

The Politics of Russian Arctic shipping: evolving security and geopolitical factors

Alexander Sergunin & Gunhild Hoogensen Gjørnv

To cite this article: Alexander Sergunin & Gunhild Hoogensen Gjørnv (2020): The Politics of Russian Arctic shipping: evolving security and geopolitical factors, The Polar Journal, DOI: [10.1080/2154896X.2020.1799613](https://doi.org/10.1080/2154896X.2020.1799613)

To link to this article: <https://doi.org/10.1080/2154896X.2020.1799613>



© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 03 Sep 2020.



Submit your article to this journal [↗](#)



Article views: 450



View related articles [↗](#)



View Crossmark data [↗](#)

The Politics of Russian Arctic shipping: evolving security and geopolitical factors

Alexander Sergunin ^{b,c,d} and Gunhild Hoegensen Gjorv ^a

^aCentre for Peace Studies, UiT The Arctic University of Norway, Tromsø, Norway; ^bDepartment of World Politics, Moscow State Institute of International Relations, Moscow, Russia; ^cSt. Petersburg State University, St. Petersburg, Russia; ^dNizhny Novgorod State University, Nizhny Novgorod, Russia

ABSTRACT


This study examines how soft security, including economic and environmental issues, inform the broader security and geopolitical factors of Moscow's policy on the Northern Sea Route (NSR). The authors begin by discussing how Russia's hard and soft security perceptions of Arctic shipping evolved in the post-Cold War era, including perceptual changes in the context of the Ukrainian crisis and ongoing tensions between Russia and the West. The article tries to structure Russia's security/geopolitical discourse on the NSR by identifying its key elements, including the role of the NSR in ensuring the country's economic security and its cohesiveness and connectivity of its different and distant from each other territories; NATO military activities in the NSR's adjacent regions; the US and some other states' vision of the Arctic sea lanes as 'global commons' where the freedom of navigation principle should be applicable; the need to control vast maritime spaces and coastline to prevent potential illegal activities ranging from poaching and smuggling to illegal migration and attacks against critical industrial and military objects; and the need to develop search and rescue (SAR) capabilities and be prepared to prevent and/or fight oil spills. The paper also discusses to what extent security and geopolitical concerns affect Russia's present-day debate and decision-making on the NSR, including its economic/commercial, diplomatic and legal aspects. The authors lastly examine what kind of practical measures are taken by the Russian authorities to ensure hard and soft security of Arctic shipping: reopening of old Soviet and constructing new Russian military bases along the NSR most of which have dual-use (SAR) capabilities; development of a border guard station network in the region; modernisation of the Coast Guard fleet; creation of SAR and emergency operations centres along the Arctic Ocean coastline; and the improvement of communication and navigation systems to increase maritime safety.

KEYWORDS

Russia; Arctic shipping; security; geopolitics

Introduction

The Northern Sea Route (NSR) constitutes a key component of Russia's national interests in the Arctic. Along with purely economic interests (which are one of Russia's strategic priorities in the High North), there are some security and geopolitical aspects of the NSR's development that should be also taken into account. The NSR is important for

CONTACT Alexander Sergunin  sergunin60@mail.ru

© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Moscow in terms of economic and environmental security as well as ensuring transport and social cohesiveness of the Arctic Zone of the Russian Federation (AZRF).

It should be noted that while the existing scholarship is replete with works on the economic, financial, technical and legal aspects of the NSR's operation, there are fewer publications on the security/geopolitical dimensions of the problem. The past literature tended to analyse some specific aspects of the NSR-related security dynamics, such as its importance for the so-called 'Northern supply' (providing remote AZRF settlements with fuel, equipment, foodstuff and other consumer goods)¹; the growth of environmental risks because of the increasing traffic²; the need to create a reliable search and rescue (SAR) system in the region³; foreign countries' claims on internationalisation of the route and freedom of navigation in its water area⁴; the potential threat of poaching and smuggling in Russia's exclusive economic zone (EEZ)⁵; the need to protect the NSR in view of NATO's growing military activities in the Arctic Ocean and adjacent regions,⁶ and so on. No systematic analysis of Russia's hard and soft security policies *vis-à-vis* the NSR was produced by the world scholarship.

This study aims to examine the role of security and geopolitical factors in making and implementing Moscow's policy on the NSR. The paper starts from analysing Russia's threat perceptions with regard to the NSR, particularly, in the context of Moscow's tensions with the West in the aftermath of the Ukrainian and Syrian crises. The next section explores the Russian security/geopolitical discourse on the NSR, including its official and unofficial components. Then, our analysis focuses on how security and geopolitical factors affect Russia's decision-making on the NSR policies. Finally, we review Moscow's practical measures to ensure the NSR's secure and sustainable development.

Threat perceptions

The Russian official documents, such as Moscow's Arctic strategies of 2008,⁷ 2013,⁸ and 2020,⁹ the state programme on the AZRF socioeconomic development (the 2017 edition),¹⁰ and 2017 economic security strategy,¹¹ inform us only on some of Russia's general security and geopolitical concerns regarding the NSR and Arctic shipping. Particularly, they underline the importance of the NSR for ensuring the AZRF's economic and food security as well as for providing connectivity of northern territories with 'mainland Russia' (because quite often there are no land transport communications between them). They also acknowledge the need for ensuring maritime safety and prevention of marine pollution from ships. The problem of potential natural and man-

¹Arikainen, *Sudohodstvo vo L'dakh Arktiki*; Bashmakova et al., *Transportno-Infrastrukturny Potentsial*; Gudev, *The Northern Sea Route*; Moe, *The Northern Sea Route*; and Zhuravel, *Razvitie Severnogo Morskogo Puti*.

²Abonismov, *Iskusstvo Ledovogo Plavaniya*; and Dushkova et al., *Environmental & Human Impact*.

³Abonismov, *Iskusstvo Ledovogo Plavaniya*; Arikainen, *Sudohodstvo vo L'dakh Arktiki*; Bashmakova et al., *Transportno-Infrastrukturny Potentsial*; and Stephenson et al., *Marine accessibility along Russia's Northern Sea Route*.

⁴Gudev, *The Northern Sea Route*; Kobzeva, *China's Arctic policy*; and Konyshev and Sergunin, *Rossiysko-Amerikanskie Otnosheniya v Arktike*.

⁵Sergunin, *Russia and Arctic Fisheries*.

⁶Gudev, *The Northern Sea Route*; and Zhuravel, *Razvitie Severnogo Morskogo Puti*.

⁷Medvedev, *Osnovy Gosudarstvennoi Politiki*.

⁸Putin, *Strategiya Razvitiya Arkticheskoi Zony Rossiyskoi Federatsii*.

⁹Putin, *Osnovy Gosudarstvennoi Politiki*.

¹⁰Medvedev, *Gosudarstvennaya Programma Rossiyskoi Federatsii*.

¹¹Putin, *Strategiya Ekonomicheskoi Bezopasnosti*.

made catastrophes in the NSR water area is mentioned as well. The Strategy-2008 specifically set the task of creating a reliable and secure border control regime in the AZRF coastal area in view of the NSR's opening up to international traffic.¹² The Strategy-2020 identifies the delays in developing the NSR infrastructure as well as building icebreakers, rescue and support ships as a serious developmental problem.¹³ In other words, Russia's doctrinal documents focus mainly on the soft security threats and challenges to Arctic shipping, rather than on the hard security or geopolitical problematique.

Perhaps the only exception was the 2017 version of the governmental programme on the AZRF socioeconomic development which addressed some military security-related issues by referring to the need to create a dual-use transport infrastructure, including the ports of Dikson, Tiksi, Pevek and Providence, as well as to maintain the technical readiness of the Northern Fleet to operate in the NSR water area.¹⁴ The Strategy-2020 also called for the creation of an effective Coast Guard system of the Federal Security Service (FSS).¹⁵

At the informal level, however, the Russian decision-makers and policy analysts are more eloquent about the hard security threats and challenges in the Far North. For example, some Russian military experts believe that the Norwegian and Barents Seas can still serve as the main launching areas for Western seaborne attack; therefore, these analysts maintain, the Russian Navy should still be concerned about the readiness of its anti-submarine forces in the Arctic Ocean.¹⁶ 'There are [US] submarines there and they carry missiles', President Putin told students at a meeting at Moscow State University. 'It only takes 15–16 min for US missiles to reach Moscow from the Barents Sea. So should we give away the Arctic? We should, on the contrary, explore it'.¹⁷

Given the ice-free Arctic in the foreseeable future (at least for part of the year), Russian military analysts do not exclude the possibility that the USA can permanently deploy a nuclear submarine fleet, large surface warships and sea-based ballistic missile defence (BMD) systems in the Arctic Ocean (currently, American submarines and other warships visit the region periodically).¹⁸ In the case of deployment of American BMD systems in the Arctic seas, analysts postulate that USA could create capabilities for intercepting Russian ICBM launches at the initial (boost) phase and making a preventive/'disarming' strike by intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs), and cruise missiles, regardless of whether they are nuclear or non-nuclear. In turn, this way of American strategic thinking can provoke Russia's continuing efforts to regularly modernise its strategic nuclear forces, with the aim of having sufficient potential to overcome the US BMD system.¹⁹ These potential developments, if they were to happen, could create direct hard security threats to the normal functioning of the NSR. For example, Moscow was very negative about joint US/UK naval exercises in the Norwegian and Barents seas in May 2020 when an American destroyer

¹²Medvedev, *Osnovy Gosudarstvennoi Politiki*.

¹³Putin, *Osnovy Gosudarstvennoi Politiki*, 3.

¹⁴Medvedev, *Gosudarstvennaya Programma Rossiyskoi Federatsii*, 28, 38.

