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Russian military strategies in the Arctic: change or continuity?

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ABSTRACT

This paper examines the nature of Moscow's military strategies in the Arctic. It is argued that the roles of military power have radically changed since the Cold War era. According to Russian strategic thinking, instead of being a coercive instrument in a global confrontation between two superpowers and capitalist and socialist systems, now military power has new functions, such as to ascertain Russia's sovereignty over its (not their) exclusive economic zone and continental shelf in the region, protect Moscow's economic interests in the North, prevent illegal migration and potential terrorist attacks against critical industrial and infrastructural objects, fulfil some dual-use functions (such as search and rescue operations, monitoring air and maritime spaces, providing navigation safety, mitigating natural and man-made catastrophes), help academic community in developing Arctic research, and carry some symbolic functions. These new roles, however, do not preclude military power from fulfilling its traditional functions, such as territorial defence, power projection, deterrence, and containment. Russia's military modernisation programmes are described. The authors arrive at a conclusion that these programmes do not provoke an arms race or undermine the regional cooperation. To prevent negative security trends, a system of arms control and confidence- and security-building measures should be developed in the region.

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Introduction

The outbreak of the Ukrainian crisis and Moscow's military intervention in the Syrian conflict have spurred new accusations of Russia as being an aggressive and militarist power not only in East Europe and the Middle East, but also in the Arctic. This was in addition to the charges brought earlier with regard to the planting of the titanium flag on the North Pole in 2007, resumption of naval and air patrols in the region and military modernisation programmes of the Russian conventional and nuclear forces deployed in the Far North. It was expected that in the wake of the Ukrainian and Syrian crises, Moscow would dramatically increase its military activities and presence in the region as well as accelerate its military modernisation programmes.

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According to some Western analysts, because of its economic weakness and technological backwardness, Russia tends to put an emphasis on military-coercive instruments to protect its national interests in the North, and this will inevitably lead to regional arms race and even military conflicts in the Arctic (Berzina 2015, pp. 288-289, Conley and Rohloff 2015, pp. 112-113, Corentin 2015, Pettersen 2015, Staalesen 2017). Moscow denies these allegations and points out that it plans to use its military power only as a last resort – to protect its legitimate interests in the region.

It should be noted that the above-mentioned alarmist expectations were not fulfilled. Instead of an alleged military build-up in the High North, Moscow paid greater attention to the socio-economic development of the Arctic Zone of the Russian Federation (AZRF). At the same time, the Kremlin tried to bracket out the Arctic cooperation from its general relations with the West and keep positive experiences accumulated in the past.

There are three main research objectives with this study. First, this paper discusses the post-Cold War changes in Russia's threat perceptions, doctrinal/conceptual underpinnings, as well as roles and missions of military power in the Arctic. Second, it aims to examine current Russian military modernisation programmes in the High North. Finally, the question of what should be done to ameliorate the regional security environment (arms control regime and confidence- and security-building measures) is discussed.

Threat perceptions

There was a negative impact of the Ukrainian crisis on the level of cooperation and trust between Russia and its Western partners. Because of the Western economic sanctions, many promising projects in the energy sector were stopped, the volume of regional trade and traffic via the Northern Sea Route (NSR) significantly dropped, and military-tomilitary cooperation was cancelled. However, the Arctic countries managed to keep major areas of their regional cooperation out of the current tensions between Moscow and the West and focus on the soft security problematique.

There is no single document where Russia's threat perceptions in the Arctic are coherently described. One should reconstruct them from various Russian national security, foreign policy, and military doctrines, as well as special Arctic strategies and numerous public statements and interviews of Russian political and military leaders.

It should be noted that the general focus of the Arctic policies and Russia's threat perceptions have shifted from hard to soft security over the last two decades. Moscow is no longer concerned about the threat of a large-scale nuclear war and now pays greater attention to threats and challenges that stem from climate change and growing competition over Arctic natural resources and sea routes rather than from the military sphere. Now the Russian security structures are charged not only with purely military functions, but also with issues such as cleaning the Soviet-made environmental mess, search and rescue (SAR) operations, fighting oil spills, poaching, smuggling, and illegal migration.

It should be noted that some climate change implications such as the Northern pole ice cap meltdown necessitate some serious changes in the Arctic states' military strategies, including the Russian one. On the one hand, as the 2014 US Navy's document argues, the extension of an ice-free season can result in a significant expansion of surface naval activities in the Arctic (The United States Navy Arctic Roadmap for 2014 to 2030 2014, pp. 8, 16–19). However, on the other hand, the shrinking ice cap provides less protection to submarines, making them visible for enemy's satellites and aircrafts.

The AZRF, particularly the Kola Peninsula, still retains its important strategic importance to Russia's national security. Given its close proximity to potential US/NATO targets, this region is well suited for strategic naval and air operations (Khramchikhin 2011, 2013). Moreover, the Kola Peninsula is still a home for two-thirds of the Russian nuclear strategic submarine fleet. Russian military analysts also emphasise the importance of the AZRF in terms of air defence and preventing a US surprise attack over the North Pole.

Both the Russian politicians and military still believe that there is a residual US/NATO military threat to the AZRF. The Arctic coastal states' armed forces modernisation programmes are predominantly treated in the alarmist way. While American experts believe that Washington has quite modest military-strategic ambitions in the Arctic (Corgan 2014), Moscow is worried about the recent US military strategies in the Arctic that envisage Washington's increased security activities in the region. Moscow is especially concerned about the US plans to increase its readiness to conduct maritime and air patrol and interception operations; to exercise and assert its navigation and overflight rights and freedoms in the region; to ensure its access to global commons in the Arctic; to expand its power projection capabilities, etc. (U.S. Department of Defence 2013, The United States Navy Arctic Roadmap for 2014 to 2030 2014, U.S. Department of Defence 2016).

Given the ice-free Arctic in the foreseeable future (at least for the part of the year), Russian military analysts do not exclude the possibility that the USA could permanently deploy a nuclear submarine fleet and sea-based ballistic missile defence (BMD) systems in the Arctic Ocean (UPI 2009, Khramchikhin 2013). In this case, the USA will create capabilities for intercepting Russian ballistic missile launches and making a preventive strike. For the above reasons, this school of strategic thought recommends Russia not only to keep its strategic forces at the present level, but also to regularly modernise them. President Vladimir Putin immediately reacted to the 2013 US doctrine by ordering the Russian Defence Ministry to accelerate the creation of the Arctic Group of Forces (AGF), modernise the Northern Fleet, and reopen the Soviet-time air and naval bases along the NSR (President Putin 2013).

