Basic Directions and Mechanisms of State Policy in Arctic and Development of the Arctic Zone of the Russian Federation (2000-2014)

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Abstract

This paper covers the transformation of the Russian state policy in Arctic since early 2000's till now describes and assesses the factors governing its certain directions. Russia's competitive positions in the Arctic space in connection with country's economic and geopolitical presence in that area are assessed. Special attention is paid to promising projects for the development of the Arctic zone of the Russian Federation. It is noted that the specifics of the Arctic policy of Russia at the present stage is the comprehensive approach to the development of the Russian Arctic zone and protection of national interests in that region accounting for legal, international, scientific, economic, military and other elements.

Keywords: Arctic, the Arctic region, the Arctic zone of the Russian Federation, national security concept of the Russian Federation, basic principles of state policy of the Russian Federation in the Arctic region, strategy for development of the Arctic zone of the Russian Federation, Northern Sea Route

1. Introduction

The first half of the 2000's in the Russian history saw the establishment of the new administrative and legal model of the regular state based on strategic planning and management by objective. With the growing governmental impact on socio-economic development process, Russia enhanced its activities in the Arctic region, which were almost finished in the 1990's while the Soviet achievements in the Arctic exploration and study were forgotten. It was upon electing Vladimir Putin President of the Russian Federation when a new model for the Arctic policy compliant with the contemporary geopolitical and socio-economic conditions was commenced. The new leader's first step was the establishment of federal districts and the offices of President's representatives in each. The main task was to make the legal fundamentals of constituent entities' operation compliant with the Russian Sactic policy changes with the new stage beginning since 2000; its specific feature was the comprehensive approach to the exploration of Russia's Arctic region and protection of the national interests in that area accounting for legal, international, scientific, economic, military and other elements.

The author put the objective to give a comprehensive view of the transformation of Russia's domestic and foreign Arctic policy since 2000 till now, specifying its core directions and implementation mechanisms.

2. Methodology

The methodological basis of the research is the system approach providing for finding and describing maximally possible set of facts required for the solution of a certain research task, suggesting that all the events and things are causal, functionally related, vary by the level of significance, which ensures their analysis accounting for any links and interrelations with general historic changes of the studied period with a particular focus on certain historic reality.

3. Results

The new period of state policy's realization in Arctic was introduced by Resolution of the Government of the Russian Federation dated March 24, 2000 #441-r, governing the activities of various agencies in connection with application to the UN reasoning extension of the external continental shelf of the RF in the Arctic region. In compliance with article 76 of the UN Law of the Sea Convention (1982), continental shelf may not spread over

350 miles from the shore line. To prove the right to the shelf limits extension, Russia organized *Arctic-2000* expedition resulting in the statement of the fact that Lomonosov and Mendeleyev underwater ridges are the extensions of the continent and therefore the continental shelf should be extended by 1.2 million km. That statement was the basis for Russia's application brought to United Nations Secretary-General in 2001 claiming to set the external border of the continental shelf in the Arctic Ocean but upon its consideration it was offered to submit barometric and navigation maps and more convincing geological data.

At the same time, in 2000 two more benchmark documents governing Russia's policy in Arctic were adopted. National Security Concept of the Russian Federation declared that "within a shortest time, the mechanisms for supporting the activities and economic development of crisis regions and the Far North areas should be developed" which was reflected as a number of planned governmental actions in the coming Decree of the President of Russia "On strategy of national security of the Russian Federation till 2020", where the Arctic zone was given much attention in connection with frontiers protection, development of competitive economic sectors, improvement of fuel and energy complex, completing building the basic transport, power, information, military infrastructure.

On March 7, 2000 Resolution of the Government of the Russian Federation #198 "On Concept for state support of economic and social development of the Far Northern regions of the Russian Federation" was issued stating that Northern Sea Route (NSR) was the priority object for state support. Short-term prospects of its development as on 2000 were the restoration of its western sector; mid-term - freight traffic growth via NSR to the level of the late 1980's; long-term - making the national transportation route in the Arctic region intercontinental.

In 2000, the State Duma offered to consider re-establishment of a federal executive body engaged in matters in connection with ensuring activities and sustainable development of the economy of the Far Northern regions and equal-status areas. Such body was established in 2002 only - Council for the Far North and Arctic regions issues affiliated to the Government of the Russian Federation as a continuously operating advisory agency created for pursuing uniform state policy regarding the Far North and the Arctic regions. But after a short time the Council was liquidated together with Interagency Commission for issues of Arctic and Antarctic regions in the course of federal agencies restructuring in 2004 (Lukin, 2008, p. 239).

