons.

Thus, there are three main points of view on the prospect of accelerated development of the Russian shelf Arctic resources:

1. Optimistic (authors of the «Strategy..»): Immediate development is advisable in the view of 2020, when there will appeara new economic «Arctic reality». It is necessary to pay efforts in advance, to foresee the actions ahead, to invest into innovative technologies.

2. Restrained (management of companies and agencies currently involved in the development of the Arctic): a suitable policy should be established based on the diversification of the strategic partnership with companies from West and East and a balanced approach to the choice of alternative technologies for the cost-effectiveness of resource extraction : this policy should also correspond to the pace of development of world trends.

3. Pessimistic (part of the scientific community): expectations of a significant and imminent increase of the economic attractiveness of offshore resources in the Arctic are not justified; significant investments into new programs nowadays are not promising.

Competitors and allies of Russian companies in the development of the Arctic resources. The accelerated melting of ice which took place in the 2000s has made the Arctic a more attractive area of the world ocean. During this period a number of states greatly intensified their economic activity in the region. There emerged a tendency to global stand-off for resources of the Arctic zone, which is manifested in two planes.

Firstly, there was a question about the internationalization of the spaces assigned to the Arctic states: the countries concerned, such as China, who does not have the territorial access to the Arctic Ocean, make suggestions for the transfer of the rights to the international bodies and the application of the principle of «common heritage of mankind», by analogy to the Antarctic, with the control of activities in the Arctic seas. In this situation, Russia's alliance with the countries of the Arctic Council (AC) who share the Arctic shelf is expedient in order to counteract the overwhelming expansion in the Arctic region by the «third» countries.

On the other hand, in the framework of the five states that had their own Arctic sector there is formed a bipolar model, since 4 of 5 active

players on the Arctic area (Denmark, Canada, Norway, the United States) are the members of NATO, who claims to lock-down and strengthen their positions in the Arctic. In this regard, justified seems a view expressed by L.G. Ivashov that at present, in order for Russia to keep the control over the share of resources which are located on her sector of the shelf, it is necessary to form an alliance with the strong «third-party» players: «The candidates capable to compile the future block are, to my mind, China, India, Japan, and possibly Germany, «[6].

Currently at the level of business Russian companies really diversify their cooperation activities in the Arctic. So, in 2013, there were signed the agreements, according which «Rosneft» and the Chinese state-owned oil corporation CNPC would invest 270 billion dollars within 25 years into their joint projects on the Arctic shelf and in Eastern Siberia. [7] On the other hand, folowing the agreement of «Rosneft» and ExxonMobil, the parties intend to construct 60 platforms for offshore oil extraction in the Arctic [8], as well as to create a Research and Design Center for the purpose of accumulation of advanced developments in oil and gas offshore extraction.

For the government and major mining companies in Russia there is a need to cooperate with the various «players» in the Arctic region, who can be both competitors, and allies or partners. The following groups of key players with whom Russia may have certain relations can be outlined,.

Group 1. A group of countries concerned about the joint extraction of the Arctic resources and / or transporting goods along the NSR, especially Asia-Pacific countries − China, South Korea, Japan, Vietnam, and India and Brazil, if they show interest in the Arctic cooperation. This group of countries can be a source of funds to finance the projects of production and transportation, based on the use of Russian technologies, acquiring shares in projects. A number of countries in the group could act as donors of technologies − in the field of robotics production (Japan), in shipbuilding (South Korea)

Group 2. A group of European countries that do not have access to the Arctic Ocean, but having potential interest in joint projects for extraction and production of hydrocarbons, includes primarily Germany, as well as Finland, France and others. This group of countries in addition to financial resources can be a supplier of the technologies, such as deep sea drilling, construction of platforms and other technologies, where Russia has a backlog. Establishment of joint ventures with this group of countries includes their entry into projects with an agreed valuation of the intellectual property provided as their share.