It should be noted that there is some difference in threat perceptions between the Russian strategic and operative-tactical forces. For the Russian strategic forces, the Arctic, North Atlantic, and North Pacific create a single operation zone or military theatre where they confront the US strategic forces. For the conventional forces, the Arctic is an area of operative-tactical significance where they should mainly protect Russia's economic interests and state borders (land, maritime, and air). From the operative-tactical point of view, the Arctic is split into several sectors which represent various zones of responsibility. In the Western sector, the Russian land and air forces confront the NATO (Norwegian) troops, while the conventional component of the Northern Fleet protects Russia's economic interests in the Barents Sea and provides nuclear forces with auxiliary services. The Northern Fleet and Border Guards are responsible for the protection of the NSR and the Arctic Ocean's coastline, while the Pacific Fleet controls the Bering Sea, Bering Strait, and the access to the Chukchi Sea.

To sum up Russia's threat perceptions, there is a clear tendency towards the increasing role of the soft rather than hard security-related concerns such as ensuring Russia's access to and control of the natural resources and transport routes in the region, climate change mitigation, and cleaning up the environmental mess. At the same time, as some Russian strategists believe, there are a number of security threats and challenges in the region that require preservation and further development of a certain military potential and presence in the North. They took notice that the ongoing Ukrainian and Syrian crises have negatively affected overall Russia's relations with NATO and its member states, which unilaterally suspended several cooperative projects with Russia, including military-to-military contacts and the development of confidence- and security-building measures.

Doctrinal/conceptual framework

The main Russian Arctic doctrines were developed prior to the Ukrainian crisis. There are two basic documents that define Moscow's strategy in the Far North:

- The Foundations of the State Policy of the Russian Federation in the Arctic to 2020 and Beyond (adopted by President Dmitry Medvedev on 18 September 2008) and
- Strategy for the Development of the AZRF (approved by President Vladimir Putin on 20 February 2013). The second document was developed to update and specify the Strategy-2008.

These papers identified four key priorities for Russia's Arctic mid- and long-term strategies:

- Climate change mitigation;
- Making the Arctic Russia's "strategic resources basis";
- The need for sustainable development of the AZRF;
- Making the Arctic a "region of peace and international cooperation".

It should be noted that these strategic priorities remained basically intact in the aftermath of the Ukrainian crisis, albeit some insignificant corrections were made from time to time.

On 26 December 2014, an updated version of the military doctrine was signed by President Vladimir Putin (2014). The new doctrine highlighted "NATO's military build-up" and the bloc's expansion towards the Russian borders as being the main external dangers to Russia's security. Other threats mentioned in the document include the development and deployment of the US BMD systems, the implementation of the "global strike" doctrine, plans to place weapons in space, deployment of high-precision conventional weapons systems, as well as evolving forms of warfare such as, for example, information warfare. For the first time, the protection of Russia's national interests in the Arctic in peacetime was assigned to the Russian armed forces.

The doctrine showed increased Russian interest in improving its own ability to use precision conventional weapons. For the first time, the concept of non-nuclear deterrence was introduced in the document. This became a reflection of the fact that most of the military threats that Russia faces now are of non-nuclear character and can be successfully met with conventional means. But the central question of when Moscow might feel compelled to use nuclear weapons seems unchanged from the position laid out in the previous (2010) doctrine.

In general, the new version of the military doctrine retained its defensive nature, but Russian neighbours, including those in the Arctic, remained concerned with Moscow's intentions in the region.

In late July 2015, President Putin approved a new version of Russia's maritime doctrine that included both naval and civilian components (Putin 2015a). As the Russian vicepremier Dmitry Rogozin has explained, the novelty of the document was that it emphasised the priority of two regions - the North Atlantic and Arctic where NATO activities and international competition for natural resources and sea routes continued to grow and required Russia's "adequate response" (Russia revises navy doctrine 2015). Along with the naval forces, the nuclear icebreaker fleet will be modernised by 2020. As part of this programme, the most powerful nuclear icebreaker "The Arctic" was pulled on the water at the Baltiysky shipyard on 16 June 2016. The icebreaker is powered by two reactors (175 Megawatt) and it can break 3-metre ice (Haun 2016). This ship is the first one in a series of three icebreakers of the same type.

On 31 December 2015, Russian President Vladimir Putin approved a new national security strategy (Putin 2015b). The Arctic was mentioned three times in this document. First, it was mentioned in the context of the doctrine's thesis on increasing international competition for natural resources of the world ocean. The second time, the Arctic was referred to as a promising transport junction which should be further developed to strengthen Russia's economic security. And for the third time, the region was specifically mentioned as an important platform for international cooperation.

On 30 November 2016, a new version of the Russian Foreign Policy Concept was approved by the Kremlin. In contrast with the previous version of 2013, the new document underscored the increasing role of force (including its military component) in the presentday international relations as a result of growing tensions between various international actors and instability of the world's political and economic systems (Putin 2016). However, the paper is based on the assumption that the threat of a large-scale nuclear war is still highly improbable. The document underlines the need to complete the process of demarcation of Russia's land and maritime boundaries and delimitation of continental shelves (implying first and foremost the Arctic Ocean). The doctrine has confirmed Russia's adherence to the 2015 Paris agreement on global climate change and sustainable development concept.

The Arctic is mentioned on two occasions in the document. For the first time, it is mentioned as a region for potential cooperation with Canada. There is also a special section on the High North where the significance of Arctic cooperation in areas such as development of the region's natural resources (on the basis of the sustainable development concept), transport communications (including the NSR), environment protection and preservation of peace and stability is emphasised. The importance of regional multilateral institutions, such as the Arctic Council and the Barents Euro-Arctic Council, is stressed as well. It is specially underlined that Moscow firmly insists on the need to bracket the Arctic out of the current tensions between Russia and the West and prevent any military confrontation in the High North.

To sum up, the Ukrainian and Syrian crises affected Russia's threat perceptions to some extent, but they did not significantly change Moscow's attitude to the Arctic where, the Kremlin believes, cooperation should prevail and the region should retain its status of the "zone of peace and security".

Changing roles of military power in the Arctic

In the Cold War era, military power was a coercive instrument in a global confrontation between two superpowers and capitalist and socialist systems. The Arctic region was a part of this global confrontation. It was a home for strategic nuclear forces (especially in the case of the USSR/Russia) and an important area for significant military activities. Both the USA and Soviet Union pursued containment strategy with the mutually assured destruction (MAD) doctrine at its core.

However, in the post-Cold War world, the roles of military power and the nature of military strategy have been radically transformed because of the global geopolitical changes and revolution in military affairs (RMA).

The present-day wars no longer aim to acquire enemy's territory and wealth. Now we see wars unleashed with the aim to change political regimes or under the banner of "human rights" protection (the doctrines of "humanitarian interventions" and "responsibility to protect"). The armed forces got new, non-traditional, roles such as fighting terrorists and piracy, policing conflict zones, protecting a country's economic interests, conducting SAR operations, and coping with natural and man-made catastrophes.

