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SOCIAL AND ECONOMIC DEVELOPMENT

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The role of labor potential in the sustainable development of the Russian Arctic *

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Abstract. The key to the effective development of the Arctic resources is the active development of elements of the socio-economic systems of the Arctic territories. The progress in their use will provide a synergistic effect in the implementation of the full range of development priorities of the Arctic zone. One of these elements is labor potential, able to confront challenges in the Arctic effectively. Modern problems of the development of the labor potential of the Arctic territories are population decline, disruption of population reproduction processes, the low life expectancy of men and native people, social tensions in labor markets, and poverty. The provisions and conclusions of the presented study contain a scientifically substantiated position regarding the role of labor potential in the sustainable development of the Arctic territories of Russia. The research results are focused on their use for managing the development of the labor potential of the Arctic territories. Prospects for the further research of this topic are related to the study of the scientific foundations of the territorial self-development in achieving sustainable development of the Arctic territories of Russia.

Keywords: *labor potential, the Arctic region, sustainable development, labor market, the standard of living, demographic situation, unemployment, social licensing.*

Introduction

The priority of Russian society is the sustainable development of the country. The leading role in achieving it is for the Arctic territories. In the Arctic, social development is particularly important due to a series of factors. The mineral and fuel-energy resources of the Arctic territories play a crucial role in meeting the needs of the national economy for strategic commodities. The use of labor requires an approach due to climatic tension, creating discomfort for living in the Arctic: the nature effects intensity serves to prolong the adaptation properties of the human organism, cold discomfort, specific northern diseases, and aging of the body. The variability of settlement, territorial remoteness, small numbers of remote settlements, limited areas of labor application, low levels of transport availability contribute to the increased resource intensity of life in the Arctic. Despite the importance of the Arctic, it's a sparsely populated macro-region and remains a problem area in Russia due to the complexity and heterogeneity of socio-economic development and the lack of scientifically sound territorial management. We noted a need to develop new approaches for the development of the Arctic and to transform the state regulation of its development. The new Arctic paradigm should be sustainable development with the goal of integrated

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resource development and a focus on the social dimension. Labor capacity plays a crucial role in such development.

***Labor potential is a systemically important factor
for territorial socio-economic systems***

Different approaches are used to determine the concept of labor potential. The prevailing is the idea that the labor potential of the region is realized at the expense of knowledge, experience, and professional competencies [1, Tsvetkova I.I.] ability of the able-bodied population to productive activity. The efficiency of such ability determines the level of labor productivity [2, Tretyakov L.A., Bessonova M.A., Trofimenko E.N.] and depends on quantitative (determined by demographic factors [3, Zaitseva I.V.]) and qualitative (determined by the level of socio-economic development) characteristics of the labor potential of the area.

Analysis of economic and sociological categories of labor [4, Corchak E.A.] shows labor potential is an integral part of the human potential, i.e., a social category that characterizes the population as a subject of social, territorial development [5, Istomin A.V., Selin V.S.]. The basis of labor capacity is a part of the people with the ability to work, whose degree of realization determines the pace and proportion of territorial socio-economic development and the level of human development of the region [6, Vorobyev A.A.].

Thus, the potential for economic activity is the social factor of territorial development, and territorial specificities shape its quantitative and qualitative characteristics and determine the level of sustainability of the area. Quantitative attributes of labor potential are measured based on statistics (population censuses, sample surveys of the labor force, employment, and unemployment [7, Popova L.A., Terentyeva M.A.]). Qualitative characteristics are formed under the influence of demographic processes [8, Terentyeva M.A.] and are determined by the social infrastructure, living standards [9, Yarasheva A.V., Makar S.V.] and functional specifics of the Arctic areas [10, Teslya A.B., Bulacheva L.V.].

Medic and demographic factors of the Arctic labor potential of Russia

Demographic processes [11, Samarina V., Skufina T. & Samarin A.] play a significant role in providing real opportunities for the generation of labor. Analysis of the medical and demographic situation (2005–2017) shows the threats to real development opportunities of the labor potential in Arctic Russia¹ [12, Revich B.A., Kharkova T.L., Kvasha E.A., Bogoyavlensky D.D., Korovkin A.G., Korolev I.B.]. Such threats include the reduction of the able-bodied population (i.e., the basis of the labor force), the migration loss of the population [13, Schmidt J., Aanesen M., Klovok K., Khrutshev S., and Hausner V.], high morbidity and mortality rates among able-bodied men and high infant mortality.

¹ Territories completely classified a part of the Arctic Russia have been selected an object of the study.

A trend of demographic development of Arctic Russia (Fig. 1) is the shift of demographic equilibrium in the direction of increasing the population older than working age and manifestation of feminization with an increase in age (starting from the age group 40–44 years): the proportion of the able-bodied population there was 61.2% against 68% in 2005.

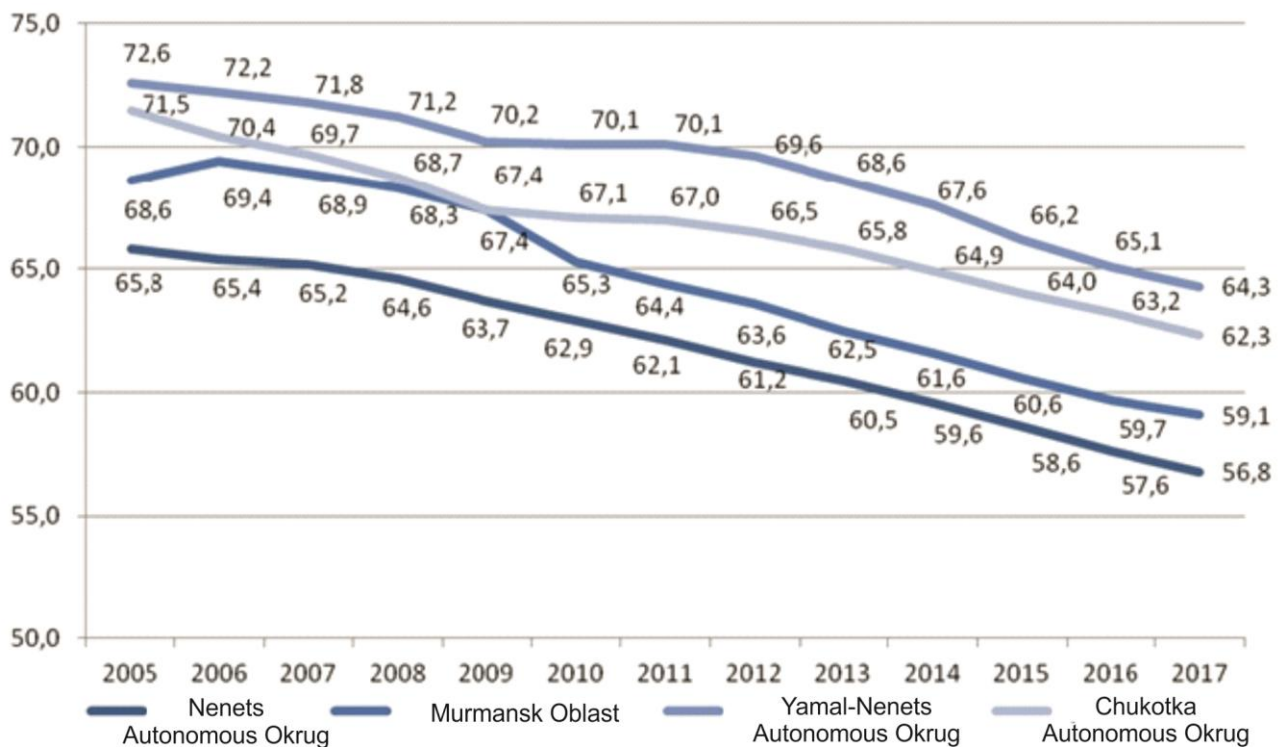


Fig. 1. Trends in the ratio of the able-bodied people in the Arctic territories of the Russian Federation, 2005–2017, % of the total population².

A prime example is the Murmansk Oblast, where against the background of a significant population decrease (2005–2017: by 85 thous people or 10.1%), the share of the able-bodied population was 59.1% against 68.6% in 2005. The migration issue is acute in the area: in 2005–2017, 75.4 thous people left the area. The situation is harmful to the development of the Arctic labor force due to the high proportion of skilled workers in the migration structure (in 2017, 57.2 % of the population aged 14 and over were qualified). No doubt, such trends limit the possibilities of exploiting the labor potential of the Arctic territories.

Factors with a negative impact on the labor force development in the Arctic are the high rate of morbidity, i.e., a cause of concern due to disability and mortality, and the high rates of able-bodies population and infant mortality. E.g., the rate of morbidity per 1,000 people (patients with first-time diagnoses) in the RF Arctic territories in 2017 was 1,015.9 against the mid-Russian level — 778.9. Respiratory diseases are among common ones: in 2017, the rates in the Chukotsky AO — 771.8, in the Nenets AO — 702.7, in the Yamal-Nenets AO — 625.3, against an average of 353.5 in Russia. The average Russian value significantly was exceeded by the level of the digestive

² Regiony Rossii. Sotsial'no-ekonomicheskie pokazateli [Territories of Russia. Socio-economic indicators]. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1138623506156 (accessed 18 May 2019). (In Russ.)

system and musculoskeletal system diseases (e.g., in 2017, in the Nenets AO the incidence rate of digestive organs diseases amounted to 82.9 against 34 — the average in Russia, in the Yamal-Nenets AO — 64.4, in the Chukotsky AO — 60.2).

Such specific features of medical and demographic indicators in the Arctic territories of Russia are caused by the discomfort of living, incl. climatic conditions, the state of the environment, the ethnic component of human potential, and the functional features of Arctic settlements. E.g., in the Murmansk Oblast (urban enterprises are responsible for up to 70% of pollutant emissions), Monchegorsk and Kola area are the places³ with high incidence rates of endocrine diseases among children under 14 years. It is more than 1.5 times the Murmansk Oblast's average. Mentioned territories are the area of the Kola Mining and Metallurgical Company production activities. Sulfur dioxide in the air of such settlements exceeds the norm by two times. In high water time, it was recorded that the rates of nickel exceeded in drinking water. A settlement with high rates of morbidity of children under 14 years caused by the musculoskeletal system diseases and congenital anomalies is Kirovsk, where the Kirov branch of JSC "Apatit" operates. The dumps of the "tailings" of the enterprise are the primary source of pollution of the environment with dust (winds from the side of the enterprise to the residential sides of the Apatitsko-Kirovsky area create increased concentrations of polluting substances in the air). The Murmansk Oblast is exposed to the dangers of radioactive contamination more than other territories of Russia: more than 200 nuclear reactors, a significant amount of radioactive waste and spent nuclear fuel are on the land of the Kola area⁴.

In the Yamal-Nenets AO, the industrial facilities of New Urengoi, Nadym, and Notoxar contribute significantly to the regional incidence of disease⁵ (esp. neoplasm). The number of air pollutant substances include sulfur dioxide, oxides of nitrogen and carbon, formaldehyde, benzopyrene. In terms of the incidence of malignant neoplasms, the industrial settlements of Salekhard, Gubkinsky, Noyabrsk, and Purovsky, Shurishkarsky, and Tazovsky areas are at risk.

Another example is Chukotka, where the high infant mortality rate was recorded (in 2017: 10.7%) and the lowest life expectancy at birth (the total population — 66,10 years, men 60.33).

³ Mediko-demograficheskie pokazateli i sanitarno-epidemiologicheskaya obstanovka v Murmanskoy oblasti v 2016 godu. Upravlenie Federal'noy sluzhby po nadzoru v sfere zashchity prav potrebiteley i blagopoluchiya cheloveka po Murmanskoy oblasti [Medical and demographic indicators and the health and epidemiological situation in the Murmansk Oblast in 2016. Office of the Federal Service for the Supervision of Consumer Protection and Human Welfare in the Murmansk Oblast]. URL: [http://51.rospotrebnadzor.ru/directions _of _ activity/social _hygienic _monitoring/](http://51.rospotrebnadzor.ru/directions/_of_activity/social_hygienic_monitoring/) (accessed 09 April 2018). (In Russ.)

⁴ Osobennosti zagryazneniya. Federal'noe gosudarstvennoe byudzhethoe uchrezhdenie «Murmanskoe upravlenie po gidrometeorologii i monitoringu okruzhayushchey sredy» [Features of pollution. Federal State Budget Institution "Murmansk Hydrometeorology and Environmental Monitoring Authority"]. URL: <http://www.kolgimet.ru/monitoring-zagryazneniya-okruzhayushchey-sredy/centr-monitoringa-zagryazneniya-okruzhayushchey-sredy/osobennosti-zagryazneniya/> (accessed 18 May 2019). (In Russ.)

⁵ Neinfektsionnaya zabolevaemost' naseleniya Yamalo-Nenetskogo avtonomnogo okruga v 2016 godu. Upravlenie Federal'noy sluzhby po nadzoru v sfere zashchity prav potrebiteley i blagopoluchiya cheloveka po Yamalo-Nenetskomu avtonomnomu okrugu [Non-communicable diseases in the Yamal-Nenets Autonomous Okrug in 2016. Office of the Federal Service for the Supervision of Consumer Protection and Human Welfare of the Yamal-Nenets Autonomous Okrug]. URL: <http://89.rospotbnadzor.ru/s/89/files/decisions/monitoring/146492.pdf/> (accessed 18 May 2019). (In Russ.)

Due to ethnic characteristics of the population, among the specific features of the medical and demographic situation in the Okrug, we should note a high proportion of the rural population (30%), a high level of morbidity from “injuries, poisoning, external causes” (110.1 cases per 1,000 people in 2017), high levels of mortality from external causes (222.3 cases per 100 thousand people in 2017) and mortality of the rural population (in 2017 — 14.2% against 7.4% among the urban population).

Territorial organization of social infrastructure in the Arctic territories of Russia

Equally important factor of labor potential development in the Arctic Russia is its social infrastructure (social organizations and institutions serving basic social needs of the population, i.e., education of children, housing, medical support, cultural and sports leisure, etc.) [14, Markin V.V., Silin A.N.] and transport accessibility, forming “household” attractiveness of the Arctic territories [15, Ivanova M., Klyukina E.S.]. An analysis of the social infrastructure of the Russian Arctic shows threats in providing real opportunities for its labor potential development. Thus, obstacles to the educational needs of children and teenagers are caused by an unsatisfactory state of educational institutions (incl. their equipment) and an imbalance in the supply and demand of pre-school education services, manifested in the incomplete coverage of children with such services. Of relevance is the shortage of places in preschool institutions for children under three years old and the availability of preschool facilities for children belonging to small native peoples. E.g., in the Nenets AO, preschool enrollment is only 78%, and no supplementary education was organized in rural areas. In Salekhard (the Yamal-Nenets AO), 33,5% of children attend schools. In the town of Gubkinsky, the number is 29,5%.

The poor state of the housing and public infrastructure is increasing the localization of morbidity and mortality in the Arctic territories. In the Yamal-Nenets AO, e.g., non-communicable diseases are caused⁶ by the poor state of a centralized water supply system: in drinking water, hygienic standards of iron and manganese content are significantly exceeded; water treatment facilities in Tarko-Salé and Noyabrsk are ineffective. In the Nadym district, operated drinking water pipes do not have the necessary treatment facilities. The Shuryshkar district has no domestic drinking water pipes, and the town of Labytnangi got water pipes to supply with untreated and undisinfectated water. In the Chukotsky AO, more than 19% of the population are not provided with quality drinking water, and more than 40% of rural settlements have no piped water.

Housing conditions play an essential role in the qualitative and quantitative characteristics of the labor potential of the Arctic territories. E.g., according to Rosstat, 8.2% of families in Arctic Russia need to improve housing conditions (15.3% in the Nenets AO); 5.9% of the housing is in an emergency and dilapidated state. In the Yamal-Nenets AO, this number reaches 11.8%. Housing problems are affecting people's migration interests rather than income.

⁶ Ibid.

The quantitative characteristics of the Arctic labor potential (e.g., unemployment and territorial differentiation, level of employment, etc.) are negatively affected by the “transport discrimination,” i.e., the minimal transport connectivity and the isolation of the territories. E.g., in the Yamalo-Nenets AO, 67.7% of the population of the Priuralsky municipal district lives in settlements with no regular transport links to the administrative center; 46.7% — in the Tazovsky district; in the Chukotsky AO— 72.4%: in the Chykotsky district — 38.7%; in the Providensky city district — 35.1%; in Pevek — 25%; in the Bilibinsky district — 9.8% in Egvekinot; in the Murmansk Oblast: 6.3% — in the Tersky district and 4.65% — in the Lovozero district.

Standard of living in Arctic Russia

The threat to the labor potential qualitative characteristics in the Arctic is low standard of living of the population: 10.1% (2017; 14.4 % in 2005) of the people of Arctic Russia is in poverty: in the Murmansk Oblast — 12.6% (19.1%); the Nenets AO — 11.4% (9%); the Chukotsky AO — 9% (15.1%), the Yamalo-Nenets AO — 6.5% (8.4%). An analysis of the average and median level of the average per capita income shows that 60 % of the population is poor. In 2017, the average per capita monetary income of 70.5% of the people of the Murmansk Oblast was less than three values of the subsistence minimum; in the Nenets AO — 59.2%, the Chukotsky AO — 56.1%. The median income in the Murmansk Oblast was 80% of the average; in the Nenets AO — 74% and the Chukotsky AO — 76%.

The average per capita income in the first group (with the lowest incomes) in the Nenets AO amounted to 25.5% of the okrug average monetary income (2017); in the Yamal-Nenets AO — 26.5%, in the Chukotsky AO — 28.2%, in the Murmansk Oblast — 33.2%.

According to household sample surveys⁷, the level of subjective poverty (the proportion of households classified as inadequate) in 2017 was 62.5%, incl. 79% — in the Yamal-Nenets AO (area with the highest wages in the Russian Federation), 68.8% — in the Nenets AO, 51.3% — in the Murmansk Oblast, 47.8% — the Chukotsky AO. 5.3 % of households “had financial difficulties which prevented the payment of established payments for housing and utilities⁸” (17.4% of homes in the Chukotsky AO). In general, the indicators of poverty and the differentiation of the Arctic population by the level of average per capita monetary income are significantly higher than the most critical values [16, Glashiev V.V., and Lokosov V.V.]: In the Murmansk Oblast, the poverty rate exceeds its significant value (3%) by 4.2 times; in the Nenets AO — by 3.8; in the Chukotsky AO by 3; in Yamal-Nenets — by 2.2.

⁷ Dokhody, raskhody i potreblenie domashnikh khozyaystv (po itogam vyborochnogo obsledovaniya byudzhetrov domashnikh khozyaystv): stat. sbornik [Household income, expenditure and consumption (based on sample survey of household budgets)]. Federal'naya sluzhba gosudarstvennoy statistiki [Federal State Statistics Service]. URL: http://www.gks.ru/bgd/regl/b18_101/Main.htm (accessed 24 April 2018). (In Russ.)

⁸ Dokhody, raskhody i potreblenie domashnikh khozyaystv v 3 kvartale 2018 goda (po itogam vyborochnogo obsledovaniya byudzhetrov domashnikh khozyaystv): stat. sbornik [Household income, expenditure and consumption in the 3rd quarter of 2018 (based on sample household budget survey)]. Federal'naya sluzhba gosudarstvennoy statistiki [Stat. compendium. Federal Service of State Statistics]. Moscow, 2019. 103p. (In Russ.)

One of the leading indicators of a low standard of living in the high share of expenditure on food in total consumption expenditure. It indicates restrictions on household access to development resources. E.g., in the Chukotsky AO, the percentage of food expenditure in the general structure of consumer spending in 2017 was 40%, in the Nenets AO — 34%, and the Yamal-Nenets AO — 32.2% (Fig. 2).

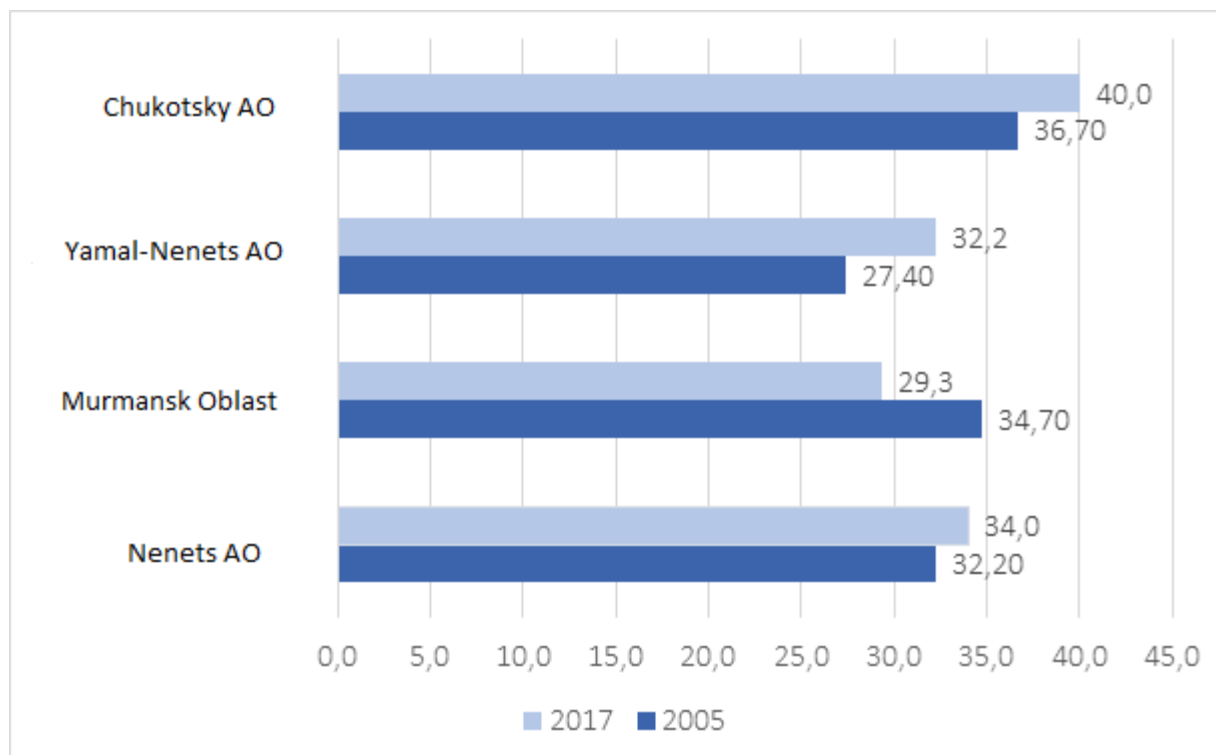


Fig. 2. Share of expenditure on food in total consumption expenditure in the Arctic areas of the Russian Federation, 2005 and 2017, %⁹.

In the Murmansk Oblast, the value of this indicator decreased in 2005-2017. It may be a positive trend in household well-being, but this conclusion is overshadowed by the rather bizarre situation of food composition. The Murmansk Oblast is entirely located in the Arctic zone of the Russian Federation, characterized by severe natural and climatic conditions and fish and mining-related specialties (i.e., a high proportion of male labor). However, the area is significantly inferior in the composition of nutrients in the consumed food to territories outside the Arctic zone (with more favorable natural and climatic conditions).

The systemic factor that determines the dynamics of socio-economic development of the Arctic territories in the strategic perspective is child poverty — the most important indicator of sustainable development. It has a significant impact on the quantitative and qualitative characteristics of the labor potential of Arctic Russia. This indicator is not visible in statistics. Thus, it is not considered by the government when forming social-political strategies. According to the author's calculations (Fig. 3), today, 20% of children in Arctic Russia are poor. The Murmansk Oblast is a part of the zone of high concentration of child poverty (27.5%).

⁹ Regiony Rossii. Sotsial'no-ekonomicheskie pokazateli [Territories of Russia. Socio-economic indicators]. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1138623506156 (accessed 24 April 2018). (In Russ.)

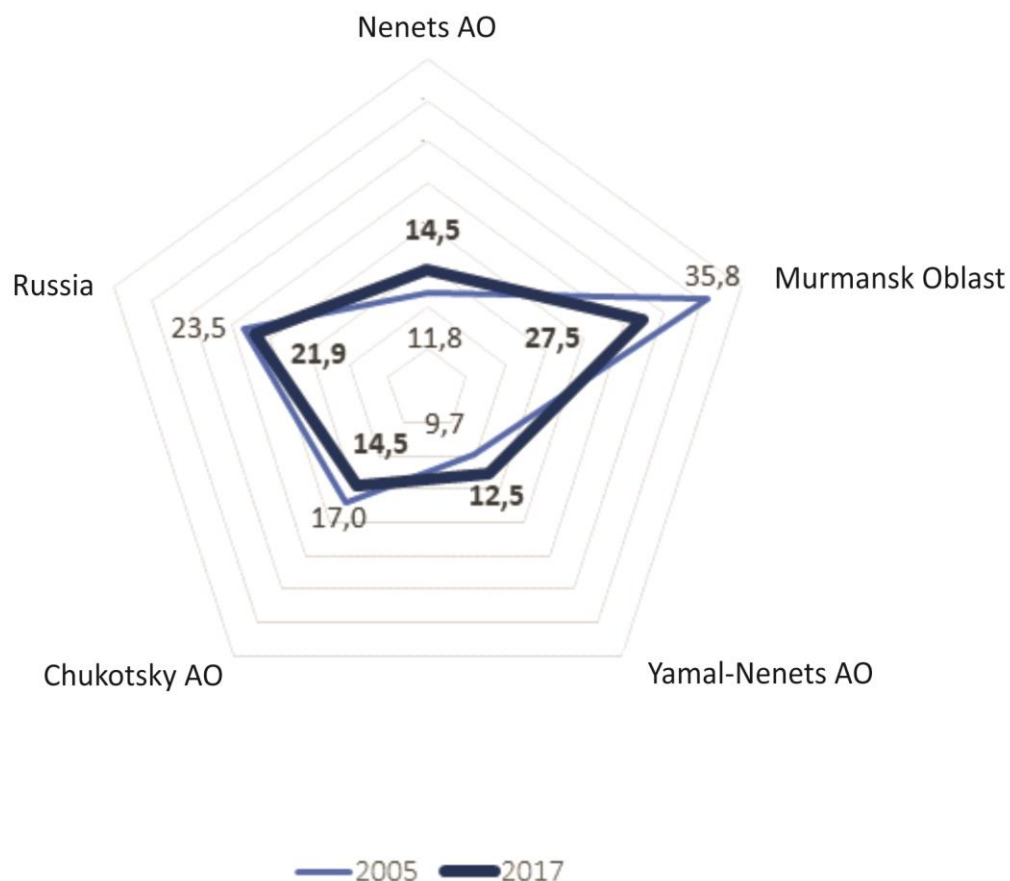


Fig. 3. Child poverty rates in the Arctic areas of the Russian Federation, 2005 and 2017, %.

Child poverty (i.e., the proportion of poor children in the total child population) occurs not only in families of unemployed people but also in families with working parents. The threat of child poverty concerning the Arctic labor potential means the risks of spreading morbidity, disability and mortality, reducing the level of education and raising the level of unemployment, declining living standards, rising crime, and social tensions, and reduced opportunities for economic growth.

Labor markets in Arctic Russia

The efficiency of territorial labor markets is central to the development of the Arctic labor potential. Its current state shows a fundamental contradiction between the strategic importance of the Russian Arctic and the negative processes in its socio-economic development. Despite high levels of population's economic activity in Arctic Russia, it is social tension in territorial labor markets caused by unemployment that negatively affects the labor potential development.

The level of unemployment was 6,1% in 2017. The primary characteristics of unemployment in the Arctic territories of Russia (Table 1) is the domination of young unemployed citizens (the average age of jobless citizens is 36.5 years, and the highest unemployment rate is in the 20-29 age group). One more typical feature is the high (63.3%) share of qualified citizens in the structure of the unemployed (we should note the tendency of increasing the share of skilled workers

among unemployed citizens). Also, we should admit the long-term nature of unemployment (almost a quarter of unemployed citizens were searching for a job for more than a year).

Table 1

*The main features of unemployment in the Arctic areas of Russia, 2005 and 2017*¹⁰

Indicator	Nenets Autonomous Okrug		Murmansk Oblast		Yamal-Nenets Autonomous Okrug		Chukotsky Autonomous Okrug	
	2005	2017	2005	2017	2005	2017	2005	2017
Average period of seeking employment, months	8.5	7.9	8.4	7.5	7.1	6.7	8.3	6.1
Unemployed persons seeking employment for 12 months or more, % of the total number of unemployed citizens	35.6	31.5	37.1	33.2	25.8	22.2	33.0	21.5
Proportion of unemployed skilled persons in the general structure of unemployed citizens, %	33.1	57.8	62.3	67.2	54.9	54.9	45.0	36.9

E.g., in the Murmansk Oblast and the Nenets AO, in 2005-2017, the proportion of skilled unemployed citizens increased with a slight decline in long-term unemployment. Also, it means the training systems of the region are inadequate and do not meet the demands of the local economies.

Social tensions in Arctic Russia's labor markets are exacerbated by the low employment, the high unemployment among graduates, and the high territorial differentiation of unemployment. E.g., one of the lowest employment rates in the Russian Federation (43%) was found in the Nenets AO, where 40% of the unemployed residents are rural citizens: the unemployment rate in the town of Anadyr is 0.2%. In the Chukotsky municipal district, the leading employers are the state and municipal institutions and agricultural enterprises. So, more than 70% of the unemployed are native people, i.e., 11.5% of the total in the area. In the Murmansk Oblast, 67.5 % of the unemployed residents are skilled, while the unemployment rate among graduates is 8.8%. The situation typical for the Murmansk Oblast: low demand for local graduates among the enterprises of the area. Graduates with secondary vocational education (colleges that interact with town-making enterprises) are more likely trained to work than persons with higher education who usually need mentoring¹¹. Only 28% of young people work in their field of study [17, Sharova E.N.]: against the background of the overabundance of lawyers, economists, and humanitarians, the greatest need of the Murmansk Oblast is made up of skilled personnel trained in ship repair, health care, housing, and construction. The rate of postgraduate migration from the Oblast is more than 30%.

The imbalance in demand and supply in the Arctic territorial labor markets is compounded by the employment of native people of the North. E.g., the employment native peoples of the

¹⁰Ibid.

¹¹ V Murmanskoy oblasti vozrozhdayut institut nastavnichestva [In the Murmansk Oblast, mentoring is being revived]. URL: <https://www.murman.ru/themes/economy-17042019.html> (accessed 18 May 2019). (In Russ.)

North in the Murmansk Oblast mean unskilled jobs in the peripheral sector of the local economy, i.e., reindeer husbandry. In the autonomous okrugs of the Russian Arctic, the unemployment of native peoples is seasonal, caused by the traditional use of natural resources (periodicity of such ethnic, economic activities as hunting and fishing). Common problems of native employment are narrow areas of labor application, reduction of jobs in traditional natural resources management, reducing the interest of young native people in regular economic activities.

The current problem of Arctic labor markets is low-paid employment. Within the modern system of state regulation of the Arctic labor potential development in the regions of Russia are institutional conditions aimed at preserving human efficiency, providing state guarantees for wages, considering the increased costs of working in the Arctic and social regulation. A critical analysis reveals significant shortcomings, which hurt the development of the labor potential of Arctic territories. These include the application of rules that do not guarantee accountability for the results and consequences of territorial and municipal governmental decisions, which do not guarantee the rights of citizens in social and labor relations. E.g., the salary of a nurse with the 3rd qualification grade in an institution subordinated to the Ministry of Health of the Murmansk Oblast is 35.8% of the minimum subsistence wage of able-bodied population (14 374 rubles); a doctor — anesthesiologist — resuscitator with a 4th qualification grade — 59.8%; a chief nurse of an outpatient health institution — 55%; the chief paramedic of the emergency medical service station — 61.4% (Table 2).

Table 2

*Salaries of employees of budgetary healthcare institutions by professional qualification groups in the Arctic areas of Russia, 2017*¹²

Indicator	Nenets Autonomous Okrug	Murmansk Oblast	Yamal-Nenets Autonomous Okrug	Chukotsky Autonomous Okrug
Mid-level medical and pharmaceutical personnel with a 3rd qualification grade	8 500	5 144	11 500	8 768
Doctors and pharmacutists with a 4th qualification grade	12 700	8 601	17 500	16 700
Heads of units at medical organizations with higher medical and pharmaceutical education and a 2nd qualification grade	17 000	9 480	18 700	17 535
Info: the minimum subsistence salary of the able-bodied population, rub.	21 664	14 374	16 569	20 600

In the Murmansk Oblast, the average monthly wage of employees at municipal pre-school institutions ranges from 28,016.3 rub, in the Kovdorsk area to 31,551.7 rub in the town of Apathy; in the Yamal-Nenets AO: from 42,632.4 rub in the Shurykarsk district to 50 988.7 rub in Noviy Urengoy; in Chukotsky AO: from 57 685.3 rub in Pevek up to 65 796 rub in Anadyr¹³.

¹² Elektronnyy fond pravovoy i normativno-tekhnicheskoy dokumentatsii [Electronic legal and regulatory documentation fund]. URL: <http://docs.cntd.ru/> (accessed 10 March 2019). (In Russ.)

¹³ Baza dannykh pokazateley munitsipal'nykh obrazovaniy. Federal'naya sluzhba gos. statistiki [Database of Municipal Indicators. Federal Service for Statistics]. URL: http://www.gks.ru/free_doc/new_site/bd_munst/munst.htm (accessed 01 April 2019). (In Russ.)

Low-paid employment, coupled with the local wage system in the Arctic territories (guarantees and compensation schemes for workers and residents of the Far North and their equivalent areas), adds to the phenomenon of economic poverty. On average, in Russian Arctic areas, the economic poverty level was 2.3%, incl. in the Nenets AO — 7.2%, in the Chukotsky AO — 2.4%, in the Murmansk Oblast — 2.2% and in the Yamal-Nenets AO — 2.1%. Arrears in wages exacerbate the situation concerning low-paid employment: In February 2019, the total amount of such debt¹⁴ in the Nenets AO was 35 million rub and in the Murmansk Oblast — 30 million rub.

Sustainable development of Russian Arctic territories

The contemporary paradigm of social development in the world is sustainable development, defined in the Sustainable Development Agenda as the result of the interaction of a human, economic system, and nature at the global, national, territorial, or local levels, and expressed in social, economic and environmental sustainability.

In Russia, the concept of sustainable development is based on an innovative model of economic growth (Concept of Long-term Socio-economic Development of the Russian Federation for the period up to 2020), considering the use of the Arctic zone of Russia as a strategic resource base of the country (Fundamentals of State Policy of the Russian Federation in the Arctic for the period up to 2020 and Further Perspective). In addition to the expansion of the Arctic resource base, among the goals of Russian State policy in the Arctic are the provision of favorable operational regime in the “Arctic region,” — protection of the Arctic environment, cooperation with the Arctic states, ensuring sustainable development of native peoples (the State Program of the Russian Federation “Socio-economic development of the Arctic zone of the Russian Federation”). Thus, the priority of sustainable development of the Arctic zone of the Russian Federation is its economic development. Its central principle is maximizing the efficiency of the use of mineral raw materials, fuel, and energy. Labor potential as a backbone factor of territorial socio-economic systems of Arctic territories of Russia is given a secondary role derived from economic problems. It does not meet the primary conditions for achieving sustainable development and ensuring the national security of the country. De facto, it is confirmed by the implicit predatory attitudes of large extractive industries and state corporations when Arctic resources are seized “for today's sake,” without “looking back” on not the only current social and economic situation in Arctic Russia, but on its future. First of all, this concerns the absence of rent relations regulation (rent payments for the use of natural resources) and social licensing (institutional management of mining rights with the involvement of the local community and minimizing the impact on the environment and biodi-

¹⁴ Prosrochennaya zadolzhennost' po zarabotnoy plate rabotnikam organizatsiy, ne otnosyashchikhsya k sub"ektam malogo predprinimatel'stva, po sub"ektam Rossiyskoy Federatsii v 2019 godu [Overdue wage arrears to employees of organizations not related to small businesses, by territories of the Russian Federation in 2019]. Federal Service for Statistics. URL: http://www.gks.ru/free_doc/new_site/population/track/sr-zarplata/t11.xlsx (accessed 13 March 2019). (In Russ.)

versity through all stages implementation of mining projects [19, Suopajärvi L., Ejdemo Th., Klyuchnikova E., Korchak E., Nygaard V., and Poelzer G.]).

An analysis of foreign experience in territorial management shows that the priority for the sustainable development of Arctic regions is their labor potential. In the North of America, institutional mechanisms for managing the labor potential growth in the Arctic areas are the institutions of corporate social responsibility (the scope of which is primary education, incl. the organization of baby food, sports, and leisure for the native people, etc.¹⁵) and social licensing in mining (its mechanism means the general vision of socio-economic development, diversification of local economies, and maximization of labor potential of the Arctic territories). E.g., in the subsidiaries of the “Dominion Diamond Mines” resource company, in 2017, the share of the employed population of the Northwest Territories and Nunavut (Canada) was 54% of the local people, incl. 18% of native people¹⁶. The company is an active participant in the Canadian system of certification of mining professions. It successfully implements mentoring programs among its production personnel, maintains partnerships with representatives of local Arctic communities (the Ekati mine contracts them for mining and catering services, blasting operations, transport, freight, and postal services). The specific of Alaska development is also related to the rent distribution: Revenues from the use of oil resources were initially directed to the development of production and social infrastructure facilities in oil-producing regions. The privatization of land and natural resources was accompanied by the creation of private-collective forms of ownership. Later, it has become the economic ground for local communities and social partnership of the state, business, and local communities. Norway has a high level of taxation on oil activities. The guiding principle for the exploitation of the oil and gas resources in the Arctic is that the works meet the requirements of the social consequences (e.g., the companies applying for the Finnmark).

The Arctic areas of Russia with a small population (1.64% of the total) play an essential role in the innovative national model of economic growth, i.e., they are donors for the federal budget. Their GRP share in the total country's GRP is more than 5%; the amount of GRP per capita is 2,348.8 thous rub against Russia's average of 510,2 thous rub. Despite it, the degree of socio-economic injustice in the Arctic areas is more pronounced. Thus, the population of the Arctic territories experiences inadequate economic compensation for work and living in extreme environmental conditions through wages and social transfers; tax bases of local budgets are reduced due to increased vertical integration of holdings, which include town-forming enterprises; the scarcity of municipal budgets and the high level of their subsidies limit the ability of local governments to participate in employment, its promotion, formation, and implementation of territorial development programs [18, Mitroshina M.N.].

¹⁵ Ekati Diamond Mine 2017 Socio-Economic Agreement Report. 38 p.

¹⁶ Local economic development RioTinto. URL: <https://www.riotinto.com/source/local-economic-development-24287.aspx> (accessed 09 October 2018).

Analysis of the conceptual foundations of sustainable development of territorial socio-economic systems [20, Manjeet K.; 21, Alvarez J., Yumashev D., Whiteman G.; 22, Newton St. T., Fast H., Henley Th.; 23, Jovovic R., Draskovic M., Delibasic M., and Jovovic M.] shows that the modern Arctic paradigm in Russia should be the sustainable development of its Arctic areas. It should be understood as a process of territorial expansion, determined by the long-term socio-economic policy of the state, formed based on a systematic interaction of state authorities, local governments, local business community, and population. It should be carried out on the principles of promoting rational socially-oriented nature management and maximum conservation of human potential through the formation of high welfare standards of the population, considering the specifics of the Arctic. The pace and proportion of sustainable development of the Russian Arctic are determined by an appropriate quality of labor potential, which in turn requires a useful model of its improvement as a systemically important factor in the territorial socio-economic systems.

Conclusion

Achieving sustainable development in the foreign Arctic areas involves, first and foremost, solving the problems of unemployment by maximizing the employment of the Arctic population through continuous interaction of significant employers with local school and vocational education systems and the wide dissemination of social licensing of extractive corporations. In our view, to achieve the sustainable development of Arctic Russia, it is necessary to refocus the development of the Arctic resources on their social importance by extending the institution of social licensing of resource companies based on the principles of social development. The social significance of resource-related activities is determined by optimizing the possibilities of territorial self-development, increasing the “domestic” attractiveness of the Arctic territories, and, ultimately, developing the labor potential of the Arctic areas of Russia.

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References

1. Tsvetkova I.I. Osnovnye printsipy razvitiya trudovogo potentsiala regiona [Basic principles for the development of the labor potential of the region]. *Ekonomika i upravlenie* [Economy and Management], 2012, no. 3, pp. 41–46. (In Russ.)
2. Tret'yakova L.A., Bessonova M.A., Trofimenko E.N. Sushchnost' kategorii «trudovoy potentsial»: sotsial'no-ekonomicheskiy aspekt [The essence of the category “labor potential”: socio-economic aspect]. *Regional'naya ekonomika: teoriya i praktika* [Regional economy: theory and practice], 2014, no. 34 (361), pp. 2–10. (In Russ.)

3. Zaitseva I.V. Demograficheskoe razvitie Stavropol'skogo kraya kak osnova formirovaniya trudovykh resursov [Demographic development of the Stavropol Territory as a basis for the formation of labor resources]. *Nauchnyy zhurnal Kub GAU* [Scientific Journal of KubSAU], 2012, no. 81 (07), pp. 1–16. (In Russ.)
4. Korchak E.A. *Trudovoy potentsial severnykh regionov v ramkah realizatsii gosudarstvennoy politiki Rossiyskoy Federatsii v Arktike* [Labor potential of the northern regions in the framework of the implementation of the state policy of the Russian Federation in the Arctic]. Apatity, KSC RAS Publ., 2017, 225 p. (In Russ.)
5. Istomin A., Selin V. Strategiya i vozmozhnosti programmno-tselevogo podhoda v regulirovanii regional'nogo ekonomicheskogo razvitiya [Strategy and possibilities of the program-target approach in the regulation of regional economic development]. *Ekonomicheskie i sotsial'nye peremeny: fakty, tendentsii, prognoz* [Economic and social changes: facts, trends, forecast], 2009, no. 3 (7), pp. 25–36. (In Russ.)
6. Vorobyev A.A. Trudovoy potentsial regionov Privolzhskogo federal'nogo okruga: analiz i vozmozhnosti ego povysheniya [Labor potential of the Volga Federal District regions: analysis and opportunities for its increase]. *Ekonomika i predprinimatel'stvo* [Economy and Entrepreneurship], 2015, no. 12, part 2, pp. 410–413. (In Russ.)
7. Popova L.A., Terentieva M.A. Trudovoy potentsial rossiyskogo Severa [Labor Potential of the Russian North]. *Arktika i Sever* [Arctic and North], 2014, no. 14, pp. 51–69. (In Russ.)
8. Terentyeva M.A. Trudovoy potentsial severnogo regiona i problemy professional'nogo obrazovaniya [Labor potential of the northern region and the problems of vocational education]. *Problemy obrazovaniya* [Problems of education], 2015, no. 1, pp. 118–136. (In Russ.)
9. Yarasheva A.V., Makar S.V. Vliyaniye demograficheskikh faktorov na trudovoy potentsial regionov Dal'nego Vostoka [The Impact of Demographic Factors on the Labor Potential of the Far East Regions]. *Ekonomika. Nalogi. Pravo* [Economics, taxes & law], 2019, no. 2, pp. 103–114. (In Russ.)
10. Teslya A.B., Bulacheva L.V. Formirovaniye i razvitie trudovogo potentsiala Arkticheskoy zony Rossiyskoy Federatsii [Formation and development of labor potential of the Russian Federation Arctic zone]. *Vestnik MGTU* [Vestnik of MSTU], 2015, no 3, vol. 18, pp. 537–546. (In Russ.)
11. Samarina V., Skufyina T. and Samarin A. Russia's North Regions as Frontier Territories: Demographic Indicators and Management Features. *European Research Studies Journal*, 2018, no. 3, pp. 705–716.
12. Revich B., Kharkova T., Kvasha E., Bogoyavlenskiy D., Korovkin A., Korolev I. Sotsial'no-demograficheskie ogranicheniya ustoychivogo razvitiya Murmanskoy oblasti [Sotsiodemographic limitations of the sustainable development of Murmansk oblast]. *Problemy prognozirovaniya* [Studies on Russian economic development], 2014, no. 2, pp. 127–135. (In Russ.)
13. Schmidt J., Aanesen M., Klovov K., Khrutshev S. and Hausner V. Demographic and economic disparities among Arctic regions. *Polar Geography*, 2015, no. 38, pp. 251–270. DOI 10.1080/1088937X.2015.1065926
14. Markin V., Silin A. Chelovecheskiy i sotsial'nyy potentsial neoindustrial'nogo osvoeniya Arktiki: sotsiologicheskyy analiz, modelirovaniye, regulirovaniye [Human and social potential of neo-industrial development of the Arctic: sociological analysis, modeling, and regulation]. *Ekonomicheskie i sotsial'nye peremeny: fakty, tendentsii, prognoz* [Economic and social changes: facts, trends, forecast], 2017, no. 6 (10), pp. 75–88. DOI <https://doi.org/10.15838/esc/2017.6.54.5> (In Russ.)
15. Ivanova M., Klyukina E. Sovremennyye predposylki budushchego arkticheskikh trudovykh resursov [Contemporary preconditions for the future of the Arctic labor resources]. *Monitoring obshchestvennogo mneniya: ekonomicheskie i sotsial'nye peremeny* [Monitoring of Public Opinion: Economic and Social Changes Journal], 2017, no. 6 (142), pp. 180–198. DOI <https://doi.org/10.14515/monitoring.2017.6.08> (In Russ.)
16. Glazhev S., Lokosov V. Otsenka predel'no-kriticheskikh znacheniy pokazateley sostoyaniya rossiyskogo obshchestva i ikh ispol'zovanie v upravlenii sotsial'no-ekonomicheskim razvitiem [Assessment of the critical threshold values of the indicators of the state of Russian society and their use in the socio-economic development management]. *Ekonomicheskie i sotsial'nye peremeny: fakty, tendentsii, prognoz* [Economic and social changes: facts, trends, forecast], 2012, no. 4 (22), pp. 22–41. (In Russ.)

17. Sharova E.N., ed. *Zhiznennye strategii molodezhi v usloviyakh Kol'skogo Severa (po materialam sotsiologicheskogo issledovaniya)* [The life strategies of young people of the Kola North (based on sociological research)]. Murmansk, Barents Press Publ., 2015. 175 p. (In Russ.)
18. Mitroshina M.N. Problemy zanyatosti naseleniya monogorodov Arkticheskoy zony Rossiyskoy Federatsii [The employment problems in mono-profile towns of the Russian Arctic]. *Regional'naya ekonomika i upravlenie: elektronnyy nauchnyy zhurnal* [Regional economics and management: electronic scientific journal], 2016, no. 3 (59). (In Russ.)
19. Suopajarvi L., Ejdemo Th., Klyuchnikova E., Korchak E., Nygaard V., Poelzer G.A. Social impacts of the “glocal” mining business: case studies from Northern Europe. *Mineral Economics*, 2017, vol. 30, is. 1, pp. 31–39. DOI <https://doi.org/10.1007/s13563-016-0092-5>
20. Manjeet K. Arctic Legal System: a New Sustainable Development Model. *Russian Law Journal*, 2016, no. 4 (2), pp. 83–95. DOI <https://doi.org/10.17589/2309-8678-2016-4-2-83-95>
21. Alvarez J., Yumashev D., Whiteman G. A framework for assessing the economic impacts of Arctic change. *Ambio. A Journal of the Human Environment*, 2019, Jun 24, pp. 1–12. DOI <https://doi.org/10.1007/s13280-019-01211-z>
22. Newton St.T., Fast H., Henley Th. Sustainable Development for Canada's Arctic and Subarctic Communities: a Backcasting Approach to Churchill, Manitoba. *Arctic*, 2002, vol. 56, no. 3, pp. 281–290.
23. Jovovic R., Draskovic M., Delibasic M. and Jovovic M. The concept of sustainable regional development — institutional aspects, policies, and prospects. *Journal of International Studies*, 2017, no. 10 (1), pp. 255–266. DOI <https://doi.org/10.14254/2071-8330.2017/10-1/18>

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Legal regulation of the traditional (native) Pacific walrus harvest in Russia *

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Abstract. The article briefly reviewed studies of the Pacific walrus. This information is necessary for the development of the Total Allowable Catch (TAC) since the native people of Chukotka annually harvest this subspecies of walrus. We have drawn attention to the long-term change in the habitat of the walrus, i.e., to the reduction of the ice period in the Bering and Chukchi Seas and possible consequences for the walrus (increased mortality and epizootics). Legal acts for the fisheries are regulating the traditional (native) walrus harvest on Chukotka, and the capture of walrus calves for educational and cultural purposes have been described. A scheme for the development of the TAC for walrus has been discussed as well. We have presented the latest data on allocated quotas and actual walrus harvest. The need for more detailed and versatile research of walrus in connection with climate change is discussed. The author suggests cooperation between the native people of Chukotka and various research institutions for the better-organized study of the walrus in relation to climate change, for conservation and rational use.

