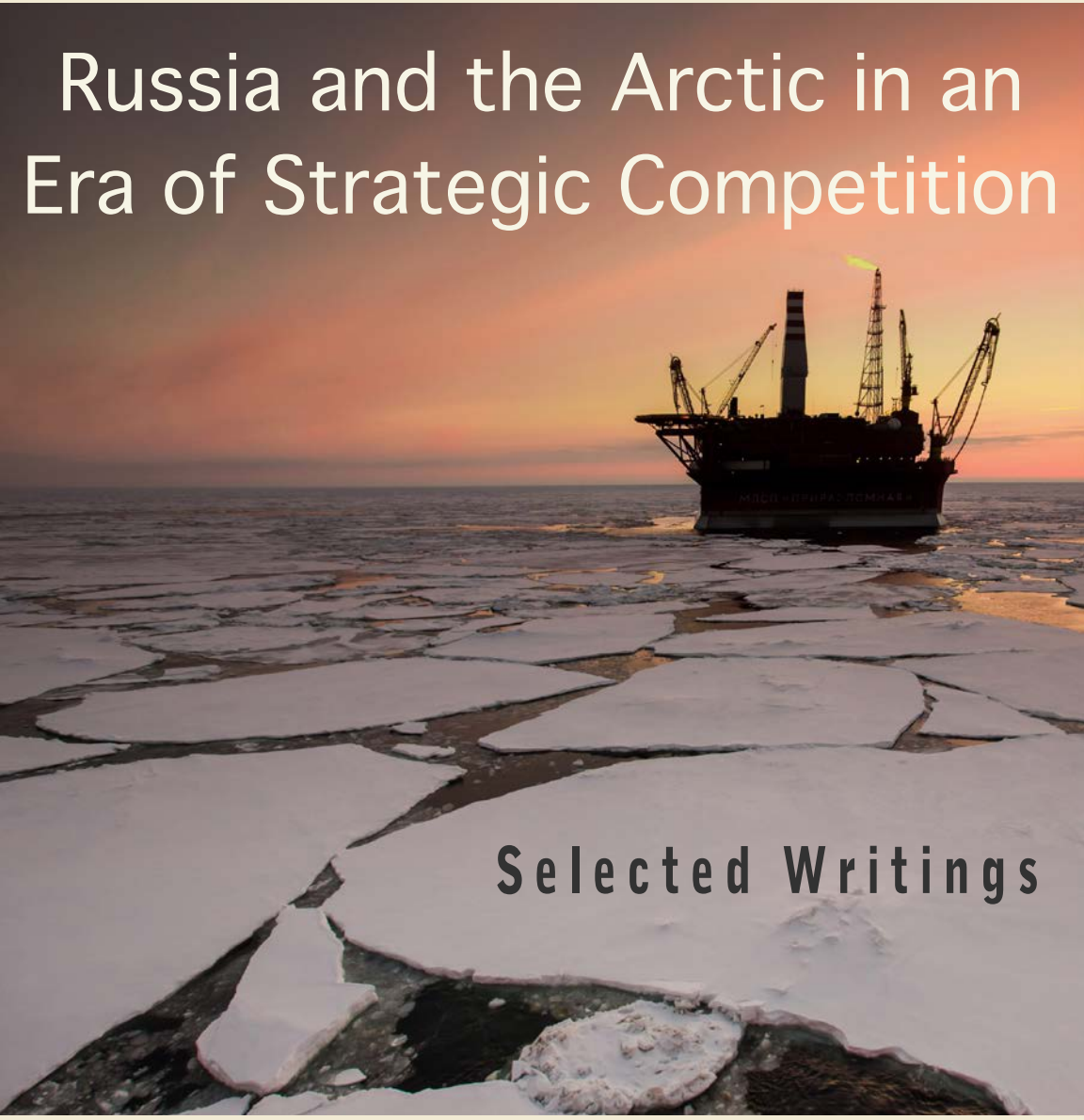
Russia and the Arctic in an Era of Strategic Competition



Selected Writings

Sergey Sukhankin

NAADSN Engage Series

Russia and the Arctic in an Era of Strategic Competition

Selected Writings

North American and Arctic Defence and Security Network (NAADSN) / Réseau sur la défense et la sécurité nord-américanes et arctiques (RDSNAA)
c/o School for the Study of Canada
Trent University
Peterborough, Ontario, Canada
K9J 7B8

LIBRARY AND ARCHIVES CANADA CATALOGUING IN PUBLICATION

Russia and the Arctic in an Era of Strategic Competition: Selected Writings / Sergey Sukhankin.

(NAADSN Engage Series no. 6 / RDSNAA série d'engage no. 6)
Published in electronic format.
ISBN: 978-1-989811-17-7 (e-book)

1. Russia—Arctic policy. 2. Arctic regions—Defence and Security. 3. Arctic development—Russia. 4. Climate change—Arctic. 5. Northern Sea Route. I. Sukhankin, Sergey, author II. Title: *Russia and the Arctic in an Era of Strategic Competition: Selected Writings*. III. Series: NAADSN Engage Series / RDSNAA série d'engage; no. 6

Designer and layout: P. Whitney Lackenbauer
Cover design: Jennifer Arthur-Lackenbauer
Cover images: imagefuse.org (front); Tpsdave/Pixabay (back)

Please consider the environment before printing this e-book

Russia and the Arctic in an Era of Strategic Competition

Selected Writings

Sergey Sukhankin

Senior Fellow, The Jamestown Foundation

Postdoctoral Fellow, North American and Arctic Defence and Security Network

Acknowledgements

Publication of this edited volume was possible thanks to my postdoctoral fellowship program funded by the North American and Arctic Defence and Security Network (NAADSN) and the Canada Research Chair in the Study of the Canadian North in the School for the Study of Canada at Trent University. I would like to thank Dr. Whitney Lackenbauer for his insightful commentaries and valuable guidance that he has given to me while I was working on this volume. Also, publication of this work would not have been possible without my collaboration with the Jamestown Foundation (Washington DC). I would like to thank Mr. Matthew Czekaj, Senior Program Associate/Editor-in-Chief, Eurasia Daily Monitor, who has spent enormous amount of time editing my EDM articles, giving advice, and providing feedback. A special note of appreciation goes to Mr. Glen Howard, Jamestown President, who has graciously agreed to write a Foreword for this volume and supported my research, providing guidance and advice, and allowing me to refine my ideas.

Last but not least, I offer a special word of appreciation to my wife Alla, who has always been my inspiration. I am grateful for her valuable advice and feedback on my work, as well as her constant support for all my endeavours.

Table of Contents

Foreword

Few Kremlinologists in the world have maintained an understanding of Russian behavior better than noted American diplomat and Cold War strategist George F. Kennan. Kennan was the author of the "Long Telegram," a highly classified cable sent to the State Department from Moscow in 1946 that identified the various dimensions of Russian behavior and suggested a course of action that would serve as a guide for Western strategy toward the Soviet Union that lasted for decades. This document and the longer version that appeared in *Foreign Affairs* magazine in July 1947 retains relevance even today. Kennan's insights into the Russian mindset and his ability to conceptualize a strategy to deter the Soviet Union made him an unmatched figure among Western experts. We should never lose sight of the importance of the "Long Telegram," particularly its understanding of the unique mindset that drives Russian behavior.

More than three quarters of a century later, we should continue to heed Kennan's advice. Regardless of whether it pertains to Russian moves in North Africa, Syria or Central Asia, a common pattern often permeates Kremlin behavior on the world stage. One can certainly apply the wisdom of Kennan to Russia's newfound interest in the Arctic when he described Russian behavior by noting:

> Its political action is a fluid stream which moves constantly, wherever it is permitted to move, toward a given goal. Its main concern is to make sure that it has filled every nook and cranny available to it in the basin of world power.

That new "emerging basin of world power" today is the Arctic. Russia is rapidly racing to fill many of the "nooks and crannies" of the High North since it first announced this drive to the world in 2007, when it planted a Russian flag on the Arctic seabed at the North Pole with a submersible vehicle. Since then, Russia has raced to attain influence in the Arctic, pushing experts and analysts to seek understand the country's strategy for the region.

In the decade since Russia's underwater flag planting at the North Pole, Moscow has created four new military bases and constructed a new fleet of nuclear icebreakers, demonstrating Moscow's determination to stake its claim over a rapidly changing Arctic. Of particular note has been the controversial Russian claim to the undersea Lomonosov Ridge and its estimated natural resource wealth. Russia, however, is not alone. The great scramble for the Arctic involves many nations, ranging from Canada and the United States to other countries in Europe and Asia. Non-Arctic China's increased involvement in the region, in particular, demonstrates how climate change is creating new

transportation routes and opportunities that influence the aims of the countries bordering the northern polar waters.

In many ways, the Arctic is perhaps the last geographic frontier for Russian expansionism. At the turn of the 19th century, both the race for Central Asia to counter Britain in the Great Game as well as expansion to the Pacific dominated the minds of Russia's imperial strategists. The Northern Sea Route (NSR) and the High North are rapidly emerging as today's new strategic arena for Moscow's geopolitical competition with the West. Similar in scale to the construction of the Trans-Siberian Railway, the NSR involves vast infrastructure developments that will absorb scarce Russian resources. Yet Moscow believes the payoff will be huge, consisting in part of lucrative tolls paid into Russian coffers by international shipping utilizing this new transportation route. Grand projects, such as Peter the Great's Volga–Don Canal and Sergei Witte's Trans-Siberian Railway, have always captivated the imaginations of Russian rulers and strategists. The Northern Sea Route is no different. Dreams of a new maritime chokepoint emerging in Russia's High North fill the minds of Moscow policymakers, who hope they will one day control a waterway connecting Europe and Asia as crucial to global commerce as the Suez Canal was to connecting Great Britain with its Asian empire.

Whether those Moscow policymakers achieve this goal remains to be seen. Various dilemmas and questions surround Russia's race to develop the Arctic, which Western policymakers are only now beginning to comprehend. In order to understand this challenge, more analysis like this volume of articles is needed to bring light to the extent of Russian aims and objectives in the Arctic. Based upon the analysis of Dr. Sergey Sukhankin, published in Jamestown's *Eurasia Daily Monitor,* these writings cover a broad range of topics about Russian economic and military expansion in the High North. This volume offers insight at every strategic level, beginning with Russian efforts to build and deploy a new fleet of nuclear icebreakers—armed with the latest weaponry—to the construction of a ring of northern "*Trilistnik*" (Trefoil) military bases as part of Russian ambitions to secure the approaches to its Arctic environs. Dr. Sukhankin's analysis digs deep for this type of information, utilizing Russian government strategy documents, local news sources and military theoretical journals such as *Voennaia Mysl* to explore Moscow's long-term goals and unique strategic perspective. Among his discoveries is the Russian High Command's view of the Arctic maritime route as complementary to the Tran-Siberian railroad, together forming a uniting vise (*obyedinitelnaia skrepa*) of the Russian geopolitical space.

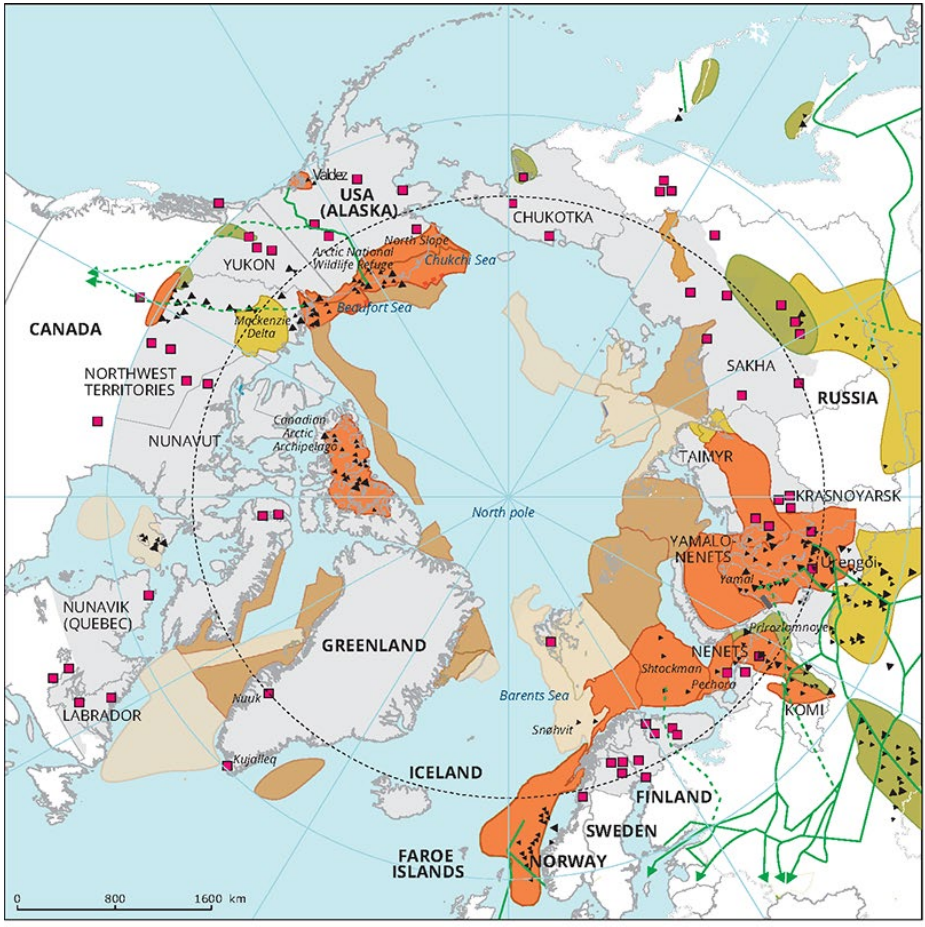
Another hidden jewel contained in this body of analysis is the discussion of Russian perceptions of China and its involvement in the Arctic, not all of

which is compatible with Moscow's interests there. To some experts and specialists in Moscow, Beijing remains a useful partner for countering Washington, the bilateral Russian-Chinese partnership seen as a perfect counterweight to the United States and NATO. Yet Dr. Sukhankin demonstrates that Russian academic writings about the Arctic reflect a sense of nervousness about Chinese engagement with the region. His research quickly presents what is emerging as a key known unknown for Moscow—China's pursuit of the Polar Silk Road.

On the one hand, Beijing's aspiration to become a polar power promises to make Russia and China two allies pursuing the same goals, eager to control the shipping lanes and routes to European markets, ostensibly on an equal footing. But on the other hand, Dr. Sukhankin provides evidence that some Russian experts view China as a future competitor in the High North as Beijing expands its commercial presence further into Russia's Arctic borderlands. Instead of relying on the Russia-controlled Northern Sea Route and the Canadian Northwest Passage, Beijing may opt for full transportation independence from both countries by using the North Pole route—with the help of its own fleet of Chinese-built nuclear icebreakers—to ship its commerce between Asia and Europe. Deep down, Russia fears China could one day sideline Moscow from its own efforts to dominate the Polar Silk Road. Such a scenario should not be dismissed. If it were to happen, it would jeopardize Moscow's aspirations to create a new Suez Canal in the Arctic, and also potentially create a new Arctic battlefield between the two Asiatic powers.

These and the many other analytical points found in this volume's research make it an important contribution to understanding Russian aims in the Arctic and its strategic phobias about the region. This volume captures research not often seen in Western analyses and helps us prod deeper into the motivations driving Russia's race for the High North. Western policymakers need some sort of context as to what this all means in terms of Russia's overall strategy, and this booklet helps to fill that gap. Academics can piece this information together, but they will ultimately depend on someone like Dr. Sukhankin who can offer valuable analytical insights informed by a reading of the indigenous source material and an understanding of the historical context. Both are necessary to accurately identify Russian aims, fears and motivation in the remote but promising Arctic region.

Glen Howard
Jamestown Foundation
July 2021



Arctic resources

Oil, gas and mining

- Oil and gas exploration and production sites
- Main mining sites
- Main projected pipeline
- Main existing gas and oil pipeline
- Prospective areas and reserves

Potential oil and/or gas field *

- Medium (30–50%), sea
- High (> 50%), sea
- Medium (30–50%), land
- High (> 50%), land

Other features

- Arctic circle
- National/regional boundaries
- Arctic region defined as in Arctic Human Development report

Notes:

* Probability that at least one accumulation over 50 million barrels of oil or oil-equivalent gas exist after USGS.

The map was adapted by EEA from Nordregio, 2015

NORDREGIO
Nordic Centre for Spatial Development

Introduction

In the decade after the end of the Cold War, Russia's presence in the Arctic was nominal, primarily stipulated by its geography. This has changed dramatically. Today, Russia is engaged in ever-growing range of strategic, mutually-reinforcing activities in the Arctic region .

The Arctic Zone of the Russian Federation is vast, far-flung, sparsely populated, handsomely endowed with natural resources, and now sits atop Russia's strategic priorities. In addition to its traditionally strong military pillar, which has made it one of the main elements of Russian regional dominance since the late 19th century[1], Moscow is actively developing other aspects of its Arctic strategy, seeking to turn the region into a locomotive of economic growth. Its ambitious plans for the region are also propelled by nationalism. The Arctic region has been playing instrumental, even sacred, role throughout the course of Russia's long and complex history.

The Arctic region's central place in shaping Russian national identity stems from several reasons. One is Russia's geography and deep, historically-rooted fear of external invasions. From the 13th to the first half of the 20th centuries, the Russian state sustained waves of invasions from the west, south and east. Unlike other parts of the Russian Empire and Soviet Union, however, perils capable of challenging the country's sovereignty and territorial integrity have not extended to the Russian North. Distance and isolation insulated the region, which could serve as a bastion of Russia's expanding geopolitical ambitions. Another important aspect was relative easiness of colonization of the northern territories that started as early as in the 9th century, when Russian voyagers began exploring the Barents and the Kara Sea basins. The Russians quickly recognized the economic importance of the region, intensifying its commercial exploration which reached a relatively advanced level by the end of the 16th century.

Following the period mainly marked by commercial exploitation, Russia's stance in the Arctic changed substantively in the 18th century.[2] In this regard, the so-called Great Northern Expedition (1733-34) – which geographically following the Northern Sea Route (NSR) from Europe to Asia – that yielded the first comprehensive map of the Russian Arctic. The combination of hardships endured by the Russian pioneers, severe climate and harsh environmental conditions, vast territories and abundant natural resources played an instrumental role in forming a distinct perception of the Arctic and parts of Siberia. Roughly equivalent to the American "frontier," Russia pursued its manifest destiny over the region[3] to assert and secure its exclusive rights and

responsibilities. Regardless of historical era, the country's political architecture, and its foreign policy, this perception persisted.

Russia's first documented claim articulating its sovereign rights in the Arctic dates back to 1916, when the Russian Ministry of Foreign Affairs issued an official statement declaring "all lands located to the north of Russia`s Asian coastline" as part of the Russian Empire."[4] This followed Canada's similar declaration of territorial claims to the islands in the North American Arctic Archipelago. The Bolsheviks pursued this approach after seizing power.[5] On 4 November 1924, a memorandum issued by People's Commissariat for Foreign Affairs reiterated the Tsarist government's claim in 1916). The Presidium of the All-Union Central Executive Committee subsequently proclaimed the Soviet borders in the Arctic in the widest and most ambitious terms on 15 April 1926, stating that "the territory of the USSR includes all currently as well as potentially discovered lands and islands located in the Arctic Ocean to the north of the coastal line of the USSR up to the Northern pole."[6]

While the young Soviet state's priorities laid mainly outside of the Arctic region, the Soviet political leadership eventually changed its outlook with respect to the Arctic and High North. This qualitative shift in focus was premised on three main pillars. First, the Second World War (1939-1945) affirmed the essential strategic utility of this region, underscoring its military, economic and geo-strategic importance. Second, the outbreak of the Cold War and rapid development of new strategic delivery systems, such as ballistic missiles, changed the nature of warfare and the geostrategic equation. In this new reality, the Arctic emerged as a primary leeway between the two superpowers. Third, resource development had a huge transformative effect on the region and its place in Russian consciousness, given the central place of the Arctic in Russia's economic models and plans. Instability in the Middle East starting with the Suez Crisis (1956) through to the Six-Day War (1967) led Arab oil producers to cut production and introduce an oil embargo against Israel and allies. These events led to the first (1973) and the second "oil shocks" (1979), with their attendant geopolitical reverberations. Western Europe, suffering from oil shortages and skyrocketing fuel prices, began to perceive the USSR – despite the ongoing Cold War – as a more stable and reliable energy supplier than Middle Eastern players. Accordingly, exploiting the huge deposits of hydrocarbons in the north-eastern USSR became a main source of Soviet state revenues as well as an emerging "geopolitical weapon" that Moscow could use to influence not only Europe but the Trans-Atlantic community.[7]

While some Soviet achievements in the Arctic were truly impressive, the USSR was unable to capitalize fully on its dominant position in the region. Soviet policies were heavily tilted in two main directions. First, the strong

ideologization of Soviet foreign policy and the fear of renewed confrontation with the West led to rapid militarization, with little to no consideration of the implications of associated costs. Second, the USSR's reckless economic exploitation of natural resources little to any consideration of social and environmental sustainability had disastrous implications. The deeply flawed nature of this approach became apparent in the second half of the 1980s, when the ailing Soviet economy - exhausted by the global arms race and collapsing oil prices – could not longer prop up costly Arctic-related projects and initiatives.

Soviet leader Mikhail Gorbachev's last attempt to use the Arctic region as a platform to intensify dialogue and cooperate with the West was soon overtaken by broader events. His timely and progressive "Murmansk Initiative," proclaimed in October 1987, sought to transform the region from a military theatre into an international "zone of peace" by establishing a nuclear weapons-free zone in Northern Europe, restricting naval activities in some Arctic waters, and strengthening transborder cooperation with respect to resource development, science, Indigenous issues, environmental protection, and marine transportation. The arms control measures did not succeed, but other aspects of the agenda took root with the creation of the Arctic Environmental Protection Strategy (1991) and the Arctic Council (1996).

During the 1980s, negative developments on the domestic front meant that the Arctic region rapidly lost popular appeal and attention of the ruling elite. The dire state of the Soviet economy led to an exodus of human capital from the region as workers sought employment elsewhere.[8] Without economic stimuli, permanent residents and temporary workers abandoned this vast region, endowed with natural resources, in increasing numbers. The region inexorable slid into economic stagnation.

This worrisome trend, already visible in the 1980s, became catastrophic in the first post-Soviet decade. The federal centre essentially abandoned the Russian North, and popular interest in the region waned. To add insult to injury, Russian military capabilities – a historical indicator of the country's potency and a source of national pride and unity – were left to atrophy, wounding national self esteem. The Arctic region was no exception – if anything, Russian problems were amplified in the Arctic.

Nevertheless, the Kremlin did not fully lose touch with the region's geopolitical value. Joining the United Nations Convention on the Law of the Sea (UNCLOS) – one of the most instrumental governing frameworks in international waters – provided a solid international legal foundation for Russia to formulate a more assertive agenda to secure and assert its sovereign rights – as perceived by Moscow – in the Arctic continental shelf. On December 20, 2001, Russia submitted extensive claims to an extended continental shelf that

rode the Lomonosov and Mendeleev ridges across the Cent).[9] In its official claim Russia contended that parts of underwater mountains (the ridges) are extensions of the Eurasian continent, meaning that Russia has the right to construe these as a part of its sovereign territory. While Russia`s claims have not been satisfied (for now), the Kremlin will be pursuing matter further, since expansion of sovereignty over continental shelf in the Arctic is Russia`s strategic goal in the region commensurate with its plans for the development of the Northern Sea Route and exploitation of vast natural resources.

Neither Russia's temporary weakening, accompanied by de-militarization[10] and apparent tilt toward the West in the 1990s, nor its subsequent military-political and economic exuberance transformed the Arctic into a region of complete peace and cooperation. While some progress was made (with the creation of the Arctic Council in 1996 serving as the most significant milestone), a sense of mutual distrust persisted. Putin's so-called "Munich Speech" in February 2007 marked the emergence of a new, more assertive Russia that took a much tougher stance on issues that run, according to Russian political leadership, contrary to its national interests. In the Arctic region, this transformation was vividly demonstrated in August 2007 when the "Arktika-2007" research expedition[11] performed the first crewed descent to the ocean floor at the North Pole. Accompanied by provocative declarations and attracting massive criticism from and dissatisfaction among Russia's Arctic partners, this expedition represented a pronounced manifestation of Kremlin's renewed ambitions. From this point onward, Russia's Arctic-related rhetoric and behaviour on Arctic-related issues changed.

While remaining an integral part of major international forums and institutions, Moscow surprised some of its Western counterparts by presenting its territorial claims in a more assertive way. Russia backed its articulation of national interests with a readiness to back them with ambitious militarization initiatives. The level of military buildup reached new heights after Russia's annexation of Crimea in March 2014 and the outbreak of armed struggle in southeastern Ukraine in April 2014. Long-range measures to restore Russian military potential in the region included the creation of the Northern Fleet Joint Strategic Command (NFJSC) in late 2014 – a move that served as a cornerstone for further action.[12]

The post-2007 period was also marked by bolder Russian strategic thinking about the Arctic, concentrating on four main macro-areas premised, in turn, on smaller elements:

(1) Defense and security. Kremlin`s main goal here boils down to preserving and further boosting regional military domination, which it considers one of the key factors securing overall success. This is reflected in

various measures, including expansion of its conventional military presence and capabilities; intensification of regular military exercises; and beefing up local military infrastructure. A primary tool to achieve this objective is active use of "icebreaker diplomacy"[13] – a phenomenon with deep historical roots traceable to the pre-1917 period and more specifically ideas expressed by Vice Admiral Stepan Makarov who, in 1897, argued that Russia had to build icebreakers to be able to establish firm control over parts of the Arctic Ocean.[14]

(2) Economics and trade. Russia's main goal is to commercialize the Arctic's huge, underdeveloped economic potential via continued exploration/exploitation of its non-renewable energy resources (oil and natural gas); exploitation of bio-marine resources; and capitalizing on its strategic geographic location to intensify international trade flows through the Northern Sea Route (NSR). While all those elements were already in place in various ways and with different rates of success, Russia also prioritized new areas such as developing local tourism and investing in new financial instruments such as mining of crypto currency. These areas reflect a dire need for economic diversification and reduced economic dependency on raw material exports. Furthermore, Russia seeks to attract foreign direct investment to modernize locally-based infrastructure (large parts of which are in bad condition) as a key precondition for improving transportation and increasing the economic attractiveness of the region.

(3) Restoration and boosting of local human capital.[15] Even though Russia's population residing in the Arctic and the High North is larger than of any other Arctic nation, it remains modest proportionate to the country's vast Arctic expanse. Population is a pillar of social sustainability that was seriously eroded in the post-1991 period. The model pursued by the USSR – when population was attracted to northern regions through the system of economic benefits and/or increasing locally deployed military personnel – was ineffective and had serious flaws, however. Accordingly, Russia seeks to address this challenge by creating attractive economic conditions and providing incentives for experts and specialists willing to move to the Arctic region.

(4) Improving Russia`s international image, prestige and political weight through participation in multi-national forums/platforms and Arctic-centered international organizations. Working toward this objective, Russia has adopted a climate change agenda, attempting to become an influential stakeholder in an issue that is bound to dominate global political environment for years to come.

These and many other aspects of Russian interests in the Arctic region are mentioned in the Kremlin's comprehensive "Strategy for the Development of the Russian Arctic Zone and Provision of National Security Through 2035"

(reproduced in English translation as an appendix)[16] released in 2020, and a host of other documents that appeared after 2008.

This volume, comprised of Arctic-related policy writings that stem primarily from my collaboration with the Washington-based Jamestown Foundation, was conceived as a compendium to encourage Western policymakers and academics to deepen their understandings of Russian Arctic policies. I have combined thematic and chronological approaches, dividing the volume into several large blocks: Russia's strategic documents and decisions; defence and security initiatives; efforts to improve economic situation and demographics; and mega-projects related to energy and their commensurability with norms of sustainable development. I also cover transportation and infrastructure in the Arctic, with particular emphasis on sea- (the NSR) and land-based (the Belkomur) projects as main preconditions for Russia to commercialize its natural resources and take advantage of its geostrategic positioning. Within these sections, a chronological approach showcases changes in Russia's Arctic policies over time.

In the course of my research I have adopted a multidisciplinary approach that draws from various disciplines, including geopolitics, Arctic history, security and defence studies, international business, and trade. Trained as an expert in International Relations and political history, and having spent years teaching in business schools in Europe and North America, I firmly believe that studying Russia's policies in such a diverse and complex region as the Arctic requires engaging a broad range of subjects and disciplines. Another important feature of my research is that all of the articles assembled in the volume are based on primary and secondary literature in the Russian language and coming from Russian sources. This approach, and these sources, provide fresh insight into Russian strategic thinking about the Arctic region – with implications for all Arctic stakeholders.

Notes

[1] This historical interim was marked by first ideas about the necessity to construct icebreakers to strengthen Russian dominance in the Arctic, along the Northern Sea Route.

[2] "Istoriya osvojenia rossijskoii Arktiki" (09.04.2019). https://nangs.org/news/authorities/istoriya-osvoeniya-rossiyskoy-arktiki

[3] Pavel Devyatkin. "Russia's Arctic Strategy: Aimed at Conflict or Cooperation?" https://www.thearcticinstitute.org/russias-arctic-strategy-aimed-conflict-cooperation-part-one/#:~:text=The%20Arctic%20is%20therefore

%20perceived%20to%20be%20Russia%E2%80%99s,polar%20researcher%20who%20led%20the%202007%20Arctic%20expedition.

[4] "Rossijskije vladenija w Arktike. Istorija I prolemy mezhdunarodno-pravovogo statusa" (09.04. 2019). https://tass.ru/info/6312329

[5] V.N. Bulatov. "KPSS – organizator osvojenija Arktiki I Severnogo Morskogo Puti (1917 – 1980)." Moscow, 1989.

[6] "Ob ojavlenii territoriej Sojuza SSR zemel I ostrovov, raspolozennykh w Severnom Ledovitom okeane" (April 15, 1926). https://docs.cntd.ru/document/901761796

[7] For instance, the fact that countries of the European Economic Communities (the Federal Republic of Germany, in particular) were purchasing Soviet energy resources and actively cooperated with Moscow, selling advanced energy technologies, was frowned upon by the US Administration.

[8] Incidentally, this trend continues. For more information see: "Naselenije Arktiki sokratilos" (October 29, 2019). https://lenta.ru/news/2019/10/29/population/

[9] Martin Breum. "Russia extends its claim to the Arctic Ocean seabed" (April 4, 2021). https://www.arctictoday.com/russia-extends-its-claim-to-the-arctic-ocean-seabed/

[10] It is very important to understand, that significant cuts in military spending was not a Russia`s strategic choice stipulated by the departure from Soviet policies. Rather, it was a reality that Moscow could not do anything with but to accept due to catastrophic lack of funds and internal instability.

[11] Nadezda Sorokina. "Skhvatka za Arktiku" (03.08.2007). https://rg.ru/2007/08/03/arktika1.html

[12] Nikolay Kucherov. "Arktika 2008-2020: itogi 12-letnej strategii razvitija" (17.01.2020). Available at: https://www.ritmeurasia.org/news--2020-01-17--arktika-2008-2020-itogi-12-letnej-strategii-razvitija-46994

[13] For example, see: Sergey Sukhankin. "'Icebreaker Diplomacy': Russia's New-Old Strategy to Dominate the Arctic". June 12, 2019. https://jamestown.org/program/icebreaker-diplomacy-russias-new-old-strategy-to-dominate-the-arctic/

[14] S. Makarov, N. Kuznetsov, S. Dolgova. "Ledokol 'Ermak'". Moscow, 2010. This idea translate into England building the world's first icebreaker *Yermak* (1898) for Russia followed by a second vessel, *Sviatogor*, in 1917.

[15] "Rossijane poluchili preferentsii pri pereezde na rabotu w Arktiku" (May 18, 2020). https://lenta.ru/news/2020/05/18/preferences/

[16] "Ukaz Presidenta Rossijskoj Federatsii O Strategii Razvitija Arkticheskoj Zony Rossijskoii Federatsii I obespechenija natsionalnoii bezopasnosti na period do 2035 goda". http://publication.pravo.gov.ru/Document/View/0001202010260033

Word Cloud of Strategy for Developing the Russian Arctic Zone and Ensuring National Security until 2035 (26 Oct. 2020).
Generated by P. Whitney Lackenbauer

1 Russia's Arctic Strategy

Russia Prepares an Ambitious Economic Strategy for the Arctic Region

11 February 2020

On January 30, the Russian government approved a number of acts concerned with rendering new economic benefits and subsidies to businesses or investors willing to engage in projects in the country's High North. The adopted proposals were jointly prepared by the Ministry of Finance (Minfin), the Ministry of Energy (Minenergo) and the Ministry for the Development of the Russian Far East (Minvostokrazvitya). Taken together, this initiative provides a steady foundation for the introduction of Russia's Arctic strategy until 2035 (1sn.ru, January 31, 2020), which is premised on the following documents:

- The Federal Law on a Special Economic Regime of the Arctic;
- The Foundations of State Policy of the Russian Federation in the Arctic Until 2035;
- The Strategy on the Development of the Arctic Zone Until 2035; and
- The Foundations of State Policy in the Arctic.

This legal framework covers Murmansk Oblast, Chukotka, Yamalo-Nenets Autonomous Okrug, and Nenets Autonomous Okrug as well as portions of five other federal subjects—Arkhangelsk Oblast, Sakha Republic (Yakutia), Krasnoyarsk Krai, the Republic of Karelia, and the Republic of Komi.

As a means to attract foreign financial capital to the above-mentioned Arctic territories, Russia has outlined four main groups/types of projects under consideration for various government benefits (Arctic-russia.ru, January 30, 2020):

- The extraction of hydrocarbons located offshore, on Russia's continental shelf, with a severance tax (imposed on the removal of natural resources) set at 5 percent for oil and 1 percent for natural gas over the next 15 years, starting from the inception of industrial extraction. It is also rumored that the Russian state might be willing to provide additional benefits for "surveys, assessments and exploration for hydrocarbons" in this area;
- The extraction of hydrocarbons on the continent, with an emphasis on liquefied natural gas (LNG) and gas-chemistry (*gazokhimiya*). New investors are expected to be promised a severance tax of zero percent in the next 12 years upon starting industrial extraction;

- The production of LNG (as well as other projects related to the *gazokhimiya* industry). Investors will have to pay the severance tax in full only after 17 years of industrial production;
- Other projects (prospective benefits will largely depend on what will be extracted and the scope of the project). Aside from non-hydrocarbon-related branches (including minerals), this group will include various infrastructure projects (such as seaports and pipelines).

The head of the Ministry for Development of the Russian Far East and Arctic, Alexander Kozlov (appointed in 2020), has stated that the key idea behind the proposed benefits and stimuli for investors is premised on Moscow's strong determination to break the post-1991 trend in the region. Specifically, he argued that the Arctic zone, whose actual share of Russian GDP is close to 10 percent and receives 10 percent of total foreign direct investment (FDI), suffers from chronic under-population, containing less than 1.5 percent of the total Russian population. Furthermore, he argued that all major components of the Human Development Index (HDI), including education, healthcare, employment, and economic wellbeing, are lower in the High North than the Russian average. As a result, he stated, "For the past 15 years, the local population has decreased by 0.3 million" (Yakutia-daily.ru, November 26, 2019). Sergey Veller, the president of the Union of Manufacturers and Entrepreneurs of Murmansk Oblast, expressed similar concern and argued that the only way to stop further depopulation of the Russian Arctic is to increase its attractiveness through new economic opportunities and job creation (Murman.ru, June 19, 2019).

These and other concerns are all reflected in the above-mentioned government planning documents. The main expectations pinned to the initiative are premised on the prospect of creating more than 21 new large regional mega-projects (including the Indiga Port in Nenets Autonomous Okrug), exploration of large deposits of platinum and other metals in Krasnoyarsk Krai and Murmansk Oblast, and the creation of a full-cycle lumber/timber-producing complex in Arkhangelsk Oblast. These and hundreds of smaller commercial initiatives (to become fully operable within the next 15 years) are expected to result in the creation of 200,000 additional jobs in the region and "make the Arctic attractive to Russian youth and young specialists" (Rossiyskaya Gazeta, November 25, 2019).