The RMA has changed the nature of war. Precision weapons, unmanned aerial vehicles (UAVs), hybrid tactics, and strikes against information infrastructure are now the most popular methods for waging wars. Supremacy in military technologies became a crucial factor in achieving regional or world military hegemony. For this reason, the competition between major powers has moved to the technological sphere and equipping the armed forces with advanced weaponry.

To what extent has these dramatic changes affected the military situation in the High North? How does Russia perceive the role of military power in its Arctic strategies? This chapter aims to examine the paradigmatic shifts in the nature of Moscow's military strategy in the Far North.

Among the relatively new roles that the Russian armed forced acquired in the post-Cold War era, the mission to ascertain Moscow's sovereignty over its exclusive economic zone (EEZ) and continental shelf in the Arctic Ocean should be mentioned first and foremost. It should be noted that this mission emerged only in the post-Cold War era when the major polar players have signed and ratified the UN Convention on the Law of the Sea of 1982. There is a special section on this issue in the 2013 Russian Arctic doctrine which states that the Kremlin aims "... to ensure the sovereign rights of Russia's Arctic and features the smooth implementation of all of its activities, including the exclusive economic zone and the continental shelf of the Russian Federation in the Arctic ... " (Putin 2013).

Another "new" mission of the armed forces is to protect Russia's economic interests in the High North, including mineral and bio-resources, fighting smuggling and poaching. In the Cold War era, when the Arctic was a completely barred territory and maritime space and there were almost no international contacts, these challenges simply did not exist. The offshore hydrocarbon extraction in the Arctic seas was seen as a distant future. The melting of the northern polar ice has dramatically altered this once static and remote geographic and oceanic area and is responsible for the new-found profitability and geostrategic/geoeconomic relevance of the region. Oil, gas, minerals, fish, and transportation routes in the region, formerly locked in by thick ice, are for the first time

becoming accessible and viable sources of profit. These resources include an estimated 13% of the world's undiscovered oil, 30% of undiscovered gas, and some one trillion dollars worth of minerals including gold, zinc, palladium, nickel, platinum, lead, rareearth minerals, and gem-quality diamonds (U.S. Coast Guard 2013, p. 7).

In addition to mineral reserves, the Arctic possesses abundant bio-resources. More than 150 fish species can be found in Arctic waters, including important varieties for international commercial fishing, such as herring, cod, butterfish, haddock, and flatfish. It should be noted that the AZRF produces 15% of Russia's seafood (Kochemasov et al. 2009). The region is also populated by some unique animal species such as the polar bear, narwhal, walrus, and white whale.

With greater accessibility to the Arctic region and its abundant resources comes both new opportunities for multilateral cooperation and the potential for regional competition and dispute, particularly conflicting territorial claims and managing maritime resources. Protracted disagreement among the Arctic littoral states could cause individual Arctic nations to become increasingly assertive in their resource and territorial claims, which has the potential to lead to the militarisation of the Arctic. Although this scenario would appear to be unlikely, Russia – similar to many other coastal states – believes that it is critical to articulate its strategic interests in the Arctic region, and develop a sufficient military potential and plans of action to ensure its leadership in this evolving region to both anticipate challenges and offer multilateral and transparent resolution to these challenges (Sergunin and Konyshev 2016, pp. 32-33, 143-144).

According to a statement in 2010 by the head of the Federal Security Service's (FSS) Border Service, Vladimir Pronichev, the main challenges for the Russian Border Service were the unauthorised presence of foreign ships and research vessels in Russian Arctic waters, illegal migration, drug smuggling, and poaching (http://www.rg.ru/2010/06/02/ pronichev.html).

For example, the issue of illegal, unreported, and unregulated (IUU) fishing in the Arctic seas has aggravated to the extent that it caused tensions between the countries whose vessels were involved in illegal fishing and coastal countries whose fishermen fished in the same areas based on scientific recommendations in their 200-mile zones.

The IUU fishing volume has reached a significant scale in the region. It amounted to about 1.3 million tonnes in the Bering Sea enclave (Zilanov 2016, p. 48). It is estimated that the fish caught in Russian waters exceed the official quota by at least 150% (The International Bering Sea Forum 2006). Overfishing creates numerous ecological problems in the region. According to some accounts, as a result of intensive trawling, species such as crab and perch are in serious decline in the entire Bering Sea, while the stocks of pollack fluctuate in an unpredictable manner from year to year. The once-plentiful pollack have had especially dramatic declines on the Western (Russian) side of the Bering Sea because of illegal fishing. In the Eastern (US) Bering Sea, harvests of snow crab have declined by 85% since 1999 (The International Bering Sea Forum 2006). This is because poaching is rampant, and the Russian organised crime is heavily involved in the fish trade. The Russian "fish, crab and caviar mafias" aim not only at expanding their commercial activities and sidelining their foreign rivals, but also at establishing control over the regional governments and federal agencies in the Russian Far North and East.

Illegal fishing in the Barents Sea constituted at least an equal threat to fish stocks, although the scale of IUU fishing there was lower than that in the Bering Sea. Norway continues to object to Russian fishing around Spitsbergen. Since Norway introduced a 200mile economic zone around the archipelago, it has regarded such fishing as poaching. Forcible arrests of Russian trawlers by the Norwegian navy have become more frequent. As Russia does not recognise the aforementioned decision by Norway and considers this area open to international economic activity, in 2004 Russia's Northern Fleet started regular patrols of the waters around Spitsbergen. Norway particularly objected to this move, viewing it as a sign of Russian imperial ambitions and of Moscow's unwillingness to cooperate with Oslo to settle maritime and economic disputes.

Given the continuation of ice melting in the High North and opening of the Arctic maritime routes for navigation for several months a year, Russia is concerned with the possibility of the growth of smuggling activities along its Arctic Ocean coastline and NSR. Russia has plans to further develop its border and coast guards in the region as well as promote coast guard cooperation. To prevent or reduce poaching, overfishing, and smuggling in the region, an Arctic Coast Guard Forum was established in October 2015. The Joint Statement formally established the operationally focused, consensus-based organisation with the purpose of leveraging collective resources to foster safe, secure, and environmentally responsible maritime activity in the Arctic (Fonseca 2015).

On 16 July 2015, the so-called Arctic Five countries (Canada, Denmark, Norway, Russia, and the USA) signed a "Declaration concerning the prevention of unregulated high seas fishing in the Central Arctic Ocean" (2015) in Oslo. The agreement came at a time when there was no commercial fishing in international waters in the Central Arctic Ocean (CAO) and was presented as a precautionary measure. The idea behind the agreement, including its focus on the need for further scientific research and its application of international law, is in line with what most Arctic fisheries stakeholders agree on. The negotiations on a mandatory agreement are underway and some other countries with global fishing interests and capabilities (China, Iceland, Japan, and South Korea) are invited. Again, Arctic nations' coast guards are in charge with enforcing the IUU fishing ban regime in the CAO.