Keywords: *the Arctic, North, Chukotka, traditional (native) harvest, Pacific walrus, legal acts.*

Introduction

The Pacific walrus area is on the territory of Russia and the US. Anciently, up to 3 thousand years ago [1, Bogoslovskaya L., Slugin I., Zagrebin I., Krupnik I., p. 15], the Pacific walrus was harvested by native peoples of Chukotka and Alaska, and now the walrus is still important for traditional economic activity.

Historically, traditional environmental management had no special permits or strict rationing. Currently, existing natural resource legislation contains general provisions on the customary use of natural resources by native peoples. Nevertheless, it requires obtaining special permits and licensing (incl. rationing) in respect of each of the natural resources [2, Zhuravel V.P., p. 84]. Therefore, the Pacific subspecies of walrus is in the list of aquatic biological resources¹ with an established total allowable catch (TAC). Every year, the rationale for TAC is developed and quotas for the walrus harvest are approved for the native people of Chukotka. On the US side, the Pacific walrus hunt is not subject to legislative quotas, but it is produced in enough quantities to meet the needs of Alaska's native people.

The average annual harvest levels of walrus in both countries in 1990–1999: 6,307 (± 707) walruses; in 2000–2009: 5,410 (± 511), incl. 42% of struck and lost walruses [3, MacCraken J.G., p.

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¹ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii ot 01.10.2013 № 365 (red. ot 16.11.2017) «Ob utverzhdenii perechnya vidov vodnykh biologicheskikh resursov, v otnoshenii kotorykh ustanavlivayetsya obshchiy dopustimyy ulov» [Order of the Ministry of agriculture of the Russian Federation dated 01.10.2013 No. 365 (ed. 16.11.2017) "On approval of the list of types of aquatic biological resources in respect of which the general allowable catch is established"].

2074], of which 49–51% were harvested in Alaska. Also, a decline in ice cover is observed in the Arctic over the past 20 years [4, Jay C.V., Fischbach A.S., Kochnev A.A., p. 9; U.S. National Ice Center]. It negatively impacts on walrus (increasing mortality) because their life is closely linked to the ice (the calves, molt, and rest in the feeding areas). To assess the current situation of the Pacific walrus harvest in the period of climate change, legislative and other official instruments governing its harvesting were analyzed, and a review of recent research was made.

Status of the Pacific Walrus and living conditions

The Pacific Walrus is the slowest breeding species among the harvested pinniped animals in the Arctic. Walrus are polygamous. Their puberty is reached by 5–7 years, but males enter reproduction only by 13–14 years because of stiff competition for females [5, Kibalchich A.A., p. 178]. Breeding occurs in January — March, and the birthing season is between April and mid-June. Pregnancy lasts 15 months, with a latent stage of 4 months [5, Kibalchich A.A., p. 178]. Females usually have one calf once every three years, depending on the mother and feeds milk up to 2–2.5 years [6, Fay F.H., p. 138]. The mortality of calves in the first year of life reaches 40–45%, incl. stillbirths and abortion in the late stage of pregnancy [data from 1981–1987; 7, Kibalchich A.A., p. 28].

Since the late 1990s — early 2000s, there is a reduction in the ice area in the Bering and the Chukchi Seas in the summer-autumn period. Also, there is a rapid decay of ice in spring and its later formation in autumn. As result, the period of the ice cover in the Chukchi Sea is reduced [8, Dmitriev A.A., p. 116; 4, Jay C.V., Fischbach A.S., Kochnev A.A., p. 9; 9, Kryukova N.V., Kochnev A.A., Pereverzev A.A., p. 34]. Earlier, years with weak and robust ice cover of the Chukchi Sea alternated [8, Dmitriev A.A., p. 116]. Now there is a long (not less than ten years) period of weak ice cover of the Chukchi Sea [10, Stroeve J.C., Serreze M.C., Holland M.M., Kay J.E., Malanik J., Barrett A.P., p. 1006]. First-year ice in winter that rapidly melts in summer is beginning to prevail, and the general warming of the Arctic has reduced the likelihood of cold years, which could lead to a temporary restoration of the ice cover [10, Stroeve J.C., Serreze M.C., Holland M.M., Kay J.E., Malanik J., Barrett A.P., p. 1005].

Since the 2000s, changes have also begun on walrus haulouts: the number of animals in the Bering Sea significantly decreased, and in the Chukchi Sea increased. It indicates the displacement of animals in the northern part of the range [9, Kryukova N.V., Kochnev A.A., Pereverzev A.A., p. 34; 11, Kryukova N.V., p. 131]. At the same time, since 2010, walrus massively appear at the shores of Alaska and form vast mixed haulouts [12, Garlich-Miller J., MacCracken J.G., Snyder J., Meehan R., Myers M., Wilder J.M., Lance E., Matz A., p. 27; 13, MacCracken J.G., Beatty W.S., Garlich-Miller J.L., Kissling M.L., Snyder J.A., p. 22]. It had never been previously observed. Since the life of the walrus is closely linked to the ice, it is most susceptible to the changes in the ice situation. In this regard, a study has been carried out to estimate of the abundance by the method of mark-recapture using genetic markers. A preliminary estimate of the data for 2013–2015 is 283.2

thousand walrus [13, MacCracken J.G., Beatty W.S., Garlich-Miller J.L., Kissling M.L., Snyder J.A., p. 25].

Development of the rationale for the total allowable catch (TAC)

Sea waters adjacent to Russia have zoning. The area of walrus in Russia covers the territory of two fishery basins² and four fishing zones³: Far East Fisheries Basin: 61.01 Western-Bering Sea Zone, 67.01 Chukchi Zone, 18 Region Arctic: Chukchi Sea. East Siberian Fisheries Basin: 18 — Arctic region: East Siberian Sea. The boundaries of these zones are described in the Order of the Ministry of Agriculture of the Russian Federation^{4, 5, 6} and according to it, these zones are located on the map (Fig. 1).



Fig. 1. Location of the fishing zones and the villages where walrus is harvested, indicating the boundaries of the Chukotka Autonomous Okrug (picture of the author).

² Federal'nyy zakon Rossiyskoy Federatsii ot 20.12.2004 № 166-FZ (red. ot 06.03.2019) «O rybolovstve i sokhraneniі vodnykh biologicheskikh resursov» [Federal Law of the Russian Federation 20.12.2004 No. 166-FZ (ed. 06.03.2019) “On fishing and conservation of aquatic biological resources”]. URL: <http://www.consultant.ru/>; <http://fish.gov.ru/>; <http://mcx.ru/docs/> (accessed 16 August 2019).

³ Prikaz Ministerstva Rybnogo khozyaystva SSSR ot 09.09.1980 № 408 «O razgranichenii Mirovogo okeana na promyslovyye rayony v novykh usloviyakh vedeniya promysla» [Order of the Ministry of Fisheries of the USSR from 09.09.1980 No. 408 “On delimitation of the world ocean on fishing areas in new conditions of fishing”].

⁴ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii ot 21.10.2013 № 385 (red. ot 04.06.2018) «Ob utverzhdenii pravil rybolovstva dlya Dal'nevostochnogo rybokhozyaystvennogo basseyna» [Order of the Ministry of agriculture of the Russian Federation 21.10.2013 No. 385 (ed. 04.06.2018) “On approval of fishing rules for the Far Eastern fishery basin”].

⁵ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii ot 23.05.2019 № 267 «Ob utverzhdenii pravil rybolovstva dlya Dal'nevostochnogo rybokhozyaystvennogo basseyna» [Order of the Ministry of agriculture of the Russian Federation 23.05.2019 No. 267 “On approval of fishing rules for the Far Eastern fishery basin”].

⁶ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii ot 03.09.2014 № 348 (red. ot 05.07.2018) «Ob utverzhdenii pravil rybolovstva dlya Vostochno-Sibirskogo rybokhozyaystvennogo basseyna» [Order of the Ministry of agriculture of the Russian Federation 03.09.2014 No. 348 (ed. 05.07.2018) “On approval of fishing rules for the far East Siberian fishery basin”].

Zone 61.01: 1 — Egvekinot, 2 — Konergino, 3 — Uel'kal', 4 — Enmelen, 5 — Nunligran, *Zone 67.01:* 6 — Si-reniki, 7 — Novoe Chaplino, 8 — Yanrakynnot, 9 — Lorino, 10 — Lavrentia, 11 — Uelen, *Zone 18 (Chukchi Sea):* 12 — Inchoun, 13 — Enurmino, 14 — Neshkan, 15 — Nutepel'men, 16 — Vankarem.

Under Federal Agency for Fishery Order 09.03.2010, No. 158⁷, the development and approval of TAC are subject to a lengthy and complicated procedure. The latest data on the total number of subspecies, rate population growth, mortality, and harvest, as well as limiting factors (ice situation, diseases, etc.) is used for TAC development. Annual monitoring studies are carried out in the haulout and harvest areas to assess the changes in the walrus population. It is done by personnel of fisheries management institutions (ChukotTINRO, TINRO, VNIRO) [14, Smirnov G.P., Kochnev A.A., Litovka M.I., Kompantseva E.I., Grigorovich P.V., p. 229; 15, Kochnev A.A., p. 282; 16, Chakilev M.V., Kochnev A.A., p. 107; 11, Kryukova N.V., p. 59; 17, Pereverzev A.A., Kryukova N.V., p. 81] and other organizations — RPO “Marine Mammal Council” [18, Semenova V.S., Boltunov A.N., Nikiforov V.V., p. 522], Kamchatka Branch of the Pacific Institute of Geography, FEB RAS [19, Altukhov A.V., Skorobogatov D.O., Zagrebelny S.V., Kryukova N.V., Kochnev A.A., Chakilev M.V., Burkanov V.N., p. 16; 20, Kryukova N.V., Kozlov M.S., Skorobogatov D.O., Pereverzev A.A., Krupin I.L., Shevelyov A.I., Burkanov V.N., p. 146], Institute of Biological Problems of the North RAS, National Park “Beringia”. Also, various institutes conduct applied research of walrus, e.g., toxicology, infection with trichinellosis, and behavior of walruses. It is conducted by the Pacific Ocean Institute named after V.I. Ilyichev FEB RAS [21, Trukhin A.M., Simokon M.V., p. 3365], Vyatka State Agricultural Academy [22, Bukina L.A., p. 13], Saint Petersburg State University [23, Giljov A., Karenina K., Kochnev A., p. 50].

The documents of the TAC rationale 2003–2019 were analyzed. To justify the TAC 2003–2011, 200 thousand walrus were used and for 2012–2019 — 129 thousand [24, Speckman S.G., Chernook V.I., Burn D.M., Udevitz M.S., Kochnev A.A., Vasilev A., Jay C.V., Lisovsky A., Fischbach A.S., Benter R.B., p. 546]. It is necessary to eliminate no more than half of the rate population growth to prevent the population decline. In the TAC 2003–2012 calculations, the rate growth of the Pacific walrus population was 9% [25, Fedoseev G.A., Goltsev V.N., p. 411], with a harvest level of 4–5 % for both countries, incl. 2% for Russia. Since 2013, the growth rate calculated by the ChukotTINRO employees based on coastal observations on the haulouts amounted to 4.6% [26, Chakilev M.V., p. 37]. In this case, walrus hunt together with unreported harvest (+ 20%) in Russia and harvest struck and lost animals (+ 42%) in Russia and Alaska fully covers population growth [26, Chakilev M.B., p.36].

⁷ Приказ Федераль'ного Агентства по Рыболовству от 09.03.2010 № 158 «Об утверждении Административного регламента Федераль'ного агентства по рыболовству по исполнению государственной функции по разработке и представлению на государственную экологическую экспертизу, а также определение и утверждение ежегодного объема допустимых уловов водных биологических ресурсов во внутренних водах Российской Федерации, в том числе во внутренних морских водах Российской Федерации, а также в территориальном море Российской Федерации, на континентальном шельфе и в исклyчител'ной экономической зоне Российской Федерации, в Азовском и Каспийском морях» [Order of the Federal Agency for Fishery No. 158 of 09 March 2010 “On approval of the Administrative Regulations of the Federal Agency for Fishery for the performance of the state function to develop and submit for state environmental review, as well as to determine and approve annually the total allowable harvests of aquatic biological resources in the inland waters of the Russian Federation, including in the internal sea waters of the Russian Federation, as well as in the territorial sea of the Russian Federation, on the continental shelf and in the exclusive economic zone of the Russian Federation, in the Sea of Azov and the Caspian”].

Actual walrus harvest (produced and cut on the shore / ice does not include unreported harvest and struck and lost animals) as reported by the Department of Agriculture and Food of the Chukotka Autonomous Okrug (earlier, until October 19, 2018 — the Department of Industrial and Agricultural Policy of the ChAO) (hereinafter — the Department of the ChAO) is in Table. 1.

Table 1

Quotas for the pacific walrus and the actual harvest

Years	Western-Bering Sea Zone	Chukchi zone	Chukchi Sea Zone	East Siberian Sea	Total TAC (C) *.	Total harvest by ISPN + C
2003	3000 (50)****				3000 ⁸	1219
2004	2000				2000 (10) ^{9, 10, 11}	1118
2005	2000				2000 (40) ^{12, 13}	1436
2006	1500 (50)****				1500 (40) ^{14, 15}	1047
2007	1500				1500** ¹⁶	1173
2008	305	900	675	20	1900** ¹⁷	695
2009	300	430	750	0	1480** ¹⁸	1035

⁸ Rasporyazheniye Pravitel'stva Rossiyskoy Federatsii ot 31.12.2002 № 1863-r (red. 26.11.2003) [Order of the Government of the Russian Federation No. 1863 of 31 December 2002 (ed. 26.11.2003)].

⁹ Rasporyazheniye Pravitel'stva Rossiyskoy Federatsii ot 12.11.2003 № 1644-r (Goskomrybolovstvu Rossii) [Order of the Government of the Russian Federation No. 1644-r of 12 November 2003 (to the State Fishery of Russia)].

¹⁰ Rasporyazheniye Pravitel'stva Rossiyskoy Federatsii ot 30.12.2003 № 1947-r [Order of the Government of the Russian Federation dated No. 1947-r of 30 December 2003.].

¹¹ Prikaz Gosudarstvennogo komiteta Rossiyskoy Federatsii po rybolovstvu ot 13.02.2004 № 75 «O kvotakh na vylov (dobychu) vodnykh biologicheskikh resursov v nauchno-issledovatel'skikh, uchebnykh i kul'turno-prosvetitel'skikh tselyakh na 2004 god» [Order of the State Committee of the Russian Federation for Fisheries No. 75 of 13 February 2004 “On quotas for the harvest (harvesting) of aquatic biological resources for scientific, research, educational, cultural and educational purposes for 2004”].

¹² Rasporyazheniye Pravitel'stva Rossiyskoy Federatsii ot 17.11.2004 № 1482-r [Order of the Government of the Russian Federation No. 1482-r of 17 November 2004].

¹³ Prikaz Federal'nogo agentstva po Rybolovstvu Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii ot 31.12.2004 № 240 «O kvotakh na vylov (dobychu) vodnykh biologicheskikh resursov v nauchno-issledovatel'skikh, uchebnykh i kul'turno-prosvetitel'skikh tselyakh na 2005 god» [Order of the Federal Agency for Fishery of the Ministry of Agriculture of the Russian Federation No. 240 of 31 December 2004 “On quotas for fishing (hunting) of aquatic biological resources for research, training and cultural and educational purposes for 2005”].

¹⁴ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii (Minsel'khoz Rossii) ot 14.12.2005 № 209 «Ob utverzhdenii obshchikh dopustimyykh ulovov vodnykh biologicheskikh resursov na 2006 god» [Order of the Ministry of Agriculture of the Russian Federation (Ministry of Agriculture) No. 209 of 14 December 2005 “On approval of general allowable harvests of aquatic biological resources for 2006”].

¹⁵ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii (Minsel'khoz Rossii) ot 16.12.2005 № 220 «Ob utverzhdenii raspredeleniya obshchikh dopustimyykh ulovov vodnykh biologicheskikh resursov po Dal'nevostochnomu basseyanu primenitel'no k vidam kvot na 2006 god» [Order of the Ministry of Agriculture of the Russian Federation (Ministry of Agriculture of the Russian Federation) No. 220 of 16 December 2005 “On approval of the distribution of the total allowable harvests of aquatic biological resources in the Far Eastern Basin as applied to the types of quotas for 2006”].

¹⁶ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii (Minsel'khoz Rossii) ot 02.11.2006 № 409 «Ob utverzhdenii obshchikh dopustimyykh ulovov vodnykh biologicheskikh resursov na 2007 god» [Order of the Ministry of Agriculture of the Russian Federation (Ministry of Agriculture of the Russian Federation) No. 409 of 02 November 2006 “On approval of the total allowable harvests of aquatic biological resources for 2007”].

¹⁷ Prikaz Goskomrybolovstva RF ot 28.11.2007 № 27 (red. ot 24.07.2008) «Ob utverzhdenii obshchikh dopustimyykh ulovov vodnykh biologicheskikh resursov na 2008 god» [Order of the State Fishery Committee of the Russian Federation No. 27 of November 28, 2007 (ed. 24.07.2008) “On the approval of the total allowable harvests of aquatic biological resources for 2008”].

¹⁸ Prikaz Rosrybolovstva ot 05.12.2008 № 382 (red. ot 17.09.2009) «Ob utverzhdenii obshchikh dopustimyykh ulovov vodnykh biologicheskikh resursov na 2009 god» [Rosrybolovstvo order No. 382 of 05 December 2008 (ed. 17.09.2009) “On approval of the total permissible harvests of aquatic biological resources for 2009”].

2010	75	520	695	10	1300 (65) ^{19, 20}	1057
2011	150	610	730	10	1500** ²¹	1032
2012	240	500	750	10	1500 (100) ^{22, 23}	1009+7***
2013	250	431	750	5	1436** ²⁴	1042+11***
2014	250	431	750	5	1436** ²⁵	819+13***
2015	203	536	746	4	1489** ²⁶	971
2016	195	539	758	4	1496** ²⁷	1020

¹⁹ Prikaz Federal'nogo agentstva po rybolovstvu ot 30.09.2009 № 874 «Ob utverzhdenii obshchego dopustimogo ulova vodnykh biologicheskikh resursov na 2010 god» [Order of the Federal Agency for Fishery No. 874 30 September 2009 "On approval of the total allowable harvest of aquatic biological resources for 2010"].

²⁰ Prikaz Federal'nogo agentstva po Rybolovstvu ot 27.05.2010 № 504 «O raspredelenii mezhdru pol'zovatelyami, v otnoshenii kotorykh prinyato resheniye o predostavlenii vodnykh biologicheskikh resursov v pol'zovaniye, kvot dobychi (vylova) vodnykh biologicheskikh resursov Severnogo, Volzhsko-Kaspiyskogo i Dal'nevostochnogo rybokhozyaystvennykh basseynov dlya osushchestvleniya rybolovstva v uchebnykh i kul'turno-prosvetitel'skikh tselyakh v 2010 godu» [Order of the Federal Agency for Fishery No. 504 of 27 May 2010 "On the distribution between users for whom a decision was made to provide aquatic biological resources for use, quotas for the harvesting (harvest) of aquatic biological resources of the Northern, Volga-Caspian and Far Eastern fishery basins for fishing for educational, cultural and educational purposes in 2010"].

²¹ Prikaz Federal'nogo agentstva po rybolovstvu ot 29.09.2010 № 825 «Ob utverzhdenii obshchego dopustimogo ulova vodnykh biologicheskikh resursov na 2011 god» [Order of the Federal Agency for Fishery No. 825 of 29 September 2010 "On approval of the total allowable harvest of aquatic biological resources for 2011"].

²² Prikaz Federal'nogo agentstva po rybolovstvu ot 05.10.2011 № 983 «Ob utverzhdenii obshchego dopustimogo ulova vodnykh biologicheskikh resursov na 2012 god» [Order of the Federal Agency for Fishery No. 983 of 05 October 2011 "On approval of the total allowable harvest of aquatic biological resources for 2012"].

²³ Prikaz Federal'nogo agentstva po rybolovstvu ot 05.05.2012 № 395 «O raspredelenii mezhdru pol'zovatelyami, v otnoshenii kotorykh prinyato resheniye o predostavlenii vodnykh biologicheskikh resursov v pol'zovaniye, kvot dobychi (vylova) vodnykh biologicheskikh resursov Severnogo, Zapadno-Sibirskogo, Volzhsko-Kaspiyskogo i Dal'nevostochnogo rybokhozyaystvennykh basseynov dlya osushchestvleniya rybolovstva v uchebnykh i kul'turno-prosvetitel'skikh tselyakh v 2012 godu» [The order of the Federal Agency for Fishery No. 395 of 05 May 2012 "On the distribution between users for whom a decision was made to provide aquatic biological resources for use, quotas for the harvesting (harvest) of aquatic biological resources of the Northern, West Siberian, Volga-Caspian and Far Eastern fisheries pools for fishing for educational and cultural-educational purposes in 2012"].

²⁴ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii ot 31.10.2012 № 571 «Ob utverzhdenii obshchego dopustimogo ulova vodnykh biologicheskikh resursov vo vnutrennikh morskikh vodakh Rossiyskoy Federatsii, a takzhe territorial'nom more Rossiyskoy Federatsii, na kontinental'nom shel'fe Rossiyskoy Federatsii i v isklyuchitel'noy ekonomicheskoy zone Rossiyskoy Federatsii, v Azovskom i Kaspiyskom moryakh na 2013 god» [Order of the Ministry of Agriculture of the Russian Federation No. 571 of 31 October 2012 "On approval of the total allowable harvest of aquatic biological resources in the inland sea waters of the Russian Federation, as well as the territorial sea of the Russian Federation, on the continental shelf of the Russian Federation and in the exclusive economic zone of the Russian Federation, in the Azov and the Caspian Seas for 2013"].

²⁵ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii ot 05.11.2013 № 403 «Ob utverzhdenii obshchego dopustimogo ulova vodnykh biologicheskikh resursov na 2014 god» [Order of the Ministry of Agriculture of the Russian Federation No. 403 of 05 November 2013 "On approval of the total allowable harvest of aquatic biological resources for 2014"].

²⁶ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii ot 21.10.2014 № 399 «Ob utverzhdenii obshchego dopustimogo ulova vodnykh biologicheskikh resursov vo vnutrennikh morskikh vodah Rossiyskoy Federatsii, territorial'nom more Rossiyskoy Federatsii, na kontinental'nom shel'fe Rossiyskoy Federatsii i v isklyuchitel'noy ekonomicheskoy zone Rossiyskoy Federatsii, v Azovskom i Kaspiyskom moryah na 2015 god» [Order of the Ministry of Agriculture of the Russian Federation No. 399 of 21 October 2014 "On approval of the total allowable harvest of aquatic biological resources in the inland sea waters of the Russian Federation, the territorial sea of the Russian Federation, on the continental shelf of the Russian Federation and in the exclusive economic zone of the Russian Federation, in the Azov and Caspian seas for 2015"].

²⁷ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii 07.10.2015 № 465 «Ob utverzhdenii obshchego dopustimogo ulova vodnykh biologicheskikh resursov vo vnutrennikh morskikh vodah Rossiyskoy Federatsii, territorial'nom more Rossiyskoy Federatsii, na kontinental'nom shel'fe Rossiyskoy Federatsii i v isklyuchitel'noy ekonomicheskoy zone Rossiyskoy Federatsii, v Azovskom i Kaspiyskom moryah na 2016 god» [Order of the Ministry of Agriculture of the Russian Federation No. 465 of 07 October 2015 "On approval of the total allowable harvest of aquatic biological resources in the inland sea waters of the Russian Federation, the territorial sea of the Russian Federation, on the continental shelf of the

2017	195	539	758	4	1496** ²⁸	1063
2018	195	539	758	4	1496 (30) ^{29, 30}	1234+6***

* TAC is the total number of walrus allowed to be harvested, incl. the catching for educational and cultural purposes (C), the quota of the latter is in brackets; ** in these years, no quotas for the capture of walruses for educational and cultural (C) goals were granted; *** data on actual capture of walruses provided by the territorial bodies of the Federal Agency for Fishery. In 2013 and 2014, catching calves was carried out for cultural and educational purposes according to ISPN quotas, **** the number of walrus allocated to the Koryak Autonomous Okrug within the total quota is in brackets.

These figures are based on the reports of communities that received quotas for the harvesting of walruses. Individuals did not report on the number of animals hunted, thus falling into the category of the unreported harvest. Currently, no up-to-date data on the size of the unreported harvest is accounted for. We have only early data that show the information of the ChAO Department might be underreported up to 20% of the real [27, Smirnov G.P., Rinteymit V.M., Agagisyk M.D., Litovka M.I., p. 231]. It has been in the TAC rationale since 2013 but has not been used for the calculation of quotas. Since 2014, it is used for the allocation of quotas to communities and private hunters, who got about 20% of the total quotas. Up-to-date data on the proportion of struck and lost animals during harvest have not been available. Since 2013, the TAC calculation uses a previously obtained factor of 42% [28, Fay F.H., Kelly B.P., p. 368]. The TAC rationale is common to all types of catches — for indigenous small-numbered peoples of the North (ISPN) and educational and cultural purposes (C), but the latter is considered only when the needs of native peoples are met.

The TAC rationale is prepared by the Chukchi branch of the Pacific branch of VNIRO (ChukotTINRO), then it is agreed with TINRO and the head institute of VNIRO. Public hearings are tak-

Russian Federation and in the exclusive economic zone of the Russian Federation, in the Azov and Caspian seas for 2016”].

²⁸ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii ot 10.10.2016 № 445 «Ob utverzhdenii obshchego dopustimogo ulova vodnykh biologicheskikh resursov vo vnutrennikh morskikh vodakh Rossiyskoy Federatsii, territorial'al'nom more Rossiyskoy Federatsii, na kontinental'nom shel'fe Rossiyskoy Federatsii i v isklyuchitel'noy ekonomicheskoy zone Rossiyskoy Federatsii, v Azovskom i Kaspiyskom moryakh na 2017 god» [Order of the Ministry of Agriculture of the Russian Federation No. 445 of 10 October 2016 “On approval of the total allowable harvest of aquatic biological resources in the inland sea waters of the Russian Federation, the territorial sea of the Russian Federation, on the continental shelf of the Russian Federation and in the exclusive economic zone of the Russian Federation, in the Azov and Caspian seas for 2017”].

²⁹ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii ot 27.10.2017 № 533 «Ob utverzhdenii obshchego dopustimogo ulova vodnykh biologicheskikh resursov vo vnutrennikh morskikh vodakh Rossiyskoy Federatsii, territorial'al'nom more Rossiyskoy Federatsii, na kontinental'nom shel'fe Rossiyskoy Federatsii i v isklyuchitel'noy ekonomicheskoy zone Rossiyskoy Federatsii, v Azovskom i Kaspiyskom moryakh na 2018 god» [Order of the Ministry of Agriculture of the Russian Federation No. 533 of 27 October 2017 “On approval of the total allowable harvest of aquatic biological resources in the inland sea waters of the Russian Federation, the territorial sea of the Russian Federation, on the continental shelf of the Russian Federation and in the exclusive economic zone of the Russian Federation, in the Azov and Caspian seas for 2018”].

³⁰ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii ot 26.12.2017 № 935 «O raspredelenii mezhdru pol'zovatelyami, v otnoshenii kotorykh prinyato resheniye o predostavlenii vodnykh biologicheskikh resursov v pol'zovaniye, kvot dobychi (vylova) vodnykh biologicheskikh resursov Volzhsko-Kaspiyskogo i Dal'nevostochnogo rybokhozyaystvennykh basseynov dlya osushchestvleniya rybolovstva v uchebnykh i kul'turno-prosvetitel'skikh tselyakh v 2018 godu» [Order of the Ministry of Agriculture of the Russian Federation No. 935 of 26 December 2017 “On the distribution between users, for whom a decision was made to provide aquatic biological resources for use, of quotas for the harvesting of aquatic biological resources of the Volga-Caspian and Far Eastern fishery basins for fishing in educational, cultural and educational purposes in 2018”].

ing place in the areas where the catch is planned. Before that, within a month, any person can get acquainted with the materials of the TAC development at the Institute (TINRO). Further, the materials are transferred to the independent environmental expertise in Federal Service for Supervision of Natural Resources, where the commission of experts considers the TAC materials within a month. It is followed by an order by the Federal Agency for Fishery to distribute quotas by zone. At different stages, there may be adjustments to the number of animals allowed to catch. The approved quotas are presented in Table 1.

The TAC justification 2003–2007 and quotas were given only for 61.01 — Western-Bering Sea zone. Since 2008, the quota has been given to 3 zones: Chukchi zone, Chukchi sea zone, and East Siberian sea zone.

Organization of harvest, its regulation and catch

The quota for ChAO is distributed between communities and individuals (small native peoples) by the ChAO Department. At present, in Chukotka, walrus are hunted by brigades consisting of the “Territorial Neighborhood Communities of the Indigenous small-numbered peoples of the North” (TNC ISPN) and the “Territorial Neighborhood Communities of the Indigenous small-numbered peoples of the Chukotka” (TNC ISPCh). There are nine communities where walrus harvest is occurring. They are sited in three districts of ChAO, in 16 villages (data 2018)³¹:

Iultinskiy District:

1. TNC ISPN “Ankal'yt” (maritime people) (settlement Egvekinot, villages Konergino, Uel'kal', Nutepel'men, and Vankarem).

Providenskiy District:

2. TNC ISPN “Enmelen” (village Enmelen)
3. TNC ISPN “Nunligran” (village Nunligran).
4. TNC ISPN “Sireniki” (village Sireniki).
5. TNC ISPN “Chaplino” (Novoye Chaplino village)
6. TNC ISPN “Yanrakynnot” (Yanrakynnot village)

Chukotskiy District:

7. TNC ISPCh “Lavrentia” (village Lavrentia)
8. TNC ISPCh “Lorino” (Lorino village).
9. TNC ISPCh “Daurkin” (villages Lavrentia, Uelen, Inchoun, Enurmino, Neshkan).

The walrus are hunted for the benefit of the native population: food, winter stocks in the form of rolls (copalahen), food for the dogs, and arctic foxes at fur farms (Lorino and Inchoun villages). About 700 arctic foxes (with cubs from spring to autumn up to 1 300) live at fur farms. During the season, walrus are hunted due to the demand of the population for meat and economic needs. The walrus harvest is carried out in spring — late autumn, in ice-free time, when walrus appear near the village area (Fig. 2, 3).

³¹ The names of the communities are presented as they are registered on the website of the Ministry of Justice of the Russian Federation. URL: <http://unro.minjust.ru/NKOs.aspx> (accessed 26 August 2019).



Fig. 2. Hunters are hauling walrus harvested ashore (the author's photo).

Usually, a more significant number of walrus are harvested in autumn — the preparation of a stock of meat for the winter, because there comes a cold season, contributing to its preservation. Private hunters (families) also harvest walrus and use them entirely for their own needs.

In the framework of traditional economic activities, marine mammals are hunted according to the List types of Traditional Economic Activities of the Indigenous small-numbered peoples of the Russian Federation³²: Art.6 Fishing (incl. marine animal harvesting) and the sale of aquatic biological resources.

Previously, the hunting process was governed by Order No. 385 of the Ministry of Agriculture of the Russian Federation of 21 October 2013 (ed. 04.06.2018) and since 17 June 2019 — Order of the Ministry of Agriculture of the Russian Federation of 05.23.2019 No. 267 “On approval of fishing rules for the Far Eastern fisheries basin”. In this order, the Regulations for the harvesting of aquatic biological resources for ensuring the traditional way of life and economic activities of the small native peoples of the North, Siberia and the Far East of the Russian Federation are described in Chapter VII.

³² Rasporyazheniye Pravitel'stva RF ot 08.05.2009 № 631-r (red. ot 29.12.2017) «Ob utverzhdenii perechnya mest traditsionnogo prozhivaniya i traditsionnoy khozyaystvennoy deyatel'nosti korennykh malochislennykh narodov Rossiyskoy Federatsii i perechnya vidov traditsionnoy khozyaystvennoy deyatel'nosti korennykh malochislennykh narodov Rossiyskoy Federatsii» [Decree of the Government of the Russian Federation No. 631-r of 08 May 2009 (ed. 29.12.2017) “On approval of the list of places of traditional residence and traditional economic activity of small native peoples” and the list of traditional economic activities of the small native peoples of the Russian Federation”].



Fig. 3. Cutting walrus (the author's photo).

According to Art. 96 concerning traditional fishing, it is prohibited to harvest: “a) walrus with the use of all tools and methods of hunt, with the exception of authorized rifled weapons, in case of the onboard presence of means for immediate hauling of the harvested animal from the water; on coastal haulouts; lactating females with calves; c) alive marine mammals for the delivery to shores.”

According to Art. 32.21, during the harvesting of aquatic bioresources, it is prohibited to harvest walrus at haulouts and the distance less than 500 m from them. Art. 23.2.1. contains a list of areas (islands, capes, and coasts) where harvesting is prohibited in the 12-mile zone, all year round or in the period from July 1 to December 31.

Parties engaged in traditional fishing, according to Art. 89, are not entitled to discard the harvested (caught) aquatic bioresources permitted for harvesting. According to Art. 86—88.2 they must ensure the filling of a fishing log, provide data to the relevant territorial authority of the Federal Agency for Fishery, i.e., data on the harvesting of aquatic bioresources incl. marine mammals, and maintain, in proper order, places of the slaughter and cutting of marine mammals.

Information on the actual harvesting of walrus is transferred by head of brigades and lead communities to the Department of ChAO. According to the Department of ChAO, quotas are not whole taken [29, Boltnev A.I., Grachev A.I., Zharikov K.A. Zabavnikov V.B., Kornev S.I., Kuznetsov V.V., Litovka D.I., Myasnikov V.G., Shafikov I.N., p. 246; 26, Chakilev M.V., p. 36]. However, observations and researches (both own and completed by the other researchers) reveal the real harvest higher than the official data of the Department. This value varies in different villages and years from 10.4% to 20% [27, Smirnov G.P., Rinteimit V.M., Agnagisyak M.D., Litovka M.I., p. 231]. Besides, as noted earlier, the private harvest is not entirely regulated. Therefore, it appears that the quota has been taken completely.

In some years (Table 1), in addition to native harvest, quotas were allocated for educational and cultural purposes, i.e., harvesting walrus for captivity (e.g., oceanariums, etc.). Catching for educational and cultural purposes is in the Fisheries Rules³³, Chapter VI. The harvest of cubs is prohibited on coastal haulouts and at less than 500 m from them. No restrictions established on age categories, but usually harvest for young walrus (4–6 months), occasionally yearling (1.5 years); both age groups are dependent calves drinking milk and accompanied by mother.

Also, if marine mammals are damaged in any type of harvesting, a fine will be charged³⁴. E.g., for the Pacific walrus, it amounts to 57,540 rub.

Discussion

Currently, seasonal mortality data are used to justify the TAC, i.e., the count of dead walrus on one or three haulouts within two months. But this does not reflect the real walrus mortality. The rest of the Chukotka coast and several other haulouts are not covered. It does not include for the deaths of young walrus from birth to the time that they are go out on the shore. They may die for various reasons, incl. the hunt of polar bears (author's observations 2017). The period of the first winter of calves is not accounted for as well. Also, stillborn and abortions are not considered. Therefore, seasonal local observations of walrus mortality give a somewhat relative estimate of mortality. A modern study on the reproductive system of walrus females is needed to answer these questions. The last time such studies were carried out 22-38 years ago [7, Kibalchich A.A., p. 28; 30, Garlich-Miller J., Pungowiyi C., p. 6]. After that, significant changes in the walrus habitat occurred, which could affect the survival of calves.

Unfortunately, there is also a lack of information on the sex and age composition of the harvested animals. Communities report only on the total number, and it does not allow for a clear assessment of elimination from the population. Information is available only if a biologist is pre-

³³ Prikaz Ministerstva sel'skogo khozyaystva Rossiyskoy Federatsii ot 23.05.2019 № 267 «Ob utverzhdenii pravil rybolovstva dlya Dal'nevostochnogo rybokhozyaystvennogo basseyna» [Order of the Ministry of agriculture of the Russian Federation No. 267 of 23 May 2019 "On approval of fishing rules for the Far Eastern fishery basin"].

³⁴ Postanovleniye Pravitel'stva Rossiyskoy Federatsii ot 03.11.2018 № 1321 «Ob utverzhdenii taks dlya ischisleniya razmera ushcherba, prichinennogo vodnym biologicheskim resursam» [Decision of the Government of the Russian Federation No. 1321 of 03 November 2018 "On approval of the charges for calculating the damage caused to aquatic biological resources"].

sent at the harvest time, but it covers only a short period in one or two villages. According to earlier data, in several communities, a small preponderance in harvest was towards males [11, Kryukova N.V., p. 124]. However, we have no complete information.

Spearing (rus. "pokol") with spears is a traditional method of harvesting walrus on coastal haulouts [1, Bogoslovskaya L., Slugin I., Zagrebin I., Krupnik I., p. 307]. At the same time, it conflicts with Fisheries Regulations that prohibit harvest on coastal haulouts. However, well-organized spearing carried out on small haulouts allows harvesting several animals quickly without significant panic among walruses. The spearing is done late in the autumn when storms interfere with hunting from boats. At this time, a small snow cover is usually formed and snowmobiles or dog sledding are used for the delivery meat of walrus to the villages. At the same time, if the hunt is poorly organized, it causes panic and mass descent of walruses into the water, which is accompanied by trauma and death of animals [31, Chakilev M.V., Bayderin A.G., Kochnev A.A., p. 272].

Also, some areas referred to the walrus quiescent zones by the Fishing Rules. Hunters actively use them since it is possible to obtain the required number of walruses with little time, effort, and fuel. Usually, hunting is carried out on the water at walruses going from the sea to haulouts, without disturbing the ones on the shore. But in some cases, this causes disturbing [32, Pereverzev A.A., Kochnev A.A., p. 175].

At the same time, poaching is present (i.e., walrus is harvested, poachers cut tusks and throw carcasses), and it is not considered when substantiating TAC. The size of poaching is not precisely known; it appears to vary from one area to another, depending on the level of control.

Catching for educational and cultural purposes, despite the ban on catching of calves on the shore, according to the Fisheries Regulations, for many years, it was focused on haulouts, accompanied by massive panic and the descent of walruses from haulout into the water, thereby increasing the mortality of walruses [14, Smirnov G.P., Kochnev A.A., Litovka M.I., Kompantseva E.I. Grigorovich P.V., p. 229; 15, Kochnev A.A., p. 284].

Another problems associated with climate change are extended periods of open water [10, Stroeve J.C., Serreze M.C., Holland M.M., Kay J.E., Malanik J., Barrett A.P., p. 1006] and an increase in water temperature in the Arctic [33, Steele M., Ermold W., Zhang J., p. 1]. They lead to increased mixing/circulation of water with pollutants — in the horizontal direction with currents and the vertical direction during storms. Of concern is the contamination of radionuclides entering the water from radioactive waste sites [34, Nikitin A.I., p. 4] whose location may be unknown. The walrus diet is dominated by mollusks, which are biofilters and can accumulate up to 90% of radioactive strontium from the surrounding water [35, Belokon' A.S., Dvoretzkiy A.I., Novitskaya O.A., Lavrova T.V., p. 21]. Similar situation with heavy metals, such as mercury, which accumulates in tissues throughout the life of the animal [21, Trukhin A.M., Simokon M.V., p. 3363]. The meat of such animals may pose a danger to the health of the native population [21, Trukhin A.M., Simokon M.V., p. 3365].

Investigations have shown that walruses and the other pinnipeds (largha, bearded seal, and ringed seal), are infected with trichinosis [22, Bukina L.A., p. 13]. The native population uses the meat of these animals for food in raw and dried form. It is possible that walruses, due to the inaccessibility of food (long feed routes), will often eat dead animals and therefore, the number of walruses infected with trichinosis can increase. It is necessary to continue the research on the walruses for infection to resolve this question.

Conclusion

The conservation of the Pacific walrus is vital for both the native people of Chukotka and the fisheries. In our view, this requires:

1. Conduct more detailed and relevant researches on the Pacific walrus, namely, to study the reproductive organs (the reproduction period, the mortality rate of calves in the first year of life, etc.); register the age and sex composition of harvested walruses; conduct toxicological, microbiological and other studies to assess animal health, because people use their meat for food raw.
2. To work out more precise and unambiguous formulations in the legislative documents regulating traditional harvest (areas, periods, and methods), since some points contradict the capabilities and interests of the native people. It is also necessary to inform the native people about changes in legislation that regulates traditional harvest, as the local population in villages often does not know either the Fishing Rules or the possible consequences of their violations.
3. Cooperation (not confrontation) between employees of different scientific institutions and the native peoples in the research of walrus. It will contribute to more extensive and full-scale research walruses on haulouts, and annual native harvest will help to collect a more substantial amount of material on the biology and health of walruses. It is also necessary to create an international walrus group for the rapid exchange of research results and relevant information in the case of epizootics since this resource is common for Russia and the US.

Communities that believe and are firmly convinced that their well-being and future depend on a hunt on walrus will be the best partners in management [36, Metcalf V., Robards M., p. 154].