In 2001, the Government approved draft Basic principles of the state policy of the Russian Federation in the Arctic region, but no Federal Act required for the effective implementation of Artic policy was adopted in the first decade of the century. The delay in development and adopting regulations to govern the activities in the Arctic zone of the Russian Federation (AZRF) was the main obstacle in socio-economic development of Arctic in the early 2000's (Lukin, 2008, p. 241).

Since the early 2000's, polar researches has been restored, *Arctic-2000* expedition being the first. After 12 years' pause, the State Flag of Russia was raised in the Central Arctic on April 26, 2003 on the first Russian drifting station "North Pole-32" (Arsentieva, 2008, p. 156), which began working studying the climate changes. For further scientific studies in the Arctic region, *Arctic-2005* expedition was organized, resulting in the voyage of a carrier vessel *Akademic Fyodorov* reaching the North Pole without icebreaker's assistance, for the first time in navigation history.

The first half of the 2000's saw a lot of meetings, international forums, sittings of State Council for issues of development of Northern Sea Route and the exploration of the Arctic region. However, the state Arctic policy oriented at institutional environment as the basis for activities required to create the most favorable conditions in connection with the socio-economic development did not receive its final institutional and regulatory framework during that period.

By 2007, the establishment of basic norms and other institutions ensuring the development of market relations in Russia basically finished. The national economy's decentralization for the benefit of regions and sectors was completed. Sustainability of state's economic development became dependent not only on gross production output and mineral wealth potential, but mostly on the economic centers managing global market flows. The new state management model was created based on regulatory separation of powers between the Russian Federation and its constituent entities. Simultaneously the development of the new administrative and legal state model came to completion, based on strategic planning and management by objective employing administrative budgeting, capable to regulate the system of interbudget relations in decentralized economy and with separated powers. All those changes created an opportunity to introduce the new geopolitics pursuing restoration and expansion of Russia's interests in the world's political and economic space which gave rise to the new stage of Russia's policy in the Arctic region.

In 2007, by Russia's initiative, the international community made a decision to declare International Polar Year, the first in XXI century. International Polar Year 2007-2008 was, first of all, the international program of coordinated interdisciplinary scientific studies and observations in Polar Regions of the Earth (Schiermeier, 2009, pp. 1072-1073 & pp. 1076-1077; Rintoul, 2008, pp. 373-385).

On July 24, 2007, a unique scientific expedition *Arctic-2007* headed by a famous polar explorer Artur Chilingarov started from Murmansk to the North Pole. The target was to explore the shelf of the Arctic Ocean. On August 1, the expedition reached the North Pole. On August 2, *Mir* submersible crafts controlled by Russian engineers successfully landed over 4 km deep. The crew of the first craft was Russian; the second one had international crew (Lukovich et al., 2011). At the record-breaking depth, the polar explorers installed a titanium capsule with the Russian flag and a message to ancestors. That action symbolized that Russia was publically declaring its claims to the North Pole. As the President of Russia Vladimir Putin stated then, the results of that Arctic expedition should be the basis of Russia's position in settling the matter of that part of the Arctic shelf belonging.

Back in January 2006, the global European project DAMOCLES (Developing Arctic Modeling and Observing Capabilities for Long-term Environmental Studies) was begun in the Arctic Ocean under the 6th framework program of the European Commission *Global changes and ecosystems* (Vasudevan et al., 2009, pp. 546-551; Grimwood et al., 2012, pp. 189-193). The project lasted for 4 years (2005-2009), and it received some EUR 17 million of funds from the European Union (the EU). Under that project, research efforts and national resources were united by over 100 experts in the Arctic Ocean studies from 45 organizations of 11 countries of the EU and Russia. The project implied coordination of its studies with other large-scale Arctic projects carried out or planned for implementation in the North America (the USA, Canada) and Asia (Japan, China and Korea). On Russia's part, DAMOCLES was joined by State scientific center "Arctic and Antarctic R&D Institute", P.P. Shirshov's Institute of oceanology of the Russian Academy of sciences (IO RAS) and a few other institutions. The restoration of the Russian research in the Arctic region commenced.

The Arctic vector of Russia's state policy became filling with good quality content since September 2008. In 2008-2012, Russia developed the basic principles of its policy in the Arctic region till 2020 (2008), Concept for development of indigenous minorities of the North, Siberia and the Far East (2009), adopted the status of the waterway of Northern Sea Route in a federal act (2011-2012).