Illegal migration is one more potential security challenge for Russia and neighbouring countries. Since 2014, refugees from the Middle East have taken the so-called Arctic Route through Russia, crossing the Norwegian border by bike as Russia does not allow anyone to cross by foot. In November 2015, Oslo announced it would deport people who had arrived from a safe country. The government considers Russia as safe but has not given the refugees opportunity to appeal the decision. The Norwegian authorities have begun sending the first of around 5500 mainly Syrian refugees who had been housed in a transit camp in the north of the country back to the Russian border they crossed in 2015 (http://www.euronews.com/2016/01/20/norway-sends-syrian-refugeesback-to-russia). Critics of the government have said the attempts to return refugees to Russia put them at risk and contravene European human rights. Although Norway is not an EU member, it is in the border-free Schengen zone.

In addition to deportation, in 2016 Norway started to build a steel fence at its border with Russia to prevent further influx of refugees.

The Russian-Finnish border has become one of the main routes used by the Middle Eastern refugees to get to Finland. The influx of refugees from Russia to Finland increased after Norway tightened security measures on its borders and hardened the procedure of asylum application in late 2015, prompting migrants to seek alternative paths to enter the EU's borderless Schengen area and to get asylum there. In January 2016, Finland registered 500 asylum seekers' arrivals from Russia against 700 border crossings throughout 2015 (https:// sputniknews.com/world/201604081037708246-finland-russia-border-restrictions/).

In March 2016, Russia and Finland agreed to introduce temporary restrictions at two checkpoints on their border, Salla and Raja-Jooseppi, for citizens of third countries. Similar to Norway, the asylum seekers were sent back to Russia, where they have valid residence permits. The Finnish Ministry of Interior said that the measures were aimed to curb undocumented migration and related threats and to enhance the effectiveness of measures taken by both Helsinki and Moscow to combat illegal migration.

It should be noted that the fact Russia allowed many of the refugees to cross the border was viewed by some Finnish and Norwegian experts as Russian application of the elements of hybrid warfare and did not contribute to raising the level of mutual trust in the region. Moscow, however, denied these allegations saying that it was difficult to stop refugees in such a scarcely populated area.

A threat of international terrorism, including the nuclear one, is seen by Russia as a real danger. Particularly, terrorist attacks against oil platforms are seen as a potential threat to security in the Arctic (Vasiliev 2012, p. 14). Based on these perceived security risks, Russia again began to prioritise the protection of Arctic borders and the strengthening of the Border Service in the region. This return to a focus on Arctic border protection was reiterated by presidents Medvedev and Putin on a number of occasions (http://www.ng.ru/ economics/2011-08-31/4 arctic.html).

Russia is seriously concerned with the threat of nuclear terrorism. Moscow is afraid that not only the industrial infrastructure or oil platforms, but also nuclear power plants and nuclear waste storages can become potential targets for terrorists. There are two nuclear plants -Kola and Bilibin – in the AZRF. Most notably, more than 200 decommissioned nuclear reactors from submarines and icebreakers from the Soviet period are stored on the Kola Peninsula from the Soviet period. It should be noted that the Cooperative Threat Reduction Programme (Nunn-Lugar) of 1991-2012 and the Multilateral Nuclear Environmental Programme in the Russian Federation (2013) played a significant role in nuclear waste treatment.

In 2016, Russia launched a large-scale programme for removing nuclear waste from the former Soviet submarine base in Andreev Bay in the Murmansk region. There were a total of 22,000 containers of spent fuel from nuclear submarines and icebreakers stored in three storage tanks. There were also 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 (http://sputniknews.com/environment/ 20160610/1041126139/russia-norway-arctic-nuclear-waste.html). These nuclear facilities must be reliably protected to prevent potential terrorist attacks.

One more new trend in Russia's military policies is the development of the dual-use potential of the military, including SAR operations, monitoring air and maritime spaces, providing navigation safety, mitigating natural and man-made catastrophes (such as, for instance, response to oil spills), etc.

Russia 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 construction of 10 SAR centres along the NSR by 2018 (with three SAR centres already operational) will be helpful in promoting this route internationally. And as the Yamal LNG (liquefied natural gas) plant becomes operational in 2017, LNG shipments from Sabetta to East Asia (and potentially to Europe and North America) will be facilitated.

It should be also noted that Russia's modernised military infrastructure in the Arctic, including the Soviet air and naval bases which 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 the power structures of the Arctic nations (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. Each country is responsible for its sector of the Arctic, and Russia has the biggest one. The SAR agreement's signatories undertake joint exercises on a regular basis. As many experts believe, the SAR activities are a clear sign of the shift from the armed forces' purely military functions to the soft security missions.

Arctic research has become one of the important missions of the military as well. For example, the Russian Navy was very helpful in preparing Moscow's second submission to the UN Commission on the Limits of the Continental Shelf (UNCLCS) in 2015. The Russian Navy sent several expeditions to Franz Josef Land, Severnaya Zemlya, the Novosibirsk Islands archipelago, and Wrangel Island over the last decade. For example, the objective of the Russian Navy's mission within the framework of the expedition Arktika-2012 was to prove that its landmass extends to the North Pole by drilling into the sea floor (2.5-3.0 km depth) to collect rock samples for scientific analysis. In September 2012, the Kalitka, a Losharik class nuclearpowered auxiliary submarine, was used to guide the Kapitan Dranitsyn and Dickson icebreakers in drilling three boreholes at two different sites on the Mendeleev ridge, collecting over 500 kg of rock samples (Mikhailov and Voloshin 2012). The navy has also shared the bathymetric data with civilian scholars to substantiate the Russian submission to the UNCLCS.

The military power carries out some symbolic functions for Russia. The deployment of significant forces in the region and development of the military infrastructure in the High North are a demonstration of the fact that it still retains its great power status and still has world-class military capabilities.

Some nationalistic authors put forward a spiritual view of the role of the High North in the construction of Russian identity and the pursuit of its traditional messianism. For instance, in his The mysteries of Eurasia, Dugin (1991) elaborates a cosmogony of the world in order to make Siberia, the last "empire of paradise" after Thule, the instrument of his geopolitical desire for a domination of the world, justified by Russia's "cosmic destiny". This group of theorists claims that the North is not only Russia's strategic resource base (as stated by the Kremlin), but also its territory of the spirit, of heroism, and of overcoming, a symbolic resource of central importance for the future of the country (Laruelle 2014, pp. 39–43). The Arctic is presented as Russia's "last chance", and as a possible way to take "revenge on history". The Arctic is portrayed as a rightful compensation for the hegemony lost with the disappearance of the Soviet Union.