References

1. Bogoslovskaya L., Slugin I., Zagrebin I., Krupnik I. *Osnovy morskogo zverboynogo promysla: nauchno-metodicheskoe posobie* [The Basics of Sea Hunting: a Scientific and Methodological Guide]. Moscow, Institut Naslediya Publ., 2007, 480 p. (In Russ.)
2. Zhuravel' V.P. Prava korennykh narodov rossiyskoy Arktiki: problemy i resheniya [Rights of the native peoples of the Russian Arctic: problems and solutions]. *Arktika i Sever* [Arctic and North], 2018, no. 30, pp. 76–96. DOI 10.17238/issn2221-2698.2018.30.76 (In Russ.)
3. MacCracken J.G. Pacific Walrus and climate change: observations and predictions. *Ecology and Evolution*, 2012, vol. 2, iss. 8, pp. 2072–2090. DOI <http://dx.doi.org/10.1002/ece3.317>
4. Jay C.V., Fischbach A.S., Kochnev A.A. Walrus areas of use in the Chukchi Sea during sparse sea ice cover. *Marine Ecology Progress Series*, 2012, vol. 468, pp. 1–13. DOI <https://doi.org/10.3354/meps10057>

5. Kibal'chich A.A. Biologiya razmnozheniya i estestvennye zapasy tikhookeanskogo morzha: dis. ... kand. biol. nauk [Reproduction biology and natural resources of the Pacific walrus: Cand. Biol. Sci. Diss.]. Moscow, 1984. 185 p. (In Russ.)
6. Fay F.H. *Ecology and biology of the Pacific walrus, Odobenus rosmarus divergens Illiger, North American Fauna*, 1982. 279 p.
7. Kibal'chich A.A. Otsenka resursov i yuvenil'naya smertnost' tikhookeanskogo morzha [Resource Assessment and Juvenile Mortality of Pacific Walrus]. *Morskie mlekopitayushchie* [Marine Mammals], Moscow, Trudy VNIRO, 1990, pp. 23–29. (In Russ.)
8. Dmitriev A.A. O prichinakh vozniknoveniya prirodnogo fenomena v Arktike letom 2007 g. [On the reasons of the origin of the natural phenomena in the Arctic in the summer 2007]. *Problemy Arktiki i Antarktiki* [Arctic and Antarctic Research], 2007, no. 77, pp. 115–127. (In Russ.)
9. Kryukova N.V., Kochnev A.A., Pereverzev A.A. Vliyaniye ledovykh usloviy na funktsionirovaniye beregovykh lezhibishch tikhookeanskogo morzha (*Odobenus rosmarus divergens*, Illiger, 1815) v Anadyrskom zalive Beringova morya [The influence of ice conditions on terrestrial haulouts of the Pacific walrus *Odobenus rosmarus divergens* Illiger, 1815 in the Gulf of Anadyr, Bering Sea]. *Biologiya morya* [Russian Journal of Marine Biology], 2014, vol. 40, no. 1, pp. 30–35. (In Russ.)
10. Stroeve J.C., Serreze M.C., Holland M.M., Kay J.E., Malanik J., Barrett A.P. The Arctic's rapidly shrinking sea ice cover: a research synthesis. *Climatic Change*, 2012, vol. 110, iss. 3–4, pp. 1005–1027. DOI <https://doi.org/10.1007/s10584-011-0101-1>
11. Kryukova N.V. *Sovremennoe sostoyaniye gruppировок tikhookeanskogo morzha (Odobenus rosmarus divergens) na beregovykh lezhibishchakh Chukotskogo poluoostrova*: dis. ... kand. biol. nauk [The current state of Pacific walrus groupings (*Odobenus rosmarus divergens*) on the coastal haulouts of the Chukchi Peninsula: dis. ... cand. biol. sciences], Moscow, 2015. 150 p. (In Russ.)
12. Garlich-Miller J., MacCracken J.G., Snyder J., Meehan R., Myers M., Wilder J.M., Lance E., Matz A. *Status review of the Pacific walrus (Odobenus rosmarus divergens) report*. U.S. Fish and Wildlife Service Report, 2011. 163 p.
13. MacCracken J.G., Beatty W.S., Garlich-Miller J.L., Kissling, M.L., Snyder J.A. *Final species status assessment for the Pacific walrus (Odobenus rosmarus divergens)*, May 2017 (Version 1.0). U.S. Fish and Wildlife Service, Marine Mammals Management, 1011 E. Tudor Rd. MS-341, Anchorage, AK 99503, 2017. 297 p.
14. Smirnov G.P., Kochnev A.A., Litovka M.I., Kompantseva E.I., Grigorovich P.V. Monitoring beregovykh lezhibishch morzha Anadyrskogo zaliva [Monitoring of the coastal walrus haulouts on the Gulf of Anadyr]. *Morskie mlekopitayushchie Golarktiki: materialy mezhdunarodnoy konferentsii* (Baykal, 10-15 sentyabrya 2002 g.) [Marine mammals of the Holarctic: abstracts of an international conference (Baikal, September 10–15, 2002)]. Moscow, 2002, pp. 228–229. (In Russ.-En)
15. Kochnev A.A. Lezhibishche morzhey (*Odobenus rosmarus divergens*) na myse Serdtse-Kamen', Chukotskoe more [The haulout of Pacific walruses (*Odobenus rosmarus divergens*) on Cape Serdtse-Kamen, the Chukchi Sea]. *Morskie mlekopitayushchie Golarktiki. Sbornik nauchnykh trudov po materialam 6-y mezhdunarodnoy konferentsii* (Kaliningrad, 11-15 oktyabrya 2010 g.) [Marine Mammals of the Holarctic. Collection of scientific papers on the materials of the 6th international conference (Kaliningrad, October 11-15, 2010)]. Moscow, 2010, pp. 281–285. (In Russ.-En)
16. Chakilev M.V., Kochnev A.A. Chislennost' i raspredeleniye tikhookeanskogo morzha (*Odobenus rosmarus divergens*) v rayone mysa Serdtse-Kamen' v 2009–2013 gg. [Abundance and distribution of Pacific walrus *Odobenus rosmarus divergens* in vicinity of Cape Serdtse-Kamen in 2009–2013]. *Izv. TINRO*, 2014, vol. 179, pp. 103–112. (In Russ.)
17. Pereverzev A.A., Kryukova N.V. Ispol'zovaniye morzhami beregovogo lezhibishcha na ostrove Kosa Meeskyn (Anadyrskiy zaliv Beringova morya) v 2003–2009 gg. [Use of a coastal haulout by walruses on the Meeskyn Spit Island (Anadyr Gulf of the Bering Sea) in 2003–2009]. *Trudy VNIRO*, 2018, vol. 170, pp. 78–89. (In Russ.)
18. Semenova V.S., Boltunov A.N., Nikiforov V.V. Beregovoye lezhibishche tikhookeanskikh morzhey (*Odobenus rosmarus divergens*) na m. Kozhevnikova, 2007–2009 gg. [Coastal haulout of Pacific walruses (*Odobenus rosmarus divergens*) on Cape Kozhevnikov in 2007-2009]. *Morskie mlekopitayushchie Golarktiki. Sbornik nauchnykh trudov po materialam 6-oy mezhdunarodnoy konferentsii* (Kaliningrad, 11-15 oktyabrya) [Marine Mammals of the Holarctic. Collection of scientific papers on the materials of

- the 6th international conference (Kaliningrad, October 11-15, 2010)]. Moscow, 2010, pp. 521–526. (In Russ.-En)
19. Altukhov A.V., Skorobogatov D.O., Zagrebel'nyy S.V., Kryukova N.V., Kochnev A.A., Chakilev M.V., Burkanov V.N. Sravnenie rezul'tatov otsenki chislennosti morzha (*Odobenus rosmarus*) na lezhbishchakh s pomoshch'yu razlichnykh metodov [Comparison of different methods to estimate walrus (*Odobenus rosmarus*) abundance on haulouts]. *Morskie mlekopitayushchie Golarktiki. Sbornik tezisov 10-oy mezhdunarodnoy konferentsii (Arkhangel'sk, 29 oktyabrya-2 noyabrya, 2018)* [Marine mammals of the Holarctic. Abstracts of the 10th international conference (Arkhangelsk, October 29-November 2, 2018)]. Moscow, 2018, pp. 130–131. (In Russ.-En)
 20. Kryukova N.V., Kozlov M.S., Skorobogatov D.O., Pereverzev A.A., Krupin I.L., Shevelev A.I., Burkanov V.N. Smertnost' morzhey (*Odobenus rosmarus*) v rayone lezhbishch severnogo poberezh'ya Chukotki v 2017 g. [Pacific walrus (*Odobenus rosmarus*) mortality in northern Chukotka haulouts, 2017]. *Morskie mlekopitayushchie Golarktiki. Sbornik nauchnykh trudov po materi-alam 10-oy mezhdunarodnoy konferentsii (Arkhangel'sk, 29 oktyabrya-2 noyabrya, 2018)* [Marine mammals of the Holarctic. Collection of scientific papers on the materials of the 10th international conference (Arkhangelsk, October 29-November 2, 2018)], Moscow, Marine Mammal Council Publ., 2019, vol. 1, pp. 146–154. DOI 10.35267/978-5-9904294-0-6-2019-1-146-154 (In Russ.-En)
 21. Trukhin A.M., Simokon M.V. Mercury in organs of Pacific walruses (*Odobenus rosmarus divergens*) from the Bering Sea. *Environmental Science and Pollution Research*, 2018, vol. 25, iss. 4, pp. 3360–3367. DOI <https://doi.org/10.1007/s11356-017-0566-1>
 22. Bukina L.A. *Trikhinellez v pribrezhnykh rayonakh Chukotskogo poluostrova, rasprostranenie, mery profilaktiki: avtoreferat dis. ... d-ra biol. nauk* [Trichinosis in the coastal areas of the Chukotka Peninsula, distribution, preventive measures: Dr. Biol. Sci. Diss. Abs.]. Kirov, 2015. 44 p. (In Russ.)
 23. Giljov A., Karenina K., Kochnev A. Prey or play: interactions between walruses and seabirds. *Acta Ethologica*, 2017, vol. 20, iss. 1, pp. 47–57. DOI 10.1007/s10211-016-0248-x
 24. Speckman S.G., Chernook V.I., Burn D.M., Udevitz M.S., Kochnev A.A., Vasilev A., Jay C.V., Lisovsky A., Fischbach A.S., Benter R.B. Results and evaluation of a survey to estimate Pacific walrus population size, 2006. *Marine Mammal Science*, 2011, vol. 27, iss. 3, pp. 514–553. DOI 10.1111/j.1748-7692.2010.00419.x
 25. Fedoseev G.A., Gol'tsev V.N. Vozrastno-polovaya struktura i vosproizvoditel'naya sposobnost' populyatsii tikhookeanskogo morzha [Sex-age structure and reproductive ability of a Pacific walrus population]. *Zoologicheskij zhurnal*, 1969, vol. 48, is. 3, pp. 407–413. (In Russ.)
 26. Chakilev M.V. Problemy i perspektivy ratsional'nogo ispol'zovaniya tikhookeanskogo morzha (*Odobenus rosmarus divergens*) na Chukotke [Problems and Perspectives of Rational Use of Pacific Walrus (*Odobenus rosmarus divergens*) in Chukotka]. *Vestnik SVFU [Herald of the North-Eastern Federal university named after M.K. Ammosov]*, 2016, no. 2 (52), pp. 33–40. (In Russ.)
 27. Smirnov G.P., Rinteymit V.M., Agnagisyak M.D., Litovka M.I. Monitoring promysla tikhookeanskogo morzha na Chukotke [Walrus harvest monitoring on Chukotka]. *Morskie mlekopitayushchie Golarktiki: materialy mezhdunarodnoy konferentsii (Baykal, 10-15 sentyabrya 2002 g.)* [Marine mammals of the Holarctic: abstracts of an international conference (Baikal, September 10–15, 2002)]. Moscow, 2002, pp. 230–231. (In Russ.-En)
 28. Fay F.H., Kelly B.P., Sease J.L. Managing the exploitation of Pacific walruses: a tragedy of delayed response and poor communication. *Marine Mammal Science*, 1989, vol. 5, is. 1, pp. 1–16.
 29. Boltnev A. I., Grachev A. I., Zharikov K. A., Zabavnikov V. B., Kornev S. I., Kuznetsov V. V., Litovka D. I., Myasnikov V. G., Shafikov I. N. Resursy morskikh mlekopitayushchikh i ikh promysel v 2013 g. [Resources of marine mammals and its harvest in 2013]. *Trudy VNIRO*, 2016, vol. 160, pp. 30–249. (In Russ.)
 30. Garlich-Miller J., Pungowiyi C. Proceedings of a workshop concerning walrus harvest monitoring in Alaska and Chukotka. Nome, Alaska, 1998, 63 p.
 31. Chakilev M.V., Bayderin A.G., Kochnev A.A. Lezhbishche tikhookeanskogo morzha (*Odobenus rosmarus divergens*) na myse Serdtse-Kamen' (Chukotskoe more) v 2013 godu [The Pacific walrus (*Odobenus rosmarus divergens*) costal haulout on the Cape Serdtse-Kamen (Chukchi Sea) in 2013]. *Morskie mlekopitayushchie Golarktiki. Sbornik nauchnykh trudov po materialam 8-y mezhdunarodnoy konferentsii (Sankt-Peterburg, 22–27 sentyabrya 2014 g.)* [Marine mammals of the Holarctic. Collection of

- scientific papers on the materials of the 8th international conference (St. Petersburg, September 22–27, 2014)]. Moscow, 2014, vol. 2, pp. 270–274. (In Russ.-En)
32. Pereverzev A.A., Kochnev A.A. Lezhbishche morzhey na ostrove Koyuchin (Chukotskoe more) v 2010 g. [The Pacific walrus (*Odobenus rosmarus divergens*) terrestrial haulout on Kolyuchin Island (Chukchi Sea), 2010]. Morskie mlekopitayushchie Golarktiki. Sbornik nauchnykh trudov po materialam 7-y mezhdunarodnoy konferentsii (Suzdal, 24–28 sentyabrya 2012 g.) [Marine mammals of the Holarctic. Collection of scientific papers on the materials of the 7th international conference (Suzdal, September 24–28, 2012)]. Moscow, 2012, vol. 2, pp. 171–176. (In Russ.-En)
 33. Steele M., Ermold W., Zhang J. Arctic Ocean surface warming trends over the past 100 years. *Geophysical Research Letters*, 2008, vol. 35, iss. 2. L02614. DOI10.1029/2007GL031651
 34. Nikitin A.I. *Naturnye issledovaniya posledstviy sbrosa i zakhoroneniya radioaktivnykh otkhodov v morya Severnogo i Dal'nevostochnogo regionov Rossiyskoy Federatsii*: dis. ... d-ra geogr. nauk [Field studies of the consequences of the dumping and burial of radioactive waste in the seas of the Northern and Far Eastern regions of the Russian Federation: Dr. Geogr. Sci. Diss.]. Obninsk, 2009. 204 p. (In Russ.)
 35. Belokon' A.S., Dvoretzkiy A.I., Novitskaya O.A., Lavrova T.V. Mollyuski kak faktor samoochishcheniya vodoemov [Mollusks as a factor in the self-cleaning of water bodies]. *Struktura ta funktsional'na rol' tvarinnogo naseleण्या v prirodnikh ta transformovikh ekosistemakh* [The structure and functional role of the creature population in natural and transform ecosystems]. Dnipropetrovs'k, DNU Publ., 2001, pp. 21–22 (In Russ.)
 36. Metcalf V., Robards M. Sustaining a healthy human-walrus relationship in a dynamic environment: challenges for comanagement. *Ecological Applications*, 2008, no. 18 (2), pp. 148–156. DOI 10.1890/06-0642.1

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Critical tendencies of the transport infrastructure development in the Russian Arctic *

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Abstract. In the article, the authors discussed the formation of a single transport system in the Arctic zone of the Russian Federation. The development of the Arctic transport system, i.e., the Northern Sea Route, adjacent airport network, seaports, water, and land communications, determined the relevance and significance of the study. It is especially important since they are the strategic priorities of Russia's Arctic policy. The study aimed to identify the trends in transport infrastructure development in the Russian Arctic. So, the authors focused on the factors determining its specifics. They conclude that the transport infrastructure of the Arctic zone of the Russian Federation is underdeveloped and needs technical improvement. According to the authors, a unified Arctic transport system is possible only after the restoration of year-round navigation through the NSR, its technological growth, and the reconstruction of the adjoining transport infrastructure.

Keywords: *the Arctic zone of the Russian Federation, the Northern Sea Route, transport system, transport infrastructure.*

Introduction

At present, the Arctic vector is one of the most important in Russia's home politics, as the Arctic rich in natural resources will be the guarantor of sustainable development and national security of our country in the 21st century. Thus, the Strategy for the Development of the Arctic Zone of the Russian Federation (AZRF) contains a priority of national interest defined: “the use of the Arctic zone as a strategic resource base that provides the solution of problems of social and economic development of the country”. The large-scale development of Arctic resources is closely linked with the need to create a unified Arctic transport system and improving its infrastructure. The development of new and modernization of existing transport communications will not only give impetus to the development of natural resources but will also contribute to improving the local population's living standard, the solution of many social problems, and it also will create preconditions for the development of transit traffic along the Northern Sea Route (NSR) and will significantly expand product distribution system in the northern areas of the country.

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The specificity of transport in the Arctic

Transportation plays a crucial role in all spheres of social and economic activities in the Arctic and is one of the most strategic sectors of the economy. The share of transport in the total volume of gross regional product in the Russian Arctic remained consistently high over the years. At the end of 2017, it was 8.2% (average for Russia — 8%). From the local perspective, the consistently high (over 10%) proportion of transport performance in GRP is typical for old industrial territories in the western sector of the Arctic — the Republic of Karelia, the Murmansk Oblast and the Arkhangelsk Oblast. The number of employed in all types of transport in the Russian Arctic is more than 40 thousand people or 9.5% of total employment in the economy (the average for Russia — 7.3%). In the entirely Arctic territories, this figure is even higher (11.8%), and in the Yamal-Nenets Autonomous Okrug, transport occupied 14.2% of total employment. Along with mining, the carrier holds a principal place in the value of fixed assets: the share of the transport sector in the total value of fixed assets in the Russian Arctic is 31.1% (average for Russia — 22.5%).

However, the transport sector of the Russian Arctic operates under the influence of a set of interrelated hard-to-regulate factors. Some of them stimulate its development (e.g., defensive purposes), while the others considerably complicate the situation and create significant risks and limitations. Natural extremeness, peripheral nature and extent of the Arctic territories, settlement features, the direction and character of historical territorial and economic ties, and so forth [1, Korchak E.A. ; 2, Zaikov K.S., Kondratov N.A., Kudryashova E.V., Lipina S.A., Chistobaev A.I., p. 10; 3, Chizhkov Yu.V., p. 27] seriously complicate and increase the cost of a single Arctic transport system, increase the transport discrimination of the population, leading to deterioration of infrastructure and technical state vehicles and impose some restrictions on the use of various means of transport. E.g., the river (an inland waterway) transport navigation is limited to a short period (2–4 months), and the construction and operation of land-based modes of transport (roads and railways) are tight in the permafrost and the harsh weather conditions in the winter. Especially relevant are these problems for sparsely populated and remote areas of the eastern Arctic. The absence of land transport links with the rest of the country causes a multi-tier and single alternative transport service schemes.

The most important factor affecting the operation of the Russian Arctic transport is also changing. Recent observations have shown that the Arctic is warming faster over the last three decades than the rest of the world. The sea ice area has reduced by 10–15% and snow on land have decreased by 10% [4, Kondratov N.A., p. 70].

The uncertainty associated with warming has different effects. On the one hand, the warming threats and leads to an increase in temperature, a change of landscapes, degradation of permafrost, a higher number of icebergs, and increase storm (wave) activity, etc. In other words, it reduces the reliability and stability of the transport system and engineering structures [5, Voronina E.P., p. 63]. On the other hand, in the long-term perspective, climate change can contribute to more effective and full use of the Arctic economic potential, increase the availability of navigation,

exploration, and mining on the Arctic shelf and new transport routes in the Arctic Ocean. Northern seas have become more available, and according to some projections, by 2050, they will be opened for year-round shipping [6, Smith L., Stephenson S.]. At the beginning of the 21st century, this new resource, transport, and logistics capabilities made the Arctic one of the most debated issues in the world. The development of its transport infrastructure got prior importance in the Russian state Arctic policy.

Current situation and development trends of the Arctic transport infrastructure

The transport infrastructure development in Arctic Russia is considered in connection to two unequal territories. The western sector formed quite an extensive system of roads and railways permanently connected to overland transport communications throughout the country and Arctic seaports. In the eastern sector, year-round surface transportation routes with access to a nationwide network are not available. Only small dead-end railway lines and roads of lower categories (winter roads) are constructed. Due to the lack of developed land communications in the eastern sector, the connection is provided through the Northern Sea Route, air and inland (river) transport.

Water transport. The largest share (50%) in the transport system of the Russian Arctic covers maritime transport. It is a critical element of the Northern Sea Route — historically rooted Russian sea transport linkages uniting the meridional water corridors of Siberian rivers and the European and Far Eastern ports of the country. Depending on climatic conditions, the NSR is divided into western Arctic — area between Murmansk¹ and Dudinka (more favorable ice conditions), and Sector East Arctic — from Dudinka to Chukotka (having mainly heavy ice conditions) [7, Zagorodnikov M. A., p. 69]. The distinctive feature of the NSR is short navigation (only 2–4 months or more with icebreakers). However, it is recognized as a profitable alternative for southern routes due to the possibility of reducing the time of delivery. The way through the Suez Canal from South Korea to Germany takes 34 days, and via the NSR — only 23.

During the Soviet period, cargo transportation along the NSR had a significant annual growth due to the exploitation of natural resources in the Russian Arctic (Fig. 1). After the transition to a market economy, navigation along the NSR stopped. Traffic volumes declined rapidly and reached only 1.25 million tons by the end of the 1990s.

¹ The NSR begins in the Kara Sea, near the Novaya Zemlya archipelago (Federal Law 30.04.1999 No. 81 “Merchant Shipping Code”, Art. 5.1), but its main cargo flows are formed in the Barents and White seas. So, the authors consider the NSR in a broader perspective, i.e. from Murmansk to Chukotka.

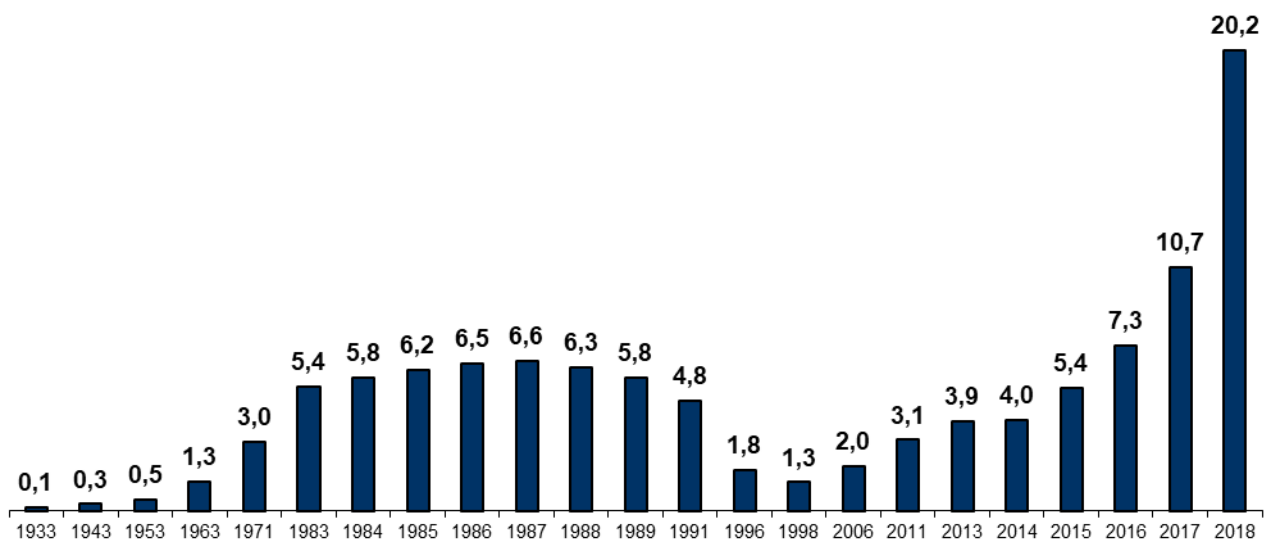


Fig. 1. Dynamics of traffic along the Northern Sea Route, thous. tons.

Only two decades after, in 2016, the volume of transported goods crossed the mark of 1980 or 7.26 million tons (energy resources: coal, oil, LNG, and metals). By 2018, the cargo delivery along the NSR increased by almost three times and was 20.2 million tons. According to forecasts, delivery along the NSR will increase, and by 2024 it will exceed 80 million tons.

The construction of the world's largest Arctic port of Sabetta on Yamal contributed significantly to the development of the delivery along the NSR. Investments in the project amounted to about 108 billion rubles, more than 70 billion rubles came from the federal budget. Construction started in 2012 was a part of the “Yamal LNG” project. It is still ongoing, but the port is now operating. It is necessary to clarify that, legally, the NSR begins in the Kara Sea and continues from the port of Dudinka to the Bering Strait, i.e., officially, it includes only 5 of the 18 ports of the Arctic basin: Dudinka, Dixon, Khatanga, Tiksi, and Pevek. But as we have seen, the NSR is much broader — from the Barents Sea to the Chukchi Sea. So, we included all the ports of the Arctic basin. The largest share in the total turnover got the port of Murmansk (60–65%) and the port Sabetta (about 25%). Remaining ports provide only 10-15%. The volume of cargo transshipment via ports of the Arctic basin is increasing every year. So, in 2016, its total size was 49.7 million tons. In 2018, it had reached 92.7 million tons, of which turnover of the port of Murmansk was 60.7 million tons, Sabetta — 17.4 million tons (by turnover growth dynamics it boosted the port transshipment by 234.7% compared with the previous year).

Integrated development of NSR is one of the priorities of Russian state policy in the Arctic [8, Serova N.A., p. 499]. Restoring the NSR functions includes the modernization of the seaports of the Arctic basin, the development of navigation and hydrographic systems, hydrometeorological and rescue support, construction of specialized vessels for fishing and research fleet, a radical renewal of the icebreaker fleet, etc. [9, Serova N.A., Serova V.A.]. Of importance is the project “Integrated Development of the Murmansk Transport Hub” (MTH) (the necessary investments amount to 139.0 billion rubles). The purpose of MTH is the creation year-round deep-sea hub based on the existing port of Murmansk, i.e., the center on the processing of oil cargo,

transshipment of coal and fertilizers, integrated into the international transport corridors “North-South” and “East-West.” In addition to the development of port facilities, the project will make the most of Russian transit opportunities and expand access to new global markets. The project started in 2014 and today they have completed the reconstruction of the federal highway P-21 “Kola”, the sea passenger station and the pier for far routes (a total station area has doubled, and the pier length has increased by 59m. So, now it is 206.6m), and energy and rail infrastructure is under construction. [10, Skufyina T.P., Serova N.A., p. 20].

Air Transport. Due to the high cost of construction and maintenance of land transport infrastructure, air transport is no alternative for passenger transport, and several state functions in the Arctic, e.g., emergency medical care and disaster management.

Targeted development of air transport took place in the Soviet period, and until the early 1990s, Arctic aviation was developed very rapidly. However, the crisis after the collapse of the Soviet Union led to the destruction of the air transport system: the intensity of flights of small aircraft decreased, its fleet reduced, the number of aviation operations in the Arctic significantly reduced, and the training of personnel almost stopped. In 1993, a single air transport system in the Arctic was represented by the former united detachments, 70% of which were closed during the 1990s. [11, Oleynikov V.A., p. 11]. Due to the lack of funds for the reconstruction and re-equipment, many airports stopped operating, and air transport services on local airlines were almost finished. Now, in the Russian Arctic, only 148 of 272 airfields and airstrips are operating. Passenger delivery is possible only at 74. The most significant number of existing airports and runways are in the Arctic areas of Yakutia (48), the Arkhangelsk Oblast (21), Chukotka (20), and the Nenets AO (19) where the air transport plays a crucial role in passenger traffic.

However, now, in the Russian Arctic airport infrastructure is slowly recovering, the new aircraft had been developed and designed for polar-based operation, and the airpark is gradually renewing. E.g., on Yamal, in 2017, an airstrip in Chokurdakh airport was opened, aircraft were updated, and their number was expanded, and some more specialized equipment for the county airport was purchased. Local budget subsidized air transport of passengers in 4 inter-regional and 30 inter-municipal areas. Twenty-one of these flights are regular. Nine are reserved and should be made in the off-season periods between localities that do not have any land connections [12, Serova V.A., p. 542].

To maintain airports with low traffic in the Far North, they are subsidized from the federal budget through seven federal state-owned enterprises (FSE). Four of them operate only in the Arctic: The Republic of Sakha (Yakutia) — FSE “Airports of the North”; (14 airfields); Chukotka — FSE “Airports of Chukotka”; (11 airfields); the Nenets AO — FSE “Amderma Airport”; (1 airfield); the Krasnoyarskiy Krai — FSE “Airports of Krasnoyarsk”; (3 airfields). In 2019, it was decided to establish a new inter-regional airline “Arctic” for the Nenets AO and the Arkhangelsk Oblast aimed at the development of interregional air transport.

A special occasion was the opening of Sabetta International Airport — a newly constructed one with the use of unique technologies to strengthen the permafrost soil watered. The airport has the status of a strategic object for the “Yamal LNG” project. In 2014, the first passenger aircraft Boeing 737 landed in Sabetta; in 2015, the airport started operating for the “Yamal LNG” seasonal workers delivery, and the first international flight was carried out in 2016. Over the three years of operation, the airport increased traffic volumes nearly three times: passenger flights — 127.7 thous. people to 369.8 thous.; cargoes delivery — 1.6 tons to 5.8 tons.

It should be noted that in 2014-2017, high rates of traffic growth occurred in some other northern airports. The leading airports are Passenger delivery: Apatity in the Murmansk Oblast (190.7%); Hatanga in the Krasnoyarskiy Krai (126.4%) and Bovanenkovo in the Yamal-Nenets AO (109.9%); Cargo delivery: Bovanenkovo (178.3%) and Labozhskoe (150.0%) in the Nenets AO; Igraka (136.9%) in the Krasnoyarskiy Krai; Seimchan (148.5%) and Omolon (120%) on Chukotka. In 2014-2017, these airports increased the volume of passenger and freight traffic in the Russian Arctic, as the most Arctic airports experienced a significant decline. The most considerable decrease in the size of passenger traffic was in Tarko-Sale in the Yamal-Nenets AO (-63.9%) and Vorkuta in the Komi Republic (-56.5%); cargo delivery: Yamburg in the Yamal-Nenets AO (-95.9%), Vorkuta (-83.9%), Belushye in the Nenets AO (75.6%) and Podkamennaya Tunguska in the Krasnoyarsk Krai (65.6%). The three airports (Dixon, Cape Schmidt, and Peschanka) had no passenger or freight transportation in 2017.

Overall, despite a lot of objective and subjective difficulties, the Arctic air transportation system continues to operate. However, the operation of the Arctic air delivery is still weak, and air transport services remain inaccessible to most of the people living in the Arctic because of high tariffs.

Land transport. As it was noted above, the land communications are the most developed in the western sector of the Arctic. In particular, the Murmansk Oblast, the Arkhangelsk Oblast, the Republic of Karelia and the Yamal-Nenets Autonomous Okrug relate to the rest of the country with the October and Northern railroads and federal highways. However, in two areas (the Komi Republic and the Nenets Autonomous Okrug), the transport network is autonomous. These territories are associated with the national transport network only by the local section of the Northern Railway (the Komi Republic) and winter road Naryan-Mar — Usinsk (the Nenets AO). In the eastern sector of the Arctic, no national railroads and highways observed.

Rail transport². The operational length of railways in the Russian Arctic is 9.6 thousand km or 11.1% of the total railway network of the country. Only 14% (1.35 thousand km.) are in the Arctic areas: the Murmansk Oblast and the Yamal-Nenets Autonomous Okrug (in the Nenets AO and Chukotka, railways are absent). The dynamics of the railway development in 2000–2018 shows a slight increase only in the partly Arctic areas of the AZRF: The Republic of Sakha (Yakutia)

² The Federal State Statistics Service does not provide open data for the Arctic territories. The further analysis was carried out separately for Arctic areas and partly Arctic territories.

(359.5 km) and Karelia (120.6 km) are the leaders. In the Murmansk Oblast, the Komi Republic and Yamal, due to the closure of some railway sections, the railway network decreased (Table. 1).

Table 1

The operational length of the railway network in the Russian Arctic, km

	2000	2005	2010	2015	2016	2018	Change 2018/2000
Arctic zone of the Russian Federation	9180	9275	9625	9625	9637	9637	+457.0
Territories entirely included in the Russian Arctic							
Nenets Autonomous Okrug	-	-	-	-	-	-	-
Murmansk Oblast	891	870	870	870	870	870	-20.7
Yamal-Nenets Autonomous Okrug	495	496	481	481	481	481	-14.1
Chukotsky Autonomous Okrug	-	-	-	-	-	-	-
Territories partially included in AZRF							
Republic of Karelia	2105	2226	2226	2226	2226	2226	+120.6
Komi Republic	1692	1671	1690	1690	1690	1690	-1.7
Arkhangelsk Oblast	1764	1781	1767	1767	1767	1767	+2.7
Krasnoyarskiy Krai	2068	2066	2067	2067	2079	2079	+10.7
Republic of Sakha (Yakutia)	165	165	525	525	525	525	+359.5

The basis of rail transport in the Russian Arctic make transportation of goods (80% of the total volume of rail transportation). The dynamics of the leading indicators characterizing the cargo delivery industry show an increase in freight transportation since 2000, with a slight fall in 2013-2014 related to the crisis and slowdown of the national economy (Fig. 2). This fall corresponded national average value (-2.8%). On the contrary, in the entirely Arctic territories, an increase (2.2%) was observed. In general, the growth of freight volumes in these territories made 53.7% in 2018 (against 24.5% — the Russian Arctic average and 32.2% — average in all Russia). It is mostly explained by the structure of cargo transportation of the Arctic territories, i.e., domination of the massive industrial cargoes. Reduced traffic volumes of such goods in the crisis years were significantly lower in comparison to consumer goods, demand for which had fallen first. The highest growth of cargo transportation for 2000–2018 was demonstrated by the Yamal-Nenets Autonomous Okrug (the volume of transported cargo increased by 5.6 times) and the Republic of Karelia (+1.8 times). A decrease in cargo transportation occurred only in the Komi Republic due to the falling of coal mining, leading in the structure of the Republic's traffic (overall decline for the entire period was — 44.9%).

Along with the increase in freight rail traffic in the Russian Arctic, the volume of passenger rail-traffic has been steadily declining. It is mainly due to the rapid rise in the number of private cars, which are the primary means of transport [13, Ksenofontov M.Y., Milyakin S.R.]. However, the national average of passenger traffic has fallen by 21.0% since 2000, and in the Russian Arctic, it fell by 60.6% (in entirely Arctic territories — 51.6%, incl. the Murmansk Oblast — more than 70%).

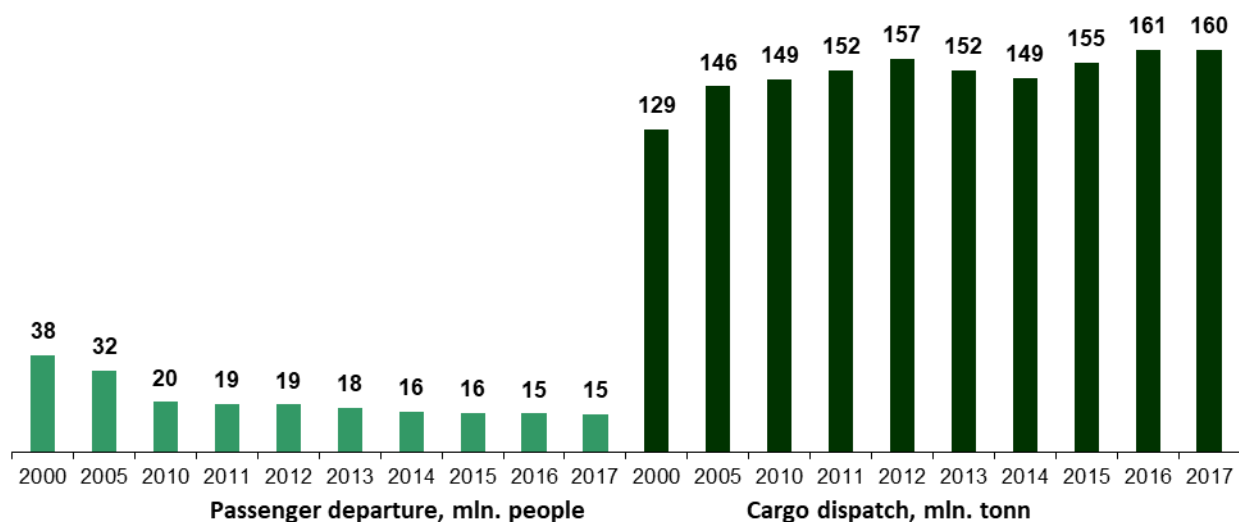


Fig. 2. The traffic dynamics within the leading railway transport network in the Russian Arctic.

Currently, in the Russian Arctic, the world's largest Arctic project "Northern latitudinal way" (NLW) is running (planned total investment is 236 billion rubles). The projects aim at linking the industrial areas of the Urals and the Arctic territories of Yamal by constructing the railway: 70 km from Novy Urengoy to Salekhard and further to Labytnangi (rail line Ob — Salekhard — Nadym — Pangody — Novy Urengoy — Korotchaevo). In 2018, Gazprom and Russian Railways signed an agreement to build a rail spur on the western section of the NLW for the new deepwater port of Sabetta in the north of the Yamal peninsula (rail line Bovanenkovo — Sabetta). It will link the entire railway Yamal infrastructure and the Northern Sea Route (the cost of the project — about 115 billion rubles). It is planned to continue the NLW to the East, to the Arctic territories of the Krasnoyarsk Krai (rail line Korotchaevo — Dudinka), which will enable the land connection to the ports of Dudinka and Igarka on the Northern Sea Route, and, in turn, will develop commodity areas of the Far North all year round [14, Gruzinov V.M. et al., p. 10]. One more project is "Belkomur" (White Sea — Komi — Ural), providing for the construction of the railway from Arkhangelsk to Perm (now this way is 800 kilometers long). Despite its strategic importance, the project is suspended for an indefinite period. Construction of this highway could contribute to the economic recovery of more than 60 settlements located along it, raising their transport accessibility, quality of life, education, health, employment growth, and the development of tourism [15, Kuratov E.S., p. 88; 16, Litovskiy V.V.].

Automobile transport. As for the road network, the length of public roads in the Russian Arctic is 108.9 thous. km 67.3% of them (or 73.3 thous. km) have a solid surface, and 38.4% (or 41.8 thous. km) are improved. The length of the Arctic roads is only 8.5 thous. km or 0.6% of the total road network in the AZRF. 79.5% (or 6.8 thous. km) have a hard coating, and 60.9 % (5.2 thous. km) are improved.

In 2000–2018, the length of roads in the Russian Arctic had increased from 49.7 thous. km in 2000 to 108.9 thous. km in 2018, i.e., more than two times (by 59.2 thous. km). It happened mainly due to road construction in the territories partially included in the Russian Arctic. The most massive increase is in Yakutia (20.8 thous. km) and the Krasnoyarsk Krai (19.4 thous. km)), and in

the most northern (arctic) areas of these territories, the construction of new roads is not carried out. Despite the increase in the total length of the AZRF roads, their share in the national road network reduced from 8.5% in 2000 to 7.2% in 2018. The same trend is observed for paved roads. Their length increased by 1.5 times (Table. 2), and their share in national road networks decreased from 8.2% in 2000 to 6.9% in 2018.

Table 2

The length of paved roads in the Russian Arctic, thous. km

	2000	2005	2010	2015	2016	2018	Change by 2000
Arctic zone of the Russian Federation	43.7	44.5	51.3	72.8	72.5	73.3	+29.6
Territories entirely included in the Russian Arctic							
Nenets Autonomous Okrug	0.2	0.2	0.2	0.2	0.2	0.2	+0.1
Murmansk Oblast	2.5	2.5	2.7	3.3	3.4	3.4	+0.9
Yamal-Nenets Autonomous Okrug	0.8	1.1	1.3	2.2	2.3	2.3	+1.5
Chukotsky Autonomous Okrug	1.3	0.6	0.6	0.7	0.7	0.9	-0.4
Territories partially included in AZRF							
Republic of Karelia	6.6	6.6	6.7	8.5	8.6	8.6	+2.1
Komi Republic	5.3	5.5	5.8	6.5	6.5	6.5	+1.2
Arkhangelsk Oblast	7.0	7.4	10.6	12.2	12.1	11.9	+5.0
Krasnoyarskiy Krai	12.8	13.0	15.1	27.5	26.9	27.5	+14.7
Republic of Sakha (Yakutia)	7.3	7.6	8.3	11.7	11.8	11.9	+4.6

In contrast to the railroad, automobile transport in the Russian Arctic is dominated by passenger traffic: its share in the total road transportation is more than 70%. The analysis of the dynamics of freight and passenger road transport shows a significant reduction in 2000-2018 in the Russian Arctic: passenger delivery fell by 2.3 times freight — 2.4 times (Fig. 3), while the national average decrease was 2.1 and 1.1 times, respectively ³.

The dynamics are positive for the investigated period in the Chukotsky Autonomous Okrug (cargoes — +83.4%; passengers — +25%), the Nenets Autonomous Okrug (cargo delivery increased by more than three times) and the Republic of Sakha (Yakutia) (passenger traffic increased by 29.7%). The Republic of Karelia demonstrated the largest decline (cargo — -90.9%; passengers — -79.5%) as well as the Murmansk Oblast (cargo — -83.7%; passengers — -79.5%). Reduced level of road transport in the Russian Arctic was due to several factors: growth of private motorization (in 2000-2018 the number of private cars in the Russian Arctic increased by 2.5 times (national average: +2.3 times) and reached 269.2 cars per 1,000 people); obsolescence of the public urban road transport (now more than 60% of buses are operating over their service life and are subject to decommissioning [17, Ushakova M.A., Sviridov D.A., p. 127]), reduction of leasing that affected the freight transport sector [18, Sevostyanova E.V., Agafonov A.A., p. 57]; rising fuel prices [19, Parshukov D.V., Kuranov E.S., p. 128; 20, Biev A.A., p. 310].

³The decrease in passenger traffic in 2005 is due to changes in registration 0in connection with the monetization of social benefits reform.

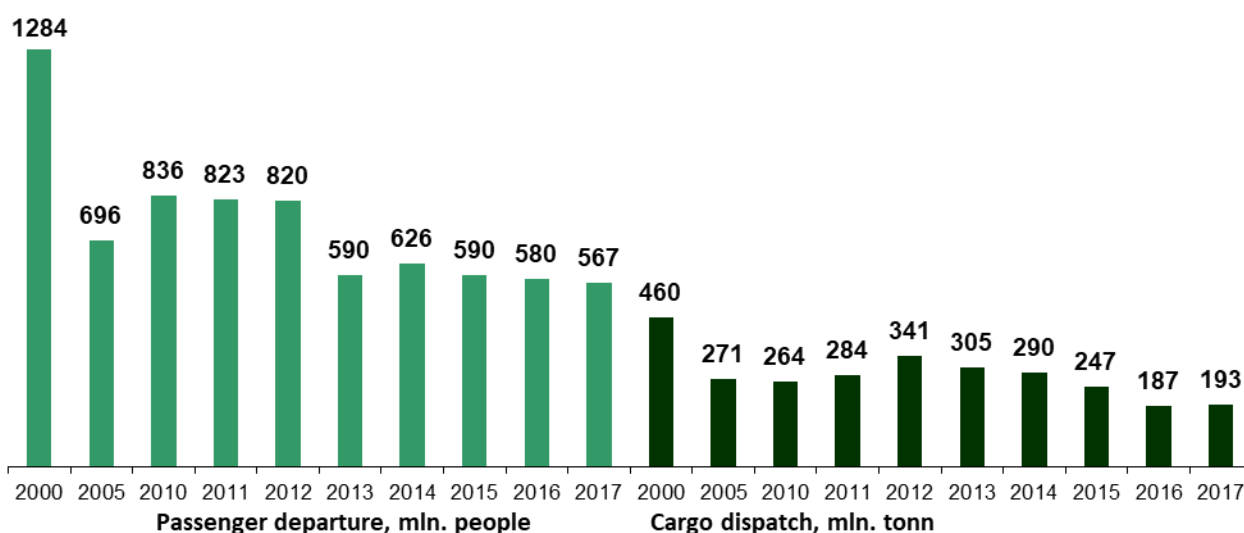


Fig. 3. Dynamics of goods and passenger transportation by cars in the Russian Arctic territories.

For generalized characteristics of the current situation and dynamics of the land transport development in the Russian Arctic, we defined security indicators of terrestrial transportation routes in 2000–2018 (Table 3).

Table 3

Dynamics of financial security in the Russian Arctic terrestrial communication routes

	2000	2005	2010	2015	2018
Railroads					
Density (per 1,000 km ²)	1.1	1.1	1.2	1.2	1.2
Engel coefficient	0.035	0.035	0.037	0.038	0.038
Public roads					
Density (per 1,000 km ²)	6.0	6.8	9.0	13.0	13.2
Engel coefficient	0.187	0.216	0.289	0.420	0.429
Paved roads					
Density (per 1,000 km ²)	5.3	5.4	6.2	8.8	8.9
Engel coefficient	0.164	0.170	0.200	0.285	0.289
Roads with an improved hard coating					
Density (per 1,000 km ²)	0.0	0.0	0.1	0.2	0.2
Engel coefficient	0.083	0.086	0.110	0.158	0.165

Source: Calculated by the authors.

The analysis showed despite the positive trends, and the Russian Arctic still has a deficient security level of land communication routes. In this case, more than 50% of the Russian Arctic terrestrial transport communications do not meet the regulatory requirements (in the Arkhangelsk Oblast and the Nenets Autonomous Okrug, these figures exceed 80% of regional roads and 90% for local).

Conclusion

Overall, the analysis of the current transport infrastructure in the Russian Arctic confirms the existence of severe imbalances in its development. Despite the favorable trends in all forms of transport, the Arctic transport system is characterized by underdevelopment and poor technical condition of the transport network, run-out equipment and a variety of other problems. In our opinion, it is possible to think about an integrated Arctic transport system only after recovery of

year-round navigation along the NSR, its technological equipment, and reconstruction of the related transport infrastructure. New forms of transport, safe and efficient use of which is possible in severe arctic conditions, should also take a special place in the Russian Arctic transport system development. Due to the scale and the high capital intensity of these problems, public-private partnership mechanisms should play a central role in the formation of a unified Arctic transport system development.

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References

1. Korchak E.A. *Arkticheskaya zona Rossii: socialnyy portret regionov* [The Arctic zone of Russia: a social portrait of regions]. Apatity, KSC RAS, 2017. 101 p. (In Russ.)
2. Zaikov K.S., Kondratov N.A., Kudryashova E.V., Lipina S.A., Chistobaev A.I. Stsenarii razvitiya arkticheskogo regiona (2020–2035 gg.) [Scenarios for the development of the Arctic region (2020–2035)]. *Arktika i Sever* [Arctic and North], 2019, no 35, pp. 5–24. DOI: 10.17238/issn2221-2698.2019.35.5 (In Russ.)
3. Chizhkov Yu.V. Severnyy morskoy put' v strukture arkticheskoy transportnoy sistemy [Northern Sea Route in the structure of the Arctic transport system]. *Transport Rossiyskoy Federatsii: zhurnal o nauke, praktike, ekonomike* [Transport of the Russian Federation: journal about science, practice, economics], 2017, no. 1 (68), pp. 27-32. (In Russ.)
4. Kondratov N.A. Osobennosti razvitiya transportnoy infrastruktury v Arkticheskoy zone Rossii [Features of the development of transport infrastructure in the Arctic zone of Russia]. *Geograficheskiy vestnik* [Geographical Bulletin], 2017, no. 4 (43), pp. 68–80. DOI 10.17072/2079-7877-2017-4-68-80 (In Russ.)
5. Voronina E.P. Transportnoe osvoenie arkticheskikh territoriy: strategicheskie zadachi i analiz riskov [Transport development of the Arctic territories: strategic objectives and risk analysis]. *Arktika: ekologiya i ekonomika* [Arctic: ecology and economy], 2017, no. 3 (27), pp. 61-68. DOI: 10.25283/2223-4594-2017-3-61-68 (In Russ.)
6. Smith L., Stephenson S. New Trans-Arctic shipping routes navigable by mid-century. *PNAS*, 2013, no. 110 (13), pp. 4871-4872. DOI: 10.1073/pnas.1214212110
7. Zagorodnikov M.A. Razvitie transportnoy infrastruktury Severnogo morskogo puti (SMP) [Development of the transport infrastructure of the Northern Sea Route (NSR)]. *Korporativnoe upravlenie i innovatsionnoe razvitie ekonomiki Severa* [Corporate Governance and Innovative Development of the North Economy], 2017, no. 2, pp. 68-73. (In Russ.)
8. Serova N.A. Regional Investment Policy Formation in the Russian Arctic. *Advances in Social Science, Education and Humanities Research*, 2019, vol. 298, pp. 499-501. DOI: 10.2991/essd-19.2019.109
9. Serova N.A., Serova V.A. Transportnaya infrastruktura rossiyskoy Arktiki: sovremennoe sostoyanie i perspektivy razvitiya [Transport infrastructure of the Russian Arctic: current status and development prospects]. *Konkurentosposobnost' v global'nom mire* [Competitiveness in the global world], 2017, no. 12 (59), pp. 1269-1272. (In Russ.)
10. Serova N.A., Serova V.A. Transportnaya infrastruktura rossiyskoy Arktiki: sovremennoe sostoyanie i perspektivy razvitiya [Actual aspects of the development of the Murmansk transport hub]. *Transport Rossiyskoy Federatsii* [Transport of the Russian Federation], 2017, no. 5 (72), pp. 19-22. (In Russ.)
11. Oleynikov V.A. K voprosu aviatransportnogo obespecheniya issledovaniya i osvoeniya Arkticheskoy zony Rossiyskoy Federatsii [On the issue of air transportation support for research and development of the Arctic zone of the Russian Federation]. *Nauka i transport. Grazhdanskaya aviatsiya* [Science and Transport. Civil Aviation], 2013, no. 3 (7), pp. 10-13. (In Russ.)

12. Serova V.A. Napravleniya razvitiya «maloy aviatsii» v Arkticheskoy zone RF [Directions of development of "small aviation" in the Arctic zone of the Russian Federation]. *Trudy Fersmanovskoy nauchnoy sessii GI KNC RAN* [Proceedings of the Fersman Scientific Session of the Kola Scientific Center of the Russian Academy of Sciences], 2017, no. 14, pp. 540–543. (In Russ.)
13. Ksenofontov M.Yu., Milyakin S.R. Protsess avtomobilizatsii i opredelyayushchie ego faktory v retrospektive, nastoyashchem i budushchem [The process of motorization and its determining factors in retrospect, present and future]. *Problemy prognozirovaniya* [Problems of forecasting], 2018, no. 4, pp. 92-105. (In Russ.)
14. Gruzinov V.M., Zvorykina Yu.V., Ivanov G.V., Sychev Yu.F., Tarasova O.V., Filin B.N. Arkticheskie transportnye magistrali na sushe, akvatoriyakh i v vozdušnom prostranstve [Arctic transport routes on land, in water areas and in airspace]. *Arktika: ekologiya i ekonomika* [Arctic: ecology and economy], 2019, no. 1 (33), pp. 6-20. Doi: 10.25283/2223-4594-2019-1-6-20 (In Russ.)
15. Kuratova E.S. Zheleznodorozhnaya magistral' «Belkomur» — sukhoputnaya al'ternativa zapadnomu uchastku Severnogo morskogo puti [The Belkomur Railway — a land alternative to the western section of the Northern Sea Route]. *Transportnoe delo Rossii* [Transport business of Russia], 2011, no. 9, pp. 88-89. (In Russ.)
16. Litovskiy V.V. Problemy prostranstvennogo formirovaniya opornogo transportnogo karkasa Urala: megaproekt «Belkomur» [Problems of spatial formation of the supporting transport framework of the Urals: megaproject “Belkomur”]. *Transport Urala* [Transport of the Urals], 2011, no. 3, pp. 15-20. (In Russ.)
17. Ushakova M.A., Sviridov D.A. Problemy ekspluatatsii ustarevshikh transportnykh sredstv na gorodskom passazhirskom transporte [Problems of operation of obsolete vehicles in urban passenger transport]. *Simvol nauki* [Symbol of science], 2017, no. 2 (3), pp. 123-125. (In Russ.)
18. Sevost'yanova E.V., Agafonova A.A. Analiz tendentsiy i problem razvitiya rynka avtomobil'nykh perevozok Rossii [Analysis of trends and problems in the development of the road transport market of Russia]. *Innovatsionnaya ekonomika i obshchestvo* [Innovative economy and society], 2016, no. 1(11), pp. 50–61. (In Russ.)
19. Parshukov D.V., Kuranov E.S. Tsena na benzin v Rossii [The price of gasoline in Russia]. *Epoha nauki* [The era of science], 2018, no. 16, pp. 127–129. DOI: 10.24411/2409-3203-2018-00035 (In Russ.)
20. Biev A.A. «Benzinovyie krizisy» v Rossii: opyt severnykh regionov [“Gasoline crises” in Russia: the experience of the northern regions]. *Sovremennyye problemy nauki i obrazovaniya* [Modern problems of science and education], 2013, no. 3, pp. 309. (In Russ.)