On February 8, 2013 the Russian President Vladimir Putin approved the Strategy for development of the Arctic zone of the Russian Federation and national security for the period till 2020, which was waited for during 20 years, and on October 16, 2013 the Government of the RF approved activity plan in connection with Strategy's implementation. On March 26, 2014 the model for comprehensive management of coastal areas in Arctic regions was approved, followed by the approval on April 21, 2014 of the state program for socio-economic development of the Russian Arctic region till 2020. Decree of the President of the RF dated May 2, 2014 #296 finally set the list of onshore areas of the Arctic zone of the Russian Federation in 9 constituent entities and island territories of the Arctic Ocean.

Russia's national priorities in the Arctic region, core objective of the state policy in the Arctic region and methods of their achievement are covered by the following basic documents: "Basic principles of the state policy of the Russian Federation in the Arctic region till 2020 and further prospects" and "Strategy for development of the Arctic zone of the Russian Federation and national security for the period till 2020".



■ AZRF □ Other part of the Russian Federation

Figure 1. Role and place of the Arctic region in the economy of the Russian Federation

The first priority states that the government considers the Arctic region as the source of nonrenewable mineral wealth, supportive region for the growth of Russia's geopolitical and economic potential, one of the country's socio-economic development locomotives (Pilyasov, 2011, pp. 38-48). About 2.5 million people live there (less than 2% of population, but about 40% of the whole Arctic area), almost 15% of Russia's gross domestic product (GDP) is produced there, making up for 1/5 of the Russian export (Figure 1).

The continental shelf of the Arctic Ocean contains about 25% of world's offshore hydrocarbons (Rowe, & Blakkisrud, 2014, pp. 66-85). According to the US Geological Survey as on 2008, the northern regions may contain up to 134 billion barrels of oil (about 18 billion mt) and nearly 47 trillion m³ of natural gas (Kondratov, 2014, p. 121; Arbo et al., 2013, p. 172). We note that Russian estimations of hydrocarbons reserves as distinct from the foreign analogues see their practically annual growth. In the early 2000's the Russian Arctic region's share was up to 60% in all Russian copper and oil production, nearly 100% of natural gas, 100% of diamonds, barite, platinum group elements, nickel, cobalt, rare-earth metals, vermiculite, apatite concentrate (Figure 2). We add that the Far North concentrates global reserves of boreal resources: forest, aquatic (comparable with Baikal's fresh water reserves), biological (including rare vanishing breeds of plants and animals) (Shvartsman & Iglovskiy, 2012).



Figure 2. Place of the Arctic region in the resource potential of the Russian Federation

The explored natural and resource potential of the Russian Arctic region is the main reason for its socio-economic development. The Arctic shelf, which the RF claims may become in the coming decades the main source of hydrocarbons both for Russia and for the whole world (Casper, 2010, pp. 825-881). Out of 6.2 million km^2 of the Russian continental shelf some 6 million km^2 are of concern in connection with oil and gas exploration, i.e., nearly all the area, including 4 million km^2 of the most prospective parts. The initial recoverable reserves reach 100 billion mt of reference fuel (including 15.5 billion mt of oil and 84.5 trillion m³ of natural gas), making up 20-25% of the world's resources (Pytkin & Ionova, 2013, pp. 28-36).

Further development of the Arctic regions is related to the implementation of megaprojects "Urals industrial -Urals polar" (Note 1), "Eastern Siberia - Pacific Ocean" (Note 2), "Nord Stream" (Note 3), "Arctic energy", hydrocarbons fields development on the Arctic shelf. Since 2008, plans have been worked out on the exploration of Shtokman gas and condensate field ("Gazprom" jointly with the French energy group "Total", and till 2012 also with the Norwegian "Statoil"), areas in the Barents and Kara seas (OAO "NK "Rosneft" and "British Petroleum", "ExxonMobil", "General Electric", ENI, "Statoil") (Immonen et al., 2008). OAO "NOVATEK" and "Total" are developing South Tambey gas and condensate field in Yamal.

The most developed infrastructure to go in the Arctic regions is in Yamal, as out of the nine Arctic constituent entities of the RF this is the basic region for gas production which has been developed most rapidly. Today, the future of the gas industry, the prospects of the federal project "Urals industrial - Urals polar" and the Russian economy in general are related to the way to Yamal peninsula where huge fields are concentrated, discovered in the Soviet time. In 2012, Bovanenkovo oil, gas and condensate field's (BOGCF) development began, in 2018 it is planned to begin developing Harasavey field. That makes the peninsula a new largest oil and gas province of

Russia, as BOGCF alone contains about 5 trillion m³ of gas.