¹⁵Putin, *Osnovy Gosudarstvennoi Politiki*, 3.

¹⁶Khramchikhin, *Voyenno-Politicheskaya Situatsiya v Arktike*; Khramchikhin, *Stanet li Arktika Teatrom*; Konyshchev and Sergunin, *Is Russia a Revisionist Military Power in the Arctic?*; and Konyshchev and Sergunin, *Russian Military Strategies*.

¹⁷Anishchuk, *Russia Needs Arctic Presence*.

¹⁸Khramchikhin, *Stanet li Arktika Teatrom*; Konyshchev and Sergunin, *Is Russia a Revisionist Military Power in the Arctic?*; and Konyshchev and Sergunin, *Russian Military Strategies*.

¹⁹Konyshchev and Sergunin, *The Changing Role of Military Power in the Arctic*; and Sergunin and Konyshchev, *Russian Military Strategies in the Arctic*.

Donald Cook with the BMD capabilities joined the exercise.²⁰ It should be noted that the US Navy surface ships have not operated in the Barents Sea since the mid-1980s. Despite the fact that the Barents Sea is formally not a part of the NSR water area (the route starts at the Kara Gate), the NATO naval activities in the NSR's proximity are perceived by the Russian military as a direct threat to Arctic shipping.

Regarding about the role of geopolitical factors in Russia's threat perceptions in the High North, international crises such as in Ukraine and Syria ones, should be mentioned. These crises have negatively affected Russia's relations with NATO and its member states, with NATO suspending several cooperative projects with Russia, including military-to-military contacts and the development of confidence- and security-building measures, including the Arctic. The NATO-Russian tensions led to some increase in their military activities and presence in the region, as well as accelerated their military modernisation programmes.²¹

It should be noted, however, that the most apocalyptic scenarios did not materialise in the High North. Instead of significantly expanding their military build-up and military activities in the region, both Western countries and Russia made the socio-economic development of their Arctic zones a priority. In parallel, the Arctic countries chose to bracket out their regional cooperation from their current tensions so that they could maintain relations with each other and other regional players on a cooperative track. In contrast to some pessimistic expectations, there has been no substantial change in the Arctic states' (including Russia) threat perceptions and their defence policies in the Far North. Along with other polar countries, Russia still believes that cooperation should prevail and the region should retain its status of the 'zone of peace and security'.

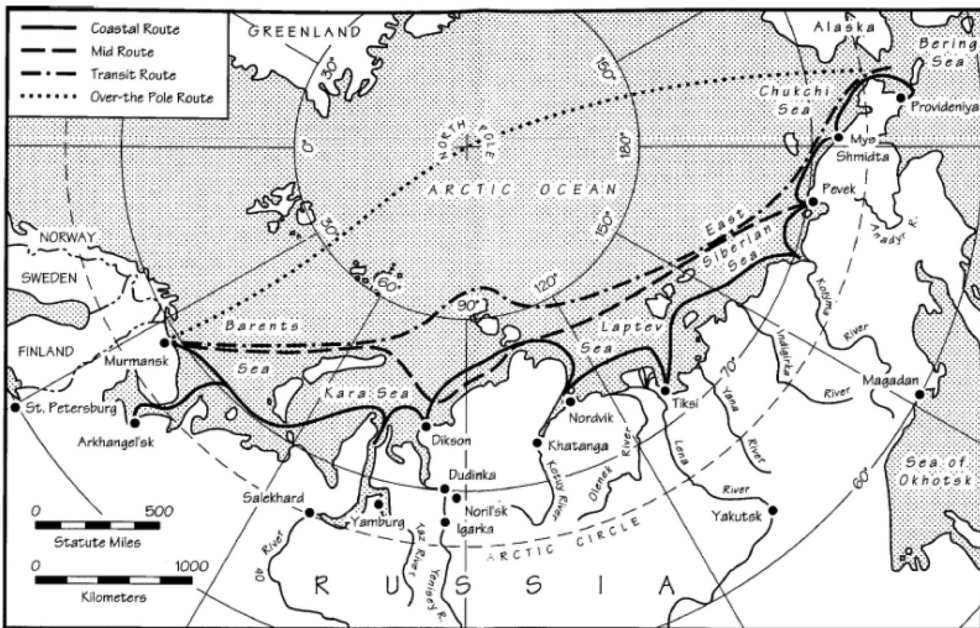
Some Russian security and geopolitical concerns are generated by the uncertain international legal status of the NSR. The latter includes the passage of nearly 60 straits, the main ones being the Vilkitski, Shokalski, Dmitri Laptev, and Sannikov Straits, running through three archipelagos, Novaya Zemlya, Severnaya Zemlya, and the New Siberian Islands. The legal definition is thus made more complex as there is not one single shipping channel; rather, there are multiple lanes, and the NSR crosses through waters of different status: internal, territorial, and adjacent waters, EEZ, and the open sea. The course of the route depends upon whether the ship crosses close to the coastlines or further out or chooses to bypass Severnaya Zemlya (see [map 1](#)).

According to the Russian legislation, all ships – Russian and foreign – should abide by rules of navigation established for the NSR water area. However, these rules have been refuted by the USA, which believes that acceptance of such regulations would mean recognising Russia's sovereignty beyond its territorial waters. The USA has, therefore, expressed its concerns and recalled that the UNCLOS regime on straits used for international navigation should take precedence over the rights of coastal states. The freedom of navigation principle was elevated by the USA to the top priority of its maritime strategy. Moreover, as the 2017 US National Security Strategy stipulates, Washington sees the Arctic as 'global commons' where Russia should not have a privileged position.²² Noteworthy, according to Vice Admiral Lisa Franchetti, US 6th Fleet commander, one of the main missions of the May 2020 US/UK

²⁰Adamczyk, *U.S. Navy ships*.

²¹Konyshov and Sergunin, *Is Russia a Revisionist Military Power in the Arctic?*; Konyshov and Sergunin, *Russian Military Strategies*; Lakshmi, *Is Russia Militarising the Arctic?*; Sergunin and Konyshov, *Russian Military Strategies in the Arctic*; and Tayloe, *Projecting Power in the Arctic*.

²²Trump, *National Security Strategy*.



Map 1. The alternative 'versions' of the Northern Sea Route. Source: <http://www.globalsecurity.org/military/world/russia/images/north-sea-route-map1.gif>

naval exercise in the Barents Sea was 'to assert freedom of navigation and demonstrate seamless integration among allies'.²³

As some American experts stress, geopolitical concerns about overreliance on Russia for energy and transportation will remain in the foreseeable future. Western sanctions introduced in the aftermath of the Ukrainian crisis will deter many international companies from the use of the NSR, and the result will be that the primary users of the sea routes will be Russian firms exporting their energy and minerals to China and some other Asian nations. According to these experts, an alternative approach is for the Arctic nations and other interested countries 'to work together, with or without Russia, to establish an icebreaker ship escort service across the Arctic. This requires thinking of the Arctic as a mutual business opportunity, like a jointly owned canal'.²⁴

Although China officially recognises Russia's sovereign rights in the NSR water area, some Chinese legal and political experts informally favour making Arctic sea routes international transport corridors.²⁵ They believe that, if Russia really wants to link the NSR to the global maritime transport system and get benefits from this, Moscow should internationalise it and maximally liberalise its transit regime.

The ideas of freedom of navigation and the NSR's internationalisation, however, meet a cold shoulder in the Russian political and expert communities. The latter perceive such

²³Adamczyk, *U.S. Navy ships*.

²⁴Treadwell, *Arctic Ambitions*.

²⁵Gudev, *The Northern Sea Route*; Kobzeva, *China's Arctic policy*; and Konyshev and Sergunin, *Strategii Stran Vostochnoi Azii*.

initiatives as ‘foreign encroachments’ on Russia’s geoeconomic and geopolitical positions and legal rights in the Arctic Ocean.²⁶

A number of Russia’s soft security concerns are related to the implementation of the Polar Code (PC) adopted by the International Maritime Organisation (IMO) and entered into force in January 2017. Some Russian experts doubt that all potential users of the Arctic seaways would be able to comply with the PC requirements. These concerns boil down to the following questions:

Who provides commercial vessels with licences to navigate the polar waters? Some Russian experts view the problem with the competence of flag state maritime administrations and classification societies, especially in the cases when these institutions come from southern countries lacking appropriate experience in Arctic shipping. They believe that authority should be moved from the flag to a port state. Most Russian experts believe that PC enforcement should be done by the port rather than flag states.²⁷ There are also doubts about the quality of crew training in non-polar countries. Some experts suggest training crews from non-polar states in the Arctic countries.

Other experts point out the lack of clear PC regulations with regard to the vessels operating with inadequate ice-strengthening and structural stability. The Code contains regulations requiring that ship operators limit entry into ice according to the ability of their ship to resist ice pressure, but concerns remain due to the fact that non-ice-strengthened ships will still be allowed to operate in ice-covered waters.²⁸ Some specialists believe that the structural requirements are too lax, for instance, being ice-classed is not a requirement for ships making one Arctic passage.

Moreover, polar certification does not require a physical separate survey and the Code allows this to be simply sent by email. The use of email (without physical inspection) for getting permission to navigate the NSR can lead to misinformation and cheating on the part of specific vessels. For example, it took place in the case of the LNG carrier *Boris Vil’kitsky* operated by Dynagas LNG Partners (April 2018).²⁹

Some Russian specialists are discontent with the lack of a clear and proper definition of an icebreaker in the Code which can create confusion and troubles in the safety net. More generally, the PC should use a clearer and more precise terminology, particularly, with regard to the definitions of an icebreaker and different types of ice-class ships.³⁰

For the above reasons, rather animated discussions on the security and geopolitical aspects of Arctic shipping are being developed in Russia.