POLITICAL PROCESSES AND INSTITUTIONS

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New risks and opportunities for interstate cooperation in the Arctic *

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Abstract. Despite the growing tension in Russia-West relations, the Arctic region continues to remain a zone of peace and cooperation. The level of interstate collaboration here is extremely high, unlike other maritime regions. The interaction is developing in scientific research, protection of the marine environment and biodiversity, regulation of fisheries, improvement of search and rescue efforts, control of oil spills, and regulation of navigation. However, interstate competition has not disappeared in the Arctic. The countries participating in the maritime activities in the region often have completely different priorities and are firmly defending their national interests. Under sanctions' pressure, the Russian Federation is forced to seek new partners and allies in the Arctic. This choice is extremely difficult since the coincidence of positions on one issue or another is often minimal. In order to defend its interests, Russia needs to achieve such a format of interaction with the Arctic and non-Arctic countries which would be extremely mutually beneficial and work for the good of our country, but not to its detriment.

Keywords: *the Arctic, the Arctic Council, the Northern Sea Route (NSR), Commission on the Limits of the Continental Shelf, Spitsbergen, USA, NATO, EU, PRC.*

Introduction

The Arctic has long been one of the priority marine regions of our country, both in economic and strategic terms. Even though in Soviet times, it was closed for marine economic activities of foreign states. Some form of interstate cooperation and cooperation existed at a very modest scale.

The Murmansk speech of M.S. Gorbachev meant a de-facto complete "opening" of the Soviet Arctic for international cooperation. In the 1990s, its volumes were genuinely enormous: all the countries interested in the economic development of the Arctic and scientific research appeared in the region. Then, relying on resource development, the Russian Federation proceeds from the inevitability of interaction with others, first and foremost, the Arctic countries. However, since 2014 these hopes are no longer existing. Russia is under the sanctions pressure of Western countries. In this situation, it is not possible to achieve these goals without deciding on cooperation issues.

From our point of view, the development of international cooperation in the Arctic requires building a particular hierarchy of countries whose interests are, to a greater or lesser extent, correlated with the Russian interests in the marine region, incl. national security and its various dimensions (e.g., resource and environmental security). It should be borne in mind that this

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“dependence” of interest will fluctuate in the short, medium, and long terms. From our point of view, the presence of long-term joint investments is a crucial criterion for building any interaction.

From this point of view, the most considerable convergence of interests in the long run (!) exists between the Russian Federation and the other Arctic countries, adjacent to the Arctic Ocean (USA, Canada, Denmark (Greenland), and Norway). Despite the seeming inconsistency, it is since the Arctic Ocean is a joint maritime region for the five Arctic countries where they face common threats and challenges. The prospect of the “opening” the Arctic for more and more types of marine economic activities (shipping, offshore commercial fishing, oil and gas, marine tourism, etc.) confronts them with the overall objectives of the economic activity to prevent damage to the vulnerable marine Arctic environment and its biodiversity. Any environmental catastrophe in the Arctic harms the Arctic countries, and only then, as a result of the circulation of the World Ocean, can lead to negative consequences for others. Arctic nations are interested in the Arctic to be a region of peace and stability, where their interests would be recognized as a priority to the attention of non-Arctic states.

On the second level of the hierarchy are the permanent members of the Arctic Council — Iceland, Sweden, and Finland — as the Arctic states with a part territory located within the Arctic Circle, but not adjacent to the Arctic Ocean. Their involvement in the “Arctic issues” is a full-scale and multi-format and requires considering their interests in the region. They have long been involved in scientific research in the Arctic, have their expertise and capabilities in the Arctic economy/industry/technology, the use of which may be of interest to the Russian Federation.

The third level of the hierarchy — non-Arctic countries with an observer status in the Arctic Council (France, Germany, Netherlands, Poland, Spain, United Kingdom, China, Italy, Japan, Republic of Korea, Singapore, and India), own doctrinal/conceptual/strategic documents¹ on the Arctic issues, as well as specialized research centers. The growth of their interest in the Arctic cannot be stopped. It is fully institutionalized within the framework of the Arctic Council. Although they have no right to vote, and the permanent members of the Arctic Council can no longer be extended. Their goals in the Arctic are different but united by an interest in scientific research and the general concern about the marine environment and its biodiversity. Many of these countries have long been engaged in polar research, e.g., in the Antarctic, and raised more than one generation of polar researchers. Of course, their experience can only help to expand the scientific knowledge in the Arctic region.

Some more states, e.g., Estonia², Turkey, Mongolia, and others, are showing interest in obtaining observer status in the Arctic Council. As it is the case with the observer states of the Arctic Council, their ambitions are on environmental issues and economic (resource) potential of the Arctic. In this case, it should be noted that it is the ecological rhetoric on their part often serves

¹ Schulze Vincent-Gregor. Arctic Strategies Round-up 2017. URL: https://www.arctic-office.de/fileadmin/user_upload/www.arctic-office.de/PDF_uploads/Arctic_Strategies_EN_10.11.17.pdf (accessed 06 May 2019).

² Cooperation and Conflict in the Arctic: a roadmap for Estonia. URL: https://icds.ee/wp-content/uploads/2013/ICDS_Report_-_Arctic_2014.pdf (accessed 16 March 2019).

the legal basis for considering their interests in the region. However, it appears that this approach is no more than ideology “cover” for their claims to the development and use of the Arctic areas and resources. The selection of potential partners for interaction among their number, from this point of view, should be based solely on the volume of the possible scientific research and how valuable will be the results of such studies.

Russia — US — Canada: interaction and conflict triangle

Washington radically revised its attitude to the Arctic: from a marginal region in the geographical sense, and it becomes one of the central areas of the World ocean³. A significant part of the projects — control of fishing regulation in the central part of the Arctic Ocean, increased regulation of shipping in the Bering Strait⁴ — the original US initiatives supported⁴ by the other Arctic countries.

Russian-American relations in the Arctic are peculiar to an absolute dualism. On the one hand, the opposition has not yet touched the Arctic. American experts and politicians of the past⁵ and present⁶ see the Arctic as an area where our countries share common interests and are forced to confront common threats, i.e., faced with the need to establish a two-way dialogue on various issues.

In the short term, in addition to the Bering Sea, the United States appear to support the project development of bilateral and trilateral cooperation (Russia — Norway — United States) in the Barents Sea region. Despite the cautious attitude of Russia towards this initiative, due to the concentration of its military-strategic potential there, certain aspects, e.g., concerning the control of shipping, can undoubtedly be mutually beneficial.

³ National Strategy for the Arctic Region. URL: https://obamawhitehouse.archives.gov/sites/default/files/docs/nat_arctic_strategy.pdf (accessed 16 June 2019); Department of Defense Report to Congress on Strategy to Protect United States National Security Interests in the Arctic Region. URL: <https://dod.defense.gov/Portals/1/Documents/pubs/2016-Arctic-Strategy-UNCLAS-cleared-for-release.pdf> (accessed 16 June 2019); Department of Defense Report to Congress on Arctic Operations and the Northwest Passage. URL: https://dod.defense.gov/Portals/1/Documents/pubs/Tab_A_Arctic_Report_Public.pdf (accessed 16 June 2019); International Security Advisory Board: Report on Arctic Policy URL: <https://www.state.gov/documents/organization/262585.pdf> (accessed 16 June 2019); The US Department of Defense Arctic Strategy. URL: https://dod.defense.gov/Portals/1/Documents/pubs/2013_Arctic_Strategy.pdf (accessed 16 June 2019); United States Navy Arctic Roadmap 2014-2030. URL: <https://digital.library.unt.edu/ark:/67531/metadc949842/> (accessed 16 June 2019).

⁴ In May 2018 the Maritime Safety Committee (MSC) of the International Maritime Organization (IMO) adopted a joint Russian-American proposal to establish a recommended scheme of the traffic in the Bering Strait at its 99th session. See: IMO Approves New Shipping Corridors in Bering Sea to Improve Safety. URL: <https://www.highnorthnews.com/en/imo-approves-new-shipping-corridors-bering-sea-improve-safety> (accessed 29 May 2019).

⁵ Rossiya i SSHA v Arktike: sotrudnichestvo radi vyzhivaniya [Russia and the United States in the Arctic: cooperation for the sake of survival]. URL: <https://russiancouncil.ru/analytics-and-comments/analytics/rossiya-i-ssha-v-arktike-sotrudnichestvo-radi-vyzhivaniya/> (accessed 07 July 2019). (In Russ.)

⁶ Ipatova M.M. Arkticheskie priorityety SSHA: adaptatsiya k menyayushchimsya usloviyam [US Arctic priorities: adaptation to the changing conditions]. URL: https://www.imemo.ru/index.php?page_id=502 (accessed 05 July 2019). (In Russ.)

The United States, even in recent policy documents on the Arctic 2019⁷, supported the approach of the Russian Federation, since the Arctic is a unique, semi-enclosed sea area where the interests of the Arctic States should be considered first. The US is quite skeptical about the expansion of the observers in the Arctic Council, incl. to obtain this status by the EU. Given the presence of the sea border between the two countries in the Arctic and a separating our coast Bering Strait, the US is ready to support any initiative for the control/regulation of marine economic activities, esp. on the part of non-regional countries.

In particular, the United States welcomes the establishment of closer cooperation between the forces of PS FSB of Russia and the US Coast Guard, incl. joint patrols in the Chukchi Sea. It is important to note that unlike the US Navy, the US CG takes a far less radical position regarding the activities of the Freedom of Navigation program: it does not consider the protection of freedom of navigation more critical than cooperation with Russia on various issues.

Of particular note is a very balanced US position on the archipelago of Svalbard: Washington continues to believe that all parties to the Treaty of Paris 1920 have equal rights of economic activity both on the archipelago [1, Pedersen T.], and in the sea areas around it (200-mile exclusive economic zone (EEZ) and the corresponding mode of the continental shelf), formed by Norway (from Russian perspective — illegally) following the rules and provisions of the UN Convention on the Law of the Sea 1982 [2, Vilegzhanin A.N., Zilanov V.K., Sawa V.M.].

On the other hand, despite the conscious need to build cooperation, Russia continues to be a significant “challenge” to the United States in the Arctic. It applies not only to the charges in the “militarization” of the region but also to political and legal disputes. E.g., the official position of the State Department and the Pentagon, on the protection of the principle of freedom of navigation, incl. in the Arctic is unlikely to undergo any changes. The US will continue to insist that the national level of regulation of sailing along the Northern Sea Route (NSR), advocated by the Russian Federation, is illegitimate. They question the very definition of NSR as a “historically established transport communication,” calling it extralegal⁸. That is why we cannot exclude that as an even more significant deterioration in US-Russian relations, the US may directly challenge the Russian claims concerning the NSR through various activities under the program “Freedom of Navigation.” It cannot be just a diplomatic note of protest, but also a direct demonstration of the flag, incl. naval exercises or maneuvers.

Discussions on the need for such steps increased significantly at a high expert level in recent years. Moreover, the “trial ball” to challenge the Russian legal claims has been already

⁷Arctic Strategic Outlook 2019. URL: <https://www.documentcloud.org/documents/5973939-Arctic-Strategic-Outlook-APR-2019.html> (accessed 10 July 2019). Department of Defense Arctic Strategy in 2019. Report to Congress. URL: <https://media.defense.gov/2019/Jun/06/2002141657/-1/-1/1/2019-DOD-ARCTIC-STRATEGY.PDF> (accessed 10 July 2019).

⁸See: Gudev P.A. Severnyj morskoy put': nacional'naya ili mezhdunarodnaya transportnaya arteriya? [The Northern Sea Route: national or international transport artery?]. URL: <https://russiancouncil.ru/analytics-and-comments/analytics/severnyy-morskoy-put-natsionalnaya-ili-mezhdunarodnaya-transportnaya-arteriya/> (accessed 07 June 2019). (In Russ.)

launched: in December 2018, the US Navy went into Peter the Great Bay in the Far East⁹. Its waters (in the Soviet national legislation and at the level of the federal doctrine of law) have always been considered internal historical water allowing order entry of foreign warships and civilian vessels. This precedent has a direct relationship with the Arctic: Russia tends to view a part of the NSR area (e.g., bays of Laptev, Sannikov, Vilkitsky, and Shokalski) internal historical waters, while the United States considers the NSR from the perspective of international straits with the right of transit passage.

Thus, the probability of increased tensions between Russia and the US in the Arctic is existing. And from this point of view, to de-escalate, it would be appropriate to reflect on how to improve the model of bilateral cooperation, formed as early as during the Cold War. So, it's all about two agreements: "On the Prevention of Incidents on and Over the High Seas" (1972) and "On the Prevention of Dangerous Military Activities" (1989). It appears that the long-overdue need for further improvement of the mutual agreement. Moreover, one would initiate a discussion on the development and adoption of some "Code of conduct" concerning the Arctic, which would fix a shared understanding of what types of naval activities in the region (incl. the various marine zones) may be considered valid and, vice versa, leading to the security threat and the local military conflict. It could be possible to apply the known formula "agree to disagree," which would allow Washington not to deviate from its legal assessments of the NSR and other Russian Arctic waters but to agree to maintain the status quo for the sake of the Arctic peace and stability. It would certainly serve the interests of the entire international community.

Climate change is particularly relevant to the Arctic, and it will also leave its mark on the US-Russian relations. Even though today's skeptical attitude of the US administration to the subject, its disappearance from the American agenda is unlikely. E.g., in March 2019, the Russian Academy of Sciences and The US National Academy of Sciences agreed to launch a project to study the impact of climate change on permafrost and ice in the Arctic Ocean¹⁰.

The United States will continue to insist that the Arctic states should reduce greenhouse gas emissions, making its industry more focused on clean technologies, widely introduce the so-called "green technologies." The American foreign policy rhetoric voices advocating the need to create a universal international regulatory development of mineral resources of the Arctic Ocean. The latter, of course, cannot but cause some apprehension in Russia, as due to a sanctions regime, it does not have access to such technologies and growth prospects of its economic and social development depends on energy exports, incl. the development of Arctic fields oil and gas. It can be predicted that in the case of the further growth of tension in the US-Russian relations, Washing-

⁹ US Navy Conducts First Post-Cold War FONOP in Peter the Great Bay, Off Russian Coast. The operation challenges what the United States sees as excessive Russian maritime claims. URL: <https://thediplomat.com/2018/12/us-navy-conducts-first-post-cold-war-fonop-in-peter-the-great-bay-off-russian-coast/> (accessed 09 March 2019).

¹⁰ RAN i NacAkademiya nauk SSHA podpisali soglashenie o sotrudnichestve. Rech' idet o sotrudnichestve v oblasti nauchnyh, inzhenernyh i medicinskih issledovanij [The Russian Academy of Sciences and The US National Academy of Sciences signed a cooperation agreement. We are talking about cooperation in the field of scientific, engineering and medical studies]. URL: <https://tass.ru/nauka/6210819> (accessed 19 June 2019). (In Russ.)

ton's pressure on Moscow to limit its possibilities to produce hydrocarbons on the shelf of the Arctic seas will be strengthened.

Canada has been a traditional partner of our state concerning shipping regulations in the Arctic waters. Canada, like Russia, insists on the priority of the rules and provisions of national legislation on the control of navigation within its Arctic archipelagos¹¹, continuing to assume that all water within its limits is internal historical waters under full state sovereignty, and does not recognize international straits status (lobbied by the US) with the right of transit passage in respect of these waters. We are talking about the coincidence of one hundred percent legal positions of Russia and Canada regarding the regulation of shipping along the NSR and the North-West Passage (NWP).

However, in recent years, especially after the beginning of the Ukrainian crisis, Ottawa does not publicly express its solidarity with the position of the Russian Federation in respect of the NSR. Moreover, Canada has taken an extremely critical place concerning the foreign policy of the Russian Federation. Is it possible to reverse this negative trend in bilateral ties? The question is extremely complex. Nevertheless, it is necessary to proceed from the fact that Russia and Canada have the most extended coastlines in the Arctic and thus may qualify for priority account of their national interests of the region¹².

Problem areas in the Russian-Canadian relations are the question of defining the outer continental shelf. May 23, 2019, Canada applied to the relevant Commission on the Limits of the Continental Shelf in respect of the continental margin in the Arctic Ocean¹³. It claims to be part of the Lomonosov Ridge and the Alpha and Mendeleev Rise¹⁴, which means the imposition of legal claims between Canada, on the one hand, and the three other Arctic countries — Russia, Denmark, and the US — on the other. The Commission is not empowered to make a distinction in the case of shelf overlap claims, and these contradictions can be resolved solely by politico-diplomatic methods in the course of two- and trilateral negotiations. The discussion already initiated¹⁵, and we can only hope for its success.

¹¹ Statement on Canada's Arctic Foreign Policy. URL: http://library.arcticportal.org/1886/1/canada_arctic_foreign_policy-eng.pdf (accessed 16 October 2019); Canada's Northern Strategy. URL: <https://www.northernstrategy.gc.ca/cns/cns.pdf> (accessed 16 June 2019).

¹² Eksperty RSMD o perspektivah sotrudnichestva Rossii i Kanady v Arktike v tekushchej mezhdunarodnoj obstanovke [RCIA experts about the prospects of cooperation between Russia and Canada in the Arctic in the current international situation]. URL: https://russiancouncil.ru/analytics-and-comments/analytics/eksperty-rsmd-o-perspektivakh-sotrudnichestva-rossii-i-kanad/?sphrase_id=28483539 (accessed 12 June 2019). (In Russ.)

¹³ Commission on the Limits of the Continental Shelf (CLCS) Outer limits of the continental shelf beyond 200 nautical miles from the baselines: Submissions to the Commission: Partial Submission by Canada. URL: https://www.un.org/Depts/los/clcs_new/submissions_files/submission_can1_84_2019.html (accessed 17 June 2019).

¹⁴ Partial Submission of Canada to the Commission on the Limits of the Continental Shelf regarding its continental Shelf in the Arctic Ocean. Executive Summary. URL: https://www.un.org/Depts/los/clcs_new/submissions_files/can1_84_2019/CDA_ARC_ES_EN_secured.pdf (accessed 14 June 2019).

¹⁵ V Sovfede rasskazali o peregovorah Rossii, Danii i Kanady po Arktike [The Federation Council of Russia was told about the talks of Russia Denmark and Canada Arctic]. URL: <https://polit.ru/news/2019/05/25/arctic/> (accessed 18 June 2019). (In Russ.)

A very negative perception of the Russian-Ukrainian crisis has also led to the fact that Canada has intensified discussion of the problems of native peoples of the Arctic. It is so since the Russian Federation, according to the representatives of Canada, pays insufficient attention to improving their quality of life. Canada has traditionally been an initiative to ensure that native peoples had a greater autonomy (incl. the creation of autonomous provinces on the Canadian example), and their representatives are involved in the management of the region. Despite the “humanistic pathos” of such proposals to some extent, they are inconsistent with the provisions of the Russian Constitution and often aimed at discrediting the efforts that Russia is making in this area.

Russia and the other permanent members of the Arctic Council

Russia and **Norway** — the Arctic neighbors that should predetermine the high demand in the interaction. Norway is not a member of the EU, but it supported the European sanctions against the Russian Federation. Previous cooperation in the oil and gas sector is practically suspended. We cannot rely on cooperation with Norway on the development of various oil and gas fields (e.g., the Shtokman).

At the same time, the cooperation between Norway, on the one hand, and the US and NATO, on the other, will not be reduced, but on the contrary, will increase as concerns the restoration of the naval potential of the Russian Federation. Also, the expansion of cooperation between Russia and Norway actively involved the US. They consider the waters of the Barents Sea a pilot project on the use of integrated coastal zone management (ICZM) and the establishment of marine protected areas (MPA) that may limit marine economic activities.

Norway actively emphasizes the protection of the marine environment of the Barents Sea and biodiversity, advocating the more great introduction of the ecosystem and precautionary approaches¹⁶, the need for integrated spatial planning, matching the interests of different maritime users with each other [3, Pilyasov A.N., pp. 57–64]. Norway stands for maximum greening of marine economic activity, incl. the one of the Russian Federation. Russia cannot wholly ignore the greening process. However, close attention to the Kola Bay and the surrounding marine areas, where the naval and military-strategic potential of the country is focused, causes a caution in Moscow.

Norway consistently tries to change the provisions Svalbard Treaty (1920), which enabled all the parties to have equal rights for economic activity both on the archipelago and the surrounding sea areas. Norwegian side works on replacing the Treaty with the norms and provisions of the UN Convention on the Law of the Sea (1982) [4, Pedersen T.]. References to the UNCLOS and its

¹⁶Norway's Arctic Strategy - between geopolitics and social development. URL: <https://www.regjeringen.no/contentassets/fad46f0404e14b2a9b551ca7359c300/arctic-strategy.pdf> (accessed 19 March 2019).

rule allow Oslo to violate the Svalbard Treaty (1920) and to introduce more control, to restrict and prohibit certain activities (e.g., the harvest of aquatic biological resources)¹⁷.

The position of Russia and some other countries (e.g., Iceland) bases on the fact that the Treaty 1920 gave Norway no legal basis for the establishment of a 12-mile territorial sea around Svalbard, and the 200-mile exclusive mode (fishing/fishery protection) and a corresponding zone of the continental shelf to it. Only the parties of the Treaty 1920 have the right to agree on the establishment of maritime zones around Svalbard and to determine their legal status. Such coordination is possible only within the framework of convening a new international conference on Svalbard, which would clearly define a new volume of the rights and powers of Norway in its relation [5, Anderson D.].

Thus, Russian-Norwegian relations are hardly unambiguous. However, the scope for cooperation remain joint research in the Arctic, the improvement of navigation and hydrographic information on the Barents Sea, the development of updated nautical charts, the adoption of collective measures on shipping regulation (vessel traffic separation schemes) and enhancing cooperation in search and rescue (6, Vylegzhanin A.N.).

Denmark has the status of the Arctic state solely because of its autonomous territory — Greenland. The country is extremely concerned about the protection of its interests in the region¹⁸. It is manifested in active support of the EU's greater involvement in the Arctic issues and the approval of the growing NATO influence in the Arctic.

On the other hand, Denmark, like the US and the UK, advocates equal rights for all members of the Svalbard Treaty 1920 for economic activity both on the archipelago and the surrounding sea areas [7, Pedersen T.]. Denmark is not disputing the legitimacy of the direct formation of the marine regions around the archipelago under its sovereignty and jurisdiction. The country is not inclined to support the Oslo's policy of radical reduction of the rights granted to all participants in the Treaty 1920. Thus, the Russian Federation may be very interested in the Danish position to form a consolidated group of opponents for Norwegian claims concerning Spitsbergen.

Russia and Denmark have the imposition of claims to the continental shelf in the central part of the Arctic Ocean beyond the 200-mile zone from the baselines. Copenhagen claims reach up to the outer limit of the Russian EEZ, challenging the way the Russian Federation jurisdiction over a sufficiently large part of the continental margin in the Arctic. It is evident, in this case, there is a maximum possible to Inquire Denmark's position that seeks a basis for further negotiations with the Russian side¹⁹. And just as in the situation with Canada (see above), the settlement of

¹⁷Koptelov V. Rossiya i Norvegiya v Arktike [Russia and Norway in the Arctic]. URL: <https://russiancouncil.ru/analytics-and-comments/analytics/rossiya-i-norvegiya-v-arktike> (accessed 13 May 2019). (In Russ.)

¹⁸Denmark, Greenland and the Faroe Islands: Kingdom of Denmark Strategy for the Arctic 2011-2020. URL: <http://library.arcticportal.org/1890/1/DENMARK.pdf> (accessed 15 March 2019).

¹⁹Tulupov D. Uroki zanimatel'noj delimitacii: kak pravil'no razdelit' arkticheskij shel'f? [Lessons of entertaining delimitation: how to divide the Arctic shelf correctly?]. URL: https://russiancouncil.ru/analytics-and-comments/analytics/uroki-zanimatel'noj-delimitatsii-kak-pravilno-razdelit-arktich/?sphrase_id=28424984 (accessed 17 May 2019). (In Russ.)

these conflicts will not be the competence of the UN Commission on the Limits of the Continental Shelf. It is only authorized to review the scientific data presented on the shelf belonging to a particular state.

Like many other Arctic countries, Denmark is ready to pay much attention to the quality of life of the native people of the North, in particular — the Greenland Eskimos. In this case, in contrast to the critical attitude of Canada regarding the lack of Russian efforts to protect their interests, Denmark is practicing a more balanced approach without any sharp condemnation. Moreover, Russia and Denmark have a lot in common in this area: so, both countries are in favor of the legal justification for native peoples have to save their legitimate right to be engaged in traditional occupations (in Denmark, it is seal hunting and whaling ²⁰).

Common interests are observed in research: Denmark is actively studying the melting of the ice sheet and the subglacial process of permafrost in Greenland. Russia considers the melting of permafrost on its territory, incl. the Arctic.

Denmark is among the ten largest shipping nations. Maersk is a leader in the container shipping market, occupying 18% of the market. It is no coincidence; Copenhagen examines the transit potential of the Northern Sea Route (NSR) ²¹. In August — September 2018, a container carrier Venta Maersk made a test flight from the South Korean port of Pusan via Vladivostok and on to St. Petersburg with frozen fish ²². Maersk has three container terminals in Russia (in Nakhodka and St. Petersburg). So, cooperation in this field can be significantly enhanced if it is clear what goods and where it will be possible to carry on the NSR ²³.

Iceland, under its geographical position and place in the system of international relations, is also very interested in strengthening its influence in the Arctic. And although it is not a member of the European Union like Norway, Iceland acts in favor of the broadest possible EU presence in the region, supporting the granting of the last observer status in the Arctic Council ²⁴. Iceland is trying to prevent the formation of any semblance of the “Arctic coalition” of the vital regional powers, which would have closed the responsibility for solving the critical issues in the region.

²⁰ V Rossii korennoe naselenie Chukotki poluchaet kvoty na kitobojny promysel v ramkah Mezhdunarodnoy kitobojnoy komissii (MKK). Kommerchesky promysel zapreshchyon. Kvota 2018 g. na dobychu kitov dlya Rossiiskoy Federacii sostavila 140 osobey [In Russia, the native people of Chukotka received quotas for whaling by the International Whaling Commission (IWC). Commercial whaling is prohibited. Quota 2018 on whaling for the Russian Federation amounted to 140 whales]. URL: http://www.mnr.gov.ru/press/news/kvota_na_dobychu_kitov_dlya_rossiyskoy_federatsii_sostavit_140_osobey_v_god_/?special_version=Y (accessed 01 July 2019). (In Russ.)

²¹ Koptelov V. Strategiya Danii v osvoenii Arktiki [Denmark's strategy for the development of the Arctic]. URL: <https://russiancouncil.ru/analytics-and-comments/analytics/strategiya-danii-v-osvoenii-arktiki/> (accessed 01 July 2019). (In Russ.)

²² Maersk proverit sposobnost' Sevmorputi konkurovat' s Sueckim kanalom [Maersk checks the NSR's ability to compete with the Suez Canal]. URL: <https://www.rbc.ru/business/21/08/2018/5b7c0fc19a794737b8cfeb8f> (accessed 02 July 2019). (In Russ.)

²³ Maersk izuchaet vozmozhnost' zapuska transporta po Severnomu morskemu puti [Maersk is exploring the possibility of transport run on the Northern Sea Route]. URL: <https://www.vestifinance.ru/articles/120451> (accessed 02 July 2019). (In Russ.)

²⁴ Parliamentary Resolution on Iceland's Arctic Policy. URL: <https://www.government.is/media/utanrikisraduneyti-media/media/nordurlandaskrifstofa/A-Parliamentary-Resolution-on-ICE-Arctic-Policy-approved-by-Althingi.pdf> (accessed 12 April 2019).

Iceland is trying to strengthen its status of an Arctic state and developing active cooperation with China. It is reflected in the joint operation of the newly built observatory, bilateral agreements on free trade, the desire to attract Chinese investment in port infrastructure, and the growing flow of Chinese tourists to Iceland²⁵. Iceland, along with Greenland and Spitsbergen, serves a convenient base to strengthen China's presence in the Arctic, incl. for global transportation and energy projects. However, China is striving to consolidate its leading position in the Arctic. It may be a desire to change the exclusive character of the Arctic cooperation, replacing it with a wider variant — an inclusive one.

Russian Federation considers the cooperation with Iceland essential to develop in the political and legal spheres, as the latter has always spoken strongly against the policy of Norway on the establishment of maritime zones around Svalbard to limit the rights of third countries in these waters. The correlation between the two countries on this issue is absolute: such zones can only be created following the results of a new international conference on Svalbard. It is impossible to be made by one side decisions took by Norway when using the UNCLOS (1982) provisions.

It should also be borne in mind that Iceland has vast experience in geothermal energy. Its knowledge may be useful for the Russian Federation. Innovative technologies of harvesting and fish processing is a promising area for Russian-Icelandic cooperation²⁶. Now Iceland is ready to participate in the development and modernization of the Russian fishing fleet, offering its knowledge and technology. Iceland's program for its Arctic Council chair 2019 concerns projects on “green” navigation, mapping of vulnerable Arctic and North Atlantic marine areas from shipping, and the fight against marine litter and oxidation of the World Ocean. Of course, it will be supported by Moscow. Iceland shows interest in the NSR, considering itself as a transit hub²⁷.

Finland — our neighbor. We have amicable relations and historically close economic interaction. Moreover, Finland is extremely interested in establishing any form of economic cooperation with Russia, especially in areas that are not cropped by the sanction regime²⁸. It positions itself as a possible supplier of “green” technologies and telecommunication and navigation equip-

²⁵ Tulupov D. Islandiya: ostrov “svobody” v Arktike [Iceland: island of “freedom” in the Arctic]. URL: https://russiancouncil.ru/analytics-and-comments/analytics/islandiya-ostrov-svobody-v-arktike/?sphrase_id=28415438 (accessed 15 June 2019). (In Russ.)

²⁶ Studneva E. Rossiya i Islandiya: arkticheskoe prityazhenie [Russia and Iceland: arctic attraction]. URL: https://russiancouncil.ru/analytics-and-comments/analytics/rossiya-i-islandiya-arkticheskoe-prityazhenie/?sphrase_id=28415438 (accessed 14 June 2019). (In Russ.)

²⁷ Nam ne nravitsya, kogda chuzhaki govoryat nam, chto delat'. Prezident Islandii Gvyudni Jóhannesson — o sovместnom s Rossiej razvítii Sevmorputi i o skhozhesti dvuh narodov [We do not like outsiders telling us what to do. President of Iceland Gvyudni Jóhannesson - about joint development of the Northern Sea Route with Russia and the similarity of the two nations]. URL: <https://iz.ru/866039/dmitrii-laru-elnar-bainazarov/nam-ne-nravitsia-kogda-chuzhaki-govoriat-nam-chto-delat> (accessed 17 June 2019). (In Russ.)

²⁸ Finland's Strategy for the Arctic Region 2013. URL: https://vnk.fi/documents/10616/334509/Arktinen_strategia_2013_en.pdf/6b6fb723-40ec-4c17-b286-5b5910fbecf4 (accessed 06 April 2019).

ment. Its shipbuilding industry is ready to take on new orders from Russia²⁹. Finland shows interest in the technical and logistical projects in the Russian Arctic³⁰.

Finland is the only Arctic country with no public concern caused by increased naval building in Northern Russia. Also, Finland does not consider Moscow a threat to its security in the Arctic. Moreover, being a member of the EU, Finland, on the one hand, demonstrates no objections to the possibility of the EU observer status in the Arctic Council, but on the other hand, it claims to be the focal point for the EU Arctic policy³¹ and is ready to act as a facilitator/moderator in relations between the EU and the Russian Arctic.

Sweden, a member of the Arctic Eight, is not interested in the domination of the Arctic Five (Russia, USA, Norway, Denmark, and Canada) in the Arctic Council. It seeks the voices of Iceland, Finland, and Sweden to be considered not to a lesser extent in decision-making³². That is why Sweden has always advocated the strengthening of the Arctic Council, and its transformation to a full-fledged international organization to prevent the weakening of the AC³³. At the same time, Sweden is for greater involvement of the EU in the Arctic issues. It is not correlated with the interests of the Russian Federation.

Moreover, the ongoing speculation about the possible participation of Sweden in NATO only increases the tension in Russian-Swedish relations. We should not forget that a few years ago, Scandinavian countries lobbied for the creation of the “mini-NATO” of Sweden, Norway, Denmark, Finland, Iceland, Estonia, Latvia, and Lithuania primarily to counter the Russian “militarization” of the Baltic Sea and the Arctic. So, it explains why the range of cooperation areas between Russia and other countries in the Arctic is extremely narrow. It is the protection of the marine environment and biodiversity, the study of climate change and the preservation of traditional ways of life of native peoples of the North.

Non-regional countries

It is possible to build a hierarchy among the full range of non-regional countries with quite a severe interest in the Arctic region. The states with a priority to establish cooperation and collaboration, incl. the international one, are countries with research arctic or polar research programs that have the history and require to accumulate research experience. And finally, these are the countries for which the scientific problem is not just a tool linking them to the Arctic, but they are also willing to share their scientific research results or to start joint research. Thus, science and

²⁹ It should be recalled that in Soviet times, a half of the Russian icebreaker fleet was built at the Finnish shipyards.

³⁰ Telegin E. Morgunov M. Strategiya Finlyandii v osvoenii Arktiki [Finland's strategy for the development of the Arctic]. URL: https://russiancouncil.ru/analytics-and-comments/analytics/strategiya-finlyandii-v-osvoenii-arktiki/?sphrase_id=28415438 (accessed 18 June 2019). (In Russ.)

³¹ Shlyamin V. Titov I. Finlyandiya v Arktike [Finland in the Arctic]. URL: https://russiancouncil.ru/analytics-and-comments/analytics/finlyandiya-v-arktike/?sphrase_id=28415438 (accessed 17 June 2019). (In Russ.)

³² Koptelov V. Arkticheskaya strategiya Shvecii [Swedish Arctic strategy]. URL: https://russiancouncil.ru/analytics-and-comments/analytics/arkticheskaya-strategiya-shvetsii/?sphrase_id=28483539 (accessed 19 June 2019). (In Russ.)

³³ Sweden's strategy for the Arctic region. URL: <https://www.government.se/49b746/contentassets/85de933bbbe4373b55eddd7f71608da/swedens-strategy-for-the-arctic-region> (accessed 14 April 2019).

protecting the fragile Arctic marine environment and its biodiversity have a top priority in these countries, not just a desire to be engaged in the exploration and development of the Arctic areas and resources.

E.g., the **European Union** is investing enough financial resources to complete marine scientific research in the Arctic ³⁴. And it is the crucial justification when the EU is claiming the observer status in the Arctic Council ³⁵. However, it seems as long as the regime of economic sanctions exists, and the EU does not cease to declare the Russian militarization of the Arctic and to insist on more significant involvement of NATO in the Arctic, it is unlikely such approaches to be supported by the Russian Federation. Moreover, the EU position on the legal status of the Northern Sea Route continues to be directly contrary to the opinion of Russia: It stands for maximum internationalization of shipping on the NSR tracks. Here, the EU got support from the other states: esp., **Germany** ³⁶, and **Spain** ³⁷.

Finally, the EU's role in the Arctic has changed little in recent years. It continues to see itself as a “normative power,” which means it proposes standards and patterns of behavior which should be adopted by all regional actors ³⁸. E.g., we are talking about the need for higher environmental standards for marine economic activities, which are often in direct conflict with the interests of the socio-economic development of the Arctic countries, incl. the Russian Federation. The only area where the EU and Russian interests in the Arctic overlap is the safety of navigation and the reduction of emissions. In particular, the EU supports the idea of using LNG instead of heavy fuel for vessels engaged in shipping in the Arctic. Russia also expressed interest in such a project.

Pretentious position in the Arctic is relevant for such European countries like **Great Britain** ³⁹ and **France**. They present themselves the pioneers in the field of polar research, advocate the maximum possible EU involvement in the Arctic, and worry about military and non-military security aspects in the Arctic.

³⁴ Ruzakova B. Arkticheskaya strategiya ES: integrirovannyj podhod 2016 [Arctic strategy of the EU: integrated approach 2016]. URL: https://russiancouncil.ru/blogs/valeriya-ruzakova/31105/?sphrase_id=28424984 (accessed 22 June 2019). (In Russ.)

³⁵ Developing a European Union Policy towards the Arctic Region: progress since 2008 and next steps. URL: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012JC0019&from=EN> (accessed 11 April 2019); European Parliament and the Council - Developing a European Union policy towards the Arctic region: progress since 2008 and next steps. URL: http://eeas.europa.eu/archives/docs/arctic_region/docs/swd_2012_182.pdf (accessed 02 April 2019); EU Arctic policy in regional context. URL: [http://www.europarl.europa.eu/RegData/etudes/STUD/2016/578017/EXPO_STU\(2016\)578017_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2016/578017/EXPO_STU(2016)578017_EN.pdf) (accessed 18 March 2019); Report on an integrated European Union policy for the Arctic. URL: <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+REPORT+A8-2017-0032+0+DOC+PDF+V0//EN> (accessed 11 April 2019); Integrated European Union policy for the Arctic. URL: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016JC0021&from=EN> (accessed 13 April 2019).

³⁶ Guidelines of the Germany Arctic policy Assume responsibility, seize opportunities. URL: https://www.bmel.de/SharedDocs/Downloads/EN/International/Leitlinien-Arktispolitik.pdf?__blob=publicationFile (accessed 17 April 2019).

³⁷ Guidelines for a Spanish Polar Strategy. URL: http://www.ciencia.gob.es/stfls/MICINN/Investigacion/FICHEROS/Comite_Polar_definitivo/Directrices_estrategia_polar_espanola.pdf (accessed 02 April 2019).

³⁸ Utkin S. ES i Arktika: prismatrivayas' drug k drugu [EU and the Arctic: scrutinizing each other]. URL: <https://russiancouncil.ru/analytics-and-comments/analytics/es-i-arktika-prismatrivayas-k-budushchemu/> (accessed 21 June 2019). (In Russ.)

³⁹ Beyond the ice: UK policy towards the Arctic. URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/697251/beyond-the-ice-uk-policy-towards-the-arctic.pdf (accessed 03 March 2019).

In particular, **the United Kingdom** strongly supported the project of “mini-NATO” with the participation Norway, Denmark, Finland, Sweden, Iceland, Estonia, Latvia, and Lithuania. The aim of the project would be the opposition to the Russian “militarization” of the Arctic⁴⁰. At the same time, the Russian approach partly supported by the other Arctic countries, based on the idea that Arctic countries should resolve all the Arctic security problems, both on a bilateral and a multilateral basis, without involving any extra-regional countries and especially NATO.

France, on the one hand, rightly positioned itself as a polar nation⁴¹. This status grounds on the fact that the French have been engaged in polar research for decades, and they raised a generation of experts. Oceanographic research and marine environmental protection — the traditional “strong point” of France. Also, among the French overseas territories — islands of Saint Pierre and Miquelon, located in the North Atlantic to the south of Newfoundland, owned by the Arctic country — Canada. Although the coordinates of the northern point of the French islands — 47 ° NL and the Arctic Circle is — 66 °NL, the appeal of Paris to the fact that in the North Atlantic has very similar climatic conditions to the Arctic Ocean, can be recognized conditionally correct.

On the other hand, France is not just supporting the EU observer status in the Arctic Council. But in general, it speaks for empowering the AC observers believing that the management of the Arctic is not a question of the regional and international responsibility⁴². This position, of course, does not get support not only in Russia but in other Arctic states, opposed the exclusive nature of their cooperation in the region.

Italy was granted observer status in the Arctic Council, and it is actively pursuing its Arctic strategy⁴³. It positions itself a country more than 100 years involved in Arctic issues. Considering the Arctic Ocean as a fragile ecosystem, Italians draw an analogy with the Alpine ecosystem, the protection of which (from the Italian point of view) is like those that exist in the Arctic.

Italy highlights four main dimensions related to the Arctic region: political, economic, environmental, and social. In the field of governmental regulation, Italy recognizes the sovereignty and jurisdiction of the Arctic states and posits the idea that the protection of the Arctic is the responsibility of all international communities. It serves to support greater involvement of the EU and the European Commission in Arctic issues. In the field of economic cooperation, incl. Russia, Italy, is ready to offer its expertise in satellite monitoring, naval architecture, navigation, and energy. Although Eni and Rosneft's joint project has been frozen due to the sanction regime, Italy continues to be one of the leaders in the use of environmentally friendly technology exploration and devel-

⁴⁰ Shaparov A. NATO i novaya povestka dnya v Arktike [NATO and a new agenda in the Arctic]. URL: https://russiancouncil.ru/analytics-and-comments/analytics/nato-i-novaya-povestka-dnya-v-arktike/?sphrase_id=28483539 (accessed 23 June 2019). (In Russ.)

⁴¹ Great challenge of the Arctic. National Roadmap for the Arctic. URL: https://www.diplomatie.gouv.fr/IMG/pdf/frna_-_eng_-_interne_-_prepa_-_17-06-pm-bd-pdf_cle02695b.pdf (accessed 06 April 2019).

⁴² Lagutina A.M. Novaya rol' Francii v Arktike [New French Role in the Arctic]. URL: https://russiancouncil.ru/analytics-and-comments/analytics/novaya-rol-frantsii-v-arktike/?sphrase_id=28510615 (accessed 21 June 2019). (In Russ.)

⁴³ Verso una strategia italiana per l'Artico. URL: https://www.esteri.it/mae/it/politica_estera/aree_geografiche/europa/artico/ (accessed 12 May 2019).

opment of hydrocarbon resources. Russia meets the Italian interests in the event of a so-called low-carbon economy, due to the promotion of natural gas as the primary fuel. Italy is ready to develop cooperation with Russia in oceanographic and meteorological research, lifestyle study in the North, climate change, protection of biodiversity, countering accidents, etc.

Netherlands's main interest in the Arctic binds to the climate change, leading to a decrease in the ice cover, raising global sea level, the impact on marine biodiversity, and increasing the number of natural disasters and phenomena, which together may adversely impact the country's coastline⁴⁴. Before the sanctions, the British-Dutch company Royal Dutch Shell could become an active player in the exploration and development of Arctic hydrocarbon, and the development of the NSR was associated with a significant economic interest in Amsterdam. However, sanctions nullified all prospects for cooperation, except for some projects. Also, the problem was and still is the fact that Netherlands sees its participation in Arctic research a part of increasing EU presence in the Arctic. Its representatives advocate for the EU observer in the Arctic Council [8, pp. 44–51].

Amsterdam disposes of one of the most influential law schools in the field of international maritime law, and voices for strict compliance with are norms for the Arctic states. This position affected the relations with Moscow until recently, as after the arrest of the Greenpeace “Arctic Sunrise” vessel, sailing under the Dutch flag, for the protests near the Pirazlomnaja platform in 2013, both sides had different ideas about how to classify the incident and Russian reaction. Netherlands stood for the concept than UNCLOS provisions were violated and filed a lawsuit to the International Tribunal for the Law of the Sea (ITLOS)⁴⁵, and in the Permanent Court of Arbitration (PCA) in Hague⁴⁶. Russia believed that the international courts had no jurisdiction to review Dutch claims, as this situation was concerned with the violation of the domestic Russian legislation. However, in May 2019, the Russian government without changing its legal position agreed to pay half of the compensation that Amsterdam had been awarded by arbitration when signing a joint statement on scientific cooperation between the countries in the Russian Arctic and the settlement of the dispute⁴⁷. It is undoubtedly an excellent example of an inter-state compromise for the sake of collaboration and interaction. However, any Dutch attempts to link the change of the Russian position on the “Arctic Sunrise” case to the investigation of the Malaysian Boeing crash looks entirely speculative⁴⁸.

⁴⁴Pole Position - NL 2.0. Strategy for the Netherlands Polar Programme 2016-2020. URL: https://www.nwo.nl/binaries/content/documents/nwo-en/common/documentation/application/alw/netherlands-polar-programme---strategy---pole-position---nl-2.0/UK_binnenwerk_Poolpositie-NL+2.0.pdf (accessed 12 May 2019).

⁴⁵The Arctic Sunrise Case (Kingdom of the Netherlands v. Russian Federation), Provisional Measures. URL: <https://www.itlos.org/cases/list-of-cases/case-no-22/> (accessed 03 July 2019).

⁴⁶The Arctic Sunrise Arbitration (Netherlands v. Russia). URL: <https://pca-cpa.org/en/cases/21/> (accessed 03 July 2019).

⁴⁷Joint Statement of the Russian Federation and the Kingdom of the Netherlands on Scientific Cooperation in the Russian Arctic Region and the Settlement of a Dispute. URL: <https://www.government.nl/documents/diplomatic-statements/2019/05/17/joint-statement-of-the-russian-federation-and-the-kingdom-of-the-netherlands-on-scientific-cooperation-in-the-russian-arctic-region-and-the-settlement-of-a-dispute> (accessed 04 July 2019).

⁴⁸Russian-Dutch settlement on Arctic Sunrise is a recognition of international law. URL: <https://raamoprusland.nl/dossiers/europa/1297-russian-dutch-settlement-on-arctic-sunrise-is-a-recognition-of-international-law> (accessed 04 July 2019).

Poland has not officially adopted the Arctic strategy, but the goals the Polish Arctic experts put are ambitious enough⁴⁹. Warsaw is aware of the benefits of a scientific co-operation. Science diplomacy stimulates the development of political cooperation between the states. Science is regarded as an “entry ticket” to the Arctic. Participation in the Arctic “affairs,” of course, raises the international status of Poland, both within the EU and at the transatlantic level. Poland especially emphasizes its participation in the Svalbard Treaty since 1931. It has a research station there. The country is an observer in the Arctic Council since 1996, and it initiated “Warsaw negotiations” intending to take on the role of moderator for the non-Arctic states and their discussions.

Polish interests in the Arctic are not only climate change and protection of the marine environment, but also to specific sectors of the economy: production of hydrocarbons and rare earth metals; the use of national shipbuilding capacity; harvesting of aquatic biological resources. Transportation opportunities in the region are also attractive for Warsaw: Polish ports and container terminals in the Baltic Sea (Gdansk, etc.) may be the beneficiaries of the NSR through which Chinese goods will be transported to Western and Eastern Europe, and esp. to Belarus and Ukraine.