The second priority is the preservation of the Arctic region as the zone of peace, safety and stability. That region demonstrates the huge potential of interstate economic, technological, educational, scientific, humanitarian cooperation realized with the participation of Russia. Among the institutions created for those purposes there are "North dimension" of the EU, Barents Euro-Arctic Council, Nordic Council of Ministers (Koivurova et al., 2012, pp. 361-371; Young, 2011, pp. 423-442). Besides, Russia is proclaiming the need to strengthen the role of the Arctic Council as the leading institution on Arctic cooperation matters (Pedersen, 2012). The point of the activities of the above institutions is the exchange of the valuable experience in settlement of urgent socio-economic and ecologic problems, improvement of people's welfare, tourism development, enhancement of infrastructure, science and education, health care and culture of the Russian North and in general of the whole Arctic region.

Much attention is paid to the realization of pan-Arctic Agreement developed under the Arctic Council with Russia's participation on cooperation in aviation and marine search and rescue in the Arctic region and Agreement on cooperation on marine oil pollution preparedness and response in Arctic (Cressey, 2011, pp. 174-177). The project "Arctic energy" brought by the governor of Yamal-Nenets Autonomous District Vladimir Vladimirov is getting more significance, offering the establishment of an international multi-function complex creating the business environment for R&D and education centers, ensuring Russia's integration into the international innovation ecosystem, establishment of coordination centers and representatives of federal and regional authorities of the RF, Arctic countries and nongovernmental organizations.

The policy in connection with indigenous minorities of the North became an important direction within the strategic task of Arctic's socio-economic matters solution.

The uniform list of indigenous minorities of the North, Siberia and the Far East of the Russian Federation (IM) includes 40 peoples, living in 28 constituent entities of the RF including in all 9 regions of AZRF. The total IM population is about 250 thousand people which are under 2% of the total population in that area. However, the main problems of the northern indigenous minorities which rose in the early 1990's have not been solved yet: unemployment, poverty, low level of education, forgetting national languages and cultural traditions, alienation from traditional areas and resources.

In 2009, Concept for sustainable development of indigenous minorities of the North, Siberia and the Far East was approved. The document declared the key objective for sustainable development policy in connection with the North's indigenous minorities - enhancement of their socio-economic potential, preservation of living environment, traditional lifestyle and cultural values both through governmental purposed support and through self-mobilization of internal resources. The settlement of IM issues was moved to the regional level with the support under state and federal target programs.

The third strategic task of Arctic's development recorded in the program documents is related to the protection of the unique Arctic ecological systems. Degradation of the natural environment is intensively seen in some areas of the Kola peninsula, Timano-Pechora, Norilsk area, mid-Ob region, Novaya Zemlya, a number of large subarctic cities. There, like in no other region of the country, it is very important to create new and extend the available specially protected natural parks (SPNP) and waterways. The tasks challenged are as follows - preservation of fragile northern nature, scientific research, ecological education, ecological tourism.

During the last 20 years, Arctic geographical system of national parks was created. Two of them - Taimyr and Lapland - possess the status of international biosphere reserves, and international park Pasvik on the border of Russia and Norway gave rise to creation of Russian-Norwegian ethnoecological zone. As an example of SPNP, "Russian Arctic" national park was created in compliance with Resolution of the RF Government dated 15.06.2009 #821 on Novaya Zemlya and Frantz Joseph Land islands. Resolution of the RF Government #153 dated 26.02.2013 prescribes to create "Onega Poromye" national park in Archangel oblast. Arctic's development prospects and the relevance of solving its ecological problems are predetermined by significant manifestations of climatic changes in that region (Hossain, 2010, pp. 295-305; Doel et al., 2014, pp. 2-14). According to NASA's data, during the last 30 years the surface of Arctic ice dropped by 2 million km² (from 15 to 13 million km²). Global warming may have effect on the geography of ocean freight routes, mineral wealth production, traditional use of natural resources by the northern IM (Sitting of Security Council, 2014).

The forth priority is the enhancement of production and transport infrastructure for reliable operation of all country's economic complex, establishment of new growth poles, based on knowledge economy. Arctic processes in connection with climatic changes and new technologies enable the initiation of projects on alternative land routes and ocean ways thus going step by step towards economically reasonable exploration of the rich Arctic resources.