Russian security and geopolitical debate on the NSR

There are two levels of such a debate on the NSR – official (formal) and non-official (informal) ones. They have one common characteristic: both of them focus more on the soft rather than hard security aspects of Arctic shipping. On the other hand, official and unofficial discourses differ thematically.

²⁶Gudev, *The Northern Sea Route*; Kobzeva, *China’s Arctic policy*; and Konyshev and Sergunin, *Rossiysko-Amerikanskije Otnosheniya v Arktike*.

²⁷Todorov, *Sotrudnichestvo v Oblasti Portovogo Kontrolya*; and Vasilyev et al., *Mezhdunarodny Polyarny Kodeks IMO*.

²⁸Ibid.

²⁹Sergunin and Konyshev, *Forging Russia’s Arctic Strategy*, 6.

³⁰Vasilyev et al., *Mezhdunarodny Polyarny Kodeks IMO*.

All Russian basic strategic documents on the AZRF and NSR pay primary attention to issues such as the development of the NSR land and telecommunication infrastructure; modernisation of icebreaker, rescue and support fleets; increasing maritime safety; improving hydrometeorological, cartographic, navigational and SAR services; early prevention of natural and man-made catastrophes, including oil spills; establishment of marine-protected areas; fighting illegal, unregulated and unreported fishing; improving border controls along the lengthy coastline of the Arctic Ocean.³¹ Normal functioning of the NSR is seen as an important and integral part of economic and societal security of the AZRF. The military dimensions of Arctic shipping are of secondary importance and mentioned in the Russian strategic documents *in passim*.³²

The Russian informal security and geopolitical discourse on the NSR focuses mainly on two issues: (1) maritime safety/marine environment and (2) the legal status of the NSR and its water area.

As far as maritime safety and protection of marine environment in the NSR water area are concerned Russian environmentalists discuss issues such as further improvement of the IMO's PC, establishing new marine protected areas (MPAs) and elimination of the accumulated environmental damage.

To improve the PC, the Russian experts believe that the following issues might be addressed:

First, the renewed PC should radically reduce shipping emissions. Many scholars underline that marine vessels are a large source of greenhouse gas and air pollutant emissions, including carbon dioxide (CO₂), nitrogen and sulphur oxides (NO_x and SO_x), particulate matter (PM) and black carbon (BC), which impact local air quality, human health and the global climate. If diversion of vessels from other international routes increases, the current lack of the regional environmental requirements for vessels transiting and operating in the Arctic may lead to an increasing impact on human health for Arctic communities and for the global climate. Additional emissions of climate-forcing pollutants such as black carbon and carbon dioxide combined with emissions of PM and NO_x, which can be linked with respiratory health issues, may place additional stress on the Arctic environment and Arctic communities.³³

Since the current PC version failed to phase out the use of heavy fuel oil in the Arctic, though it is already banned in Antarctica, many specialists suggest switching to lighter and cleaner fuels such as distillates and LNG to further reduce emissions in the polar areas.³⁴

Second, some experts insist that in the near future the Code should phase out ballast and graywater discharge in the polar areas. Special facilities to receive, store and reprocess such water should be built in the Arctic ports, including the NSR.³⁵

³¹Medvedev, *Osnovy Gosudarstvennoi Politiki*; Medvedev, *Gosudarstvennaya Programma Rossiyskoi Federatsii*; Putin, *Strategiya Razvitiya Arkticheskoi Zony Rossiyskoi Federatsii*; Putin, *Strategiya Ekonomicheskoi Bezopasnosti*; and Putin, *Osnovy Gosudarstvennoi Politiki*.

³²Medvedev, *Osnovy Gosudarstvennoi Politiki*; and Putin, *Voennaya Doktrina*.

³³Azzara et al., *A 10-year Projection of Maritime Activity in the U.S. Arctic Region*; and Bond et al. *Bounding the Role of Black Carbon in the Climate System*.

³⁴Fomin, *Predlozheniya po Sovershenstvovaniyu Mezhdunarodnogo Zakonodatel'stva*; and Vasilyev et al., *Mezhdunarodny Polyarny Kodeks IMO*.

³⁵Fomin, *Predlozheniya po Sovershenstvovaniyu Mezhdunarodnogo Zakonodatel'stva*, 29.

Third, many environmentalists believe that there will still remain disturbances of wildlife. While the Code includes requirements for ships to avoid marine mammals such as whales and walrus, it fails to consider seabird colonies. Other experts criticise the IMO for some other omissions in the PC standards, including the lack of mandatory provisions to prevent the introduction of invasive species, failure to restrict discharges of graywater and failure to address underwater noise.³⁶

As far as the MPAs are concerned, the environmentalists point out that other potential avenues for reducing Arctic emissions from vessels include designations of these areas under domestic conservation frameworks or possibly the designation of particularly sensitive sea areas (PSSA) under the IMO. The authors of these proposals believe that both options would provide guidelines for limiting vessel operations within the areas and specifying either speed limits or fuel requirements for operation, both of which could reduce emissions.³⁷

Currently, seven of Russia's 100 *zapovedniks*, or strictly protected nature reserves, include MPAs in their territory: Bolshoi Arktichesky (Greater Arctic), Kandalakshsky, Komandorsky, Koryaksky, Nenetsky, Taimyrsky, and Wrangel Island natural reserves. A number of *zakazniks*, or special purpose reserves, also protect marine waters. These include Franz Josef Land, Nenetsky, Nizhne-Obsky and Severozemelsky reserves. In addition, five *zapovedniks* (Gydansky, Komandorsky, Nenetsky, Ust-Lensky, and Wrangel Island reserves) have offshore buffer zones (see map 2).³⁸ The Russian Arctic and Beringia national parks have also included limited MPAs.

It remains unclear whether the Russian Government is ready for far-reaching initiatives in terms of further developments of the MPA system, especially considering the growing traffic *via* the NSR. However, Moscow does not reject a dialogue with the 'greens' and other NGOs as it further acknowledges the need to develop research in this area.³⁹

Moscow is also concerned about the environmental situation in the NSR water area. As a result of intensive industrial and military activity in the region, many Arctic areas are heavily polluted and pose serious health hazards. According to some accounts, some 15% of the AZRF (including the islands and archipelagos in the Arctic Ocean) is polluted or contaminated.⁴⁰

The Russian environmentalists are also concerned about nuclear safety in the AZRF, especially on Arctic seas. Northern Russia, particularly the Barents Sea area, has the largest concentration of nuclear installations – both military and civilian – in the world. More than 80 nuclear submarines with over 200 nuclear reactors were located there at one time.⁴¹ The operational risks of reactors at nuclear power plants in the AZRF (some are the same RBMK model used at Chernobyl) also present a serious threat to the population and a large area of Russia and Europe. Spent nuclear fuel and radioactive waste in Russia is also a widespread and worrying problem.⁴²

³⁶Fomin, *Predlozheniya po Sovershenstvovaniyu Mezhdunarodnogo Zakonodatel'stva*; and Vasilyev et al., *Mezhdunarodny Polyarny Kodeks IMO*.

³⁷Fomin, *Predlozheniya po Sovershenstvovaniyu Mezhdunarodnogo Zakonodatel'stva*, 29.

³⁸Spiridonov and Mokievsky, *Tides of Change*.

³⁹Editors, *Expanding Russia's System of Marine Protected Areas*.

⁴⁰Kochemasov et al., *Ekologo-ekonomicheskaya Otsenka*.

⁴¹Ahunov, *The speech of Mr. Viktor Ahunov*, 73.

⁴²Heininen and Segerstahl, *International Negotiations*.



Map 2. Russia's federal level coastal and marine protected areas. Source: Spiridonov and Mokievsky, *Tides of Change*, 5.

The Arctic seas are extremely vulnerable to nuclear contamination. Tens of thousands of cubic metres of highly radioactive nuclear waste have collected there. Radioactive material from nuclear munitions factories in Krasnoyarsk, Tomsk, Chelyabinsk used to float down the great Siberian rivers and into the Arctic Ocean. From 1964 to 1991, fluid and solid radioactive waste was dumped in the Barents and Kara seas. According to some reports, the Soviet Union dumped 13 nuclear reactors in the Kara Sea (including 6 with nuclear fuel). Three reactors and a container with nuclear waste from the ice-breaker *Lenin* were also allegedly dumped in the sea. Radioactive waste amounted to 319,000 curie in the Barents Sea and 2,419,000 curie in the Kara Sea.⁴³ Although Russia has stopped dumping, the Russian environmentalists believe that the remaining nuclear waste in the Arctic is still a serious problem for the country.

As for the NSR legal status, the Russian international jurists quite actively discuss some countries' attempts to declare the Arctic maritime routes (including the NSR)

⁴³*Ekologicheskoe Sostoyanie Impactnykh Raionov*; and Gizewski, *Military Activity and Environmental Security*.

'global commons', make them internationalised and subject to freedom of navigation split the Russian expert community to different groups.