The only problem is the status of the NSR. Its open condition is favorable for Poland as well as the use of the UNCLOS rather than the Russian national legislation. Also, Warsaw sees a way of strengthening its presence in the Arctic only through greater involvement of the EU and NATO. In particular, Poland still has not developed the Arctic strategy for the simple reason that its views on the region fully coincide with those recorded in the EU documents. As for the NATO, the Polish experts insist that security in the Arctic should be provided exclusively by the NATO without provocation of Russia to take countermeasures⁵⁰.

Asian allies and competitors

India has traditionally given priority to Antarctic research. In recent years, considering the importance of climate change, it has begun to pay more attention to the Arctic⁵¹. India is a full member of the Svalbard Treaty 1920 and has a research station on the archipelago. Delhi has observer status in the Arctic Council, which is certainly advantageous for the Russian Federation, considering the two-way interaction within BRICS. In the context of the sanction regime, Delhi and Moscow's cooperation in shipbuilding, energy (esp. investment) climate study may be significantly expanded.

However, India's position on the critical issues in the Arctic (regulatory models of naval operations, the legal status of NSR) does not always coincide with the national interests of Russia. India continues to view the Arctic as a “common” maritime region, where extra-regional countries

⁴⁹ Michał Łuszczuk, Piotr Graczyk, Adam Stępień, Małgorzata Śmieszek. Poland's Policy towards the Arctic: Key Areas and Priority Actions. URL: [https://www.files.ethz.ch/isn/191034/PISM Policy Paper no 11 \(113\). pdf](https://www.files.ethz.ch/isn/191034/PISM_Policy_Paper_no_11_(113).pdf) (accessed 19 June 2019).

⁵⁰ Piotr Kościński, Wojciech Lorenz, Lidia Puka. Poland in the Arctic: Seeking the Balance. URL: <https://slidex.tips/download/introduction-piotr-kociski-wojciech-lorenz-lidia-puka> (accessed 13 June 2019).

⁵¹ Lunev S. Indiya ustremilas' v Arktiku [India rushed to the Arctic]. URL: https://russiancouncil.ru/analytics-and-comments/analytics/indiya-ustremilas-v-arktiku/?sphrase_id=28510615 (accessed 19 June 2019). (In Russ.)

would better have a certain similarity to the Antarctic Treaty for equal access for all states to the Arctic areas and resources [9, pp. 5–17]. Besides, Delhi supports the idea of nuclear-free status for the Arctic, which is hard will meet the military-strategic interests of Russia and the US. Concerning the NSR, India has a certain skepticism, fearing that its development will take over some of the traffic that currently goes through the Indian Ocean.

Japan had polar research since 1959 when it joined the Antarctic Treaty. This fact means a generation of polar researchers, knowledge, and experience, which can be useful for the study of the Arctic. Even earlier, in 1935, Japan became a party to the Svalbard Treaty. But the country has not still formulated a clear position concerning the Oslo policies aimed at the replacement of the Svalbard Treaty provisions with the UNCLOS [10, Gutenev M.Yu.]. At the same time, Japan is an island (archipelagic) state and justifies its interest in the Arctic by climate change in the Arctic, its consequences for the oceans (incl. the increase in water level) and impacts on Japan ⁵².

Tokyo has traditionally (since Soviet times) been interested in the development of the NSR, which can be closed at the Japanese port of Yokohama. This interest manifested itself after the famous speech of M.S. Gorbachev in Murmansk (1987) and his idea to open the NSR for international navigation. In the 1990s and 2000s, Tokyo was one of the organizers of studies and expeditions to evaluate all the pros and cons of using the NSR. It should also be borne in mind that Japan represented about 10% of the world seaborne trade [11, Mogilevkin I.M. p. 197], and the Japanese fleet took 2nd place in the world in terms of tonnage ⁵³.

However, Japan supports the norms and provisions of international law. So, it acts with the support of the exclusive use of the UNCLOS for the Arctic and upholds the need to respect the principle of freedom of navigation. It contradicts the Russian position on the issue.

Moreover, Japan's policy documents on the Arctic reveal active participation in the emerging regional management system and the will to be a guarantor of international law ⁵⁴. Such claims from Tokyo to strengthen its influence in the Arctic are clear enough, especially considering the growing intensification of Arctic policy in Beijing and Seoul. However, they can be presented too ambitious for the Arctic states.

Singapore, being, along with Japan, an island nation, is also interested in the Arctic due to its possible influence on the world climate system and Oceans ⁵⁵. Besides, covering approximately 70% of the world market of floating units for production, storage, and transportation of oil, Singapore is interested in expanding its participation in oil and gas projects in the region. Its port facili-

⁵²Fedotova A. Yaponiya v Arktike: kompleksnaya strategiya razvitiya regiona [Japan in the Arctic: a comprehensive strategy for the region]. URL: https://russiancouncil.ru/blogs/arctic/31245/?sphrase_id=28424984 (accessed 11 May 2019). (In Russ.)

⁵³The Review of Maritime Transport 2018 by UNCTAD. URL: https://unctad.org/en/PublicationsLibrary/rmt2018_en.pdf (accessed 10 June 2019).

⁵⁴Japan's Arctic Policy. October 16th, 2015. URL: https://www8.cao.go.jp/ocean/english/arctic/pdf/japans_ap_e.pdf (accessed 19 March 2019).

⁵⁵Dereschuk A. Interesy Singapura v Arktike [Singapore's interests in the Arctic]. URL: https://russiancouncil.ru/blogs/arctic/31229/?sphrase_id=28424984 (accessed 12 April 2016). (In Russ.)

ties and the fleet (more than 3.5 thous vessels) aimed at cargo base service, going through the Suez Canal, could be employed for the development of transit along the NSR [9, pp. 48–55].

The Republic of Korea, as well as many other Asian countries, considers its involvement in the Arctic as an element of enhancing its international status⁵⁶. It is evident that strengthening presence in the Arctic, participation in its development is possible only for successful states⁵⁷, as well as involvement in Antarctic research, which started back in Seoul 1986.

Transport potential of the Arctic, just as the exploration and development of energy resources, is of interest to Seoul. But, e.g., the harvest of aquatic biological resources is considered by all Asian countries a pivotal element to ensure their food security and guarantee of the further socio-economic development. A highly developed shipbuilding sector makes the Republic of Korea very interested in receiving new orders for the design and construction of ships for Arctic waters [12, Zhuravel V.P.]. It is worth mentioning about 2 / 3 of the LNG carriers in the world were built on the Korean shipyards [13, Gutenev M.Yu.]. Russian company Novatek ordered a series of ice-breaking tankers for the Yamal LNG project in Korea.

In this case, Korea is actively involved in the development of science diplomacy through the various forms of international cooperation, joint research, and business projects in the Arctic. Seoul is engaged in climate change research in the Arctic, drafting of the relief maps of the Arctic seabed, and development of technology for deep seabed energy resources [14, Dongmin Jin]. This balanced and conflict-free approach, of course, gets support from the Russian government and the relevant experts.

Somewhat contradictory position on the Arctic takes **China**⁵⁸. Thus, China claims that the very development of the situation in the Arctic is beyond the region and the interests of the Arctic countries. It has vital importance not only for the extra-regional players but also for the entire international community⁵⁹. It declared the situation there depends on “survival, development, and the common future of all mankind.”

China sees itself as a state ready to be responsible for the production and improvement of the rules of conduct in the Arctic, more than that — the control system in the Arctic region⁶⁰. The purpose of such a system is exceptionally universalist, i.e., to create conditions for the protection,

⁵⁶Nacional'naya gordost' i kommercheskie vozmozhnosti vlekut Yuzhnyuyu Koreyu v Arktiku [National pride and commercial opportunities involve South Korea, the Arctic]. URL: <https://russiancouncil.ru/analytics-and-comments/interview/natsionalnaya-gordost-i-kommercheskie-vozmozhnosti-vlekut-yu/> (accessed 01 April 2019). (In Russ.)

⁵⁷Zachem Azii Arktika? [Why Asia needs Arctic?]. URL: <https://russiancouncil.ru/analytics-and-comments/analytics/zachem-azii-arktiku/> (accessed 02 April 2019). (In Russ.)

⁵⁸China's Arctic Policy. URL: http://english.gov.cn/archive/white_paper/2019/01/26/content_281476026660336.htm (accessed 18 April 2019).

⁵⁹Tulupov D. Chlenstvo Kitaya v arkticheskom Sovete [Membership of China in the Arctic Council]. URL: <https://russiancouncil.ru/analytics-and-comments/analytics/chlenstvo-kitaya-v-arkticheskom-sovete/> (accessed 12 April 2019). (In Russ.)

⁶⁰See: Gudev P.A. Arkticheskie ambicii Podnebesnoj [Arctic ambitions of China]. URL: <https://globalaffairs.ru/number/Arkticheskie-ambicii-Podnebesnoj-19751> (accessed 12 May 2019). (In Russ.)

development, and management of the Arctic for the benefit of all humanity⁶¹. Very ambitious, China sees itself as a state — “norm-taker” but wants to become a “law-maker” [15, Timo Koivurova, p. 26].

China is ready to cooperate not only with the Arctic states but also with all other countries and members of the international community, incl. international and non-governmental institutions and organizations. It is an ambitious attempt to lead the process of strengthening the role of external actors in the Arctic, well-camouflaged desire to play a leading role in the Arctic agenda.

China is positioning itself as a “near-Arctic” state, referring to the fact that it is a full member of the Svalbard Treaty 1920. The reference to the Svalbard Treaty is essential for China, as it allows it to position itself a country that, since 1925, for more than 90 years, has been involved in Arctic issues. Also, since the early 2000s, Svalbard became a kind of scientific foothold for China in the Arctic, and the country is not willing to lose its presence there. However, the reference to such a rich history of presence in the Arctic looks strange. Unlike the Soviet Union/Russia with a long history of presence in the archipelago and its legal grounds (Russian Pomors opened and actively explored the land and water of the archipelago), the first Beijing interest in Svalbard revealed only at the beginning of the 1990s.

Besides, Beijing's position on the legal status of the archipelago and the extent of the projection of Norway's sovereignty over it is still unclear. Although China claims equal rights on the archipelago and in the waters around it, the country is hardly ready to go on intensifying the confrontation with Oslo on this issue. China prefers to refer to the use of only the norms and the UNCLOS justifying its legal claims on the development and exploitation of the Svalbard area and its resources. As a result, Beijing's strategy in this matter is straightforward: it will oppose any restrictions on the rights of the parties to the Treaty on Svalbard, but never declare the priority of the Treaty over the UNCLOS.

China's position concerning the NSR also has a certain inconsistency. So, on the one hand, China respects the legislative, law enforcement, and judicial powers of the Arctic States in the waters under their jurisdiction. One might think Beijing recognizes a national regulatory level. However, on the other hand, China emphasizes the management of Arctic shipping routes shall be following the treaties, incl. UNCLOS, and general international law, and that the freedom of navigation, which is used by all countries and their right to the use of Arctic sea routes, must be provided.

No doubt, China is interested in the export of Russian mineral and energy resources along the NSR to its domestic market, as well as the inclusion of the NSR in the “Polar Silk Road” project to expand opportunities for exports of Chinese goods to the demands of other countries. Freedom of navigation and its liberalization along the NSR provide more advantages for China than enough rigidly regimented control at which Russia insists [9, pp. 17–31].

⁶¹Bochkov D. Zachem Kitayu Arktika? [Why does China need Arctic?]. URL: https://russiancouncil.ru/blogs/danil-bochkov/33820/?sphrase_id=28424984 (accessed 11 May 2019). (In Russ.)

Russia is not opposed to Chinese investments, incl. those aimed at the NSR infrastructure development, incl. the construction and modernization of ports, terminals, and railways. The NSR as part of the “One Belt and One Road” or the “Ice Silk Road” to connect Europe and China through the Arctic Ocean is also not contrary to the economic interests of Moscow. Russia would receive dividends from the involvement of foreign shipping companies, incl. Chinese⁶². On the other hand, in 2014, the Ministry of Transport of China released national Leadership for the Chinese Navigation along the Northern Sea Route, and the same concerning the Canadian Northwest Passage. Even from a legal point of view, it does not look entirely appropriate [16, Kienko E. V., p. 22].

China's interest in the development and use of Arctic living and non-living resources is clear, as it is a guarantee of China's further social and economic development. However, the Arctic — is an exceptionally vulnerable marine area, and it raises reasonable questions: is China technologically ready for the development of these resources? Has the country relevant technologies, incl. green ones?

Moreover, although China is actively promoting its concern about climate change, marine environment, and biodiversity in the Arctic, several points cause an absolute surprise. E.g., according to statistics, China is the world's most significant source of carbon dioxide emissions, and they account for about 30% of the total volume. Energy (coal) and heavy industry are the primary sources of emissions in China [15, Timo Koivurova, pp. 39–43]. At the same time, a considerable amount of air pollutants in the Arctic comes directly from China and other countries of Southeast Asia. It is noteworthy that Beijing does not cooperate and does not discuss these issues in the Arctic Council.

Chinese care about the living standard of the native population of the North appears to be quite hypocritical: Beijing actively discusses these problems not only in the UN but also in the Arctic Council. But Beijing sees topics related to the Tibetan people and the Xinjiang Uygur autonomous area taboo issues. Beijing is not willing to discuss them.

As a result, China's position on the Arctic grounds on the idea of a joint maritime region, where the interests of all states, incl. those outside the area, have own legitimate reasons to exist. China has set itself the main task — to make the control mode in the Arctic even more perfect, to develop and introduce specific new international rules to guarantee the rights of all interested parties in the region. Such a position is precisely one: Beijing is eager to question the exclusive nature of the collaboration between the Arctic Five (Denmark, Canada, Norway, Russia, and the USA), and replace it with a more inclusive mode based on the greater involvement of non-regional states and players. We are talking about the internationalization of the Arctic space and resources for the sake of some abstract “international community.” This approach seems not only meet the

⁶² At the Petersburg Economic Forum 2019, it was signed an agreement to establish a joint venture of “Novatek”, “Sovcomflot”, Chinese “Cosco Shipping” and the “Silk Road” fund to ensure the year-round navigation on the NSR]. URL: <http://www.morvesti.ru/detail.php?ID=79016> (accessed 03 July 2019). (In Russ.)

national interests of the Russian Federation but also, without doubt, is unlikely to find adequate support from other Arctic states.

Conclusion

All the Arctic states are very interested in the north polar region is a zone of peace and cooperation. Development of international cooperation and interaction, from this point of view, will always guarantee the possibility of a dialogue in the Arctic even though some inter-state contradictions.

Here, of course, one could draw an analogy with the Antarctic Treaty and other international agreements of the Cold War to manage “common” spaces (the Outer Space Treaty 1966⁶³, the Treaty on the seabed⁶⁴), based on the limited “cooperation” principle. The Arctic, in the legal sense, can never be equated to the Antarctic, but the development of joint research, common interests to protect the marine environment and its biodiversity unite the two polar regions. Finally, communication between experts and researchers is to create an atmosphere of greater trust, which will inevitably be reflected in a higher political level. In 2017, an agreement was signed to strengthen scientific cooperation in the Arctic. It aimed to establish a new framework of relations both between the Arctic countries and between them and the rest of the non-regional states [17, Berkman P.A., Vylegzhanin A.N., Young O.R.].

Paradoxically, most of M.S. Gorbachev's ideas voiced in 1987 during his visit to Murmansk, i.e., peaceful cooperation for sustainable development of resources in the North and the Arctic, incl. the establishment of joint and mixed companies for the development of North Sea shelf; the scientific study of the Arctic and the coordination of international efforts in this area; a survey of native peoples of the North; protection of the environment of the North, incl. the radiation safety monitoring (land, air, and water); the NSR opening for foreign vessels under Soviet icebreaker assistance (with the right of approaching Soviet ports) [18, Fokin Y.E., Smirnov A., pp. 9–10] have not disappeared from the agenda of the Russian Arctic.

The main problem lies in the fact that many countries see the engagement in Arctic research and exploration as a convenient and straightforward tool for familiarizing with Arctic issues, incl. spatial and resource components. The concept of “science diplomacy” is often applied to the Arctic⁶⁵. No doubt, many global problems there, i.e., climate change, melting of Arctic ice, pollution of the seas and oceans, protection of the marine environment and biodiversity cannot be solved alone or only by the Arctic Five. However, the regional states tend to a precise balance be-

⁶³ Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies. URL: http://www.un.org/ru/documents/decl_conv/conventions/outer_space_governing.shtml (accessed 18 May 2019).

⁶⁴ Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Sea-Bed and the Ocean Floor and in the Subsoil thereof. URL: http://www.un.org/ru/documents/decl_conv/conventions/seabed_wmd_prohibition.shtml (accessed 18 May 2019).

⁶⁵ See, e.g.: Nauchnaya diplomatiya: sotrudnichestvo Rossii i SShA v Arktike [Science diplomacy: cooperation of Russia and the US in the Arctic]. URL: <https://russiancouncil.ru/news/v-rsmd-obsudili-vklad-nauchnoy-diplomatii-v-razvitiie-mezhdunarodnogo-sotrudnichestva-v-arktike/> (accessed 10 July 2019). (In Russ.)

tween the interests of sustainable development and the solution to their problems in environmental, resource, food, and other aspects of national security.

The Russian Federation is in quite tricky conditions. Under the sanctions, on the one hand, Russia retains the extreme interest in the restoration of regional cooperation, and, on the other, it is forced to search for new partners and allies in the Arctic even if their interests and goal-setting are the same. That is why the choice of Arctic partners should be extraordinarily prudent and strategically verified.

References

1. Pedersen T. International Law and Politics in U.S. Policymaking: The United States and the Svalbard Dispute. *Ocean Development & International Law*, 2011, vol. 42, iss. 1–2, pp. 120–135.
2. Vylegzhanin A.N., Zilanov V.K., Savva V.M. *Pravovoy rezhim Shpitsbergena i prilgayushchikh morskikh rayonov* [Legal regime of Svalbard and adjacent marine areas]. Moscow, Norma Publ., 2019. 284 p. (In Russ.)
3. Pilyasov A.N., Kotov A.V. *Potentsial rossiyской Arktiki dlya mezhdunarodnogo sotrudnichestva: doklad № 17/2015* [The potential of the Russian Arctic for international cooperation: report no. 17/2015]. Moscow, Spetskniga Publ., 2015. 120 p. (In Russ.)
4. Pedersen T. The Svalbard Continental Shelf Controversy: Legal Disputes and Political Rivalries. *Ocean Development & International Law*, 2006, vol. 37, iss. 3–4, pp. 339–358.
5. Anderson D.H. The Status under International Law of the Maritime Areas around Svalbard. *Ocean Development & International Law*, 2009, vol. 40, iss. 4, pp. 373–384.
6. Vylegzhanin A.N., Young O.R., Berkman P.A. Governing the Barents Sea Region: Current Status, Emerging Issues, and Future Options. *Ocean Development & International Law*, 2018, vol. 49, iss. 1, pp. 52–78.
7. Pedersen T. Denmark's Policies Toward the Svalbard Area. *Ocean Development & International Law*, 2009, vol. 40, iss. 4, pp. 319–332.
8. *Strany-nablyudateli v Arkticheskom sovete: pozitsiya i motivy deyatel'nosti* [Observer countries in the Arctic Council: position and motives]. Moscow, ANO Publ., 2014. 102 p. (In Russ.)
9. Ivanov I.S., ed. *Aziatskie igroki v Arktike: interesy, vozmozhnosti, perspektivy: Doklad № 26/2016* [Asian players in the Arctic: interests, opportunities, prospects: Report no. 26/2016]. Moscow, RIAC Publ., 2016, 56 p. (In Russ.)
10. Gutenev M.Yu. Arkticheskaya politika Tokio: istoriya i sovremennost' [The Arctic policy of Tokyo: history and modernity]. *Vestnik ZabGU* [Transbaikal State University Journal], 2017, vol. 23, no. 9, pp. 75–83. (In Russ.)
11. Mogilevkin I.M. *Transport i kommunikatsii: proshloe, nastoyashchee, budushchee* [Transport and communications: past, present, future]. Moscow, Nauka Publ., 2005. 356 p. (In Russ.)
12. Zhuravel' V.P. Kitay, Respublika Koreya, Yaponiya v Arktike: politika, ekonomika, bezopasnost' [China, Republic of Korea and Japan in the Arctic: politics, economy, security]. *Arktika i Sever* [Arctic and North], 2016, no. 24, pp. 112–144. (In Russ.)
13. Gutenev M.Yu. Natsional'nye interesy Yuzhnoy Korei v Arktike [National interests of South Korea in the Arctic]. *Problemy dal'nego Vostoka*, 2019, no. 1, pp. 46–53. (In Russ.)
14. Dongmin J., Won-sang S., Seokwoo L. Arctic Policy of the Republic of Korea. *Ocean and Coastal Law Journal*, 2017, vol. 22, no. 1, pp. 85–96.
15. Koivurova T., Kauppila L., Kopra S., Lanteigne M., Shi M., Smieszek M. (Gosia), and Stepien A. in cooperation with Käpylä J., Mikkola H., Pór Nielsson E. and Nojonen M. *China in the Arctic; and the Opportunities and Challenges for ChineseFinnish Arctic Co-operation. Publications of the Government's analysis, assessment and research activities*, 2019. 106 p.
16. Kienko E.V. Mezhdunarodno-pravovaya kharakteristika arkticheskoy politiki Kitaya [International legal framework of the Arctic policy of the people's republic of China]. *Moskovskiy zhurnal mezhdunarodnogo prava* [Moscow Journal of International Law], 2017, no. 3, pp. 18–30. (In Russ.)

17. Berkman P.A., Vylegzhanin A.N., Young O.R. Application and Interpretation of the Agreement on Enhancing International Arctic Scientific Cooperation. *Moskovskiy zhurnal mezhdunarodnogo prava* [Moscow Journal of International Law], 2017, no. 3, pp. 6–17.
18. Fokin Yu.E., Smirnov A.I. *Kirkenesskaya Deklaratsiya o sotrudnichestve v Barentsevom / Evroarkticheskoy regione: vzglyad iz Rossii 20 let spustya* [Kirkenes declaration on cooperation in the Barents / Euro-Arctic region: a view from Russia 20 years later]. Moscow, 2012. 88 p. (In Russ.)

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The UK's interests in the Arctic *

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Abstract. The article analyzes the priorities of British policy in the Arctic. The UK has a long tradition of studying the Arctic and is one of the first observer countries of the Arctic Council. At the same time, the Arctic strategy of London has undergone several significant changes, which are a natural reaction to the changing situation in the region. An analysis of the British Foreign Ministry report 2018 reveals four primary areas of the UK's interest in the Arctic. First, the country's economy continues to rely heavily on the hydrocarbon and bioresources of the Arctic. Secondly, after the outbreak of the Ukrainian crisis and in the conditions of deteriorating relations with Moscow, the British authorities have begun to pay more attention to the security, primarily the military one. Third, an important direction of the UK Arctic policy is to solve the problem of climate change since the country considered one of the world leaders in reducing greenhouse gas emissions. Finally, the development of international cooperation in the region based on scientific diplomacy is one of the priorities of British Arctic politics. However, despite the official documents fixing the priorities of the UK's Arctic strategy, London's Arctic policy is passive. This fact is a reason for British expert criticism.

Keywords: *the UK, the Arctic, Russia, international cooperation in the Arctic, navigation, security, oil and gas, the Arctic Council, Paris Agreement.*

Introduction

Ongoing climate change in the Arctic and the accelerated melting of ice, opening access to the seas of the Arctic Ocean, will inevitably lead to increased international attention to the region. In addition to the Arctic countries, many of which increase activity in the region, non-regional states and associations are interested in it. [1, Konishev V.N. Sergunin A.A., Rykhtik M.I., p. 156]. In 2016, the European Union accepted a document on an integrated policy in the Arctic. China, in early 2018, published a White Paper on the strategy for the Arctic ¹, and Britain revealed ambition concerning the region. In April 2018 Polar Regions Department of the Foreign and Commonwealth Office of Great Britain published a report "Beyond the Ice: UK Policy Towards the Arctic" (Report 2018) ², supplemented by another official document of the state policy in the Arctic — "Adapting

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¹China's Arctic Policy the State Council Information Office of the People's Republic of China January 2018. URL: http://english.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm (accessed 26 May 2019).

²Beyond the Ice UK policy towards the Arctic/HM Government. URL: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/697251/beyond-the-ice-uk-policy-towards-the-arctic.pdf (accessed 26 May 2019).

To Change UK policy towards the Arctic” 2013³. Report 2018 signaled the desire of Britain to hold a leading position in dealing with Arctic issues.

According to experts, the active involvement of non-regional players can lead to the growth of the economic and political contradictions in the Arctic [2, Ivanov I.S., p. 112]. This thesis is not indisputable because the Arctic has always been and remains the region of the mutually beneficial cooperation, legal certainty, low potential for conflict, and war threats [3, Zagorski A. V., pp. 15–18]. At the same time, relations between Russia and the West against the background of the Ukrainian crisis had an impact on the Arctic. It is, first of all, fair for the sphere of military security, in which Western countries have stopped cooperation with Russia. Mutual accusations of militarization in the region and aggressive behavior⁴ are the reality. Against this background, one publication is notable. In February 2019, it was announced the UK Armed Forces were planning to increase their presence in the Arctic, “to protect the northern flank of NATO from Russia”.⁵

These circumstances actualize the question of Britain's role in the Arctic region, its priorities, and the evaluation of official documentation on the issue.

Main points

The United Kingdom follows the logic of some other non-Arctic countries with interest in the Arctic (esp. China) and has positioned itself as a “near-Arctic” state [9, Depledge D., p. 31]. London's main arguments to substantiate its interest in the polar territories are often referred to history and geography. British underline the significant contribution of their representatives in the study of the Arctic since the 16th century. A considerable period of growth in the significance of the Arctic for Britain was the Second World War. Sending Arctic convoys to assist the Soviet Union made the Barents and the Norwegian Sea area a strategic area [5, Murray R.W., Dey Nuttall A., p. 551]. The UK authorities emphasize the northern boundary of the exclusive economic zone of the Shetland islands comes to the Arctic Circle. In these circumstances, Scotland is a significant argument for the justification of the UK presence in the Arctic. Report 2018 mentions Scotland participated in a major international conference Arctic Circle. Moreover, Scotland will shortly develop its national strategy in the Arctic and calls for closer cooperation with the Arctic states⁶. But we should not assume the presence of the British authorities in the Arctic is justified only geographically or historically [6, Ananyev E.V., Antyushina N.M., p. 70].

³Adapting to Change: UK policy towards the Arctic. URL: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/251216/Adapting_To_Change_UK_policy_towards_the_Arctic.pdf (accessed 26 May 2019).

⁴MP Argues That Pompeo Provoked Unnecessarily - Fears for High North Cooperation/High North New. URL: <https://www.highnorthnews.com/en/argues-pompeo-provoked-unnecessary-fears-high-north-cooperation> (accessed 26 May 2019).

⁵Telegraph: Britaniya narastit voennoe prisutstvie v Arktike iz-za Rossii [Telegraph: Britain will escalate its military presence in the Arctic because of Russia]. RIA Novosti. URL: <https://ria.ru/20190218/1550999617.html> (accessed 26 May 2019). (In Russ.)

⁶Cool Britannia: The UK Updates its Arctic Policy. Over the Circle Arctic Politics and Foreign Policy. URL: <https://overthecircle.com/2018/04/06/cool-britannia-the-uk-updates-its-arctic-policy/> (accessed 26 May 2019).

In the UK strategy in the Arctic, four aspects are essential: economy, security, the environment, and international cooperation. At the same time, the state does not have any single body responsible for conducting the state line in the Arctic. The powers are divided between several institutions according to the scope and form a rather complicated system [7, Depledge D., p. 132]. E.g., the authority to address climate issues and issues related to the exploitation of energy resources, assigned to the Department of Energy and Climate Change. Department for Transport and the Maritime and Coastguard Agency are responsible for navigation. Department for Environment, Food and Rural Affairs deals with the exploitation of living resources, incl. fisheries and environmental protection. Arctic research projects are the responsibility of the Department for Business, Innovation, and Skills. Military security issues are related to the Ministry of Defense; the Foreign and Commonwealth Office coordinates British international cooperation in the Arctic.

Economy

One of the main interests of the country above the Arctic Circle remains the solution to energy problems. The UK has its facilities for oil and gas development, but, at the same time, the country is experiencing a significant shortage of hydrocarbons, covered by imports. Britain is one of the first in the world in terms of gas and oil import [6, Ananyeva E.V., Antyushina N.M., p. 71]. In this case, the largest partner of the UK is an Arctic nation — Norway. E.g., in 2017, the UK imported about 75% gas and 50% oil⁷ from Norway. By 2030, the total import oil may rise to 73% [8, Eremina N.V., p. 9].

In this case, the British oil and gas companies are the largest in the world. In 2018, the Anglo-Dutch Shell ranked first in the world in the oil and gas sector (in terms of total income criteria, turnover, assets, etc.), British Petroleum — the 7th⁸. Despite London's involvement in anti-Russian sanctions of Washington and Brussels, both corporations are closely working with Russian partners on Arctic initiatives. Thus, BP owns a 19.75% stake in Rosneft. In 2017, the company launched several joint projects in the Russian Arctic⁹. This contradictory position is explained by the fact that the UK linked its energy interests with Russia, its priority market of hydrocarbons after the collapse of the Soviet Union [8, Eremina N.V., p. 16]. At the same time, in 2012, the British government was seeking to diversify energy sources and signed an agreement with Iceland on geothermal electricity supplied via submarine cables [4, Depledge D., p. 84].

Besides, the UK relates opening transport routes to specific economic prospects in the Arctic. In Report 2018, British experts noted the importance of the Northern Sea Route, the Northwest Passage, and their potential to secure additional short commercial routes between Asia and

⁷UK ENERGY IN BRIEF 2018. URL: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728374/UK_Energy_in_Brief_2018.pdf (accessed 26 May 2019).

⁸The World's Largest Oil & Gas Companies 2018: Royal Dutch Shell Surpasses Exxon As Top Dog. URL: <https://www.forbes.com/sites/clairepoole/2018/06/06/global-2000-oil-gas/#6a0f02801d1b> (accessed 26 May 2019).

⁹BP Strategic Report 2018. URL: <https://www.bp.com/content/dam/bp/en/corporate/pdf/investors/bp-annual-report-and-form-20f-2017.pdf> (accessed 26 May 2019).

Europe¹⁰. London is a world leader in insurances for marine companies, incl. those active in the Arctic. The London-based companies ensure risks associated with oil spills, lifting wrecks lives and health of the crew and passengers, etc. for a multimillion-dollar sum. L.R. (Lloyd's Register) leads a survey for about 25% of the world's icebreaker fleet and is the second-largest community classification (after Russian Marine Register) [4, Depledge D., p. 86].

Besides, the traditional interest of the British authorities are fisheries in the Arctic seas. The country remains one of the largest importers of cod and haddock [4, Depledge D., p. 90]. In 2014, the annual turnover of the UK fishing industry amounted to about 3 billion pounds. 95% of the cod in British stores are caught in the Arctic waters. Among the major suppliers are Canada, Denmark, the Faroe Islands, and Norway [4, Depledge D., p. 91]. In these circumstances, London is following the situation around the fishing industry in the Arctic. It also applies to areas beyond the national jurisdiction of the Arctic Ocean, for which in 2018, it was concluded an international agreement to impose a temporary ban on commercial fishing¹¹.

Security

In Report 2018, more attention is devoted to security compared with documents in 2013. As the British experts' point, it is an indication of the growing concern of London against the changing environment in the Arctic¹². And it is not just about the emerging threats in connection with the intensification of shipping and the lack of search and rescue resources, but also about the challenges of military security. It is evidenced by the statement on the development of military strategy in the Arctic issues by the Ministry of Defense in September 2018 [9, Depledge D., Dodds K., Kennedy-Pipe C., p. 28]. At the moment, the document is under construction and should be published before the end of 2019. The UK recognizes the right of the Arctic states to protect their interests in the High North, but at the same time notes that "the build-up of military resources by some Arctic countries makes the region's future less certain"¹³. Although some countries are not mentioned directly. Given the severe deterioration of relations between Moscow and London on the background of the scandalous case of Skripal, it does not remain doubt that the statement was about our state¹⁴.

It should be noted that the growing attention of the British authorities to the military security in the Arctic is inextricably linked to the events in Ukraine in 2014. The subsequent crisis in relations with Russia affected the estimates of some British politicians of Russia's actions for the modernization of military infrastructure in the region [9, Depledge D., Dodds K., Kennedy-Pipe C.,

¹⁰Beyond the Ice UK policy towards the Arctic.

¹¹Parties to the agreement are the five Arctic coastal states - Canada, Denmark, Norway, Russia, the United States, the four major fishing nations - Iceland, China, South Korea, Japan and the European Union. Rossiya podpisala soglashenie o predotvrashchenii nereguliruemogo promysla v Arktike [Russia signed an agreement on the prevention of unregulated fishing in the Arctic]. TASS, October 3, 2018. URL: <https://tass.ru/ekonomika/5633940> (accessed 26 May 2019). (In Russ.)

¹²Cool Britannia: The UK Updates its Arctic Policy.

¹³Beyond the Ice UK policy towards the Arctic.

¹⁴Cool Britannia: The UK Updates its Arctic Policy.

p. 35]. London sees the Russian Navy Northern Fleet a threat to the northern flank of NATO. However, as British experts noted, the Arctic itself should not become a pretext for a military conflict¹⁵.

Under these conditions, the Arctic has become an essential component in the justification of the British military need to increase defense funding to ensure an adequate response to the “threat” of Russia. For the same purpose, several activities, in conjunction with the allied states, are conducted. So, in 2017 the Royal Navy submarines resumed their work in the Arctic in a joint exercise with the US ICEX. In 2018 the sub-HMS Trenchant held ascent in the Arctic ice for the first time in a decade. Furthermore, British marines are scheduled to constitute the bulk of a military contingent of 800 men, conductive annual exercise in Norway to prepare the test, and the army resources in extreme conditions [9, Depledge D., Dodds K., Kennedy -Pipe C., p. 35].

In matters of cooperation in the field of military security in the Arctic, the 2018 report calls NATO the central platform. The British naval forces hold regular exercises in Norway together with its NATO allies (Britain, Poland, Germany, the Netherlands, the Nordic and the Baltic countries)¹⁶. At the same time, as we know, NATO's serious advancement in the Arctic is hampered by the lack of unity among the member states. Norway and Canada occupy opposing positions: Norwegians are the most consistent supporters of the alliance's expansion activities in the North, whereas Ottawa does not see the need for a more prominent role of the alliance in the Arctic [3, Zagorski A.V., pp. 244–248]. In these circumstances, the United Kingdom seeks to coordinate the efforts of Norway and the United States, forming the so-called “Northern Triangle” of the North Atlantic military cooperation [9, Depledge D., Dodds K., Kennedy-Pipe C., p. 36].

In general, over the past five years, the UK demonstrates its desire for military presence in the Arctic, arguing Russia mainly threatens it. This approach is somewhat contrary to the more traditional British policy in the Arctic, relying on cooperation with the Arctic states to address non-military issues, esp. climate change. Despite this apparent transformation and growth of tension in relations with Moscow, the British experts urge not to consider a new military strategy of the country in the Arctic as a declaration of the Cold War and the arms race [9, Depledge D., Dodds K., Kennedy-Pipe C., p. 36]. Since 2010 the technical resources of the Ministry of Defense in the polar regions declined¹⁷.

In addition to participating in the Arctic activities of NATO, the UK was involved in other security cooperation formats in the region. Since 2011, a round table meeting on Arctic security had been held. The aim was to discuss the security situation in the Arctic informally. In addition to the Arctic countries, the sessions were attended by the military of Great Britain, Germany, the Netherlands, and France. However, since 2014 meetings were held without Russia [10, Zagorskiy A., p. 99].

¹⁵The United Kingdom, Scotland and the Arctic. Arctic Institute. URL: <https://www.thearcticinstitute.org/united-kingdom-scotland-arctic/> (accessed 26 May 2019).

¹⁶House of Lords Select Committee on the Arctic - Report of Session 2014-15, UK Parliament. URL: <https://publications.parliament.uk/pa/ld201415/ldselect/ldarctic/118/11809.html> (accessed 26 May 2019).

¹⁷House of Lords Select Committee on the Arctic.

Concerning non-military threats, in 2014, The UK National Strategy for Maritime Security¹⁸ stated that the opening of the northern route, along with an economic interest, is a potential threat to the safety of navigation. The interest in shipping problems is also determined by the fact that London took an active part - through the International Maritime Organization and the Arctic Council Working Group PAME - in the development and adoption of the Polar Code, which entered into force in 2017 and contains requirements for ships, functioning in arctic waters. It entered into force in 2017 and contained requirements for ships operating in Arctic waters. Britain is an advocate of strict environmental restrictions for navigation: e.g., the gradual introduction of zero-emissions requirements for vessels in polar seas¹⁹.

Climatic direction

Britain focuses on the relationship of climate change in the Arctic and the other regions of the world, esp. the UK territory. In this regard, the UK stresses the need to achieve sustainable development in the Arctic, considering the importance of environmental protection measures. Report 2018 reveals the country intends to participate in the development of standards for the protection of the Arctic marine environment, the prevention of plastic pollution, and keeping biodiversity and ecosystems. In this area, London is celebrating its contribution to reducing greenhouse gas emissions, incl. global climate instruments. The most important tool is called the Paris Agreement within the United Nations Framework Convention on Climate Change (UNFCCC) [11, Kopylov M.N., Kopylov S.M., Mohammad S.M.A., p. 139]. It calls not to let the global average temperature exceed by 2°C and take measures not to exceed the level of 1.5°C²⁰. The Paris Agreement (2015) is enforced since 2016, approved by 55 states that share 55% of global greenhouse gas emissions. London ratified the agreement at the end of November 2016.

It should be noted that the United Kingdom stood at the origins of approaches to the solution of global climatic problems [12, Gray T.S., p. 125]. Back in 1989, speaking at the UN, Prime Minister Margaret Thatcher said of the need to promote international cooperation in this area²¹.

The critical piece of legislation in Britain that shapes the national climate policy is a law adopted in 2008, i.e., Act on Climate Change. The document became the world's first legally binding national legal action to deal with climate change by reducing greenhouse gas emissions. The purpose of the law is to reduce the total emissions of greenhouse gases in the country to 2050 (by 80% compared to the level of 1990²²). This goal was subsequently enshrined in the national contribution of the country to reducing global emissions within the Paris agreement.

¹⁸The UK National Strategy for Maritime Security in 2014. URL: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/310323/National_Strategy_for_Maritime_Security_2014.pdf (accessed 27 May 2019).

¹⁹Beyond the Ice UK policy towards the Arctic.

²⁰Paris agreement. United Nations Framework Convention on Climate Change. 2019. URL: https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_russian.pdf (accessed 16 May 2019).

²¹Proročeskij dar Margaret Tetčer i izmernenie klimata [Prophetic gift of Margaret Thatcher and climate change]. UN News. 19.04.2013. URL: <https://news.un.org/ru/audio/2013/04/1017611> (accessed 16 May 2019).

²²UK Climate Change Act 2008. The National Archive. URL: http://www.legislation.gov.uk/ukpga/2008/27/pdfs/ukpga_20080027_en.pdf (accessed 16 May 2019).

Despite the British interest in the development of Arctic hydrocarbons, the country is one of the world leaders in reducing greenhouse gas emissions and energy decarbonization [13, Pugachev A.V., p. 109]. The United Kingdom is rapidly reducing the use of coal. In 2015, the Ministry of Energy had announced plans to stop using coal by 2025. In 2019, the economy of the United Kingdom (for the first time since the beginning of the industrial age) could function without coal for a week. An essential tool is to be a gradually increased tax on greenhouse gas emissions²³.

According to the Department for Environment, Food & Rural Affairs, the implementation of the Act on Climate Change and the promotion of low-carbon economy allowed the country to cut emissions by 40% by 2018 compared to 1990²⁴. It is 6% more milestones laid down in the Act. It may be noted that over the past ten years the British economy grew by more than two-thirds. It is the best indicator per capita than any other country of the “Big Seven” has. At present, renewable energy accounts for about 23% of the total generating capacity of the country.

Britain plans to strengthen its actions to deal with climate change. After the analysis of the special report of the Intergovernmental Panel on Climate Change released in October 2018²⁵, the UK's government notified about the intentions to review climate policy and tighten it. The new target can be “zero emissions” of greenhouse gases in 2050²⁶. Thus, the United Kingdom will contribute to achieving the ambitious goals of the Paris Agreement. It is important to stress that the UK climate policy is not interrelated with the US. The latter announced its withdrawal from the Paris Agreement and is now sabotaging it at the international level, incl. the Arctic organizations²⁷. Difficulties in reaching new climate policy objectives can be associated with Brexit, as the EU funds several prominent British environmental programs.

International cooperation and science diplomacy

International cooperation in the Arctic is one of the priorities for the UK. The UK Arctic Strategy, adopted in 2013, emphasizes that the starting point of international governance and regulation in the region is the sovereign rights of the Arctic states themselves, as well as international treaties and conventions, among which the UNCLOS 1982 stands out. The country has become one of the first observers to the Arctic Council in 1998, two years after its establishment. Reports 2013 and 2018 note the critical role of the AC in establishing Arctic cooperation, despite

²³ Evans S. UK coal use to fall to lowest level since industrial revolution. Carbon Brief. 15.01.2015. URL: <https://www.carbonbrief.org/uk-coal-use-to-fall-to-lowest-level-since-industrial-revolution> (accessed 16 May 2019).

²⁴ Most detailed picture yet of changing climate launched. UK Department for Environment Food & Rural Affairs 2018. URL: <https://www.gov.uk/government/news/most-detailed-picture-yet-of-changing-climate-launched> (accessed 16 May 2019).

²⁵ Global Warming of 1.5 °C. IPCC Special Report. 2018. URL: <https://www.ipcc.ch/sr15/> (accessed 16 May 2019).

²⁶ Velikobritaniya peresmotrit dolgosrochnye celi po klimatu [UK will review the long-term goals for climate]. News agency TASS. 20.04.2019. URL: <https://tass.ru/plus-one/5146239> (accessed 16 May 2019).

²⁷ Somini Sengupta United States Rattles Arctic Talks with a Sharp Warning to China and Russia. The New York Times. 05.06.2019. <https://www.nytimes.com/2019/05/06/climate/pompeo-arctic-china-russia.html> (accessed 16 May 2019).

the lack of competence to address military security issues. Developing bilateral collaboration with the Arctic countries and other interested players, Britain stands for scientific diplomacy²⁸.

According to the notes of the UK Parliament hearings on Arctic issues, the scientific achievements of the country are the most significant²⁹. Britain is considered one of the leading states in Arctic research. About 9% of all scientific publications on Arctic issues are authored (and co-authored) by British organizations³⁰. In particular, the UK is a world leader in the study of the cryosphere and biodiversity, climate change in the Arctic, and Greenland's ice cover. Since 1991, a British research station has been operating in Ny-Ålesund (Svalbard Archipelago). The head of the state scientific organization is the British Natural Environmental Research Council. Its functions include financing and coordination of research activities of the British scientific organizations [6, Ananyeva E.V., Antyushina N.M., p. 72]. NERC Arctic Office was established with headquarters in Cambridge. In 2012–2017, NERC invested in the study of the Arctic more than 30 million pounds³¹. For the next five years, it is planned to finance the Changing Arctic Ocean program for 16 million pounds³².

However, the British Parliament notes that the Arctic is far from being the full scientific potential of the country. Science is funded situationally, depending on specific projects. No clear national strategy for research exists due to a lack of British scientists in international Arctic institutions, incl. the working groups of the Arctic Council³³.

In addition to conducting its research in the Arctic, the UK is a member of European joint projects and programs, e.g., EU-PolarNet. Financing of such projects (before Brexit) wholly or partially comes from the EU budget. Report 2018 notes that cooperation with the EU will be exceedingly complicated after Brexit. However, much will depend on the future agreement on Brexit³⁴.

Conclusion

The analysis of the Report 2018 suggests the growing importance of the Arctic in the foreign policy of Great Britain. However, British experts noted the country's behavior in the Arctic had always been somewhat “reactive” rather than “proactive” [8, Eremina N.V., p. 10]. On the one hand, search for reasons why the Arctic will benefit the UK economy and security is continued. British authorities realize that the country will be welcomed in the Arctic only as a partner. They seek to persuade the international community of its utility for the Arctic by issuing this report.

At the same time, it is due to these circumstances and despite the apparent deterioration of relations with Moscow and attempts to see the aggressive intentions of Russia in its Arctic mili-

²⁸ Beyond the Ice UK policy towards the Arctic.

²⁹ House of Lords Select Committee on the Arctic.

³⁰ Ibid.

³¹ The United Kingdom, Scotland and the Arctic.

³² Beyond the Ice UK policy towards the Arctic.

³³ House of Lords Select Committee on the Arctic.

³⁴ Beyond the Ice UK policy towards the Arctic.

tary infrastructure, London will consider the Far North a region of mutually beneficial cooperation of all countries concerned, and not an arena for military confrontation.

References

1. Konyshev V.N., Sergunin A.A., Rykhtik M.I. Arkticheskaya strategiya evropeyskikh stran: problemy i perspektivy [Arctic strategy of European states: problems and prospects]. *Arktika: zona mira i sotrudnichestva* [Arctic: zone of peace and cooperation]. Ed. by A. Zagorskiy. Moscow, IMEMO Publ., pp. 156–169. (In Russ.)
2. Ivanov I.S., ed. *Arkticheskii region: Problemy mezhdunarodnogo sotrudnichestva: khrestomatiya: v 3 t.* [Arctic region: problems of international cooperation]. Moscow, Aspekt-Press Publ., 2013, vol. 3. 663 p. (In Russ.)
3. Zagorskiy A.V., ed. *Mezhdunarodno-politicheskie usloviya razvitiya Arkticheskoy zony Rossiyskoy Federatsii* [International political development of the Arctic Zone of the Russian Federation]. Moscow, Magistr Publ., 2015. 304 p. (In Russ.)
4. Depledge D. *Britain and the Arctic*. Basingstoke: Palgrave Macmillan, 2018, 142 p. DOI: 10.1007/978-3-319-69293-7
5. Murray R.W., Nuttall A.D. *International Relations and the Arctic: Understanding Policy and Governance*. Cambria Press Publ., 2014. 725 p.
6. Ananyeva E.V., Antyushina N.M. Arkticheskaya politika Velikobritanii [The Arctic policy of the UK]. *Arktika i Sever* [Arctic and North], 2016, no. 24, pp. 61–70. DOI: 10.17238/issn2221-2698.2016.24.68 (In Russ.)
7. Depledge D. The United Kingdom and the Arctic in the 21st Century. *Arctic Yearbook 2012*, pp. 130–138.
8. Eremina N.V. Arkticheskii vektor britanskoy uglevodorodnoy strategii [Arctic vector of British energetic strategy]. *Sovremennye issledovaniya sotsial'nykh problem* [Russian Journal of Education and Psychology], 2017, vol. 8, no. 3, pp. 6–28 (In Russ.)
9. Depledge D., Dodds K., Kennedy-Pipe C. The UK's Defence Arctic Strategy. *The RUSI Journal*, 2019, no. 164 (1), pp. 28–39. DOI 10.1080/03071847.2019.1605015
10. Zagorskiy A.V. *Nestrategicheskie voprosy bezopasnosti i sotrudnichestva v Arktike* [Conventional security and cooperation in the Arctic]. Moscow, IMEMO Publ., 2016, 104 p. DOI 10/20542/978-5-9535-0492-8 (In Russ.)
11. Kopylov M.N., Kopylov S.M., Mokhammad S.M.A. Formirovanie global'noy ekologicheskoy politiki i mezhdunarodnykh rezhimov mezhdunarodnogo ekologicheskogo upravleniya: per aspera ad astrum [Formation of global ecological policy and international regimes for international ecological management: per aspera ad astrum]. *Vestnik VolGU. Ser. 5: Yurisprudentsiya* [Science Journal of Volgograd State University. Jurisprudence], 2015, no. 2, pp. 138–148 (In Russ.)
12. Gray T.S. *UK Environmental Policy in the 1990s*. Palgrave Macmillan Publ., London, 2016, 308 p. DOI <https://doi.org/10.1007/978-1-349-24237-5>
13. Pugachev A.V. Ekologicheskaya politika v nekotorykh evropeyskikh stranakh: razlichnye podkhody [Environmental policies in some European countries: different approaches]. *Vestnik KemGU* [Bulletin of Kemerovo State University], 2014, no. 3 (59), pp. 109–111 (In Russ.)