That said, it is important to underscore that Russia's main economic interests the Arctic region actually boil down to just two elements (Rossiyskaya Gazeta, November 25, 2019). First is production of liquefied natural gas, which, "in the upcoming 15 years, could turn Russia into one of the largest players on the global LNG market." This will be achieved primarily through

Yamal LNG (located in Sabetta, on the Yamal Peninsula) and Arctic LNG 2 (Gyda Peninsula). Second, Russia is making huge investments in the so-called Northern Sea Route, intended not only to give Russia access to Arctic natural resources, but also to provide a maritime corridor for Chinese goods traveling to the European Union. Russia aims to solidify its role as the main transportation artery between the two—both on land and by sea.

Importantly, in line with the above-mentioned legal documents and proposals, some specific suggestions have already been voiced. Namely, it has been argued that a subsidized mortgage program (2 percent annual rate) should be created to aid all who are willing to move to the Arctic region (Rossiyskaya Gazeta, November 13, 2019). Additionally, Minvostokrazvitya proposed creating a new state corporation, "Roshelf," specifically tasked with the exploration and extraction of hydrocarbons in the High North and the Far East. Accordingly, this corporation should be given exclusive rights to "represent Russia's interests" and to "exploit [Russian] resources and grant the right to participate in projects [to] private investors" (Rossiyskaya Gazeta, December 31, 2019).

Two important inferences should be drawn from these developments related to the Russian Arctic. First, for the first time, an initiative of this scope and ambition has been jointly drafted by three powerful institutions, with one of them being made directly responsible for the region. Second, the Arctic Strategy has outlined Russia's most important national interests in the High North. And aside from its economic aspects, this Strategy clearly points to a necessity to defend Russian sovereignty and territorial integrity in this remote but resource-rich region.

Russia Steps up Efforts to Dominate the Arctic Region

24 February 2020

Moscow approved a number of policy decrees on January 30 that *de facto* establish a foundation for the introduction of a Russian Arctic strategy until 2035 (see EDM, February 11, 2020). Russia's huge expectations for the Arctic region center on the Northern Sea Route (NSR), whose strategic importance is premised on two main pillars. The first of these is, naturally, to boost the transportation capabilities along Russia's northern coast (inseparable from and integrated with the Chinese east–west Belt and Road Initiative). By 2024, the NSR is supposed to be able to carry 80 million of tons of cargo

annually and 160 million by 2035 (currently, 26 million tons). To reach these ambitious targets, Russia has already planned 84 large-to-medium projects in the territories of the Nenets and Chukotka Autonomous okrugs as well as in Sakha Republic (Yakutia) (Rossiyskaya Gazeta, December 30, 2019). The second pillar anticipates developing the region's vast natural resources, which include large deposits of hydrocarbons—approximately "80 percent of all oil and nearly all [of Russia's] natural gas" (Arctic.ru, accessed February 22, 2020).

These calculations are reflected in a document entitled "Plan on the Development of the Northern Sea Route Until 2035," prepared near the end of 2019 by the state-owned nuclear energy corporation Rosatom (Atomic-energy.ru, December 23, 2019). The document recognizes the strategic importance of the NSR to the Russian economy and national security (TASS, December 23, 2019). The key element of the plan is premised on increasing Russia's capabilities through the following measures (Rossiyskaya Gazeta, January 28, 2020):

- Constructing and introducing 29 new small- to medium-sized vessels in the Arctic;
- Building four new icebreakers (with special attention devoted to the Lider- and Arctica-class icebreakers, whose completion is scheduled for 2026);
- Developing a new helicopter model that can land and be stationed aboard icebreakers;
- Completing a proposal for a new model of "Arctic ramp cargo plane" capable of transporting 10,000 tons of cargo and of traveling up to 4,000 kilometers non-stop; and
- Securing "uninterrupted satellite connections along the NSR." To this end, the Russian authorities are planning to deploy four Arktika-M remote-sensing and emergency communications satellites by 2024 and, in 2025, three Resurs-PM and three Kondor-FKS satellites.

This program has attracted some criticism even though it is supported by mainstream Russian experts. Namely, Vera Smorchkova, a professor at the Russian Presidential Academy of National Economy and Public Administration, pointed out a number of general weakness in the "social" aspects (attraction of human capital) of the project. Furthermore, the Accounts Chamber of the Russian Federation voiced other concerns, doubting that the NSR can be expanded to carry 80 million tons of cargo annually within the proposed timeframe (Rossiyskaya Gazeta, January 28, 2020).

These economic initiatives—though heavily promoted by the Kremlin—are in actuality taking a backseat to Russian icebreaker construction plans. Specifically, Russia is determined to move forward on its Project 10510 Lider-

class nuclear-powered icebreakers (under contract by the Rosatom corporation and slated for completion in 2027). According to Russian sources, icebreakers of this type "should raise transportation capabilities [in the Arctic] to a qualitatively new level." Moreover, this type of icebreaker (primarily intended to transport hydrocarbons) will facilitate the navigation of both civilian and military vessels. This will be possible due to the following technical characteristics (Topwar.ru, January 29, 2020):

- Year-round operational capabilities ("practically unconstrained length of sea voyages" and the ability to operate for no less than eight months straight with 130 men onboard);
- Ability to overcome various types of ice up to two meters deep;
- New technological solutions, including spaces for helicopters and "special munition as well as weaponry;" and finally
- The latest in radio-electronic equipment, which will secure steady navigation under even the most challenging geographic and climactic conditions.

The third point—the ability to equip icebreakers with onboard weapons—deserves particular attention. The idea to use "military icebreakers" to secure Russian strategic dominance in the Arctic region has been seen before in Moscow's military-strategic calculations (see EDM, June 26, 2019). Indeed, the first concrete step in this direction was made on October 25, 2019, when the *Ivan Papanin* (Project 23550) military icebreaker officially launched. According to Russian sources, the icebreaker will be equipped with a new missile-defense system, radio-electronic defense, and Poliment-Redut ship-borne anti-aircraft weapons systems. At the same time, this icebreaker class could be equipped with the 3M22 Tsirkon anti-ship hypersonic cruise missile, with a reported striking distance of up to 1,000 kilometers (Gazeta.ru, October 25, 2019). The latter prospect is a distant one, however; for now, the missile is still undergoing tests and will not become fully operable for at least "a couple of years" (Sputnik Radio, January 21, 2020). Notably, having introduced the *Ivan Papanin*, Russia has demonstrated its ability to produce vessels combining civilian and military functions—a capability Western naval forces currently do not wield (Politexpert.net, February 12, 2020).

In general, Russia has repeatedly reiterated its strong determination to rely on "military icebreakers" in the Arctic. According to Valery Poliakov, an advisor to the CEO of the Krylov State Research Center, the decision to put specific weaponry and special equipment on its "military icebreakers" will primarily rely on the variation in ice thickness in the regions of the Arctic where the vessels will be operating (TASS, November 14, 2019).

The most recent steps in the High North point to Russia's determination to elaborate a strategy that, at present, is more virtual than real. Moscow must still introduce and implement a whole package of integrated measures in the realms of security, economics, social development and foreign policy before it can credibly argue that its Arctic strategy is grounded in more than simply rhetoric and inflated threat assessments.

Russia's Energy Strategy 2035: A Breakthrough or Another Impasse?

2 June 2020

On April 2, Russia adopted the "Energy Strategy 2035" (ES-2035) planning document (Minenergo.gov.ru, April 2, 2020). As noted by Russian Prime Minister Mikhail Mishustin, the country's fuel and energy complex (FEC) is a driver of domestic economic growth; therefore, "we need to start planning now for how to continue our energy policy once global markets have recovered" following the end of the COVID-19 pandemic (Minenergo.gov.ru, April 2, 2020). The energy document suggests that the Russian FEC will become the "central pillar of Russia's economy in the upcoming decade." And the domestic economy itself will undergo two major changes: a shift toward "resource-innovative development" as well as a transition of the FEC from a "donor" to the "locomotive of the Russian economy."

To achieve these broad goals, the ES-2035 puts forth five key objectives (Government.ru, April 2, 2020). First is boosting domestic consumption to a qualitatively new level, to be achieved through the introduction/implementation of an integrated complex of measures aimed at modernizing the FEC. Specifically, these measures will consist of *inter alia* new financial transparency requirements among leading players/corporations operating on the Russian market, the gradual liquidation of some sectoral subsidies, and greater transparency on tariffs.

Second is a greater diversification of exports, drawing particularly on investments in liquefied natural gas (LNG), whose production is to increase by 3.4 times by 2024. Within the scope of this objective, two LNG clusters are to be completed, on the Yamal and Gyda peninsulas (Sever-press.ru, April 3, 2020). Furthermore, the ES-2035 states that Russia should develop in-country production of hydrogen and helium to become one of the global leaders in the hydrogen economy.

Third is the modernization and development of Russia's FEC infrastructure. This will involve increasing the gasification of the Russian regions, developing energy infrastructure in Eastern Siberia and the Far East and completely integrating them into the wider Russian energy infrastructure system, as well as commercially developing the Arctic region and the Northern Sea Route, in particular.

Fourth is achieving technological independence and increasing national competitiveness. This is to be accomplished via domestically produced technologies, which falls within the import substitution strategy adopted by Russia after 2014.

Fifth is digital transformation, premised on several essential pillars: the digitalization of the FEC; increasing the role of artificial intelligence (AI), which is to attain 100 percent penetration (by 2035) in some areas of the FEC, such as electricity meters; the introduction of AI-based systems of control of electricity grids; and the realization of the National Technological Initiative (launched in 2014) aimed at the development of a domestic cybernetics market by 2035.

This optimistic plan faces some substantial obstacles, however, which cast doubt on the feasibility and main postulates identified in the ES-2035. Namely, the implementation (and feasibility) of the strategy document could be challenged by the following factors.

First is the retrograde nature of the ES-2035, as illustrated by a stress-test conducted by the Ministry of Energy of the Russian Federation (*Minenergo*) in line with the energy strategy's outlined requirements. Notably, the *Minenergo's* stress-test identified five main threats and risks faced by the Russian FEC:

- The rapid growth of new energy-sector technologies;
- The globalization of the world energy market;
- Growing competition, primarily posed by LNG and shale oil;
- Increasing non-competitive means of economic competition (a.k.a. sanctions);
- Promotion of green (renewable) energy.

Analysis of these above-identified risks vividly underscores that Russia perceives any type of external competition to its leading global energy position—including emerging new players as well as structural trends related to the transformation of the global energy market—as existential threats that must be mitigated/eliminated rather than as incentives or potential opportunities for adaptation/innovation.

The second hindrance to fulfilling the ES-2035 involves Russia's internal competition/transparency issues. For instance, while the document argues for

increasing both, officials from the *Minenergo* are pushing for greater state subsidies and earmarking large funds for specific projects developed by Russia's largest energy companies (Neftegaz.ru, April 29, 2020). As notoriously highlighted by Gazprom's Nord Stream Two and TurkStream gas pipelines, some of those Russian energy projects are clearly of dubious commercial value and grossly overstate their resource potential (Lenta.ru, May 28, 2020).

Third, as noted by some leading Russian academics, the ES-2035—though filled with such concepts as "innovation," "effectiveness," "social-orientation," "development of human capital," and "eco security"—in effect, provides no real solutions or definitive proposals on how to modernize the FEC. Nor does the document explain how the errors of the past could be corrected. Specifically, the energy strategy fails to provide any viable clarification on how FEC regulations might be changed/adjusted to fit new market realities defined by (relatively) inexpensive hydrocarbons. Furthermore, the document does not pay due attention to the nexus between energy extraction and ecology—in many ways a continuation of Soviet-era practice (Natalia Zhavoronkova, Yuri Shpakovsky. *Energeticheskaya Strategiya-2035: Pravovii Problemy Innovatsionnogo Razvitiya i Ekologicheskoii Bezopasnosti*, 2020).

A fourth (somewhat unexpected) issue might also challenge the implementation of certain aspects of the new energy strategy. Namely, the gasification of the Kamchatka region—planned by the Russian gas company Novatek and including the creation of an LNG terminal—is reportedly being thwarted by the Russian navy, the Military-Maritime Fleet (*Voyenno-Morskoi Flot*—VMF). The overall annual capacity of the terminal, to be completed by 2022, is to reach 21.7 million tons. Undoubtedly, a non-fulfillment of this project will result in "huge economic losses" (RBC, March 31). Incidentally, this is happening despite an explicit order coming from Yury Trutnev, the presidential envoy to the Far Eastern Federal District, who has repeatedly stressed the instrumental importance of this project for regional economic development (Kamchatinfo.com, April 29). While the VMF has so far abstained from any comments on the subject, presumably its position is primarily stipulated by the fact that the defense ministry has its own plans for Bechenivka Bay (where the LNG terminal is to be established), which, potentially might include the restoration of a Soviet-era military base (Neftegaz.ru, April 1, 2020).

In the final analysis, as noted by Mikhail Krutikhin (the co-founder and partner of RusEnergy, a Moscow-based independent analytical agency), the ES-2035 "is a terrible document… Russia persists in selling its oil, gas and coal to the rest of the world, and everything that obstructs this goal is considered to be a peril and a challenge" (Rosbalt, May 28, 2020).

Russia's New 'Arctic Offensive': Do the Benefits Outweigh the Costs? (Part One)

17 February 2021

On February 1, Russian Prime Minister Mikhail Mishustin signed a decree approving the launch of six major state-supported investment projects in the Arctic region. According to the document, Russia expects to attract more than 200 billion rubles (approximately $2.7 billion) in outside investments to complete these initiatives. Businesses interested in these projects will be able to count on reimbursement (to be defrayed by the Russian state) of up to 20 percent of their total investment. According to Mishustin, with this decree, the government demonstrates its adherence to the earlier presidential instruction to promote the comprehensive development of the Russian Arctic zone. He stated, "[C]onditions are being established to be able to create more jobs and to make the northern territories a more attractive place to live" (Arctic.ru, February 1, 2021).

The document puts forth several essential conditions for participating companies to be eligible for state support (Government.ru, February 1, 2021):

- the overall cost of any given project must not be less than 300 million rubles ($4 million);
- the subsidy (allocated by the Russian state) must be covered (through taxation) within ten years; and
- new jobs must be created by launching new businesses or modernizing already existing ones.

The decree also specifies that six large projects must be completed in the region by 2027, with the main emphasis on ones located in Murmansk Oblast, the Novaya Zemlya archipelago and the Taymyr Peninsula (Government.ru, February 1, 2021).

Speaking about the economic sustainability of the decree, the head of the Ministry for the Development of the Far East and the Arctic (Minvostokrazvitia), Alexei Chekunkov, stated that private businesses will have to invest ten times more than the Russian government. He also noted that over the next decade, approximately 5,800 new jobs will be created locally, and the region's expected tax revenues will grow by 42 billion rubles ($569 million). Minister Cherkunov also suggested that "the realization of these initiatives [the six major projects] solves the strategic goals related to the development of local logistics, the modernization of seaport infrastructure, and safeguarding of transportation along the Northern Sea Route [NSR]" (Rossaprimavera.ru, February 3, 2021).

Many of these Arctic development initiatives—as well as other steps the Russian government may adopt down the road—are not new by any means. A number of these topics were extensively discussed during the fifth international "Arktika-2020" conference (February 19–20), held in Moscow, which convened representatives of the federal and regional political elite, the corporate sector, as well as science and education (Neftegaz.ru, February 21, 2020). And subsequently some of these ideas were implemented. Specifically, Minvostokrazvitia proposed liberalizing access to Russia's Arctic shelf area, arguing that both foreign and domestic companies—mainly operating in the realm of oil and natural gas/liquefied natural gas (LNG)—should receive more opportunities to augment their activities in the region. Furthermore, the same ministry started to work on a mechanism (potentially) allowing businesses to lease parts of the Arctic region (Neftegaz.ru, December 11, 2020).

The last such important undertaking prior to the decree signed on February 1, 2021, was the decision of the federal government to partially compensate Russian companies for infrastructure-related (transportation, energy, and electricity) construction expenditures that were necessary to begin or to continue their activities in the Arctic region. Importantly, the subsidy can be extended to both completed (already operating) projects as well as ones still under development. According to available data, the Russian side is ready to divert up to 13 billion rubles ($176 million) for this purpose until 2023. As stated in the February government decree, this decision is merely a part of a much broader complex of measures aimed at stimulating socio-economic development of the resource-endowed Arctic region (Neftegaz.ru, December 21, 2020). The decision—combined with a law that facilitates quicker transportation of goods across the Russian Arctic region, via the NSR (Sever-press.ru, February 11, 2021)—represents a solid step forward in turning Russia's Arctic region into a free economic zone (FEZ). Although it is worth noting that assessments of other FEZs in Russia have been mixed.

Russia's Arctic policy is predominantly concerned with creating all necessary conditions for the development of the NSR (see EDM, November 19, 2020). The approach, which combines both specific and more general measures, is clearly two pronged. On the one hand, according to the head of Arkhangelsk Oblast, Aleksandr Tsybulskii, the "Arctic territories need to develop as a single macro-region with the help of some sort of a Gosplan [State Planning Committee]" due to the fact that "without taking a more macro-regional approach no success can be achieved" (Gaidarforum.ru, January 15, 2021). On the other hand, the government is placing an ever more pronounced emphasis on region-specific initiatives. For instance, in Murmansk, the authorities are creating a Ministry for the Development of the Arctic and

Economics. According to the local governor, Andrei Chibis, the main goal of this entity is to "not only boost the leading role of Murmansk oblast […] but also to facilitate and streamline the process of attracting investors" (Gov-murman.ru, January 11, 2021). This approach is rather innovative and was virtually unheard of in the pre-1991 period of Russian/Soviet history, when the Arctic region was treated as a homogenous entity without much due consideration for sub-regional specificities. Yet despite its strengths, Moscow's strategy for the High North raises an important point of concern for the long-term cohesiveness of the Russian Federation.

Specifically, it is already apparent that in its approach to the Arctic, the federal center has chosen a handful of "prioritized" regions that will enjoy massive federal support. Prospectively, this might pose a serious challenge if the local elites of neighboring regions—less endowed with strategic natural resources and/or less important for the NSR—feel frustrated at being excluded. Those economically driven tensions could easily transform into political grievances, resulting in sharpening inter-regional rivalries as well as rising centrifugal dynamics across the Russian Arctic.

Russia's New 'Arctic Offensive': Do the Benefits Outweigh the Costs? (Part Two)

2 March 2021

On February 1, Russian Prime Minister Mikhail Mishustin signed a decree approving the launch of six large investment projects in the Arctic that are to be completed by 2027 (Government.ru, February 1, 2021; see Part One in EDM, February 17, 2021). While this plan might result in some longer-term solutions to anemic socio-economic development in the region, Moscow needs to be able to generate revenues from its vast Arctic resources right away to cover growing budgetary expenses. Until recently, Russia's ability to tap the economic potential of the High North has been hindered by two interdependent factors. First, as noted by the head of the financial-analytical Alperi Center, Alexander Razyvaev, "[T]he Arctic region is Russia's last unexplored oil and [natural] gas province […] the problem is that without tax subsidies, development of the majority of local deposits is only economically profitable at an oil price of $100 per barrel…" He added, "[I]n order to be able to reap the benefits, some serious investments are needed" (Nezavisimaya Gazeta, February 1, 2021). Second, existing environmental laws and regulations constrain the ability of Russia's

largest oil-extracting corporations to increase the exploitation of Arctic-based energy resources.

This was explicitly underscored in an open letter (dated January 19, 2021) signed by representatives of Rosneft, Lukoil, and Gazprom Neft, which asked the Russian government to amend existing environmental legislation in order to facilitate the exploration and extraction of hydrocarbons in the Arctic region (Salehard.bezformata.com, January 19, 2021). The main argument presented by the signatories boils down to the fact that these regulations not only obstruct the extraction of locally based natural resources, they also hamper further development of the geo-economically and geopolitically important Northern Sea Route (NSR) (Ridl.io, May 8, 2020). Each of the above-mentioned corporations have vital interests in the Arctic. For instance, Rosneft—whose CEO, Igor Sechin, enjoys close personal ties with President Vladimir Putin—is strategically interested in the launch of its major Arctic project "Vostok Oil" (Arctic-russia.ru, accessed February 15, 2021). Gazprom Neft has special interests in the Prirazlomnoye (located in the Pechora Sea) and Novoportovskoye (next to the Yamal Peninsula) petroleum fields. In turn, Lukoil is also interested in development of Bolshekhetskaya Depression deposits located in the Yamalo-Nenets Autonomous Okrug.

Russia's leading oil companies seem to be particularly irritated by Article 11, sub-point 7.9 (which came into force on August 28, 2020), of the Russian Law on Ecological Expertise (Cntd.ru, December 30, 2020) that introduces somewhat stricter environmental regulations. As argued by Russian legal experts, this legislation can postpone the initiation of commercial exploitation of certain oil deposits for up to one year (Kommersant, January 19, 2021). Under current circumstances, this could have a serious economic impact on Russian oil corporations desperately seeking new sources of revenue. Nonetheless, the Ministry of Natural Resources and the Environment (Minprorody) responded that the necessity of preserving and enforcing Article 11 "is stipulated by the specific traits and uniqueness of Arctic nature, its brittleness and the much longer period it takes for the local ecosystem to recuperate" from pollution or ecological disasters (Interfax, January 19, 2021).

Later, however, the Russian government seemed to backtrack from that position. On January 27, Minprirody officially agreed to scrap stricter regulations related to ecological expertise in the Arctic. In his comment, Alexander Kozlov, who now heads the ministry, said that the arguments presented late last year by the oil corporations were fully justifiable. And Kozlov declared that he fully understands these fears and concerns. Indeed, he noted, if existing ecological laws are followed, Russian oil producers are likely to lose both time and money (RBC, January 27). In effect, Kozlov's remarks meant the

natural resources ministry was giving the green light to dismantle some currently existing environmental regulations in the Arctic.

Undoubtedly, this relaxing of regulations will grant more opportunities to Russia's largest oil-extracting corporations, giving them a free hand in expanding operations in the region. This growing commercial activity will, in turn, result in larger government revenues (coming from the pumping of oil) as well as the expansion of transportation via the NSR. And yet, despite gaining some immediate economic benefits, Russia runs the risk of encountering two serious challenges.

First, there is environmental risk. By loosening environmental standards and permitting a freer hand to corporations with questionable track records, risks associated with new ecological catastrophes and incidents—akin to last year's notorious "Norilsk Disaster" (see EDM, June 29, 2020 and July 7, 2020)—increase significantly. New ecological accidents could have a deeply destabilizing effect on the ecosystem of the entire Arctic region, damaging the flora, fauna, and local Russian communities.

Second, there is the challenge of economic sustainability and competitiveness. In effect, by betting on the development of new (and costly) oil deposits in the Arctic—which to some extent may be compared to the Coal Strategy to 2035 (see EDM, July 27, 2020)—Russia may be overlooking larger trends and profound transformations underway in the global energy domain. Incidentally, this concern has been voiced by Ruslan Edelgeriyev, the special presidential representative on climate issues, who warned that in the near future, the world's most economically developed countries might completely refrain from purchasing Russia's hydrocarbon-based energy resources. He stated that not only the European Union—where the issue of ecological sustainability has been prioritized for some time now—but also the United States and China are showcasing strategic interest in reducing the emission of greenhouse gases and pursuing carbon neutrality. Edelgeriyev cautioned that Russia risks missing a chance to join the "climate club" composed of countries actively pursuing ecological sustainability. In turn, this could result in growing tensions between Russia and these countries, which will point to the former's lack of adherence to environmental sustainability standards to put more pressure on Moscow via, among other tools, imposing sanctions on its energy projects in the Arctic region (Kommersant, February 15, 2021). Incidentally, a similar idea had already been expressed by the CEO of Lukoil, Leonid Fedun, in late 2020. In an interview with *Kommersant*, Fedun stated that by 2040, Russian exports of oil and gas to the European market could drastically contract (by at least half) because of transformations the EU is pursuing in the domain of energy security and ecological sustainability (Rosbalt, February 15, 2021).

Russia Pursues 'Region-Oriented' Approach in Arctic Development

10 March 2021

On October 26, President Vladimir Putin formally adopted the "Strategy for the Development of the Russian Arctic Zone and Provision of National Security Through 2035," which aims to implement a "region-specific approach" for dealing with problems facing the country's vast, strategically important, yet increasingly problematic Arctic region (see EDM, November 9, 2020). While the Strategy mentions parts of Arkhangelsk Oblast, the Republic Sakha (Yakutia), and Karelia and Komi republics, a clear priority in the Russian High North is allocated to Murmansk Oblast, the Chukotka Autonomous Okrug, Yamalo-Nenets Autonomous Okrug (YaNAO), and Nenets Autonomous Okrug (Pravo.gov.ru, October 26, 2020). The document ascribes each of these latter four entities a special role in promoting Russia's ambitions and achieving its specific objectives in the Arctic.

The Strategy gives particular significance to Murmansk Oblast, emphasizing a broad range of complex and multifaceted transformative measures targeting this province (Pravo.gov.ru, October 26, 2020). Murmansk has long been the Russian Federation's most prioritized Arctic entity. In 2007, an initiative named the "Arctic Bridge" envisaged creating a seasonal, 6,700-kilometer maritime transport route between Murmansk and the Canadian port of Churchill, Manitoba (RBC, October 19, 2007). More recently, during last year's ninth international "Arctic: Present and Future" Forum, the Murmansk delegation delivered a presentation entitled "Murmansk—The Capital of the Arctic," which highlighted several key sectors that drive economic development in the oblast. Aside from traditional hydrocarbon reserves and bio-marine resources, the region has high industrial (shipbuilding) as well as strategic transportation potential. That said, the Murmansk presenters noted that creeping depopulation poses a serious challenge (Myseldon.com, December 6, 2019).

Negative demographic trends in this Russian Arctic province are acknowledged in Moscow and were addressed in the newly adopted Strategy. According to Konstantin Dolgov, a member of the Federation Council (upper chamber of the Russian parliament) from Murmansk, the Russian Arctic development document envisages the oblast's dramatic transformation in terms of human capital by the creation of 200,000 new jobs by 2035 (Rossyiskaya Gazeta, November 3, 2020).

Considering these and other concerns, Article 20 of the Strategy proposes several measures that roughly fall into two broad categories. First are measures in the domain of infrastructure, with the ultimate objective being to transform Murmansk into a complex multi-dimensional transportation hub and a key link along the Northern Sea Route (NSR), which will carry Asian (mainly Chinese) goods to European Union markets. Related plans concern upgrading other types of infrastructure, including local airports. Importantly, the Strategy underscores the necessity of modernizing the oblast's military and dual-purpose infrastructure to maintain the necessary level of security. The second set of measures focus heavily on the development of Murmansk's natural resource potential: especially hydrocarbons and rare-earth minerals (strategically important for both military and civilian applications) (Pravo.gov.ru, October 26, 2020).

In regard to Chukotka, Article 22 of the Strategy takes an explicit resource-oriented approach. Specifically, the document mentions a series of ambitious transit projects. Those include the Pevek seaport and terminals (Chaun Bay), a transportation-logistical hub in the Provideniya port (Bering Sea), and a year-round sea terminal on the Arinay Lagoon (also on the Bering Sea).

For the YaNAO, the document's ambitious multi-dimensional program (Article 23) envisages several major activities. First is the development of an integrated system of transportation infrastructure, which includes measures in both sea- (the port of Sabetta with supporting facilities as well as the canal in the Gulf of Ob) and land-based infrastructure. Second is the development of facilities/infrastructure related to liquefied natural gas (LNG) and oil production. Here, the Strategy specifically prioritizes the gas-endowed Yamal and Gyda peninsulas. Importantly, the government planning document also pays attention to the necessity of boosting related sectors such as hydrocarbon processing. At the same time, the YaNAO is to become a major testing ground for Russia's import-substitution strategy in the realm of petroleum extraction and processing capabilities. Specifically, the document emphasizes that in the oil-endowed Nadym-Pur and Pur-Taz districts, Russia will employ the most up-to-date, domestically produced means of drilling and extraction. Third, the Strategy calls for creating a regional recreational cluster—connecting the towns of Salekhard, Labytnangi, and Kharp—which is to become an additional source of revenue and a means for diversifying the local economy. Toward 2024, the area should receive a world-class ski resort with a developed network of hotels, restaurants, and recreational facilities (Pravo.gov.ru, October 26). As stated by the YaNAO's Governor Dmitry Artukhov, "[T]his year [2020] has clearly demonstrated that the locals and all Russian citizens have a great interest in new

resorts and tourist destinations. That is why the creation of a new ski resort is the foundation of our project" (Sever-press.ru, October 27, 2020).

Regarding the neighboring Nenets Autonomous Okrug, the Strategy (Article 21) discusses five major dimensions. First, it calls for the development of strategic-level transportation infrastructure. Namely, the document emphasizes plans to build a deep-water, ice-free Indiga Seaport suitable for ships with a deadweight of at least 100,000 tons. The port—a coastal cluster connected to locally based resource-rich areas through a network of rail, pipeline, and water transit—is expected to become a hub for exporting cargo from Russia to the United States, Canada, Europe, China, and Asia-Pacific countries. Also, the Strategy lays out plans to modernize local railroads (the Sosnogorsk–Ingida line) and highways (Narian-Mar–Usinsk). Second, Russia's new Arctic development strategy stresses the need to build or modernize Nenets' energy-related infrastructure as well as extracting and processing facilities. Third, as a means of diversifying the local economy (heavily reliant on hydrocarbon exploration and extraction), the document proposes to increase the search and production of rare-earth minerals. Fourth, to deal with local food security concerns, the Strategy indicates several projects that should improve local conditions and even increase export capabilities in some areas (such as venison). Fifth, the planning document calls for the development of tourism and recreation as both a job creation engine and as a means to diversify the local economy away from its heavy natural resource–oriented base (Pravo.gov.ru, October 26, 2020).

The newly adopted Arctic development strategy ostensibly introduces a qualitatively new approach to dealing with the various issues and challenges faced by local populations and economies. Instead of its traditional one-size-fits-all prescriptions, which *de facto* ignored the needs of many parts of the Russian High North, Moscow is now pursuing a more region-specific policy. In the central government's view, this will allow each Arctic federal entity to use its unique, region-specific competitive advantage to, in its own way, contribute to the development of the strategically vital Northern Sea Route. But it remains to be seen whether Russia sticks to the Arctic Strategy or if, ultimately, its policies simply revert to more intensified exploitation of regional natural resources.

The Land Territories of the Arctic Zone of the Russian Federation
Сухопутные Территории Арктической Зоны Российской Федерации

Source / Источник:

Decree of the President of the Russian Federation of May 13, 2019 No. 220 "On Amendments to the Decree of the President of the Russian Federation No. 296 of May 2, 2014 On Land Territories of the Arctic Zone of the Russian Federation"

Decree of the President of the Russian Federation of June 27, 2017 No. 287
On the Introduction of Amendments to the Decree of the President of the Russian Federation of May 2, 2014 No. 296 "On the Land Territories of the Arctic Zone of the Russian Federation"

Указ Президента РФ от 13 мая 2019 г. № 220 «О внесении изменений в Указ Президента Российской Федерации от 2 мая 2014 г. N 296 О сухопутных территориях Арктической зоны Российской Федерации»

Указ Президента Российской Федерации от 27.06.2017 г. № 287
О внесении изменений в Указ Президента Российской Федерации
от 2 мая 2014 г. № 296 «О сухопутных территориях Арктической зоны Российской Федерации»

Russian Federation subjects without territory in the Arctic Zone
Российские федеральные субъекты без сухопутной территории в Арктической зоне

Political boundary of the Arctic Zone of the Russian Federation
Политическая граница Арктической зоны Российской Федерации

List of Territories

1. Murmansk Oblast
2. Nenets Autonomous Okrug
3. Chukotka Autonomous Okrug
4. Yamalo-Nenets Autonomous Okrug
5. Republic of Karelia:
   a. Districts of Belomorsk, Loukhsky, and Kemsky
6. Arkhangelsk Oblast:
   a. Districts of Mezensky, Novaya Zemlya, Onezhsky, and Primorsky. Cities of Arkhangelsk, Novodvinsk and Severodvinsk
7. Komi Republic:
   a. City of Vorkuta
8. Krasnoyarsk Krai:
   a. Districts of Taimirsky Dolgano-Nenetsky and Turukhansky. City of Norilsk.
9. Republic of Sakha (Yakutia):
   a. Districts of Abytsky, Allaikhovsky, Anabarsky, Bulunsky, Verkhnekolymsky, Verkhoyansky, Zhigansky, Momsky, Nizhnekolmsky, Olenekskiy Evenki, Srednekolymsky, Ust-Yansky, and Eveno-Bytantaysky.

Список территорий

1. Мурманская область
2. Ненецкий автономный округ
3. Чукотский автономный округ
4. Ямало-Ненецкий автономный округ
5. Республика Карелия:
   a. Беломорский, Лоухский и Кемский районы
6. Архангельская область:
   a. Мезенский, Онежский, Приморский районы, район Новая Земля. Город Архангельск, Новодвинск, Северодвинск
7. Республика Коми:
   a. Город Воркута
8. Красноярский край:
   a. Таймырский Долгано-Ненецкий район, Туруханский район. Город Норильск.
9. Республика Саха (Якутия):
   a. Районы Абыйского, Аллаиховского, Анабарского, Булунского, Верхнеколымского, Верхоянского, Жиганского, Момского, Нижнеколымского, Оленекского эвенкийского, Среднеколымского, Усть-Янского, и Эвено-Бытантайского.

Russian federal subjects (unedited) with land territory in the Arctic Zone

Российские федеральные субъекты (неотредактированные) с сухопутими территориями в Арктической зоне

2 Military and Security Interests

Russia's Push to Militarize the Arctic Continues

18 June 2018

In 2015, speaking before the Federation Council (the upper chamber of the Russian parliament), Deputy Prime Minister Dmitry Rogozin accused the West of "inflaming anti-Russian propaganda" related to Russia's alleged militarization of the Arctic region (RIA Novosti, November 20, 2015). However, merely two years later, Russian Defense Minister Sergei Shoigu affirmed that the Ministry of Defense had, in effect, already completed all planned major facilities (including military ones) in the Arctic. He also declared, "For the entire history of the Arctic region, no single state had managed to develop infrastructure, including energy-related and military facilities, as impressive as what Russia has accomplished" (RIA Novosti, December 25, 2017). Now, the latest news coming from the region points to an even larger push by Russia to pursue comprehensive military build-up in the Arctic, including by bolstering local tank forces, air-defense missile systems, naval forces, strategic aviation, and locally based special operations forces.

On June 5, the Russian daily *Izvestia* reported that the Arctic Troops would soon add the newly modified version of the T-80 main battle tank—the T-80BVM—to their arsenals (Izvestia, June 5, 2018). This advanced model boasts a wide range of superior upgrades, including:

- The ability to effectively operate under challenging climactic conditions (well below -40° Fahrenheit/-40° Celsius), thanks to its modified turboshaft engine, similar to those used in helicopters;
- Profound advancements in speed and maneuvering;
- An upgraded fire-control system (Sosna-U), which increases the level of effectiveness and range of fire; as well as
- The *Refleks* integrated, laser-guided anti-tank missile.

In assessing this news, the former head of the Main Automotive-Armored Directorate of the Ministry of Defense (GABTU), Colonel General Sergei Mayev, stated that T-80BVMs will help Russia secure military superiority in the High North (Bezformata.ru, June 6, 2018). All in all, the Russian defense ministry expects to deploy at least 100 of these modernized tanks to troops stationed in the Arctic. Those developments have also demonstrated the premature nature of previous prognoses given in 2013, stating that, by 2020, the T-80 will gradually be phased out of service (Politros.com, accessed June 9, 2018).

Additionally, the Russian side has been extensively testing the Pantsir-SA—an "Arctic model" of the Pantsir-S1 (NATO classification: SA-22 Greyhound)

short- to medium-range surface-to-air missile system. The trials are being conducted north of the Polar Circle, suggesting that this weaponry will likely soon be integrated into Russia's Arctic military forces (see EDM, January 30, 2018). Tests have revealed the ineffectiveness of the conventional Pantsir system's anti-aircraft gun in the High North's severe climactic conditions. As such, the autocannon guns have been removed, while the number of onboard missiles was increased from 12 to 18 (Nation-news.ru, December 1, 2017).