These new roles described above, however, do not preclude military power from fulfilling its traditional functions such as territorial defence, power projection, deterrence, and containment.

Military modernisation programmes

It should be noted that the Soviet-time military machine in the Arctic significantly degenerated in the 1990s and early 2000s and the Russian nuclear and conventional forces badly need modernisation to effectively meet new challenges and threats. The main idea behind the modernisation plans is to make the Russian armed forces in the Arctic more compact, better equipped, and trained (Konyshev and Sergunin 2014a, 2014b). The Russian armed forces' modernisation has started with the launch of the third State Rearmament Programme (2007–2015) which covered both nuclear and conventional components.

Strategic forces

It should be noted that the nuclear deterrence and MAD doctrines still remain a key element of Russian military strategies (Zysk 2008, p. 81, Klimenko 2016). Maintaining strategic nuclear capabilities and modernisation of strategic nuclear forces are, therefore, the highest priorities of Moscow's military policies both in the High North and globally.

The fleet of eight strategic nuclear submarines (SSBNs – Ship Submarine Ballistic Nuclear) is a backbone of the Russian strategic forces in the North. Only six Delta IVclass (667-BDRM Dolphin by the Russian designation) submarines (based in Gadzhievo) undergo the process of modernisation. They will be provided with a new sonar system and new submarine-launched ballistic missiles (SLBMs) Sineva (Skiff SSN-23) which entered service in 2007. Sineva is a third-generation liquid-propelled SLBM which is able to cover a distance up to 8300 km and to carry either 4 or 10 nuclear warheads (http:// fb.ru/article/219005/ballisticheskaya-raketa-sineva-harakteristiki-opisanie). Russia is planning to equip its Delta IV-class submarines with at least 100 Sineva missiles which are to stay on alert status until 2030 (http://vs.milrf.ru/armament/marine/mbr r29rm.htm). The Sineva missiles can be launched from under the ice while remaining invisible to enemy's satellites until the last moment (Laruelle 2014, p. 122).

Another class of the Russian strategic submarines, the Typhoons (project 941 – Akula/ Shark by the Russian categorisation), which are considered as the world's largest, will be reequipped with long-range cruise missiles. For the time being, only one Typhoon-class strategic submarine, the Dmitri Donskoy, has been modernised and deployed to the Northern Fleet (Zapadnaya Litsa submarine base). It serves to conduct test firing for the Bulava (R-30) system, a new generation solid-fuel SLBM, designed to avoid possible future US BMD weapons, and which can cover a distance of more than 9000 km (http://www. arms-expo.ru/049057054048124050052056054051.html). Despite some technical problems with Bulava (8 from 26 launches in 2004-2016 were unsuccessful), it was, however, decided to equip Typhoons and some new Russian SLBMs with these missiles (http://www.rbc.ru/politics/27/09/2016/57ead6739a794744094ef974).

It is planned that in the future, the Typhoon- and Delta IV-class submarines should be replaced with the new Borey-class fourth-generation nuclear-powered strategic submarines. The first Borey-class submarine, the Yuri Dolgoruky – which was the first strategic submarine to be built in Russia since the collapse of the Soviet Union – has been in operation by the Northern Fleet since January 2013. Two other Borey-class submarines, the Alexander Nevsky and the Vladimir Monomakh, were deployed to Russia's Pacific Fleet in 2013-2014. The Prince Vladimir, the Prince Oleg, and the Prince Pozharsky designed for the Northern Fleet should be operable by 2018 and 2020, respectively (http://militaryrussia.ru/blog/ topic-338.html). Four Borey-class submarines which are to be deployed to the Northern Fleet will be based at the Gadzhievo navy base (about 100 km from the Norwegian border), where new infrastructure is being built to host them.



This new generation of Russian strategic submarines is almost invisible at deep ocean depths and - having Bulava missiles as well as several types of cruise missiles and torpedoes - it will be able to carry out multipurpose missions, including attacks on enemy aircraft carriers and missile strikes on coastal targets. According to the Defence Ministry's plans, the building of eight Borev-class submarines (four for the Northern Fleet and four for the Pacific one) should be completed by 2020, which seems too ambitious and unlikely in the context of budget constraints caused by the ongoing economic crisis.

Conventional forces

Along with the strategic submarine force, the Northern Fleet also operates 38 surface ships. These include 11 large surface ships; among them are Russia's only aircraft carrier, 3 cruisers and 7 destroyers. The Admiral Kuznetsov aircraft carrier is designed for the global rather than regional military theatre (as demonstrated by its mission in Syria). The Pyotr Veliky (Kirov-class) nuclear-power cruiser serves as the Northern Fleet's flagship and is also designed for global missions (it is called aircraft carrier flotillas' killer). Two of the cruisers, the Admiral Nakhimov (Kirov class) and the Marshal Ustinov (Slava class), are currently out of service undergoing modernisation. After modernisation, these warships will be transferred to the Pacific Fleet. In addition, the Northern Fleet includes 4 destroyers/ large anti-submarine ships (and one is being modernised), 9 corvettes, 9 mine-warfare ships, 4 landing ships, 3 nuclear-powered multipurpose submarines equipped with cruise missiles (Yasen and Oscar-II classes), 8 nuclear-powered multipurpose submarines (Akula-1, Akula-1, Sierra-1, Sierra-2, and Victor-III classes) (5 more are under modernisation), 6 diesel submarines (Kilo and Lada classes), and one experimental hydrogen-fuelled submarine (project 20120) (http://russianships.info/today/). Under the State Rearmament Programme, Russia is planning to build 51 surface ships, including up to 15 frigates and 25 corvettes. According to some accounts, one destroyer, five frigates, five mine-hunters, and two landing ships will be allocated to the Northern Fleet by the end of 2020 (Klimenko 2016, pp. 20-21).

Russian air force in the Arctic are mainly represented by the Northern and Pacific fleets' naval aviation forces. The majority of such aircraft cannot operate outside the Russian Arctic, but a number of Tu-142 anti-submarine warfare aircraft (13 with the Northern Fleet and 14 with the Pacific Fleet) and Il-38 maritime patrol aircraft (14 with the Northern Fleet and 15 with the Pacific Fleet) are capable of long-distance operations. Russia's strategic aviation is not based in the Far North; however, it does use the region as a transit channel for air patrols in the Arctic and North Atlantic oceans.

Air-defence force units are stationed on the Kola Peninsula, near Severodvinsk (Arkhangelsk region), Chukotka, and on a number of Russian islands in the Arctic – Novaya Zemlya, Franz Josef Land, the New Siberian Islands, and Wrangel Island. Some of these units have re-established many of the old Soviet airfields and military bases in the Arctic. In October 2014, these units have been united into a joint task force. These units 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. The 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 (The International Institute for Strategic Studies 2016, pp. 165-166). One task 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.