In 1996, the construction of "Belkomur" railway was commenced (White Sea - Komi Republic - Urals) Archangel - Syktyvkar - Kudymkar - Perm (On "Belkomur" project, 2014). In the USSR, the issue on the construction of that railway was put forward back in the 1930's. Later it was brought a few times in the scientific literature. The strategic significance for Russia meant giving European Russia's northern regions (Komi Republic and Archangel Oblast) and Urals (Perm Krai) direct access to nonfreezing port of Murmansk, port of Archangel (needs expansion and dredging) for further access to the countries of Northern Europe. In future the railway will ensure the shortest transit of cargo via Russia to Northern Europe from, for instance, Middle Asia. Now that route is about 800 km longer. The railway under construction will contribute to the exploration of new mineral wealth deposits, will enhance the transportation services in the adjacent area, will contribute to the establishment of the transport system of the Russian North. Finally it may be expected to overcome the isolation of Arctic regions, to ensure partial solution of unemployment problems in nearby regions due to infrastructural development.

"Belkomur" railway is part of uniform comprehensive megaproject for the development of multimodal transport infrastructure in AZRF "Northern latitude course" going through the central part of Yamal-Nenets Autonomous District and becoming part of the transport infrastructure in the central AZRF. The new railway will connect the two traditional transport areas - western and eastern. The western transport area is based on the largest transportation artery - the Ob with adjacent Northern railway's branch in Labytnangi city area. The eastern transport area was formed by the railway route of Sverdlovsk railway from Novyi Urengoi to Tyumen and middle-size rivers - the Nadym, the Pur and the Taz. "Northern latitude course" will connect Obskaya station of Northern railway with Korotchaevo of Sverdlovsk railway. The railway will consist of several sections and objects: new rail Obskaya - Salekhard, new line Salekhard - Nadym, combined bridges across the Ob and the Nadym, railway sections under construction Nadym - Pangody, Pandory - Novyi Urengoi, Novyi Urengoi -Korotchaevo with potential access to multifunctional seaport of Sabetta (Vylitok, 2014) (Figure 3).

The intensification of Northern sea route in the country's Arctic policy is given a special place. On a sitting of Security Council on April 22, 2014 President of the RF Vladimir Putin stated that "it is required to work out an optimal economic model for the development of Northern Sea Route to make its traffic volume four million tons in 2015" (Sitting of Security Council, 2014). The significance of Northern Sea Route has not been decreased in the whole post-Soviet period while the traffic drop caused by economic reasons was overcome back in 1998 (Selin, 2014, p. 21).



Figure 3. Transport scheme of "Northern latitude course" project

In 2010, the Government of the RF specified timeline of NSR development: in 2010-2015, restoration of the western area, in 2016-2020 - that of the eastern. The NSR issues were discussed in detail on the Second international Arctic forum "Arctic - territory for dialogue" in 2011 in Archangel.

In 2013, the new edition of the Federal Act "On Northern Sea Route" took effect. The Government made decision on the construction of new nuclear and diesel icebreakers to replace the old vessels. On August 19, 2013 the Prime-minister of Russia Dmitry Medvedev signed Resolution #715 on budget's investments on the construction

of two serial universal nuclear icebreakers in 2014-2020. The first icebreaker was to be commissioned in 2019, the second - in 2020. As follows from the Resolution's wording, the total volume of investments was 86,105.43 million rubles. Meantime, cost-estimate price of the first icebreaker is 42,002.81 million rubles, that of the second - 44,102.62 million rubles. The governmental customers in connection with the construction of icebreakers are "Rosatom" corporation and federal state unitary enterprise "Atomflot".

In 2014, the construction of the first icebreaker of the three new generation icebreakers began together with large-scale hydronavigation works - sounding new, more northern and deeper ways of NSR and their mapping. Ten search and rescue centers were created along the whole NSR. In 2015-2016, a number of satellites are planned for launching to provide navigation and communication in Arctic.

In compliance with Comprehensive plan for development of liquefied natural gas (LNG) production in Yamal peninsula ("Yamal LNG" project) there was commenced the construction of Sabetta sea port. It began in July 2012 in the north-eastern part of the peninsula on the western coast of Gulf of Ob, 5 km north-east from Sabetta field camp - transshipment facility of the gas industry back in Soviet times, and 30 km south-east from Tambey community.