The Russian mainstream opposes the international status of straits along the NSR saying that all of them are historically controlled by Russia and no international agreements were concluded to define these straits' status as 'global commons'.⁴⁴

To defend its rights in the NSR water area Moscow refers to Article 234 of the UNCLOS which has recognised special hazards of navigation in ice-covered waters and has given extra powers for coastal states to pass and enforce laws for the control of vessel source pollution for those waters. A coastal state may adopt stricter than international pollution standards normally applicable in the EEZ. Article 234 provides:

Coastal States have the right to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction and control of marine pollution from vessels in ice-covered areas within the limits of the exclusive economic zone, where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation, and pollution of the marine environment could cause major harm to or irreversible disturbance of the ecological balance. Such laws and regulations shall have due regard to navigation and the protection and preservation of the marine environment based on the best available scientific evidence.⁴⁵

However, as some Russian international jurists point out, Article 234 leaves open many questions of interpretation.⁴⁶ For example, what is the significance of recognising special coastal state powers specific to the EEZ? One interpretation is that coastal states are given no greater powers than those granted for the territorial sea and thus no unilateral right exists to adopt special ship construction, crewing and equipment standards. What extent of ice coverage is required to invoke this article (especially given the current trend of melting ice in the Arctic Ocean)? It is unclear whether this article is applicable to international straits (although Russia denies such status for straits in the NSR water area)? The application of Article 234 to straits used for national navigation may also be questioned, although the UNCLOS does not explicitly exempt straits from application.

To solve these legal issues and properly regulate navigation in the NSR water area and in the Arctic region at large this school of Russian legal thought suggests concluding a special treaty among the Arctic states and other potential users of the polar maritime routes. Such a treaty should regulate the legal status of the Arctic sea routes, delimitation of maritime spaces, EEZs, outer limits of continental shelf, environmental standards, maritime-protected areas, maritime safety rules, military activities, Arctic research and so on.⁴⁷ In fact, this suggestion is close to the idea of establishing an Antarctic Treaty system in the Far North.

The Russian mainstream scholarship, however, strongly believes that Article 234 is fully applicable to the NSR water area and the entire Russian EEZ in the Arctic Ocean.⁴⁸ This school points out that even if melting of the Arctic ice to continue in the summer

⁴⁴Ovlashenko and Pokrovsky, *Perspektivy Pravovogo Rezhima*; Solntsev and Kopylov, *Mezhdunarodnoe Morskoe Pravo*; and Zhilina, "Pravovye Aspekty Razvitiya Severnogo Morskogo Puti."

⁴⁵UNCLOS, article 234.

⁴⁶Goverdovsky, *Vyacheslav Popov*; Sivakov, *Rossiyskaya Arktika*.

⁴⁷Dodin, *Ustoychivoe Razvitie Arktiki*; Kovalev, *Sovremennoe Mezhdunarodnoe Morskoe Pravo*; Sivakov, *Rossiyskaya Arktika*.

⁴⁸Ovlashenko and Pokrovsky, *Perspektivy Pravovogo Rezhima*; Solntsev and Kopylov, *Mezhdunarodnoe Morskoe Pravo*; and Zhilina, "Pravovye Aspekty Razvitiya Severnogo Morskogo Puti."

season, the Russian Arctic sector still will be covered with ice most of the year. For this reason, Moscow will have a legal right to invoke Article 234 in the foreseeable future.

In sum, despite some legal inconsistencies, the lack of a proper infrastructure and residual environmental problems, the NSR will remain an important priority for the Russian future strategy in the Arctic region. The NSR is considered by the Kremlin as an effective instrument to develop the AZRF both domestically and internationally. For this reason, Moscow plans to make considerable investments to the development of the NSR and bringing its infrastructure to international standards. However, similar to other dimensions of its Arctic course Russia faces an uneasy dilemma: how to combine its control over the NSR with the passage's opening up for international cooperation and its integration to the global transportation system.

The role of security and geopolitical factors in decision-making on the NSR

With the decline of Russia's interest in the use of the NSR and general decrease of military-strategic importance of the Arctic for Moscow in the 1990s and early 2000s, the entire NSR management system was in disarray. There was not a single coordinating centre that was responsible for Arctic shipping. For example, icebreaker assistance, sailing master services, radio communication and hydrographic information – were provided by the federal state unitary enterprises «Rosatomflot» (part of the Russian state corporation on nuclear power – Rosatom) (nuclear icebreakers, pilot services) and 'Rosmorport' (subordinated to the Ministry of Transport) (diesel icebreakers) as well as by the private companies such as the «Far Eastern Shipping Company», «Murmansk Shipping Company», Murmansk transport branch of the 'Norilsk Nickel', 'Lukoil' (diesel icebreakers) and 'Ice Pilots Ltd' (pilot services).

The situation started to gradually change after the adoption of the Arctic Strategy-2008 which foresaw, among other things, the revival of the NSR. In 2012, the Federal Law on the Northern Sea Route was adopted, and following this document, the Ministry of Transport issued the Regulations on Navigation through the NSR in 2013. In March 2013, the NSR Administration (NSRA) was reborn within the Ministry of Transport. In contrast with the Soviet time, when it was located in Arkhangelsk, now this agency is based in Moscow. The NSRA got powers to consider applications for the navigation through the NSR, coordinate the activities of the above companies and exercise control over the navigation safety. With the adoption of the IMO's Polar Code in 2014–2015, the NSRA together with the Russian Maritime Register (national classification society) became responsible for the Code's implementation and supervision.

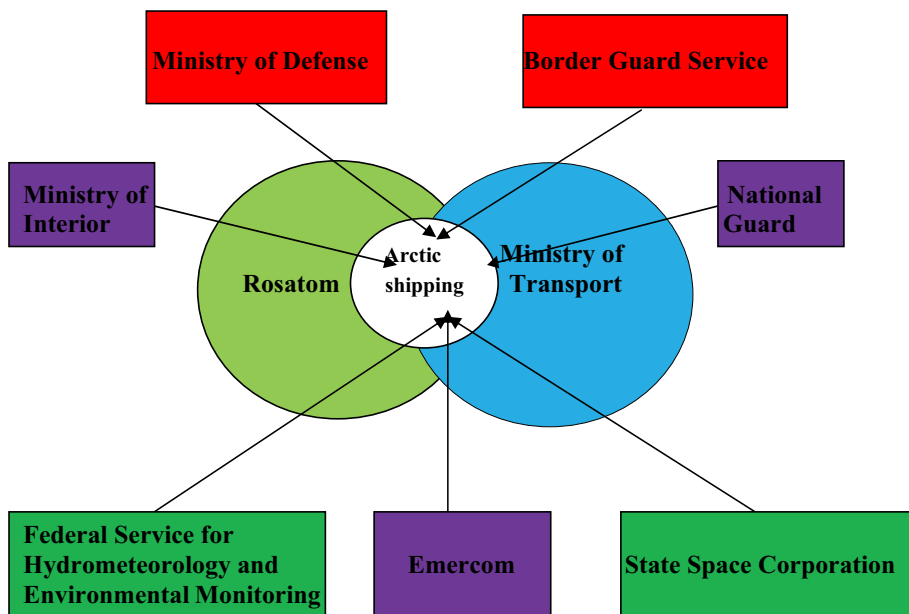
However, quite soon the Russian political leadership (ranging from the then Vice-Prime Minister Dmitry Rogozin, who was responsible for Arctic affairs, to President Vladimir Putin) became discontent with the NSRA performance accusing it of being too slow, bureaucratic and corrupted. Generally, the Kremlin doubted that the NSRA would be able to effectively manage the growing traffic through the NSR.

Initially, some radical ideas on the creation of a superagency responsible for the whole complex of problems related to Arctic shipping were floating in the Kremlin. However, in contrast with the Soviet management system in the time of Joseph Stalin, where Glavsevmorput' (the Main Directorate of the Northern Sea Route) had icebreaker, rescue and research fleets, port infrastructure, shipyards, enterprises, research institutes, design

bureaus and even part of Gulag, the market economy does not allow that kind of monopolist superstructure.

After a two-year 'bureaucratic warfare',⁴⁹ on 27 December 2018, President Putin signed a law which established a shared responsibility for the NSR management between the Rosatom (which created a special department to deal with the NSR) and Ministry of Transport (NSRA). Rosatom's new powers included development and operational responsibilities for Arctic shipping, as well as infrastructure and seaports along the northern Russian coast. The Ministry of Transport (NSRA) retained its powers to issue regulations on shipping (including safety and environmental standards), allow or deny ships' access to the NSR and develop international cooperation, including the Polar Code implementation.⁵⁰ This reform was supposed to help the NSR to fulfil the presidential task to increase annual goods volumes shipped along the Arctic route to as much as 80 million tons by the year 2024.

Along with the Rosatom and Ministry of Transport, some other executive agencies are responsible for the NSR's safety and management (see [organigram 1](#)). For example, the Federal Service for Hydrometeorology and Environmental Monitoring and the State Space Corporation are responsible for providing the governmental agencies and ships travelling via the NSR with information on ice conditions and meteorological forecasts in the region. The Ministry for Civil Defence, Emergencies and Elimination of Consequences of Natural Disasters (Emercom) is responsible for SAR operations and oil spill prevention and response in the Arctic – both on the land and sea. As mentioned above, for these purposes Emercom maintains the network of SAR centres along the NSR.



Organigram 1. Decision-making on Arctic shipping.

⁴⁹Sergunin and Konyshov, *Forging Russia's Arctic Strategy*, 79–81.

⁵⁰Putin, *O Vnesenii Izmeneniy*.

Since some parts of the NSR run closely to the naval and air force bases on the Arctic islands specific navigation routes should be coordinated with the Russian Defence Ministry. Moreover, Arctic shipping should take into account military exercises or test missile launches either from submarines or surface military vessels although most of them take place beyond the formal NSR water area (namely, in the Barents and White seas which officially do not belong to the NSR). On the other hand, the Defence Ministry is ready to help the Emercom and other rescue agencies with its SAR capabilities if something extraordinary happens.

As mentioned above, the Coast Guard and Border Guard Service (BGS) in general are very important players in the region because they are responsible for border controls, economic security and prevention of various illegal activities in the Russian EEZ ranging from poaching and smuggling to illegal migration and terrorism. For this reason, all ships travelling via the NSR should notify the BGS on the proposed route of navigation and regularly report on their location. This is important not only because of the need to exercise control over shipping but also for safety reasons: in practical terms, the Coast Guard ships used to be the closest ones to the site of potential shipwreck, oil spill or other emergency. The Ministry of Interior and the Russian National Guard can be helpful as well in preventing illegal migration along the Arctic Ocean coastline or assisting Emercom's SAR operations on the land.