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Migration attitudes and mechanisms for attracting young people to the Russian Arctic *

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Abstract. In this article, the author considers the migration outflow of the population from the Russian Arctic, a significant part of which are representatives of the socially active youth. A study of young people's motivations to move to a permanent or temporary place of residence in the Arctic showed that the idea of a region dominates the consciousness of this social group, characterized more by negative associations, such as "ice", "cold" and "snow". Nevertheless, some specific material incentives that, according to respondents, would positively influence a possible decision to relocate revealed. We are talking about providing additional paid vacations and rental housing. It was also possible to establish approximate boundaries of the minimum wage enough to decide on moving. The author claims that the socio-economic conditions changed after the collapse of the USSR. The state labor policy in the Arctic requires clarification concerning the discussed development options. Also, it demands the coherence of all measures taken at the legislative level in the context of speedy adoption of the fundamental law on the Russian Arctic. It is necessary to continue the policy of supporting various volunteer organizations as the most active and mobile structures for informing young people about employment opportunities in the Arctic and involving their representatives in socially useful activities.

Keywords: *Russia, the Arctic, the Russian Arctic, youth, government policy, demography, volunteer, North.*

Introduction

One of the main problems of the Russian Arctic remains rapid population decline. The collapse of the Soviet Union and the subsequent degradation of public utilities of several Arctic cities [1, Konyshov V.N., Sergunin A.A., Subbotin S.V., p. 1190] have caused mass migration to central and southern Russia, i.e., 30–50% of the entire Arctic territory [2, Pilyasov A.N., p. 232]. Some researchers noted that even more massive migration was not possible because about 95% of residents of the North did not have sufficient savings [3, Andrienko Y., Guriev S., p. 11].

A factor for migration from northern areas compared to the rest of the country was initially a relatively young and educated population in the North [4, Heleniak T.E., p. 39]. Returning to the historical homeland of the predominantly socially active groups has led to an increase in the North share socially disadvantaged citizens, which is a detrimental impact on regional budgets [5, Vityazeva V.A., Kotyrlo E.S., p. 85], worsening the already negative situation. Today, Russia is "back" to the Arctic, determines its priorities for the long-term development of the region [6, Mikkola J., Käpylä H., p. 163] and implements infrastructure projects. Labor shortage requires attention.

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In the table below, we can see that in most of the Russian Arctic territories has been a steady outflow of population. In absolute terms, the Murmansk Oblast lost more people than the other areas. In 2010–2018, it was 41 852 people. But at the same time, it is the most populated the territory of the Russian Arctic. In percentage terms, the most significant losses are in the Republic of Karelia and the Komi Republic (-17.11% and -19.34% compared to 2010, respectively).

Table 1

Dynamics of the population in the Arctic zone of the Russian Federation in 2010–2018.

Territory	Year						Total decrease (2010-2018)
	2010	2014	2015	2016	2017	2018	
Arkhangelsk Oblast	664,465	656,624	655,100	652,867	650,755	646,899	-17,566 (-2,64%)
Krasnoyarsk Krai	229,392	228,493	226,935	227,546	227,220	227,972	-1 420 (-0,62%)
Murmansk Oblast	795,409	771,058	766,281	762,173	757,621	753,557	-41,852 (-5,26)
Nenets AO	42 090	43 025	43 373	43 838	43 937	43 997	1 907 (4,53%)
Republic of Karelia	51 634	47 432	46 186	45 070	44 301	42 799	-8 835 (-17,11%)
Komi Republic	95 854	84 707	82 953	81 442	80 061	77 314	-18,540 (-19,34%)
Republic of Sakha (Yakutia)	28 325	26 488	26 182	26 147	26 210	26 063	-2 262 (-7,99%)
Chukotsky AO	50 526	50 555	50 540	50 157	49 822	49 348	-1 178 (-2,33%)
Yamal-Nenets AO	522,904	539,671	539,985	534,104	536,049	538,547	15 643 (2,99%)

Territories with positive dynamics: Nenets AO (4.53%) and Yamal-Nenets AO (2.99%). In the Arctic, a minimal decrease had the Krasnoyarsk Krai (-0.62%) and the Chukotsky AO (-2.33%). The most significant outflow of population occurred in the European part of the Russian Arctic, the most urbanized and industrialized one.

The growth of the population in the Russian Arctic was due to the inclusion of some territories of the Republic of Karelia in 2017 (Fig. 1). Without the addition, the decline amounted to about 8 000 people, and, in general, it would be consistent with the general trend [7, Galimullin E.Z., p. 271].

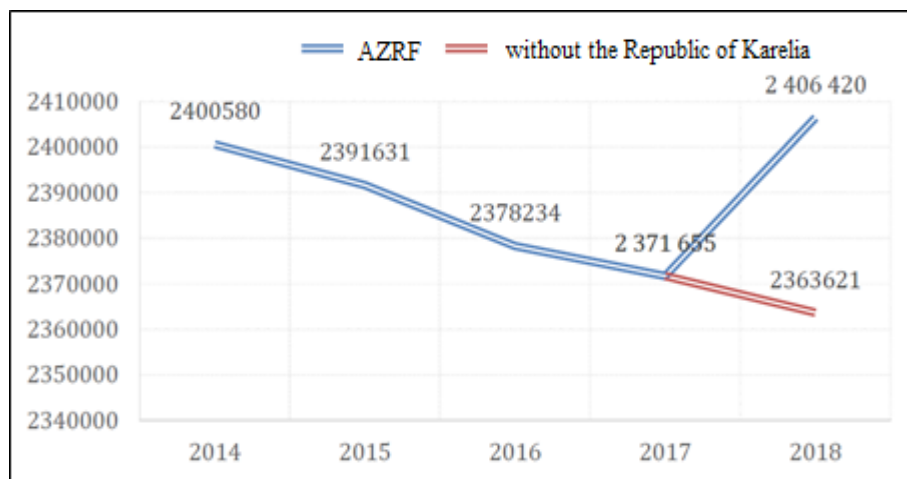


Fig. 1. Dynamics of the population of the Russian Arctic.

We are talking about the outflow since, as the researchers note, the decline of the population is provided mainly by out-migration [8, Ivanova M.V., p. 184]. Moreover, the recent decline comes amid a natural increase that, to some extent, performs compensating function [9, Tatarkin A.I., Loginov V.G., Zakharchuk E.A., p. 15].

Setting up the issue

A survey by the Netherlands 1998 identified three main reasons for the migration in the northern regions: “We have always viewed our presence in the North as a temporary” (29%), “stay in the North became meaningless” (27%) and “want to return to native land, to relatives and friends”(23%) [10]. Today, people are leaving the Arctic due to the reduction of benefits [11, Volgin N.A., Shirokova L.N., Mosina L.L., p. 38] and lack of prospects for further education and work [8, Ivanova M.V.].

Some authors have noted the deeper systemic causes depopulation of the Arctic zone, e.g., a normal interregional differentiation in the socio-economic development [12, Leksin V.N., Porfiryev B.N., p. 988]. Arctic issues, according to some researchers, are the result of nationwide problems, caused by the difficulties of transition to market economy and privatization of state property [13, Andreassen N., p. 82] but: this macro-region of the country to the greatest extent absorbed the socialist policies of the location and development of productive forces [14, Leksin V.N., Porfiryev B.N., p. 117]. So, the problems there require more effort to resolve them.

Most mobile group of population in the Arctic is the youth: the desire of its representatives to receive a quality education, and dissatisfaction with the socio-economic situation and the lack of job prospects correspond to national trends [8, Ivanova M.V., p. 187]. The Soviet Union has built an entire system to attract skilled young workers to the Far North, incl. various kinds of allowances and increased regional coefficients. Recently, the current size of these payments is lower than the differences in the cost of living compare with the average for Russia [11, Volgin N.A., Shirokova L.N., Mosina L.L., p. 40], not to mention the differences in living standards in the broadest sense. However, it is worth noting that the migration attitudes among young people are high, not only in Russia.

The results of a study showed that 74% of young people in the Barents Region seriously think about migration [15, Tuhkunen A., p. 145].

Due to the lack of the fundamental law on the Arctic zone of the Russian Federation, discussions on how to develop the macro-region and a possible rate for shift method, great importance is an understanding of the new motivation of young people for a living and working in the Arctic.

Methods and Results

In October 2018 — January 2019, we and at the Project Office on the Development of the Arctic (PODA) completed a study of the Russian youth (age 18–33; 100 people) living outside the Arctic region. The idea was to identify favorably and, on the other hand, the factors hindering a possible move to a temporary or permanent residence in the Russian Arctic. A specially designed questionnaire included nine questions. Respondents were asked to select one or several answers. The survey had two stages:

- October 31: full-time participation and responses to a questionnaire at the “Day of the Arctic” event; the questionnaire was developed within the project supported by the PODA grant, during the Arctic Expedition in Helsinki, September 5–7;
- October 1 — January 31: Internet questionnaire (through social networking, friends, and acquaintances of the author from different cities; the relevant target group criteria).

A working hypothesis: modern Russian youth living outside the Russian Arctic is rather poorly informed about the Arctic, but it has fragmented, disparate notions of severe natural conditions and relatively high incomes of northerners. The objectives of the study: determination of current migration sentiments of youth, setting some specific indicators of motivation to live and work in the Arctic, and the data obtained were compared with the results of similar surveys.

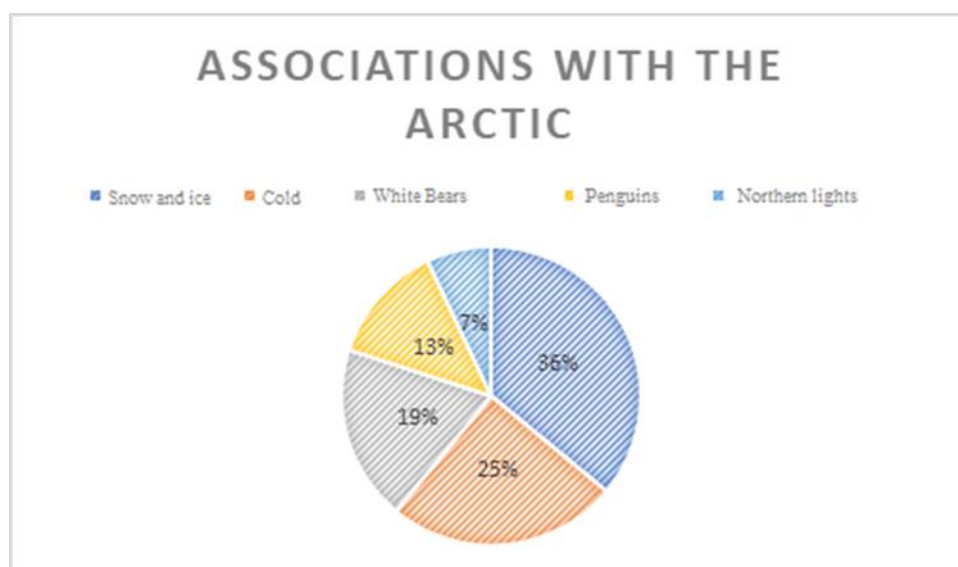


Fig. 2. The percentage ration of associations of the respondents.

More than half of respondents associate the Arctic with cold, snow, and ice (Fig. 2), and it is wholly correlated with some other similar studies [16, Nazukina M.V., p. 61]. In the last two terms, during the analysis of the results, we have united in one position. It is two states of the same sub-

stance. The third most popular association was a White (polar) bear, then — Penguins and northern lights.

It would be interesting to make two points. First, the penguins do not live in the Arctic. It is evident that here we have the influence of various commercials and ignorance of the difference between the Arctic and Antarctica. Almost no absence of associations with the Arctic Ocean, an integral part of the whole region, confirms that. Three most popular associations are objective, but negatively stained, i.e., have no positive influence on the decision about a possible move to the northern regions.

The results show rather weak awareness of the youth about the Arctic region, confirmed by other surveys (Fig. 3.) — e.g., the one conducted by REGNUM in 2017 (61,895 people participated) ¹.

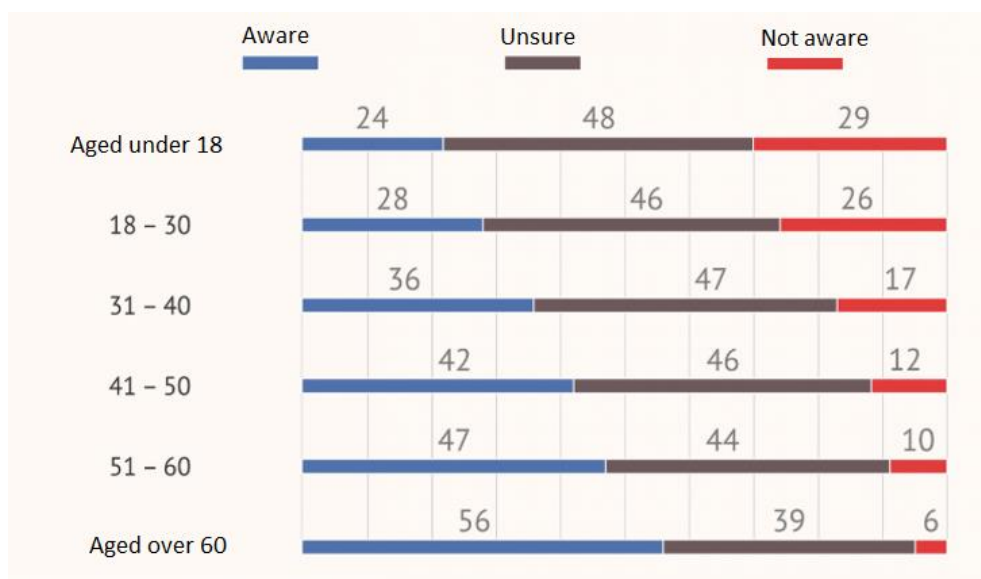


Fig. 3. The proportion respondents by assessments of their awareness of the Arctic issues, different age groups, %.

Federal and regional authorities could organize an information campaign aimed at the promotion of the Arctic tourism brand and attracting young professionals of high wages in the Arctic zone of the Russian Federation. It is so not just for shift workers, but also for the public sector ².

Most young people (60%) do not plan to move to the Arctic areas of Russia in the next 10–15 years (Fig. 4).

¹ Bolee poloviny molodyozhi schitaet osvoenie Arktiki vazhnym [More than half of young people consider exploration of the Arctic important]. REGNUM. URL: <https://regnum.ru/news/economy/2344640.html> (accessed 30 May 2019). (In Russ.)

² Kak zainteresovat' molodyozh' ostavatsya v Arktike [How to make young people be interested in staying in the Arctic]. Parliamentskaya gazeta [Parliamentary newspaper]. URL: <https://www.pnp.ru/social/kak-zainteresovat-molodezh-ostavatsya-v-arktike.html> (accessed 05 May 2019). (In Russ.)



Fig. 4. The percentage of responses by a specified grade (1 — minimum probability; 5 — maximum).

Among the factors that negatively affect the decision about a possible move, respondents notably marked the harsh climatic conditions (half of the respondents assessed its harmful impact with the maximum grade), poor quality of life and the distance from the large cities of the European part of Russia (Fig. 5). Curiously, crime and lousy ecology had not influenced the decision to move: 56% and 46%, respectively. The resume of the comments could be reduced to the following: “quality of life is not so important if you come for a short time, for earning; and a crime and bad ecology are equally present everywhere in our country, regardless of area.”

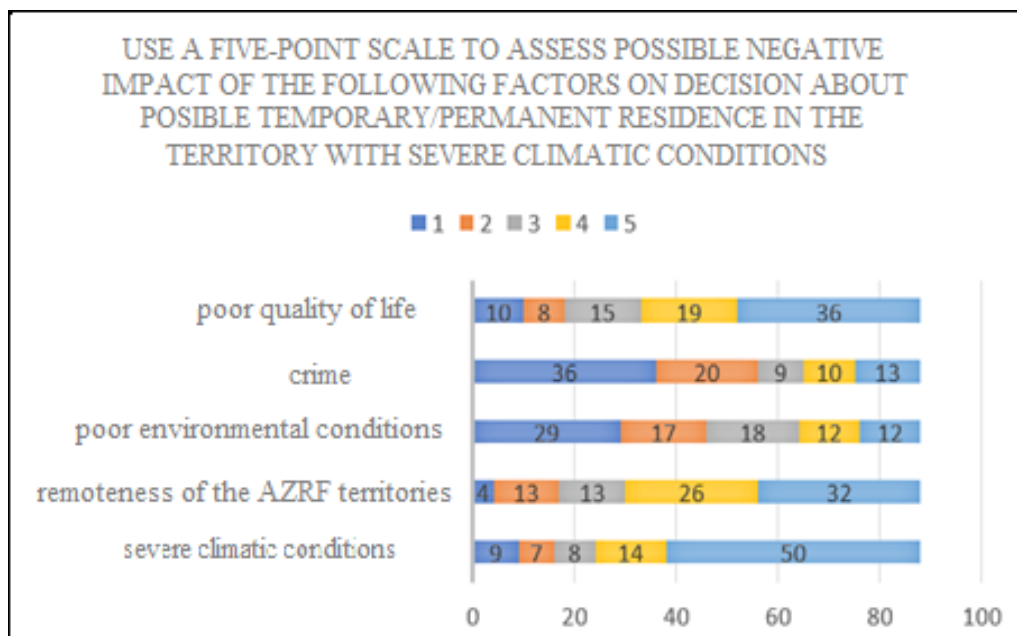


Fig. 5. The percentage of responses by a specified grade (1 — minimum probability; 5 — maximum).

Additional paid leave and rental housing have been named notable for a favorable decision about the move (Fig. 6).

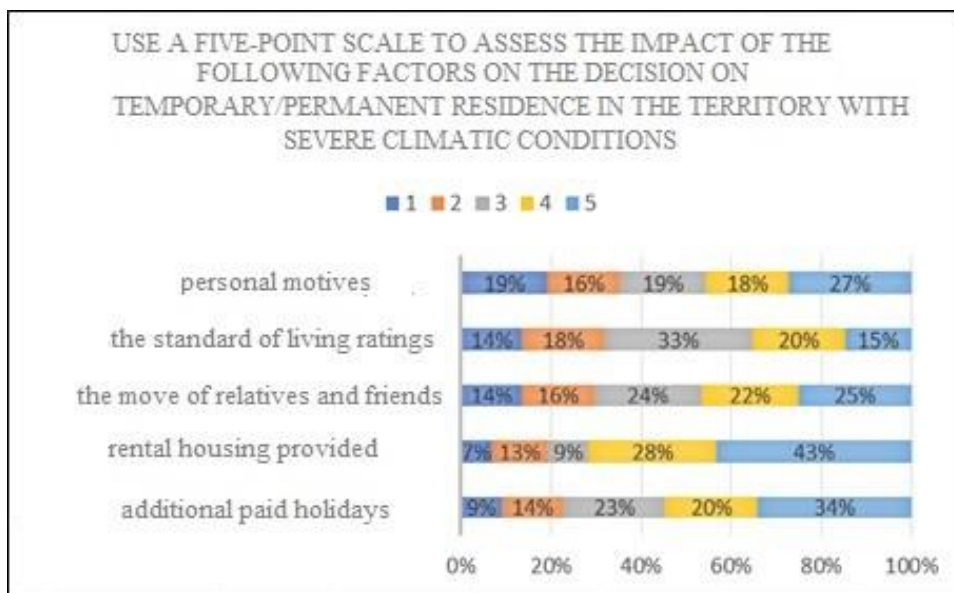


Fig. 6. The percentage of responses by a specified grade (1 — minimum probability; 5 — maximum).

These factors had determined the migratory behavior of the youth in recent decades. According to the results of similar surveys, it has been found, e.g., 76% and 26% of the students in the Murmansk Oblast called the high wages and free housing incentives to live and work in the Arctic [17, Lazhentsev V.N., p. 199]. Among the other essential factors: “improving living conditions,” “improving the quality of medicine,” “regulation of prices.”

Interesting was the question of the lower wage boundary: half of the respondents said 100–200 thousand rubles. Almost every five (18%) would be satisfied with 100 thousand rubles, and 26% of respondents would like to get more than 200 thousand rubles (Fig. 7). Last year, the research team of the St. Petersburg Mining University received data, according to which young people were not planning to move to the Arctic but could do it for 270 thousand rubles per month. Young people who considered living in the Arctic were ready to do it for 150-200 thousand rubles per month [18, Nikulina A. et al., p. 94].

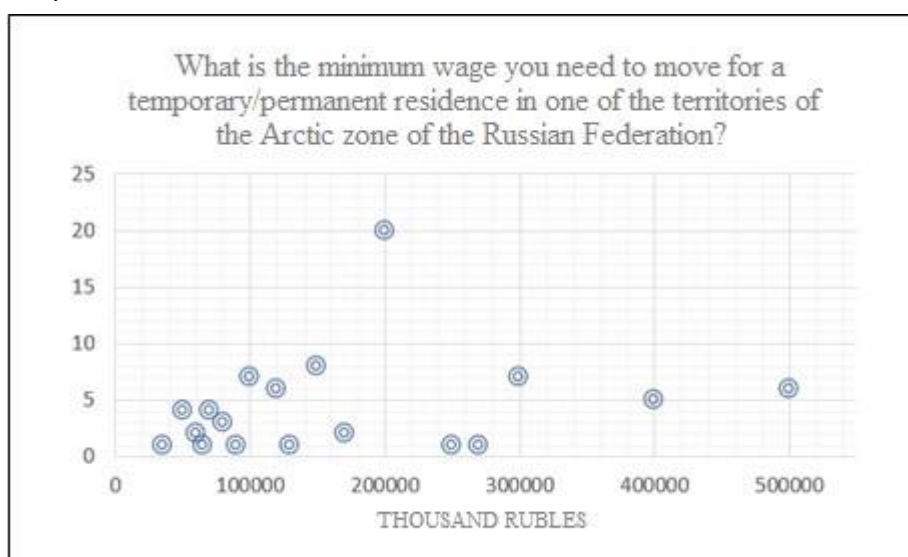


Fig. 7. The percentage of responses by a specified grade (1 — minimum probability; 5 — maximum).

Discussion

Thus, despite the clear and logical lack of desire of the Russian youth to move to the Russian Arctic, well-defined and measurable factors exist and could help to attract people to the region. Even considering the presence of substantial Soviet experience, in modern conditions, we need a fundamentally new socio-economic mechanism to attract and retain people in the newly developed areas of the North and the Arctic. Some authors point out the concept of youth migration policy, economic mechanism of crediting of population migration, and measures to attract and retain population in newly developed areas of the North and the Arctic [19, Fauzer V.V., p. 78]. This question should be approached comprehensively. Young people are interested in rental housing and a high income, but also, they need developed infrastructure: cinemas, parks, airports, malls, etc.³

We cannot say that the Russian authorities do not pay attention to attracting young people to the Arctic region: several initiatives have been taken by Rosmolodozh^{4,5} to organize training for the Arctic in 2009. In Arkhangelsk, Northern (Arctic) Federal University named after M.V. Lomonosov (NArFU) was established. Reducing the outflow of scientific and technical personnel, increase in demand for highly skilled scientific and technical staff, and more active involvement of young professionals and scientists have been designated as the expected results of one of the sub-programs of the Russian Federation “Socio-economic development of the Russian Arctic.” It was recently extended to 2025⁶.

Since 2014, the Interregional public organization “The Green Arctic” is operating to address environmental problems⁷. Its headquarters is in Salekhard. At the local level, we should mention the Arctic Youth Competence Center⁸, created in 2016 under the Committee on Youth Policy and Interaction with NGOs of Saint-Petersburg Government. Also noteworthy is the educational activities of the national park “Russian Arctic”⁹, formed in 2011 by the Ministry of Natural Resources and Environment. Work in this direction should be continued.

³ Molodyozh' ne hochet rabotat' v Arktike dazhe za 270 tysyach v mesyac [Young people do not want to work in the Arctic, even for 270 thousand a month]. *Forpost Severo-Zapad*. [Outpost North-West]. URL: <https://forpost-sz.ru/a/2019-05-24/molodyozh-ne-khochet-rabotat-v-arktike-dazhe-za-270-tysyach-v-mesyac> (accessed 30 May 2019). (In Russ.)

⁴ Mezhdunarodnyy molodyozhnyy obrazovatel'nyy forum “Arktika. Sdelano v Rossii” [International Youth Educational Forum “The Arctic. Made in Russia”]. *Rosmolodezh* [Russian Youth]. URL: <https://fadm.gov.ru/activity/events/arctic> (accessed 06 May 2019). (In Russ.)

⁵ Molodyozhnyy den' Mezhdunarodnogo arkticheskogo foruma “Arktika — territoriya dialoga” [Youth Day at the International Arctic Forum “The Arctic - Territory of Dialogue”]. *Rosmolodezh* [Russian Youth]. URL: <https://myrosmol.ru/measures/view/24234> (accessed 06 May 2019). (In Russ.)

⁶ RF potratit na osvoenie Arktiki bolee 160 mlrd rubley do 2025 goda [Russian Federation spends more than 160 billion rubles on the development of the Arctic until 2025]. TASS. URL: <https://tass.ru/ekonomika/4521028> (accessed 07 May 2019). (In Russ.)

⁷ Zelyonaya Arktika. O nas [Green Arctic. About us]. URL: <http://greenarctic.ru/about/> (accessed 06 May 2019). (In Russ.)

⁸ Arkticheskyy molodyozhnyy tsentr kompetentsii. Pravitel'stvo Sankt-Peterburga [Arctic Youth Competence Center. Government of St. Petersburg]. URL: <https://kmpm.gov.spb.ru/arkticheskij-molodezhnyj-centr-kometencij/> (accessed 06 May 2019). (In Russ.)

⁹ Russkaya Arktika. O parke [Russian Arctic. About the park]. URL: <http://www.rus-arc.ru/ru/AboutPark/History> (accessed 06 May 2019). (In Russ.)

Grant programs provide opportunities for the public initiative to popularize the Arctic theme. E.g., since 2017, Project Office for the Arctic development distributed more than 100 grants. For the same period, Presidential support was granted to only four projects. They received funding and apparent opportunities for growth ¹⁰.

No less necessary are and the measures by the organizations operating in the Arctic region to create a sustainable talent pool and increase employee motivation. Providing a tour to the Black Sea or the Mediterranean coast, e.g., is practiced at PJSC "FosAgro," whose flagship company — JSC "Apatit" is in the Murmansk Oblast ¹¹.

However, the importance in the context of the Russian Arctic development and labor shortages is the law on the Arctic zone, which will probably be adopted later this year. Some scholars explain the failure of all previous attempts of its adoption by the lack of a holistic foundation and "ideological core" [20, Pilyasov A.N., Kuleshov V.V, Seliverstov V.E., p. 15] for such a fundamental legal act, the lack of detailed knowledge of the problem and abstracting from the previous experience [21, Zhukov M.A., Kraynov V.N., p. 4]. The complete legal form of the AZRF as a state regulation object will, we believe, be a full understanding of the long-term goals and objectives as well as specific mechanisms for their achievement and implementation.

Regional leaders have significant work for the branding of territories. Its results can not only attract young people for permanent/temporary residence but also increase the tourist flow necessary to create a logical structure of the organizational and legal conditions, considering the experience of the other Arctic states [22, Dawson D., Johnston M., Stewart E.]. A decisive step in this direction that sets the strategic priorities for the development was the recent approval of the concept of the federal target program "Development of domestic tourism in the Russian Federation (2019–2025 years)" (approved by the Federal Government on May 5, 2018, No. 872-r). An entire chapter is devoted to the development of a promising tourist investment project, "Russian Arctic." The document also underlined the importance of policies to create an environment to encourage youth's interest in the historical and cultural heritage of Russia ¹².

Conclusion

The solution to the population outflow problem in the Russian Arctic and attracting labor resources requires a comprehensive approach. Numerous government initiatives, in our opinion, work much better if a law on the Russian Arctic will be adopted. The conditions of the Arctic settlement policy of the USSR had changed. These changes happened due to common reasons for all Russia.

¹⁰ Presidential Grand Foundation. URL: <https://prezidentskiegranty.rf> (accessed 30 May 2019). (In Russ.)

¹¹ Molodezh' ne hochet rabotat' v Arktike dazhe za 270 tysyach v mesyac [Young people do not want to work in the Arctic, even for 270 thousand a month]. *Forpost Severo-Zapad* [Outpost North-West]. URL: <https://forpost-sz.ru/a/2019-05-24/molodyozh-ne-khochet-rabotat-v-arktike-dazhe-za-270-tysyach-v-mesyac> (accessed 30 May 2019). (In Russ.)

¹² Konceptsiya federal'noy tselevoy programmy "Razvitie vnutrennego i vyezdnoy turizma v Rossijskoy Federatsii (2019–2025 gody)" (utverzhdena rasporyazheniem Pravitel'stva Rossijskoy Federatsii ot 5 maya 2018 g. № 872-r) [The concept of the federal target program "Development of domestic tourism in the Russian Federation (2019–2025 years)" (approved by the Federal Government on May 5, 2018 No 872-r)].

The current Far North policy requires a revision in the context of the state's strategic priorities, goals, and objectives for the sustainable development of the Arctic.

At the end of our research, we found out that despite the general reluctance of Russian youth to move to the Russian Arctic, as well as the superficial notion of the region, quite specific, measurable, and quantitative indicators exist. First, it is financial incentives: rental housing, higher wages, and additional paid holidays. And only after that young people think about personal motives, moving of family members, etc. These rates and a broad awareness-raising campaign on the possibilities for young people in the Arctic should be a ground for current state policy in the region. It is gradually gaining institutional and regulatory clearance now.

We hope our study and other surveys will serve both a fundamental basis for further monitoring of the situation and a tool to improve the socio-economic policy in the Russian Arctic.

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References

1. Konyshov V.N., Sergunin A.A., Subbotin S.V. Sotsial'naya mobil'nost' v rossiyskoy Arktike [Social mobility in the Russian Arctic]. *Natsional'nye interesy priority i bezopasnost'* [National Interests: Priorities and Security], 2017, vol. 13, no. 6, pp. 1189–1196 (In Russ.)
2. Pilyasov A.N. Russia's Arctic frontier: Paradoxes of development. *Reg. Res. Russ*, 2016, vol. 6, no. 3, pp. 227–239.
3. Andrienko Y., Guriev S. *Understanding Migration in Russia*, 2005. 46 p.
4. Heleniak T.E. The role of attachment to place in migration decisions of the population of the Russian North. *Polar Geogr.*, 2009, vol. 32, no. 1–2, pp. 31–60.
5. Vityazeva V.A., Kotyrlo E.S. *Sotsial'no-ekonomicheskoe razvitie Rossiyskogo i zarubezhnogo Severa* [Socio-economic development of the Russian and foreign North.]. Syktyvkar, SGU Publ., 2007. 298 p. (In Russ.)
6. Mikkola J., Käpylä H. Contemporary Arctic Meets World Politics: Rethinking Arctic Exceptionalism in the Age of Uncertainty. *The Global Arctic Handbook*, Springer International Publishing, 2019, iss. Springer I., pp. 153–169. DOI: 10.1007/978-3-319-91995-9_10
7. Galimullin E.Z. Sotsial'no-ekonomicheskoe razvitie sub"ektov «Arkticheskoy zony Rossiyskoy Federatsii» v kontekste ustoychivogo razvitiya regiona [Socio-economic development of the sub-projects of the “Arctic zone of the Russian Federation” in the context of sustainable development of the region]. *Materialy II Mezhdunarodnoy nauchno-prakticheskoy konferentsii «Bezopasnost' prirodopol'zovaniya v usloviyakh ustoychivogo razvitiya»* [Proc. Int. sci.-practical conf. “Environmental Management in Sustainable Development”]. FGBOU VO «IGU», Geogr. Fak, 2018, pp. 269–273 (In Russ.)
8. Ivanova M.V. Sovremennye predposylki budushchego arkticheskikh trudovykh resursov [Modern background for the future of Arctic labor]. *Sotsiologiya truda* [Sociology of labor], 2017, vol. 6, no. 142, pp. 180–198. DOI: 10.14515/monitoring.2017.6.08 (In Russ.)
9. Tatarin A.I., Loginov V.G., Zakharchuk E.A. Socioeconomic problems in development of the Russian Arctic zone. *Herald of the Russian academy of sciences*, 2017, vol. 87, no. 1, pp. 12–21.
10. *Netherlands Economic Institute. Migration from the Russian North: Profile, Mechanisms of Migration and Adjustment in Recipient Regions*. Rotterdam and Moscow, 1998.
11. Volgin N.A., Shirokova L.N., Mosina L.L. Aktual'nye voprosy razvitiya rossiyskogo severa: kompensatsionnye i stimuliruyushchie sistemy, napravlennye na privlechenie i zakreplenie naseleniya v sever-

- nykh i arkticheskikh regionakh [Topical Questions of Developing the Russian North: Compensation and Incentive Systems Intended to Attract and Consolidate the Population in the Northern and Arctic Regions]. *Uroven' zhizni naseleniya regionov Rossii* [Living standards of the population in the regions of Russia], 2018, vol. 2, no. 208, pp. 34–46. DOI: 10.24411/1999-9836-2018-10013 (In Russ.)
12. Leksin V.N., Porfir'ev B.N. Sotsial'no-ekonomicheskie priority ustoychivogo razvitiya Arkticheskogo makroregiona Rossii [Socio-Economic Priorities for the Sustainable Development of Russian Arctic Macro-Region]. *Ekonomika regiona* [Economy of region], 2017, vol. 13, no. 4, pp. 985–1004. DOI: 10.17059/2017-4-2 (In Russ.)
 13. Andreassen N. Arctic energy development in Russia — How «sustainability» can fit? *Energy Research & Social Science*, 2016, vol. 16, pp. 78–88.
 14. Leksin V.N., Porfir'ev B.N. Sostoyanie i zadachi gosudarstvennogo upravleniya sotsial'no-ekonomicheskimi razvitiem rossiyskoy Arktiki: pravovoy aspekt [Current State and Goals of Russian Arctic Legal Regulation of Socio-Economic Development]. *Voprosy gosudarstvennogo i munitsipal'nogo upravleniya* [Public administration issues], 2018, vol. 2, pp. 114–138. (In Russ.)
 15. Tuhkunen A. *Between Location and a Sense of Place Observations Regarding Young People's Migration Alacrity in Northern Europe*. Tampere: University of Tampere Publ., 2007. 2002 p.
 16. Nazukina M.V. Osnovnye trendy pozitsionirovaniya regionov Rossiyskoy Arktiki [Major trends ranking of Russia's Arctic regions]. *Labirint. Zhurnal sotsial'no-gumanitarnykh issledovaniy* [Labyrinth. Journal of Philosophy and Social Sciences], 2013, vol. 5, pp. 59–68. (In Russ.)
 17. Lazhentsev V.N. Prostranstvennye i vremennye tendentsii sotsial'no-ekonomicheskikh protsessov na Rossiyskom Severe [Spatial and temporal trends of socio-economic processes in the Russian North]. Moscow; Syktyvkar, 2012, pp. 198–200. (In Russ.)
 18. Nikulina A., et al. Factors for mobilizing human resources to work in the Arctic. *Arktika: istoriya i sovremennost': trudy ezhegodnoy mezhdunarodnoy nauchnoy konferentsii* [Arctic: history and modernity: proc. ann. int. sci. conf.]. Saint Petersburg, POLITEKh-PRESS Publ., 2019, pp. 90–98 (In Russ.)
 19. Fauzer V.V. Demograficheskiy potentsial severnykh regionov Rossii — faktor i uslovie ekonomicheskogo osvoeniya arktiki [The demographic potential of the northern regions of Russia — a factor and condition for the economic development of the Arctic]. *Ekonomika regiona* [Economy of region], 2014, vol. 34, no. 985, pp. 69–81. (In Russ.)
 20. Pilyasov A.N., Kuleshov V.V., Seliverstov V.E. Arctic Policy in an Era of Global Instability: Experience and Lessons for Russia. *Regional research of Russia*, 2015, vol. 5, no. 1, pp. 10–22. DOI: 10.1134/S2079 970515010086 (In Russ.)
 21. Zhukov M.A., Kraynov V.N. Problemy normativno-pravovogo zakrepleniya Arkticheskoy zony Rossiyskoy Federatsii [Problems of legal consolidation of the Arctic zone of the Russian Federation]. *Novyy Dal'niy Vostok* [New Far East], 2008, pp. 2–33. (In Russ.)
 22. Dawson D., Johnston M., Stewart E. The unintended consequences of regulatory complexity: the case of cruise tourism in Arctic Canada. *Mar. Policy*, 2017, vol. 76, February, pp. 71–78.

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Recovery technology of social work — an important condition for maintaining and ensuring family safety (case of the Arkhangelsk Oblast) *

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Abstract. Ensuring the social security of the modern family is an urgent issue and a priority of the national policy of the Russian Federation. In contemporary society, the relationship between the social security system and the resource of the family is visible. Family resource acts as a set of potentials aimed at maintaining the stability of the family and the development of its competence in solving family problems. So, the technology of social work aimed at enhancing the resources of the family is essential. The same is fair for the role of the immediate environment in supporting the family since it becomes an active subject in solving family problems. Such an instrument is restoration technologies focused on the resource potential of the family and the resources of social capital. These technologies are widely used in foreign social work and are a promising area for the Russian one. The use of these technologies can be a factor in increasing the effectiveness of family institutional resources in the social protection of the population. Also, the author analyzed the role of recovery technologies in ensuring the social security of the family and examined the use of these technologies in the Arkhangelsk Oblast.

Keywords: *social security of the family, recovery technologies of social work, social work with the family, family trouble, family in a socially dangerous situation, institutional resources, family resources, social capital.*

Introduction

Currently, the sphere of family and childhood is exposed to various threats of social, psychological, and economic nature. The impact of social risks at a person and society is considered a primary destabilizing factor by some researchers [1, Voroncov D.B., Vorontcova A.V.; 2, Dregalo A.A. Ulyanovsky V.I.; 3, Stanislavsky P.V.]. Shraga M.H. rightly pointed it, human social security as a humanistic concept was based on the belief that the idea of “security” had covered the basic needs and rights of the people: food, housing, health, education, meaningful work, environmental protection, etc. [4, Shraga M.H., Kudrya L.I.]. Modern risk society, on the one hand, projects many stressors that impact on the individual and social environment. On the other hand, a way of life in a society can act as a stress factor for the individual and the social group.

Families of the Arkhangelsk Oblast experience the same problems as the family at risk. Risk indicators are the weak economic development of the territory (except for the Nenets AO); technological backwardness of the leading industrial enterprises, i.e., forestry and pulp and paper industry; the loss of the benefits of a high income in the 2000s.; natural decrease and steady out-

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migration caused by the poor quality of life; the poor housing improvement, underdevelopment of Arkhangelsk as a service center ¹.

Rating of the quality of life in Russia, published by "RIA Novosti": in 2018, the Arkhangelsk oblast got 75th place among the 85 subjects of the Russian Federation (in 2017 — 74th, in 2016 — 71st, in 2015 — 74th) ². In the North-Arctic region of the Russian Federation, rating point analysis of quality of life is the lowest in the Arkhangelsk Oblast — 35.676 (the Republic of Karelia — 36.324, the Nenets Autonomous Okrug — 39.255, the Komi Republic — 39.984, the Murmansk Oblast — 47.308).

Analysis of the family lived in the Arkhangelsk Oblast, suggests the instability of the socio-economic situation. It means the social differentiation, the growth of the stereotypical family problems (i.e., unavailability of the home purchase and improvement of housing, and lack of decent income), psychological factors complicating the social well-being of family members, and intense incredulity for the authorities in the territory.

Thus, socio-economic and political instability in the area directly or indirectly affects the family and its members. A part of the family is not ready for self-help and does not have enough family resources. Such families are in the category of families in a socially dangerous situation, i.e., when parents or legal representatives are not able to exercise proper care and negatively impact on family well-being ³. According to statistics provided by the information and analytical reference, in the Arkhangelsk Oblast, in 2017, the category "socially dangerous position" increased by 1185 families with 2103 children in total. By January 1, 2018, the public institutions of social services for families and children had been registered 1620 families in socially dangerous situations ⁴.

In general, the presence of social risk families complicates quality of life, and it is a security threat. In this regard, it is urgent to ensure the social security of the family, i.e., the interaction between a family and the environment, safe and protected from the risks, preserving the values of family integration. Social security is inextricably linked to the quality of life and is expressed in the creation of favorable conditions of life and the activities of state institutions and civil society aimed at practical solutions to the economic, demographic, political, and other problems of the community.

Currently, it is necessary to strengthen and support a family as it is the most effective investment of moral, cultural, and social capital. In this context, social security of families serves

¹Nezavisimyy institut sotsial'noy politiki. Social'nyy atlas rossiyskikh regionov [Independent Institute for Social Policy. Social Atlas of Russian Regions]. URL: <http://www.socpol.ru/atlas/portraits/arkh.shtml> (accessed 03 March 2019). (In Russ.)

²Reyting rossiyskikh regionov po kachestvu zhizni [Rating of Russian territories for quality of life]. URL: <https://ria.ru/20190218/1550940417.html> (accessed 10 March 2019). (In Russ.)

³A family with children at risk, as well as a family where parents or other legal representatives of the minors do not fulfill their obligations and (or) have negative impact on children's behavior or mistreated them. Article 1 of the Federal Law, 24.06.1999 No. 129 -FZ "On Principles of prevention of neglect and juvenile delinquency". (In Russ.)

⁴Ivanova E.A., ed. O polozhenii detey i semey, imeyushchikh detey, v Arhangel'skoj oblasti v 2017 godu: informatsionno-analiticheskie materialy [On the situation of children and families with children in the Arkhangelsk Oblast in 2017: information and analytical materials]. Arkhangelsk, 2018. p. 102. (In Russ.)

protection from violations of the vital interests and social rights and freedoms: the right to live; to work and be fair paid; the right to education; health and medical care rights; the right on affordable vacation, and the right to a guaranteed social protection and state social services. Modern components of social work in the Russian Federation and the totality of local institutional resources contributed to the development of a model of social security of the family in the Arkhangelsk Oblast. The model is a set of social, economic, psychological, and other measures in the Oblast [5, Fedulova A.B., Turalkina N.A.].

The social security family model is aimed at systematization and coordination of formal social institutions to assist and support the family to increase its effectiveness and the internal resources of the family to get out of the crisis. The components of the model: the macro-component, i.e., social policy, a meso-component, i.e., institutional and extra-institutional regional authorities and social services and a micro-component, i.e., resources of families, social work with clients (individual or group).

A unique role in the social security of the family is for the institutional resources of agencies and services of social protection and support to the family, i.e., instruments of the state policy. One of the priorities of the institutions of the Arkhangelsk Oblast is the creation of a social and rehabilitation model for families and children⁵, aimed at enhancing the internal resources of the family, prevention, and detection of child abuse. However, it is possible, if the region will actively use the social support of families with children, new preventive measures, and authorities and institutions will have a well-honed system of interdepartmental work.

In this case, social work with the family should focus on different types of families, and the family should be able to select a form of social support. In this regard, it is crucial to understand how the current system of social protection and assistance can effectively solve the problem of different types of families, as well and whether the current system is ready to apply innovative approaches to solving these problems.

Social work with the family: challenges and prospects for social security

Currently, the traditional social work with families is gradually losing its effectiveness due to the lack of material and human resources agencies, a large paperwork load for specialists working for family rehabilitation. 80–90% of their time is paperwork: maintenance of personnel files, requests, inquiries, statements, reports, and responses. Also, we observe a lack of well-functioning inter-agency cooperation between the authorities and services and, as a result, duplication of services. Working with the family is underrepresented preventive work, which should contribute to the early detection of circumstances and causes of social deviance in the family, prevention, and mitigation. It is important to note, it is often relatively prosperous families and families, balancing

⁵ Ivanova E.A., ed. *O polozhenii detey i semey, imeyushchikh detey, v Arhangel'skoj oblasti v 2017 godu: informatsionno-analiticheskie materialy* [On the situation of children and families with children in the Arkhangelsk Oblast in 2017: information and analytical materials]. Arkhangelsk, 2018. p. 110. (In Russ.)

on edge, do not seek social support to specialized institutions, which contributes to late detection of family trouble and often triggers the “postponement of problems.”

As the Ombudsman for Children in Moscow, Yevgeny Bunimovich pointed: “in recent years, we are faced with children's problems that arise in families of not a poor level000. Perhaps, it is due to the general state of anxiety and aggression in a society that is broadcasting in the family”. Often family problems become systemic, and they could be the reason for the removal of a child from the family. At the same time, “often, if the guardianship authorities sue restriction or deprivation of parental rights, the road to this side spelled out thoroughly. But the reverse, to restore — not at all”⁶.

According to Chudova S.G. and Zakharova T.V., deficiencies of contemporary social work with the family in Russia are late detection of family troubles; the consideration of individual family members issues, rather than the family as a whole, considering the lack of internal resources of the family; paternalistic approach to solving the problems of the family, when the social worker tries to solve the problem for the customer; the imposition of the customer personal value system that leads to the fact that the client loses self-esteem and develops a feeling of complete dependence on specialist, i.e., formed a dependent position [6, Chudova S.G., Zakharova T.V., pp. 255–257].

Thus, the traditional social work technology is focused on families at risk. It has become ineffective. Security by engaging only the external institutional resources (existing agencies and services of the social care system) is not enough. Foreign practice means the family-focused work on early prevention, considering the restorative approach, i.e. when the family is independent and autonomous in making decisions about its development. It uses social capital resources and social support networks [7, Wheelock J., Jones K.; 8, Prang K.H., Newnam S., Berecki-Gisolf J.; 9, Tømmerås T., Kjølbi J.].

In many countries, it is a practice of temporary child placement in a professional replacement family for a period of crisis while social work with parents is going on to restore family relationships. Also, foreign specialists use the technology of early prevention of family trouble, when the family is offered to evaluate the problem and find a solution with the support of experts. The added value is to involve the community in help and support. Thus, there is the inclusion of social networks in social work that promotes awareness of participants' positions and interests about other people, understanding the benefits of the other part, searching a way out of the problem, as well as a culture of communication and trust between people. It is of relevance for modern social work in Russia when “the complaint on a child crying from a nearby apartment we considered snitching”⁷.

⁶ Sokolov D. Zhaloby na detskiy plach iz sosedney kvartiry u nas schitayutsya stukachestvom [Complaints about a baby crying from a nearby apartment we considered snitching]. *Sobesednik* [Interlocutor], 2019, no. 12, p. 7. (In Russ.)

⁷ Ibid.

In Russia, the current system of social work is focused primarily on high-risk families. Preventive action with the family often is a formality and does not allow to speak about the effectiveness of social work. Family resource mobilization in preventive work of social services will let the family bear the responsibility for solving the problems and thereby ensure the social security of the family and each of its members, as well as improve the efficiency of current social work.