To reorganise in a more efficient way the Russian land forces in the AZRF, there were plans to transform the motorised infantry and marine brigades located near Pechenga (Murmansk region) to the Arctic special force unit, with soldiers trained in a special programme and equipped with modern personal equipment for military operations in the Arctic. The Arctic brigade should be operational by 2016. There were also plans to create another Arctic brigade somewhere in the Arkhangelsk region. All conventional forces in the AZRF should form an AGF to be led by the joint Arctic command (to be established in 2017).

However, the Ukrainian crisis has made adjustments to Russia's military planning. While two Pechenga-based brigades were left in place, the 80th special Arctic brigade was created ahead of schedule (in January 2015) and deployed in Alakurtti, which is close to the Finnish-Russian border. This was explained by the growing unfriendly activities of the Western countries in the Arctic and the need to protect Russia's vast northern territories ranging from the Murmansk region to the New Siberian Islands. Another move explained by an "increased NATO military threat" in the North was President Putin's decision to accelerate the creation of a new strategic command "North" which was established in December 2014 (three years ahead of the schedule). It was also announced that the second Arctic brigade will be formed soon and will be stationed in the Yamal-Nenets autonomous district (east of the Ural Mountains in the Arctic Circle).

The Russian Defence Minister Sergei Shoigu said also that two new Arctic coast defence divisions are to be established by 2018 as part of an effort to strengthen security along the NSR. One of them is likely to be stationed on the Kola Peninsula (in addition to the existing military units), and the other in the eastern Arctic (the Chukotka Peninsula). The new forces can be tasked with anti-assault, anti-sabotage, and anti-aircraft defence issues along the NSR (Rumm 2017). They will both interact closely with law-enforcement authorities such as the Ministry of Interior, the National Guard, and the Border Guard Service.

As mentioned above, the Border Guards' strengthening is one of the most important priorities of Russia's national security policies in the High North. An Arctic border quard unit was created as early as 1994. Its aim was to monitor 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 quard 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 quards are assigned with the task to deal 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. It 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 (Zagorsky 2013, Klimenko 2016, pp. 14-15).

Another interesting structural change is an ongoing reorganisation of the Russian Coast Guard (part of the Border Service). 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 22100. The Okean-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.

Moscow argues that this build-up is defensive in nature, and that the numbers of armed forces added are small. The Kremlin posits that these activities are prudent, given the importance of the North to Russia's future economic development plans, the increasing permeability of Russia's vast northern borders, and the anticipated increase in commercial shipping along Russia's north as Arctic sea ice melts.

Towards a regional arms control regime?

Given the fact that the "hard" security situation in the Arctic is relatively benign, serious threats and challenges such as WMD (weapons of mass destruction) proliferation, largescale terrorist attacks, or military conflicts are hardly probable in the region – at least in the foreseeable future.

However, it should be noted that the Arctic lacks a special arms control regime. There were only two international arms control regimes applicable to the area: The first regime was (and is) a system of the US-Soviet/Russian strategic arms control and reduction agreements. Particularly, these agreements regulate a number of launchers and nuclear warheads on the Russian strategic submarines based on the Kola Peninsula.

The second arms control regime was the Conventional Forces in Europe (CFE) treaty that was concluded between NATO and the Warsaw Pact in 1990 and adapted in 1999 under the aegis of the Organisation for Security and Cooperation in Europe (OSCE). However, the Baltic States refused to abide by the treaty, because it was concluded when they were still part of the USSR. Finland and Sweden have also refused to sign the treaty, referring to their neutral (now non-aligned) status. In addition, none of the Western signatories of the 1999 Adaptation Treaty ratified it. As a result, Russia suspended its participation in the treaty in 2007 and decided to withdraw from it in 2015.

Moscow, however, hopes that the CFE process can be reanimated in the foreseeable future. Drawing lessons from the past negative experiences, Russia believes that there are two preconditions for the resumption and successful continuation of the CFE process:

- A new treaty should be fully ratified by all signatories and
- All countries of the Arctic region should partake in this arms control regime.

It should also be noted that the CFE treaty was applicable only to land forces. Naval armaments were (and are) mainly excluded from any arms control regime. Unilateral measures were taken by some countries (including Russia) in the 1990s for the reduction of naval armaments and naval activities, but they related only to obsolete weapons and cannot be a substitute for a real arms control regime. According to some assessments, the basic hesitancy of the EU and NATO nations regarding naval armament limitations in the High North seems to be that if you initiate naval arms control in one of the seas within their zone of responsibility, this could lead to restrictions on maritime flexibility in other seas as well. However, these parties should initiate negotiations on naval arms control (including non-strategic nuclear weapons) if they are serious about further improvement of the security environment in the region.

It should be noted, with concern, that the Arctic region currently has no confidenceand security-building measures (CSBMs) regime - a gap that should be filled with great urgency because CSBMs development is a very important element of any regional security system. The regional CSBMs could be based first and foremost on the 1994 OSCE Vienna Document which proved to be efficient in Europe. In addition, the following measures could be suggested:

- Given the specifics of the region, CSBMs should cover not only land, but also naval military activities.
- Along with spatial limitations, temporal limitations on Russian, NATO, and EU military activities in the region could also be established.
- Military-to-military contacts, joint exercises, exchanges, and visits should be further encouraged. Since the eruption of that crisis in 2014, however, Russian representatives have no longer been invited to meetings of the Arctic Security Forces Roundtable. Joint military exercises such as Northern Eagle – manoeuvres involving US, Russian, and Norwegian forces - have been cancelled. Cooperation in military affairs has been disrupted almost entirely. Some international experts point out that restoring military contacts over the Arctic would not connote acceptance of Russia's moves in Crimea and East Ukraine, nor is it a sign of weakness to discuss cooperation in charting the Arctic Ocean, researching ice conditions, and protecting more permeable borders (Yalowitz and Gallucci 2016).
- The countries of the region should intensify exchange of information on their military doctrines, on defence budgets, as well as on major arms export/import programmes.
- Not only regional but also bilateral CSBMs should be further encouraged.
- An idea of establishing a limited nuclear weapon-free zone in the Arctic (say, in Central Arctic) can be discussed. For example, Russia and the USA could consider Canada's initiative to ban nuclear weapons in the region. Russia has responded positively to this initiative (Moscow raised a similar idea under Mikhail Gorbachev), but has questions about the geographical scope of such a zone. Russia supports making the Arctic a nuclear weapon-free zone, provided this would not affect the Kola Peninsula which is a home to two-thirds of the Russian strategic nuclear submarines.