The abundance of various governmental agencies responsible for the safety and security of Arctic shipping obviously creates a problem of coordination of their activities and establishment of a proper division of labour between them. Unfortunately, the formal coordinating institutions – the Ministry for Far Eastern and Arctic Affairs as well as the State Commission on the Arctic Development – do not deal specifically with Arctic shipping being preoccupied with more general problems related to the AZRF development. No surprise, the lack of a centralised management system in Arctic shipping often results in inter-agency conflicts, unhealthy competition between them, numerous delays in decision-making, parallelisms and discontent of customers – domestic and foreign – who are irritated by the lack of clear rules. In other words, the creation of a proper and efficient decision-making system for Arctic shipping remains to be seen.

Practical measures to ensure the NSR's security

To address the hard and soft security threats as well as geopolitical challenges to Arctic shipping, Moscow develops four major components of its strategy in the NSR water area – purely military (to protect seaways from alleged NATO 'encroachments'); mixed (border controls, economic security), civil defence/maritime safety measures and cleaning the environmental mess inherited from the Soviet time.

As far as military measures are concerned the emphasis is made on the development of coastal defence forces. In addition to the three brigades on the Kola Peninsula (Arctic brigade, motor rifle and marine infantry brigades), the Russian Defence Minister Sergei Shoigu also announced the plans to establish two new Arctic coast defence divisions in the foreseeable future as part of an effort to strengthen security along the NSR. One of them should be stationed on the Kola Peninsula (in addition to the existing military units), the other one will be deployed in the eastern Arctic (Chukotka Peninsula). The new forces should be tasked with anti-assault, anti-sabotage, and anti-aircraft defence duties along the

NSR.⁵¹ They should both interact closely with law enforcement authorities like the Ministry of Interior, National Guard and BGS. However, no news about establishing these units was reported to date. Perhaps their creation will be delayed because of the budget constraints which Russia experiences since the start of a new economic crisis in 2014 and continuing oil prices drop in the context of the coronavirus pandemics.

The growing tension with NATO has forced Russia to pay more attention to its air-defence force units, which are stationed in the AZRF – on the Kola Peninsula, near Severodvinsk (Arkhangelsk region), Chukotka, and on several Russian islands in the Arctic: Novaya Zemlya, Franz Josef Land, the New Siberian Islands, and Wrangel Island. Some of these units have re-established old Soviet airfields and military bases in the region. These units, which are equipped with (among other things) RS-26 Rubezh coastal missile systems, S-300 air-defence missiles, and the Pantsyr-S1 anti-aircraft artillery weapon system,⁵² were merged into a joint task force in October 2014.

Measures to increase Moscow's military potential in the region include the creation of a new air force and air defence army, including regiments armed with MiG-31 interceptor aircraft, S-400 air-defence missile systems (to replace the S-300 systems), and radar units.⁵³ One goal is to restore continuous radar coverage along Russia's entire northern coast, which was lost in the 1990s. To that end, a total of 13 airfields, an air force test range, and 10 radar sites and direction centres would be established in the Arctic in the coming years (see [map 3](#)).

While the Russian Defence Ministry is responsible for coping with the hard security threats, the BGS which is subordinated to the FSS is in charge of the 'softer' security challenges. It should be noted that Russia shares the same soft security concerns with other Arctic nations. According to the then head of the BGS Vladimir Pronichev, the main challenges for this service were the unauthorised presence of foreign ships and research vessels in Russian Arctic waters, illegal migration, drug smuggling and poaching.⁵⁴ Terrorist attacks against oil platforms and nuclear power plants were also seen as a potential threat to security in the Arctic.⁵⁵ Based on these perceived security risks, Russia again began to prioritise the protection of Arctic borders and the strengthening of the BGS in the region. This return to a focus on Arctic border protection has been reiterated by Presidents Medvedev and Putin on a number of occasions.⁵⁶

An Arctic border guards unit was created as early as in 1994 with the aim of monitoring the circulation of ships and poaching at sea. The unit was reorganised in 2004–2005. In 2009, it was announced that new Arctic units had been established in border guard stations in Arkhangelsk and Murmansk. Furthermore, the FSS has established two new border guard commands: one in Murmansk for the western AZRF regions, and one in Petropavlovsk-Kamchatsky for the eastern Arctic regions.

Now the border guards are assigned with the task of dealing with the new (soft security) threats and challenges such as the establishment of reliable border control systems, the introduction of special visa regulations to certain regions, and the implementation of technological controls over fluvial zones and sites along the NSR. The latter

⁵¹Staalesen, *New Russian Forces*.

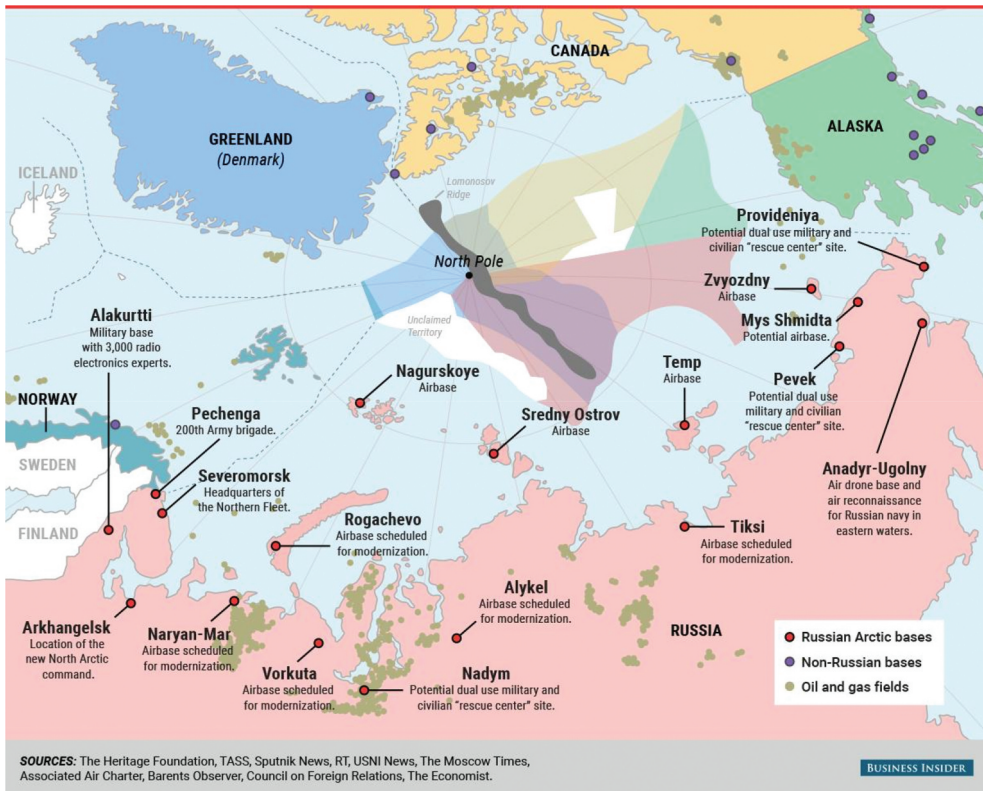
⁵²Klimenko, *Russia's Arctic Security Policy*, 21.

⁵³*The Military Balance 2016*, 165–166.

⁵⁴Kulikov, *Granitsa Menyaet Zamki*.

⁵⁵Vasiliev, *Russia's Approaches*, 14.

⁵⁶Naumov, *Arktiku Zakroyut*.



Map 3. Russian military bases in the Arctic. Source: https://ic.pics.livejournal.com/doskado/24487869/387560/387560_original.jpg

is currently controlled from the air by border guard aircrafts, and on the land and sea by the North-Eastern Border Guard Agency; the Russian border guards further plan to establish a global monitoring network from Murmansk to Wrangel Island. All in all, Moscow plans to build 20 border guard stations along the Arctic Ocean's coastline.⁵⁷

Another interesting structural change is an ongoing reorganisation of the Russian Coast Guard (part of the BGS). Now the Coast Guard has a wide focus in the Arctic: in addition to the traditional protection of biological resources in the Arctic Ocean, oil and gas installations and shipping along the NSR are among the agency's new top priorities. There are plans to equip the Coast Guard in the AZRF with the brand new vessels of project 22,100. The Ocean-class ice-going patrol ship, the *Polyarnaya Zvezda* (Polar Star), is currently undergoing sea trials in the Baltic Sea. Vessels of this class can break up to 31.4-inch-thick ice. They have an endurance of 60 days and a range of 12,000 nautical miles at 20 knots. They are equipped with a Ka-27 helicopter and can be supplied with Gorizont UAVs.

As for the third component of Russia's strategy in the NSR water area – maritime safety – several governmental agencies are responsible for this sphere. Moscow strongly believes that by improving NSR infrastructure and safety, this maritime route will be attractive not only for Russian business but also for foreign shipping companies. The

⁵⁷ Klimenko, *Russia's Arctic Security Policy*, 14–15; and Zagorsky, *Arkticheskie Ucheniya*.