The need for an early start to addressing emerging problems of the family, incl. for their timely decisions and preservation of family, led to the search for new approaches to social work with the family. Such a tool uses the resources mentioned above, performs remediation technologies focused on the family, and contributed to the actualization of its resource potential. These technologies are widely used in foreign social work and are a promising direction in Russia, as many scholars and experts note by many researchers and experts [10, Abashina A.D., Zilinskikh I.A.; 11, Appolonova A.A.; 12, Kotlyarova V.V., Savchenko S.V.; 13, Khovanskaya T.V.].

Rehabilitation technologies typical for Russia and foreign countries include family group conferences (family conferences), network family therapy, restorative mediation (direct and shuttle), school reconciliation services, community circles, the social partnership, the network of social contacts, etc. [10, Abashina A.D., Zilinskikh I.A.; 14, Levintseva E.H.; 15; 16, Konopleva S.V.; 17, Maksudov R.R.; 18, Mukhametgalieva S.H.; 19, Vasetskaya A.S.; 20, Hagemann O.; 21, Doolan M.; 22, Pagee van R. Van., 23, Jackson S., Morris K.]. Also, various types of rehabilitation programs could be defined: "The meeting of reparation", "Family Reconciliation", "Circles of Care", "School-Conference", "Restorative Justice", "School parent council", etc. [15; 24, Karnozova L. M.].

In Russia, the restorative approach is relevant to territorial and school reconciliation services. In 2016, 18 RF territories had 102 reconciliation service centers [24, Karnozova L.M.], 23 provinces had 852 school reconciliation services in total⁸. In 2017, 121 Reconciliation Services in 15 territories operated (data provided by the areas) [25, Karnozova L.M.], and it is generally insufficient. Additional commonly used recovery technology is remediation (direct — 68.7%, and the shuttle — 4,4% of all programs); the less mastered technique is a family group conference (less than 1%). Currently, the most popular is the restorative justice program for juvenile crimes [24–25].

The use of rehabilitation technologies in Russia faces some challenges: the complexity and time-consuming preparation and use of the technology, unavailability of experts for rehabilitation programs, the lack of administrative regulation of reconciliation services based on social institutions, insufficient financial and personnel support, low family interest in solving problems [26, Fedulova A.B.; 27, Gerasimov D.E., Khovanskaya T.V.].

⁸ Konovalov A.Yu. Monitoring deyatelnosti shkol'nyh sluzhnb primireniya za 2016 god, provodimyj v ramkah Vserossijskoj associacii vosstanovitel'noj mediacii [Monitor the activities of the school reconciliation services for the year 2016 held within the All-Russian Association of Restorative Mediation]. URL: www.8-926-145-87-01.ru (accessed 19 January 2019). (In Russ.)

Rehabilitation approach in the Arkhangelsk Oblast

Previous research [5; 26] revealed that in the Arkhangelsk Oblast, the activities of formal institutions to address issues of social protection and family support, as well as the provision of social services is inadequate. First, the institutions are not provided with full financial and human capacity to implement enough prevention work and support families at risk. Secondly, prevention activities have insufficient efficiency due to lack of interest and awareness in this direction and low efficiency of the standard technologies of social work with families at risk. Third, the activities of the agencies are generic. The “patronage-punishing” method is revealing. It reduces the role of early detection and prevention of family trouble. Fourth, the social work activities lack methods and techniques of social work to develop family resources and the use of family building potential [5, Fedulova A.B., Turalkina N.A., p. 123].

Now, the reorganization of the current social institutions is taking place to help families and minors by optimizing management. It will require additional time to deal with organizational and methodological issues, but also it may lead to an increase in the quality of public services.

Under these conditions, it will not adequately ensure the social security of families in the area. The impact of social risks often makes family low-resource. The inability to independently overcome crisis will contribute to the family's transition to the category of socially dangerous situations, which complicates its functioning, makes social support measures problematic.

In the Arkhangelsk Oblast, rehabilitation technologies of social work received its development in 2011. It was possible within the project “Children and young people at risk in the Barents Region 2008–2012” [28, p. 44]. This direction is still an innovative approach to regional social work. E.g., 68 experts were trained to work with the method of family group conference. By 2016 only three institutions of the area had such specialists: SBI AO “Center “Nadezhda” (Arkhangelsk); MSI SEI School No 4 (its division “Center “Garmonija”, Novodvinsk); SBSI AO “Kargopol social rehabilitation center for minors” (Kargopol). These institutions apply the method [29, pp. 73–74].

In June 2015, six municipalities of the Arkhangelsk Oblast had nine reconciliation services and 23 employed mediators. After the approval of the Concept⁹, the number of reconciliation services reached 14 in 10 municipalities (Arkhangelsk, Severodvinsk, the Kargopolskiy District, Koryazhma, the Ustyanskiy District, Velsk, Kotlas, Privodinskoe municipality in the Kotlas raion, Konoshkiy raion, and Novodvinsk); the number of mediators is 43¹⁰.

⁹ Ob utverzhdenii Konceptsii razvitiya do 2017 goda seti sluzhb mediatsii v tselyakh realizatsii vosstanovitel'nogo pravosudiya v otnoshenii detei, v tom chisle sovershivshikh obshchestvenno opasnye deyaniya, no ne dostigshikh vozrasta, s kotorogo nastupaet ugolovnaya otvetstvennost': rasporyazhenie Pravitel'stva Rossiiskoy Federatsii ot 30.07.2014, No. 1430 [On approval of the Concept of development up to 2017 for network mediation services for the implementation of rehabilitation justice for children, including those committed socially dangerous acts, but have not reached the age of criminal responsibility: Decree of the RF Government. 30 July 2014, No. 1430]. URL: http://www.consultant.ru/document/cons_doc_LAW_82134 (accessed 20 May 2018). (In Russ.)

¹⁰ Informatsiya po realizatsii Konceptsii razvitiya do 2017 goda seti sluzhb mediatsii (primireniya) v Arhangel'skoi oblasti [Information on the use of the Concept of development up to 2017 for network services of mediation (conciliation) in the Arkhangelsk region]. URL: <http://nadejdaarh.ru/poleznaya-informatsiya/vosstanovitelnye-tehnologii/> in-

In comparison with the data for 2015–2016, the number of reconciliation services increased in 2017. In general, the monitoring proved the growth and strengthening of reconciliation services due to the systematic work of the territorial institutions. In the Arkhangelsk Oblast, a two-tier system of services has been established: Local TSU and territorial service of reconciliation work for rehabilitation programs and provide methodological support and coordination services [25, Karnozova L.M., p. 171].

Following the decree of the Ministry of Education and Science of the Arkhangelsk Oblast, information and methodological support of reconciliation services are the responsibility of the SBI AO “Center “Nadezhda”. The center has a license apply rehabilitation technologies: “Mediation in the restorative justice”, “Regenerative technologies for school reconciliation services for teachers”, “Regenerative technologies as a method of settling family disputes involving children”, and “Family Conference — an effective method of working with the family”.

According to the materials of the Public Center “Judicial and legal reform” in the Arkhangelsk Oblast for 2016, territorial services of reconciliation received 411 applications. The total number of participants in completed programs amounted to — 460 [24, Karnozova L.M., p. 112]. In 2017, 608 requests were sent, and the total number of participants reached 779 [25, Karnozova L.M.]. According to the monitoring, in 2015, among 30 school services of reconciliation, only eight schools had systematic reconciliation activities. In 2016, the restoration programs involved 35 teachers [27, Gerasimov D.E., Khovanskaya T.V., pp. 83–84].

The need for remediation technologies in the area remains high. Although the Arkhangelsk oblast is a leader in the development of restorative justice in criminal proceedings against minors [25], recovery technologies focused on families are poorly represented.

To justify the urgency of remediation technologies in modern social work, in 2018, the NArFU Department of Social Work and Social Security completed a study aimed at studying the local experience of remediation for families in a socially dangerous situation. The empirical part of the study included two phases: questionnaire, aimed at exploring the problems and opportunities for restoration in the area and expert interviews with the local specialists.

The questionnaire (n = 74 people) was attended by students (35%) and teachers of the department and other educational institutions of the Arkhangelsk Oblast (19%), professionals (46%) of social care institutions for families and children (Arkhangelsk, Velsk, Senkursk, Kargopol, Ustjani, and Nyandoma). The selection of respondents was due to the approach to the study. The respondents act as experts in the analysis of professional social work, which is not available (maybe presented incorrectly) for respondents without knowing the categorical apparatus of social work, or those who are not familiar with its practice and therefore are not willing to see, define and understand the need for scientific knowledge to solve problems of social work.

The second phase was expert interviews (n = 4 people) with specialists using remedial technologies. The study involved specialists of SBI AO "Center "Nadezhda" (Arkhangelsk), MEI School No. 4 (its division "Center "Garmonija", Novodvinsk), SBSI AO "Shenkursky KTSSO" (Shenkursk, the Arkhangelsk Oblast), SBCI AO "Arkhangelsk CSHF&K" (Arkhangelsk).

The first phase of the study (the questionnaire) determined the level of awareness of remediation technologies. We analyzed the willingness of respondents to build an open dialogue with the customer, marked difficulties in using remediation technologies at social institutions, and identified the primary sources of public information on remediation technologies.

The study revealed most respondents were informed about the rehabilitation technologies and consider them relevant and promising direction. Rehabilitation technology should be introduced and developed at social care institutions. The success of the restorative approach when working with the family requires a high readiness of society, families, and professionals to the formation of trust and alignment of an open dialogue with experts and the immediate environment.

According to the study, only a part of families and professionals is ready for the development of such forms of cooperation. 41% of teachers, 36% of students, and 24% of specialists are not ready-to-use recovery programs. The high preparedness for remediation technologies was shown by students (49%) and professionals (35%) familiar with remediation and practiced it. However, the willingness to apply does not mean its use. Despite the high motivation of professionals to adopt new forms of a "customer-specialist" interaction, the lack of human and funding, as well as the operating system for services, limit opportunities for active use of recovery programs when working with the family and minors.

The unavailability of respondents to the use of restorative practices is due to the difficulties of their application. Among the problems, respondents noted low awareness of the rehabilitation technologies (24.3%), inadequate infrastructure facilities, lack of financing (14.9%), small commitment and paternalism of family members (13.5%), the complexity of adaptation for these technologies to the social work in Russia (13.5%), low social capital of Russian citizens (12.2%).

Low awareness of the rehabilitation technologies was called the primary difficulty. According to respondents, the most effective sources of public information are websites of institutions and active promotion in social networks and media (32.4%), social advertising: stands, billboards, commercials (21.6%), information and handouts of social institutions: booklets, leaflets (17.6%), and media coverage of regenerative technologies in social work (16.2%).

Successful application of remediation technologies is only possible if customers are willing to take responsibility for decisions and their consequences. Most of the teachers surveyed (39%) agree: clients can resolve problems and deal with difficulties. Most experts (46%) and students (42%) only partially agree with that statement, believing that this is possible only if the family has needed personal and institutional resources. Among the students: 21% disagree with the state-

ment and consider the families are not ready to take responsibility for solving family problems, preferring to shift it to the professionals.

Expert interviews (the second phase of the study) proved remediation in social work was promising in the area. The current social support of a family, most often, does not allow a family to bear responsibility for its well-being and change a dependent position. The use of recovery technologies, as noted by experts, will enhance the personal potential of family members to get out of the crisis and will make it possible to improve the efficiency and effectiveness of external institutional resources to ensure the social security of the family at the institutional and extra-institutional levels.

The specialists note current difficulties in the use of remediation in the Arkhangelsk Oblast: low motivation of family members to change the situation; the territorial remoteness of families in need of assistance; time and costs of preparing and carrying out rehabilitation programs; the lack of a standard results evaluation system; unavailability of experts for rehabilitation programs and additional professional capacity, and the unwillingness of social institutions management for the introduction and use of remediation, associated with the specifics of the state and municipal order for social services, as well as the low public awareness of the innovative forms of social work in the area.

Conclusion

Social security of the family is a priority for the Russian national policy, and the foundation of the local social system following the “Strategy for the Development of the Russian Arctic and National Security for the period until 2020”. In this context, social work with the family becomes risk management, a resource social security of a family and its members. Professional social work combines social protection and social support, helps people to solve social problems, and adapt to changes.

According to Ulrich Beck's “risk society” concept, risk management will be possible after the transition towards a higher stage of development, i.e., reflexive modernity, which is the ability of social actors to realize and maintain a constant theoretical understanding of their activities; it establishes security measures and assesses the prospects for individual and collective exposure to risk [30, Beck U.]. In this connection, a unique role in social security should be assigned to a family.

The restorative approach in social work with the family is a tool for updating family resources and social safety. The use of this approach will increase the efficiency of external institutional family resources (resources of public bodies and services) and make the recipients of social services full actors of interaction, and thereby helping to improve the social security of the family.

The activities of social institutions for the prevention of family trouble are not accompanied by a qualitative change in the work at the primary level. It may be due to the prevalence of the traditional forms of social work of “sanction” nature and promote family closeness — social

rehabilitation centers underrepresented family-oriented practice. Often specialists assist the family in deep crisis and not ready to solve their problems without specialists.

To increase the effectiveness of preventive work with families in Russia should be aimed at restoring family and the parent-child relationships and be focused on the preservation of the family and the upbringing of children. It is essential to use family resources activating technology. These technologies are the restorative justice programs: restorative mediation, school service of reconciliation, community circles, and family conference.

These technologies have been widely developed in the foreign practice of work with families and minors as a technology-focused on family resources. In this case, the use of social capital resources. Its main components are confidence in each other, a tendency to cooperate in the common interest, not only with their friends but also strangers, personal responsibility for what is happening, a manifestation of civic culture.

Value of remediation technologies is that they are aimed at enhancing family capacity for self out of difficult situations, focused on strengthening and restoration of family, the family's ability to be responsible for the solving family problems, and in our view, serve a link between the conditions of social security formation in a Russian family: the availability of the family and institutional resources of the current state system of social protection and family support.

The analysis of legal documents regulating the social safety of family, the results of the study and social work practice in Russia and abroad allowed us to conclude the use of recovery technologies is essential and urgent resource providing social security of a Russian family, as resource-based approach in work with the family accumulates two components: institutional resources expressed by the formal representation of public and private institutions of social care, family support system and extra-institutional resources, due to the presence of informal resources of kinship and friendship ties, and resources of social support networks.

The use of rehabilitation technologies in the area is an essential field of modern professionalization of social work. The action plan until 2020 in the Arkhangelsk Oblast within the Decade of childhood means the development of technologies within the program "Children and young people at risk" in the Arkhangelsk Oblast in 2018–2020. It shows the readiness of the area to apply the restorative approach. However, the use of this approach is a complex process that requires a reorganization of the current social work with families.

It is necessary: to train professionals and keep their motivation work for rehabilitation programs; to get additional financial support for institutions; interest and support of such technologies by the management of institutions; to have methodological support and exchange of experience between specialists.

In general, the successful implementation of remediation technologies needs to be adapted to the Russian system of social protection. It is also essential to review and amend the standards of social services, to have systemic training of experts capable of using regenerative technologies aimed at family resource, of securing remediation technologies at the legally, incl.

through the introduction of professional standards into practice, and to promote such programs among the population.

It is important to note, the use of remediation technologies in the Arkhangelsk Oblast may be promising for socially oriented non-profit organizations (CO NPO) in a public-private partnership system. In the Arkhangelsk Oblast, in 2018, 17 non-state providers of social services operated. It accounted for 24.2% of the service providers, and the share of recipients of non-state social services amounted to 5%¹¹. Moreover, almost no facilities for families and minors are observed among the non-state services. The territory has only one non-profit organization — “Center for work with citizens in a difficult situation “Doverie” (Severodvinsk) — uses recovery technologies.

Non-state social services (incl. CO NPO), in our opinion, are an effective way of ensuring the quality of service for families and minors and can also be an addition to the state social protection of families and children, based on state and municipal orders.

References

1. Vorontsov D.B., Vorontsova A.V. Sotsial'nye riski, vliyayushchie na sovremennuyu sem'i [Social Risks Affecting the Modern Family]. *Lichnost', sem'ya i obshchestvo: voprosy pedagogiki i psikhologii: sb. st. po mater. XLV mezhdunar. nauch.-prakt. konf [The Individual, the Family and Society: Pedagogical and Psychological Issues]*. Novosibirsk, SIBAC Publ., 2014, no. 10 (45). (In Russ.)
2. Dregalo A.A., Ulyanovskii V.I., eds. *Sotsiokul'turnaya dinamika sotsial'nogo prostranstva Severa: monografiya [Sociocultural Dynamics of Social Environment of the North]*. NArFU Publ., 2017, 252 p. (In Russ.)
3. Stanislavskiy P.V. Sotsial'naya zashchishchennost' semni, materinstva i detstva v Rossii v kontekste obespecheniya demograficheskoy bezopasnosti Rossii [Social safety of family, maternity and children in Russia in the context of providing demographic safety of Russia]. *Gumanitarnye, sotsial'no-ekonomicheskie i obshchestvennye nauki [Humanities, Social-economic and Social Sciences]*, 2015, no. 10–1, pp. 104–108 (In Russ.)
4. Shraga M.Kh., ed. *Sotsial'naya bezopasnost' (bezopasnost' zhiznedeiyatel'nosti lyudey): uchebnoe posobie [Social safety (human activity safety)]*. Arkhangelsk, NArFU Publ., 2014, 280 p. (In Russ.)
5. Fedulova A.B., Tural'kina N.A. Strukturno-resursnyye elementy modeli sotsial'noy bezopasnosti sem'i v Arkhangel'skoy oblasti [Structural and resource components of the model of family's social safety in Arkhangelsk region]. *Izvestiya Komi nauchnogo tsentra UrO RAN [Proceedings of the Komi Science Centre of the Ural Division of the Russian Academy of Sciences]*, 2018, no. 1 (33), pp. 118–126 (In Russ.)
6. Chudova S.G., Zakharova T.V. Sem'i, nakhodyashchiesya v sotsial'no opasnom polozhenii: spetsifika sotsial'noy raboty s uchetom ikh zhiznennykh strategiy [Families in socially dangerous situation: specifics of social work considering their life strategies]. *Sotsiologiya v sovremennom mire: nauka, obrazovanie, tvorchestvo [Sociology in the modern world: science, education, creativity]*, 2013, no. 5, pp. 245–264 (In Russ.)
7. Wheelock J., Jones K. Grandparents are the next best thing: informal childcare for working parents in urban Britain. *Journal of social policy*, 2002, vol. 31, no. 3, pp. 441–463.
8. Prang K.H., Newnam S., Berecki-Gisolf J. The impact of family and work-related social support on musculoskeletal injury outcomes: a systematic review. *Journal of occupational rehabilitation*, 2015, vol. 25, no. 1, pp. 207–219.
9. Tømmerås T., Kjøbli J. Family resources and effects on child behavior problem interventions: a cumulative risk approach. *Journal of child and family studies*, 2017, vol. 26, no. 10, pp. 2936–2947.

¹¹ Gazeta Arkhangelsk. [Arkhangelsk Newspaper], 2019, no. 3 (4881). (In Russ.)

10. Abashina A.D., Zilinskikh I.A. Innovatsionnye tekhnologii v sisteme sotsial'noy raboty s sem'ey [Innovative technologies in system of social work with family]. *Vestnik TOGIRRO* [Herald of Tumen Regional State Institute of the Development of Regional Education], 2015, no. 1 (31), pp. 278–279 (In Russ.)
11. Appolonova A.A. Tekhnologizatsiya sotsial'noy raboty s sem'ey v sisteme sotsial'noy zashchity naseleniya [Technologies in social work with family in the system of social protection of the population]. *Tendentsii razvitiya nauki i obrazovaniya* [Tendencies of the development of science and education], 2018, no. 35–2, pp. 11–14 (In Russ.)
12. Kotlyarova V.V., Savchenko S.V. Tekhnologii i innovatsionnye metody sotsial'noy raboty s sem'ey [Technologies and innovative methods in social work with family]. *Alleya nauki* [Alley of Science], 2017, vol. 4, no. 10, pp. 319–322 (In Russ.)
13. Khovanskaya T.V. Sasha i vosstanovitel'nye tekhnologii [Sasha and rehabilitation technologies]. *Vestnik vosstanovitel'noy yustitsii* [Rehabilitation justice herald], 2016, no. 13, pp. 139–141 (In Russ.)
14. Liventseva E.N., Maksudov R.R., Kuznetsova A.N., Ryabinin A.L., eds. *Vosstanovitel'nyy podkhod v rabote spetsialistov sistemy profilaktiki pravonarusheniy i podderzhki sotsializatsii nesovershennoletnikh* [Rehabilitation approach in work of specialists of the system of prevention of crimes and support of minors' socialization]. Cherepovets Publ., 2015, 30 p. (In Russ.)
15. *Vosstanovitel'nye programmy v rabote s det'mi i sem'yami, nakhodyashchimisya v trudnoy zhiznennoy situatsii (sbornik materialov)*. [Rehabilitation programs in work with children and families in difficult life situation]. Moscow, Community Centre “Sudebno-pravovaya reforma” Publ., 2014, 152 p. (In Russ.)
16. Konopleva S.V. *Semeynye gruppovye konferentsii v Rossii: teoriya i praktika: metodicheskoe posobie* [Family group conferences in Russia: theory and practice]. Murmansk, 2012. 96 p. (In Russ.)
17. Maksudov R.R. *Programmy vosstanovitel'nogo razresheniya konfliktov ot unikal'nykh epizodov k zazhivleniyu sotsial'noy tkani* [Restorative conflict resolution programs from unique episodes to healing social tissue]. Moscow, Community Centre “Sudebno-pravovaya reforma”, 2012, 256 p. (In Russ.)
18. Mukhametgalieva S.Kh. Mediatsiya i vosstanovitel'nye tekhnologii kak forma profilaktiki pravonarusheniy nesovershennoletnikh [Mediation and rehabilitative technologies as a form of prevention of crimes among minors]. *Yuridicheskie i sotsial'no-pedagogicheskie aspekty profilaktiki pravonarusheniy nesovershennoletnikh i molodezhi. Materialy II Vserossiyskoy nauchno-prakticheskoy konferentsii (Elabuga, 17 aprelya, 2015 g.)* [Legal and socio-pedagogical aspects of prevention of crimes of minors and youth. Proc. II All-Russ. Sci. prac. Conf. (Elabuga, April 17th, 2015)]. Elabuga, 2015, pp. 17–20. (In Russ.)
19. Vasetskaya A.S. Vosstanovitel'nye praktiki v shkolakh: zarubezhnyy opyt [Rehabilitative technologies at school: foreign experience]. *Vestnik vosstanovitel'noy yustitsii. Vosstanovitel'nye programmy v rabote s det'mi i sem'yami, nakhodyashchimisya v trudnoy zhiznennoy situatsii* [Herald of rehabilitative justice. Rehabilitative programs at work with children and families in difficult life situation], 2018, no. 15, pp. 242–246 (In Russ.)
20. Khagemann Otmar Vosstanovitel'noe pravosudie kak obshchaya osnova dlya dvukh form konferentsiy v Germanii [Rehabilitative justice as a common base for 2 forms of conferences in Germany]. *Vestnik vosstanovitel'noy yustitsii. Vosstanovitel'nye programmy v rabote s det'mi i sem'yami, nakhodyashchimisya v trudnoy zhiznennoy situatsii* [Herald of rehabilitative justice. Rehabilitative programs at work with children and families in difficult life situation], 2018, no. 15, pp. 233–241 (In Russ.)
21. Doolan M. Family group conferences: a partnership method. Riepl B., Wilk L. & Berman Y. *Policies and Services for Children at Risk*. Vienna, European Centre, 2002, p. 107.
22. Pagee van R. Van. *Family Group Conferencing. Manual for Independent Coordinators*. Eigen Kracht — Center for Restorative Action, Zwolle, the Netherlands, 2006, pp. 3–64.
23. Jackson S., Morris K. Family group conferences: User empowerment or family self-reliance? A development from Lupton. *British journal of social work*, 1999, vol. 29, no. 4, 621 p.
24. Karnozova L.M. Monitoring deyatelnosti territorial'nykh sluzhb primireniya za 2016 god, provedenny v ramkakh Vserossiyskoy assotsiatsii vosstanovitel'noy mediatsii [Monitoring of work

- of territorial reconciliation services' in 2016, held in the frames of All-Russian Association of rehabilitative mediation]. *Vestnik vosstanovitel'noy yustitsii* [Herald of rehabilitative justice], 2017, no. 14, pp. 108–151 (In Russ.)
25. Karnozova L.M. Monitoring deyatelnosti territorial'nykh sluzhb primireniya za 2017 god, provedenny v ramkakh Vserossiyskoy assotsiatsii vosstanovitel'noy mediatsii [Monitoring of work of territorial reconciliation services' in 2017, held in the frames of All-Russian Association of rehabilitative mediation]. *Vestnik vosstanovitel'noy yustitsii. Vosstanovitel'nye programmy v rabote s det'mi i sem'yami, nakhodyashchimisya v trudnoy zhiznennoy situatsii* [Herald of rehabilitative justice. Rehabilitative programs at work with children and families in difficult life situation], 2018, no. 15, pp. 145–201. (In Russ.)
 26. Fedulova A.B. Problemy i vozmozhnosti primeneniya tekhnologii "Semeynye gruppovye konferentsii" v sotsial'noy rabote s sem'ey v Rossii [Problems and possibilities of applying the 'Family Group Conferences' technology in social work with family in Russia]. *Izvestiya Saratovskogo gosudarstvennogo universiteta. Novaya Seriya. Seriya: Sotsiologiya i Politologiya* [Izvestia of Saratov University. New Series. Series: Sociology. Politology], 2018, pp. 269–273 (In Russ.)
 27. Gerasimova D.E., Khovanskaya T.V. Razvitie shkol'nykh sluzhb primireniya v Arkhangel'skoy oblasti [Development of reconciliation services at schools in Arkhangelsk region]. *Vestnik vosstanovitel'noy yustitsii* [Herald of rehabilitative justice], 2017, no. 14, pp. 82–84 (In Russ.)
 28. Karnozova L.M., ed. *Territorial'nye sluzhby primireniya: usloviya funktsionirovaniya i organizatsionnoe ustroystvo* [Territorial reconciliation services: conditions of functioning and organization]. Moscow, Community Centre "Sudebno-pravovaya reforma", 2015, 184 p. (In Russ.)
 29. *Vosstanovitel'nye programmy v rabote s det'mi i sem'yami, nakhodyashchimisya v trudnoy zhiznennoy situatsii. Rabota s trudnymi sluchayami (sbornik materialov)* [Rehabilitation programs in work with children and families in difficult life situation. Work with complicated cases]. Moscow, Community Centre "Sudebno-pravovaya reforma", 2018, 142 p. (In Russ.)
 30. Beck U. *Obshchestvo riska. Na puti k drugomu modernu* [Risk Society. On the way to alternative modern]. Moscow, Progress-Traditsiya, 2000, 384 p. (In Russ.)

REVIEWS AND REPORTS

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Review of the monograph “The Arctic: a Development Strategy” *

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Abstract. The review emphasizes the key features of the monograph “The Arctic: Development Strategy”, prepared by experts of the Council for the Study of Productive Forces of the Ministry of Economic Development of Russia and NArFU named after M.V. Lomonosov. The authors developed a systematic analysis of the development issues of the Russian Arctic and the state development efforts in this macro-region. They studied the preferential regimes of economic activities and the role of mineral resource centers as important drivers of socio-economic development. According to the reviewer, the monograph is of interest both to specialists and to a wide range of readers.

Keywords: *a review, a monograph, the Russian Arctic, the Arctic zone of the Russian Federation, strategy.*

The monograph “The Arctic: a strategy for development” submitted for review represents research results of two major scientific organizations concerned with the development of the Arctic: The Council for Study of Productive Forces RFTA Ministry of Economic Development of Russia and the Northern (Arctic) Federal University named after M.V. Lomonosov.

The authors carried out a systematic analysis of the Russian Arctic development and government's efforts to its development. The focus of the study is to determine the measures for economic incentives and making regional Russia's economic development driver.

The book outlines a comprehensive approach to the definition of the region's southern boundary. The issue is still relevant not only from a scientific point of view but also in terms of governance.

Relevance and timeliness of this book are due to the need to link the territorial development of tools and mechanisms to support large-scale investment projects planned to be implemented in the Arctic zone of the Russian Federation. State Commission for the Development of the Arctic approved the approach to the formation of support zones as the primary tool for implementing state policy in the Arctic zone of Russia. It is secured in the new version of the State program “Social and economic development of the Arctic zone of the Russian Federation,” approved by the Decree of the Government of the Russian Federation, 31. 08. 2017 No. 1064

The monograph represents a detailed study of favorable regimes for economic activities, their analysis, and assessment of the effectiveness for Arctic Russia, as well as the other Russian areas with similar climatic, social, and economic characteristics. They are, e.g., modes of taxation: VAT, unified social tax, income tax, property tax, etc. Also, the authors discussed competencies for

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residents of individual modes and management companies; they defined features of each mode (validity periods, the territory, the infrastructure, restrictions for residents, the responsibility for achieving the targets, esp. government support, etc.). The evaluation of the effectiveness in the monograph means the assessment of special economic zones and analysis of the reasons led to the unsuccessful implementation of various regimes in the Russian Arctic. The authors also attempted to evaluate the effectiveness of the territories of advancing socio-economic development.

The authors completed the analysis of the federal and regional legislation to identify measures to promote social and economic development and defining features of the management mode in every Arctic territory. The study lets the authors develop proposals on a toolbox of modes of economic activity following the management type in the territories of the Russian Arctic. It was supplemented by the justification of specifics for the application of economic modes in every area.

Besides, the authors analyzed the possibility of such regimes on the territory of the macro-region and the formation of mineral centers conceivable to be the main drivers of socio-economic development.

It should be noted, a group of authors formulated the original science-based proposals for tools to create and support the development of support areas in the Russian Arctic, incl. those planned for the creation of mineral centers. Several mechanisms that could form the basis for supporting areas were suggested. The authors considered state support mechanisms, incl. for small and medium-sized businesses and makes proposals to maintain the budgetary efficiency of the Arctic territories.

In general, obtained research results presented in the book are recommended for publication as they are significant in decision-making on the Russian state policy in the Arctic. The monograph will, no doubt, be of interest to a broader audience.

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Overview of the recent US legislative initiatives for the Arctic development *

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Abstract. In conditions of a significant increase in the world community's attention to the Arctic, as well as intensive development of technologies for its study and development, the low activity of the USA in this area is noteworthy. The article is devoted to a review of some aspects of the US home policy in the Arctic. It also contains an analysis of two bills submitted to the US Congress aimed at increasing the economic presence in the Arctic region. The author notes the increasing scientific and practical interest of the Alaska political elites in the study and development of the Arctic.

Keywords: *Arctic region, the USA, Donald Trump, Lisa Murkovsky, Arctic Executive Steering Committee, US Arctic Sea Infrastructure Development Corporation.*

The ice-free Arctic is creating more and more opportunities for economic activity in the region, attracting more and more attention to circumpolar and extra-regional powers. In recent years, the development of the Arctic is increasingly included in the foreign policy agenda of the leading world powers. In one or another form, Arctic strategies and other legal acts regulating the state policy of states in the Arctic have been adopted by more than 25 countries. It is due to many factors, incl. the ability to develop mineral resources. USGS estimated that almost 22% of the world reserves of oil and gas are in the Arctic¹. Among extra-regional countries, the most significant interest in the region has North-East Asia, esp. China, Japan and the Republic of Korea.

Against this background, the US activity in the region looks unusually low. In particular, the US Arctic strategy has not been updated since 2013. The state has once again postponed the plans to modernize the icebreaker fleet. Washington ceased to participate in the Paris Agreement on climate 2015 (COP21), etc. Despite the missed opportunities for the development of large areas of the continental shelf and the seabed, the United States has not ratified the UN Convention on the Law of the Sea 1982 (UNCLOS).

Since Donald Trump administration, Washington's special passivity in the Arctic is demonstrated. The Arctic executive steering Committee, created by Barack Obama in 2015, was abolished. Funding for Arctic research decreased. Contacts with foreign institutions on the Arctic issues reduced. Adverse changes in the Office of Science and Technology Policy became noticeable, and, finally, the US Environmental Protection Agency lost its scientific advisory board².

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¹US Congressional Hearing: "Strategic Importance of the Arctic in US Policy". URL: https://fas.org/irp/congress/2009_hr/arctic.pdf (accessed 19 July 2019).

²The White House's Science Division Is Now Completely Empty. URL: <https://www.iflscience.com/editors-blog/white-houses-science-division-completely-empty> (accessed 19 July 2019).

In 2018, the House of Representatives forwarded the funds budgeted for the construction of an ice-breaking vessel to the presidential project, i.e., the creation of a wall on the border with Mexico. As a result, in 2019, one of the eight Arctic states has only two icebreakers, while one of them is in dry dock near the Seattle-Tacoma, and the other “Polar Star” is in Antarctica³.

A significant failure of the US policy is the reluctance of the presidential administration to understand the strategic implications of competition between the Arctic powers. Currently, the US national interests in the Arctic are focused, mostly, on the extraction of oil in the northern off-shore of Alaska (Prudhoe Bay). While the White House believes that the Arctic will be of limited strategic value and current minimum presence in the region is enough to protect its interests, its two competitors, Russia and China hold different points of view and gradually expand their capacity in the Arctic.

In an interview with NBC Agency in December 2018, John Garamendi, a Democrat member of the House of Representatives from the state of California, came to a disappointing conclusion: “The reality is that the United States ignored the Arctic. We missed what would become the main sea route between Europe and Asia”⁴.

Also, noteworthy, D. Trump dismissive attitude to the development of the State of Alaska — the only Arctic area of the US. Thus, the state budget for 2020 proposed by the legislature of Alaska, lost nearly 410 million US dollars⁵. One-third of the cuts account for the University of Alaska; public funding is reduced by \$ 130 million (or 41%) compare to 2019⁶.

According to representatives of the political elite of Alaska, the entire country has forgotten that it has ownership of the Arctic, the national interests in the region and that the US is an Arctic Power. The population of the state is concerned with such an attitude of the D. Trump administration to the development and exploration of the Arctic and attempts to legislate the need to develop and implement the Arctic strategy of the USA and increase the participation of Alaska in this process.

³ Floor speech: Unveiling Arctic Legislation to Reinvigorate America’s Arctic Role. URL: <https://www.murkowski.senate.gov/press/speech/floor-speech-unveiling-arctic-legislation-to-reinvigorate-americas-arctic-role> (accessed 19 July 2019).

⁴ The US urgently needs new icebreaker ships to patrol the Arctic. Will Trump's border wall get in the way? URL: <https://www.nbcnews.com/news/us-news/us-urgently-needs-new-icebreaker-ships-patrol-arctic-will-n942236> (accessed 19 July 2019).

⁵ Dunleavy vetoes \$ 409 million in general funds, cuts university by \$ 130 million. URL: http://www.newsminer.com/news/alaska_news/dunleavy-vetoes-million-in-general-funds-cuts-university-by-million/article_f3706a58-99d6-11e9-b799-fbe7e6d26fee.html (accessed 19 July 2019).

⁶ Alaska's governor is trying to destroy its universities. The state may never recover. URL: <https://www.theguardian.com/commentisfree/2019/jul/06/mike-dunleavy-alaska-university-system-budget-cuts> (accessed 19 July 2019).

In this regard, in December 2018, during the 115th session of the US Congress, Senator of Alaska Lisa Murkowski (Republican Party) made just two legislative initiatives aimed at promoting the interests of the United States in the Arctic ⁷.

The first draft bill concerns the reform of the national Arctic policy (Arctic Policy Act, № S.3739) and recreates B. Obama's Arctic Executive Steering Committee (the Arctic Committee) to coordinate the activities of all ministries and agencies to develop and implement the US Arctic policy ⁸.

According to the draft bill, the Arctic should be recognized as one of the main elements of US national security. So, the permanent chairman of the Arctic Committee would be Secretary of Homeland Security and his deputy — head of the Office of Science and Technology Policy. In total, the Arctic Committee would include 25 federal agencies:

- heads of the Council on Environmental Quality, the Domestic Policy Council, National Economic Council, Council of Economic Advisers and the National Security Council under the US administration;
- representatives of the Department of Health and Human Services, the Department of the Interior, the Department of Justice, and the Department of State with a rank not below the Deputy Minister;
- leaders (or their substituents) of the Office of the Director of National Intelligence, the Environmental Protection Agency (EPA), NASA, the National Science Foundation, the Arctic Research Commission and the Office of Management and Budget;
- other representatives of the authorities on the decision of the Chairman of the Arctic Committee.

The Chairman would also appoint the administrator of the Executive Officer of the Steering Committee responsible for meetings and oversees the execution of decisions. The meeting would be planned and scheduled once a quarter. The Chairman would appoint additional meetings if necessary. These meetings are for working out the strategic priorities and direction of the US Arctic policy and assessment of previous recommendations and decisions of the Arctic Committee. The meetings would also contribute to the coordination of the federal authorities' actions in the region.

At the same time, the Arctic Committee would get two advisory groups composed of representatives of the State of Alaska: the Bering Sea Tribal Advisory Group and the Arctic Advisory Committee. The first group would consist of the elders of the native peoples of the coast of the Bering Sea and the Bering Strait. Alaska indigenous communities possess in-depth knowledge of the Arctic and deserve their place in the leadership of the region, said L. Murkowski. According to

⁷ Two US bills could advance American presence in the Arctic. URL: <https://www.arctictoday.com/two-us-bills-could-advance-american-presence-in-the-arctic> (accessed 19 July 2019).

⁸ Arctic Policy Act of 2018, no. S.3739. URL: <https://www.congress.gov/bill/115th-congress/senate-bill/3739/text> (accessed 19 July 2019).

her, “in the Arctic, we have the opportunity to show the world how to integrate the knowledge and capabilities of native peoples in policy and science”⁹.

The second group would include eight representatives of the Alaska authorities: Arctic Slope, North-Western Arctic, Norton Sound, Interior, Yukon-Kuskokwim, Bristol Bay, the Aleutian Islands, and the Pribilof Islands. Arctic Committee will have to consult and coordinate their decisions. The move, due to Lisa Murkowski's idea, would strengthen the influence of Alaska in shaping and implementing the Arctic policy of the USA.

Also, to enhance the role of the state in the development of the Arctic, the draft bill put forward a point providing the expansion of the US Arctic research commission due to the inclusion of two additional commissioners (representatives of the native peoples of Alaska) appointed by the US President.

According to John Farrell, Executive Director of the Research Commission of the Arctic USA, the transfer functions to the Internal Security Minister would make the Arctic Committee independent from the newly elected administration. “It will be a long-term responsibility for its actions, no matter who is the president of the United States”¹⁰.

The second draft bill, “Shipping and Environmental Arctic Leadership Act”, No. S.3740 aims to enhance the US capabilities to regulate marine traffic in the Arctic Ocean¹¹.

The legislative initiative would create the US Arctic Seaway Infrastructure Development Corporation to provide paid services to ensure safe navigation in the Arctic Ocean for various types of vessels. In this regard, its responsibilities would be:

- construction, modernization, and maintenance of the state of deep-sea ports, incl. for bunkering fuel and maintenance icebreakers (with US Army Corps of Engineers) and the authorities of Alaska;
- creation and reconstruction of navigation and other infrastructure for safe shipping, incl. closed harbors (with the US Coast Guard);
- preparedness and competitiveness of US icebreakers to escort cargo ships in the waters of the Arctic seas (with the US Coast Guard).

It is noteworthy, and the draft bill provides for the provision of ice-breaking services not only in the waters of Alaska but also in along the Northern Sea Route and the Northwest Passage. In article 9, section 2 of the draft, the US does not recognize Russian jurisdiction over the NSR beyond the 12-mile zone. Also, the Corporation would authorize charter icebreakers of other countries to provide services for icebreaker assistance.

The governing body of the Corporation would be the Board of Directors of 9 members:

- Chairman (appointed by the President of the USA);

⁹ Two US bills could advance American presence in the Arctic. URL: <https://www.arctictoday.com/two-us-bills-could-advance-american-presence-in-the-arctic> (accessed 19 July 2019).

¹⁰ Two US bills could advance American presence in the Arctic. URL: <https://www.arctictoday.com/two-us-bills-could-advance-american-presence-in-the-arctic> (accessed 19 July 2019).

¹¹ Shipping and Environmental Arctic Leadership Act, no. S. 3740. URL: <https://www.congress.gov/bill/115th-congress/senate-bill/3740/text> (accessed 19 July 2019).

- a representative of the Secretary of State;
- a representative of the Ministry of Transport;
- a representative of the Coast Guard;
- a representative of the National Oceanic and Atmospheric Administration;
- four representatives of the State of Alaska.

The Board of Directors, after consultation with the Minister of Transport, would appoint the corporate executive responsible for the management and developing a structure and staff of the organization. The Board of Directors would address the Chair, but not less than once every 90 days. At these meetings, it is planned to develop the strategy and policy of the organization, incl. tariff calculation rules for services.

The initial capital of the Corporation would be provided through the issuance of revenue bonds of the US Department of Treasury. The amount of funding is to be approved by the Ministry of Transport and the Ministry of Finance. These funds would go to the creation of a structure and first infrastructure projects. It is further assumed that the Corporation will move to self-sufficiency due to services.

The Corporation would be controlled by the US Congress and be required to submit an annual report on its activities for approval. Besides, reports on the activities of the Corporation would be delivered on the request of the President, the Congress, and the Board of Directors.

At the same time, to strengthen the influence of Alaska in the organization, in addition to the introduction of 4 Alaska representatives to the Board of Directors, Murkowski L. included the point on the Corporation must be resident in the State.

Both drafts were discussed in the two hearings in the Senate, and now they are in the US Senate Committee on Commerce, Science, and Transportation.

These drafts let us conclude there is an understanding of the importance of presence in the Arctic in the US. Now, the initiative comes mainly from representatives of the Alaska political establishment. Will the Arctic arena get a new player in the face of the United States? It depends on the federal support of the initiative. It is supported by the US administration and the intention to adopt a new strategy for the Arctic.

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“Cold Peace in the Arctic”: prospects for cooperation between Russia and Western Europe in the Arctic were discussed in Oslo *

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Abstract. The article represents a brief overview of the speeches presented at the “Cold Peace in the Arctic” International Conference (Oslo, Norway, September 2018) attended by experts from Russia, Norway, and other countries. The author believes that many representatives of the scientific community see prospects for mitigating contradictions and strengthening international cooperation in the Arctic.

Keywords: *geopolitics, the Arctic, Norway, Russia, international cooperation.*

Studying geopolitical changes in the Arctic is of interest to the academic community, diplomats, organizations, and states, as well as business representatives and experts in international relations. The Arctic countries within and outside the region have always been perceived as a platform for dialogue and cooperation. According to many politicians, researchers, and journalists, historically, Russian-Norwegian relations were distinguished by the absence of military conflicts and a desire for mutual understanding and good neighborly relations, which became the ground for cooperation in the North and the Arctic. This view was challenged by the events of 2014–2018, when, in connection with the Ukrainian crisis, Russia fell under a series of economic and political sanctions that questioned cooperation, incl. the Arctic one. The accession of Norway to the sanctions against Russia reduced the intensity of the political dialogue at the senior management level and led to a decline in cooperation.

These and other changes are becoming the subject of discussion in the academic community, which addressed both private problems of cooperation, successful cases of collaboration, and scenarios for the development of events in the region that can be of use in foreign policy decision making. The discussion is usually held in an international format, which indicates the continuation of the dialogue and readiness for a reasoned exchange of views.

September 14, 2018, the Norwegian Institute of International Affairs in Oslo (NUPI) hosted the International Conference “Cold Peace in the Arctic”. The event was held within the project CANARCT devoted to geopolitical changes and their impact on the situation in the Arctic. The project involved both Norwegian and Russian researchers and experts from other countries. The objective of the conference was to answer the question of whether new management practices and co-operation in the Arctic overshadow or soften the contradictions between Russia and Western

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countries. This issue was set in the light of political culture changes, technological development of the Arctic countries, economic activity in the region, and climate change.

Three panel discussions lighted some top issues of Arctic policy, international relations, economic activity in the region, Russian-Norwegian relations, and prospects of the Arctic development in various aspects.

The first panel discussion, "The Arctic as a domestic issue in Russia" covered the formation of the Russian Arctic policy (Helge Blakkisrud, NUPI), the energy potential of the Arctic region and concerning natural resources and its use (N. Poussenkova, IMAMO, Moscow), the formation of the Russian state approach to the Arctic as a "support zone" of the country (D. Tulupov, St. Petersburg State University). During the speech, Helge Blakkisrud emphasized preserving ties between Russia and the Western countries in international cooperation in the Arctic. He also introduced the Arctic policy of Russia as a two-tier system with both intra- and foreign elements. H. Blakkisrud defined the Russian Arctic as territorial complex within the jurisdiction of the Russian Federation, and the area that Russia considers its sphere of influence in the region. Blakkisrud H. believes that the Arctic is not a priority due to the absence of a relevant ministry. Russia only has a commission with a reduced amount of state funding to address the Arctic issues. The author concluded that Russian policy in the Arctic suggested a gradual search for answers to the challenges of the region.

Nina Poussenkova's report, "Energy resources of the Arctic Ocean and Europe (or Asia?)", focused on the development of oil and gas in the waters of the Russian Arctic. It was all about the internal and external aspects of the issue, e.g., the search for a comprehensive solution to ensure the profitability of extraction and selection of markets, which is essential in connection with a range of costs incurred by Russia in the institutional and foreign policy perspective. Analytics of the Russian Government let the author conclude the issue would not be among the priorities up to 2035.

Dmitry Tulupov touched upon the problem of defining "reference zones" in the Russian Arctic. The author outlined the following criteria: based on a territorial approach, the status of the territory of regional development, the availability of strategic natural resources, the implementation or preparation of "anchor" projects, the presence of clusters, and infrastructure, incl. transport (concerning the Arctic, the Northern Sea Route). The author believes, the main factor of success is bringing together interested public and private entities. In this case, all the players are showing interest in minimizing damage to the environment through the introduction of more environmentally friendly technological solutions. In the author's opinion, funding "support zones" is intended to be mostly at the expense of the interested corporations and partly due to foreign investments. The role of the NSR will not be deciding on a global scale at least the next 15 years, although it is not a priority for Russia.

The second panel discussion "The Arctic as a meeting place" covered such issues as the view on international cooperation in the Arctic from Russia (A. Sergunin, Saint Petersburg State

University), the effects of the interaction of the Arctic (K.L. Gjerde, NUPI), the US perspective of Arctic cooperation (H. Conley, CSIS).

Alexander Sergunin stressed the strategic importance of the Arctic for Russia concerning natural resources, which entails strengthening the country's presence in the region in different ways. Further, he elaborated on the different approaches to the Russian policy in the area. "Neo-realistic" school in Russia regards the situation in the region as the rivalry between Russia and the Western countries, mainly through mutual economic impacts. The West aims to maintain Russia's status as a "junior partner", the source of cheap resources, incl. labor and a market for products. "Neoliberals", in the author's opinion, start from the responsibility of all humanity for the region, which gives the right to share resources and their rational use. Radical neoliberalism school believes the Arctic should move to a management model like the Antarctic one. According to the researchers, the priority of the Russian Arctic strategy should be "human dimension" (i.e., the Arctic population, incl. the native peoples of the North) and environmental protection. North must abandon the military development and become a platform for Russian entry into the European and multilateral institutions. "Hybrid / moderate school" believes in the exclusive responsibility of Russia based on a pragmatic approach, considering the integration with supranational institutions. It should form a flexible system of regional governance with strong support from the country's aspirations and rights in the delimitation of the shelf, control the Northern Sea Route operation, countering organized crime, etc. Politics, according to the author, is dominated by a combination of neoliberal and neorealistic approaches, which avoid radicalization of these matters and maintain a higher degree of cooperation than confrontation.