In terms of naval power in the Arctic region, Russia's reliance on submarines as a means to achieve military superiority will continue to increase. Recently, the commander of the Northern Fleet, Nikolai Evmenov, confirmed the constant presence of Russian submarines in Arctic waters. Additionally, he stated that, when it comes to wielding the most modern equipment, "the Northern Fleet is not only in step with the times but, according to certain indicators, it is even ahead" (RIA Novosti, June 1, 2018).

Meanwhile, in the domain of strategic aviation, the defense ministry intends to actively engage Tupolev Tu-160 supersonic heavy strategic bombers in "the task of increasing the level of protection of Russia's Arctic region." It is worth noting that, in recent years, Russia has upgraded the Tu-160, providing for a "much broader latitude of use" of this platform. Most importantly the aircraft has been outfitted with the ability to refuel in the air, thus vastly increasing its operational period (Redstar.ru, May 18, 2018).

Finally, in addition to these "technical" improvements, Russia has also been working to boost the "human" component of its forces guarding the Arctic. Notably, last April, in Murmansk, the Russian National Guard (Rosgvardia) launched a series of tactical exercises, supervised by the special service's head, Viktor Zolotov. These exercises aimed to achieve the following objectives (Voenno-Promyshlenny Kurier, April 11, 2018):

- To test the system of command and control (C2) in conditions of the Far North;
- To synchronize joint actions between the Rosgvardia and locally deployed units of the Ministry of Internal Affairs (MVD), the Federal Security Service (FSB) and the Ministry of Emergency Situations (MChS); and
- To rehearse various options for protecting the objects and infrastructure belonging to Rosatomflot, which maintains the country's fleet of nuclear-powered icebreakers.

The last stage of the April Arctic exercises envisaged the Russian special forces, jointly with border guard troops, "halting and defeating a terrorist group." The special forces involved included the 1st Special Purpose Unit of the

Internal Forces "Vityaz," the Special Rapid Response Unit (SOBR) "Rys," and the SOBR "Terek."

On the basis of these developments, Russia's continuing militarization of the Arctic region appears to be premised on two main (in many respects, mutually supporting) objectives. First, Moscow is trying to secure its version of the "Silk Road Project"—the Northern Sea Route—with its huge natural resources and strategic geopolitical importance. Second, Russia is seeking to enhance regional military security by implementing a "multi-layered system of defense" built on the Syrian experience, which is likely to lead to the creation of one or more Anti-Access/Area-Denial (A2/AD) "bubble(s)" in the Russian High North. As such, Moscow can be expected to further develop its Arctic units' Electronic Warfare (EW) capabilities—an area in which the Russian side feels superior to the United States (Voenno-Promyshlenny Kurier, June 8, 2018).

The Arctic 'Trilistnik'—Russia's Bid for Regional Military Superiority

12 September 2018

Russia's Minister of Defense Sergei Shoigu announced at the end of August that one of the main tasks of the Russian Armed Forces is the protection of the country's national interests in the Arctic region. The frozen High North has "high conflict potential," Shoigu asserted, due to the regional determination of "some countries" (Vpk-news.ru, August 31, 2018). Russian strategic interests in the Arctic include:

- Geo-economics. The Arctic region contains an estimated quarter of the world's hydrocarbon deposits, and Russia plans to take under its effective control 55 percent of these reserves by 2030;
- Geopolitics. One of Russia's strategic objectives is taking and preserving steady control over the so-called Northeast Passage (NEP—which includes the Northern Sea Route, or NSR, across Russia's northern coast)—a goal implicitly announced by Vladimir Putin in 2013 (RBC, September 16, 2013).
- Military-strategic calculations. The Arctic represents the shortest path to reach US military bases from Russia and offers a (climactically harsh) maritime link between Northern Europe and Asia. Moscow aspires to control all of these maritime and aerial corridors so as to challenge the United States across the entire region.

To deal with all three tasks, Russia has focused on building up a network of inter-connected military bases throughout the Russian High North. The first such major facility was the "Northern Clover," a three-leaved military base built in 2014 on Kotelny Island (S-vesti.ru, September 25, 2014). During 2016 to 2017, Russia continued to expand its military potential in the region, both in terms of manpower, military equipment, and infrastructure (Newsru.com, December 22, 2016). And in late December 2017, Shoigu claimed that Moscow "had completed works on virtually all planned military infrastructure" in the Arctic region. According to the minister, within five years Russian regional infrastructure (primarily on Kotelny Island, Alexandra Land, Wrangel Island, and Cape Schmidt) had expanded to 425 various objects, spanning an area of 700,000 square kilometers. These facilities were ready to permanently house and serve 1,000 personnel and "various types of special arms and munition" (Newsru.com, December 25, 2017).

One of the main pillars of Russia's expanding regional ambitions is the unique "Arctic Trefoil" (*Arkticheskii Trilistnik*) military base, composed of three interconnected buildings and erected thanks to the application of unique building technologies required for the extreme environment. The construction of the Arctic Trefoil base started in 2007, but was halted several times due to economic problems, with a decisive thrust in construction only completed in 2015. Located on the island of Alexandra Land, this military complex is deemed essential for securing Russian military domination in the region (Nvo.ng.ru, November 13, 2015).

On March 10, 2018, the Russian Ministry of Defense posted a virtual tour of the Arctic Trefoil, focusing in particular on the base's residential-administrative complex. At 14,000 square kilometers and capable of hosting at least 180 military personnel for 18 month without requiring any outside supplies or provisions, the Trefoil is the largest and northernmost building in the world (Oko-planet.su, March 10, 2018). The promotional video reveals the key functions ascribed to the complex:

- Anti-missile defense of Russian territory;
- Protection of the NEP (both in peace time and during a potential military escalation in the region);
- General security for regional maritime shipping—*de facto* placing international shipping through the Arctic under Russian control;
- Meteorological research, which (via its system of Earth observational satellites), could be used by the Russian military for intelligence-related purposes.

Media reports have also asserted that, given Russian capabilities for building such sophisticated infrastructure, additional similar (or even more

advanced) types of military objects should be expected to appear across the region before long. Notably, the extremely northern Franz Josef Land (FJL) archipelago was explicitly mentioned as the main area that will receive further basing infrastructure advancements. The sector of the Arctic where the FJL is located is strategically vital for Russia's regional ambitions—economically (in terms of nearby underwater hydrocarbon reserves), geopolitically (at the intersection of the Barents Sea, the Kara Sea and the Arctic Ocean; overlooking northern Scandinavia) and in terms of military-strategic thinking (as a forward location in the High North). It also needs to be mentioned that in terms of air connections, the area is inseparable from Arkhangelsk and the Kola Peninsula (Tvzvezda.ru, August 26, 2018). Importantly, Russia has ambitions to create another Anti-Access/Area-Denial (A2/AD) zone there, which could interconnect and overlap with the A2/AD bubble already in place in Kaliningrad.

Moscow's plans to militarize the Arctic region more thoroughly were given a boost in 2014 with the formation of the Northern Fleet Joint Strategic Command. Subsequently, the State Armament Program (2018–2027) included the addition of new S-300 long-range and Tor-M2 short-range surface-to-air missile systems to help fortify Russian Arctic equipment (Kommersant, December 18, 2017).

During 2014–2018, Russia deployed to the Arctic region the following military equipment (Rossiyskaya Gazeta, July 3, 2018):

- T-80BVM main battle tanks (see EDM, June 18, 2018);
- BTR-82A armored personnel carriers;
- Gvozdika self-propelled howitzers (with a strike range of up to 15 km);
- "Arctic" Tor-M2DT air-defense missile launchers (strike range of 16 km, at altitudes of up to 10 km);
- Pantsir-SA self-propelled, medium-range surface-to-air missile systems (able to cover targets at altitudes of up to 15 km);
- The first "Arctic" Mi-8 helicopters (which can operate in extreme temperatures below -60° F); and
- GAZ-3344-20 all-terrain amphibious tracked carriers (capable of moving at up to 60 km per hour on land and 3.8 km per hour in the water).

Given the harsh climactic conditions, Russian Armed Forces in the region are prepared to operate under unconditional circumstances: in case equipment is damaged or unable to function normally, maneuverers and transportation will be carried out with the help of sled dogs and reindeer (able to cross up to 40 km daily).

Mounting evidence highlights Russia's determination to expand its zone of control across the wider Arctic region; although serious questions have been raised about whether Russia can afford to actually accomplish these goals (see EDM, September 11, 2018). Nevertheless, Russian strategy is clearly built on the practical implementation of the principle of asymmetricity (and off-the-beaten-path thinking), which has been increasingly emphasized by Russian military thinkers on the basis of the experience gained in the intervention in the Syrian civil war (see EDM, April 5, 2018). Instead of fortifying the country's entire northwestern frontier, stretching from Kaliningrad Oblast to the Arctic region, Russia relies on selective militarization of strategically important areas, pursuing an A2/AD strategy. Thus, the two above-mentioned military bases (and prospectively new ones) could be turned into genuine A2/AD "bubbles" in the near future.

With 'Azov Debacle' as Pretext, Russia Further Militarizes Crimea and Obstructs Passage Through Northern Sea Route

4 December 2018

The November 25 "incident" in the Black Sea involving Russia's illegal seizure of three Ukrainian military vessels and their personnel—in actuality, an explicit violation of the norms of international maritime law (see EDM, November 26, 28, 29, 2018)—has become a "legitimate" pretext for Moscow to conduct sweeping offensive activities in two strategic theaters: Crimea and the Arctic region.

The first set of measures (both immediate and to be accomplished in a short-term prospect) pertains to the resumed further militarization of Crimea:

– Bolstering of medium- and long-range anti-aircraft/missile defense capabilities. On November 29, Russia declared it was deploying S-400 Triumf anti-aircraft systems (capable of destroying targets up to 400 kilometers away and flying at an altitude of up to 30 km) in Dzhankoy (northern Crimea, 20 km from the *de facto* border with mainland Ukraine) (Allcrimea.net, November 29, 2018). Including Feodosia, Sevastopol, and Eupatoria—where S-400 complexes were deployed in September (Krymr.com, November 28, 2018)—there are now four locations in Crimea equipped with this formidable weapon. Russian political scientist Andrey Ivanov called this move "a remedy against hot heads both in Ukraine and in the West," specifying that "the West

has never been sentimental with countries that have a weak system of anti-missile/aircraft defense." Namely, he mentioned Yugoslavia (1999) and Iraq (2003) to support his thesis. He also stated that "the trick did not work in Syria" primarily because of Russia's savvy move to increase the Syrian military's anti-missile capabilities (Infox.ru, November 28). In addition to this step, on November 30, the Russian side deployed another division of the Pantsir-S1 self-propelled medium-range surface-to-air missile systems (RIA Novosti, November 30, 2018).

- Boosting coastal defenses. On November 28, volunteers of the Ukrainian "Come Back Alive" foundation traced Russian transports of additional pieces of the Bal coastal-defense missile system to the Crimean peninsula (UNIAN, November 28, 2018). Equipped with the Kh-35 anti-ship turbojet subsonic cruise missile (120 km striking range), the Bal complex is designed to ensure denial of entry on a tactical level. When combined with the Bastion systems previously deployed to Crimea (RIA Novosti, September 19, 2017), Russia is ensuring coastal-protection capabilities within a range of 120–200 km. And crucially, after Russia demonstrated the Bastion system's capability to destroy land-based targets in Syria in 2016 (RIA Novosti, November 15, 2016), it would be safe to suggest that those same weapons based in Crimea may be able to hit land targets up to 450 km away inside Ukraine.
- Increasing Electronic Warfare (EW) capabilities. On November 29, Russian officials noted that a Voronezh-M early-warning radar (operating in VHF band) would be deployed to the Crimean Peninsula in 2019. The Voronezh-M is capable of detecting ballistic missile launches and the flight of cruise missiles up to 3,500 km away. It will "replace the Dnepr radar, and profoundly increase Russia's military capabilities" in terms of early-warning and detection capabilities (Interfax, November 29, 2018).
- Building up strategic and tactical aviation power. Russia previously began the modernization of the Belbek airport—which, upon completion, is expected to become capable of receiving strategic bombers such as the Tu-95, Tu-160, and Tu-22M (Crimea.ria.ru, August 15, 2018). And on November 30, the Russian side additionally deployed a number of the super-maneuverable Su-27 and MiG-29 fighter aircraft (Espreso.tv, November 30, 2018), thereby increasing the tactical-operational capabilities of Russian forces located in Crimea.

– Increasing naval potential. Also on November 30, Vice Admiral Alexander Moiseyev, the commander of the Russian Black Sea Fleet, stated that as early as next year, the fleet will receive 13 new vessels equipped with Kalibr anti-ship and land-attack cruise missiles (Tvzvezda.ru, November 30, 2018). This deployment will significantly upgrade Russia's current conventional high-precision strike capabilities in the region.

Together, the above-mentioned measures (some already implemented) will dramatically increase the defensive and, to some extent, counter-offensive capabilities of the Russian forces currently stationed in Crimea. After 2019 (upon the prospective deployment of the Voronezh-M radar), the only piece left for the peninsula to acquire all essential qualities of a classic Anti-Access/Area-Denial (A2/AD) "bubble" (in Russia's reading of this concept) will be the nuclear-capable Iskander-M ballistic-missile complexes. Iskanders would potentially add further offensive qualities to "fortress Crimea" (see EDM, November 14, 2017). Currently, Russia's military-strategic calculations continue to consider Crimea as a defensive base—though, one capable of, if necessary, some counter-offensive operative tasks.

Interestingly, in addition to the announced deployments to Crimea, the Arctic region has become another key theater for Russia's decisive actions that were spurred on by the November 25 naval clash with Ukraine. On November 30, authorities stated that, starting from 2019, "not a single foreign military vessel, including submarines, will be permitted free passage through the Northeast Passage" without prior warning and consent granted by the Russian side (Topwar.ru, November 30, 2018).

It is essential to note that the main portion of the 5,500-kilometer-long trans-Polar Northeast Passage is located in Russia's territorial waters—the so-called Northern Sea Route (NSR). This strategic maritime transit corridor linking Europe and Asia winds past 50 ports in the Russian High North. The route is viewed by the Russian side as the backbone of its future joint cooperative initiatives with the People's Republic of China, within the scope of Beijing's Polar Silk Road initiative (see EDM, November 7, 2018,). Thus, the Kremlin's warning to foreign navies operating in the NSR should be read as an unequivocal reminder to other parties that Moscow remains a major stakeholder in this trans-Eurasian project—with Russia's military might as the main argument (TASS, November 30, 2018).

Russia's Two-Pronged Approach to Militarizing the Arctic

14 May 2019

The Russian Ministry of Defense (MoD) announced, on April 19, that the Northern Fleet Joint Strategic Command (NF JSC), headquartered in Severomorsk, will receive the status of a separate military-administrative unit by December (see EDM, April 24, 2019). The move will *de facto* turn the entity into Russia's newest Military District (MD). According to available information, the NF JSC (created as an experiment in 2014) will assume full military-strategic responsibility over Arkhangelsk Oblast, the Komi Republic, Murmansk Oblast, and the Nenets Autonomous Okrug (Izvestia, April 19, 2019). Such a development is unprecedented for Russia's military-administrative divisions: while the Northern Fleet is to form a separate MD, all other fleets/flotillas are integrated into the MDs where they are based.

The defense ministry's decision to upgrade the NF JSC appears to have been driven by Russia's wider goal to increase its military-political weight in the Arctic. Specifically, starting from 2016 (when major two-month long exercises were carried out in the region), Moscow has made a dramatic push toward militarizing the High North, reflected in:

- The buildup of technical-material compounds and the completion of the unique "Arctic Trefoil" (*Arkticheskii Trilistnik*) military base. Occupying an area of 14,000 square kilometers, the base is reportedly capable of hosting at least 180 military personnel for 18 months without requiring any outside supplies/provisions (see EDM, September 12, 2018);
- Boosting anti-missile and anti-aircraft capabilities (see EDM, April 30, May 7, 2019). Within the past several months, Air and Missile Defense Forces (*Voyska Protivovozdushnoy i Protivoraketnoy Oborony*—PVO-PRO) in the Arctic have received a new version ("Arctic model") of the Pantsir-S1 complex (see EDM, June 18, 2018). Furthermore, the authorities are placing specific emphasis on rearming some units of the locally stationed 45th Army with S-400 surface-to-air missile systems, which are to be additionally equipped with longer-range missiles capable of striking targets up to 400 kilometers away (Izvestia, April 16, 2019); as well as
- Increasing air power (offensive military capabilities) by planning to add two squadrons of the MiG-31 supersonic interceptor aircraft to bases in the High North (Gazeta.ru, February 5, 2019).

Commenting on the Russian MoD's decision to increase Air Force presence in the Arctic, Russian defense expert Anton Lavrov stated, "[T]his move has once again underscored that the Arctic region is our [Russia's] clear military priority." His opinion was echoed by the editor-in-chief of the military magazine *Arsenal Otechestva*, Viktor Murakhovsky, who argued that "the new status reflects the special role of Russian naval-military forces in the Arctic" (Izvestia, April 19, 2019).

Aside from military-strategic calculations, the Arctic region is seen by many in the Russian expert community as a future "locomotive" of Russia's economy. As of September 2016, the region accounted for 11 percent of Russia's national income and output (RIA Novosti, September 1, 2016). At the same time, Russian experts widely believe that "the United States and NATO [the North Atlantic Treaty Organization] are steadily but surely increasing their presence in the Arctic region," which suggests that "it [the Arctic] might soon become an area where geopolitical interests of major global players will clash… Russia has to prepare for this in an appropriate manner. The Arctic is turning into a field of acute competition between Arctic, near-Arctic [*priarkticheskikh*] and non-regional players." Importantly, these same experts suggest that, to prepare, Russia should consider using tools of both "soft" and "hard" power (Nezavisimoe Voennoe Obozrenie, April 19, 2019).

The last point is particularly important given the fact that, in pursuit of boosting its military power in the region, Russia is actively using a combination of overt and covert military approaches. One poignant example is Ice Camp Barneo, a temporary Russian base, built every year (since 2002) on an ice floe close to the North Pole. Operating under the patronage of the Russian Geographical Society, Camp Barneo is officially an expensive tourist destination, where the price of a standard tour is 19,000 euros ($21,300) per person, and a ski tour costs around 46,000 euros ($51,600).

Yet, on April 12, organizers stated that the camp will not be completed this year. The official explanation is that participants (as well as all necessary equipment) can only be transferred to Barneo by an Antonov An-74 transport aircraft specifically modified to be used in the Arctic and Antarctica. However, Ukraine ("despite a previous arrangement") is not allowing Russia to use any more of its polar-modified An-74s. Representatives of Ukrainian Antonov Airlines claimed that the Barneo Camp organizers had attempted to take one of its chartered planes on a "suspicious route" from Longyearbyen (Spitsbergen, Norway) to Minsk—a flight route that the Russian side only revealed upon the Ukrainian aircraft's arrival at the Norwegian airfield (BBC News—Ukrainian service, April 23, 2019). Indeed, this story (and the Ukrainian reaction) sheds light on a more hidden aspect of Russian operations in the High North.

Despite having always been presented by Moscow as a "purely peaceful project," Ice Camp Barneo has actually also been used for years as a remote military training center. Notably, in April 2014, over 50 members of the Russian Airborne Troops (*Vozdushno-Desantnye Voyska*—VDV) conducted experimental military exercises that involved rapid transit from Barneo to Franz Joseph Land and onward to the Olenya reconnaissance base (Murmansk Oblast) before arriving at the Ivanovo Severny military airport (Ivanovo city). The cumulative distance covered by the group (including, in part, on foot, by snowmobile and by dogsled) was close to 300 kilometers. The maneuvers were particularly unique as they were coordinated with the Russian Geographic Society, highlighting the crucial nexus between Russian military and civilian efforts in the Arctic region. In the aftermath of these exercises, military officials declared, "This experience will be used by Russian VDV Command in subsequent preparation of special and reconnaissance forces [operating in the Arctic]" (Spec-naz.org, April 14, 2014).

In 2016, Barneo also became a training site for the special forces (*Spetsnaz*) of the Chechen Ministry of Internal Affairs (MVD). According to the details (legend) of this exercise, the Spetsnaz were to discover and storm an enemy camp. And this year, on April 21, the Barneo site hosted a joint military exercise conducted by VDV Spetsnaz of Belarus and Russia. Interestingly, the event was carried out once again in coordination with the Russian Geographic Society, which was proclaimed to be "the patron of the Borneo Camp" (News.mail.ru, April 23, 2019). Curiously enough, the Society's board of trustees (*popechitelskii sovet*) includes Russian President Vladimir Putin and Defense Minister Sergei Shoigu as well as other notable Russian officials. Last month's sudden declaration of the closure of the ice floe camp to civilian tourists, thus, raises important questions about what skills Russian military forces have been training there.

Military Icebreakers'—Russia's Trump Card in the Battle for the Arctic?

26 June 2019

The United States Department of Defense released its new Arctic Strategy in early June (Defense.gov, June 6, 2019), and Russia's leading information outlets responded by "reminding" that, by 2020, Moscow is planning to deploy a complex multi-branch force "capable of reacting to existing threats and protecting [Russian] national interests in the Arctic zone in the military,

economic and transportation spheres" (Nezavisimoye Voyennoye Obozreniye, June 21, 2019). This description highlights Russia's determination to secure complete (if necessary) control over the Northern Sea Route (NSR), the Russian portion of the longer Northeast Passage that links East Asia and Northern Europe across Arctic waters off Russia's north coast. The NSR, "along with the *Transsib* [Trans-Siberian Railway], is a uniting vise [*obyedinitelnaya skrepa*] of Russia's geopolitical space" (Cyberleninka.ru, 2015).

As argued by Russian analysts, "to be able to control the Arctic region, one needs to have a sufficient number of icebreakers. Currently, the US has only the *Polar Star* (built in 1976) and the *Healy* (2000). Another three vessels capable of operating in the Arctic region are to be completed by 2023… Canada has also announced it is building 18 large military vessels that will cost $11.7 billion" (Nezavisimaya Gazeta, May 23, 2019). Yet, the Russian side seems not particularly preoccupied with these initiatives, which may be due to Moscow's confidence in its own plans concerned with expanding Russian military might in the region. Aside from constructing new non-military icebreakers (see EDM, June 12, 2019)—an essential element of Russia's Arctic strategy—Moscow is planning to boost its capabilities with so-called "military icebreakers," officially designated as Project 23550 heavily-armed icebreaking patrol ships. This practice—equipping icebreakers with weaponry—is by no means new to Russia. The first such episode occurred during the Soviet era, in 1941, when the icebreaker *Stalin* was equipped with ten artillery pieces and machine guns. And from the late 1960s onward, Ivan Susanin–class patrol ships (eight vessels in total, produced between 1973 and 1981) were primarily designed for use by KGB units of the Soviet coast guard (Rusvesna.su, May 3, 2019).

And yet, Russia's latest undertaking—the heavily-armed Project 23550 icebreaking patrol ships *Ivan Papanin* (to be formally commissioned in 2023) and *Nikolay Zubov* (2024)—represents a qualitatively new type of "military icebreaker" technology, which combines the functions of a tugboat, an icebreaker, and a patrol ship. As noted two years ago by one anonymous source close to the Russian military shipbuilding industry, "This patrol ship will have all the necessary weaponry and other equipment to allow it to perform all necessary tasks in the Arctic region" (Vpk.name, April 20, 2017). At the same time, the former commander-in-chief of the Russian navy, Admiral Vladimir Korolyov, stated, "I would like to specifically highlight that we really need this ship [a Project 23550 military icebreaker]… We need a battleship capable of operating in the Arctic both autonomously and as a part of a group of vessels." The director of the Almaz Central Marine Design Bureau, Aleksandr Shlyakhtenko, in turn, described the vessel as "unique for the global

shipbuilding industry," due to a combination of "a very high level of ice penetration and an excellent weaponry-related complex" (Korabel.ru, April 24, 2017).

Incidentally, in 2016, Russia produced the *Ilya Muromets*, a Project 21180 military icebreaker. However, the excessively high cost of production and inferior technical characteristics of this vessel (primarily, the lack of powerful weaponry onboard and the inability to permanently carry a helicopter) urged the Russian Ministry of Defense and domestic shipbuilders (who were not excited about this model from the beginning) to start considering other options. This led to the elaboration of the Project 23550, the first one of which (the *Ivan Papanin*) was laid down in 2017 and launched in 2019. The most distinctive feature of the new military icebreaker class is said to be its "universality," allowing the ship to carry out the following tasks (Comp-pro.ru, May 24, 2018):

- Protection and monitoring of Russian continental waters in the Arctic region;
- Convoying and towing vessels;
- Participation in search-and-rescue missions in the Arctic;
- Convoying and support for auxiliary and support naval vessels;
- Transportation of cargoes;
- Extinguishing fires that break out on coastal and sea-based objects.

However, the vessel's most important attribute is the types of weaponry and munitions it can be equipped with (simultaneously):

- Two Project 03160 (Raptor) patrol boats;
- A Kamov Ka-27 military helicopter, designed for anti-ship protection;
- One air-cushion vehicle (the Manul Project);
- A 100-millimeter universal A-190 artillery gun;
- An AK-176 naval gun (mounted in an enclosed turret) designed to target sea-, coastal- and aerial-based targets (including low-flying anti-ship missiles), which is said to have more advanced characteristics than its previous versions (Izvestia, March 17, 2017);
- The Club-K container-housed missile complex, designed to defeat sea surface and ground targets at a range of up to 300 kilometers. As modified versions of the Kalibr sea-launched cruise missile, missiles of this type are capable of flying at extra-low altitudes, making them difficult to spot and target.

In terms of existing analogues, it is tempting to compare the Project 23550 military icebreakers to the Norwegian Coast Guard icebreaker and offshore patrol vessel NoCGV *Svalbard* (W303), which became fully operational in

2001. Yet, a simple comparison demonstrates the apparent superiority of the Russian model. The Project 23550s are said to be bigger and more powerful in terms of the displacement tonnage (6,500 against 8,500 tons); the Russian vessels will be capable of going through 1.5-meter ice, while the Norwegian ship can only go through 1 meter. Moreover, the Project 23550s can carry up to 50 more personnel on board than the *Svalbard*. Most importantly, the weaponry and munitions mounted on the Russian vessels are much more formidable: the *Svalbard* carries one 57-mm or 70-mm gun, while the Project 23550 ships can even be armed with tactical missile weaponry. On the other hand, the Norwegian vessel can travel as much as 18,500 miles (against 6,000 miles) before having to be restocked—the only known advantage compared with the Russian military icebreakers (Comp-pro.ru, May 24, 2018).

In the late 1880s, the vice admiral and commander of the Russian Imperial Navy, Stepan Makarov, called for the construction of icebreakers for military purposes as a means to secure the country's position in the Arctic region (Naspravdi.info, December 9, 2015). And today, taking Makarov's thesis to heart, Moscow seems to be combining both military and non-military measures in the High North to preserve and expand its regional posture.

Russia Emphasizes Non-Military Threats in the Arctic Region

31 July 2019

In an article in the military-theoretical journal *Voyennya Mysl*, Russian Colonel Oleg Gavrilov states that "on the basis of the analysis of national interests of Western countries in the Arctic region, it is possible to ascertain those [interests] that are adverse to Russia's." Among others, he lists the expansion of the United States' military presence in the Arctic region, the deployment of elements of anti-missile and early-warning systems by the US, and the deployment of US strategic deterrence forces and related military infrastructure (Mil.ru, June 1). Yet, aside from such military-related threats, Gavrilov also notably points to non-military strategic threats with the potential to erode Russia's stance in the Arctic region and diminish its capabilities there. Those threats can be summarized in three broad categories: ecology, ethnic separatism and the legal status of the Northern Sea Route.

In terms of ecology, the *Voyennya Mysl* author refers to "anti-Russian" actions that take the form of "politicization of ecological problems in Russia's Arctic zone, which is in effect a serious challenge to Russia's national security."

Among other aspects, he notes that "so-called ecological problems could be used as a pretext for the non-Arctic countries (including some members of the EU [European Union]) to become actively involved in Arctic affairs […] and discredit Russia, so that international public opinion construes Russia as a country that is incapable of independently and effectively controlling its Arctic territories." Indeed, conservative-nationalist Russian information outlets have been increasingly preoccupied with the West supposedly trying to use non-governmental organizations (such as Greenpeace) to "discredit" Russia for contributing to an "approaching ecological catastrophe in the Arctic" (Greenpeace.org, accessed July 27). Likewise, they charge that the West is using countries such as Finland as a means to "vilify Russia" (Newsbalt.ru, January 10, 2014). As Gavrilov notes, "under certain circumstances, such [anti-Russian] information campaigns could result in Russia starting to be viewed as a country incapable of securing its environment, which in turn might result in halting or even cancelling some strategically important projects in the Arctic region" (Mil.ru, June 1, 2019).

Ethnic separatism as a means to drive Russia out of the High North is an issue that started to gain currency with Russian conservative media in the early 2010s. At that time, the head of the PomorAssociation, Ivan Moiseev (whom Russia has since accused of spying for Norway), was actively pursuing the interests of one of the Russian Federation's northernmost Indigenous groups, the Pomors (Tvrain.ru, November 22, 2012). In his assessment, Gavrilov notes that "the mechanism for launching a tide of ethnic separatism in Russia's Arctic zone, under the guise of the so-called 'Pomor project,' has been enacted by the West." He argues that "the template used [in the Arctic] has already been tested in Ukraine…" and includes "denial of everything Russian (common spiritual and ethnic roots, history, religion and culture), as well as propaganda of everything non-Russian [*nerusskost*]." Gavrilov states that the "Pomor project" aims to develop such themes as "fundamental ethnic divisions between the Pomors and Russians," "centuries-long suppression of their language, forceful assimilation," and "colonial exploitation." In other words, he asserts that the objective is to create a repugnant image of Russia and underline "their [Pomor] proximity to Norway, its culture, politics, and mentality" (Mil.ru, June 1, 2019).

At this juncture, it is important to note that Russia's concerns pertaining to potential Pomor separatism, primarily in the area of the White Sea, have spread well beyond this region to virtually the whole Russian High North. Moscow seems to be increasingly preoccupied with a theory actively promulgated by Sakha Republic–based scientists Uliana Vinokurova and Yuri Yakovets—the so-called "Arctic Circumpolar Civilization"

(*Arcticheskaya Tsirkumpolyarnaya Tsivilizatsiya*). These scholars postulate the existence of a "common Arctic genotype among northern circumpolar Indigenous peoples (the Chukchi, Evenks, Inupiat, Khanty, Koryaks, Nenets, Sami, Yukaghir, and Yupik) based on shared linguistic and cultural traditions" (M-Yakutsk: MISK-AGIIK, 2013). Apparently, Russia's uneasiness with this theory is premised on the purported prospect of the unification of these Indigenous peoples on a platform that is more independent from the Moscow-backed Orthodox-Slavic "core."

Finally, Gavrilov suggests that questions over the legal status of the Northern Sea Route could be exploited to try to dilute Russia's grip over Arctic transportation routes. In this regard, Russia's main fear is the prospect of "internationalization" (equal rights of passage for all nations) of the NSR as a middle segment of the longer Northeast Passage (NEP), which connects Asia with Northern Europe. Moscow, in contrast, insists the NSR is territory over which it retains exclusive rights. Russia's paramount concerns relate to Washington's insistence on freedom of passage through the NEP, which, in turn, might "lead toward its [NEP] prospective exclusion from Russia's legal jurisdiction" (Mil.ru, June 1). Within this context, it is worth mentioning the reflections of conservative Russian military expert and historian Aleksandr Shirokorad, who has argued that the US is actively trying to achieve its objective (the internationalization of the NSR/NEP) by using various means, including a combination of scientific research and indirect espionage. Namely, he claims that "approximately half of foreign vessels that have crossed the NEP between 1991 and 2018 were dual use—in other words, combining scientific research with espionage—and it is virtually impossible to make a clear division between the former and the latter" (Vpk.name, February 11, 2019).

Aside from the above-mentioned fears, Moscow is perfectly aware of the fact that numerous internal problems plague Russia's near-Arctic zone; and even without Western "help," these might ultimately contribute to a serious regional crisis. For example, the most recent sociological study conducted by the Obshestvennoye Mneniye Foundation has shown that the population in the region (particularly, in the Far East and the Siberian Federal District) remains bitterly disappointed with local living conditions (73 and 66 percent of respondents, respectively). Additionally, residents of the Russian High North complain about the extremely ineffective system of local governance (Nezavisimaya Gazeta, July 23, 2019), despite massive financial injections from Moscow and the Kremlin's habitual explicit warnings about the local authorities' unsatisfactory results. However, the situation might further worsen if Moscow decides to cut down on economic support to the area. Indeed,

several weeks ago, the Russian Ministry of Finance warned that continued state support for projects elaborated by the Ministry for Development of the Russian Far East and Arctic (*Minvostokrazvitia*) as well as traditional subsidies to these regions are leading to massive budget shortages that can no longer be covered by profits derived from oil and natural gas (Nezavisimaya Gazeta, July 15, 2019). Thus, barring a sudden and lasting spike in petroleum prices, prospects for Russian development of the High North look bleak.

Russian Spetsnaz in Norway: 'Fake News' Versus Facts

9 October 2019

On September 27, *AldriMer*, a Norwegian information outlet specializing in military affairs, claimed that, according to its sources, "members of the Russian special services without any insignia and dressed as civilians were spotted on Svalbard [Spitsbergen] Island" and on Norwegian continental territory. As noted by the media site, forces deployed to Norway were "militarized mercenary formations, whose activities have been very well known starting from the annexation of Crimea"—in other words, members of Russian private military companies (PMC). The group was said to have been transferred to the island by a P-650 midget submarine, designed to transport military personal behind the enemy's front lines (AldriMer, September 27, 2019).

The publication triggered a fierce reaction in Russia. The Ministry of Foreign Affairs called the information a "fake story" and an "example of a rude provocation […] aimed at manufacturing the image of Russia as an enemy state." The purpose of the publication is "nothing but an attempt [of the Norwegian defense ministry] to hammer out additional economic means to confront the so-called 'Russian threat' " (Mid.ru, September 27, 2019). In turn, leading Russian military expert and editor-in-chief of the military magazine *Natsionalnaya Oborona*, Igor Korotchenko, classified the publication as "hogwash [*gazetnaya utka*] generated to exploit fears within populations of NATO [North Atlantic Treaty Organization] member states regarding illusory Russian intelligence missions on their territory" (RIA Novosti, September 30, 2019). Bogdan Bespalko, a member of the Russian Presidential Council for Inter-Ethnic Relations, linked the appearance of the aforementioned *AldriMer* article to attempts of "certain groups to derail the nascent armistice between European countries and Russia," adding that it was

"nothing but part of the informational-psychological war against Russia" (RIA Novosti, September 30, 2019). Later, the Norwegian embassy in Moscow reportedly declared that it has no "data proving the validity of this information," nor can it "provide evidence that these activities took place" (Rosbalt, October 7, 2019).

Nonetheless, the information presented by the above Norwegian outlet was compounded by an investigative report in the Russian newspaper *Novaya Gazeta*, which assessed the news from a different perspective. The press outlet argues that, based on the analysis of pictures uploaded to Instagram and related comment posts, the Chechen *Spetsnaz* has been active in the area since 2016, illegally and covertly penetrating Norwegian borders in the Arctic zone (Svalbard) on a regular basis and on numerous occasions. The newspaper argues that forces that took part in the unauthorized landings were members of the so-called "Kadyrov Squad"—highly professional units trained at the Russian Spetsnaz University, a unique private institution in Gudermes, Chechnya specializing in the preparation of elite special forces. It is said to be personally patronized by Chechen head Ramzan Kadyrov. The main instructor at the University is the first deputy director of the National Guard (*Rosgvardia*) in Chechnya, Daniil Martynov. The institution prepares professionals in a variety of specializations (snipers, military alpinists, and paratroopers), equipping them with knowledge and skills essential for conducting fighting in both urban areas and forested or mountainous terrain (Novaya Gazeta, October 2, 2019).

Based on the Instagram pictures available, Novaya Gazeta claims to have identified two members of the institution that may have been deployed to Svalbard (Novaya Gazeta, October 2, 2019). Incidentally, the aforementioned center is said to have given training to members of the Chechen military police who took part in missions on Syrian territory. Moreover, the Spetsnaz University in Gudermes is said to soon start preparing bodyguards—*de facto* members of private military security companies (PMSC)—on an individual basis. Crucially, former members and veterans of special forces units Alfa group (*Spetsgruppa 'A'*) and Vympel group (*Spetsgruppa 'V'*) will conduct the training (RBC, October 4, 2019).