Group 3. A group of countries that used to have «the Arctic sector» shares − the United States, Canada, Denmark, Norway. Relations of global partnership (twinning arrangements) with these countries at this stage concerning resources development are unlikely to arise, while more likely are neutral relations and competition − for resources, investment, technology and consumers. At the same time, certain ambitions of «outside players» in the Arctic, in particular the Chinese party, as well as the contradictions that arise within the «Arctic Five» can be resolved or balanced only in the framework of co-produced mechanisms of the «civilized» and just solution to the points of controversy. −

Group 4. It is also necessary to highlight the role of the major European and international mining companies (BP, ExxonMobil, Total, Texaco and others.) Their policies are based on the strategic guidelines for the increase in their own market value and entering into joint projects with the maximum degree of control of all the resources available. Since it is the major international mining companies that are holders of advanced technologies for the extraction of offshore resources, the interests of the Russian party lie in the fact that for the adequate remuneration (share in the profits of the project) to involve these companies into joint ventures with the possibility of the technologies transfer. For this it is necessary to demonstrate the value of Russia's intrinsic scientific capacity in this area.

The project of fully robotic oil and gas extraction without surface platforms. «Rossiyskaya Gazeta» on March 14, 2014 promulgated an article «A look into the abyss» by Deputy Prime Minister Dmitry Rogozin, curator of the Russian military-industrial complex, where he said that there is similar groundwork for the globally unprecedented

technology of offshore oil and gas extraction in the Arctic without surface platforms. To date, the technology of extraction of natural resources on the continental shelf requires the «aerial coverage.» The drilling equipment and technological systems attached to the bottom are controlled either from watercraft, or from surface platforms. Concurrently, these platforms are limited by the depth of mining – a maximum of 100 meters.

The developments mentioned by D. Rogozin provide for founding of autonomous underwater «cities» with their own traffic, power supply service, communication lines. «The main elements of these complexes are going to be exploration submarines and water-carriers, the equipment for drilling, exploration, the product processing, power supply, operation and maintenance, integrated safety and security, on the all-round automated base,» – said Deputy Prime Minister.

The pioneer of this technology is known to be Norway where within a public-private partnership project WS Seabed Rig they are already testing prototype elements of the automated underwater rig. Many experts believe that in Russia development projects on mining in the Arctic shelf can be economically viable if there appear a «breakthrough» technology for cheap oil and gas production on the ocean floor. Concurrently, the practices of the 2000s show that the cost of the indigenous independent development on a platform of «Prirazlomnaja,» for example, was twice as high as the costs of the analogous equipment declared by European companies.

Thus, it would be potentially more cost-effective to borrow the best in global companies, adding Russian own unique solutions. Reliance only on our own developments, according to experts of the Arctic and Antarctic Research Institute, may lead to the effect that the project announced by D. Rogozin will need long time and high costs to be implemented. «In addition to creating the extraction and transportation technology proper, we will have to solve the environment and security problems (you never know how robots will behave), to develop new materials, etc.» It is a considerable restraint on Russian companies to buy and borrow technologies from large West-European companies ready to co-operate, is a set of official and unofficial bans, acting within the NATO structures, the European Union and the organizations who impose restrictions on cooperation with Russia, including the ones previuos to the sanctions regime in 2014.

Creating a communication center of the Arctic cluster. As noted by several authors, the government is able to administer a significant support to the processes of integration of business structures, by creating institutions and development strategies [9, 10], preparing the infrastructure.

The concept of the cluster territorial economic development is a popular scientific approach at the moment, which is the subject of many hundreds of scientific papers (see for example [11, 12]). The Arctic cluster in the North-West region of Russia with its center in St. Petersburg can be defined as a set of scientific, implementation and innovative subjects, as well as of a variety of service companies, public authorities and representation agencies of the foreign partners engaged in the issues of the Arctic shelf resources development and improvement of navigation along the NSR and in the Arctic seas, geographically located in the North-West Federal District.

Currently in St. Petersburg there have been established pharmaceutical, medical, automotive, shipbuilding clusters, an electronics cluster. The cluster approach is also introduced in the Development Strategy of the Arctic zone of the Russian Federation until 2020.According to the Strategy, «the meaningful effect of clusters and cluster policy for the regions of the Russian Arctic consists in their ability to impart the knowledge-intensive features to the traditional resource development, to promote the diversification of single-industry economy, to contribute to the dynamic development of transport, energy and communications infrastructure, the growth of small and medium-sized businesses» [2].