The first vessel from Sabetta is planned for shipping in quarter I, 2017 (Sytnik, 2013, p. 17). Continuous delivery of LNG from Yamal peninsula will be ensured by 4 icebreakers and a fleet up to 20 vessels with capacity of 140-160 thousand m³ of gas. Sabetta is part of "Northern latitude course" project providing for railway branch to Sabetta, ensuring access of the unified transport system of Russia to the Arctic infrastructure and connection with Northern Sea Route (Figure 4).



Figure 4. Benchmark points of AZRF transport system and prospective infrastructure

Legend. The Figure is submitted by Ministry of regional development of the Russian Federation. Red plane sign - large hubs for long-haul and international traffic; Blue plane sign - federal airports; White ship sign - new sea ports; Grey ship sign - sea ports under reconstruction.

The fifth and the most important priority of the Russian Arctic policy is enhancement of country's military security in Arctic. This is set forth by the following core documents: Strategy of national security of the Russian Federation till 2020 and Strategy for development of Arctic Zone of the Russian Federation and national security enforcement till 2020.

The length of the state frontier of the RF along the Arctic Ocean exceeds 20 thousand km, its protection and security is related to special difficulties. On the limited by size nonfreezing area of Kola Peninsula, making up 2.5% of the Russian Arctic coast length, there are all the facilities of Northern fleet, while Murmansk and Archangel accommodate military industrial sector's enterprises.

Specific physical and geographical conditions of Arctic, in particular, its high-latitude location, land ice of Russian Arctic seas, special interests in geopolitics, economy, ecology and other spheres predetermine the significance for setting international legal status of adjacent waterways and their delimitation with other states (Riddell-Dixon, 2008, pp. 343-359; Young, 2009, pp. 423-442; Baker & Mooney, 2013, pp. 86-104; Manicom, 2014, pp. 165-175; James & James, 2014, pp.187-204).

Governed by the intention to settle old disputes around non-regulated areas in the Barents Sea, Russia and Norway in 2010 signed Treaty on maritime delimitation and cooperation in the Barents Sea and the Arctic Ocean. Thus, the water area about 175 thousand km² was divided into two almost equal parts. The document provides for joint development of fields crossed by the delimitation line.

Still, shelf delimitation issue has not been solved in the area of Lomonosov and Mendeleyev ridges. In 2001, Russia brought general application to the UN Commission on the limits of the continental shelf to admit the continental shelf a Russian territory: it was in connection with both Sea of Okhotsk and the Arctic area. In 2004, it was decided to separate those applications. On March 14, 2014 the UN Commission on the limits of the continental shelf met Russia's application on including in its continental shelf the enclave some 52 thousand km² in the middle area of Sea of Okhotsk. However, the Arctic issue remains pending. In 2001-2007, upon the national scientific expeditions to the North Pole, Russia made out a new application in connection with the right to expand the Arctic shelf for about 1.2 million km², planned for bringing in the second half of 2014. If it is met, Russia will gain sovereign rights to the exploration and development of mineral and other natural wealth on the continental shelf outside the exclusive economic zone and to laying underwater cables and pipelines, constructing facilities and plants. We note that the results of the Russian expedition in 2007 created some rush and the five Arctic states (Russia, the USA, Canada, Denmark and Norway) since that have been claiming their rights to parts of the Arctic Ocean's shelf.

4. Discussion

The issues of Arctic development and development of Arctic states are widely enlightened in Russian and foreign science. Radical transformation of the Arctic space and its consequences for politics and the world community are studied in the works by N. A. Kondratov, Yu. F. Lukin, A. I. Chistobayev, A. Vylitok. The works by V. S. Selin, A. N. Pytkin, I. G. Ionova, etc. analyze the comprehensive issues of the development of Russia's northern areas, describing geopolitical and economic processes in Arctic. A. N. Pilyasov and a number of other authors insist on sustainable protection of national interests in the accelerating globalization. Foreign scientists are approaching the Arctic development issues from the same positions but stressing attention on their countries and their strategies of Arctic policies (James & James, 2014, pp. 187-204; Baker & Mooney, 2013, pp. 86-104; Riddell-Dixon, 2008, pp. 343-359). Foreign authors are also actively covering the issues of international policy in Arctic, security issues, international projects realized (Rintoul, 2008, pp. 373-385; Lukovich et al., 2011; Vasudevan et al., 2009, pp. 546-551). Of high interest for foreign researchers is the Russian Arctic policy and its impact on the system of international relations (Rowe & Blakkisrud, 2014, pp. 66-85, Immonen et al., 2008, pp. 841-848). We note that the issues covered by this paper are on the high level of practicability and scientific relevance which is acknowledged by wide discussion of the matters put by the author in the academic community.