Moscow also considers the field of civil protection as a promising venue for the Arctic regional cooperation. For example, according to the EU-Russia 2005 roadmap to the Common Space on External Security, one of the strategic objectives of Brussels-Moscow cooperation is to strengthen EU-Russia dialogue on promoting a common ability to respond to disasters and emergencies, specifically including crisis management situations (Commission of the European Communities 2005). The positive experience

accumulated in this area could be replicated to the Arctic regional cooperation. The priority areas for such cooperation could be as follows:

- Strengthening the coordination of the Arctic states' agencies responsible for civil protection. This requires hard work in implementing the existing arrangements between the Operations Centre of Russia's EMERCOM (Ministry for Emergency Situations) and its foreign counterparts. More specifically, this means exchanging contact details for keeping in touch on a 24-hour basis; exchanging templates for early warnings and requests/offers for assistance; exchanging information during an emergency, where appropriate; conducting communications exercises on an agreed basis; and enabling operation staff to spend some time in the operational centre of the other partner's service in order to gain practical experience.
- Exchanging information on lessons learnt from terrorist attacks.
- Inviting experts, on a case-by-case basis, to specific technical workshops and symposia on civil protection issues.
- Inviting observers, on a case-by-case basis, to specific exercises organised by the partner countries.
- Facilitating mutual assistance in SAR operations for submarines, ships, and aircrafts in emergency situations.

Hopefully, a steady implementation of this rather ambitious agenda could substantially change the security environment in the Arctic region in a positive way.

Conclusions

The nature and roles of military power in the Arctic have been radically changed over the last quarter of the century. In contrast with the Cold War era, when it was a coercive instrument in a global military confrontation between two superpowers and capitalist and socialist systems, now military power has principally new functions – assertion of Russia's sovereignty over its EEZ and continental shelf in the Arctic Ocean; protection of Moscow's economic interests in the North; prevention of illegal migration and potential terrorist attacks against critical industrial and infrastructural objects; fulfilment of dual-use functions, such as SAR operations, monitoring air and maritime spaces, providing navigation safety, and mitigating natural and man-made catastrophes; and assistance to the academic community in developing Arctic research and performance of some important symbolic functions.

These new roles, however, do not preclude military power from fulfilling its traditional functions, such as territorial defence, power projection, deterrence, and containment.

To make the Russian armed forces in the Arctic more compact, better equipped and trained, as well as prepared for coping with new, non-traditional, security challenges and threats, Moscow has launched military modernisation programmes since the late 2000s. These programmes covered both conventional and nuclear components as well as naval, air, and land forces.

While some media, politicians, and strategic analysts portray the changes in Russia's military capabilities as a significant military build-up and even a renewed arms race in the region, the real picture is far from this apocalyptical scenario. It is possible to speak only about limited modernisation and increases or changes in equipment, force levels,

and force structure. Some of these changes – for example, the creation of new Russian Arctic units, commissioning more sophisticated and better armed warships, and the establishment of new command structures in the north – have little or nothing to do with power projection into the potentially disputed areas (where the Arctic coastal states' claims overlap) or region at large; rather, they are for the patrolling and protecting of recognised national territories that are becoming more accessible, including for illegal activities, such as overfishing, poaching, smuggling, and uncontrolled migration. Others changes - such as modernisation of the Russian strategic nuclear forces – may have more to do with maintaining a deterrent potential rather than with developing offensive capabilities.

In other words, it is safe to assume that these programmes do not provoke an arms race or undermine the regional cooperation.

In order to prevent potential conflicts, avoid misunderstandings, and facilitate regional cooperation, Russia suggests that the Arctic states should be clear about their military policies and doctrines and should include arms control initiatives and CSBMs in their bilateral or multilateral relations in the Arctic. Moscow favours regional cooperation between the military, especially in areas such as SAR, emergency situations, air and maritime safety, charting safe maritime routes, and cartography.

Russia clearly has a preference for soft power instruments (diplomatic, economic, and cultural) in the Arctic theatre, as well as activity and discourse via multilateral institutions. This preference should be taken seriously by Russia's partners, and reciprocation will be a key to the preservation of peace and security in the region.

Note

1. In this article, the concepts of the Arctic, Far North, and High North are used interchangeably.

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References

- Bērziņa, I., 2015. Foreign and domestic discourse on the Russian arctic. *In*: L. Heininen, ed. *Arctic Yearbook 2015*. Akureyri: Northern Research Forum, 281–295.
- Commission of the European Communities, 2005. Roadmaps to the EU-Russia common spaces [online]. Brussels: Commission of the European Communities. Available from: http://europa.eu.int/comm/external_relations/russia [Accessed 15 March 2016].
- Conley, H. and Rohloff, C., 2015. *The new ice curtain. Russia's strategic reach to the Arctic.* Lanham: Rowman & Littlefield.
- Corentin, L., 2015. Russia in the Arctic: aggressive or cooperative? [online]. 27 November. Centre for International Maritime Security. Available from: http://cimsec.org/russia-in-the-arctic-aggressive-or-cooperative/20196 [Accessed 15 January 2017].
- Corgan, M., 2014. The USA in the Arctic: superpower or spectator? *In*: L. Heininen, ed. *Security and sovereignty in the North Atlantic small states, middle powers and their maritime interests*. Basingstoke: Palgrave Pivot, 62–79.
- 2015. Declaration concerning the prevention of unregulated high seas fishing in the Central Arctic Ocean [online]. Available from: https://www.regjeringen.no/globalassets/departementene/ud/vedlegg/folkerett/declaration-on-arctic-fisheries-16-july-2015.pdf [Accessed 25 January 2017].
- Dugin, A., 1991. Misterii Evrazii [The mysteries of Eurasia]. Moscow: Arktogeia (in Russia).
- Fonseca, J.R., 2015. *Arctic Coast Guard Forum established* [online]. 31 October. Available from: http://www.marinelink.com/news/established-arctic-quard400213 [Accessed 15 January 2017].
- Haun, E., 2016. *Russia launches 'world's largest' nuclear icebreaker* [online]. 17 June. Available from: http://www.marinelink.com/news/icebreaker-launches411371 [Accessed 15 January 2017].
- The International Bering Sea Forum, 2006. *Issues* [online]. Available from: http://www.beringseaforum.org/issues.html [Accessed 15 January 2017].
- The International Institute for Strategic Studies, 2016. The military balance 2016. London.
- Khramchikhin, A., 2011. Voyenno-politicheskaya situatsiya v Arktike i stsenarii vozmozhnykh konfliktov [Military-political situation in Arctic regions and the scenario of possible conflicts]. *Arktika i sever* [The Arctic and the North] [online], (2), 1–15. Available from: http://narfu.ru/upload/iblock/7f9/grjopufvglvzvegamx.pdf [Accessed 15 January 2017] (in Russian).
- Khramchikhin, A., 2013. 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*, (10), 52–60 (in Russian).
- Klimenko, E., 2016. Russia's Arctic security policy. Still quiet in the High North? Stockholm: SIPRI (SIPRI Policy Paper No. 45).
- Kochemasov, Y.V., Morgunov, B.A., and Solomatin, V.I., 2009. *Ekologo-ekonomicheskaya Otsenka Perspectivy Razvitiya Arktiki* [Ecological-economic assessment of perspectives of the Arctic's development] [online]. Available from: http://www.perspektivy.info/rus/ekob/arktika_perspektivy_razvitija_2009-04-24.htm [Accessed 15 January 2017] (in Russian).
- Konyshev, V. and Sergunin, A., 2014a. Is Russia a revisionist military power in the Arctic? *Defense and security analysis*, 30 (4), 323–335.
- Konyshev, V. and Sergunin, A., 2014b. Russian military strategies in the High North. *In*: L. Heininen, ed. *Security and sovereignty in the North Atlantic*. Basingstoke: Palgrave Macmillan, 80–99.
- Laruelle, M., 2014. Russia's Arctic strategies and the future of the far North. Armonk, NY: M.E. Sharpe. Mikhailov, A. and Voloshin, V., 2012. Voennyi Atomny Batiskaf "Losharik" Ispytali v Arktike [The nuclear-powered military bathyscaphe "Losharik" was tried in the Arctic]. Izvestiya [online], 27 October. Available from: http://izvestia.ru/news/538268 [Accessed 15 January 2017] (in Russian).
- Pettersen, T., 2015. New maritime doctrine to strengthen Arctic presence. *Barents Observer* [online], 28 July. Available from: http://barentsobserver.com/en/arctic/2015/07/new-maritime-doctrine-strengthen-arctic-presence-28-07 [Accessed 21 January 2017].
- 2013. President Putin makes tough statement on Arctic security to youth voters. *Chicago Tribune* [online], 3 December. Available from: http://www.chicagotribune.com/news/sns-rt-us-al-russia-putinarctic-20131203,0,5499339.story [Accessed 15 January 2017].