The official statement from the Norwegian embassy in Moscow denying having any evidence of Russian special forces operating on Norwegian territory would seem to sufficiently bring this potential scandal to a close (although, in this regard, a statement from Norway's Ministry of Defense would be of value as well). Nevertheless, the issue still deserves an additional look from three specific angles.

First, Russia's recently concluded strategic-operational exercise Tsentr 2019 (September 16–21) was meant to simulate anti-terrorist operations along the country's southern flank. Presumably, the "Arctic dimension" should not have had any major role. And yet, this was not the case. Indeed, a closer look at the "Arctic side" of Tsentr 2019 provides a better understanding of the tactics that the Russian Armed Forces are likely to employ in this theater in case of hostilities. Available information suggests that in the High North, the legend of the exercises primarily focused on simulating operations by small, tactical highly maneuvering groups launching a surprise attack against enemy forces. The exercises, held just prior to the official start of Tsentr2019, clearly demonstrated that the Russian military expects local operations to have to be carried out with limited ground (ten BTR-82A 8×8 wheeled armored personnel carriers), sea (three combat ships), or aerial support (two Ka-27 helicopters) (Mil.ru, September 14, 2019,). The total number of military personnel (500 troops, with a decisive role allocated to the military divers) and equipment offered an important glimpse into how Russia expects future conflict(s) to play out in the Arctic region (Regnum, September 17, 2019). As Russian military expert Vladislav Shuryghin explained late last year, "In the Arctic region, you do not fight wars with armies and divisions" (Izvestia, December 18, 2018). The alleged insertion of a small group of Russian (Chechen) special forces to Svalbard would, thus, seem to fit this model.

Second, previously held regional drills in the Russian High North are fully commensurate with the above-made point. Notably, in 2016, when the Russian tourist camp Ice Camp Barneo was surreptitiously transformed into a special forces training range, the exercises held there notably included Chechen *Spetsnaz* (see EDM, May 14, 2019).

Third, Russia's actions in the Arctic and northern Scandinavia—provocations actively supported by high-level Moscow officials, including former deputy prime minister Dmitry Rogozin (Novaya Gazeta, April 22, 2015)—have been increasingly used by the Russian side to discredit the European Union and NATO, as well as to highlight the Kremlin's supposed invulnerability to international reaction.

When it comes to its actions in the Arctic (tactics of "small steps"), Russia quite skillfully combines both actual military preparations with an element of disinformation. And by successfully utilizing the latter, Moscow succeeds in distracting international attention from the former.

The 'Military Pillar' of Russia's Arctic Policy

16 March 2020

On February 28, Russian Defense Minister Sergei Shoigu announced that the Northern Fleet (NF) created an additional Air Defense (*Voyska Protivovozdushnoy*—PVO) division, ensuring that, "the Northern Sea Route [NSR] is now under steady protection." He noted that protection of the east–west NSR, which follows Russia's northern coast, as well as "the defense of vital industrial objects and protection of Russia's economic interests in the Arctic zone" is a task jointly performed by the NF, the Russian Airborne Forces (*Vozdushno-Desantnye Voyska*—VDV), the Aerospace Forces (*Vozdushno Kosmicheskikh Sil*—VKS), and the Special Operations Forces (SOF). Furthermore, by the end of 2020, the NF "will receive more than 180 pieces of military equipment specifically tailored for the harsh conditions of the Arctic region," which will include, among others, "the K-549 *Knyaz Vladimir*, a Borei-class nuclear-powered ballistic missile submarine, and the *Admiral Flota Kasatonov* frigate" as well as "four capital ships, submarines and motor ships" (RIA Novosti, February 28, 2020).

Incidentally, the notion of further bolstering Arctic defense was echoed in an earlier statement by Russian military affairs expert and ultra-conservative commentator Alexander Shirokorad, who noted, "[O]ur main objective is not to let them [Americans] into our Arctic […] it [the NSR] is our first and last line of defense." Speaking about the importance of the NEP, Shirokorad not only emphasized the geopolitical and military opportunity in the region, but also pointed out its strategic, geo-economic value, noting that "if it had not been for the demonstration of our military potential [in the 1920s–1930s]—by showing our proto-military icebreakers—third parties would have continued their economic activities in the area." He also noted that the drive of the West to "internationalize" the NSR should be viewed as an aggressive and far-reaching move, which is aimed at curtailing Russia's presence and influence in the Arctic region (Kontseptual, July 30, 2018). Indeed, Russia today sees military icebreakers as one of its competitive advantages in a potential struggle for the Artic (see EDM, June 12, 2019 and February 24, 2020).

In a broad sense, four additional tools are meant to secure Russia's posture in the Artic (in general) and its dominance over the NSR (in particular). The first is Air and Missile Defense (*Voyska Protivovozdushnoy i Protivoraketnoy Oborony*—PVO-PRO) capabilities. Moscow announced it will be deploying two Resonance-N radar complexes to the Kola Peninsula by the end of 2020. Resonance-N is able to detect ballistic missiles, cruise missiles, hypersonic

targets and stealth aircraft, adding additional PVO-PRO competencies to Russia's Arctic presence. According to one source, this move "will allow Russia to increase the military potential of the Northern Fleet and secure uninterrupted monitoring of the most missile-dangerous [*raketoopasnyii*] directions controlled by the fleet" (Gazeta.ru, February 7, 2020). The importance of the PVO-PRO element was thoroughly explained by the prominent Russian military expert and commentator Igor Korotchenko, who argued that due to the specific conditions of the Artic, potential military encounters in the region will take a rather different form. As Korotchenko explained, "Our [Russian] military detachments [there] are primarily presented by Arctic bases and locally deployed means of counter-air defense… When it comes to equipment, we have created […] the TOR-M2DT, which is specifically designed for Arctic conditions. It is capable of targeting almost all flying objects" (Riafan.ru, February 28, 2020).

The second key tool for securing Russia's Arctic supremacy is strategic aviation. Specifically, Russian sources refer to the Tupolev Tu-160, which can be deployed to Alexandra Land island, where the Russian Nagurskoye military base is located. Such a move could create a serious challenge for the West primarily due to the fact that this type of aircraft can carry Kh-101/Kh-102 air-launched cruise missiles, which are capable of carrying both conventional and nuclear payloads. If these missiles are used by the Russian side, they "will make it impossible [for the United States] to ward off a potential strike against their Thule Air Base in Greenland. In effect, Moscow would have a chance to call checkmate in a single move," military commentator Aleksandr Frolov argues (Politexpert.net, January 21, 2020).

The third tool is ground transportation and infantry fighting vehicles (IFV). A February 3 article by Russian Deputy Minister of Defense Aleksey Krivoruchko contends that this element is one of the main priorities for the Russian Armed Forces in general and the Arctic region in particular. Namely, he mentions that a new-generation Russian IFV, the Ritsar, was specifically designed for operations in the High North and will soon become operable (Radioelekronnyie Technologii, №1/2020, p. 10). Despite the lack of concrete information on the Ritsar, some Russian sources have claimed it will soon become "the main ground-based means of military operations in the Arctic" (RIA Novosti, February 3, 2020).

The final element for ensuring Russia's Arctic dominance is high-precision weaponry. The Kh-47M2 Kinzhal nuclear-capable air-launched ballistic missile (ALBM) was first deployed to airbases in Russia's Southern Military District in 2017 (Redstar.ru, March 12, 2018; Kremlin.ru, March 1, 2018). According to the editor-in-chief of the military magazine *Arsenal Otechestva*, Viktor

Murakhovskii, the Kh-47M2 is "the result of deep and profound modernization of the operative-tactical ballistic missile [9M723] from the Iskander complex" (BBC Russian—service, March 11, 2018). Following its deployment in the Black and Caspian seas, Russia has expanded the operative theater of its deployment to the north. In mid-November 2019, according to one source close to the Ministry of Defense, the MiG-31K for the first time fired the missile near the Pembey training ground, located northeast of Vorkuta. Furthermore, having taken off from the airfield in Olenegorsk, the MiG reportedly destroyed a land-based target with the Kh-47M2 missile, which traveled at a speed of Mach 10. The Russian VKS refused to issue any comments regarding the event, however. According to reputable Russian sources, this test—as well as other similar measures aimed at the remilitarization of the Arctic—is related to the "potential accretion of NATO [North Atlantic Treaty Organization] forces in the Arctic region, which also requires the creation of weaponry that can be used in harsh climactic conditions of the High North" (Nezavisimaya Gazeta, December 30, 2019).

Unlike its socio-economic, cultural, and political policies toward the Arctic, Russian military actions in this remote region have followed a much more solid, complex, and result-oriented path.

Completing the Arctic Shield: Russian Activities on Wrangel Island

9 April 2020

On February 11, the head of the Russian Ministry of Emergency Situations, Yevgeny Zinichev, stated that a series of Crisis Management Centers were being established in the Artic region in order to "increase the level of security in the Northern Sea Route" (Lenta.ru, February 11, 2020). This initiative logically flows from Russia's recently adopted strategy for the region, primarily concerned with increasing its posture in the High North by beefing up local infrastructure and increasing local military potential (Lenta.ru, December 24, 2018; see EDM, March 16, 2020).

The strategy is premised on two main objectives: pursuit of Arctic-based natural resources (secondary role in light of the present oil market price turbulence) and the determination to secure unilateral control over the Northern Sea Route (NSR), which runs along Russia's polar coast. The NSR makes up a key element of the longer Northeast Passage, in recent years promoted by Beijing as the "Polar Silk Road, which aims to connect Chinese

producers with European markets via the Bering Strait. This strategic shipping artery is being positioned as a shorter alternative to the sea route through the Suez Canal. To secure the NSR, Moscow plans to complete six military bases in the High North—on the New Siberian Islands, Alexandra Land, the Severnaya Zemlya archipelago, Novaya Zemlya (Rogachevo), Mys Shmidta, and Wrangel Island—thereby creating a multi-layered defensive shield. Widespread opinion posits that the military facilities on the New Siberian Islands and Alexandra Land—frequently nicknamed the "Russian guards" of the Arctic (TASS, December 2, 2019)—are the most crucial elements of this constellation. Yet, the vitality of Wrangel Island should not be downplayed. Aside from its proximity to the United States, this is the first major island encountered on the westward Asia–Europe maritime transit route after crossing through the Bering Strait.

Wrangel Island has historically (as early as 1911) played an instrumental role in enabling Russian/Soviet military domination of the region. In 1924, the Soviets demonstrated a "military icebreaker" prototype to ward off claims on this island by the United States (Geopolitica.ru, August 20, 2014). After 1991, Russia's regional presence (including military) was dramatically reduced (Izvestia, July 2, 2014). However, as its Arctic policy began to shift during the mid-2000s, Moscow adopted a much more assertive stance. This was primarily reflected in the rapid development of military infrastructure in the Eastern Military District (MD) by 2014. For example, that year, the authorities established a military town (*voyenniy gorodok*) on Wrangel Island, effectively restoring Soviet military potential in the area by deploying radio-location units, anti-missile/aircraft formations and a spare airfield, which had been liquidated in 1992 (RIA Novosti, October 22, 2014).

Starting from 2016, Russia further intensified its militarization of Wrangel Island by locally deploying the Sopka-2 S-band Air-Route Radar Complex (ARRC). As stated at the time by the head of the press-service of the Eastern MD, Alexander Gordeev, the deployment of the Sopka-2 was designed to secure Russia's control over aerial targets moving in the area (Politros.com, November 4, 2016). The official webpage of the Sopka-2 ARRC manufacturer states that this unique radar is primarily designed to detect/control air traffic and to monitor the local airspace. More specific functions include the ability to detect various air objects; provide measurements of range, azimuth, and elevation angle (height) of targets; as well as identify the target's country of origin.

The Sopka-2 consists of three radars: a primary radar that uses a passive phased-array antenna, and two secondary radars whose antennas are mounted at the back of the phased array. It also has Monopulse Secondary Surveillance

Radar (MSSR), which considerably increases its qualities and operational capabilities (Lemz.ru, accessed March 31, 2020). The radar can spot objects at a maximum range of 450 kilometers, with merely one technical operator, who can actually operate the system remotely. Importantly (particularly in the harsh climatic conditions of the High North), the Sopka-2 can operate in high wind (up to 40 meters per second) and extreme cold (down to –50 Celsius) (Zvezdaweekly.ru, January 4, 2019). During 2017–2018, the Russian side conducted a series of trainings/exercises on Wrangel Island specifically concerned with testing the radar's ability to locate simulated enemy aerial objects (of a conditional enemy) as well as locate individual objects moving within a larger group (Politros.com, October 28, 2018).

In 2019, training intensified (carried out twice that year) and gained in sophistication and scope. During this period, the Sopka-2 complex was primarily used to locate aircraft or aerial objects equipped with stealth (low observable) technology (Tvzvezda.ru, November 15, 2019). Another important development observed during these trainings was an emphasis on locating smaller targets, such as unmanned aerial vehicles (UAV), operating individually and in groups/swarms to perform reconnaissance missions (Defendingrussia.ru, March 13, 2019).

The beginning of this year witnessed several new developments that included exercises involving troops assembled from the Eastern MD, with specialists of the Radio-Technical Troops (RTT) allocated a special role. During these drills, RTT specialists used the Sopka-2 ARRC to simulate tracking enemy flying objects operating with their transponders switched off. Information acquired by the radar was immediately sent to the commanding post of the anti-missile/aircraft defense post. To complicate the task, the "enemy" aerial vehicles were constantly changing direction and speed (Mil.ru, March 18, 2020).

Russia's prime objective in beefing up its military capabilities in the Arctic region—in terms of both firepower and creating a multi-layered defense—is to secure full control over the NSR. This maritime Arctic route is seen by Russian authorities as a source of substantial economic gains as well as a means for Moscow to promulgate the "Great Eurasian Power" concept. The ongoing developments on Wrangel Island attest to this reality. For now, Russian actions are concerned with mainly defensive tasks, reflecting growing uneasiness about other countries (primarily the US) attempting to increase their presence in the region (Zvezdaweekly.ru, August 29, 2019), which the Kremlin perceives as a direct challenge to Russia's position in its High North.

Russia's Icebreaker Buildup: A Mixture of Geo-Economic and Military-Political Calculations

13 July 2020

July 6, the Russian shipbuilding complex Zvezda, LLC started construction on a Project 10510 (Lider) icebreaker. Upon its completion (scheduled for 2027), the first ship of this class, named the *Rossiya* and commissioned by the Rosatom State Nuclear Energy Corporation (Rosatom), will become the most powerful nuclear-powered icebreaker ever produced. Reportedly, the future vessel's main task will be to guarantee uninterrupted commercial transportation along the Northern Sea Route (NSR)—the maritime shipping corridor off Russia's Arctic coast that connects the Pacific and the Atlantic oceans. Moscow routinely stresses the NSR's geo-economic/political value to the Russian Federation (Ridl.io, May 8). The icebreaker is said to have unique technical characteristics, including a 120-megawatt engine, that will allow it to cut through ice up to 4.5 meters deep and create water canals 50 meters wide (Gazeta.ru, July 6, 2020). According to Rosatom subsidiary Rosatomflot's General Director Mustafa Kashka, "[T]he vessel has no analogues in the world. This unique icebreaker has outstanding technical characteristics that will guarantee year-round operations in the eastern Arctic" (RIA Novosti, July 6, 2020).

The expected launch of Project 10510 icebreakers has two strategic objectives. First are Moscow's geo-economic calculations. Rosatom argues that, as the only country in the world with a nuclear-powered icebreaker fleet, Russia is able to maintain a year-round presence in the Arctic region. And when combined with the already operating Arktika-class icebreakers (Rosatom.ru, accessed July 9, 2020), Project 10510 vessels will be specifically concerned with various transportation missions to and from China, Japan, and South Korea. According to Russian sources, this will raise the importance of the NSR in the surging competition for dominance in the global liquefied natural gas (LNG) market. Specifically, the Russian side hopes to win the race against the United States in becoming the main LNG supplier to energy-hungry Asian markets (Atomicexpert.com, accessed July 8, 2020). In a speech earlier this year, Russian Prime Minister Mikhail Mishustin specifically highlighted the role of icebreakers as a key factor allowing Moscow to "fully unravel the transportation potential of the NSR artery and increase the interest of the international business to this new corridor between Europe and Asia […] to guarantee Russia's supremacy in the Arctic region, which is strategically vital to us" (The World News, June 15, 2020). Importantly, the Russian vision of

commercializing the NSR—inseparable from the development of icebreakers—is premised on two pillars: 1) capitalizing on the vast natural resources concealed in the Arctic region (currently, 83 percent of natural gas and 17 percent of Russian oil are extracted there), and 2) the transformation of the NSR into an integral part of Beijing's Belt and Road Initiative linking China with Europe. According to estimates of the Ministry of Natural Resources and Environment, by 2034, Russia plans to increase annual cargo flows via the NSR to 157 million tons (Vedomosti, November 13, 2019) primarily contingent on Chinese trade activities.

Leading Russian experts have linked the further development of a powerful icebreaker fleet to the country's ability to commercialize its Arctic potential. As noted by the leading subject-matter scholar from the Foundation of the National Energy Security, Stanislav Mitrakhovych, Russia's potential in the northern polar region is far from maximized. In this regard, "projects concerned with the development and support of the domestic shipbuilding industry and the realization of the import-substitution strategy" is instrumental for the development of the Arctic region and the High North. In turn, Vera Smorchkova, a professor at the Russian Presidential Academy of National Economy and Public Administration (RANEPA), also underscored the strategic importance of icebreakers for the development of the NSR, since "icebreakers—which can operate on Siberian rivers—can also secure the uninterrupted supply of vital commodities to critical far-flung areas of the NSR." Oleg Filippov (likewise of RANEPA) saw a somewhat different need for increasing Russia`s capabilities in the Arctic region: in addition to purely geo-economic considerations, the expert mentioned that increasing involvement of the US in the region (including Washington's own icebreaker-related plans) was a warning to Russia and its regional ambitions (Gazeta.ru, June 15, 2020,).

The second strategic objective guiding the development of new nuclear icebreakers involves military-political calculations. Importantly, Russian experts suggest that the date of the prospective launch of the Project 10510 craft *Rossiya* (2027) will see the "end of the [global] economic crisis [as well as] the intensification of competition between the main international players for Arctic resources and the shortest path from the Pacific to the Atlantic via the NSR." Russian experts argue that two main competitive advantages Russia has in this looming struggle for the Arctic region are military facilities reconstructed along the NSR and its formidable icebreaker fleet, which allows Russia to maintain a constant military presence there. Specifically, the prospective introduction of Lider-class icebreakers is viewed by the Russian conservative expert community as "our response to those seeking to marginalize Russia in the Arctic [region] and to establish their control over this strategic region […]

in light of the unfolding 'cold war 2.0'" (Zvezda Weekly, August 29, 2019). Thus, as noted by a member of the Officers of Russia organization, Captain 1st rank (ret.) Vasyli Dandykin, although the construction of this type of icebreaker will be an extremely costly enterprise, it presents a huge opportunity, since the Zvezda corporation could use the acquired expertise and injection of state funds to additionally start building not only new civilian vessels but also aircraft carriers (Zvezda Weekly, April 27, 2020). Other Russian commentators have related the need to build up the country's icebreaker fleet with "mounting American ambitions" and the most recent declaration of President Donald Trump to increase the US presence in the Artic region and Antarctica, which, as noted in Russian sources is "*Terra nullius*" (RT, June 9, 2020). Prominent ultra-conservative military expert Captain 1st rank (ret.) Konstantin Sivkov has posited that as long as Russia is able to preserve supremacy over the US in terms of icebreakers, it will have the upper hand in the Arctic region (RT, June 11, 2020).

Undoubtedly, Russia's ambitious program of icebreaker fleet expansion will boost its already strong regional position. Yet, the ultimate costs of this endeavor could prove excessively high. As pointed out by some Russian experts, "[E]ven the previously defrayed initial costs—with the final costs still unknown—already cast a shadow of doubt on the economic expediency and profitability of some of these projects" (Gazeta.ru, June 15, 2020).

The Northeastern Dimension of Russia's 'Ocean Shield 2020' Naval Exercises (Part One)

11 September 2020

Between August 3 and 31, forces from the four Russian fleets—Northern, Pacific, Black, and Baltic—took part in the country's annual "Ocean Shield" large-scale naval military exercises. Supervised by the Military-Maritime Fleet's (*Voyenno-Morskoy Flot*—VMF) commander-in-chief, Admiral Nikolai Yevmenov, Ocean Shield 2020 involved a broad range of forces, including naval aviation, combat ships and support vessels, anti-missile/aircraft systems, unmanned aerial vehicles (UAV), and naval infantry (Interfax, August 3, 2020). The preparatory stage of the exercises was launched at the end of July, with the first stage then officially starting at the beginning of August and running for three weeks in the Baltic Sea area. It involved anti-submarine and anti-aircraft operations, torpedo and artillery training, as well as elements of amphibious

warfare, which culminated in a simulated landing at the Khmelevka polygon (Rubaltic.ru, August 4, 2020). More than 30 vessels, 20 aircraft, over 3,000 marines, and approximately 400 units of heavy/auxiliary machinery were cumulatively employed during this stage (TASS, August 3, 2020).

In the second stage (August 24–31), the maneuvers shifted to the northern Pacific (Otr-online.ru, August 29, 2020). Despite the shorter period of time devoted to the drills in the northeast, this operative theater—which primarily comprised forces from the Pacific Fleet, the best-equipped of Russia's fleets in 2017, 2018 and 2019 (Mil.ru, December 2, 2017; RIA Novosti, December 3, 2018; Mil.ru, November 29, 2019)—occupied a central place in the whole Ocean Shield 2020 exercise. As noted by Admiral Yevmenov prior to the official start of the second stage, "[T]he Pacific Fleet will most certainly remain the most critical instrument in the system of Russia's national security, and [a tool] capable of preempting all types of threats in the sea- and ocean-related directions as well as [a means] of boosting stability and mutual trust in the whole Asian-Pacific region" (Marine.gov.ru, July 8, 2020).

Out of more than fifty types of maneuvers performed during the second stage, the emphasis was clearly put on the following five main macro-dimensions:

First, the integrated training of amphibious landings, protected by naval artillery gunfire from small warships (corvettes). This operation was practiced for the first time ever under the challenging conditions of the Chukchi Sea coastline (Mil.ru, September 1, 2020).

Second, the integrated use of surface and sub-surface naval forces. For instance, the missile cruiser *Varyag* and the nuclear-powered cruise missile submarine *Omsk* jointly fired at targets located in open water in the Bering Sea. Reportedly, the maritime targets were destroyed by missiles launched from the Vulkan complex (mounted on the *Varyag*) and P-700 Granit anti-ship cruise missiles (launched from the *Omsk*), from a distance of more than 450 and 320 kilometers, respectively (Rambler, August 30, 2020). Additionally, the K-300P Bastion-P mobile coastal-defense missile system—delivered to the theater after a simulated 50-kilometer raid—managed to destroy a target in the Gulf of Anadyr with the P-800 Oniks supersonic anti-ship cruise missile (Mil.ru, August 27, 2020).

Third, the use of UAVs—a trend that has become an integral part of virtually all exercises carried out by Russia. Specifically, the Granat-4 UAV—incidentally, previously spotted in the Donbas region, operated by separatist forces (InformNapalm, June 9, 2018)—was used to transmit information related to the accuracy of missile strikes in real time (Rambler, August 30, 2020). Furthermore, Orlan-10 medium-range, multi-purpose UAVs were

employed to correct naval gunfire aiming at hidden, coastal targets that could not be spotted by the naval forces due to the challenging local geographic conditions.

Fourth, the improvement of naval logistics and transportation capabilities. In this regard, the key role was ascribed to the large landing ships (BDK) *Nikolay Vilkov*, *Oslyabya*, *Peresvet* and *Admiral Nevelskoy*, which rehearsed loading military equipment and personnel from the unequipped coast. The loading of the marines was carried out in Desantnaya Bay (inside the Ussuri Bay, Primorsky Krai). The BDK took on board BMP-2 infantry fighting vehicles, BTR-82A armored personnel carriers, Grad multiple-launch rocket systems (MLRS), self-propelled artillery and about 300 marines. Furthermore, in parallel with this operation, participating forces simulated a search-and-rescue mission in the northwestern part of the Bering Sea, with naval aviation and Ka-27PS helicopters, in particular, playing a key role. The helicopters performed takeoffs and landings on the deck of the largest surface ship of the Pacific Fleet, the *Marshal Krylov* (Rossyiskaya Gazeta, August 28, 2020).

Fifth, the VMF allocated a crucial role to naval aviation, including MiG-31 high-altitude interceptors and Il-38 anti-submarine aircraft. As Yevmenov specifically highlighted, "[W]ithin the scope of the aerial exercises, naval aviation crews demonstrated professionalism of the highest level, confirming their combat readiness and preparedness to solve tasks in any part of the world ocean, under any circumstances." He also emphasized that "[Russian] aviation operating in the outer layer of Russian territorial waters was closely watched by NATO [North Atlantic Treaty Organization] fighter jets" (TV Zvezda, August 31, 2020).

In assessing the preliminary results of Ocean Shield 2020, Admiral Yevmenov stated that "preliminary analysis of the exercises demonstrated the high level of skills of Russia's Pacific Fleet" (Redstar.ru, September 2, 2020).

But additionally, last month's large-scale naval maneuvers in the North Pacific reflect Moscow's view of the military-political situation in the wider Arctic region. First, despite some official rhetoric to the contrary, Russia increasingly perceives the Arctic as an area of confrontation—not cooperation or dialogue. As stated by the deputy secretary of the Russian Security Council, Mikhail Popov, "[T]oday the Arctic region has become a zone where geopolitical, geo-strategic and economic interests of the world's leading powers have collided […] the United States is seeking to maintain constant surveillance of the Northern Fleet and the Russian Arctic zone" (Interfax, August 19, 2020). Russia, thus, aims to demonstrate, through exercises such as Ocean Shield 2020 and the re-establishment of military infrastructure in the High North, readiness to defend its dominant role in the Arctic region—an area endowed with natural

resources and viewed as a nascent major global commercial/transportation hub. Second, according to Yevmenov, the Ocean Shield exercises in the north Pacific manifested "our return to the Arctic… The main goal of the exercises is Chukotka" (Rambler, August 30). Specifically, Russia's primary objective was the rehearsal of a potential small-scale confrontation in and around the Bering Strait area—a zone of high conflict potential, where Russia's claims are becoming more audible and ambitions more visible (see EDM, March 14, 2019 and January 30, 2020).

The Northeastern Dimension of Russia's 'Ocean Shield 2020' Naval Exercises (Part Two)

15 September 2020

Between late July and August 31, forces from Russia's Northern, Black Sea, Pacific and Baltic fleets took part in the large-scale Ocean Shield 2020 naval military exercises, subsequently held in the western and then northeastern theaters (Portnews.ru, September 1, 2020; see Part One in EDM, September 11, 2020). The main strategic objective of the second stage of the exercises was the simulation of a potential small-scale military encounter in the Bering Strait area—the sole maritime passage between the Pacific and the Arctic oceans. The uniqueness and strategic importance of the Bering Strait for Russia is premised on two, in many ways interconnected, pillars. First are Moscow's military-(geo)political calculations: Russia sees the power of its Pacific Fleet as a necessary factor for ensuring the security and stability (in Russia's understanding of these terms) of the Asia-Pacific Region (Marine.gov.ru, July 8, 2020). Second is the geo-economic/strategic factor: the Bering Strait is a key bottleneck along the China-promoted Polar Silk Road project, which Russia perceives as a major source of future income and revitalization of the entire Arctic region so long as the Chinese shipping utilizes the Northern Sea Route (NSR), off Russia's northern coast (see EDM, February 11, 2020).

The northeastern dimension of Ocean Shield 2020, thus, highlighted three macro aspects:

1) The reviving military-political value of the Bering Strait. Regarding this issue, it is worth highlighting some continuity and tradition in Russia's actions. For instance, the Soviet Union began seriously drafting a plan of counterattack against the United States—in case of a potential military confrontation between the two powers—as early as 1948. Under this plan, the locally stationed

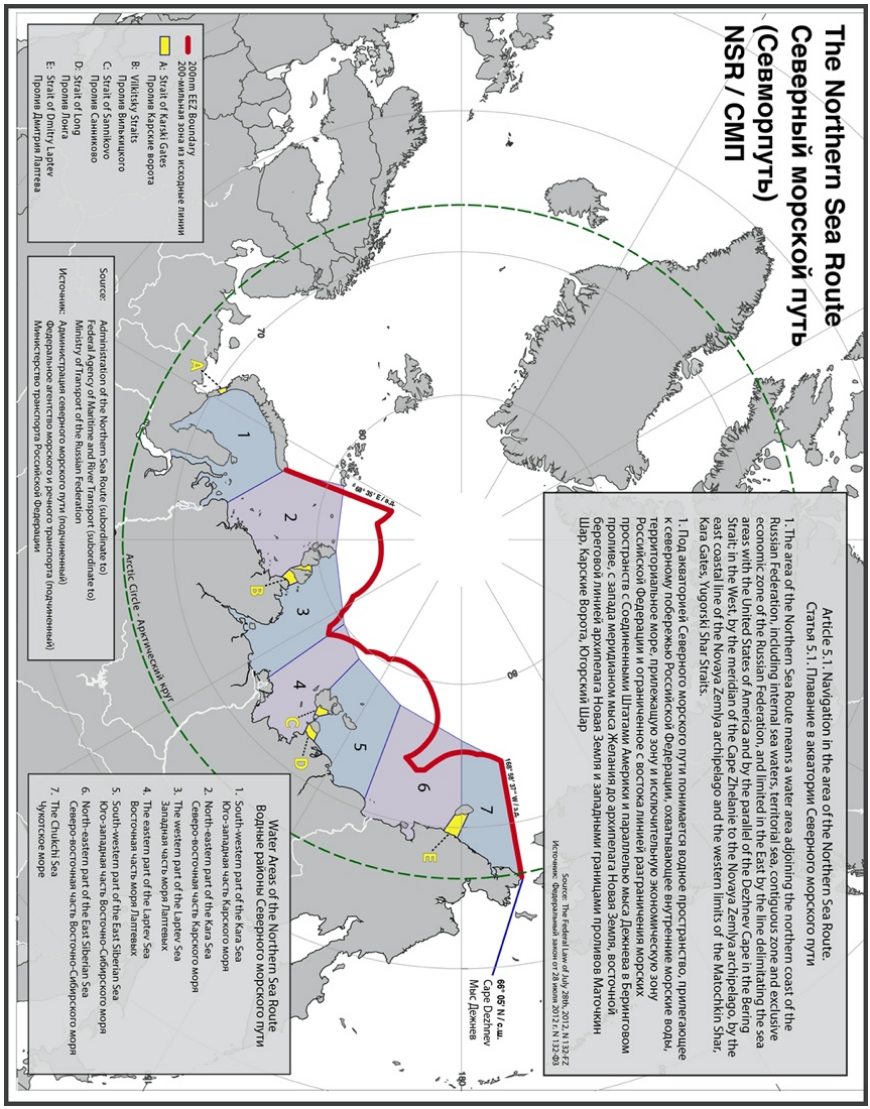
14th Army was to immediately take control of the opposite side of the Bering Strait, repel US forces, and prepare a basis for a rapid attack by Soviet land units. Incidentally, to achieve higher readiness, the Soviets extensively employed Indigenous people to track US activities in the area (Rossiyskaya Gazeta, March 16, 2015). In turn, last month's exercises likely rehearsed Russia's ability to counter the United States' so-called Dynamic Force Employment concept—the ability of the US to "build a force that can be proactively and rapidly deployed to confront China or Russia if necessary and to reassure allies" (RealClearDefense, September 18, 2018; Inosmi.ru, June 16, 2020).

2) Russia's preparedness to challenge international law and the Kremlin's mounting local ambitions. This is evident based on ongoing discussions coming from the highest echelons of power in Russia. Namely, Moscow is looking into ways of abrogating the US-Soviet Maritime Boundary Agreement on the Bering Strait (a.k.a. the James Baker–Eduard Shevardnadze line agreement), signed in 1990, on the basis of its purported "illegitimacy" since it was ratified by the Soviet Union—not Russia. Namely, a senator from the Federation Council (the upper chamber of the Russian parliament), Boris Nevzorov, stated earlier this year that the agreement, signed by a supposedly weak and defeatist Foreign Minister Shevardnadze, deprived Russia of 78,000 square kilometers of the Bering Sea (including the continental shelf) endowed with hydrocarbons and bio-marine resources (fish and crabs), causing "hundreds of billions [of rubles] in economic losses." Above all, Nevzorov noted that one of the main victims of this historical agreement is the Northern Sea Route (Infonavigator.com.ua, January 28), which Russia sees as key to the revitalization of its High North and the Arctic region. Specifically, the lawmaker noted that "now, when a tanker with liquefied natural gas [crosses the Strait] we will have to ask the Americans for permission every time […] this is nonsense" (Militarynews.ru, January 27, 2020). Those sentiments were echoed and supported by the chair of the Federation Council, Valentina Matviyenko (RIA Novosti, January 27, 2020).

3) Russia's fear of losing its edge in the struggle for dominance over the Arctic. Specifically, Russia worries that US capacity to threaten the Bering Strait might result in an economic devaluation of the NSR, thus discouraging Chinese partners who have pinned their expectations on this maritime transit artery. Among other aspects, the Russian side is apprehensive about the recently adopted "Memorandum on Safeguarding US National Interests in the Arctic and Antarctic Regions" (Whitehouse.gov, June 9, 2020), which aims to boost the capabilities of the US icebreaker fleet and general regional naval power. Some Russian (and US) experts reasonably argue that even if all the main points of the document are implemented, Russia's regular military strength and

presence in the Arctic will still be incomparably greater than that of the US (RIA Novosti, July 31, 2019); but others warn that it is quite premature for Moscow to celebrate victory. Namely, to compete with Russia, the US side may not need the same number of icebreakers that the former wields. To decrease the attractiveness of the Northern Sea Route, Washington need only to be able to threaten the Russian Arctic and, specifically the NSR, at two locations—its entrance and exit. If this is achieved, several US icebreakers—supported by forces of the Sixth and Seventh fleets, operating at both ends of the NSR—will suffice (Vpoanalytics.com, June 24, 2020). Russian observers note that Beijing is also extremely concerned about the fact that transportation along the NSR (which could make up a major segment of the above-mentioned Polar Silk Road) might be compromised by US naval power (Vybor-naroda.org, June 23, 2020). In effect, if Washington is able to threaten the above-mentioned two NSR end points—the Bering Strait and the Barents Sea—the Chinese side will end up with quite a similar predicament in the north to the one it already faces in the south (in the Strait of Malacca). As such, Russian politicians openly rebuked this past spring's joint US-British maneuvers in the Barents Sea, calling them an "explicit provocation" (Tsargrad.tv, May 8, 2020).

If the United States truly becomes able to jeopardize, at will, both the entrance and exit to the Northern Sea Route, Russia will suffer two major blows. First, Moscow's extremely ambitious and expensive icebreaker buildup program (see EDM, July 13, 2020) will end up being a waste of resources. Second, should Chinese interest in the Kremlin-promoted NSR fade away, Russia's wider hopes pinned on commercializing the Arctic region—explicitly voiced in the "Russian Arctic Strategy Until 2035" (see EDM, February 24, 2020)—will itself become void. At that point, Russia's posture in the Arctic will once again come to resemble the Soviet model—one based on bare military supremacy but without any economic/commercial value. And in turn, the Bering Strait will become solely a naval chokepoint—not a lucrative transport artery.