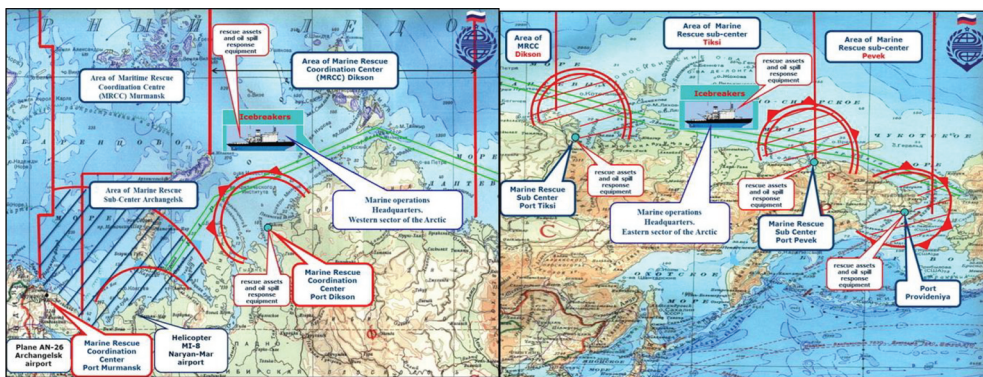
launch of the Yamal LNG (liquefied natural gas) plant in Sabetta which became operational in 2017 made the issue of maritime safety especially critical.

To radically improve the SAR system in the region Moscow has an ambitious plan to create 10 federal SAR centres along the NSR (see [map 4](#)). Currently, seven federal SAR centres are already operational in the region. Moreover, there are four regional SAR and fire units, two maritime SAR coordination centres (Murmansk and Dikson), three maritime SAR stations (Arkhangelsk, Tiksi and Pevek) and four storages for equipment for oil spill response (Dikson, Tiksi, Pevek and Providence).⁵⁸

Russia also plans to radically modernise its nuclear icebreaker fleet. For example, in June 2016, the most powerful nuclear icebreaker ‘The Arctic’ was pulled on the water at the *Baltiysky* shipyard as a part of this ambitious program. The icebreaker is powered by two reactors (175 Megawatt) and able to break three-metre ice.⁵⁹ This ship is the first one in a series of three icebreakers of the same type.

In 2018, Russia’s Navy got its first icebreaker ‘Ilya Muromets’, a diesel-electric vessel which is designed for the Northern Fleet. The need for a military icebreaker was explained by the Russian Defence Ministry by the fact that in the past the Russian naval forces were dependent on the civilian agencies Rosatomflot and Sovkomflot which own nuclear and diesel icebreakers. The navy had to order the icebreaker escort for its purposes well in advance. Now, this military icebreaker can not only serve the navy but also participate in civilian SAR operations, if needed.

In addition to the icebreaker fleet, the Russian governmental program suggests to build 17 rescue and 13 hydrographic ships as well to modernise three hydrographic vessels by 2024.⁶⁰ By 2024–2025, the Russian space agency Roskosmos plans to create three satellite groups consisting of five *Express-RV*, three *Resource-PM* and three *Condor-FKA* sputniks that will be able to provide reliable communications and navigation in the high altitudes.⁶¹



Map 4. Search and rescue centres on the Arctic Ocean’s coastline and their zones of responsibility. Source: http://www.arctic-lio.com/nsr_searchandrescue

⁵⁸Borisov, *Spasenie pri Minus Soroka*; and Vasilyev et al., *Mezhdunarodny Polyarny Kodeks IMO*, 29.

⁵⁹RIA Novosti, *Samiy Moshniy v Mire*.

⁶⁰Medvedev, *Plan Razvitiya*, 3–5.

⁶¹*Ibid.*, 12.

It should be also noted that Russia's modernised military infrastructure in the Arctic, including the Soviet air and naval bases that have been reopened over the last years, is of dual-use nature. Such an infrastructure can be used not only for military but also for civilian purposes, including SAR operations.

In general, all Russian power structures deployed in the Arctic (army, navy, border and coast guards, and agencies dealing with emergency situations) are charged with implementing the Arctic Council's agreement of 2011 on the creation of a Maritime and Aeronautical Sea and Rescue System. Along with other Arctic nations, Russia is responsible for its own sector of the Arctic which is the biggest one. The SAR agreement's signatories undertake joint exercises on a regular basis. As many experts believe, the SAR activities are a sign of the shift from the armed forces' purely military functions to the soft security missions.

As for the elimination of the accumulated environmental damage, in 2011, the Russian Government launched a 2.3 billion ruble programme to clean the AZRF, including the Franz Joseph Land and Novaya Zemlya archipelagos. By the end of 2016, some 42,000 tons of waste had been removed from these archipelagos and 349 hectares of insular land had been cleaned.⁶² In 2015, another AZRF cleaning program was launched, this time with 21 billion rubles of funding. By the end of 2016, the cleaning of Wrangel Island – including the removal of 36,477 barrels and 264 tons of scrap metal by the Russian military⁶³ – was nearly complete. A comprehensive analysis of the environmental situation in another seven major AZRF areas had been planned, but the federal government was unable to find reliable contractors for that purpose.

In nuclear waste management, a Russian government program on nuclear and radiological safety for the 2008–2015 period succeeded in dismantling 195 retired nuclear submarines (97% of the total quantum), removing 98.8% of radioisotope thermoelectric generators from service and dismantling 86% of these generators. Centralised long-term storage facilities for spent nuclear fuel were constructed. In addition, 53 hazardous nuclear facilities were decommissioned, 270 hectares of contaminated land were remediated and open water storage of radioactive waste was ended.⁶⁴

In 2016, Russia launched a large-scale programme to remove nuclear waste from the former Soviet submarine base in Andreev Bay in the Murmansk region. The programme must reckon with some 22,000 containers of spent fuel from nuclear submarines and icebreakers currently stored in 3 storage tanks in Saida Bay on the Kola Peninsula, as well as approximately 18,000 cubic metres of solid waste and 3400 cubic metres of liquid radioactive waste, which, according to Norwegian sources, are collectively as radioactive as 5000 Hiroshima bombs.⁶⁵

Russia has supported and vigorously participated in developing all UN-related environmental initiatives, from the Intergovernmental Panel on Climate Change' activities (including its five assessment reports) and IMO's PC (2014–2015) to the Paris agreement on climate change (2015). Moscow has also actively participated in the Arctic Council's working and expert groups involved in environmental research and assessment.

⁶²RIA Novosti, *Likvidatsiya Nakoplennoego Ekologicheskogo Usherba v Arktike*.

⁶³Neftegaz.ru, *Usiliyami Rossiyskih Voennyh*.

⁶⁴Rosatom, *Back-end*.

⁶⁵Sputnik, *All Clear!*

Conclusions

Several conclusions emerge from the above analysis:

First, despite the fact that economic significance of the NSR is the most important priority for Moscow's policies in the sphere of Arctic shipping, the role of security and geopolitical factors should not be completely ignored.

Among Russia's hard security concerns NATO countries' military modernisation programmes (especially modernisation of naval and air forces deployed in the Arctic), an increasing number of military exercises nearby the Russian borders and NSR, potential deployment of the US BMD seaborne systems in the region, foreign countries' repeated claims of freedom of navigation in the NSR water area and their attempts to make the Arctic sea routes 'global commons' should be mentioned.

Russia's soft security threat perceptions include illegal activities in the NSR water area, such as poaching, smuggling, illegal migration, marine pollution, oil spills, ballast and grey water discharges, violation of the Polar Code requirements and potential attacks on critical industrial objects (oil and gas rigs, pipelines, cables, floating nuclear power plants, etc.).

However, there are at least two positive trends in the Russian security/geopolitical discourse on Arctic shipping. First, there is a clear shift from discussing hard security threats to the soft security challenges which are now in the focus of Russia's debate. Second, Moscow aims to solve the NSR-related problems in a cooperative way through political and scientific dialogue with other regional players and in the context of multi-lateral institutions, such as the Arctic Council, Barents-Euro-Arctic Council, Nordic institutions, IMO and other specialised UN bodies.

To solve existing problems and make the NSR an attractive transport corridor and a real platform for international cooperation Russia still has to do a lot of homework. Clear and transparent rules of navigation via the NSR should be established. Better division of labour between various governmental agencies should be introduced. The port, SAR and communication infrastructures along the NSR should be radically improved. Safer and faster sea routes within the NSR water area should be defined. Icebreaker, rescue and research fleets should be modernised. Icebreaker and pilot escort serviced should become affordable for all NSR potential customers. Information systems on ice conditions and weather forecasts should be improved as well.

If this ambitious program to be executed, Moscow's attention can be inevitably diverted from the so-called hard security/geopolitical aspects of Arctic shipping and 'normal', de-securitized agenda can be further prioritised.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by the Research Council of Norway (SIRAW project); Donner Canadian Foundation; ERA.Net RUS Plus/Russian Foundation for Basic Research (RFBR) project [grant number 18-55-76003], and RFBR grant no. 20-514-22001.