Kristian Lundby Gjerde paid attention to changes in the dynamics and logic of interaction between Russia and the West in the Arctic since 2014. The example was Norwegian-Russian relations. He drew attention to the fact that, since 2012, the focus increasingly began to shift from cooperation to security. The author emphasizes, the Arctic region remains a platform for dialogue based on international law. As for Russia, it does not appear in Norwegian official documents as a threat to national security, although the partnership depends on whether the states find the opportunities for its preservation and development. Representation of Russia in Norway and the Norwegian image in Russia remain conflict emanating from the security of their interests. Both sides, in the author's opinion, believe it is possible to improve the relationship and expect the first steps of the partners, as reciprocal sanctions only led to a deterioration of the image of the West in Russia.

Heather Conley (Center for Strategic and International Studies, USA) identified that the Arctic remained in the background for Washington. It runs just some infrastructure projects in the region, but the activities remain low. The projects involve research and the country's participation in the Arctic Council. However, the administration of D. Trump managed to attract foreign investment to Alaska. Despite the possibility of agreements in the "5+5" format (five Arctic sea states and five non-Arctic states engaged in fishing in the region), the National Security Strategy and De-

fense did not indicate any priorities in the region but deal with the presence of the US competition with China and Russia. The position of the US Congress designated decisive in this regard.

The conference keynote speech was one of the Minister of Foreign Affairs, Ine Eriksen Sørensen. Sending participants to the long history of cooperation and peaceful relations in the Arctic, the unique nature of the Norwegian-Russian relationships, shared historical memory, the Minister noted the intertwining of the concepts of “an ally” and “an opponent” concerning Russia remains relevant in Norway. It is associated with the country's priorities in foreign policy, based on membership in NATO, on the one hand, and the preservation of good relations with Russia, on the other. The Minister stressed the asymmetric character of the neighborhood between the countries, the narrowing of opportunities in Russia for the development of civil society, but noted “man-to-man” contacts between the two countries as the ground for the development of good relations. The role of the Arctic region in these issues is especially crucial because international law remains the primary regulator that reduces the conflict potential. The purpose of the Northern Dimension of Norway's foreign policy in building good neighborly relations in the Arctic is particularly important. Cooperation in the Barents Euro-Arctic region (in 2018, 25 years) played a considerable role, developing cross-border cooperation, regional development, maintaining, and enhancing “man-to-man” contacts.

The Minister said, “the peace is not just the absence of war,” the legacy of the “cold war” somehow affects the relations between the two countries. Therefore, the “cold peace” is unacceptable; cooperation is a critical success factor.

The third panel “Arctic Futures” touched upon such issues as “hard security” in the Arctic (P. Baev, Institute for Conflict Studies in Oslo, PRIO), the future of international cooperation in the Arctic from the perspective of the region (K. Zaikov, NARFU) and scenarios for the future development of the Arctic (J. M. Godzimirski, NUPI). Pavel Baev, in his report “Challenges of “hard security” in the Arctic”, noted two cornerstones of the Arctic policy of Norway and Russia: on the one hand, it is military construction, and on the other, international cooperation. The author emphasized the advantage of the first element, as a rule, undermines the second, and this process intensified after the Ukrainian crisis in 2014. The main problem that the author drew attention to is the change in Russia's status in the Arctic. The goal of the author was to determine the role of Russia as a revisionist or a state-supporter of the status quo in the region. Baev P. drew attention to the reasons for the militarization of the region, strengthening the military-industrial complex and the expansion of cooperation with China in the region. The first speaks in favor of Russia as a supporter of the status quo in the Arctic. But in general, the country acts as a revisionist of the established order. Konstantin Zaikov, in his speech on “The future of international cooperation in the Arctic: a view from the region”, spoke about the status of specific territories in international cooperation in the Arctic. Considering the foreign policy of Russia is the jurisdiction of the federal center, he noted the Russian regions have the potential for collaboration with external partners, both politically and on topical issues with standard solutions. He said, most of the Russian areas did not have

strategies for international cooperation. The Barents Euro-Arctic Region (BEAR) was cited in the report as an example of successful collaboration, with a critical role in education and science. Further development of inter-regional cross-border cooperation, according to K. Zaikov, requires continuing lowering administrative barriers and strengthen the flows of collaboration in a cross-border format, where the author noted positive dynamics.

The panel's final report by Yakub Godzimirski (NUPI) — "Arctic futures — three basic scenarios" had the following goal: to assess the future of interstate cooperation in the region for the next ten years in the current political context. The author outlined three main scenarios for the region:

- Negative. It includes aggravation of relations with the possibility of military operations while preserving diplomacy and foreign economic activity, regulated by the motives of survival;
- Continuity. The scenario assumes coexistence in a diplomatic format with reliance on international institutions and key players in both the world and the region;
- Positive scenario. It involves cooperation on an institutional basis and liberal values, as well as contribution to the implementation of joint projects with a possible ideological consensus.

The ideal option, according to the author, seems to be convergence considering common values according to the EU model. The possibility of a scenario, according to the author, depends on the main actors, problems, localization, drivers, and time of events. He believes that roles can be distributed both among global and local players, both state and non-state. Drivers can be processes in various areas of human interaction, as well as climate change, specific claims and requirements, and the participation of individual non-Arctic players. Jakub M. Godzimirski referred Dmitry Trenin, who in 2014 presented five main areas with a need for cooperation: territorial issues, energy resources, sea routes, the international legal regime, and military-strategic processes. Jakub M. Godzimirski suggests the second and third scenarios in one or another combination are the most probable. At the same time, he identifies factors that can adjust any of the options: political, economic, technological, and environmental.

Considering the opinions voiced at the conference and the research presented, it seems possible to conclude that mitigating the contradictions in the region and developing effective international cooperation is possible. The key points noted by the authors of the reports speak in favor of this: an active search for solutions to the existing challenges to the development of the Arctic, combining the efforts of state and private structures, reducing radicalism in relations between countries, developing cross-border cooperation, institutionalizing new forms of relationships in the region, and a tendency to lower administrative barriers to the collaboration at the interregional level, the search for consensus on controversial issues.

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A large-scale meeting of Nordic and Russian historians, philologists and archaeologists in Arctic Norway *

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Abstract. The history of Russia and Norway and their areas in the Arctic and Russian-Norwegian relations are traditionally important for the residents of both states. Opportunities to present new documents and materials, to discuss the significance of centuries-old ties between Russia and Norway, especially in the North, are not provided so often. In early April 2019, a large-scale scientific seminar of Russian and Scandinavian historians, philologists, and archaeologists was held at the University of Tromsø — the Arctic University of Norway. It was precisely dedicated to the issues listed above. One of the reasons for the meeting was the jubilee of the Honorary Doctor of the Northern (Arctic) Federal University named after M.V. Lomonosov, Professor J.P. Nielsen. Also, the seminar hosted the presentation of a collective scientific collection written by associates of J.P. Nielsen from various countries — “In the North, the East and the West meet.”

Keywords: *Russian-Norwegian relations, North of Russia and Norway, Arctic territories, cooperation in historical science, good neighborly relations, an international seminar in Tromsø.*

April 2019 may well go down in the history of the Russian-Norwegian and even Russian-Scandinavian scientific relations in the social and humanitarian sphere. On April 4, 2019, in the Arctic part of Norway, at the University of Tromsø — the Arctic University of Norway, a large meeting of historians, linguists, and archaeologists from Russia and the Scandinavian countries was held. The reason for such a meeting, attended by about 200 people, was the Jubilee of Professor Jens Petter Nielsen. Besides, the meeting coincided with the presentation of a scientific collection written by colleagues of J.P. Nielsen — “In the North, the East and West meet”.

So, in early April 2019, colleagues, partners, and collaborators of J.P. Nielsen, arrived in Tromsø from capitals and different towns of the North: from the Russian Federation (Moscow, St Petersburg, Murmansk, and Arkhangelsk), and Norway (Oslo, Longyearbyen, Bergen, Bodø, Alta, Kirkenes, Vadsø, Vardø, and Tromsø) and Sweden (Stockholm). This meeting took place in the form of a scientific seminar and was called a “jubilee seminar”. It became a kind of international celebration of Jens Petter Nielsen and an acknowledgment of his scholarly merits.

Since 1990, J.P. Nielsen is a professor (“International relations, polar research, the study of the North”) at the Department of History (since 2016 — Department of Archaeology, History, Reli-

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gious Studies and Theology) University of Tromsø (since 2014 — University of Tromsø — The Arctic University of Norway).

His research interests have, for almost 45 years (since the beginning of the 1970s) been focused on three essential areas: Russian (and Soviet) history and historiography, the history of the North-Norwegian and Norwegian-Russian relations, with an emphasis on the northern and Arctic areas of the two countries. Over the years, first at the University of Oslo, since 1990 at the University of Tromsø — the Arctic University of Norway, Jens Petter has participated in a significant number of international, national and regional research projects. More than 2/3 of his historical themes cover the 19th — the beginning of the 21st century. His work also includes such areas as organizational, educational, scientific assistance of young scientists. From year to year, J.P. Nielsen plays a leading role in conferences, seminars, and meetings; he has reported on various issues in the history of Russian-Norwegian relations in many cities of Russia and Scandinavia.

In 1998, Professor J.P. Nielsen became an Honorary Doctor of the Pomor State University named after M.V. Lomonosov in Arkhangelsk. This title was confirmed once again in 2015 after the renaming of the university as the Northern (Arctic) Federal University named after Lomonosov. Thus, he has been an Honorary Doctor of this university for more than 20 years. Jens Petter has also, for many years, been a member of Academia Borealis, the North Norwegian Academy of Sciences, as well as member of The Norwegian Scientific Academy for Polar Research, and, in Arkhangelsk, a member of the editorial board of the peer-reviewed scientific journal “Bulletin of the Northern (Arctic) Federal University”. Series “Humanities and Social Sciences” and the editorial board of the peer-reviewed scientific journal “Arctic and North” (both issued in Arkhangelsk).

Since the 1980s, Professor J. P. Nielsen has taught at different universities in Norway and Russia, been responsible for relevant studies of bachelor, master and doctoral students in Norwegian, Russian and English; for a number of courses on the history of Russia, the Russian and Soviet historiography, the history of the Arctic and the Northern Sea Route, Norwegian-Russian relations in the 19th — beginning of the 21st centuries.

In September 2018, a collective monograph “Getting closer: Norway and Russia. 1814–1917”, edited by Jens Petter Nielsen (published in Russian in 2017 by the Moscow publishing house “Ves Mir”) received a special award from the Association of Book Publishers of Russia as the “Best book (published in 2017) contributing to the dialogue of cultures”¹.

The book was written by 17 historians from Russia and Norway within a joint megaproject called “Neighbourly Asymmetry. Norway and Russia. 1814-2014” (see below). In November 2018, Professor J.P. Nielsen received a letter of appreciation from the Rector of the Northern (Arctic) Federal University named after M.V. Lomonosov (NArFU) for his significant contribution to the development of scientific and educational cooperation between NArFU and the University of Tromsø

¹ Sblizhenie: Rossiya i Norvegiya v 1814–1917 godah. Pod red. J.P. Nil'sena (per. s norvezhskogo yazyka s dopolneniyami kollektivnoj monografii “Russland kommer nærmere: Norge og Russland 1814–1917”) [Nielsen J.P., ed. Convergence: Russia and Norway in 1814-1917 (translated from Norwegian with additions “Russland kommer nærmere: Norge og Russland 1814-1917”. Oslo, Pax Forlag AS, 2014, Vol. 1)]. Moscow, Ves Mir, 2017, vol 708, no. 1. (In Russ.)

— the Arctic University of Norway in connection with the 25th anniversary of the cross-border cooperation between the two university-partners.

So, at the international seminar, which took place on April 4, 2019, at the Arctic University of Tromsø, it was possible to hear many colleagues of J.P. Nielsen speaking. One of the first to talk about the dynamics of Russian historians cooperation with colleagues from the Nordic countries over the past 30 years was A.A. Komarov — leading researcher, head of the Nordic Center for History and the Baltic, Institute of World History, Russian Academy of Sciences and a professor at the University of Tromsø — the Arctic University of Norway. He could surprise the audience with memories of some innovative Norwegian-Russian projects. First, it was the research mentioned above, the megaproject in history “Neighbourly Asymmetry. Norway and Russia. 1814–2014”, carried through in 2008–2014². Numerous publications had appeared recently in Norwegian, e.g., the diaries of A.M. Kollontai in the period when she was Soviet envoy to Norway (1922–1930) and a collection of archival documents on the history of the Soviet-Norwegian relations. Besides, Alexey Komarov underlined the results of various discussions, meetings, conferences, in tandem with Norwegian colleagues, attended by both well-known historians and recent graduates. One of the most important meeting places, he said, is the international Kirkenes seminars of historians from Norway and various Russian scientific centers. They were named after the location of the first seminar — Kirkenes, in 2002. This kind of tradition got the support of the Consulate General of the Russian Federation, located directly at the border with Russia, the Norwegian town of Kirkenes.

In 2017, the sixth and so far most recent seminar was again organized in Kirkenes. This time the organizer was the Barents Institute — an institute which is a part of the Faculty of Humanities, Social Sciences, and Education of the University of Tromsø — Arctic University of Norway. The sixth Kirkenes seminar gathered more than thirty historians from Russia and Norway. They presented new documents and materials about the centuries-old good neighborly relations between Russia and Norway, esp. in the North. Academic organizers of this workshop in addition to A.A. Komarov and J.P. Nielsen were Professor V.V. Tevlina (Northern (Arctic) Federal University, University of Tromsø — The Arctic University of Norway); Associate Professor V.A. Karelin (St. Petersburg Military Institute); Associate Professor Marianne Neerland Soleim (University of Tromsø — The Arctic University of Norway) and Professor Sergey G. Verigin (Petrozavodsk State University). It is noteworthy that the Kirkenes Seminar in 2017 was devoted to the 30th anniversary of cooperation between historians of Russia and Norway, established in the wake of the Perestroika in 1986–1987. The next, the seventh, Kirkenes seminar is scheduled to be held in Arkhangelsk in 2020.

The presentation by NArFU Professor V.I. Goldin at the jubilee in Tromsø was devoted to the peculiarities and prospects of interaction between the Arkhangelsk historians and Jens Petter

² See more about the course and results of the project: Goldin V.I., Zaykov K.S. *Norvegiya i Rossiya: 1814–2014. Itogi megaproekta [Norway and Russia: 1814–2014. The results of the megaproject]. Voprosi Istorii [Questions of History]*, 2019, no 3, pp. 103–109. (In Russ.)

Nielsen as coordinator, initiator, and participant of joint projects on the study of the regional history of the Russian North and the North of Norway. Vladislav I. Goldin paid attention to joint book publications, especially on the history of the North, issued in Norwegian, English, and Russian in the 1990s — 2010s as the result of the joint efforts of humanists on both sides of the border. He emphasized books published within the Russian-Norwegian historical project “Neighbourly Asymmetry. Norway and Russia 1814–2014”, viz. works on the history of Russian-Norwegian relations. Among them, he mentioned books like “Caution & Compliance. Norwegian-Russian Diplomatic Relations 1814-2014” (2012); “Net Severa, a est' Severa”. The manifold ideas of the North in Norway and Russia” (2016) and other publications³.

V.I. Goldin also named several significant initiatives in cooperation between Russian and Norwegian historians taken in the late 1980s in the Arctic North of both countries. In this case, the Arkhangelsk Oblast has always played a unique role. Goldin noted the influence of Scandinavian scientific conferences, held in the form of international meetings of scientists from Russia and Scandinavia, at the turn of the 20th and 21st centuries. Among them is the “Conference for the Study of the Scandinavian countries and Finland” traditionally held in Russia since the 1980s. They have repeatedly been organized in Moscow, Arkhangelsk, Petrozavodsk, and other cities of Russia, with the active participation of the Institute of World History, Pomor State University (now NArFU), and other universities in Russia. At the same time V.I. Goldin reminded the audience that Professor J.P. Nielsen, in the 1980s — 1990s, was a permanent member of the organizing committee and co-coordinator for several conferences. “It is a hope that this kind of forums can return,” — he said in the conclusion of the speech. The professor also read solemn greetings to the participants of the meeting and personally to J.P. Nielsen from the NArFU Rector, Professor E.V. Kudrjashova, and all the university staff.

Joint international meetings of historians, philologists, and archaeologists held repeatedly in Moscow with the participation of Professor J.P. Nielsen were mentioned by Professor Tatyana Jackson, the Institute for World History of the Russian Academy of Sciences. T. Jackson has long collaborated with Jens Petter. She noted that at the very beginning of the 1990s when the above-mentioned conference on the history of the Scandinavian countries and Finland was held at the Russian Academy of Sciences for the first time, with the participation of colleagues from Moscow, St Petersburg and other cities of Russia and Scandinavia, J.P. Nielsen took part and gave a presentation. Besides, Tatyana Jackson named exciting articles about the North and Russian-Norwegian relations, published for more than 20 years in Norway in the English peer-reviewed scientific journal “Acta Borealia”. Colleagues from scientific centers of Russia and Norway have repeatedly published there, incl. Professor Nielsen, who (in 1999–2003) was one of the journal co-editors.

³ Bones S., Myklebust K.A., eds. Caution & Compliance. Norwegian-Russian Diplomatic Relations 1814-2014. Oslo, Orkana Akademisk, 2012. 202p. Myklebust K.A., Nielsen J.P., Tevlina V.V., Komarov A.A., eds. Niet severa, a est' severá. [About the diversity of concept “Northernness” in Norway and Russia]. Moscow: URSS, 2016. 288 p. (In Russ.)

Among the speakers at the jubilee seminar in 2019, one can also distinguish professors from the University of Tromsø — the Arctic University of Norway, Stian Bones, and Kari Aga Myklebost. Their joint speech concerned the analysis of scientific relations between Russia and Norway after the dissolution of the Soviet Union and the search for areas of mutual interest in humanities, especially outlined at the turn of the century. They also noted his “art of wording and ability for decades to pave the way through the high waves of interstate historical research”. They also emphasized the decisive role of Jens Petter Nielsen in “the quality educational reform”.

Two speeches at the seminar were devoted to the experience of the joint long-term study of documents stored in the Russian archives on different aspects of Russian-Norwegian relations. We are talking both about ties between Norway and tsarist Russia, but also about Norwegian-Soviet historical relations. This experience was analyzed by professor Sven G. Holtsmark from Oslo and associate professor from St. Petersburg Vladimir A. Karelin. As a result of the cooperation between Russian and Norwegian historians, two extensive collections of documents have been published. One of them is called “Norway and the Soviet Union 1917–1955. A foreign policy documentation” (there is both a Norwegian and a Russian edition), and the second — “Old’ Russia and “new” Norway. Russian-Norwegian relations 1905–1917. A collection of documents” (In Russ.)⁴.

No less remarkable and exciting were speeches that focused on specific historical topics. Associate Professor Marianne Neerland Soleim from the University of Tromsø — the Arctic University of Norway highlighted main issues in field studies related to the Second World War and the commemoration of Norwegian-Russian military history in the post-war period. Dr. art. Marianne Soleim is a former student of Jens Petter Nielsen. She has been studying the fate of Russian prisoners of war in Norway (1941-45) for more than 20 years, working for the immortalization of the memory about them. The achievements of Marianne Neerland Soleim have resulted in positive feedback from Russia, among other things, a letter of gratitude from the President of the Russian Federation. In 2014–2017, Marianne Neerland Soleim was Director of the Barents Institute at the University of Tromsø — the Arctic University of Norway, and now she is an Associate Professor at the same university, at the Institute of Archeology, History, Religious Studies, and Theology.

Professor Einar-Arne Drivenes and associate professor Harald Dag Jølle, both from Tromsø, focused on the topic of the history of the polar regions since the 1970s. The speakers noted the role of Professor Jens Petter Nielsen as a polar historian, a connoisseur of northern subjects, who has participated in several projects related to the Arctic. Associate Professor of Murmansk Arctic State University M.B. Ilyicheva, in the same way, spoke about the importance of studying the history of the Kola Peninsula and the Murmansk Territory in the 19th and early 20th centuries, and what Russian and Norwegian historians had obtained in this respect through their cooperation.

⁴ Chubaryan A.O., Riste U., Komarov A.A., Lebedev I.V., Holtsmark S.G., Korobochkin M.L., Roginskiy V.V., Egge O., eds. *Sovetsko-norvezhskie otnosheniya. 1917-1955. Sbornik dokumentov* [Soviet-Norwegian relations. 1917-1955]. Moscow, ELIA-ART-O, 1977. 683 p.; Karelin V.A., Nil'sen J.P., eds. *“Staraya” Rossiya i “novaya” Norvegiya. Rossiysko-norvezhskie otnosheniya 1905–1917* [“Old” Russia and “new” Norway. Russian-Norwegian relations 1905–1917]. Moscow, LENAND, 2014. 400 p. (In Russ.)

The former Norwegian ambassador to Russia, Øyvind Nordsletten, said a few words devoted to J.P. Nielsen and, at the same time, mentioned the numerous joint publications, seminars, and meetings of Russian and Norwegian historians after the demise of the Cold War. Nordsletten is a unique person. He served twelve years altogether as Norwegian Ambassador in Russia and then as Norwegian Consul General in Murmansk. He was one of the architects behind large scale exhibition, "Russia — Norway: Through Centuries and Borders," launched in Oslo and St Petersburg in 2004-2005 to commemorate the centenary of the establishment of diplomatic relations between the two countries in 1905. Øyvind Nordsletten mentioned this exhibition with enthusiasm. Moreover, not the last role in making this exhibition, as the speaker noted, belongs to the engine of these processes — J.P. Nielsen. By the way, Øyvind Nordsletten himself became an important actor in the breakthrough for economic, cultural, and other cooperation between Russia and Norway, which came after the breakdown of the Soviet Union.

During the seminar, a Festschrift with the title "In the North, the East, and West meet" was presented⁵. It was published in Norway by the publishing house Orkana Akademisk. Editors were Stian Bones and Kari Aga Myklebost. We can not describe the entire contents of this book, with articles written in four languages: Russian, English, Norwegian, and Swedish. We will only note that it is dedicated to honoring the years of the professional activity of Professor Jens Petter Nielsen as a humanitarian, a historian, a scientist, and a historian-teacher. The book contains 25 articles, placed in six sections and dedicated, one way or another, to the diverse scientific topics that have been treated by Professor Nielsen himself and his Norwegian and Russian colleagues. The monograph looks like a significant publication; it presents unique scientific materials on several topics with photographs and maps covering almost 500 years of historical development in Norway and Russia. It deals with Russian and Soviet historiography; the history of Russia and Norway separately, esp. in the 20th century; Norwegian-Russian relations with a focus on the North and the Arctic parts of the two countries; the development of the Northern regions of Norway.

At the end of the Festschrift, there is a bibliography of Professor J.P. Nielsen's publications. It appears that over the years of his activity (since the 1970s — present), he has had about 300 publications in different languages (Norwegian, Swedish, Russian, English, and German) and various publication channels in Norway, Sweden, England, Russia. Among them, we find nine monographs written by J.P. Nielsen, 128 co-authored books, and 25 books where he was editor or co-editor. Such research activity, basically related to the two neighbor states, Russia and Norway, and to the international relations in the North of Europe, is impressive, and this was emphasized both by speakers during the jubilee session and by authors in the Festschrift.

So, the scholarly meeting of researchers from Russia, Norway, and Sweden in Tromsø in April 2019 was not only about the activities and indisputable merits of Professor J.P. Nielsen. It also gave people an opportunity to summarize what had been done on a range of issues in the his-

⁵ Bones S., Myklebust K.A., eds. *In the North, the East and West meet*. Stamsund, Orkana Akademisk, 2019. 408p.

torical relations between Norway and Russia - and to outline the prospects for new joint projects and cooperation between Norwegian and Russian historians in the future.

SUMMARY

Authors, titles, abstracts, and keywords

SOCIAL AND ECONOMIC DEVELOPMENT

КОРЧАК Е.А. Роль трудового потенциала в устойчивом развитии Арктической зоны России

KORCHAK E.A. The role of labor potential in the sustainable development of the Russian Arctic

Аннотация. Залог эффективного освоения ресурсов Арктики составляют активные усилия по развитию элементов социально-экономических систем арктических регионов, прогресс в использовании которых обеспечит синергетический эффект при реализации всего спектра приоритетов развития Арктической зоны. Один из таких элементов — трудовой потенциал, способный эффективно противостоять вызовам в Арктике. Современными угрозами развития трудового потенциала арктических регионов являются снижение численности населения, нарушение процессов воспроизводства населения, низкая ожидаемая продолжительность жизни мужчин и коренного малочисленного населения, социальная напряжённость на территориальных рынках труда, бедность населения. Положения и выводы представленного исследования содержат научно обоснованную позицию в отношении роли трудового потенциала в устойчивом развитии арктических регионов России. Результаты исследования ориентированы на их практическое использование в сфере управления развитием трудового потенциала арктических регионов. Перспективы дальнейшей разработки затронутой темы связаны с проработкой научных основ активизации механизмов территориального саморазвития в достижении устойчивого развития арктических регионов России.

Ключевые слова: *трудовой потенциал, арктический регион, устойчивое развитие, рынок труда, уровень жизни, демографическая ситуация, безработица, социальное лицензирование.*

Abstract. The key to the effective development of the Arctic resources is the active development of elements of the socio-economic systems of the Arctic territories. The progress in their use will provide a synergistic effect in the implementation of the full range of development priorities of the Arctic zone. One of these elements is labor potential able to confront challenges in the Arctic effectively. Modern problems of the development of the labor potential of the Arctic territories are population decline, disruption of population reproduction processes, the low life expectancy of men and native people, social tensions in labor markets, and poverty. The provisions and conclusions of the presented study contain a scientifically substantiated position regarding the role of labor potential in the sustainable development of the Arctic territories of Russia. The research results are focused on their use for managing the development of the labor potential of the Arctic territories. Prospects for the further research of this topic are related to the study of the scientific foundations of the territorial self-development in achieving sustainable development of the Arctic territories of Russia.

Keywords: *labor potential, the Arctic region, sustainable development, labor market, the standard of living, demographic situation, unemployment, social licensing.*

КРЮКОВА Н.В. Проблемы законодательного регулирования традиционного (аборигенного) промысла тихоокеанского моржа в России

KRYUKOVA N.V. Legal regulation of the traditional (native) Pacific walrus harvest in Russia

Аннотация. В статье кратко рассмотрен уровень изученности тихоокеанского подвида моржа. Эта информация необходима для обоснования общего допустимого улова (ОДУ), поскольку этот подвид моржа ежегодно добывается коренными малочисленными жителями Чукотки. Обращено внимание на длительное изменение среды обитания моржа — сокращение ледового периода Берингова и Чукотского морей, последствиями чего могут быть увеличение смертности и эпизоо-

Abstract. The article briefly reviewed studies of the Pacific walrus. This information is necessary for the development of the Total Allowable Harvest (TAC) since the native people of Chukotka annually harvest this subspecies of walrus. We have drawn attention to the long-term change in the habitat of the walrus, i.e., to the reduction of the ice period in the Bering and Chukchi Seas and possible consequences for the walrus (increased mortality and epizootics). Legal acts for the fisheries are regulating the traditional (native)

тий. Рассмотрены законодательные акты рыбохозяйственной отрасли, регулирующие традиционный (аборигенный) промысел моржа на Чукотке, а также отлов детенышей моржей в учебных и культурно-просветительских целях. Также в статье описана схема разработки обоснования ОДУ по моржу и представлены последние данные по выделенным квотам и фактическому изъятию моржа. Обсуждается необходимость более детальных и разносторонних исследований моржа в связи с изменением климата. Автор полагает, что для лучшей организации исследований и изучения моржа в период изменения климата, с целью сохранения и рационального использования, необходимо сотрудничество между коренными малочисленными народами Чукотки и различными научно-исследовательскими институтами.

Ключевые слова: Арктика, Север, Чукотка, традиционный аборигенный промысел, тихоокеанский морж, законодательные документы.

СЕРОВА Н.А., СЕРОВА В.А. Основные тенденции развития транспортной инфраструктуры российской Арктики

SEROVA N.A., SEROVA V.A. Critical tendencies of the transport infrastructure development in the Russian Arctic

Аннотация. В статье рассматриваются некоторые аспекты формирования единой транспортной системы Арктической зоны РФ. Актуальность и значимость настоящего исследования определяется тем, что развитие инфраструктуры арктической транспортной системы — Северного морского пути и тяготеющих к нему аэропортовой сети, морских портов, водных и наземных коммуникаций, является одним из стратегических приоритетов государственной политики России в Арктике. Цель работы заключалась в определении основных тенденций развития транспортной инфраструктуры Арктической зоны РФ. Рассмотрены факторы, определяющие специфику функционирования транспорта в арктических условиях. По мнению авторов, транспортная инфраструктура АЗРФ недостаточно развита и требует улучшений. Единая арктическая транспортная система будет возможна только после восстановления круглогодичной навигации по СМП, его технологического оснащения и восстановления связанной с ним транспортной инфраструктуры.

Ключевые слова: Арктическая зона РФ, Северный морской путь, транспортная система, транспортная инфраструктура.

walrus harvest on Chukotka, and the capture of walrus calves for educational and cultural purposes have been described. A scheme for the development of the TAC for the walrus has been discussed as well. We have presented the latest data on allocated quotas and actual walrus harvest. The need for more detailed and versatile research of walrus in connection with climate change is discussed. The author suggests cooperation between the native people of Chukotka and various research institutions for the better-organized study of the walrus in relation to climate change, for conservation and rational use.

Keywords: the Arctic, North, Chukotka, traditional (native) harvest, Pacific walrus, legal acts.

Abstract. In the article, the authors discussed the formation of a single transport system in the Arctic zone of the Russian Federation. The development of the Arctic transport system, i.e., the Northern Sea Route, adjacent airport network, seaports, water, and land communications, determined the relevance and significance of the study. It is especially important since they are the strategic priorities of Russia's Arctic policy. The study aimed to identify the trends in transport infrastructure development in the Russian Arctic. So, the authors focused on the factors determining its specifics. They conclude that the transport infrastructure of the Arctic zone of the Russian Federation is underdeveloped and needs technical improvement. According to the authors, a unified Arctic transport system is possible only after the restoration of year-round navigation through the NSR, its technological growth, and the reconstruction of the adjoining transport infrastructure.

Keywords: the Arctic zone of the Russian Federation, the Northern Sea Route, transport system, transport infrastructure.

ПОЛИТИЧЕСКИЕ ПРОЦЕССЫ И ИНСТИТУТЫ POLITICAL PROCESSES AND INSTITUTIONS

ГУДЕВ П.А. Новые риски и возможности межгосударственного сотрудничества в Арктике

GUDEV P.A. New risks and opportunities for interstate cooperation in the Arctic

Аннотация. Арктика, несмотря на усиление напряжённости в отношениях России и Запада, продолжает оставаться зоной мира и сотрудничества. Уровень межгосударственного взаимодействия здесь очень высок. Кооперация развивается по линии научных исследований, защиты морской среды и биоразнообразия, регулирования рыболовства, совершенствования усилий по поиску и спасанию, борьбы с нефтеразливами, контролю над судоходством. Однако межгосударственная конкуренция никуда не исчезла: страны-участницы морехозяйственной деятельности в регионе зачастую имеют совершенно разные приоритеты и жёстко отстаивают свои национальные интересы. Российская Федерация, находящаяся под санкционным давлением, вынуждена искать новых партнёров и союзников в Арктике. Этот выбор непросто, так как зачастую совпадение позиций по тем или иным вопросам является минимальным. Чтобы отстаивать свои интересы, России необходимо добиться такого формата взаимодействия с арктическими и неарктическими странами, который был бы предельно взаимовыгодным и работал на благо нашей страны.

Ключевые слова: Арктика, Арктический Совет, Северный морской путь (СМП), Комиссия по границам континентального шельфа, Шпицберген, США, НАТО, ЕС, КНР.

Abstract. Despite the growing tension in Russia-West relations, the Arctic region continues to remain a zone of peace and cooperation. The level of interstate collaboration here is extremely high, unlike other maritime regions. The interaction is developing in scientific research, protection of the marine environment and biodiversity, regulation of fisheries, improvement of search and rescue efforts, control of oil spills, and regulation of navigation. However, interstate competition has not disappeared in the Arctic. The countries participating in the maritime activities in the region often have completely different priorities and are firmly defending their national interests. Under sanctions' pressure, the Russian Federation is forced to seek new partners and allies in the Arctic. This choice is extremely difficult since the coincidence of positions on one issue or another is often minimal. In order to defend its interests, Russia needs to achieve such a format of interaction with the Arctic and non-Arctic countries which would be extremely mutually beneficial and work for the good of our country, but not to its detriment.

Keywords: the Arctic, the Arctic Council, the Northern Sea Route (NSR), Commission on the Limits of the Continental Shelf, Spitsbergen, USA, NATO, EU, PRC.

ТОДОРОВ А.А., ЛЫЖИН Д.Н. Интересы Великобритании в Арктике

TODOROV A.A., LYZHIN D.N. The UK's interests in the Arctic

Аннотация. В статье анализируются приоритеты государственной политики Великобритании в Арктике. Великобритания имеет давние традиции в изучении Арктики и является одной из первых стран-наблюдателей Арктического совета. В то же время арктическая стратегия Лондона в последние годы претерпевает ряд важных изменений, что является закономерной реакцией на меняющуюся ситуацию в регионе. Анализ доклада внешнеполитического ведомства Британии 2018 г. позволяет выделить четыре основных области интересов Соединённого королевства в Арктике. Во-первых, экономика страны продолжает в значительной степени опираться на углеводородные и биологические ресурсы Арктики. Во-вторых, после начала украинского кризиса и в условиях ухудшения отношений с Москвой власти Великобритании стали уделять гораздо

Abstract. The article analyzes the priorities of British policy in the Arctic. The UK has a long tradition of studying the Arctic and is one of the first observer countries of the Arctic Council. At the same time, the Arctic strategy of London has undergone several significant changes, which are a natural reaction to the changing situation in the region. An analysis of the British Foreign Ministry report 2018 reveals four primary areas of the UK's interest in the Arctic. First, the country's economy continues to rely heavily on the hydrocarbon and bioresources of the Arctic. Secondly, after the outbreak of the Ukrainian crisis and in the conditions of deteriorating relations with Moscow, the British authorities have begun to pay more attention to the security, primarily the military one. Third, an important direction of the UK Arctic policy is to solve the problem of climate change since the country considered one of the world lead-

большее внимание сфере безопасности, прежде всего, военной. В-третьих, важным направлением арктической политики страны, считающейся одним из мировых лидеров по сокращению выбросов парниковых газов, является решение проблемы изменения климата. Наконец, к приоритетам британской арктической политики относится развитие международного сотрудничества в регионе с опорой на научную дипломатию. Однако, несмотря на наличие официальных документов, закрепляющих приоритеты арктической стратегии Британии, политика Лондона в Арктике носит пассивный характер, что делает её объектом критики со стороны британских экспертов.

Ключевые слова: *Великобритания, Арктика, Россия, международное сотрудничество в Арктике, судоходство, безопасность, нефть и газ, Арктический совет, Парижское соглашение.*

ers in reducing greenhouse gas emissions. Finally, the development of international cooperation in the region based on scientific diplomacy is one of the priorities of British Arctic politics. However, despite the official documents fixing the priorities of the UK's Arctic strategy, London's Arctic policy is passive. This fact is a reason for British expert criticism.

Keywords: *the UK, the Arctic, Russia, international cooperation in the Arctic, navigation, security, oil and gas, the Arctic Council, Paris Agreement.*

СЕВЕРНЫЕ И АРКТИЧЕСКИЕ СОЦИУМЫ NORTHERN AND ARCTIC SOCIETIES

ГАЛИМУЛЛИН Э.З. Миграционные установки и механизмы привлечения молодёжи в Арктическую зону Российской Федерации

GALIMULLIN E.Z. Migration attitudes and mechanisms for attracting young people to the Russian Arctic

Аннотация. В данной статье автор рассматривает проблему миграционного оттока населения из регионов Арктической зоны Российской Федерации, значительную часть которого составляют представители социально активной части молодёжи. Проведённое исследование мотиваций молодых людей к переезду на постоянное или временное место жительства в Арктику показало, что в сознании данной социальной группы доминирует представление о регионе, характеризующееся скорее негативными ассоциациями, вроде «льда», «холода» и «снега». Несмотря на это, было выявлено существование конкретных материальных стимулов, которые, по оценкам респондентов, положительным образом повлияли бы на возможное решение о переезде, — речь идёт о предоставлении дополнительных оплачиваемых отпусков и арендного жилья. Удалось также установить примерные границы минимальной заработной платы, достаточной для принятия решения о переезде. Автор утверждает, что в изменившихся после распада СССР социально-экономических условиях, государственная политика в отношении привлечения в Арктику трудовых ресурсов требует окончательной определённости в выборе обсуждаемых вариантов развития макрорегиона, а также согласованности всех принятых на законодательном уровне

Abstract. In this article, the author considers the migration outflow of the population from the Russian Arctic, a significant part of which are representatives of the socially active youth. A study of young people's motivations to move to a permanent or temporary place of residence in the Arctic showed that the idea of a region dominates the consciousness of this social group, characterized more by negative associations, such as "ice", "cold" and "snow". Nevertheless, some specific material incentives that, according to respondents, would positively influence a possible decision to relocate revealed. We are talking about providing additional paid vacations and rental housing. It was also possible to establish approximate boundaries of the minimum wage enough to decide on moving. The author claims that the socio-economic conditions changed after the collapse of the USSR. The state labor policy in the Arctic requires clarification concerning the discussed development options. Also, it demands the coherence of all measures taken at the legislative level in the context of speedy adoption of the fundamental law on the Russian Arctic. It is necessary to continue the policy of supporting various volunteer organizations as the most active and mobile structures for informing young people about employment opportunities in the Arctic and involving their representatives in socially useful activities.

мер в контексте скорого принятия базового закона об Арктической зоне Российской Федерации. Необходимо продолжать и политику поддержки различных волонтерских организаций как наиболее активных и мобильных структур по информированию молодежи о возможностях трудоустройства в регионах Арктики и вовлечению её представителей в общественно полезную деятельность.

Ключевые слова: Россия, Арктика, АЗРФ, молодежь, государственная политика, демография, волонтер, Север.

Keywords: Russia, the Arctic, the Russian Arctic, youth, government policy, demography, volunteer, North.

ФЕДУЛОВА А.Б. Восстановительные технологии социальной работы как важное условие сохранения и обеспечения безопасности семьи (на примере Архангельской области)

FEDULOVA A.B. Recovery technology of social work — an important condition for maintaining and ensuring family safety (case of the Arkhangelsk Oblast)

Аннотация. Обеспечение социальной безопасности современной семьи является актуальной проблемой и приоритетом национальной политики Российской Федерации. В современном обществе прослеживается взаимосвязь между системой социальной безопасности общества и ресурсностью семьи. Семейная ресурсность выступает как совокупность потенциалов, направленных на поддержание стабильности семьи, развитие её компетентности в решении семейных проблем. В связи с этим актуальность представляют технологии социальной работы, направленные на активизацию ресурсов семьи, включение в процесс сопровождения семьи ближайшего окружения, которое становится активным субъектом в изменении семейного неблагополучия. Таким инструментом выступают восстановительные технологии, ориентированные на ресурсный потенциал семьи и ресурсы социального капитала. Данные технологии получили широкое распространение в зарубежном опыте социальной работы и являются перспективным направлением в российской практике. Использование восстановительных технологий может рассматриваться как фактор повышения эффективности институциональных ресурсов семьи в сфере социальной защиты населения. В статье проанализирована роль восстановительных технологий в вопросе обеспечения социальной безопасности семьи, рассмотрен опыт реализации восстановительных технологий социальной работы в Архангельской области.

Ключевые слова: социальная безопасность семьи, восстановительные технологии социальной работы, социальная работа с семьёй, семейное неблагополучие, семья, находящаяся в социально опасном положении, институцио-

Abstract. Ensuring the social security of the modern family is an urgent issue and a priority of the national policy of the Russian Federation. In contemporary society, the relationship between the social security system and the resource of the family is visible. Family resource acts as a set of potentials aimed at maintaining the stability of the family and the development of its competence in solving family problems. So, the technology of social work aimed at enhancing the resources of the family is essential. The same is fair for the role of the immediate environment in supporting the family since it becomes an active subject in solving family problems. Such an instrument is restoration technologies focused on the resource potential of the family and the resources of social capital. These technologies are widely used in foreign social work and are a promising area for the Russian one. The use of these technologies can be a factor in increasing the effectiveness of family institutional resources in the social protection of the population. Also, the author analyzed the role of recovery technologies in ensuring the social security of the family and examined the use of these technologies in the Arkhangelsk Oblast.

Keywords: social security of the family, recovery technologies of social work, social work with the family, family trouble, family in a socially dangerous situation, institutional resources, family resources, social capital.

нальные ресурсы, семейная ресурсность, социальный капитал.

ОБЗОРЫ И СООБЩЕНИЯ REVIEWS AND REPORTS

ВАЙСБЕРГ Л.А. Рецензия на монографию «Арктика: стратегия развития» коллектива авторов
VAISBERG L.A. Review of the monograph “The Arctic: A Development Strategy”

Аннотация. Рецензия подчёркивает важнейшие особенности монографии «Арктика: стратегия развития», подготовленной специалистами СОПС Минэкономразвития России и САФУ имени М.В. Ломоносова. Авторы научного труда провели системный анализ проблем развития Арктической зоны России и усилий государства по развитию этого макрорегиона, в частности, изучили льготные режимы осуществления хозяйственной деятельности и роль минерально-сырьевых центров — основных драйверов социально-экономического развития. По мнению рецензента, монография будет интересна как специалистам, так и широкому кругу читателей.

Ключевые слова: рецензия, монография, российская Арктика, Арктическая зона Российской Федерации, стратегия.

Abstract. The review emphasizes the key features of the monograph “The Arctic: Development Strategy”, prepared by experts of the Council for the Study of Productive Forces of the Ministry of Economic Development of Russia and NArFU named after M.V. Lomonosov. The authors prepared a systematic analysis of the development issues of the Russian Arctic and the state development efforts in this macro-region. They studied the preferential regimes of economic activities and the role of mineral resource centers — the main drivers of socio-economic development. According to the reviewer, the monograph is of interest both to specialists and to a wide range of readers.

Keywords: a review, a monograph, the Russian Arctic, the Arctic zone of the Russian Federation, strategy.

ВОРОНЕНКО А.Л. Обзор последних законодательных инициатив США в области освоения арктического региона

VORONENKO A.L. Overview of the recent US legislative initiatives for the Arctic development

Аннотация. В условиях значительного повышения внимания мирового сообщества к Арктике, а также интенсивного развития технологий по её изучению и освоению, примечательна низкая активность США в этой области. Статья посвящена обзору некоторых аспектов внутренней политики Соединённых Штатов в Арктике, а также содержит анализ двух законопроектов, внесённых на рассмотрение в Конгресс США, направленных на увеличение экономического присутствия в арктическом регионе. В статье отмечены факты повышающегося научного и практического интереса со стороны политических элит штата Аляска к изучению и освоению Арктики.

Ключевые слова: Арктический регион, США, Дональд Трамп, Лиза Мурковски, Арктический исполнительный руководящий комитет, Корпорация по развитию инфраструктуры арктического морского маршрута США.

Abstract. In conditions of a significant increase in the world community’s attention to the Arctic, as well as intensive development of technologies for its study and development, the low activity of the USA in this area is noteworthy. The article is devoted to a review of some aspects of the US home policy in the Arctic. It also contains an analysis of two bills submitted to the US Congress aimed at increasing the economic presence in the Arctic region. The author notes the increasing scientific and practical interest of the Alaska political elites in the study and development of the Arctic.

Keywords: the Arctic region, the USA, Donald Trump, Lisa Murkovsky, the Arctic Executive Steering Committee, the US Arctic Sea Infrastructure Development Corporation.

ЗАРУБИНА Л.А. «Холодный мир в Арктике»: в Осло обсудили перспективы сотрудничества России и Западной Европы в Арктическом регионе

ZARUBINA L.A. "Cold Peace in the Arctic": prospects for cooperation between Russia and Western Europe in the Arctic were discussed in Oslo

Аннотация. Статья представляет собой краткий обзор основных выступлений, представленных на международной конференции Cold Peace in the Arctic (Осло, Норвегия, сентябрь 2018 года), в которой участвовали специалисты из России, Норвегии и других стран. Автор полагает, что многие исследователи видят перспективы для смягчения противоречий и усиления международного сотрудничества в Арктике.

Ключевые слова: геополитика, Арктика, Норвегия, Россия, международное сотрудничество.

Abstract. The article represents a brief overview of the speeches presented at the "Cold Peace in the Arctic" international conference (Oslo, Norway, September 2018) attended by experts from Russia, Norway, and other countries. The author believes that many representatives of the scientific community see prospects for mitigating contradictions and strengthening international cooperation in the Arctic.

Keywords: geopolitics, the Arctic, Norway, Russia, international cooperation.

ТЕВЛИНА В.В., СОЛЕЙМ М.Н. Масштабная встреча историков, филологов и археологов из Северных стран и России в Арктической Норвегии

TEVLINA V.V., SOLEIM M.N. A large-scale meeting of Nordic and Russian historians, philologists and archaeologists in Arctic Norway

Аннотация. Вопросы, связанные с историей России и Норвегии и их северными частями в Арктике, а также российско-норвежскими отношениями, традиционно являются важными для жителей обоих государств. Возможности представить новые документы и материалы, обсудить значимость многовековых связей между Россией и Норвегией, особенно на Севере, предоставляются не так часто. В начале апреля 2019 г. в Университете Тромсё — Арктическом университете Норвегии состоялся масштабный научный семинар историков, филологов и археологов из России и Скандинавских стран, посвящённый именно этим вопросам. Одним из поводов проведения встречи стал юбилейный день рождения почётного доктора Северного (Арктического) федерального университета им. М.В. Ломоносова, профессора Й.П. Нильсена. Кроме того, на семинаре прошла презентация коллективного научного сборника, написанного соратниками Й.П. Нильсена из разных стран «In the North, the East and West meet».

Ключевые слова: российско-норвежские отношения, Север России и Норвегии, Арктические территории, сотрудничество в исторической науке, добрососедские связи, международный семинар в Тромсё.

Abstract. The history of Russia and Norway and their areas in the Arctic and Russian-Norwegian relations are traditionally important for the residents of both states. Opportunities to present new documents and materials, to discuss the significance of centuries-old ties between Russia and Norway, especially in the North, are not provided so often. In early April 2019, a large-scale scientific seminar of Russian and Scandinavian historians, philologists, and archaeologists was held at the University of Tromsø — the Arctic University of Norway. It was precisely dedicated to the issues listed above. One of the reasons for the meeting was the jubilee of the Honorary Doctor of the Northern (Arctic) Federal University named after M.V. Lomonosov, Professor J.P. Nielsen. Also, the seminar hosted the presentation of a collective scientific collection written by associates of J.P. Nielsen from various countries — "In the North, the East and the West meet."

Keywords: Russian-Norwegian relations, the North of Russia and Norway, the Arctic territories, cooperation in historical science, good neighborly relations, an international seminar in Tromsø.

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