5. Conclusion

From the long-term trends point of view and taking into account the world's geopolitical situation affected by the Ukrainian events and anti-Russian sanctions, it may be suggested that in the near future Russia will not manage to solve the issue of the continental shelf limits while one of the most important factors for positioning and interaction of various political and economic forces of the world will be the struggle for Arctic resources. Therefore, objectively the growing geoeconomic contradictions are probable in Arctic in connection with its resource potential and transport significance on one hand and with the absence of accepted and legally set forth demarcation of sea areas and the shelf on the other hand.

The prospects of economic development of the Arctic areas are related solely to the natural competitive advantages of the Arctic zone which may be divided into the three groups as follows:

- Natural wealth suitable for successful development within the coming 30-50 years subject to intensive development of innovation technologies;

- Transport systems, related first of all both now and in prospect to the delivery of mineral wealth, accounting for possible climatic changes;

- Spatial resources playing larger role since the middle of XX century.

Arctic states are now at the important historical turn: the stage of reasoning the changes in Arctic passed, the time for its practical development came up (Breathing strife or new life into Arctic policy? 2009). The changes going in the Far North are opening new areas for cooperation in connection with natural wealth, mainly mineral, the use of ocean transport routes freed from ice, protection of fragile environment, search and rescue of people in trouble, protection of indigenous minorities, development of science, creating competencies of labor resources

ready to work in the severe natural and climatic conditions of Arctic.

References

- Arbo, P., Iversen, A., Knol, M., Ringholm, T., & Sander, G. (2013). Arctic futures: Conceptualizations and images of a changing Arctic. *Polar Geography*, 36(3), 163-182. http://dx.doi.org/10.1080/1088937 X.2012.724462
- Arsentieva, I. (2008). Russian regions in the system of Russia's national security. Moscow: Vostok-Zapad.
- Baker, B., & Mooney, S. (2013). The legal status of Arctic Sea ice in the United States and Canada. *Polar Geography*, 36(1-2), 86-104. http://dx.doi.org/10.1080/1088937X.2012.705914
- Breathing strife or new life into Arctic policy? (2009). Environmental Policy and Law, 39(1), 72-74.
- Casper, K. (2010). Oil and gas development in the Arctic: Softening of ice demands hardening of international law. *Natural Resources Journal, 49*(3-4), 825-881.
- Cressey, D. (2011). Scientific challenges in the Arctic: Open water. Nature, 478(7368), 174-177. http://dx.doi.org/10.1038/478174a
- Doel, R., Wråkberg, U., & Zeller, S. (2014). Science, Environment, and the New Arctic. *Journal of Historical Geography*, 44, 2-14. http://dx.doi.org/10.1016/j.jhg.2013.12.003
- Grimwood, B., Cuerrier, A., & Doubleday, N. (2012). Arctic community engagement during the 2007-2008 International Polar Year. *Polar Geography*, 35(3-4), 189-193. http://dx.doi.org/10.1080/1088937X.2012. 714413
- Hossain, K. (2010). EU energy policy and the arctic region: A balancing interest between environmental responsibility and resource dependence. *European Energy and Environmental Law Review*, 19(6), 295-305.
- Immonen, I., Anderssen, N., & Lvova, M. (2008). Project work across borders in the arctic Barents region: Practical challenges for project members. *Nurse Education Today*, 28(7), 841-848. http://dx.doi.org/ 10.1016/j.nedt.2008.02.001
- James, C., & James, P. (2014). Canada, the United States and arctic sovereignty: Architecture without building? *American Review of Canadian Studies*, 44(2), 187-204. http://dx.doi.org/10.1080/02722011.2014.914048
- Koivurova, T., Kokko, K., Duyck, S., Sellheim, N., & Stepien, A. (2012). The present and future competence of the European Union in the Arctic. *Polar Record*, 48(4), 361-371. http://dx.doi.org/10.1017/S003224741100 0295
- Kondratov, N. (2014). Exploring Arctic: strategic interests of Russia. Northern (Arctic) federal university Bulletin. Series: Natural sciences, 1, 120-126.
- Lukin, Yu. (2008). *Russian Arctic in the changing world*. Archangel: FSAEI HPO "Lomonosov Northern (Arctic) federal university".
- Lukovich, J., Babb, D., & Barber, D. (2011). On the scaling laws derived from ice beacon trajectories in the southern Beaufort Sea during the International Polar Year - Circumpolar Flaw Lead study, 2007-2008. *Journal of Geophysical Research: Oceans, 116*(11), art. No. C00G07. http://dx.doi.org/10.1029/2011jc00 7049
- Manicom, J. (2014). The domestic politics of disputed Arctic boundaries: The Canadian case. *Polar Record*, 50(2), 165-175. http://dx.doi.org/10.1017/S0032247413000120
- On "Belkomur" project". (2014). Official website. Retrieved March 26, 2015, from http://www.belkomur.com
- Pedersen, T. (2012). Debates over the role of the arctic council. *Ocean Development and International Law,* 43(2), 146-156. http://dx.doi.org/10.1080/00908320.2012.672289
- Pilyasov, A. (2011). Contours of the strategy for development of the Arctic zone of the Russian Federation. *Arctic: Ecology and economy, 1,* 38-48.
- Pytkin, A., & Ionova, I. (2013). Problems and prospects of the Arctic region's fuel and energy sector. *Oil and gas* of Western Siberia: Materials of international scientific and technical conference, Tyumen, 5, 28-36.
- Riddell-Dixon, E. (2008). Canada and arctic politics: The continental shelf extension. Ocean Development and International Law, 39(4), 343-359. http://dx.doi.org/10.1080/00908320802459052
- Rintoul, S. (2008). The role of Southern Ocean in past, present and future climate: A strategy for the International Polar Year. *Indian Journal of Marine Sciences*, *37*(4), 373-385.