ORCID

Alexander Sergunin  <http://orcid.org/0000-0002-4683-0611>

Gunhild Hoogensen Gjørsvik  <http://orcid.org/0000-0001-8037-7796>

Bibliography

- Abonisimov, V. *Iskusstvo Ledovogo Plavaniya* [The Art of Navigation in Icy Waters]. Vladivostok: Maritime Polygraphist Combine, 2002. (in Russian).
- Adamczyk, E. “U.S. Navy Ships, Trailed by Russia, Visit Barents Sea above Arctic Circle.” May 4, 2020. <https://www.upi.com/Defense-News/2020/05/04/US-Navy-ships-trailed-by-Russia-visit-Barents-Sea-above-Arctic-Circle/8601588610978/>
- Ahunov, V. “The Speech of Mr. Viktor Ahunov, Deputy Director General, Ministry for Atomic Energy.” In *Foreign Ministers’ Conference on the Northern Dimension, Helsinki, 11–12 November 1999. A Compilation of Speeches*, ed. M. Nissinen, 73–74. Helsinki: Unit for the Northern Dimension in the Ministry for Foreign Affairs.
- Anishchuk, A. “Russia Needs Arctic Presence to Guard against U.S. Threat: Putin.” Chicago Tribune, December 3, 2013. <http://www.chicagotribune.com/news/sns-rt-us-al-russia-putinarctic-20131203,0,5499339.story> (Accessed December 11, 2016).
- Arikainen, A. *Sudohodstvo Vo L’dakh Arktiki* [Arctic Shipping]. Moscow: Transport, 1990. (in Russian).
- Azzara, A.J., H. Wang, and D. Rutherford “A 10-year Projection of Maritime Activity in the U.S. Arctic Region.” A Report to the President. U.S. Committee on the Marine Transportation System, Integrated Action Team on the Arctic. Washington, D.C.: The International Council on Clean Transportation, 2015. http://www.cmts.gov/downloads/CMTS_10-Year_Arctic_Vessel_Projection_Report_1.1.15.pdf
- Bashmakova, E.P., V.V. Vasiliev, and S.Y. Kozmenko. *Transportno-Infrastrukturny Potentsial Rossijskoj Arktiki* [Transport Infrastructure Potential of the Russian Arctic]. Apatity: Kola Science Centre, Russian Academy of Sciences, 2013. (in Russian).
- Bond, T.C., et al. “Bounding the Role of Black Carbon in the Climate System: A Scientific Assessment.” *Journal of Geophysical Research: Atmospheres* 118, no. 11 (2013): 5380–552.
- Borisov, T. “Spasenie Pri Minus Soroka I Nizhe” [Rescue Operations When It Is Minus Forty and Below]. *Rossiyskaya Gazeta*, March 11, 2020. <https://rg.ru/2020/03/11/mchs-uskorit-razvitiye-svoih-centrov-v-arktike.html> (accessed April 17, 2020) (in Russian).
- Dodin, D.A. *Ustoychivoe Razvitie Arktiki (Problemy I Perspektivy)* [The Arctic’s Sustainable Development (Problems and Prospects)]. St. Petersburg: Nauka, 2005. (in Russian).
- Dushkova, D., T. Krasovskaya, and A. Evseev. “Environmental & Human Impact of the Northern Sea Route & Industrial Development in Russia’s Arctic Zone.” In *Arctic Yearbook 2017*, 275–89. Akureyri: The Northern Research Forum, 2017.
- Editors. “Expanding Russia’s System of Marine Protected Areas.” *Russian Conservation News* (36), Summer 2004, 35–37. <http://wild-russia.org/pubs/pdfs/36.pdf> (accessed February 25, 2019).
- “Ekologicheskoe Sostoyanie Impactnykh Raionov Sushi Arkticheskoi Zony Rossiyskoi Federatsii” [The Environmental Situation in the Impact Zones of the Terrestrial Parts of the Arctic Zone of the Russian Federation]. 2012. <http://www.arcticonline.ru/ekologiya/ekologicheskoe-sostoyanie-impaktnyh-rajonov-sushi-arkticheskoy-zony-rossijskoj-federacii> (in Russian).
- Fomin, S.Y. “Predlozheniya Po Sovershenstvovaniyu Mezhdunarodnogo Zakonodatel’stva S Tselyu Minimizatsii Ugroz Ot Sudokhodstva Dlya Ekosistem Arktiki Na Primere Beringova Proliva” [Recommendations on Improving the International Legislation on Reducing Shipping Hazards for the Arctic Ecosystems: the Case of the Bering Strait]. March 20, 2015. <http://www.wwf.ru/data/seas/shipping/predl-po-soversh-mejd-zakonodatelstva.pdf> (in Russian).
- Gizewski, P. “Military Activity and Environmental Security: The Case of Radioactivity in the Arctic.” In *Environmental Security and Quality after Communism: Eastern Europe and the Soviet Successor States*, ed. J. DeBardeleben and J. Hannigan, 25–41. Boulder: Westview Press, 1995.

- Goverdovsky, Y. “Vyacheslav Popov: Morskaya Derzhava Flotom Sil’na” [Vyacheslav Popov: A Maritime Power is Strong with its Fleet]. *Parlamentskaya Gazeta*, November 3, 2009. <http://www.pnp.ru/newspaper/20091103/924.html> (in Russian).
- Gudev, P. *The Northern Sea Route: a National or an International Transportation Corridor?* September 24, 2018. <https://russiancouncil.ru/en/analytics-and-comments/analytics/the-northern-sea-route-a-national-or-an-international-transportation-corridor/> (accessed April 16, 2020).
- Heininen, L., and B. Segerstahl. “International Negotiations Aiming at a Reduction of Nuclear Risks in the Barents Sea Region.” In *Containing the Atom. International Negotiations on Nuclear Security and Safety*, ed. R. Avenhaus, V. Kremenyuk, and G. Sjøstedt, 243–70. New York: Lexington Books, 2002.
- Khramchikhin, A. “Voyenno-Politicheskaya Situatsiya V Arktike I Stsenarii Vozmozhnykh Konfliktov” [Military-political Situation in the Arctic and Scenarios of Possible Conflicts]. *Arktika I Sever* [The Arctic and the North] 2 (2011): 1–15. <http://narfu.ru/upload/iblock/7f9/grjopufvqlvzveqamx.pdf> (accessed December 11, 2016). (in Russian).
- Khramchikhin, A. “Stanet Li Arktika Teatrom Voennykh Deistviy Po Poslednemu Peredelu Mira” [Will the Arctic Become a Military Theater for the Final Re-division of the World?]. *Arktika I Sever* [The Arctic and the North] 10 (2013): 52–60. <http://narfu.ru/upload/iblock/c9d/5.pdf> (accessed January 10, 2017). (in Russian).
- Klimenko, E. *Russia’s Arctic Security Policy. Still Quiet in the High North?* Stockholm: SIPRI, 2016 (SIPRI Policy Paper No. 45).
- Kobzeva, M. “China’s Arctic Policy: Present and Future.” *The Polar Journal* 9, no. 1 (2019): 94–112. doi:10.1080/2154896X.2019.1618558.
- Kochemasov, Y.V., B.A. Morgunov, and V.I. Solomatin *Ekologo-ekonomicheskaya Otsenka Perspektivy Razvitiya Arktiki* [Ecological Assessment of the Prospects for Arctic Development]. 2009. http://www.perspektivy.info/rus/ekob/arktika_perspektivy_razvitija_2009%E2%80%939304%E2%80%939324.htm (in Russian).
- Konyshchev, V., and A. Sergunin. “Strategii Stran Vostochnoi Azii V Arktike” [East Asian Countries’ Strategies in the Arctic]. *Problemy Dal’nego Vostoka* [Far Eastern Studies] 6 (2012): 35–48. (in Russian).
- Konyshchev, V., and A. Sergunin. “Is Russia a Revisionist Military Power in the Arctic?” *Defense and Security Analysis* 3 (2014): 1–13.
- Konyshchev, V., and A. Sergunin. “Russian Military Strategies in the High North.” In *Security and Sovereignty in the North Atlantic*, ed. L. Heininen, 80–99. Basingstoke: Palgrave Macmillan, 2014.
- Konyshchev, V., and A. Sergunin. “Rossiysko-Amerikanskie Otnosheniya V Arktike: Sotrudnichestvo Ili Sopernichestvo?” [U.S.-russia Relations in the Arctic: Cooperation or Competition?]. *Mirovaya Ekonomika I Mezhdunarodnye Otnosheniya* [World Economy and International Relations] 62, no. 9 (2018): 103–11. (in Russian).
- Konyshchev, V., and A. Sergunin. “The Changing Role of Military Power in the Arctic.” In *The Global Arctic Handbook*, ed. M. Finger and L. Heininen, 171–95. Cham: Springer, 2019. doi:10.1007/978-3-319-91995-9_11.
- Kovalev, A.A. *Sovremennoe Mezhdunarodnoe Morskoe Pravo I Praktika Ego Primeneniya* [Contemporary International Law of the Sea and Its Implementation Practice]. Moscow: Nauchnaya Kniga, 2003. (in Russian).
- Kulikov, V. “Granitsa Menyaet Zamki” [The Border Changes the Locks]. *Rossiyskaya Gazeta*, June 2, 2010. <https://rg.ru/2010/06/02/pronichev.html> (accessed April 17, 2020) (in Russian).
- Lakshmi, A. “Is Russia Militarizing the Arctic?” *MarineLink*, August 20, 2015. <https://www.marinelink.com/news/militarizing-russia396525.aspx>. (accessed January 3, 2017).
- Medvedev, D. *Osnovy Gosudarstvennoi Politiki Rossiiskoi Federatsii v Arktike na Period do 2020 Goda i Dal’neishuiu Perspektivu* [Foundations of the State Policy of the Russian Federation in the Arctic up to and beyond 2020], 2008. <http://www.rg.ru/2009/03/30/arktika-osnovy-dok.html>. (accessed December 11, 2016) (in Russian).
- Medvedev, D. *Gosudarstvennaya Programma Rossiiskoi Federatsii “Sotsial’no-Ekonomicheskoe Razvitie Arkticheskoi Zony Rossiiskoi Federatsii”* [The State Program of the Russian Federation