The «Arctic cluster» project initiated by St. Petersburg authorities may be seen as a specific instrument for the regional development. It is in St. Petersburg, where scientific and industrial organizations that have a direct relation to the exploration of the Arctic in the Soviet and post-Soviet period are concentrated. To date, an important objective of such cluster creation is

organization of international cooperation in the Arctic resources development.

Attracting foreign companies to work together on development of the shelf exploration technologies is extremely promising for both the city and the North-West region, as well as for the Russian Federation as a whole. Communication policy, which is the epitome of a marketing strategy and marketing research [13, p. 109], in the context of a venture is an essential tool for its product promotion and investment opportunities. For local (regional) authorities, as Sam Black, a classic of PR, says, «public relations help elected officials to show a constructive attitude toward their responsibility to inform the public and the outside world about the policies pursued by local authorities...» [14, p. 236-237].

Under the current conditions of uncertainty with the new programs of the Arctic exploration, the communication aspects, allowing to draw attention to the proposal of St. Petersburg at the federal and international level, may come to the fore. In our opinion, the main stages of the formation of a communications strategy promoting the Arctic cluster project in the North-West region of Russia with its center in St. Petersburg could be the following.

1. Formation of the holistic conception of the cluster, covering various scenarios of climate forecasts in the Arctic in 2020 to 2030's. The efforts to formulate the conception of the Arctic cluster in 2013 year were intensified, however, as at the 2nd quarter of 2014 the conception has not been externalized.

2. Formation of a package of investment proposals and public exposure of these proposals, as well as the information about the cluster creation, on the federal and international level. Incorporation of this information into the program of investment proposals «I invest in SPb» («Invest in St. Petersburg») and road shows held by the municipal Committee on urban investments and strategic projects for foreign investors.

3. Provision of the task-specific information about the scientific and technological potential of companies in St. Petersburg and North-West, in the prospect for attracting foreign companies to cooperate. At present, for example, in the Research Institute named after Academician Krylov there is established an engineering center for the Arctic areas (creating ice marine equipment, platforms, etc..). This should ensure the concentration of available scientific and experimental base and practical experience of Russian shipbuilders. Foreign specialists with the relevant expertise will also work, together with Russian experts, within the framework of the Arctic engineering center.

The Strategy of socio-economic development of St. Petersburg until 2030 (Strategy 2030), developed in 2013, includes a short section entitled «Development of the Arctic cluster» which says: «Under the Arctic cluster is understood the pooling of resources of governmental bodies, academic and business communities of the Arctic states on the mutually beneficial conditions for the region development»[15, p. 90]. Within the framework of the above-mentioned relations with different groups of countries, however, it has been found that the most promising in terms of investment and technology to Russia can be cooperation not with the Arctic countries but with the «third» countries interested in penetrating the Arctic and with companies who accommodate advanced technologies for offshore arctic operations.

Absorbing the Arctic hydrocarbon reserves, today Russia is cooperating with companies in France, Great Britain, Holland, Germany, capable of being full-fledged partners in terms of both scientific and technological, and financial capacity [16, p. 97]. The next stage of such cooperation can occur with boosting cooperation with the Nordic countries – Norway and Finland. Today in Norway they are working at the technologies of onglacial and subglacial shelf development. Finland has considerable experience in the development of ice-reinforced engineering equipment. In St. Petersburg it is possible to work together to improve these technologies.

Besides, Petersburg has got the potentialities to become a center that would focus not only at design and industry, but also can become a powerful management structure aimed at development of the Arctic. In this case, St. Petersburg could become a platform for the coordination of efforts for the development of the Arctic shelf with the interested European partners, and potentially with partners from Asia-Pacific countries. The strategic partnership agreements for the development of the Russian

Arctic resources with governments of the major European countries such as Germany and France, and with major European companies could result in the creation of joint management structures in St. Petersburg. However, the possibility of such strategic partnerships will be determined by factors like climate change in the Arctic, and skillful actions for the implementation of a communications strategy to promote new development programs in the Arctic, including the «Arctic cluster» project in the North-West region.