The Northern Sea Route
Северный морской путь
(Севморпуть)
NSR / СМП
Article 5.1. Navigation in the area of the Northern Sea Route.
Статья 5.1. Плавание в акватории Северного морского пути
1. The area of the Northern Sea Route means a water area adjoining the northern coast of the Russian Federation, including internal sea waters, territorial sea, contiguous zone and exclusive economic zone of the Russian Federation, and limited in the East by the line delimitating the sea areas with the United States of America and by the parallel of the Dezhnev Cape in the Bering Strait; in the West, by the meridian of the Cape Zhelaniе to the Novaya Zemlya archipelago, by the east coastal line of the Novaya Zemlya archipelago and the western limits of the Matochkin Shar, Kara Gates, Yugorski Shar Straits.
1. Под акваторией Северного морского пути понимается водное пространство, прилегающее к северному побережью Российской Федерации, охватывающее внутренние морские воды, территориальное море, прилежащую зону и исключительную экономическую зону Российской Федерации и ограниченное с востока линией разграничения морских пространств с Соединенными Штатами Америки и параллелью мыса Дежнева в Беринговом проливе, с запада меридианом мыса Желания до архипелага Новая Земля, восточной береговой линией архипелага Новая Земля и западными границами проливов Маточкин Шар, Карские Ворота, Югорский Шар
Source: The Federal Law of July 28th, 2012, N 132-FZ
Источник: Федеральный закон от 28 июля 2012 г. N 132-ФЗ
200nm EEZ Boundary
200-мильная зона из исходные линии
A: Strait of Karski Gates
Проливе Карские ворота
B: Vilkitsky Straits
Проливе Вилькицкого
C: Strait of Sannikovo
Пролив Санниково
D: Strait of Long
Пролив Лонга
E: Strait of Dmitry Laptev
Пролив Дмитрия Лаптева
Source: Administration of the Northern Sea Route (subordinate to)
Federal Agency of Maritime and River Transport (subordinate to)
Ministry of Transport of the Russian Federation
Источник: Администрация северного морского пути (подчиненный)
Федеральное агентство морского и речного транспорта (подчиненный)
Министерство транспорта Российской Федерации
Water Areas of the Northern Sea Route
Водные районы Северного морского пути
1. South-western part of the Kara Sea
Юго-западная часть Карского моря
2. North-eastern part of the Kara Sea
Северо-восточная часть Карского моря
3. The western part of the Laptev Sea
Западная часть моря Лаптевых
4. The eastern part of the Laptev Sea
Восточная часть моря Лаптевых
5. South-western part of the East Siberian Sea
Юго-западная часть Восточно-Сибирского моря
6. North-eastern part of the East Siberian Sea
Северо-восточная часть Восточно-Сибирского моря
7. The Chukchi Sea
Чукотское море
Arctic Circle - Арктический круг
66° 05' N / с.ш.
Cape Dezhnev
Мыс Дежнев
168° 58' 37" W / з.д.
169° 39' 30" E / в.д.

3 Foreign Actors

China's 'Polar Silk Road' Versus Russia's Arctic Dilemmas

7 November 2018

An article published on October 5 by the Russian International Affairs Council (RIAC) discusses Russia's strategy in the Arctic region and the evolving role of China therein (Russiancouncil.ru, October 5, 2018). Among other points, the piece notes that "the Arctic region is one of the key elements of Russian national security" and "one of two regions where Russia plays the role of a great power." At the same time, the article alludes to "growing international competition in the region." It frames the United States and the European Union as Russia's main regional competitors. But China is notably presented as a "strategic partner" for whom "the Arctic region is not a top strategic priority" and whose efforts to build up its naval strength are related to a desire to challenge the US, not Russia. The sentiments expressed in the above-mentioned RIAC article appear to reflect how Moscow views the prior concrete steps the Russian Federation and People's Republic of China (PRC) have been taking to strengthen bilateral cooperation in the Arctic. On May 15, Russian media stated that "Russia and China are preparing a memorandum on joint efforts to consolidate actions in the Arctic region" (TASS, May 15, 2018), while on June 8, Presidents Vladimir Putin and Xi Jinping declared their readiness to "boost cooperation in the Arctic via the implementation of joint infrastructural-, transportation-, and energy-related projects" (RIA Novosti, June 8, 2018). Nonetheless, Chinese ambitions in the Arctic seem to extend beyond the level of such joint initiatives.

On January 26, the Chinese State Council Information Office published a white paper titled "China's Arctic Policy," which argues the country is entitled to "enjoy freedom or rights […] in the Arctic Ocean" and to be a full-fledged player equal to other states (Gov.cn, January 26, 2018). The paper points to the fact that, since the PRC is "closely involved in trans-regional and global issues in the Arctic," it seeks to further "facilitate connectivity and sustainable economic and social development of the Arctic" via expansion of the Silk Road Economic Belt and the Maritime Silk Road toward the creation of a Polar Silk Road—an extremely ambitious project that aims to enhance trade/transportation routes linking Asian and European markets.

The news from China was met with enthusiasm on the Russian side, being construed as sign of expansion of the Sino-Russian strategic partnership. Russia's expectations in this matter are premised on three assumptions:

- China will save Russia's stagnant north: Chinese investments in the Arctic are thought to be a remedy for long-lasting structural problems faced by Russia's High North. In particular, Russia hopes the PRC's involvement will bring new work sites, large infrastructure projects, socio-economic development of the area, as well as a lifeline from Western sanctions (Asiarussia.ru, January 31, 2018);
- China has no alternatives but to work with Russia: The Northeast Passage (NEP), controlled by Russia, and the Northwest Passage (NWP), controlled by the US and Canada, are China's only prospective maritime transportation routes across the Arctic Ocean. Further, Beijing's growing conflict with Washington purportedly makes the NEP the only viable option for Chinese vessels traveling to and from Europe (RIA Novosti, January 29, 2018). This idea was expressed by Putin in 2017, when he proposed to "merge the Silk Road with the NEP, to turn the latter into the former" (TASS, December 8, 2017);
- China will be unable to "sideline" Russia (Topwar.ru, January 30, 2018), given Russia's dominant position in the Arctic and the nature of relations between Beijing and Moscow.

However, these assumptions appear questionable at best:

First, the NEP still requires a staggering amount of infrastructure investment—realistic estimates run in the trillions of US dollars—before it can start yielding profits (Vz.ru, June 9, 2015). Moreover, the facts do not bear out the Russian conviction that Beijing can choose only between the NEP and the NWP, with no available alternative. As underscored by the Polar Research Institute of China (PRIC), "the basin of the Arctic Ocean closer to the North Pole is the most expeditious trade route from East Asia to Europe… [I]ts employment will relieve us from the necessity to cross the territorial waters of both Russia and Canada" (Ritmeurasia.org, August 8, 2018). Indeed, in summer of 2017, Chinese icebreaker *Snow Dragon* successfully tested a passage across the North Pole—the so-called "central seaway"—explicitly beyond both Russian and Canadian/US territorial waters (see EDM, October 3, 2017).

Second, Russia is not China's only potential partner in the Arctic. The PRC white paper clearly points to the fact that Chinese involvement there will be a multilateral, not a bilateral affair. Illustratively, Chinese initiatives since 2010 have evinced Beijing's interest in maintaining equally balanced ties with all Arctic governments (including, incidentally, South Korea and Japan for technological support) via the promotion of multi-national platforms for

dialogue and cooperation as well as through various treaties and think tanks (Eurasia.expert, February 26, 2018).

Third, China is likely to ultimately sideline Russia. As rightfully pointed out by Dr. Pavel Gudev, a senior research fellow at the Institute of World Economy and International Relations (IMEMO), China's strategy in the Arctic region is dictated by the desire to "downplay exclusivity in relations between Arctic nations" and "internationalize the Arctic as much as possible," which "runs counter to Russia's national interests in the region" (Globalaffairs.ru, September 14, 2018).

And finally, international competition by other Arctic players may further outflank Russian efforts. Notably, a joint Finnish-Norwegian initiative—a railroad from the Barents Sea port of Kirkenes, Norway, to Oulu, Finland, (on the Baltic Sea)—could serve as a direct multi-modal transit link for Chinese goods bound for the EU (E24.no, March 9, 2018; Julkaisut.liikennevirasto.fi, accessed November 3, 2018).

As China seeks to develop multiple resilient transit corridors to markets in the West, Russia believes that geography makes it an obligatory and unavoidable partner in any such efforts. Yet, increasingly, Russia is finding itself circumvented and outflanked; and it lacks the financial resources to rectify that situation.

Moscow as Beijing's 'Useful Partner' in the Arctic Region

20 May 2019

Speaking at the Belt and Road Forum, in Beijing (April 25–27), President Vladimir Putin stated that Russia is "considering a merger between the Northern Sea Route [the segment of the Northeast Passage running along the Russian coast] and the Chinese 'Maritime Silk Road' initiative," which will result in the "emergence of a global competitive route, connecting Northeast, East and Southeast Asia with Europe" (Vpk-news.ru, April 27, 2019). Several weeks earlier, during the fifth international "Arctic: Territory of Dialogue" forum (April 9–10), held in St. Petersburg, Putin stated that the authorities are working on a new framework to govern the development of the Russian Arctic until 2035. He stated that this economically depressed and infrastructure-poor region might experience an economic surge thanks to an influx of foreign financial capital, which could be attracted with the right mix of necessary legislative amendments (YouTube, April 9, 2019). In turn, Dmitry Kobylkin,

the minister of natural resources, hinted that Russia might soon claim an additional 1.2 million square kilometers of continental shelf in the High North and could, given the domestic lack of necessary technologies, consider allowing foreign companies to work in this area (Vpk-news.ru, April 23, 2019). Given the strained economic and political relations between Russia and the West, the main addressee of these calls for foreign investment is arguably China.

The narrative of a "privileged strategic partnership" with Beijing, actively promoted since 2014, has largely replaced previous, much less optimistic, Russian commentary on the subject (Sibirmi.ru, June 28, 2012). For instance, in his book *Battle for the Arctic* (2010), Artur Indzhiev openly stated that China was "one of those players primarily interested in promoting an idea that Russia has no resources and technologies to explore the Arctic… So [the Chinese] are dreaming about trilateral joint enterprises to extract our [Russian] natural resources with the application of [Chinese] financial capital and Western technologies…"

Unlike Russia, Norway, Finland, Sweden, Denmark, Iceland, Canada, and the United States, China is not an Arctic state and thus cannot be a full-fledged regional stakeholder (despite its observer status in the Arctic Council). As such, Beijing claims "[W]e are not meddling in [the Arctic], yet we will not stay aloof" (Polit-mir.ru, February 6, 2018). Chinese strategy in pursuing its key objective—gaining access to the Arctic's natural resources and pathways—is based on a combination of various elements, ranging from property/territory acquisition to cultural diplomacy, and bilateral deals. Chinese rhetoric, which has not always been soothing and conciliatory, has dramatically changed over time in response to growing concerns both in the West and Russia (Regnum, June 6, 2017).

Beijing's first attempt to use "economic leverage" as a lure in the Arctic was made in the mid-2000s, when Chinese billionaire Huang Nubo expressed willingness to acquire nearly 300 square kilometers in northern Iceland to build "golf courses" (Komsomolskaya Pravda, August 30, 2011), and he later attempted to purchase a similarly large plot in tiny Kirkenes, in the Norwegian Svalbard archipelago (Barents Observer, May 23, 2014). Moreover, in 2016, Chinese businessmen tried to buy a former Danish military base (closed down in 2014), causing alarm among Western governments (Gazetaprotestant.ru, February 7, 2018). The growing concerns in European and North American capitals forced Beijing to reconsider its strategy. Over the past decade, Chinese businessmen/entrepreneurs, diplomats, and politicians have paid multiple visits to Denmark, Sweden, Iceland (Nord-news.ru, October 2, 2012), and Finland, offering exceptionally lucrative business deals. Nevertheless, local political

considerations and the North Atlantic Treaty Organization's (NATO) own growing focus on the Arctic reduced China's room for maneuver in the region.

Russia, on the other hand, presents a different case: its ongoing confrontation with the West, lack of economic resources and Moscow's embrace of the "turn to the East" policy (see EDM, December 14, 2018) have created strong incentives to pursue Sino-Russian cooperation in the Arctic. That said, despite the high hopes Russia has pinned on China, the reality paints a somewhat less rosy picture. According to Andrey Ostrovskii, the deputy director of the Institute of the Far East of the Russian Academy of Science, Russia is increasingly turning into a mere source of raw materials for China: today, 85 percent of China-bound Russian exports are mostly unprocessed natural resources. Ostrovskii sees the Chinese-Russian economic partnership as "somewhat odd": despite visible growth (currently $108 billion), bilateral trade is lower than China's trade balance with Vietnam ($148 billion), even though "[Russo-Chinese] political relations are said to be much better than between [China] and Vietnam." Ostrovskii has also expressed a great deal of scepticism about Russian-Chinese partnership in the Arctic, which will require "huge financial expenditures" that could be "split 50/50 […] but Russia has no money for this" (Svpressa.ru, April 27, 2019). Indeed, despite a great deal of hype (especially from the Russian side), the much-celebrated Yamal liquefied natural gas (LNG) plant (Sabetta, the Yamal Peninsula) has attracted waves of criticism over the last few years. The project has been panned as unprofitable (Vedomosti, Aril 8, 2019) and for allegedly serving the interests of foreign, not domestic enterprises (RBC, December 11, 2017; Komsomolskaya Pravda, December 11, 2018).

Meanwhile, some Russian experts have begun to express concern that China might (in the future) be willing to establish military bases of its own along transit corridors built as part of its ambitious Belt and Road Initiative. Indeed, a Chinese military outpost appeared several years ago in Djibouti (as part of the prospective maritime route of the Silk Road). According to Russian military expert Vasily Kashin, the Djibouti base "should be seen in the context of Chinese growing naval-military presence in the Indian Ocean and the Mediterranean Sea, suggesting that the role of China in global and regional security will be changing" (Nezavisimaya Gazeta, May 3, 2019). The Arctic region should be looked at in the same context—i.e., Beijing's interest in the Northern Sea Route and its role in linking China with the European market.

It seems that while Russia is trying to justify its "turn to the East" policy course, Beijing is using Russia to achieve its own (and, from Moscow's point of view, presumably contradictory) strategic objective—becoming a stakeholder in the Arctic region.

Russian-Chinese Military Alliance in the Arctic: An (Im)Possible Prospect?

31 May 2019

Speaking at the 11th Arctic Council Ministerial meeting in Rovaniemi, Finland, on May 7, US Secretary of State Michael Pompeo warned that the pattern of aggressive Chinese behavior in other regions may give important indications to how China will act in the Arctic (Rambler.ru, May 8, 2019). This statement was met with stern criticism in Beijing: "[The] militarization of the Arctic is beyond Chinese interests […] these accusations can only be seen as speculation and Pompeo's personal theories," noted scholar Guo Peicin, adding, "Russia has enough capabilities to provide security to the Arctic" and "Russia needs Chinese participation for the development of its Arctic zone and the Northeast Passage [NEP]" (RIA Novosti, May 7, 2019).

As understood by Russian analysts, China's current approach to the Arctic region is shaped by three main objectives (Russiancouncil.ru, October 12, 2016):

1. The internationalization of the Arctic region as "a common legacy of humankind," meaning that China has the same rights as any other state;
2. China as a near-Arctic state—a claim reflected in a white paper titled "China's Arctic Policy" (see EDM, November 7, 2018)—which asserts special rights for Beijing in the Arctic region; and
3. The "Polar Silk Road" concept.

At present, Chinese strategic interest in the Arctic is primarily driven by geo-economic issues: predominantly, natural gas (the region has approximately 30 percent of global deposits, according to estimates) and new transportation capabilities (potentially allowing Chinese goods to reach European markets twice as fast as via the Suez Canal) (Vpoanalytics.com, July 10, 2018). However, Chinese ambitions remain profoundly constrained by two factors. First, China is not an Arctic-contiguous state, which bars Beijing from full participation in various Arctic-related decision-making process, including deliberations of the Arctic Council (although China is an "Observer" there since 2013). This forces China to rely on "soft power" in dealing with the other Arctic countries. Between 1997 and 2017, China carried out eight Arctic expeditions and expanded its involvement via the China-Nordic Arctic Research Center. Also during the same period, it proliferated ties with

Denmark, Sweden, Norway, Finland and Iceland through diplomatic, economic and scientific channels. In 2013, Beijing was granted Observer status at the Arctic Council and became a member of the Arctic Circle organization.

At some point, however, Europeans started to feel ill at ease with this Chinese activism. For instance, Norway backed away from the idea of a Free Trade Zone with China, whereas the autonomous government of Greenland blocked further Chinese extraction of rare-earth metals on the island. Similarly, Chinese "concerns" for the Arctic ecosystem came under attack on the basis of Beijing's predatory policies in Africa, where Chinese companies' nearly non-existent attention to local environmental conditions led to serious ecological problems (Inafran.ru, accessed May 26, 2019). Whereas the United States and Canada have themselves categorically rejected any calls for changes to China's current legal status in the region. Of the Arctic powers, only Russia has taken a somewhat more flexible stance, motivated both by the influence of Chinese economic stimuli (Beijing promised to invest up to $10 billion in the development of the Russian Arctic) (Vedomosti, June 8, 2018) and Moscow's continued confrontation with the West. Yet, Russia does not have the ability to singlehandedly change China's legal status in the Arctic region.

The second factor constricting Beijing's objectives in the Arctic is Chinese military limitations. Even if the NEP maritime route works according to Chinese (and Russian) plans, navigation through this northern passage will nevertheless require military protection to ensure full security of the transiting cargo vessels. For now, mainstream Russian experts consider Chinese military capabilities in the Arctic to be minimal at best (Newizv.ru, January 22, 2019); China will not be able to operate in the area without Russia's explicit approval (see EDM, March 14, April 15, May 14, 30 2019). Thus, to secure steady traffic via this route, China will have to closely cooperate with Russia, which has been heavily investing in weaponry and capabilities specifically designed for Arctic conditions. One such weapons system—the Project 23550 patrol ship *Ivan Papanin* (due by 2023)—has no analogues. The vessel, designed to guard Russian territorial waters and its exclusive economic zone (EEZ) in the Arctic, will be armed with a 100-milimeter gun and 3M-54 Kalibr anti-ship missiles (Nevskii-bastion.ru, January 21, 2016).

A recent article published by Finland's major information outlet *Ilta-Sanomat* argues that a Chinese-Russian alliance in the Polar region could take the form of a binary military (Russia)–economic (China) deal, since "China can do nothing until it reaches an agreement with Russia." The article goes on to ask "why the US is doing everything it can to encourage its adversaries to join their efforts?" (Eurotopics.net, May 8, 2019). In a similar vein, authoritative Russian sources have claimed that only by first reaching a broad agreement and

concluding an alliance with Russia will China be able to become a new leader in the Arctic region. This development will, in turn, "dismantle the US from its global pedestal [at the top]" (Lenta.ru, May 8, 2019).

Russian military historian and war expert Alexander Shirokorad presents a particularly ominous prospect regarding the formation of a Chinese-Russian "alliance" in the Arctic region. Namely, he writes that, currently, China has six Type 094 submarines, each of which is capable of carrying twelve JL-2 second-generation intercontinental-range ballistic missile with a striking range of 8,000–9,000 kilometers. Additionally, China is said to have launched construction of even more advanced Type 096 submarines (projected start of exploitation: 2022–2023), which will be equipped with 24 JL-3 missiles. Therefore, Shirokorad argues, by entering the Arctic region, "the Chinese are killing two birds with one stone: aside from a dramatic increase in [the submarines'] invincibility [while operating in remote Arctic waters and beneath the Polar ice sheet], the distance to US-based strategic targets will decrease exponentially. For example, the distance from the Chinese coastline near Shanghai to New York is 11,800 kilometers, whereas from the North Pole it is 3,400 kilometers, which is 3.5 times less." He further stated that, "with Russia's consent, using, say, scientific exploration of the Arctic as a smokescreen, the Chinese could create bases and necessary facilities in our [Russian] Arctic… We [Russia] will not be endangered by such a move of the Chinese" (Nezavisimaya Gazeta, May 17, 2019).

For now, none of these fanciful ideas have materialized yet; though, that does not mean they will remain in the realm of the hypothetical forever.

Culture, Money, Propaganda: Russia's Approach Toward Greenland and the Faroe Islands

20 June 2019

To carry out its grand strategy in the Arctic, Russia relies on eroding the positions of other regional players. Denmark, a fellow member of the Arctic Council, is seen by Moscow as a relatively easy target since Copenhagen can only remain an official stakeholder as long as it maintains control over Greenland and the Faroe Islands (FI). In his 2010 book, *Battle for the Arctic*, Artur Indzhiev argues that "Greenland and the Faroe Islands could scramble the West's plans in its struggle for Arctic resources… This could be used by

Russia to obtain possession of Arctic treasures and deliver a blow to the unity of NATO [the North Atlantic Treaty Organization—of which Denmark is a member]…" Specifically he recommends that "Russia has to use the mounting tensions [between Denmark and its Arctic possessions] for its [Moscow's] own benefit… [by weakening] the Danish claims. Second, we will pay them [the West] back in kind for their anti-Russian policy and support of the Chechen separatists [sic]."

Russia's actual policies vis-à-vis Greenland and the Faroe Island are, in fact, more elaborate and far-reaching than even Indzhiev's recommendations. And they are presently based on the following three pillars:

- The first is public diplomacy, with the Russian Orthodox Church (ROC) having become one of the key actors on Moscow's behalf. Illustratively, on June 1-4, 2019, ROC Metropolitan Anthony (head of the Diocese of Korsun and the Patriarchal Exarchate in Western Europe) visited the Faroe Islands with the explicit blessing of Patriarch Kirill. There, Anthony met with the mayor of Runavík, Tórbjørn Jacobsen, and with Arni Dam, the honorary consul of Russia to the FI. According to the ROC, one of the main subjects discussed pertained to the possibility of opening the first parish of the Moscow Patriarchate on these Arctic islands (Patriarchia.ru, June 4, 2019). Aside from the Orthodox Church, Russia's efforts are also backed by various cultural and scientific initiatives. Between May 22 and 23, the A. M. Gorky Institute of World Literature, the M. I. Rudomino All-Russian State Library for Foreign Literature, as well as the Russia-Iceland Friendship Society (supported from Moscow by the Embassy of Iceland and the Representation of the Faroe Islands) held a joint conference in the Russian capital. The event, entitled "Interconnection of Cultures in the Arctic Region: Russia–Iceland–the FI (Literature, Language, Culture)," put special emphasis on political developments in the region. Importantly, the conference program underscored that "the Icelanders and the Faroese are Indigenous populations of the Arctic region," thus implying that Danish ties to the region are not inherent (Imli.ru, accessed June 5, 2019).
- The second pillar of Russian policy involves building up economic leverage. Ever since Europe and the United States introduced sanctions against Russia in 2014 (for the latter's invasion of Ukraine and annexation of Crimea), Moscow has been searching for a "weak spot" in the Western alliance. The fact that the autonomous government of the FI not only refused to join Western efforts, but actually intensified economic cooperation with Moscow, invigorated the Russian side

(Regnum, March 23, 2017). And this economic cooperation was further buttressed in March 2015 with the creation of the above-mentioned Faroe Islands diplomatic office in Moscow and Arni Dam later becoming Russia's honorary consul to the FI (Government.fo, Faroeagency.fo, accessed June 6, 2019). The Russian media, in turn, has held up the FI as an example of "non-alignment with anti-Russian sanctions [being] a path to economic growth." For instance, in an interview with *Radio Sputnik* last year, Russian political scientist Aleksey Zudin insisted, "The Faroe Islands in this case are a clear embodiment of what countries that supported sanctions lose. …those [countries] that imposed sanctions [were] 'punished.' " For instance, a quarter of the FI's seafood exports (increased to $383 million since 2013) now goes to Russia, which has substituted EU producers (Radio Sputnik, December 29, 2018).

– The final element of the Russian policy toward Greenland and the FI is anti-Danish and anti-American information operations (IO). Russia actively uses economic arguments as a means to undermine the relationships between the FI and Greenland on the one hand and Denmark and the Western alliance on the other. Namely, Moscow argues that with its population of approximately 50,000 people, the FI are heavily dependent on fisheries (around 95 percent of all exports), and their "annual subsidy annually received from Copenhagen is not nearly enough to justify Denmark's interference in local affairs" (Sputnik News.com, December 29, 2019).

In dealing with Greenland, Russian IOs are even more elaborate, targeting not only Denmark but US-Danish relations as well. The main argument put forward by Russian media is that the US presence in Greenland (and Copenhagen's acquiescence to it) are ruining the local economy and environment. Russian outlets thus extensively quote local activists and opposition forces, such as lawmaker Sara Olsvig, who promote this narrative (Sputnik News, September 26, 2016). Pro-Kremlin media sources also encourage the Greenland authorities to assume a tougher stance toward Copenhagen and push it to "denounce the treaty of 1951, which allowed Washington to establish 33 military and satellite bases in Greenland… including the Camp Century military scientific research base… that are ruining the local environment" (RT, November 26, 2016). Even more pointedly, a *Regnum* news story from 2016 characterized Greenland as the US's "trash bin" (Regnum, October 18, 2016). Russian media carefully selects opinions from local public figures that are in line with this argument. For example,

Vittus Qujaukitsoq (a former Greenland minister of finance, minerals, and of foreign affairs) was quoted by *Sputnik News* saying, "For 75 years, the Americans' presence has been nothing but trouble, nothing but environmental pollution, and it has created a crisis of trust between Greenland and Denmark." Thus, he argued, the autonomous government in Nuuk would like to have more direct say over Greenland's fishing industry (90 percent of exports), which, if taken under the Arctic island's full control (along with other natural resources), would easily replace the subsidy of $550 million it receives every year from the Danish budget (Sputnik News, December 14, 2016).

As Indziev notes in his 2010 book (see above), "When the population of Greenland starts pursuing a more independent policy, it will rid itself of American military bases… What we need to do, is to help them in their struggle for independence… which could trigger similar sentiments in Alaska and Canada. Russia should understand one thing—the fight against NATO's expansion should not be fought on our borders, but on the territory of the Alliance."

Eastern Economic Forum Confirms Strong Foreign Interest in Russian Arctic Territories

12 September 2019

Russia declared the fifth Eastern Economic Forum (EEF), hosted in Vladivostok, on September 4-6, to have been the most "fruitful" since the event's creation: reportedly, 270 contracts were signed with foreign investors and 8,500 guests (from 65 countries, representing 440 global companies/businesses) attended the forum. Of these visitors, special attention should be paid to the leaders of Japan (Shinzō Abe), Malaysia (Mahathir Mohamad), Mongolia (Khaltmaagiin Battulga), and India (Narendra Modi, who visited the EEF for the first time) (Kommersant, September 6, 2019). Among the major issues raised at the event, significant consideration was paid to the Arctic region and economic projects in the Russian High North. In his speech, Vladimir Putin highlighted that Russia's Far East and the Arctic region, received $9.27 billion in investment, which has "put into operation 242 new plants [and] created more than 39,000 jobs" (TASS, September 5, 2019). Conspicuously absent from EEF 2019—in contrast to last year's event—was a particularly large delegation from China (see EDM, September 9, 2019); although it was explicitly pointed out that China remains the main foreign investor in Russia's High North and Far East (Rossyiskaya Gazeta, September

6, 2019). Nonetheless, the noticeable dearth of Chinese guests in Vladivostok encourages a closer look at the other foreign bidders apparently ready to join economic projects in the Far East and, most crucially, the Arctic region.

During last week's Eastern Economic Forum, India expressed the greatest interest in the Arctic, as noted by Boris Volkhonsky, from the Institute of Asian and African Countries at Lomonosov Moscow State University. The expert argued, "For India, one of the world's largest consumers of hydrocarbons […] the issue of diversification of supplies is very important," meaning the Russian Arctic shelf, which is endowed with petroleum and natural gas reserves, acquires a qualitatively new role in New Delhi's eyes. Volkhonsky also suggested that the pursuit of opportunities in the Arctic region influenced India's decision to become an observer in the Arctic Council "and, in general, [India] pays increasingly greater attention to the development of its projects in the Arctic region" (RT, September 3, 2019).

Indeed, the crisis in Venezuela and tensions over Iran have dramatically influenced the Indian economy, whose growth rate is currently 3 percent lower now than it was a year before (Newsworldcenter.ru, September 8, 2019). During the forum in Vladivostok, the Indian delegation voiced its readiness to open "an unprecedented special credit line worth $1 billion" to invest in the Russian Far East. Above all, Indian companies have reiterated their readiness to "increase the supply of Russian liquefied natural gas (LNG), in particular […] from future Novatek projects—Arctic LNG-2 and Arctic LNG-3." This was jointly confirmed by Russia's Minister of Energy Alexander Novak and India's Minister of Petroleum and Natural Gas Dharmendra Pradhan (TASS, August 31, 2019).

Aside from India, South Korea demonstrated interest in developing projects on the Arctic coastal shelf. Specifically, according to Deputy Prime Minister and Presidential Envoy to the Far Eastern Federal District Yuri Trutnev, Russia's Far East Investment and Export Agency and Korea's gas corporation, Kogas, reached an agreement to undertake potential joint projects in the High North, particularly in offshore operations (TASS, September 6, 2019).

Japan, for whom energy security is an integral element of maintaining national security, has also demonstrated a willingness to take part in some of these regional initiatives. For example, Japanese Mitsui Group (one of the world's largest corporate entities) restated its plans to participate in the Arctic LNG-2 project (set to commence in 2023), which, according to the Japanese side, will "ensure stable supplies of hydrocarbons to the Asian markets." Moreover, according to Leonid Mikhelson, the CEO of Novatek, Japanese

investors are ready to participate in the Arctic LNG-1 project, as well. In turn, the head of the Russian state-owned oil giant, Rosneft, Igor Sechin, assured that—aside from natural gas—Japanese enterprises are committed to invest large economic means in petroleum-related projects. All in all, 15 various prospective initiatives might include Japanese investors. The largest of these projects is the Vostok Oil complex, which will link the resource-endowed region of Krasnoyarsk Krai with the Northern Sea Route (*Sevmorput*, which skirts Russia's Arctic coast) (Kommersant, June 6, 2019).

Australia, too, showed its (limited, yet already visible) interest in investing in the Russian Arctic. Namely, Tigers Realm Coal, Ltd. (headquartered in Melbourne) pledged to invest in infrastructure in the Chukotka Autonomous Okrug. During the economic forum, "a trilateral cooperation agreement between Chukotka's government, Tigers Realm Coal, Ltd., and the Agency for Development of the Far East and Arctic" was signed. The agreement stipulates that "The company [Tigers Realm Coal] will eye renovation of the Beringovsky airport, will prepare a road between the seaport to the Beringovsky coal basin, [and] will build power-generating facilities at the coal field. A separate provision refers to broadband Internet access via a projected fiber-optic line to Chukotka." Chukotka's governor, Roman Kopin, corroborated this information and expressed his hopes that the involvement of the Australian side will not only bring new financial opportunities and Western experience and technologies but also make "the economy and life in the region more sustainable" (TASS, September 5, 2019).

Meanwhile, the Russian Far East looks poised to soon benefit from visible legal and legislative changes. Namely, the head of Sakha Republic (Yakutia), Aisen Nikolaev, hinted that by the end of 2019, the republic could receive a new strategy for the Arctic zone, which could create new opportunities for foreign investments (Rossyiskaya Gazeta, September 6, 2019).

Commenting on the results of the fifth Eastern Economic Forum, Russian conservative media outlets claimed that Russia has not only been able to withstand the "Western-inspired 'hybrid war' [sic] but has also *de facto* initiated a process of shaping the world's current political agenda" (Zavtra.ru, September 8, 2019). Nevertheless, prior to the forum, Dmitry Kobylkin, Russia's minister of natural resources and ecology, warned against such excessive premature optimism. He noted that the country's own economic capabilities, as well as current oil prices, might discourage potential foreign investors from large investments in the future, since "everything that pertains to the Arctic is very expensive" (TASS, September 3, 2019). For now, however, EEF 2019 can probably be seen as at least a tactical victory for the Kremlin.

Russia's Arctic Agenda and the Role of Canada

15 April 2020

New research (which includes two articles written by Russian experts) published by the prominent think tank the Canadian Global Affairs Institute has spurred interest and hopes in Russia's expert community about the possibility of normalizing ties between Russia and Canada through cooperation in the Arctic region (Russiancouncil.ru, April 3; Cgai.ca, accessed April 12, 2020). This cooperation could potentially be premised on two main pillars.

First would be the mutual rejection of "internationalization" of the Arctic. Both Canada and Russia—for whom the Arctic region is an issue of foreign policy (Russiancouncil.ru, July 1, 2019) —feel ill at ease with the increasing involvement of non-Arctic states in the region, particularly, China. Russian information outlets noted the level of distress when the Chinese icebreaker *Snow Dragon* completed its first-ever voyage through the Arctic Ocean off the coast of Canada, accumulating "a wealth of experience for Chinese ships going through the Northwest Passage in the future" (Regnum, September 17, 2017; see EDM, October 3, 2017).

Second, Moscow seeks to exploit regional frictions and disagreements between Canada and the United States (Pentagonus.ru, accessed April 10, 2020) to boost its own position/influence in the region. Russian sources recall the year 2010, when then–Secretary of State Hillary Clinton publicly challenged Canada's stance on the status of the Northwest Passage, which Ottawa considers part of Canadian territory (Foreignpolicy.ru, February 20, 2015). In the past, both the Russian tone and general assessment of Canada's role in the Arctic were denigrating, claiming Ottawa lacked agency. Perhaps the clearest expression of this sentiment came from the director of the Institute of Strategic Planning and Forecasting, Professor Alexander Gusev, who, in 2015, declared that "they [Canada] are only performing the role assigned by the US" (Odnako.org, March 30, 2015). After 2016, however, Russia dramatically changed its coverage of the US-Canadian dispute in the Arctic region, with Moscow increasingly employing reconciliatory rhetoric toward Ottawa and employing ever more assertive public diplomacy tools.

One notable example of this new approach is Moscow's reliance on pro-Russian experts based in Canada. In 2016, speaking in Sochi, on the margins of that year's Valdai Club session, Professor Piotr Dutkiewicz (a former director of the Institute of European and Russian Studies at Carleton University, in Ottawa) stated, "[T]his area [the Arctic region] will be the first one where we

will feel real changes in our relations… Arctic cooperation will become the focal point thanks to which our two sides [Canada and Russia] will be extending their areas of collaboration" (Izvestia, October 28, 2016). Moreover, as repeatedly stated by Federation Council member Igor Chernyshenko (a senator from Murmansk Oblast), the Arctic region could become a "bridge," helping Canada and Russia overcome the existing difficulties in their bilateral ties. Last May, he announced, "[W]e invited them [the Canadian side] to return to a dialogue. We proposed holding a conference between Russian and Canadian universities in northwest Russia, maybe in Murmansk Oblast. They supported this idea" (TASS, May 25, 2019). Notably, the last such event was held in November 2014, in Canada, hosted by the aforementioned Carleton University.

In addition to trying to foster bilateral academic ties, Russia's outreach to Canada on Arctic issues involves sustained information campaigns via *RT* and similar multi-language information outlets with international reach. In particular, Russian propaganda narratives routinely overemphasize the extent of current US-Canadian disagreements in the Arctic. At the same time, foreign-audience-facing Kremlin-linked media outlets underscore the allegedly negative role of then-President Donald Trump (and his policies toward Canada) in aggravating the existing disputes. *RT* widely claimed that "after Trump's inauguration, he began pressing Ottawa on economic issues and extended claims on Canadian possessions in the Arctic region." It also highlighted then-US Secretary of State Michael Pompeo's remarks suggesting that "Russia is not the only country with illegitimate claims [in the Arctic] …the US has a lasting dispute with Canada over its claims on sovereignty over the Northwest Passage. Finally, *RT*'s propaganda reporting also relied on a statement by Pavel Feldman, the deputy director of the Institute for Strategic Studies and Forecasts at the Moscow-based Peoples' Friendship University of Russia (RUDN). Feldman is quoted as saying, "[T]he US and Canada carry on a heated competition over the Arctic region; yet, publicly, these countries are trying to position themselves as partners" (RT, October 16, 2019).

In recent months, this increasing Russian attention to Canada as an Arctic power and a key element of regional stability and order has started to be expressed at the highest levels in Moscow. Poignantly, President Vladimir Putin declared in a public address at the start of this year that Russia "is open to cooperation with Canada on the basis of mutual respect and consideration of each other's interest." Putin added, "[O]ur countries are neighbors in the Arctic region and bear joint responsibility for the development of this vast region, for preservation of the traditional lifestyle of its native populations and the careful treatment of its brittle ecosystem" (Vzglyad, February 5, 2020).

Such reconciliatory rhetoric should, however, be taken with a heavy dose of caution in Ottawa: from the earliest days of the Soviet Union, Moscow's stance on the Arctic region has been deliberately flexible and tightly premised on being able to demonstrate its military potential in the High North and to intimidate other regional players. The Russian Federation has increasingly undertaken the same policy course since 2014 (see EDM, April 9, 2020). Incidentally, on January 31, 2020, two Russian Tu-160 heavy strategic bombers approached Canadian airspace—maneuvers that the Russian Ministry of Defense explained away as "planned exercises" (Vpk.name, February 3, 2020). It is worth pointing out that the US North American Aerospace Defense Command (NORAD) is unable to identify and track Russian bombers of this type until they are close enough to launch missiles at targets on the continent.