- “Socioeconomic Development of the Arctic Zone of the Russian Federation”, August 31, 2017. <http://static.government.ru/media/files/GGu3GTtv8bvV8gZxSEAS1R7XmzloK6ar.pdf> (accessed May 5, 2019) (in Russian).
- Medvedev, D. *Plan Razvitiya Infrastruktury Severnogo Morskogo Putin a Period do 2035 Goda* [The Plan of Development of the Northern Sea Route’s Infrastructure up to 2035]. December 21, 2019. <http://static.government.ru/media/files/itR86nOgy9xFEvUVAgmZ3XoeruY8Bf9u.pdf> (accessed April 17, 2020) (in Russian).
- The Military Balance 2016*. London: International Institute for Strategic Studies, 2016.
- Moe, A. “The Northern Sea Route: Smooth Sailing Ahead?” *Strategic Analysis* 38, no. 6 (2014): 784–802. doi:10.1080/09700161.2014.952940.
- Naumov, I. “Arktiku Zakroyut Na Pogranichny Zamok” [The Arctic to be Closed Down by the Border Lock]. *Nezavisimaya Gazeta*, August 31, 2011. http://www.ng.ru/economics/2011-08-31/4_arctic.html (accessed February 24, 2020) (in Russian).
- Neftegaz.ru. “Usiliyami Rossiyskih Voennyh S Ostrova Vrangelya Bylo Vyvezeno 36,477 Bochek I 264 Tons Metalloloma” [The Russian Military Removed 36,477 Barrels and 264 Tons of Scrap Metal from the Wrangel Island]. *Neftegaz.ru*, November 2, 2016. <http://neftegaz.ru/news/view/154946-Usiliyami-rossiyskih-voennyh-s-ostrova-Vrangelya-bylo-vyvezeno-36-477-bochek-i-264-tmetalloloma> (in Russian).
- Novosti, R.I.A. Likvidatsiya Nakoplennoego Ekologicheskogo Usherba v Arktike [Elimination of accumulated environmental damage in the Arctic], November 21, 2016. <https://ria.ru/infografika/20161121/1481781022.html> (in Russian).
- Novosti, R.I.A. “Samiy Moshniy V Mire Atomny Ledokol ‘Arktika’ Spushen Na Vodu V Peterburge” [The World’s Most Powerful Nuclear Icebreaker ‘The Arctic’ Was Pulled on the Water in Petersburg]. *Oruzhie Rossii*, June 16, 2016. http://www.arms-expo.ru/news/novye_razrabotki/samyy_moshchnyy_v_mire_atomny_ledokol_arktiki_spushchen_na_vodu_v_peterburge/?sphrase_id=12240420 (accessed December 11, 2016) (in Russian).
- Ovlashenko, A.V., and I.F. Pokrovsky. “Perspektivy Pravovogo Rezhima Morskoy Transportnoy Sredy Rossiyskoy Arktiki: Dualizm Podhodov Ili Ikh Eklektizm?” [Prospects for the Legal Regime of the Maritime Transportation System in the Russian Arctic: Dualism of Eclecticism of Approaches?]. *Transportnoe Pravo* [Labor Law] no. 1 (2012): 12–20. (in Russian).
- Putin, V. *Strategiya Razvitiya Arkticheskoi Zony Rossiyskoi Federatsii i Obespecheniya Natsional’noi Bezopasnosti na Period do 2020 Goda* [The Strategy for the Development of the Arctic Zone of the Russian Federation and Ensuring National Security for the Period up to 2020]. 2013. <http://www.pravительство.рф/docs/22846> (accessed December 11, 2016) (in Russian).
- Putin, V. *Strategiya Ekonomicheskoi Bezopasnosti Rossiyskoi Federatsiina Period dp 2030 Goda* [Economic Security Strategy of the Russian Federation up to 2030]. May 13, 2017. <https://cdnimg.rg.ru/pril/140/28/53/strategiya2030.pdf> (accessed May 17, 2017) (in Russian).
- Putin, V. *Voennaya Doktrina Rossiyskoi Federatsii* [The Military Doctrine of the Russian Federation]. October 20, 2018. <http://legalacts.ru/doc/voennaja-doktrina-rossiiskoi-federatsii-utv-prezidentom-rf/> (accessed December 2, 2018) (in Russian).
- Putin, V. *Osnovy Gosudarstvennoi Politiki Rossiiskoi Federatsii v Arktike na Period do 2035 Goda* [Foundations of the State Policy of the Russian Federation in the Arctic up to 2035]. March 5, 2020. <http://static.kremlin.ru/media/events/files/ru/f8ZpjhpAaQ0WB1zjywN04OgKiI1mAvaM.pdf> (accessed March 6, 2020) (in Russian).
- Putin, V. “O Vnesenii Izmeneniy V Otdel’nye Zakonodatel’nye Akty Rossiyskoi Federatsii” [On Making Changes in Some Legislative Act of the Russian Federation]. <http://docs.cntd.ru/document/552045960> (accessed December 27, 2018) (in Russian).
- Rosatom. *Back-end*. 2018. http://www.rosatom.ru/en/rosatom-group/back-end/index.php?sphrase_id=11699
- Sergunin, A. “Russia and Arctic Fisheries.” In *Governing Marine Living Resources in the Polar Regions*, ed. N. Liu, C.M. Brooks, and T. Qin, 109–37. Northampton: Edward Elgar Publishing, Inc., 2019. doi:10.4337/9781788977432.

- Sergunin, A., and V. Konyshv. "Russian Military Strategies in the Arctic: Change or Continuity?" *European Security* 26, no. 2 (2017): 171–89.
- Sergunin, A., and V. Konyshv. "Forging Russia's Arctic Strategy: Actors and Decision-Making." *The Polar Journal* 9, no. 1 (2019): 75–93. doi:10.1080/2154896X.2019.1618549.
- Sivakov, D.O. "Rossiyskaya Arktika: Sposoby Pravovoy Zashity" [The Russian Arctic: Means for Legal Protection]. *Problemy Severa I Arktiki Rossiyskoy Federatsii* no. 9 (2009). <http://archiv.council.gov.ru/files/journalsf/item/20090922142429.pdf> (in Russian).
- Solntsev, A.M., and S.M. Kopylov. *Mezhdunarodnoe Morskoe Pravo* [International Maritime Law]. Moscow: University of Peoples' Friendship, 2010. (in Russian).
- Spiridonov, V., and V. Mokievsky. "Tides of Change: Tracing the Development of Marine Protected Areas in Russia." *Russian Conservation News* no. 36 (Summer 2004): 4–7. <http://wild-russia.org/pubs/pdfs/36.pdf> (accessed February 25, 2019).
- Sputnik. *All Clear! Russia to Give Its Arctic Domains a Clean Bill of Health*, October 6, 2016. <http://sputniknews.com/environment/20160610/1041126139/russianorway-arctic-nuclear-waste.html>
- Staalesen, A. "New Russian Forces to Protect Arctic Coast." *The Independent Barents Observer*, January 23, 2017). <https://thebarentsobserver.com/en/security/2017/01/newrussian-forces-protect-arctic-coast> (accessed February 5, 2017).
- Stephenson, S.R., L.W. Brigham, and L.C. Smith. "Marine Accessibility along Russia's Northern Sea Route." *Polar Geography* 37, no. 2 (2014): 111–33. doi:10.1080/1088937X.2013.845859.
- Taylor, S.C. "Projecting Power in the Arctic: The Russian Scramble for Energy, Power, and Prestige in the High North." *Pepperdine Policy Review* 8, no. 4 (2015): 1–19.
- Todorov, A. "Sotrudnichestvo V Oblasti Portovogo Kontrolya V Arktike Kak Instrument Realizatsii Polyarnogo Kodeksa" [Arctic Port State Control as a Tool of Enforcement of the Polar Code]. *Kontury Global'nykh Transformatsiy: Politika, Ekonomika, Pravo* [Outlines of Global Transformations: Politics, Economics, Law] 12, no. 5 (2019): 160–76. (in Russian). doi:10.23932/2542-0240-2019-12-5-160-176.
- Treadwell, M. "Arctic Ambitions: Will US Let Russia Control Shipping in the Far North?" *Alaska Dispatch News*, June 28, 2015.
- Trump, D. *National Security Strategy of the United States of America*. December 2017. Washington, The White House, 2017. <https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf> (accessed March 10, 2018).
- United Nations. *Convention on the Law of the Sea*, 1982. http://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf
- Vasiliev, A. "Russia's Approaches to International Cooperation in the Arctic." *Arctic Herald* no. 1 (2012): 12–27.
- Vasilyev, V., V. Semyonov, and L. Tsoy. *Mezhdunarodny Polyarny Kodeks IMO: Aspekty Obespecheniya Sootvetstviya Trebovaniya Kodeksa v Rossiyskoy Federatsii* [IMO International Polar Code: Some Aspects of the Code's Implementation in the Russian Federation]. St. Petersburg: Central Marine Research & Design Institute, 2015. <http://www.cniimf.ru/news/22062015/polyarnyi-kodeks-cniimf.pdf> (accessed December 11, 2016) (in Russian).
- Zagorsky, A. *Arkticheskie Ucheniya Severnogo Flota* [The Arctic Exercises of the Northern Fleet]. 2013. http://www.imemo.ru/ru/publ/comments/2013/comm_2013_053.pdf. (accessed December 11, 2016) (in Russian).
- Zhilina, I. "Pravovye Aspekty Razvitiya Severnogo Morskogo Puti I Severo-Zapadnogo Prokhoda Kak Novoy Arkticheskoy Morskoy Transportnoy Sistemy" [The Legal Aspects of Making the Northern Sea Route and North-Western Passage a New Arctic Maritime Transport System] *Arktika I Sever* [The Arctic and North] no. 7 (2012): 1–13. (in Russian).
- Zhuravel, V. "Razvitie Severnogo Morskogo Puti: Natsional'ny I Mezhdunarony Aspekty" [Northern Sea Route's Development: National and International Aspects]. *Nauchno-Analitichesky Vestnik Instituta Evropy RAN* [Research-analytical Bulletin of the Institute of Europe RAS] no. 2 (2019): 119–24. (in Russian).