Shipbuilding companies already included in the «USC» (United Shipbuilding Corporation) and the shipbuilding cluster of the city (40 % of production capacity and 75 % of applied science Russia), as well as specialized research institutes and educational institutions, can become the base for design and production of the «Arctic cluster» in St. Petersburg. The cluster can be additionally staffed with management companies, shipping agents, brokers, insurers, financial investment groups. St. Petersburg as a cultural center of the North-West region of Russia is a convenient platform for interaction with foreign businessmen and politicians.

The relationship of these enterprises and public authorities in the framework of the «Arctic cluster» implies far-reaching public-private partnership (PPP) combined with a variety of links formed between the participants [17, 18]. With such a large-scale set of elements that can be employed for the «Arctic cluster» project it becomes feasible to found a communication cente which should link the involved authorities, government agencies, private and public companies, foreign partners. As the key aspects of the communication center of the Arctic cluster can be distinguished the following:

– The international character resulting from the function of coordination of interactions with foreign partners;

– Focus on the mechanisms and legal forms of PPPs;

– A significant component of PR which should provide the involvement a «creative class» as professionals, as well as leading companies and foreign governments as a business partners to implement the prospective development in the Arctic.

These proposals were presented by the author and discussed at a number of scientific – practical conferences, such as «Ensuring national interests of Russia in the Arctic: Challenges and Prospects» (December 4, 2013), «Actual problems of protection and security» (April 1-4, 2014) and others.

In 2013, the efforts to establish the Arctic cluster were intensified. On April 2, 2013 the first meeting of the Polar Commission on the establishment in St. Petersburg Arctic cluster under the leadership of the President of the State Polar Academy A.N. Chilingarov was held. On August 1, 2013 the Committee on Economic Policy and Strategic Planning in St. Petersburg (KEPiSP) held a working meeting with representatives of the Polar Commission. On September 19, 2013 the Committee on Industrial Policy and Innovation in St. Petersburg (KPPiI) held the first meeting of the Polar Commission working group to establish the conception of «The Arctic territorial innovation cluster.» On November 26, 2013 it was announced that in the near future the building of the Arctic cluster will undergo the registration phase [24]. In the 3d quarter of 2014 the draft of the Arctic cluster conception is still under work by experts who in 2013 drafted the strategy of socio-economic development of St. Petersburg until 2030 (Strategy 2030).

The main conclusions. The economic basis of the «new wave» of the Arctic exploration is often considered to be the development of hydrocarbon deposits of the continental shelf, as well as the development of navigation along the Northern Sea Route (NSR). The intensity of development of the Arctic resources today depends on the major companies operating in the region, and on the realization of certain state projects. In the absence of reliable forecasts of the global climate one must be prepared for different scenarios of climate processes in the Arctic, including cooling. When considering the economic feasibility of the development of the Arctic shelf, we cannot exclude the emergence of new technologies in Russia (extraction of shale hydrocarbons) and alternative sources or methods of energy production. Switching to new technologies or sources of energy may be preferred from an environmental and/or environmental standpoint.

There are three or four groups of key players with whom Russia may implement some or

another kind of relationship while planning the Arctic cooperation. Russia is interested to involve large foreign companies in joint ventures with the possibility of technology transfer for the adequate remuneration (share in the profits of the project). To reach that it is necessary to demonstrate the value of Russia's own scientific capacity in this area. However, there are restrictions on Russia to buy and borrow advanced technologies.

An important goal of creating the Arctic cluster in St. Petersburg is organization of international cooperation in the development of the Arctic resources. The main stages of the formation of a communications strategy to promote «The Arctic cluster» project in the North-West region of Russia with its center in St. Petersburg would be: formation of a holistic conception of the cluster, covering various scenarios of climate forecasts in the Arctic in 2020-2030: formation of a package of investment proposals and public exposure of these proposals and information about creating a cluster on the national and international levels; providing specific information on scientific and technical backup experience accumulated by enterprises of St. Petersburg and the North-West, the potential to attract foreign companies for cooperation. St. Petersburg could be in this case a platform for the coordination of efforts to develop the Arctic shelf with the interested European partners, and potentially – and with partners in Asia-Pacific countries.

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