Furthermore, it is worth keeping in mind that, in fact, Russia (not the US) is Canada's direct competitor when it comes to territorial claims in the Arctic (the Lomonosov Ridge)—a point explicitly corroborated by Russia's Arktika 2007 expedition, which explored this disputed undersea area and famously planted a Russian flag at the North Pole, on the bottom of the Arctic Ocean (Izvestia, August 3, 2007).

Lastly, it may be worth keeping an eye on one of the proposed amendments (soon to be officially adopted) to the Russian Constitution on the "prohibition of actions related to the alienation of Russian territory, or the propaganda thereof" (TASS, February 25, 2020). This amendment—reportedly drafted with predominantly Kaliningrad and Vladivostok in mind—is likely to also be applied to some Arctic territories that are of equally strategic interest to Canada.

Looking Beyond China: Asian Actors in the Russian Arctic (Part One)

7 May 2020

Among the non-Arctic states seeking partnership with Russia as a means to increase their presence in the northern polar region, China has become by far the most visible player (see EDM, May 20, 2019). Yet, other emerging actors—India and Japan—should be noted.

On January 14, Russian Foreign Minister Sergei Lavrov claimed that New Delhi and Moscow are tightening cooperation in the development of Arctic-

based oil and natural gas projects (TASS, January 14, 2020). This information was confirmed by Indian Minister of Petroleum and Natural Gas Dharmendra Pradhan (Rambler.ru, January 15, 2020). Following these statements, Russian state-owned petroleum giant, Rosneft, concluded an agreement with Indian Oil, envisaging the latter's annual procurement of two million tons of crude from the Russian High North. Other Indian energy firms, including Hindustan Petroleum and Bharat Petroleum, were also reportedly negotiating contracts with Rosneft (Oilcapital.ru, January 22, 2020).

More far-reaching news arrived on February 5, when, following negotiations in New Delhi with Rosneft CEO Igor Sechin, Minister Pradhan announced that Indian companies would be joining the Vostok Oil extraction project (Interfax, January 13, 2020). Expected to begin operations in 2024 Vostok Oil (according to Rosneft) will be pivotal in transforming the Russian Arctic by contributing to the development of 15 new industry towns in the region, 2 airports and a seaport, as well creating at least 100,000 new jobs (Kremlin.ru, February 11, 2020). The main strategic advantage of this project is its geographic proximity to the Northern Sea Route (NSR)—Russia's much-hyped east-west maritime transportation corridor (under continued development), which hugs the country's Arctic coast and is anticipated to become an engine of Russian economic growth for decades to come (RIA Novosti, January 15, 2020).

The involvement of India in Vostok Oil was motivated by two important aspects. First, despite its geographic remoteness from the region, India is gradually becoming an important Arctic player in its own right. The first signs of interest emerged between 2007 and 2008, when India conducted its first scientific expedition to the Arctic and then established the Himadri Station at Svalbard. India managed to secure Observer status in the Arctic Council (AC) on May 12, 2013, an event celebrated as New Delhi's "Arctic victory." And in 2015, during his visit to Moscow, Indian Prime Minister Narendra Modi noted the strategic importance of India's presence in the AC, acknowledging the "high cooperative potential of Indian-Russian ties in the Arctic region" (Kremlin.ru, December 24, 2015). As a non-Arctic state—and thus unable to participate in local affairs unilaterally—but strategically interested in cultivating a regional presence, India will have to closely cooperate with Russia. Its involvement in the Vostok Oil project appears to underscore this approach.

Second, Indian interest in the Arctic region—initially limited to pursuing scientific research—is progressively acquiring visible geo-economic features. This trend is inseparable from Modi's strategic aim of achieving energy security for India through the diversification of energy suppliers. Russia, with its vast Arctic resources, is deemed one of the main elements of this Indian energy

strategy. It acquired concrete shape between 2014 and 2018, when Indian corporations, including ONGC Videsh, and the political leaderships of the two countries signed a series of agreements/memoranda pertaining to the intensification of their partnership in the Arctic region via cooperation on oil and gas projects there (Goarctic.ru, February 28, 2020). The fifth Eastern Economic Forum (EEF), hosted in Vladivostok on September 4–6, 2019, became an important milestone, when the Russian side specifically "invited" the Indians to take part in its Arctic projects (see EDM, September 12, 2019). Importantly, several days prior to the summit, Pradhan argued that India is interested in establishing an "energy bridge" with Russia—an initiative premised on three main types of energy resources to be imported from Russia (1prime.ru, September 3, 2019):

– Oil (primarily concerned with Vankor-based oil deposits), which is to be managed by such Indian corporations as ONGC, Oil India, Indian Oil Corporation as well as Bharat Petroresources.

– Liquefied natural gas (LNG—from Yamal-based deposits and the Arctic LNG-2 project), whose consumption in India has increased exponentially. Incidentally, Indian scholars have argued that for India to optimize its LNG consumption and import scheme, the country should study Chinese and German cooperation with Russia (J. Bhagwat, "Rossiya i India v Arktike: Neobkhodimost Bolshey Sinergii," *Arctica i Sever*, 2020, No 38, pp. 73–90).

– Coal (a strategically important commodity for the Indian steel industry), whose imports are to be managed by such Indian corporations as Tata, SAIL, NMDC and Jindal.

However, this excessively promising picture needs to be supplemented by several factors that could affect Russian-Indian cooperation in the High North going forward.

First is the sensitive issue of the "internationalization" of the Arctic. While Russia maintains that the Arctic must remain "for Arctic countries," India sees the region as a part of a global heritage (Roscongress.org, August 7, 2017). For Moscow, this narrative represents a strategic threat to its national interests.

Second is the "Chinese factor," premised on two pillars. On the one hand, India sees Chinese advancements into the region as a strategic threat: in addition to geo-economic and geopolitical calculations, growing Chinese activities there are likely to further pollute the Arctic and speed up adverse climactic changes with global repercussions that can be expected to have a detrimental effect on India. Moreover, India, which supports the denuclearization and demilitarization of the region, has serious concerns over potential Chinese attempts to increase its military involvement north of the

Arctic Circle ("Aziatskiye igroki w Arktike: interesy, vozmoznosti, perspektivy," *RIAC*, 2016). On the other hand, India feels ill at ease with the development of the Northern Sea Route, which could dramatically diminish the role of the Indian Ocean as a transportation artery between East and West, and at the same time redraw the balance of power between India and China. Namely, a year-round functional NSR with sufficient capacity will remove New Delhi's ostensible ability at present to (in case of a bilateral conflict) block vessels to and from China passing through the Indian Ocean and the Straits of Malacca carrying strategically important resources and raw materials (Yana Leksutina, "Kitay i India v Arktike: Interesy, Strategii Sotrudnichestva z Rossiyey," *Regionovedcheskiye Issledovaniya*, 2019, No. 4).

Finally, despite Indian involvement in Russian-backed Arctic projects, New Delhi does not share Moscow's utilitarian stance on the Arctic due to the former's potential ecological and climate concerns. Furthermore, inexpensive oil, which seems to be the new long-term reality, could make India more cautious about investing in expensive Arctic oil or LNG projects.

Looking Beyond China: Asian Actors in the Russian Arctic (Part Two)

14 May 2020

While China remains the most active player among non-Arctic nations, other Asian actors, such as India (see Part One in EDM, May 7, 2020) and Japan (the world`s third largest economy) are playing an increasingly visible role in this geo-economically and geopolitically vital region. In an article published by *Inosmi.ru* at the start of this year, the director of the Hokkaido Research Institute for the Twenty-First Century, Eisaku Nakamura, argues that Japan needs to increase its presence in the Arctic region by strengthening cooperation with Russia. Specifically, he notes that this could be achieved by building stronger subnational ties between Japanese Hokkaido and Russia`s Kamchatka Peninsula. If successful, this initiative could mark "the first year of [Japan's] great Arctic path" (Inosmi.ru, January 22, 2020).

Indeed, the past decade was marked by Japan`s active promotion of an Arctic agenda. In 2013, the country was granted permanent observer status in the Arctic Council (AC); whereas, in 2015, Tokyo released a government policy document articulating Japan's objective of achieving a leading role in the sustainable development of the Arctic region (Cao.go.jp, October 16, 2015).

The "Arctic Policy of Japan" explicitly points to Tokyo's determination to use its scientific and technological potential to transform the country into a non-Arctic power. This, however, will remain unachievable without close cooperation with the Arctic states themselves, and Russia in particular.

Japan's interest in the Artic is effectively inseparable from Russia, premised on the following four main pillars:

The first issue of importance for Japan is realizing fast, inexpensive and safe transportation of goods and products between East Asia and Europe via through the Northeast Passage (NEP)—a maritime route that crosses the Bering Strait and importantly hugs Russia's Arctic coast, a segment under Moscow's control known as the Northern Sea Route (NSR). Japanese estimates suggest that the NEP could eventually secure up to 40 percent of the country's cargo shipments to the European Union (Nezavisimaya Gazeta, March 1, 2016). In late 2019, the Japanese business sector first floated the idea to connect the Japanese city of Tomakomai and Kunashir Island with Kamchatka-based Russian port(s), thereby directly linking Japan to the NEP (Inosmi.ru, December 14, 2019).

The second factor guiding Tokyo and its need to cooperate with Moscow is energy security and diversification of energy supply routes—an issue that acquired particular resonance domestically after the 2012 Fukushima nuclear disaster. An issue of special interest is liquefied natural gas (LNG) (Bfm.ru, January 21, 2019). According to former Russian minister for economic development Maksim Oreshkin, Japan has, therefore, invested approximately $5 billion in Russia's Arctic LNG-2 project (located on the Gydan Peninsula, in northern Siberia). On July 22, 2019, the Russian side confirmed that approximately a 10 percent share of the project was acquired by a Japanese consortium of Mitsui & Co. and the Japan Oil, Gas and Metals National Corporation (JOGMEC). Russian officials, however, stated that the above-indicated sum does not fully reflect the real picture: Japanese investments in the Russian energy sector are much larger (around $15 billion) due to the fact that "[Japanese] investments are coming via third countries… [T]hat is why they are not reflected as 'investments' in official documents" (Econominews.ru, September 7, 2019).

Another important milestone in Japan's involvement in LNG projects in the Russian High North is the prospective creation of a joint venture (with headquarters in Singapore) between Novatek (with a 49 percent share) and Japanese Saibu Gas (51 percent) that envisages shared use of an LNG terminal in Kitakyushu, Japan that would store and subsequently redistribute LNG coming from Russia's Arctic. Russian sources have argued that the terminal will

ensure more flexibility in working with potential LNG buyers (Ngv.ru, March 6, 2020). A second major aspect of Japan's energy security push is its demand for oil and oil products. To address this issue, the Japanese side (represented by Inpex, Mitsubishi, Itochu, Mitsui & Co. and Marubeni) conducted negotiations with the CEO of Rosneft, Igor Sechin, who invited the Japanese corporations to take part in the Vostok Oil extraction project (expected to begin operations in 2024). The Russian side argued that participation in the project could help Japan diversify its energy supplies from the unstable Middle East, which is currently the source of 90 percent of all Japanese oil imports (Oilcapital.ru, December 11, 2019).

The third factor behind Tokyo's outreach to Moscow in the Arctic is the two sides' long-time cooperation on regional science and research projects in areas such as climatology, meteorology, ecology and seismology. The two main Arctic research facilities used by Japanese scientists are both on Russian territory: the experimental forest station "Spasskaya Pad" (Central Yakutia region) and Cape Baranov (Severnaya Zemlya) station (Bigasia.ru, August 22, 2017).

The fourth motivating factor for Japan is national security concern over China's regional aspirations, which threaten to materialize as growing militarization of the Arctic (Hideki Asari. Recommendations for Japan's Diplomacy "Arctic Governance and Japan's Diplomatic Strategy," *Projects,* 2012).

So while Japan is unlikely to succeed in its Arctic projects without close cooperation with Russia, certain realities might diminish the effectiveness of their regional cooperation. First of all, Japanese businesses retain certain doubts about the viability of this relationship. Japanese sources have pointed to the "bitter experience" of dealing with Rosneft in the past, when, last year, the Russian side opted for Swiss (Glencore) and Qatari (Qatar Investment Authority) investors over any Japanese partners (Inosmi.ru, April 21, 2019). In addition, the seemingly long-term plummeting of oil and gas prices will profoundly decrease the commercial attractiveness of Arctic-based projects.

Second of all, the NEP is itself experiencing difficulties. Russian sources have underscored multiple complaints coming from the Japanese side related to high transit tariffs, inflexible regulations, and the still-unsatisfactory state of Russian Arctic infrastructure—discouraging Japanese investors (D. Stretsov, "Politika Japonii w Arktike," *Sravnitelnaja Politika*, 2017). And while regulatory/administrative obstacles can be addressed relatively easily, physical infrastructure improvements will require massive economic investments, which Russia does not have, and which foreign players are unlikely to provide given Western sanctions and current global economic trends.

Finally, Japanese energy regulations currently prevent Russia from supplying more than 10 percent of the East Asian country's gas. This means that Japanese investments in Russia's Arctic projects will be limited (Rueconomics.ru, December 18, 2019).

Japan will almost certainly continue developing its ties with Russia in the Arctic. But expecting any major breakthroughs in this relationship is hardly likely at this stage.

The Asian Tigers in Russia's Arctic: Unforeseen Favorites?

26 May 2020

A number of countries in the Asia-Pacific region are looking at the Arctic as a potential engine to drive dramatic transformations in their most strategically important economic sectors, including energy, transportation, as well as research and development (Pro-arctic.ru, April 24, 2020). Aside from the three Asian giants—China, India and Japan (see EDM, May 7, 14, 2020)—the Arctic region has also attracted the attention of smaller, though also influential players: notably, the four so-called Asian Tigers, Hong Kong, Singapore, South Korea and Taiwan. Of those four, Singapore and South Korea have shown particularly keen interest in pursuing regional projects and initiatives. But despite some similarities, the pair's approaches and objectives vary between them.

As noted in 2013 by Sam Tan, the senior parliamentary secretary at the Singaporean Ministry of Foreign Affairs, his island country, unlike other Asian actors, is "not interested in [Arctic] natural resources" (Cryopolitics.com, October 24, 2013). Rather, Singapore, an observer at the Arctic Council since 2013, sees the region as a platform for the realization of its huge innovative-technological potential (Arktika i Sever, No. 24, 2016). This will not be possible, however, without cooperation with other Arctic countries, including Russia.

In broader terms, Russia sees four key areas that offer potential for bolstering its ties with Singapore:

The first is joint development of new technologies and know-how. Given Western economic sanctions and the lack of domestic alternatives, Singapore—one of the world leaders in offshore drilling rigs (with a global share of nearly

70 percent), including ice-class exploration—is of great interest to the Russian oil extraction industry (Arctic.ru, March 17, 2016). Furthermore, given broader, long-term trends toward the decarbonization of the oil and natural gas sector (requiring technologies Russia lacks and is, for now, unlikely to obtain from the West) (Carnegie.ru, May 14, 2020), Singapore's experience could prove indispensable.

The second potential area for cooperation is in corporate services. Aside from Singapore's excellent track record in offering risk insurance and conflict mediation, Russia sees the country as an exceptional middleman for its Artic-related oil and liquefied natural gas (LNG) deals. Specifically, both Russian Novatek (Ngv.ru, March 6, 2020) and Rosneft (Rosneft.ru, April 5, 2019) have already used Singapore as a bridge with their foreign clients.

The third area is Arctic research. Singapore is profoundly interested in researching climate change since it threatens to have detrimental consequences for this island city-state. As noted by Singaporean authorities, cooperation with Russia is of critical importance for the country`s progress in Arctic research (Arctic.ru, January 24, 2018).

Fourth is advocacy for Russia`s Arctic claims (1.2 million square kilometers of the Arctic sea shelf). This topic became central during Artur Chilingarov's (Hero of Russia and the Soviet Union) conversation with Sam Tan, when the Russian explorer stated that his country "is counting on Singapore's support" in backing Moscow's claims in the Arctic (RIA Novosti, March 15, 2016).

In contrast to Singapore, South Korea's (Republic of Korea—ROK) interests in the Arctic region are shaped by the Northeast Asian country's geographic location, export-oriented and innovation-based economy, and its lack of strategic natural resources (Kim Minsu and Maksim Marchenkov, *Respublika Koreya v Arkticheskom Regione: Ot Teoreticheskogo Oformleniya Politiki do ee Praktichskoii Realizatsii*, *Arktika i Sever*, 2019, No. 37, pp. 69–81). Following the acquisition of observer status in the Arctic Council (2013), Seoul adopted its own Arctic strategy (for 2013–2017), formulating four main goals: 1) international cooperation, 2) research and development, 3) sustainable business practices, 4) and the promotion of institutionalism. In pursuit of objectives, the ROK has intensified its dialogue and cooperation with Russia. The principles of this cooperative dialogue were set in September 2017, during that year's Eastern Economic Forum (EEF) in Vladivostok. In his keynote speech at that event, President Moon Jae-in proclaimed the launch of the "Nine Bridges" initiative (Valdaiclub.com, November 27, 2017), consisting of the following elements (TASS, January 19, 2020):

1. Natural gas as a means to diversify the ROK's supplies;
2. Railroad transportation (establishing a connection between the Trans-Korean Railway and the Trans-Siberian Railway);
3. Energy (the Asian Super Grid initiative);
4. Shipbuilding (icebreakers for the Yamal LNG project);
5. Seaports (the port of Zarubino and other initiatives);
6. Agriculture (a mineral fertilizer plant in Kozmino);
7. Fisheries (a fish processing complex in Vladivostok);
8. Industrial zones (the industrial complex in Primorsky Krai);
9. Development of the Arctic region.

In 2018, during their meeting in Moscow, Presidents Vladimir Putin and Moon Jae-in reaffirmed their adherence to the initiative and stressed the necessity to "develop a mutually beneficial partnership in the Arctic region, including in energy and transportation" (TV Zvezda, June 22, 2018). Yet, progress on this initiative has been overshadowed by three main uncertainties.

First, strengthening cooperation with Russia to some degree presupposes undermining South Korea's strategic partnership with the United States—an option the ROK cannot afford given the current political and security environment in the Asia-Pacific region. Indeed, the absence of the ROK leader during last year's EEF summit disturbed the Kremlin. Commenting on this nonattendance, leading Russian policymakers declared that it illustrated the lack of a common political agenda between the two countries (Valdaiclub.com, September 25, 2019).

The second obstacle is the conservatism of Korean business elites. Despite an initial preliminary agreement, ROK shipbuilders ultimately announced that their Arctic-adjusted LNG carriers would not be built at Russia's Zvezda shipyard (owned by the United Shipbuilding Corporation). Instead, both Samsung Heavy and Hyundai Heavy Industries would build the carriers for Novatek domestically, in Korea. According to Russian sources, South Korean shipbuilders are concerned about "unnecessary construction delays," "the lack of qualified [Russian] experts," as well as the prospect of "losing strategically important technologies" (in other words, industrial espionage) if work is conducted in Russia (Sudostroenie.info, July 1, 2019).

The third issue involves Korean concerns over the actual capabilities, profitability and the state of infrastructure along the Northeast Passage (NEP), which follows Russia's eastern and northern coasts (Ridl.io, May 8). Even notable Russian experts have repeatedly argued that if no infrastructural improvements are made, South Korean businesses will have low confidence in

the profitability of using this maritime transportation artery linking Asia and Europe. Thus, a massive involvement of ROK businesses should be excluded. Though some selective projects involving South Korea might take place, larger initiatives are unlikely to be launched (Roscongress.org, August 7, 2017).

In general, the Asian Tigers are viewed in Russia as potentially desirable partners in the Arctic. Their key quality (aside from the above-mentioned ones) is their *de facto* rejection of a political agenda, which suits Moscow perfectly. Yet, given current trends, prospects for this partnership remain quite fuzzy.

Russia's Pivot to Asia (China) After 2014: The Wrong Turn?

8 June 2021

Known as the "Pivot to Asia" and informally announced by Vladimir Putin in early 2012, Russia's strategic (re)orientation to the Asian markets and China, in particular, seems to be failing to work as planned (Mn.ru, February 27, 2012). New evidence, broken down into five categories, points to multiple flaws in Moscow's strategy (See EDM November 24, 2020).

First, some profoundly negative trends persist in the realm of foreign direct investments (FDI). The most recent data suggest that the Russian economy is experiencing a massive outflow of Chinese investors. Between the first and third quarters, Chinese FDI dropped by nearly 52 percent (from $3.7 billion to $1.8 billion), signaling that "Chinese investors pulled away every second US dollar previously invested in the real sector of the Russian economy" (Cbr.ru, accessed on May 31, 2021). Russian economists have argued that this trend is not new. This tendency, which is not widely discussed in Russia's pro-Kremlin media, has been evident for at least five to six years. Ironically, since Russia's "Pivot to Asia" started to acquire practical forms in 2014—mainly resulting from Western economic and political sanctions against Russia for its unlawful actions in Ukraine—Chinese investments in the Russian economy have decreased 2.5 times (Sneg.tv, April 9, 2021).

Second, the results have been similarly negative in the realm of large infrastructural projects. So far, it appears that China is unwilling to invest in Russia's infrastructure. For Russia, the modernization of its infrastructure and creating new facilities is the crucial precondition for monetizing economic opportunities (transportation and energy resources) in the Arctic region and the High North (See EDM November 9, 2020). Russian sources point out that

Russia has been unable to secure Chinese capital in any of Russia's major infrastructural projects for the past seven years. Moreover, previously arranged plans, such as the high-speed "Eurasia" railroad connecting Beijing, Moscow and Berlin, were found "economically unsustainable" and financially unattractive by Chinese investors (Finanz.ru, April 8, 2021).

In Russia's Arctic and High North (areas that require investments in particular), China is primarily discouraged by three main factors: the need for substantial investments, given the poor state of local infrastructure; the thawing of the permafrost that could result in major ecological cataclysms, derailing the investments; and the fear of further international (primarily US) sanctions and the growing militarization of the Arctic, posing a severe threat to transportation via the Bering Strait.

Third, Russian hopes to engage the Chinese in setting up an alternative to the SWIFT platform—to hedge the Russian economy against potential Western sanctions—seem to have also fallen short of expectations. Thus far, only one Chinese financial institution has indicated some interest in the idea, yet no further details have been publicly announced (Finanz.ru, April 6, 2021). This turn of events must be particularly upsetting for Moscow. The need to form an international coalition against Western sanctions and alter global payment systems became one of the main elements of Russian Foreign Minister Sergei Lavrov's agenda during his visit to China in March (Tass.ru, March 21; Finanz.ru, March 22, 2021). Yet, the Chinese side seems to have ignored the message, de-facto refraining from siding with Russia in its campaign against Western sanctions.

Fourth, Russia's experiments in investing in the national currencies of China (110.5 billion yuan acquired) and Japan (600.3 billion yen), as a part of a general strategy aimed at reducing reliance on the US dollar, does not appear to have been a sound decision (Minfin.gov.ru, February 24, 2021). Having rushed into lowering the share of USD/EUR reserves from 45 to 35 percent, the Russian National Wealth Fund suffered losses stemming from financial fluctuations and the yuan/yen exchange volatility (Minfin.gov.ru, March 5, 2021).

Fifth, and perhaps most important from an economic point of view, Moscow worries that China may reduce its oil imports from Russia. Despite pompous rhetoric, oil is still the key pillar of Russia's economy (See EDM March 16 2021). Two trends must be taken into consideration. On the one hand, while gradually reducing its imports from Russia (by 15.3 percent in April), China is actively investing in Iranian and Iraqi oil deposits (Rosbalt.ru, May 20, 2021). This means that Russia's share in China's energy

architecture will likely decrease in the near future. Given the economic hardship of Iran and Iraq and the US partial withdrawal from the region, it would be easier for Beijing to reach an agreement on more lucrative (for China) terms with both Middle Eastern players.

On the other hand, China's "green agenda," based on a solid economic and geopolitical foundation, should be of great concern to Russia (Lenta.ru, May 20, 2021). During the recent climate summit organized by the US, China reconfirmed its commitment to achieving complete carbon neutrality by 2060. In effect, the prospect of China going green could have a huge negative impact on Russia and its plans and expectations related to oil supplies to China from its Arctic-based deposits.

In case China drastically reduces its oil imports—and such intentions have already been expressed by Beijing, causing alarm among Russian experts—it will not be interested in investing in Russia's extremely costly Arctic oil projects (Russtrat.ru, May 14, 2021). This scenario presents a serious challenge to Russia's entire "Strategy for the Development of the Russian Arctic Zone and Provision of National Security Through 2035" (See EDM November 9, 2020). Russia does not appear to have an alternative contingency plan—judging by crucial points in the Strategy-2035 and other initiatives, including its Coal Strategy 2035 (See EDM July 27, 2020).

In the final analysis, the much-praised Sino-Russian partnership is in many ways a one-sided deal. Since 2014, while Beijing has received nearly everything it has asked for, Moscow has had plenty of expectations but very few practical achievements. It appears that the "Pivot to the East" and Russia's orientation toward China might turn out to be the wrong turn.

4

Transportation, Infrastructure, and Development

'Icebreaker Diplomacy': Russia's New-Old Strategy to Dominate the Arctic

12 June 2019

Russia's Baltic Shipyard (St. Petersburg) held a grand ceremony, on May 25, to celebrate the launching of the nuclear-powered Project 22220 (LK-60Ya) icebreaker *Ural* (Geoenergetika.ru, May 27, 2019). Following the festivities, Russian Central Bank head Elvira Nabiullina stated that the event would be further commemorated by issuing a special coin hailing the new Project 22220 icebreakers (Vpk-news.ru, May 26, 2019). The development of this and other classes of icebreakers is seen by Moscow as a crucial step toward ensuring that the Northeast Passage (NEP) can be turned into a source of wealth and sustainable economic growth for Russia as well as preserving Russia's status as a main stakeholder in the Arctic. As President Vladimir Putin noted earlier this spring, Russia must increase the transportation capacity of the NEP—the shortest maritime route through the Arctic region (14,500 kilometers from St. Petersburg to Vladivostok, compared to the Suez Canal route of 23,000 kilometers)—to 80 million tons of cargo per year by 2024, and icebreakers should become the main driver. For now, the Russian icebreaker fleet in the NEP area consists of 8 vessels, which is clearly not enough to fulfill this objective in full; therefore, by 2035, the overall number should be increased to 13 (Vpk-news.ru, April 23, 2019). Prime Minister Dmitry Medvedev declared, on November 28, that the "creation of new icebreakers is the main precondition for Russia to keep up with plans pertaining to the development of the NEP" (Arctic.ru, November 28, 2018).

Russian sources claim that "Russia's technological supremacy in the Arctic region will remain total and unchallenged for at least next fifteen years," despite its present-day shortage of icebreakers (RIA Novosti, February 27, 2019). But to maintain this edge over the long term, Moscow has embarked on an ambitious program to modernize its Arctic icebreaker fleet. The following key initiatives are worth pointing out:

- The aforementioned Project 22220 icebreakers (LK-60Ya) are to replace two main classes of vessels that Russia has been relying on to date: Arktika- (Projects 10520 and 10521) and Taymyr-class icebreakers. Much more advanced than its predecessors, the LK-60Ya combines the operational qualities of both types and may be used on both the high seas and in Siberian river estuaries, thereby decreasing

exploitation costs and increasing operative effectiveness (Technogies.ru, May 29, 2019). Currently, the Baltic Shipyard is working on three nuclear-powered icebreakers of the new type (procured by the Rosatom): *Arktika* (to operate in Arctic waters in 2020), *Sibir* (2020) and *Ural* (2021) (Arctic.ru, March 11, 2019).

- As noted by the director general of the Murmansk-based FSUE Atomflot (Rosatomflot), Vyacheslav Ruksha, Project 10510 (LK-110Ya) icebreakers will be an indispensable element in securing Russia's firm presence on the global liquefied natural gas (LNG) market. Specifically, he noted that the *Lider*—which gives this nuclear icebreaker class its name—"is primarily designed to secure our [Russia's] direct access to the markets of the Asian-Pacific region. China, Japan [and] South Korea are the main consumers of LNG. The US is on track to monopolize this market within the next ten years." Therefore, he added, the *Lider* will effectively help define "Russia's future posture on the LNG market" (RIA Novosti, June 28, 2018). Lider-class icebreakers are said to have unique characteristics, including the ability to break through ice up to 4 meters thick and create canals up to 55 meters wide as well as a lifespan of up to 40 years. This will allow these vessels to conduct year-round navigation along the entire NEP, while leading convoys (TASS, February 18, 2019);
- The highly maneuverable next-generation icebreakers *Andrey Vilkitsky* and *Aleksandr Sannikov* (both procured by Gazprom Neft) are already operating in the Arctic region in an integrated way. According to officials, their tandem has fortified year-round logistical transportation networks, allowing the delivery of oil from the Vorota Arktiki terminal (in the Yamalo-Nenets Autonomous Okrug) to a floating oil terminal in the Kola Bay, "and from there, to global markets via standard oil tankers" (Vpk.name, January 25, 2019).

Aside from the icebreakers, the Russian side is working on two additional projects that could have serious potential and impact:

- The Malachite design bureau has been developing an 82-meter-long ice-breaking nuclear-powered submarine, which is expected to be able to navigate through 1.2-meter-thick ice under all weather conditions. Its primary tasks will assist the operations of oil/gas subsea installations and mineral resource extraction. Designers also claim that the submarine will be capable of carrying mini-submarines that could work independently (Rusvesna.su, January 17, 2019).

– The Project 00903 is a unique, non-freezing self-propelled platform ("*Severniy polus*"), whose expected completion date is 2020. Its construction is an integral part of the state-sponsored program pertaining to the socio-economic development of the Russian High North, aiming to "fortify Russia's national position in the Arctic region as the global leader in Arctic studies." The range of tasks and functions to be performed by the platform is broad, but perhaps most notable is its announced capability to "conduct geological exploration of the Arctic basin" (Korabel.ru, February 20, 2019). Most likely, Russia will try to use this capability in order to increase its exploration of the Arctic seafloor, thus solidifying Moscow's claims over many of the most resource-endowed but disputed offshore areas north of the Polar Circle.

Based on these developments, two main conclusions should be drawn. First, Russia has made reliance on icebreakers a key foundation on which to cement its leading position in the Arctic. This trend was (re)initiated in 2007, when an expedition conducted by the Arktika-class nuclear-powered icebreaker *Rossiya* performed major exploration of Russia's Arctic continental shelf. It now seems to have been further reinvigorated and is likely to continue with new impetus. Second, Moscow's confrontation with the West, sparked by Russia's attack on Ukraine in 2014, has tilted Russian priorities toward the High North to an even greater extent (Periskop.livejournal.com, December 12, 2017). Exploration of the Arctic region is thus becoming a central part Russia's national idea—not merely an economic project.

Russia's Belkomur Arctic Railway Project: Hope, Illusion or Necessity?

17 July 2019

At the fifth annual gathering of the International Arctic Forum, hosted by St. Petersburg, Russia, on April 9–10, 2019, participants voiced two diametrically opposing opinions regarding the so-called Belkomur (Arkhangelsk–Syktyvkar–Kudymakar–Perm) strategic railway project in the Russian High North. Yury Trutnev, a deputy prime minister of Russia and the presidential envoy to the Far Eastern Federal District, stated, "I became familiar with this project 15 years ago as governor of the Perm Region"; but he declared that he has yet to see any financial figures confirming the proposed railway's profitability. If such evidence were to materialize, he would be glad to render

full support for the initiative (TASS, April 10, 2019). In contrast, Vladimir Shchelokov, the director of the JSC Interregional Company Belkomur, called the project a potential "breakthrough" and assured that, by 2035, the planned railroad would be capable of transmitting 20.8 million tons of cargo annually (oil products, natural gas liquids, timber and coal). This would result, finally, in the creation of a unified transportation system in Russia's northern territories. He specifically maintained that Belkomur should not be seen in isolation, but as an integral part of three other strategic projects—the Northern Latitudinal Railway (NLR), a deep-water port in Arkhangelsk, and Murmansk's transportation hub (Rossyiskaya Gazeta, April 10, 2019).

Belkomur is a 720-mile (1,160-kilometer), north-south strategic railroad project designed to link Perm, in the Ural Mountains, with the Arctic port city of Arkhangelsk. This idea is by no means new: first entertained in 1912, concrete actions were undertaken between 1947 and 1954 and, after a significant pause, received new impetus in 1995, when the project obtained its

The proposed Belkomur railway

current name. In 1998, construction began near Komi. And in 2008, the project was included in Russia`s Transportation Strategy Until 2030. However, financial difficulties halted the project, despite its designation as a "project of […] all-Russian importance." In 2011, Belkomur was included in the Strategy for the Development of the Northwestern Federal District; this, however, brought no new developments (Belkomur.com, accessed July 15, 2019). The long-anticipated revival of the Belkomur railroad ensued on September 19, 2017, when President Vladimir Putin and Arkhangelsk Oblast Governor Igor Orlov defined the project (in conjunction with the deep-water port in Arkhangelsk city) as being of "instrumental importance for socio-economic development of the [Arkhangelsk] region" (Dvinanews.ru, September 19, 2017).

Importantly, Federation Council (upper chamber of the Russian parliament) Chairperson Valentina Matviyenko underscored another promised geostrategic feature of the Belkomur railway, stating that "this project will allow to not only accelerate the development of Russia's High North and the Ural region but also to form an international transportation corridor in the direction of China" (Parlamentskaya Gazeta, May 24, 2017). In terms of local economic development, Belkomur has the potential to jumpstart 40 large-scale industrial projects (in various sectors of the economy), create 45,000 new jobs, boost regional GDP by 5.1 percent. Belkomur is also expected to become a factor in Russia's foreign policy by providing Chinese goods and Kazakhstani and Mongolian coal the shortest land-based route to European markets (Railways.by, March 28, 2017).

Based on 2017 analysis of the economic benefits of the Belkomur railway (TASS, May 25, 2017), Arkhangelsk Oblast could process an additional four million cubic meters of timber yearly as well as increase local production of bauxites (the North Onezhsky mine), zinc and lead (the Pavlovskoye mine), building materials and diamonds (the Lomonosov and the Grib mines). The Perm region would arguably see minimal additional profits, although it would potentially boost exports of agricultural fertilizer and timber. Komi Republic could profit from greater exploration of timber resources (an additional 5 million cubic meters annually), bauxites (the Timan Ridge), titanium (the Yaregskoye mine), hydrocarbons, polymetallic nodules and chromite.

Despite these potentially lucrative prospects, several factors cast serious doubts on the likelihood of the project ultimately being implemented. The first major issue is the shortage of financial means and visible lack of interest from the side of (primarily) domestic investors. At different times, the project attracted the attention of such large players as Uralkali (URKA), Yarega Ruda and Solikamskbumprom; yet none of them was in the end willing to finance

the project. A seeming breakthrough—serious interest from the Chinese Poly Group Holding Co. Ltd and willingness to invest $5.5 billion (sufficient to complete the project)—also did not yield any practical results. Some sources have pointed to Russia's uneasiness with the prospect of fully embracing Chinese investors. As noted by the director of the information and analytical company Gekon, Mikhail Dmitriyev, one of the primary problems with the Chinese is that "they always demand full participation in a project: from investing and crediting to equipment delivery, participation in transportation and receiving of guaranteed profits" (Ritmeurasia.org, June 25, 2018).

The second major obstacle is indirectly related to the project, yet is by no means any less daunting. Arguably, the key segment of the Belkomur railroad—the Solikamsk–Syktyvkar–Arkhangelsk corridor—is virtually useless without necessary infrastructure in Arkhangelsk—namely, a functioning deep water port (Atpu.ru, accessed July 15, 2019). This, however, is said to be quite costly and might require at least eight years to start yielding profits. Moreover, some natural geographic particularities of the region—the constantly changing estuary of the Northern Dvina River, for one—is seen as yet another issue that might derail the implementation and ultimate success of the project (E-news.su, June 25, 2018).