- Putin, V., 2013. Strategiya Razvitiya Arkticheskoi Zony Rossiyskoi Federatsiii 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] [online]. Approved by President Vladimir Putin on 20 February 2013. Available from: http://правительство.pф/docs/22846/ [Accessed 15 January 2017] (in Russian).
- Putin, V., 2014. Voennaya Doktrina Rossiyskoy Federatsii [The military doctrine of the Russian Federation] [online]. Available from: http://static.kremlin.ru/media/events/files/41d527556bec8deb3530.pdf [Accessed 15 January 2017] (in Russian).
- Putin, V., 2015a. *Morskaya Doktrina Rossiyskoy Federatsii* [Maritime doctrine of the Russian Federation] [online]. Available from: http://statc.kremlin.ru/media/events/files/ru/uAFi5nvux2twaqjftS5yr IZUVTJan77L.pdf [Accessed 15 January 2017] (in Russian).
- Putin, V., 2015b. O Strategii Natsional'noi Bezopasnosti Rossiyskoi Federatsii [On the National Security Strategy of the Russian Federation] [online]. Available from: http://www.scrf.gov.ru/documents/1/133.html [Accessed 15 January 2017] (in Russian).
- Putin, V., 2016. Kontseptsiya vneshnei politiki Rossiyskoi Federatsii [The foreign policy concept of the Russian Federation] [online]. Available from: http://publication.pravo.gov.ru/Document/View/0001201612010045?index=0&rangeSize=1 [Accessed 9 April 2017] (in Russian).
- Rumm, A., 2017. V Rossii sformiruyut chasty beregovoy oborony [The coast defence units will be formed in Russia]. *Izvestiya* [online], 16 January. Available from: http://izvestia.ru/news/656353 [Accessed 1 February 2017] (in Russian).
- 2015. Russia revises navy doctrine over NATO's 'inadmissible' expansion [online]. 26 July. Available from: http://news.yahoo.com/russia-revises-navy-doctrine-over-natos-inadmissible-expansion-191235893.html [Accessed 15 January 2017].
- Sergunin, A. and Konyshev, V., 2016. Russia in the Arctic: hard or soft power? Stuttgart: ibidem.
- Staalesen, A., 2017. New Russian forces to protect Arctic coast. *The Independent Barents Observer* [online], 23 January. Available from: https://thebarentsobserver.com/en/security/2017/01/newrussian-forces-protect-arctic-coast [Accessed 5 February 2017].
- 2014. The United States Navy Arctic roadmap for 2014 to 2030. February 2014. Washington, DC: Chief of Naval Operations.
- UPI. 2009. Russia fears missile defence in the Arctic [online]. Helsinki: The Finnish Institute of International Affairs, 29 September. Available from: http://www.upi.com/Top_News/2009/09/29/Russia-fearsmissile-defenses-in-Arctic/UPI-80901254231286/#ixzz2TStTQULu80901254231286/#ixzz2TStTQULu [Accessed 15 January 2017].
- U.S. Coast Guard. 2013. *Arctic strategy* [online]. Available from: http://www.uscg.mil/seniorleadership/DOCS/CG_Arctic_Strategy.pdf [Accessed 15 January 2017].
- U.S. Department of Defence. 2013. *Arctic strategy* [online]. Washington, DC: Department of Defence. Available from: http://www.defense.gov/pubs/2013_Arctic_Strategy.pdf [Accessed 15 January 2017]
- U.S. Department of Defence. 2016. *Report to congress on strategy to protect United States National Security interests in the Arctic region* [online]. Washington, DC: Department of Defence. Available from: http://www.sullivan.senate.gov/imo/media/doc/2016_ArcticStrategy-Unclass.pdf [Accessed 5 February 2017].
- Vasiliev, A., 2012. Russia's approaches to international cooperation in the Arctic. *Arctic herald*, 1, 12–27. Yalowitz, K. and Gallucci, V., 2016. Can the U.S. and Russia avoid an Arctic arms race? *The National Interest* [online]. 8 April. Available from: http://nationalinterest.org/feature/can-the-us-russia-avoid-arctic-arms-race-15713 [Accessed 9 April 2017].
- Zagorsky, A., 2013. *Arkticheskie ucheniya Severnogoplota* [The Arctic exercises of the Northern Fleet] [online]. Available from: http://www.imemo.ru/ru/publ/comments/2013/comm_2013_053.pdf [Accessed 15 January 2017] (in Russian).
- Zilanov, V.K., 2016. The Russian experience of IUU-extraction of marine living resources in the Arctic seas' enclaves. *Arctic herald*, 4 (19), 44–49 (in Russian).
- Zysk, K., 2008. Russian military power and the Arctic. *Russian foreign policy* (EU–Russia Centre's Review), 8, 80–86.