- Rowe, E. W., & Blakkisrud, H. (2014). A New Kind of Arctic Power? Russia's Policy Discourses and Diplomatic Practices in the Circumpolar North. *Geopolitics*, 19(1), 66-85. http://dx.doi.org/10.1080/14650045. 2013.789863
- Schiermeier, Q. (2009). International polar year: In from the cold. *Nature*, 457(7233), 1072-1073; 1076-1077. http://dx.doi.org/10.1038/4571072a
- Selin, V. (2014). Factor analysis of the Northern Sea Route freight traffic. North and market: establishment of economic order; 43(6), 19-23.
- Shvartsman, Yu., & Iglovskiy, S. (2012). *Climatic changes and their consequences for perennially frozen rocks of the European Russia's North.* Ecology of Northern regions. International congress materials. Novosibirsk.
- Sitting of Security Council on the realization of state policy in Arctic: President of Russia. (2014, April 22). Retrieved March 26, 2015, from http://kremlin.ru/news/20845
- Sytnik, O. (2013). Sabetta becoming deep. Yamal meridian, 9, 17.
- Vasudevan, V., Mathys, Y., & Tolar, J. (2009). DAMOCLES: An observer-based approach to design tracking. *IEEE/ACM International Conference on Computer-Aided Design*, 546-551.
- Vylitok, A. (2014). Northern latitude course needed for all. Interview with Head of Arctic projects department, nonprofit organization "Regional innovations and investments fund Yamal". *Arctic Info*. Retrieved March 26, 2015, from http://www.arctic-info.ru/Interview/Page/severnii-sirotnii-hod-nyjen-vsem
- Young, O. (2009). The arctic in play: Governance in a time of rapid change. *International Journal of Marine and Coastal Law, 24*(2), 423-442. http://dx.doi.org/10.1163/157180809X421833
- Young, O. (2011). Governance: A peaceful Arctic. Nature, 478(7368), 180-181. http://dx.doi.org/10.1038/ 478180a

Notes

Note 1. Project's key objective is ensuring economic access and feasibility of involvement of mineral wealth of the subpolar and polar Urals in Urals industrial output by creating a transport corridor on the eastern slope of the Ural mountains. To achieve the objectives above, separate subprojects are implemented in transport and energy infrastructure, geological survey and mineral wealth production as well as industrial yield.

Note 2. "Eastern Siberia - Pacific Ocean" (ESPO) - oil pipeline from Taishet city (Irkutsk Oblast) to oil terminal in Kozmino in Nakhodka Bay (Primorsk Krai). Connects deposits of Western and Eastern Siberia with the US and Asian markets. 4,740 km long. Operated by state natural monopoly "Transneft". The oil supplied to the world's market via that pipeline, was branded ESPO.

Note 3. Nord Stream. Main gas pipeline between Russia and Germany going through the Baltic Sea. Owned and operated by "Nord Stream AG". Nord Stream is 1,204 km long, going from Portovaya Bay near Vyborg (Leningrad Oblast) to Lubmin community near Greifswald (Mecklenburg-Western Pomerania). This is the longest underwater pipeline.

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