Even so, Russia may be forced to try to undertake the completion of Belkomur anyway. This is because the Kremlin's growing reliance on its icebreaker fleet in the Arctic region is, and will remain, effective only to a limited extent (see EDM, June 12, 2019). As argued by Russian experts, without necessary land-based backup in the form of a steady system of railways criss-crossing the High North, the much-promoted Northern Sea Route (*Sevmorput*) will preserve Russia's "economic-geographical and military-political vulnerabilities… that is why it is crucial to underscore the strategic importance of the 'Arctic Transsib' [the Belkomur], which must be created… the absence thereof is weakening not only the *Sevmorput*, but the whole shipbuilding infrastructure on the Asian coast… weakening our state's security and our geopolitical positions, and not merely in the Arctic region" (Vpk-news.ru, May 14, 2018).

Could the 'Norilsk Disaster' Be the Harbinger of a Looming Catastrophe in the Russian Arctic? (Part One)

29 June 2020

On May 29, the Norilsk-based CHPP-3 combined heat and power plant, owned by the Norilsk-Taimyr Energy Company (a member of the Norilsk Nickel Group conglomerate), suffered the loss of a diesel fuel tank, resulting in a spill of approximately 21,000 tons of fuel. The disaster, which contaminated an area of 180,000 square meters in the Russian High North (Interfax, May 29), is the largest such incident since 1994, when a similar event in the Komi Republic caused a loss of more than 21,000 tons of fuel in the Arctic region. Speaking of last month's accident, the head of the Federal Service for Supervision of Natural Resources (*Rosprirodnadzor*), Svetlana Radionova, noted, "[T]his is not tens, but potentially hundreds of billions of rubles' worth of losses" (Vpk-news.ru, June 4, 2020). In turn, Kremlin spokesperson Dmitry Peskov stated that Moscow's plans in the Arctic are "ambitious," since the region is essential for Russia's socio-economic development (Rosbalt, June 8, 2020). Hence, one can expect that, aside from some conspicuous gestures by the authorities, the deeply rooted reasons for the disaster at the CHPP-3 facility will not be properly investigated.

According to the All-Russian Research Institute of Fisheries and Oceanography, the incident in Norilsk caused significant damage to local aquatic biological resources, and it will take time to ascertain its actual impact (TASS, June 18, 2020). The former head of *Rosprirodnadzor*, Oleg Mitvol, has claimed that a cleanup of the disaster site will require more than 100 billion rubles ($1.42 billion) and at least 5–10 years for the local environment to recuperate (Znak.com, June 3, 2020). The governor of the surrounding Krasnoyarsk Krai, Alexander Uss, admitted that "the fuel has contaminated [Lake] Pyasino […] it is imperative not to let it spread to the Pyasina River, which flows further north" (Interfax, June 16, 2020). Lake Pyasino is a freshwater lake, which is connected, via the Pysina River, with the Kara Sea. According to Vladimir Kirillov (of the Institute for Water and Environmental Problems at the Siberian Branch of the Russian Academy of Sciences), after the catastrophe "the lake is *de facto* dead" (Life.ru, June 4, 2020).

Aside from the actual environmental and economic damage, the second-most-discussed issue has been what actually led to the incident. As stated by Vasily Yablokov, an environmental expert with Greenpeace Russia, the main

culprit behind the accident is climate change, which has led to the rapid melting of the underground permafrost in the Russian High North and the wider Arctic region (Rosbalt, June 5, 2020). The melting of permafrost leads to shifting soil and, consequently, structural damage in buildings and structures built on top of this heretofore perennially frozen layer (see EDM, September 11, 2018) At the same time, Alexey Knizhnikov (World Wildlife Federation–Russia) concurred with this statement but added that the catastrophe also resulted from negligence and violations of existing ecological rules/regulations. He noted that the power plant "should have been fortified with dams blocking the flow of [locally stored] toxic substances," meaning that climate change is not the only reason that led to the catastrophe (Rosbalt, June 5, 2020). Meanwhile, Russian Security Council Secretary (and former head of the Federal Security Service) Nikolai Patrushev offered up quite an original interpretation of the incident: on the one hand, he acknowledged that the threats posed by climate change were clearly underestimated; but on the other hand, he warned that the disaster "could be used by those who are trying to discredit Russian policy in the Arctic region." He added that Russia's critical infrastructure in the Arctic region has flaws and may not be fully prepared to deal with a full spectrum of terrorism-related threats (Interfax, June 9, 2020).

Following the massive Norilsk chemical spill, Russian President Vladimir Putin urgently called on the legislative branch to prepare all necessary amendments to "prevent similar incidents from repeating themselves in the future" (Interfax, June 5, 2020). Predictably, the Russian General Prosecutor's Office instantly launched an investigation, opening up four criminal cases and arresting the head of one of the CHPP-3 departments allegedly responsible for the incident. Additionally, the incident was classified as a "federal-level emergency." A commission of the Federal Service for Ecological, Technological and Nuclear Supervision (*Rostekhnadzor*) visited the site of the accident and discovered "numerous violations of safety norms and regulations" (Interfax, June 23, 2020). Incidentally, the Norilsk Nickel Group (together with *Rostekhnadzor*) has pledged to conduct a thorough review of all its major infrastructural objects, particularly those that are related to fuel storage. This was made explicitly clear by the head of the company, Vladimir Potanin, who promised to "allocate billions of rubles" toward this objective and to "find and liquidate all the deficiencies" (Interfax, June 19, 2020).

Despite the above-mentioned high-profile measures, it would be premature to conclude that the situation in the Russian Arctic is likely to actually improve. First of all, the Norilsk Nickel Group has built up a notorious reputation for widescale pollution and breaking ecological rules. Notably, in 2016, the same

CHPP-3 facility already suffered a similar, though then smaller-scale incident (RBC, June 5). No modernization of the local infrastructure was ever carried out. And despite promises from the corporate leadership, members of the inspection committee were not granted full access to the plant when they visited in early June 2020. (Sibreal.org, June 5, 2020). Incidentally, between 2017 and 2018, *Rostekhnadzor* warned the company about problems with CHPP-3 (RBC, June 5, 2020); yet, the company took no steps to address them. Given the political influence of the Norilsk Nickel Group's executive board on the government, there is every reason to believe that the latest incident will have no practical impact as well.

Second, Norilsk—already considered Russia's "most heavily polluted city" and ranked number seven worldwide (Ecobloger.ru, January 22, 2018)—is merely part of a much larger problem. All major Russian municipal centers located in the Russian polar regions (zone of permafrost), such as Vorkuta, Tiksi, Yakutsk, Magadan, Igarka, Anadyr, and Novy Urengoy, are ticking time bombs. These cities, by and large, all rely on Soviet-era infrastructure and require serious renovation as well as complete (and unbiased) assessments/inspections of their local critical infrastructure (especially oil, natural gas, and nuclear facilities). The prospect for such modernization seems highly unlikely: according to one study, widescale permafrost thaws across Russia could cost more than $80 billion in infrastructural damages—financial expenditures that Moscow can ill afford at present (Arctictoday.com, January 24, 2019).

Consequently, the Norilsk disaster will not be the last ecological problem to affect the Russian High North.

Could the 'Norilsk Disaster' Be the Harbinger of a Looming Catastrophe in the Russian Arctic? (Part Two)

7 July 2020

A disastrous fuel spill at the CHPP-3 combined heat and power plant in Norilsk (owned and operated by the Norilsk Nickel Group) has resulted in massive contamination of the local environment and will likely incur huge financial expenditures related to the cleanup (Interfax, May 29, 2020; see Part One in EDM, June 29, 2020). Above all, the catastrophe could have

detrimental long-term consequences for the ecology of the surrounding territories and seriously affect the health of the wider Artic region. For now, the most widely discussed topic pertaining to the calamity has focused on sussing out blame. The narrative most actively promulgated by the company's top management and supported by some ecologists claims that the disaster was caused mainly by the detrimental consequences of climate change, which melts the permafrost layer upon which the local infrastructure is built. The second version, notably maintained by Alexey Knizhnikov (a WWF-Russia expert on ecological problems related to the oil and natural gas sector), argues that because "the thawing of permafrost is a natural and very long process […] some violations must have occurred during the exploitation of this object [CHPP-3]" (Vzglyad, June 4, 2020). While the authorities continue to deal with the consequences of the disaster as well as search for the responsible culprits, it is imperative to put the man-made disaster in Norilsk into a broader context, which suggests that the ecological situation in parts of Russia's Arctic region and the High North is already close to catastrophic.

Most visibly, the incident at the Norilsk plant showcases a myriad of instances of various violations of environmental rules in the region. In late May, an inspection team discovered a huge unauthorized dump on the shores of Lake Lama—one of the largest lakes (318 square kilometers, and up to 600 meters deep) in Krasnoyarsk Krai—located on the territory of the Putorana natural reservation (TASS, June 2, 2020). Furthermore, June was marked by a series of additional smaller incidents that involved unintended discharges of fuel and oil products. On June 5, local prosecutors launched an investigation into an oil spill in Novgorod Oblast, close to the Valdaysky National Park, a UNESCO Biosphere Reserve site since 2004 (Interfax, June 5, 2020). On the same day, on the territory of the Yamalo-Nenets Autonomous Okrug, approximately seven cubic meters of oil products poured out into the environment, causing some contamination of soil (Interfax, June 5, 2020). On June 8, in the Nenets Autonomous District, ten tons of oil spilled; while the damaged oil well has reportedly been successfully blocked, further cleanup of the incident was impossible due to extremely harsh weather conditions (Rosbalt, RIA Novosti, June 8, 2020). On June 21, the Ministry of Emergency Situations (EMERCOM) reported another such episode in Sakha-Yakutia, where approximately five tons of fuel escaped. Details of the incident have yet to be revealed, but the leak occurred at an electric power station belonging to the Russian Hydroelectricity Company (RusHydro) (Rosbalt, June 21, 2020).

These and other such accidents have spotlighted another point of contention in the Arctic region: the growing dissatisfaction of Indigenous

peoples to Russia's constant violation of environmental rules/regulations in the High North. Specifically, the Association of Indigenous Peoples of Taimyr declared that it is preparing a petition to President Vladimir Putin, proposing the adoption of a federal program to strengthen the protection of the country's northern Indigenous peoples. The head of the Krasnoyarsk-based branch, Grigori Dukarev, stated that, were local environmental laws better able to protect the environment, "Nornickel [Norilsk Nickel Group] would have lost money… [Whereas,] we are losing our natural habitat that helps us to survive. For Indigenous peoples, such an incident is a direct threat to our existence… The Russian Federation has to protect our interests." Importantly, for approximately 10,000 inhabitants (Indigenous peoples) of the basins of the Pyasina River and Lake Pyasino—areas severely affected by last May's Norilsk disaster—these territories represent a traditional homeland and a source of subsistence. As noted by Dukarev, the environmental challenges faced by the region are a combination of the "Soviet legacy" (yet to be dealt with) and new developments. In turn, the president of the Russian Association of Indigenous Peoples of the North (RAIPON), Grigory Ledkov, stressed that technogenic accidents in the region could seriously jeopardize the local ecology and incur significant harm on the wellbeing and health of locals (Kommersant, June 17, 2020).

A number of reputable Russian scientists and research institutions have also issued critical warnings, suggesting that if the Russian authorities fail to radically change local environmental policies, the Arctic region will face a range of existential challenges. For instance, scientists from the Krasnoyarsk Science Center of the Siberian Branch of the Russian Academy of Sciences have found, in a new study, that massive wildfires now taking place nearly annually in Siberia are changing the chemical composition of the Arctic Ocean, its biodiversity and ecosystem, as well as that of the adjacent river systems (TASS, June 1, 2020).

Moreover, research conducted by the Antistikhia center (which operates under the roof of EMERCOM) has ascertained that the erosion of the littoral landscape of the Kara Sea might have truly detrimental consequences. Namely, "degradation of the permafrost on the shores of the Kara Sea could further worsen the erosion process […] even today the coastline is losing between two to four meters annually." If this trend persists, huge portions of the (near)Arctic region—including Chukotka, parts of Yakutia, the West Siberian Plain, as well as basins of the Indigirka and the Kolyma rivers, and the island of Novaya Zemlya—could be jeopardized. The most dangerous ecological consequences could result in structural damage or destruction of locally based oil, gas or even

nuclear facilities (for example, the Bilibino Nuclear Power Plant). Moreover, the region is home to multiple military bases (Ura.news, March 11, 2018).

If this negative scenario materializes (even in part), Russia's ambitions related to the commercialization of the Northern Sea Route and the exploration of new oil and gas fields in and around the Arctic region will be derailed. From a strategic point of view, continuing negligence of the local ecology (directly stemming from Soviet practices and environmental nihilism) could have a devastatingly transformative effect on the entire northern polar region, extending well beyond Russia's national borders as such.

Russia Unveils New Arctic Development Strategy: Focal Points and Key Priorities

9 November 2020

On October 26, President Vladimir Putin formally adopted the "Strategy for the Development of the Russian Arctic Zone and Provision of National Security Through 2035" (Pravo.gov.ru, October 26, 2020). The document is to be implemented in three stages: 2020–2024, 2025–2030 and 2031–2035. In a related comment, the Minister for the Development of the Russian Far East and Arctic Alexander Kozlov argued that the strategy—as opposed to similar previously adopted documents—features two distinct traits. First is an emphasis on socio-economic development to raise the quality of life in the region. And second, it takes a more individual (*de facto* region-specific) approach, whereby the socio-economic development of each region/territory is to be addressed on a case-by-case basis without the previously practiced generalist approach (Eprussia.ru, October 27, 2020).

A more detailed look at the document reveals three main tasks/strategic areas most likely to attract Russian attention and resources.

The first is the development of Arctic infrastructure. Virtually all actions outlined in the October 26 strategy document revolve around the Northern Sea Route (NSR)—the shortest, least expensive way of reaching Europe from Asia by sea. The NSR is viewed by Russia simultaneously as a source of income and a means of strengthening its partnership with China (Ridl.io, May 8, 2020). Specifically, among other aspects related to the above-mentioned strategic objective, the document names the following measures to be accomplished by 2035:

- Development of general marine infrastructure (seaports and transportation routes/lanes), primarily in strategic junctures of the NSR: the Barents, White and Pechora seas;
- Establishment of "headquarters on marine/sea operations and management of naval transportation" along the entire NSR;
- Digitalization of services (particularly in the realm of cargo transportation and delivery);
- Building of five Project 22220 and three Leader-class icebreakers, in line with Russia's "Icebreaker Diplomacy," which seeks to rely on its icebreaker fleet in the Arctic as a means of strengthening Moscow's regional superiority (see EDM, June 12, 2019);
- Increasing navigation capabilities via the White Sea–Baltic Canal in general and the basins of the Onega, Northern Dvina, Mezen, Pechora, Ob, Yenisey, Lena and Kolyma rivers in particular. In effect, this draws on yet another aspect of the "Icebreaker Diplomacy" approach specifically concerned with upgrading navigation in Russia's High North areas (rivers adjacent to the Arctic Ocean).

Taken together, these measures are expected to increase the navigability of the NSR and facilitate the rapid transportation/delivery of Russia's energy resources to strategically vital Asian markets (see EDM, May 7, 2020).

The second main task outlined in the newly adopted Arctic development strategy is boosting regional military capabilities. This is reflected in the document's call to rearm and equip the Russian Arctic forces with the most up-to-date means of warfare (considering local climactic conditions) as well as to boost local military infrastructure. Specifically, the document emphasizes the need to "create a favorable operative regime in the Arctic […] in accordance with current and forecasted military threats." In line with Russia's previous steps aimed at increasing its military potential/presence in the Arctic (see EDM, April 9, 2020 and June 18, 2018), the document not only emphasizes "growing conflictual potential" in the region but also calls for a need to "constantly upgrade [Russia's] military potential" of forces deployed in the High North. It is, however, interesting to note that the document, despite Russia's actual steps, does not put excessive emphasis on military-related issues (Pravo.gov.ru, October 26, 2020).

Third is the expressed need for socio-economic advances. The strategy document heavily underscores that a dramatic improvement in local socio-economic conditions is key to preserving Russia's firm standing in the region and to effectively exploit its natural resources. Among other measures, the document plans for the "creation of a special economic regime, stimulating a transition toward a circular economy," and in turn paving the way toward

achieving economic and ecological sustainability in the region. Further, the strategy mentions a number of steps aimed at attracting human capital to the region and improving its local demographic potential. Since 1989, the population of the Arctic zone and the High North has dwindled by at least 20 percent (Lenta.ru, October 29, 2019) due to worsening local socio-economic conditions and lack of attractiveness. This depopulation is identified as one of the main regional threats facing Russia.

A comparison between the document's stated ambitions and limitations imposed by Russia's present and long-term socio-economic conditions thus point to several important conclusions.

First, despite the rhetorical prioritization of the socio-economic component in developing the Arctic, Moscow does not have an actual plan on how this is to be accomplished. Based on commentary and analyses of many leading Russian experts, it seems that in pursuit of this objective Moscow is likely to rely on the "mobilizational" option, which heavily depends on so-called command-administrative (*kommandno-administrativnii*) measures (Aif.ru, May 14, 2020). One of the distinctive features of the Soviet period, this method, while effective in the short run, is unlikely to yield any long-term results.

Second, in terms of local demographics, it is not at all apparent that Moscow can or will actually embark on the policy to dramatically increase (at all cost) the size of the population residing in the High North. In fact, Russia already has the largest share of the population (2.5 million) living near or north of the Arctic Circle, and any hypothetical further increase could, in fact, be detrimental to the Russian economy. A number of influential Russian experts now claim that Russia should follow the example of other Arctic players (Canada, the United States, Norway) that rely on the fly-in/fly-out method for their regional labor forces as the most cost-effective way of exploiting local natural resources (Aif.ru, January 20, 2020).

Third, despite the seemingly marginal role that militarization and military-related efforts play in the newly adopted Arctic strategy document, these, in fact, constitute one of the central pillars of Russia's overarching approach to the High North and will be the main recipients of financial outlays from the federal center.

Consequently, given current economic hardships, Russia can be expected to pursue an approach premised on selective investment in strategic "links" connecting key parts of the NSR. The Arctic development strategy—akin to various other documents related to the northern polar region and Russia's prospects therein—strongly emphasizes the long-term strategic value of the NSR as an essential transportation artery connecting East and West.

Russia's Digitalization of the Arctic Region: Plans and Achievements

10 March 2021

The "Strategy for the Development of the Russian Arctic Zone and Provision of National Security Through 2035" (Pravo.gov.ru, October 26, 2020) highlights, among others, three crucial aspects. First, it *de facto* introduces a "region-specific approach" in the strategically important though problem-riddled Arctic region, where special priority will be given to Arkhangelsk Oblast, the Republic of Sakha (Yakutia), Republic of Karelia, Komi Republic, Murmansk Oblast, the Chukotka Autonomous Okrug, Yamalo-Nenets Autonomous Okrug (YaNAO) and Nenets Autonomous Okrug (see EDM, November 19, 2020). Second, the document outlines strategic project and development goals that most importantly include general marine infrastructure (seaports and transportation routes/lanes) located at strategic junctures of the Northern Sea Route (NSR) in the Barents, White and Pechora seas. And third, the document emphasizes the necessity of expanding the digitalization of services in the Russian High North, particularly in the realm of cargo transportation and delivery (see EDM, November 9, 2020). This third aspect of Moscow's latest Arctic development strategy now seems to be gaining prominence and notably fits within the broader goal (adopted in 2017) of digitalizing the entire Russian economy (Government.ru, July 31, 2017).

Three examples, in particular, demonstrate Russia's commitment to expanding the digital connectivity of the Arctic. First, perhaps, the most ambitious and grandiose plan developed by Russia is the project envisaging the creation of a 14,000-kilometer fiber optic cable stretching along and beyond the entire NSR. The project, whose cost has been preliminarily estimated at $800 million–$1.2 billion, would link Asia and Europe with an uninterrupted data trunkline offering data speeds as high as 200 terabytes per second (see EDM, January 26, 2021). The megaproject, dubbed "Arctic Connect," promises to become a turning point in establishing digital infrastructure between the two continents, while at the same time allocating a special role to Russia, turning it into a "continental digital bridge." Some concrete steps in this direction have already been made. Specifically, works in several Russian Arctic regions—where the key role is played by MegaFon, the second-largest mobile phone operator and the third-largest telecommunications operator in Russia—have already been initiated. For example, in Sakha, MegaFon has not only pledged to enhance internet coverage in the region in general but also to

start integrating digital technologies in the energy sector of the local economy (Neftegaz.ru, February 1, 2021). In the Komi Republic, the key goal pursued by MegaFon within the scope of the Arctic Connect project is integrating new digital technologies in this region to increase the operational efficiency of locally operating oil- and coal-extracting companies (mainly in the Pechora coal basin). In a related comment, Vladimir Uyba, the acting head of the Komi Republic, stated that the realization of this megaproject has a strategic meaning for his region since it will convert Komi into "one of the main junctions securing the technological development of the Russian Arctic" and an indispensable element of the NSR (Abnews.ru, February 26, 2021). Finally, in the Chukotka Autonomous Okrug, the main objective (aside from work on the Arctic Connect megaproject itself) is achieving a "qualitatively new level of internet connection and improving communications" (Newdaynews.ru, February 5, 2021).

A second, less grandiose, though perhaps equally important aspect of the digitalization of the Arctic is linked to the Russian state-owned oil giant Rosneft. Namely, the company has been emphasizing integrating the most up-to-date digital technologies to improve its operations and extraction practices (in 2020, more than 800 types of various technological solutions received patents). Specifically, two main projects are being developed as part of this goal. The first one—pursued by Rosneft together with Lomonosov Moscow State University (MGU) and the non-governmental development institution Innopraktika—is concerned with technological solutions for accurate analysis and collection of information related to the geological structure of soil. Ultimately, when fully developed, this technology is expected to help find unique ways of drilling in various types of terrain. The other of these initiatives—to become fully operable in 2021—is premised on the development of domestic information technologies in the domain of geological modelling vital for oil engineering. By working on this project, Rosneft is said to be introducing new solutions to overarching problems in Russia's oil-extraction industry. But at the same time—and as is vigorously accentuated by its corporate management—Rosneft is overcoming sanctions-related deficiencies, acting in line with the main principles of the import-substitution strategy introduced by the Russian government after 2014 (TASS, February 16, 2021).

The third indication of Moscow's focus on digital solutions for the High North can be observed in the ruling elite's deliberations over how to convert the Arctic's challenging climate conditions—typically perceived as a major disadvantage—into a strategic strength. Specifically, Dmitry Chernyshenko (Russia's deputy prime minister for tourism, sport, culture and

communications) stated that conditions in the Arctic region are ideal for the deployment of digital data centers, which are notorious for producing extreme levels of heat that must be mitigated. According to him, the frigid temperatures of the High North during most of the year could result in significantly lower maintenance costs compared to other regions. He also stated that by exploiting the local climate conditions properly, Russia could use the Arctic region for mining of cryptocurrency (which similarly generates substantial heat and uses a lot of energy due to the vast computation power required). Along the same vein, the senator from Pskov Oblast, Andrey Turchak, has referenced the Swedish example, where local climactic conditions are used to naturally cool data storage centers. Turchak urged the government to begin work on a comprehensive roadmap and elaborate specific plans on how to achieve this in the Russian Arctic (Rossiyskaya Gazeta, November 10, 2020).

Despite some negative forecasts, Russia is likely to achieve many of its High North digital connectivity objectives, including the Arctic Connect fiber optic cable megaproject. This primarily stems from the fact that both the European Union (Submarinenetworks.com, accessed March 8, 2021) and China are interested in this happening, meaning that the necessary resources and political support will probably be found and allocated.

The 'Suez Jam': A Window of Opportunity for Russia's Northern Sea Route?

31 March 2021

On March 23, the Suez Canal, one of the world's busiest transport arteries, became blocked in both directions when the ultra-large Golden-class container ship *Ever Given* (operated by the firm Evergreen), en route from Malaysia to the Netherlands, ran aground cross-ways. For nearly a week, the massive vessels remained lodged along both embankments of the man-made waterway. According to various estimates, every day of blockage was costing the global economy approximately $9.6 billion (Lenta, March 25, 2021). Between 2015 and 2020, approximately 90,000 ships, carrying a total of 5.5 billion tons of cargo (approximately 12 percent of world trade), traversed the artery. Moreover, the Suez Canal serves as the main transportation route for hydrocarbons being shipped from the Middle East to the European Union and the United States (Finam.ru, March 25, 2021). The commodity data tracking company Kpler has noted that the obstruction by the *Ever Given* resulted in

seven tankers (carrying 6.3 million barrel of oil) being stuck in the Canal, temporarily raising global oil prices and—more importantly—breeding uncertainty among investors (Rossiyskaya Gazeta, March 26, 2021). By the following Monday (March 29), the Egyptian authorities finally succeeded in freeing the container ship and moving it out of the way.

The dramatic episode triggered a wave of exhilaration inside Russia, amplifying voices and institutions that have long wanted to more aggressively promote the Northern Sea Route (NSR)—an east-west maritime passage along the country's Arctic coast, connecting the Asia-Pacific and Europe. First to react was the Rosatom State Nuclear Energy Corporation, which launched a Twitter campaign mocking the Suez and praising the NSR as its alternative (Katehon.com, March 26, 2021). Simultaneously, Russia's representative to the Arctic Council (Moscow will hold the chair of this international organization in 2021–2023), Nikolai Korchunov, contended that the incident at the Suez Canal reinforces the need to develop the NSR as a viable alternative so as to minimize "global trade and transportation risks" (News.ru, March 26, 2021).

And even though transportation via the Suez has been largely restored (Rossiyskaya Gazeta, March 29, 2021), the internal debate among Russian experts regarding the subsequent economic outlook for the NSR is unlikely to cease. Based on a survey of recent Russian-language sources discussing the incident, two main "camps" can be ascertained.

The first group (the mainstream) contends that the temporary shutdown of the Suez route opens up a window of opportunity for the NSR. As stated by the head of the Public Movement for the Support of Navy, Mikhail Nenashev, "[T]his is a signal for all major naval powers […] if alternative routes, like the NSR, are not developed, some huge economic losses are likely to occur in the future" (Riafan, March 24, 2021). The director of research on developing markets at the Skolkovo School of Management, Alexei Kalinin, emphasized that, as an alternative to Suez, the NSR could provide not only a geography-related comparative advantage but also superior ecological sustainability (Rossiyskaya Gazeta, March 25, 2021). Finally, the director of the Institute of Socio-Economic Research at the Financial University Under the Government of the Russian Federation, Alexei Zubets, has argued that although the Suez Canal has heretofore been the world's most reliably transportation artery, its reputation has now been shaken, giving opportunities not only to the NSR but also Russia's transcontinental railways (Regnum, March 26, 2021).

The second group of experts, on the other hand, expresses doubts that Russia will be able to seriously capitalize on the recent Suez logjam. For instance, economist Dmitry Adaminov proclaimed that last week's impasse—

though troublesome—would not have a fundamental impact on global transportation networks and/or the attitudes of international suppliers. Indeed, any increase to the overall role of the NSR as a major transportation artery remains hampered by fundamental questions and uncertainties related to the seasonal state of the northern polar icecap and the Arctic transit capabilities of shippers. The most serious question, however, lies in the realm of infrastructure in the Russian High North, which is—at least for now—not ready to meet such ambitions plans as profoundly challenging the Suez Canal. Thus, while the NSR is an important transportation artery, it is mainly vital to Russia as a means to develop its Arctic region (Rueconomics.ru, March 25). Russian media outlets have also argued that were global oil and natural gas supply chains to be seriously disrupted for an extended period, perhaps that would significantly increase Russia's hopes of raising the NSR's profile and attracting foreign transportation companies. For now, however, hydrocarbon delivery disruptions via the Suez have only ever been temporary; thus, the prospect of a tectonic shift in maritime shipping remains a vague and theoretical notion (Rossiyskaya Gazeta, March 26, 2021). Illustratively, the head of the transport-logistics holding company Sovfrakht, Dmitry Purim, asserted that for the NSR to become a real alternative to the Suez Canal, the entire Arctic icecap has to melt completely; until then, all such talk is "groundless" (RBC, March 24, 2021).

In the final analysis, four main takeaways are worth noting. First, compared to the Suez Canal, the Northern Sea Route does admittedly have several comparative advantages (not least that it is significantly less prone to becoming blocked), and global climate change gradually boosts its competitiveness. The Federal Service for Hydrometeorology and Environmental Monitoring of Russia (Rosgidromet) has reported that the year 2020 broke yet another record in terms of temperatures, and the Arctic icecap has decreased by five to seven times in comparison with the 1980s (RBC, July 4, 2020). Specifically, the area of ice coverage in the Arctic Ocean reportedly shrank to a record low of 26,000 square kilometers last year (Fishnews.ru, March 26, 2021). Russia, as the only country in the world at the moment with a relatively large fleet of icebreakers, can certainly try to capitalize on this climactic trend. Second, as noted by a great number of experts, the NSR will—assuming the first condition is fulfilled—become more economically attractive if the necessary funding for the development of local infrastructure is obtained (tens of billions of dollars, based on the most conservative calculations). Realistically, only China could help Russia with these means, yet it is doubtful that Beijing will allot the necessary funding (Ridl.io, May 8, 2020). Third, the melting of the permafrost in the High North could result in ecological tragedies—similar to the "Norilsk disaster" (see EDM, June 29, 2020 and July

7, 2020)—that would have damaging economic and reputational implications for Russia. Finally, if the EU and US expand their economic sanctions against Russia and/or the Bering Strait becomes a dangerous bottleneck, the commercial attractiveness of the NSR will markedly collapse.

Russia's 'Green' Agenda in the Arctic and the Far East: Words vs. Deeds

26 May 2021

On May 17, Russian Prime Minister Mikhail Mishustin approved the concept of Moscow's chairmanship of the Arctic Council (2021–2023) along with a plan of events. In particular, "the protection of the Arctic environment, including climate change," was named as one of four high-priority goals during Russia's tenure. From his side, Minister for the Development of the Russian Far East and Arctic (*Minvostokrazvitia*) Alexei Chekunkov stressed his country's determination to "touch upon global climate change, [and] the use of renewable energy sources to reduce greenhouse gas emissions" (Arctic.ru, May 17, 2021). Nonetheless, such statements and rhetoric coming from Moscow's top officials bear little resemblance to reality.

Several days prior to Mushustin's and Chekunkov's remarks, on May 11, yet another ecological catastrophe involving an oil spill occurred in the northern Komi Republic (which borders the Nenets Autonomous District). As a result, parts of the Kolva River became heavily contaminated with oil from the Osha hydrocarbon deposit. Following the incident, the head of Komi Republic, Vladimir Uyba, accompanied by a high-level delegation, headed to the site of the incident (Rkomi.ru, May 13, 2021). Right from the start, the authorities' response to the ecological disaster was marked by a lack of transparency and, apparently, lies from local officials. According to the press service of the company involved, Lukoil-Komi, the incident resulted in "merely" four tons of oil products being spilled (Rosbalt, May 16, 2021). However, the affected spill area stretches for 12,700 square kilometers; and unofficially, the volume of spilled petroleum is estimated at 90 tons. Moreover, local environmental activists accused Lukoil and the republican authorities of concealing information regarding the spill, alleging that the incident may have started not on May 11 but as early as March, and that during this entire time

nothing was done to address the growing calamity. Aleksander Sladkoshtiev, the deputy director of the non-governmental organization Committee of Salvation of Pechora, asserted that hazardous materials contaminated not only the Kolva River but also spread to larger nearby rivers—the Usa and Pechora. His statement was corroborated by the World Wildlife Fund (WWF), which, based on satellite imagery, concluded that the first signs of uncontrolled seepage of petroleum into the surrounding environment date back to March. Local officials expressed doubt about the correctness of this information (Komionline.ru, May 16, 2021).

The Kolva River spill was not the only such case of ecological devastation affecting Russia's vulnerable Arctic and Far East regions since the start of the year. For instance, in late April, parts of the Ob River (Yamal peninsula) were contaminated with more than 56 tons of spilled oil products as well as pollution from of an earlier massive wildfire. While an investigation was officially launched right away, no further information was revealed to date. And the culprit, SiburTumenGas, has remained silent on the matter (Rosbalt, April 27, 2021). According to local eco-activists, the aforementioned company was not the only party culpable for the damage. Rather, the environmental catastrophe was allowed to happen due to negligence—or more likely corruption (see EDM, June 7, 2020)—on the part of the Federal Service for Supervision of Natural Resources (*Rosprirodnadzor*), which, for some reason, chose to ignore mounting problems (Nash-surgut.ru, April 22, 2021).

Another petroleum spill (approximately 3,000 cubic meters of oil), occurred on May 14, on the territory of the Yamal Nenets Autonomous Okrug (YNAO), resulting in massive contamination of the local environment (Rosbalt, May 14, 2021). Reports also emerged, on May 17, of an oil leak in the Arctic town of Dudinka, in Krasnoyarsk Krai, on the territory of the Taimyr Fuel Company, owned by metals mining giant Nornickel; its consequences remain unknown (Rosbalt, May 17). Nornickel was notably involved in another massive ecological catastrophe last year, in the High North region of Norilsk (see EDM June 29, 2020 and July 7, 2020).

A still unexplained recent incident occurred in September–October 2020, in the Kamchatka area of the Russian Far East, which is also under the purview of Minvostokrazvitia. Namely, recovered marine species in the waters off the coast of the peninsula were found with traces of chemical burns. Initially, reports stated that collected seawater samples had traces of phenol; but Russian officials subsequently contended that the incident was likely caused by a specific sort of seaweed (Lenta, December 18, 2020). Local ecologists, including Dmitry Lisitsin, rejected such claims, pointing out that next to the location where the poisoned wildlife was discovered, there is a large military polygon that

stockpiles up to 300 tons of toxic materials. Incidentally, he also noted that the authorities came late with their justification, since dead sea animals began to be observed much earlier than had first been declared (BBC News—Russian service, October 5, 2020).

In addition to directly anthropogenic disasters, the Russian Far East and High North also continue to face dramatic seasonal wildfires that incur huge ecological costs to the entire Arctic region well beyond Russia's territory. Though natural phenomena, these wildfires are made worse by inadequate state resources and inept policies designed to combat them (see EDM, January 7, 2021). In 2019 alone, Irkutsk, Krasnoyarsk and Sakha Republic experienced out-of-control fires that affected areas exceeding the territory of Greece. The WWF argued the Russian authorities demonstrated complete unpreparedness and lack of strategy. Even though the government has spent large amounts of money on "ecology," these wildfires demonstrated the ineffectiveness of those projects and the wastefulness of these state expenditures (Newsru.com, July 2, 2020).

It is important to understand that the ecological damage incurred by the Russian Arctic and Far East is not episodic: it is of a long-running systemic nature, with roots in the pre-1991 period. Moreover, while environmental catastrophes certainly happen in many countries, Russia (and the Soviet Union before it) have a lengthy and notorious track record of covering up and/or diminishing the real scale of the damage. In 2019 alone, out of 17,000 accidents in Russia's fuel-energy sector, more than 10,500 involved oil facilities, the majority of which are located in the High North. This means that, on average, an accident took place every thirty minutes (Terra-ecology.ru, October 16, 2020). Nevertheless, only a handful of catastrophes ever become public knowledge—most are concealed by the authorities.

Despite this questionable environmental legacy, Russia is now consciously trying to attract the other Arctic Council members to sign on to its "green" agenda items for the region. Moscow believes that if it can play a leadership role on ecology, this will aid its larger goal of convincing the other Arctic states to accept Russia's expansive geographic and security claims in the north (see EDM, April 22, May 13, 24, 2021). The other Arctic Council members will need to be conscious of this stratagem.

Appendix: Russia's Arctic Strategy to 2035

Translation from Russian into English

EXECUTIVE ORDER

OF THE PRESIDENT OF THE RUSSIAN FEDERATION

on the Strategy for Developing the Russian Arctic Zone and Ensuring National Security until 2035

In accordance with Article 17 of Federal Law No. 172-FZ "On Strategic Planning in the Russian Federation" dated June 28, 2014, I hereby order:

1. That the attached Strategy for Developing the Russian Arctic Zone and Ensuring National Security until 2035 be approved.

2. That the Government of the Russian Federation:

a) within 3 months, approve a unified action plan for the implementation of the Basic Principles of the State Policy of the Russian Federation in the Arctic until 2035, approved by Executive Order of the President of the Russian Federation No. 164 dated March 5, 2020, and the Strategy for Developing the Russian Arctic Zone and Ensuring National Security until 2035 (hereinafter referred to as the "Strategy"), approved by this Executive Order;

b) ensure the implementation of the Strategy;

c) oversee the implementation of the Strategy;

d) submit an annual progress report to the President of the Russian Federation on the implementation of the Strategy.

3. Recommend that the state authorities of the Subjects of the Russian Federation whose territories belong to the land territories of the Russian Arctic Zone be guided by the provisions of the Strategy in their activities and make the relevant changes in socio-economic development strategies and state programs for the development of the Subjects of the Russian Federation.

4. This Executive Order shall enter into force as of the date of its signing.

V. Putin
President of the Russian Federation

Moscow, the Kremlin
October 26, 2020
No. 645

STRATEGY

for Developing the Russian Arctic Zone and Ensuring National Security until 2035

I. General

1. This Strategy is a strategic planning document in the field of ensuring the national security of the Russian Federation (hereinafter, "national security"), developed to implement the Basic Principles of the State Policy of the Russian Federation in the Arctic until 2035 (hereinafter, the "Basic Principles of the State Policy in the Arctic") and defining measures aimed at achieving the main objectives of the development of the Arctic Zone and ensuring national security, as well as the stages and expected results of the implementation of these measures.

2. The legal basis of this Strategy comprises the Constitution of the Russian Federation, Federal Law No. 172-FZ of June 28, 2014, "On Strategic Planning in the Russian Federation", the National Security Strategy of the Russian Federation, the Foreign Policy Concept of the Russian Federation, the Strategy of Scientific and Technological Development of the Russian Federation, the Basic Principles of the State Policy for Regional Development in the Russian Federation until 2025, Executive Orders of the President of the Russian Federation No. 296 dated May 2, 2014, "On the Land Territories of the Russian Arctic Zone", No. 204 dated May 7, 2018, "On National Goals and Strategic Objectives for the Development of the Russian Federation until 2024", and No. 474 dated July 21, 2020, "On the National Development Goals of the Russian Federation until 2030".

3. In this Strategy, the concepts of the Arctic and the Russian Arctic Zone (hereinafter referred to as the "Arctic Zone") are used with the same meanings as in the Basic Principles of the State Policy of the Russian Federation in the Arctic.

4. The Arctic Zone has the following peculiarities which define the special approaches to its socio-economic development and to ensuring national security in the Arctic:

a) extreme natural and climatic conditions, extremely low population density and low development of transport and social infrastructure;
b) high sensitivity of environmental systems to external influences, especially in the places of residence of the minority indigenous peoples of the Russian Federation (hereinafter referred to as "indigenous peoples");
c) climate change contributing to the emergence of both new economic opportunities and risks for the economy and the environment;
d) stable geographic, historical and economic ties with the Northern Sea Route;
e) uneven industrial and economic development of certain territories of the Arctic Zone, focus of the economy on the extraction of natural resources and their shipment to industrially developed regions of the Russian Federation and export;
f) high resource intensity of economic activity and essential services for the population, their dependence on the supply of fuel, food and other vital goods from various Subjects of the Russian Federation;
g) growing potential for conflict in the Arctic.

II. Assessment of the state of development of the Arctic Zone and of the state of national security

5. The importance of the Arctic Zone in the socio-economic development of the Russian Federation and in ensuring its national security is due to the following:

a) the Arctic Zone ensures the production of more than 80 percent of combustible natural gas and 17 percent of oil (including gas condensate) in the Russian Federation;
b) implementation of major economic (investment) projects in the Arctic Zone ensures the creation of demand for high-tech products and stimulates the production of such products in various Subjects of the Russian Federation;
c) according to experts, the continental shelf of the Russian Federation in the Arctic (hereinafter referred to as the "continental shelf") contains more than 85.1 trillion m3 of combustible natural gas and 17.3 billion t of oil (including gas condensate) and is a strategic reserve for the development of the mineral resource base of the Russian Federation;

d) the importance of the Northern Sea Route as a transport corridor of global importance used for the transportation of national and international cargo will increase as a result of climate change;
e) the likelihood of events with a negative impact on the environment as a result of anthropogenic impact and/or climatic changes in the Arctic Zone creates global risks for the economic system, the environment and the security of the Russian Federation and the world as a whole;
f) 19 indigenous peoples live in the Arctic Zone, and sites of their historical and cultural heritage with global historical and cultural value are located there;
g) facilities of strategic deterrent forces aimed at preventing aggression against the Russian Federation and its allies are located in the Arctic Zone.

6. As a result of the implementation of the Strategy for Developing the Russian Arctic Zone and Ensuring National Security until 2020:

a) the life expectancy of people born in the Arctic Zone increased from 70.65 years in 2014 to 72.39 years in 2018;
b) the migration of the population from the Arctic Zone decreased by 53 percent during the period from 2014 to 2018;
c) the unemployment rate (according to the methodology of the International Labor Organization) decreased from 5.6 percent in 2017 to 4.6 percent in 2019;
d) the share of gross regional product generated in the Arctic Zone in the aggregate gross regional product of the the Subjects of the Russian Federation increased from 5 percent in 2014 to 6.2 percent in 2018;
e) the share of funds from the budgets of the budgetary system of the Russian Federation in the total amount of investments in fixed assets made in the Arctic Zone increased from 5.5 percent in 2014 to 7.6 percent in 2019;
f) the volume of cargo traffic in the waterways of the Northern Sea Route increased from 4 million t in 2014 to 31.5 million t in 2019;
g) the share of households with broadband access to the Internet in the total number of such households in the Arctic Zone increased from 73.9 percent in 2016 to 81.3 percent in 2019;
h) the share of modern weapons and military and special equipment in the Arctic Zone increased from 41 percent in 2014 to 59 percent in 2019.

7. The main dangers, challenges and threats that pose risks for the development of the Arctic Zone and for ensuring national security remain:

a) intensive warming of the climate in the Arctic, which is taking place 2 - 2.5 times faster than on the planet as a whole;
b) a decrease in natural population growth, migration outflow and, as a result, a decrease in population;
c) lag of the values of indicators characterizing the quality of life in the Arctic Zone behind the Russian nationwide values or average values for the Subjects of the Russian Federation, including in terms of life expectancy at birth, mortality of the working-age population, infant mortality, share of public roads that meet standard requirements, share of unfit housing, volume of commissioned housing, share of the provision of housing with all types of improvement;
d) low availability of high-quality social services and well-equipped housing in remote settlements, including in the places of traditional residence and traditional economic activity of indigenous peoples;
e) a high level of occupational risk due to working conditions exceeding standards and the combined impact of harmful and/or hazardous production factors and unfavorable climatic conditions, and increased risk of the incidence and development of occupational diseases;
f) lack of a state support system for the delivery of fuel, food and other vital goods to remote settlements which would ensure the possibility of their sale to the population and business entities at affordable prices;
g) underdeveloped transport infrastructure, including infrastructure for general aviation and year-round air transportation at affordable prices, and the high cost of creating such infrastructure;
h) low competitiveness of business entities due to significant costs, including in connection with the need to provide guarantees and compensation to people working in the Far North and equivalent areas;
i) the secondary vocational and higher education systems in the Arctic Zone do not meet the economic and social need for qualified and highly qualified personnel;
j) delay in the development of the infrastructure of the Northern Sea Route and the construction of icebreaker, rescue and auxiliary fleets on the deadlines for the implementation of economic projects in the Arctic Zone;
k) absence of a system for emergency evacuation and provision of medical assistance to crew members of sea vessels in the waters of the Northern Sea Route;
l) underdeveloped information and communication infrastructure and lack of competition in the telecommunications sector;

m) high share of local electricity generation based on the use of economically ineffective and environmentally unsafe diesel fuel;
n) a decrease in the share of added value of high-tech sectors of the economy in the gross regional product of the Arctic Zone, weak interaction of the research and development sector with the real sector of the economy, and discontinuity of the innovation cycle;
o) low level of investments in fixed assets for the protection and rational use of natural resources;
p) likelihood of highly toxic and radioactive substances entering the Arctic Zone from abroad, as well as pathogens causing especially dangerous infectious diseases;
q) the rate of development of the rescue infrastructure and the public safety system does not match the growth rate of economic activity in the Arctic Zone;
r) growth of the potential for conflict in the Arctic requiring a constant increase in the combat capabilities of the troops (forces) of the Armed Forces of the Russian Federation, other troops, and military formations and bodies in the Arctic Zone.

8. In 2019, the public administration system was reorganized to account for the challenges associated with the development of the Arctic Zone and ensuring national security: a new composition and expanded powers of the State Commission for Arctic Development were approved, the Ministry for the Development of the Russian Far East and the Arctic was established, and it was resolved to expand the competence of the institutions for the development of the Far East to the Arctic Zone.

III. Purpose of the implementation of this Strategy and measures aimed at attaining the main objectives of the development of the Arctic Zone and ensuring national security

9. The purpose of the implementation of this Strategy is to ensure the national interests of the Russian Federation in the Arctic Zone and to achieve the goals defined in the Basic Principles of the State Policy in the Arctic.

10. The main areas and objectives of the development of the Arctic Zone and ensuring national security correspond to the main areas of implementation of the state policy of the Russian Federation in the Arctic and the main objectives of the development of the Arctic Zone listed in the Basic Principles of the State Policy in the Arctic.

11. The main objectives in the area of social development of the Arctic Zone shall be achieved by implementing the following measures:

a) modernization of primary health care, including bringing the material and technical base of medical organizations providing primary health care to adults and children and their separate structural units and central district and district hospitals into compliance with the procedures for the provision of medical care, and equipment upgrade and re-equipment of these organizations, units and hospitals with equipment necessary for the provision of medical care;
b) equipment of medical organizations providing primary health care with road and air transport for the transportation of patients to medical organizations or medical workers to the place of residence of patients, as well as for the delivery of drugs to settlements located in remote areas, including to the areas of traditional residence of indigenous peoples;
c) improvement of the state financing mechanisms for the provision of medical care, taking into account the low population density in settlements and their transport distance;
d) priority provision of Internet access to medical organizations, ensuring the possibility of providing medical care using telemedicine technologies, and development of off-site medical care, including on the routes of nomadic indigenous peoples;
e) ensuring the approval of standards for the provision of medical care for certain diseases to citizens living in the Far North, as well as the setting of separate standards for the number of medical workers and for equipment for medical organizations and their branches or subdivisions operating in the Far North and equivalent areas, based on morbidity rates and the number of cases of medical evacuation;
f) organization of medical assistance for the navigation of ships in the waterways of the Northern Sea Route and the operation of stationary and floating offshore platforms in the water area of the Arctic Ocean;
g) development of high-tech medical assistance;
h) development of measures for the prevention of diseases, including infectious diseases, and implementation of a set of measures aimed at forming citizens' commitment to a healthy lifestyle, including their motivation to switch to a healthy diet and reduce the consumption of alcohol and tobacco products;
i) provision of social support for healthcare professionals to eliminate the shortage of personnel;
j) development of schemes for the optimal placement of social infrastructure facilities, including medical organizations that are not

related to primary health care, educational organizations, and organizations providing services in the field of culture, fitness and sports, to ensure the availability of the relevant services to the population, taking into account demographic and personnel forecasts, the transport accessibility of settlements and the peculiarities of the residence of indigenous peoples, as well as the modernization of social infrastructure facilities;

k) an increase in the accessibility of high-quality general education and ensuring the conditions for organizing additional education for children, including in remote and rural settlements, and development of distance education technologies;

l) improvement of legal regulation in the field of education and creation of the conditions for providing education for indigenous peoples;

m) development, together with large and medium-sized enterprises, of a network of professional educational organizations, including the creation of centers for advanced vocational training and equipment of workshops with modern technology in accordance with WorldSkills standards;

n) support of development programs of federal universities and other institutions of higher education and their integration with scientific organizations and enterprises;

o) establishing the specifics of legislation in the area of ensuring the sanitary and epidemiological well-being of the population for the Arctic Zone;

p) elimination of the negative environmental impact of economic and other human activities and risks of harm to public health caused by climate change, and the study and assessment of the impact of such changes on the sources and the spread of infectious and parasitic diseases dependent on them;

q) ensuring the preservation and promotion of cultural heritage, the development of traditional culture, and the preservation and development of the languages of indigenous peoples;

r) provision of state support measures aimed at stimulating visits to cultural organizations by children living in remote settlements (including payment for the children's travel), for organizing and conducting tours of performing groups and visiting exhibitions, ensuring the participation of local sports teams in interregional and all-Russian sports events, and holding all-Russian festivals and creative projects in the Arctic Zone, as well as major sports events;

s) creation of the conditions for increasing the share of citizens who regularly engage in fitness and sports, an increase in the provision of the

population with sports facilities, and an increase in the simultaneous capacity of such facilities;

t) improvement of mechanisms for subsidizing long-distance, interregional and local (intraregional) air transportation;

u) formation of a modern urban environment in settlements, including through the improvement of public and courtyard spaces, taking into account the natural and climatic characteristics of the Arctic and the introduction of advanced digital and engineering solutions;

v) state support of housing construction, including wooden housing construction, construction of engineering and social infrastructure in the areas of traditional residence of indigenous peoples and in settlements where bodies and organizations operating in the field of national security and/or as a base for the development of mineral resource centers are located, and implementation of economic and/or infrastructure projects in the Arctic;

w) ensuring the financing of expenses associated with the provision of housing subsidies to citizens leaving the Far North and equivalent areas;

x) stimulating the participation of state corporations, companies with state participation and private investors in the creation and modernization of social, housing, utilities and transport infrastructure, as well as in the development of infrastructure in the areas of traditional residence of indigenous peoples and performance of their traditional economic activities;

y) definition of a system of social guarantees provided to citizens of the Russian Federation who work and live in the Arctic Zone;

z) creation of a state support system for the delivery of fuel, food and other vital goods to settlements located in remote areas.

12. The main objectives in the area of economic development of the Arctic Zone shall be achieved by implementing the following measures:

a) implementation of a special economic regime in the Arctic Zone contributing to the transition to a circular economy, private investments in exploration work, the creation of new production facilities and the modernization of existing ones, the development of high-tech production facilities, the development of new oil and gas provinces, deposits of solid minerals and hard-to-extract hydrocarbon reserves, and an increase in the volume of advanced petroleum refining and the production of liquefied natural gas and gas chemical products;

b) provision of state support to investors for capital investments in transport, energy and utilities infrastructure, including the infrastructure

for gas supply, water supply, pipeline transport and communications systems necessary for the implementation of new investment projects, selected or determined in accordance with the procedures or criteria established by federal laws and other regulations;

c) development and implementation of a state support program for traditional economic activities of indigenous peoples;
d) simplification of the procedure for providing citizens with land plots to carry out business and other activities not prohibited by law;
e) development of digital services for persons who are granted use of forest and fish farming areas;
f) development and implementation of a geological survey program for the Arctic Zone;
g) continuation of work on the preparation of materials needed to confirm the outer boundary of the continental shelf;
h) creation and development of a new model for the implementation of economic projects on the continental shelf providing for the expansion of the participation of private investors in such projects while maintaining control over their implementation by the state;
i) provision of state support measures aimed at the creation and development of technologies for the development of oil and gas fields (including technologies used on the continental shelf) and the production of liquefied natural gas, as well as ensuring the production of the relevant industrial products;
j) stimulating the use of Russian industrial products in the implementation of new economic projects;
k) provision of state support to projects for the creation and/or modernization of fish processing complexes, fish farming and greenhouse enterprises, and livestock complexes;
l) development and implementation of legal and organizational measures to prevent illegal extraction and sale of marine biological resources, as well as to stimulate the sale of legally obtained marine biological resources;
m) development of a mechanism for state support for intensifying reforestation, development of forest infrastructure and added-value processing of forest resources, and development of a system of aerial forest fire protection;
n) state support for the construction of ice-class Arctic cruise ships in the Russian Federation and the development of tourism infrastructure;
o) bringing the system of basic professional educational programs and admission targets for training at the expense of budgetary allocations

from the federal budget, the budgets of the Subjects of the Russian Federation, and local budgets to educational organizations located in the Arctic Zone into compliance with the forecast need for qualified and highly qualified personnel;

p) systematic provision of state support measures to the economically active population of Russia willing to move (relocate) to the Arctic Zone to work.

13. The main objectives in the area of infrastructure development in the Arctic Zone shall be achieved by implementing the following measures:

a) integrated development of the infrastructure of seaports and shipping routes in the waters of the Northern Sea Route and the Barents, White and Pechora Seas;
b) creation of headquarters for maritime operations to manage shipping along the entire water area of the Northern Sea Route;
c) consolidation of transport and logistics services provided in the waters of the Northern Sea Route on the basis of a digital platform designed for paperless processing of multimodal transportation of passengers and goods;
d) construction of at least five universal nuclear-powered icebreakers under project 22220, three nuclear-powered icebreakers under the Leader project, 16 rescue and towing vessels of various capacities, three hydrographic survey ships and two buoy tenders;
e) development of the vocational education and additional education system, taking into account the need for the development of the Northern Sea Route;
f) development and approval of a program for the construction of cargo ships used for merchant shipping, for the implementation of economic projects and the construction of cargo and passenger ships for transportation between sea and river ports in the Arctic Zone;
g) construction of hub ports and creation of a Russian container operator to ensure international and coastal shipping in the water area of the Northern Sea Route;
h) expanding the possibilities of navigation along the White Sea-Baltic Canal, the basins of the Onega, Northern Dvina, Mezen, Pechora, Ob, Yenisey, Lena and Kolyma rivers and other rivers of the Arctic Zone, including dredging and infrastructure development of ports and port stations;

i) expanding the use of liquefied natural gas in sea and river transport in the water area of the Northern Sea Route, as well as for power supply of settlements;

j) creation of a scheme for the development and construction (reconstruction) of airport complexes and checkpoints across the state border of the Russian Federation simultaneously with the development of the infrastructure of the Northern Sea Route and the implementation of economic projects;

k) development and implementation of engineering and technical solutions that ensure the sustainable functioning of infrastructure in the context of climate change;

l) construction and reconstruction of roads of local importance, including in remote settlements;

m) deployment of a highly elliptical orbit space system providing high time resolution hydrometeorological data for the polar region of Earth;

n) creation and development of a satellite constellation in highly elliptical orbits on the basis of Russian equipment, providing satellite communications for users in the water area of the Northern Sea Route and in territories north of the 70th parallel north, as well as the required quality and speed of operation of the automatic identification system and remote sensing systems;

o) creation of a trans-Arctic main underwater fiber-optic communication line with the output of local communication lines to the largest ports and settlements of the Arctic Zone;

p) ensuring the radiation safety of seaports upon the arrival and moorage of surface ships and nuclear-powered ships, nuclear service ships and floating power units of nuclear thermal power plants;

q) development and implementation of a mechanism for state support of projects aimed at improving the efficiency of power generation in isolated and hard-to-reach areas and involving the use of liquefied natural gas, renewable energy sources and local fuel;

r) providing indigenous peoples in the places of their traditional residence and traditional economic activity with mobile power supply sources and communication means.

14. The main objectives in the area of the development of science and technology for the development of the Arctic shall be achieved by implementing the following measures:

a) identification of priority areas of scientific and technological development and increasing activities for conducting fundamental and applied scientific research for the development of the Arctic;
b) development and implementation of critically important technologies for the development of the Arctic, including ensuring the creation of new functional and construction materials necessary for carrying out economic activities in Arctic conditions, development of land vehicles and aviation equipment for work in the natural and climatic conditions of the Arctic, and development of technologies for preserving the health and increasing the life expectancy of the population of the Arctic Zone;
c) conducting comprehensive expeditionary research in the Arctic Ocean (including bathymetric and gravimetric work and acoustic profiling), hydrographic research to ensure the safety of navigation, and long-term hydrographic research, including deep-sea research, to study the underwater environment;
d) development of a comprehensive plan for international scientific research (including expeditionary research) on the state of Arctic ecosystems and global climate changes and study of the Arctic;
e) development of the research fleet of the Russian Federation, including construction of a drifting ice-resistant self-propelled platform and research vessels for the study of the Arctic;
f) creation of scientific and educational centers in priority areas of fundamental and applied scientific research carried out for the development of the Arctic;
g) monitoring, evaluating and forecasting the development of science and technology in the Arctic Zone.

15. The main objectives in the field of environmental protection and environmental safety shall be achieved by implementing the following measures:

a) creation of specially protected natural areas, ensuring compliance with their special protection status, including entering information about them into the Unified State Register of Real Estate;
b) adaptation of the economy and infrastructure of the Arctic Zone to climate change;
c) identification, assessment and recording of sites of accumulated harm to the environment and organization of work to eliminate accumulated harm to the environment;

d) development of a unified state ecological monitoring system (state environmental monitoring) using modern information and communication technologies and systems;
e) work in the field of hydrometeorology, including increasing the density of the observation network and the technical equipment of environmental monitoring systems according to the recommendations of the World Meteorological Organization;
f) minimization of atmospheric emissions and discharges of pollutants into water bodies during economic and other activities in the Arctic Zone, as well as establishment of state support measures aimed at introducing the best available technologies in the performance of economic and other activities in the Arctic Zone;
g) prevention of negative environmental consequences in the development of natural resources;
h) development of a unified state system for the prevention and management of emergencies to implement measures to clean up spills of oil and petroleum products, including in the waters of the Northern Sea Route and other sea transport corridors;
i) prevention of the entry of highly toxic and radioactive substances and dangerous microorganisms into the Arctic Zone from abroad;
j) regular assessment of the environmental and socio-economic consequences of anthropogenic impact on the environment of the Arctic Zone, including those caused by the transfer of pollutants from North America, Europe and Asia;
k) regular assessments of the impact of nuclear facilities located in the Arctic Zone on the environment and the population;
l) ensuring the rational use of associated petroleum gas to minimize its flaring;
m) state support for activities in the area of waste management in the Arctic Zone and improvement of the hazardous waste handling system in the Arctic Zone;
n) creation of a system for promptly informing public authorities and the population about the occurrence or increase of the risks of harmful effects of the most dangerous pollutants and microorganisms in connection with emergencies caused by climate change.

16. The main objectives in the area of development of international cooperation shall be achieved by implementing the following measures:

a) implementation of multi-vector foreign policy activities aimed at preserving the Arctic as a territory of peace, stability and mutually beneficial cooperation;
b) ensuring the mutually beneficial bilateral and multilateral cooperation of the Russian Federation with foreign states, including under international treaties, agreements and conventions to which it is a party;
c) international legal formalization of the outer border of the continental shelf and maintaining interaction with the Arctic states to protect national interests and implement the rights of a coastal state in the Arctic provided for by international acts, including those related to the exploration and development of resources of the continental shelf and the establishment of its external boundaries;
d) ensuring Russian presence in the Svalbard archipelago on the basis of equal and mutually beneficial cooperation with Norway and other states of the Svalbard Treaty of February 9, 1920;
e) assistance in increasing the efforts of the Arctic states to create a unified regional search and rescue system, prevent anthropogenic disasters and manage their consequences, coordinate the activities of rescue forces, and ensure interaction of the Arctic states within the framework of the Arctic Coast Guard Forum;
f) development and implementation of programs for economic and humanitarian cooperation of the Subjects of the Russian Federation whose territories belong to the land territories of the Arctic Zone with the regions of the Arctic states;
g) active participation of Russian state and nonprofit organizations in the work of the Arctic Council and other international forums dedicated to Arctic issues;
h) ensuring the effective operation of the Arctic Council under the chairmanship of the Russian Federation in 2021-2023, including the promotion of joint projects, including those aimed at ensuring sustainable development of the Arctic and preserving the cultural heritage of indigenous peoples;
i) support in strengthening ties between the indigenous peoples living in the Arctic Zone and the indigenous peoples living in the Arctic territories of foreign states and holding of relevant international forums;
j) promoting the all-round development of the young generation of indigenous peoples through educational, humanitarian and cultural exchanges with young people from other Arctic states;
k) development of general principles for the implementation of investment projects in the Arctic Zone with the participation of foreign capital;

l) organization of events aimed at attracting foreign investors to participate in the implementation of economic (investment) projects in the Arctic Zone;

m) contribution to the strengthening of the role of the Arctic Economic Council as one of the central forums for sustainable development of the Arctic;

n) development and implementation by Russian organizations, together with foreign partners, of basic and additional professional educational programs related to the development and exploration of the Arctic;

o) ensuring the implementation of the Agreement on Enhancing International Arctic Scientific Cooperation;

p) creation and promotion on the Internet of a multilingual information resource dedicated to the development of the Arctic Zone and Russia's activities in the Arctic.

17. The main objectives in the area of ensuring the protection of the population and territories of the Arctic from natural and anthropogenic emergencies shall be achieved by implementing the following measures:

a) identification and analysis of the risks of natural and anthropogenic emergencies and development of ways to prevent such situations;

b) development of technologies, creation of technical tools and equipment for emergency rescue operations and firefighting, modernization of the aircraft fleet, and development of aviation infrastructure and aviation rescue technologies to ensure the protection of the population and territories and reduce the response time to emergencies, taking into account the objectives to be attained and the natural and climatic conditions of the Arctic Zone;

c) improvement of methods for protecting the population and territories, methods for extinguishing fires, including with the use of aircraft, and the procedure for temporary accommodation of the population and professionals in the Arctic during the management of natural and anthropogenic emergencies;

d) enhancement of the protection of critical and potentially hazardous facilities, ensuring their stable operation in emergency situations in the Arctic;

e) improvement of the legal and regulatory framework in the field of protection of the population, territories and critical and potentially hazardous facilities from natural and anthropogenic emergencies in the

field of fire safety, taking into account the specifics of facilities which it is planned to build in the Arctic Zone;

f) development of systems for monitoring the situation and forecasting emergency situations in the Arctic Zone, including on the basis of processing data from remote sensing of the Earth from space;
g) development of an anti-crisis management system within the framework of a unified state system for the prevention and management of emergency situations;
h) development (taking into account the objectives to be achieved and the natural and climatic conditions) of Arctic integrated emergency rescue centers, including the expansion of their technical and tactical capabilities related to the prevention of emergencies and response to them, improvement of their structure, composition and material and technical support, and expansion of the base infrastructure;
i) organization of drills and practice to check the readiness of the forces and facilities of the Arctic states to eliminate natural and anthropogenic emergencies, including those arising from the implementation of large economic and infrastructure projects, as well as participation in such drills and practice;
j) setting of requirements for rescue equipment and facilities for providing assistance and preserving life and health in the event of radiation accidents and incidents in the Arctic Zone;
k) ensuring the evacuation (resettlement) of citizens from settlements due to the consequences of natural and anthropogenic emergencies.

18. The main objectives in the area of public safety of the Arctic Zone shall be achieved by implementing the following measures:

a) improvement of the structure and staffing of the internal affairs agencies of the Russian Federation and the troops of the national guard of the Russian Federation;
b) equipment of the subdivisions of the internal affairs agencies of the Russian Federation and the troops of the national guard of the Russian Federation stationed in the Arctic Zone with modern weapons and appropriate ammunition and special and other supplies and equipment adapted to the Arctic conditions;
c) prevention of extremist and terrorist activities;
d) enhancement of the effectiveness of measures to prevent neglect and provide social assistance to minors with various forms and degrees of maladjustment, as well as their rehabilitation;

e) creation of the conditions for the organization of volunteer public order patrols and other law enforcement associations, an anti-drug movement, and public anti-drug associations and organizations, and formation of regional branches of the system for comprehensive rehabilitation and resocialization of users of narcotic drugs and psychotropic substances;
f) prevention of crimes at enterprises of the fuel and energy complex and in housing and utilities, as well as crimes committed with the use of information and communication technologies;
g) implementation, development and maintenance of the law enforcement segment system of the Safe City hardware and software package;
h) expansion (creation) of a network of rehabilitation and adaptation centers to provide comprehensive social assistance to persons released from places of detention.

19. The main objectives in the area of ensuring military security, defense and protection of the state border of the Russian Federation in the Arctic Zone shall be achieved by implementing the following measures:

a) improvement of the composition and structure of the Armed Forces of the Russian Federation, other troops, and military formations and bodies in the Arctic Zone;
b) ensuring favorable operational conditions in the Arctic Zone, including maintaining the level of combat readiness of troops (forces) of the Armed Forces of the Russian Federation, other troops, and military formations and bodies in compliance with the actual and forecast military dangers and threats faced by the Russian Federation in the Arctic;
c) equipment of the Armed Forces of the Russian Federation, other troops, and military formations and bodies stationed in the Arctic Zone with modern weapons and military and special equipment adapted to Arctic conditions;
d) development of base infrastructure, implementation of measures for the operational equipment of territories, and improvement of the logistics system of the Armed Forces of the Russian Federation, other troops, and military formations and bodies to ensure the accomplishment of objectives in the Arctic Zone;
e) use of dual-use technologies and infrastructure to achieve a comprehensive solution to defense objectives in the Arctic Zone.

IV. Main areas of implementation of this Strategy in individual Subjects of the Russian Federation and municipal entities

20. The main areas of implementation of this Strategy in the Murmansk Region are:

a) comprehensive development of the Murmansk seaport, the only ice-free Russian port in the Arctic; development of the Murmansk transport hub as a multimodal transport hub; and construction of new terminals and transshipment complexes in the port;
b) comprehensive development of closed administrative territorial formations and settlements in which military formations are stationed, including the development of infrastructure and the modernization of dual-use facilities;
c) creation and development of enterprises of the marine service complex performing repair, supply and bunkering of ships and development of coastal bases to provide services on a competitive basis to companies engaged in shipping in the water area of the Northern Sea Route and implementing projects in the Arctic Zone;
d) creation and development of a center for the construction of large-tonnage offshore structures for the production, storage and shipment of liquefied natural gas and creation and development of enterprises that repair and maintain marine equipment and equipment used for the development of offshore hydrocarbon deposits;
e) geological study of the mineral resource base of the Kola Peninsula and the formation of new and development of existing mineral resource centers specializing in the extraction and processing of minerals;
f) development of the energy infrastructure, including replacement of equipment intended for fuel oil heat generation with equipment using other types of energy resources;
g) modernization of airport complexes, including Murmansk's international airport;
h) development of the congress, exhibition and business infrastructure of Murmansk to use the competitive advantages of the Russian Federation in the field of international cooperation and business tourism in the Arctic;
i) development of the fishery complex (taking into account the need to preserve and develop the resource potential of the fishing industry), technical re-equipment of enterprises, including construction of ships, commissioning of new capacities for added-value processing of aquatic

biological resources on a modern technological and organizational basis, and development of aquaculture;

j) development of tourism and recreational clusters, including in the territories of Kirovsk, Teriberka, Kovdorsky, Pechengsky and Tersky municipal districts.

21. The main areas of implementation of this Strategy in the Nenets Autonomous District are:

a) development of the project for the construction of the Indiga deep-water seaport and the Sosnogorsk-Indiga railway;
b) development of transport infrastructure, including the reconstruction of Naryan-Mar seaport, Naryan-Mar airport and the airport in the village of Amderma, performance of dredging works on the Pechora river, construction of the Naryan-Mar - Usinsk road;
c) development of the Varandeysky, Kolguevsky, Kharyago-Usinsky and Khasyreysky oil and mineral resource centers;
d) formation of gas condensate mineral resource centers on the basis of the fields of the Nenets Autonomous District, including the development of the Korovinsky and Kumzhinsky gas condensate fields and the Vaneyvissky and Layavozhsky oil and gas condensate fields;
e) geological study and development of the mineral resource base to diversify the economy of the Nenets Autonomous District;
f) construction of an agro-industrial park and implementation of export-oriented projects involving advanced processing of venison;
g) development of a tourism cluster, including the infrastructure for cultural, religious and ethnic tourism.

22. The main areas of implementation of this Strategy in the Chukotka Autonomous District are:

a) development of the Pevek seaport and its terminals;
b) creation of a transport and logistics hub in the deep-water year-round seaport of Providenie;
c) modernization of the Chaun-Bilibino power center;
d) development of transport infrastructure, including the construction of the Kolyma - Omsukchan - Omolon - Anadyr interregional road;
e) connection of the Nenets Autonomous Okrug to the unified telecommunication network of the Russian Federation by creating an underwater fiber optic Petropavlovsk-Kamchatsky-Anadyr communication line;

f) development of the Baimsky and Pyrkakaysko-Maysky mineral resource centers of precious and non-ferrous metals;
g) development of the Bering coal-mining center and construction of a year-round terminal in the deep-water Arinay lagoon;
h) creation of an emergency rescue unit and an Arctic crisis management center in Pevek;
i) development of Arctic cruise tourism and formation of ethnic and environmental tourism clusters in Anadyr, Pevek and Providenie.

23. The main areas of implementation of this Strategy in the Yamalo-Nenets Autonomous District are:

a) development of the Sabetta seaport with shipping terminals and a sea shipping channel in the Gulf of Ob;
b) construction and development of the Obskaya - Salekhard - Nadym - Pangody - Novy Urengoy - Korotchaevo and Obskaya - Bovanenkovo - Sabetta railways;
c) expansion of liquefied natural gas production on the Yamal and Gydan peninsulas;
d) development of gas fields in the Gulf of Ob with the development of a gas transportation pipeline system;
e) development of the Novoportovskoye oil and gas condensate and Bovanenkovskoye gas condensate mineral resource centers, development of the Tambeyskaya group of fields and preparation for the development of shelf deposits;
f) development of oil and gas chemical production in the area of Sabetta, Yamburg and Novy Urengoy, and formation of a diversified industrial and technological gas processing and petrochemical complex;
g) maintenance and development of oil and gas pipeline networks, development of oil and gas mineral resource centers of the Nadym-Pur and Pur-Taz oil- and gas-bearing areas connected to pipelines, including using new technologies for the extraction and development of underlying reservoirs, as well as hard-to-recover oil reserves;
h) development of technologies for industrial use of low-pressure natural gas, including gas compressing technologies;
i) expansion of the centralized power supply zone by connecting settlements to the unified power system;
j) development of oil and gas services through the creation of industrial zones in the relevant settlements;
k) organization of production of construction materials to meet the needs of the fuel and energy sector and housing construction;

l) creation of an emergency rescue unit and an Arctic crisis management center in Sabetta;
m) formation of a tourism cluster based in the agglomeration which includes Salekhard, Labytnangi and Kharp.

24. The main areas of implementation of this Strategy in individual municipal entities of the Republic of Karelia are:
a) modernization of the White Sea-Baltic Canal;
b) development of the construction materials industry based on building stone deposits, including for the purpose of ensuring the performance of construction work in the neighboring regions of the Russian Federation;
c) creation and development of mineral resource centers of the East Karelian copper, gold and molybdenum ore area;
d) formation and development of a cluster of added-value wood processing enterprises;
e) development of a fishery cluster, including aquaculture enterprises;
f) development of cultural, historical and environmental tourism;
g) creation of cascades of small hydroelectric power plants, subject to confirmation of the prospective demand for electricity and their cost effectiveness;
h) creation of a network of data processing and storage centers based on domestic high-speed ultra dense solutions.

25. The main areas of implementation of this Strategy in individual municipal entities of the Komi Republic are:
a) diversification of the economy and integrated socio-economic development of the single-industry municipal entities Vorkuta and Inta urban districts;
b) development of coal mineral resource centers on the basis of the Pechora coal basin and creation of complexes for advanced processing of coal raw materials and coal chemicals on their basis;
c) formation and development of oil and gas mineral resource centers on the basis of the Timan-Pechora oil and gas province, including creation of oil and gas processing facilities;
d) geological study of individual territories and development of the solid mineral resource base;
e) creation and development of a vertically integrated mining and metallurgical complex for the processing of titanium ores and quartz (glass) sands of the Pizhemskoye deposit;

f) formation and development of the Parnoksky ferromanganese mineral resource center;
g) development of railway infrastructure to ensure connection with railway lines under construction and planned for construction, including the construction of the Sosnogorsk-Indiga railway and reconstruction of the Konosha-Kotlas-Chum-Labytnangi section, and a feasibility study of the reconstruction of the Mikun-Vending section and of the Vending-Karpogory section;
h) development of transport infrastructure, including the construction and reconstruction of sections of the Syktyvkar - Ukhta - Pechora - Usinsk - Naryan-Mar road and performance of dredging works on the Pechora river, which provides the only option for transport accessibility of certain territories;
i) reconstruction and modernization of the airport network, including the Vorkuta joint civil and military airport;
j) development of a cultural-ethnographic and cultural-historical tourism cluster, as well as formation of an active nature tourism cluster.

26. The main areas of implementation of this Strategy in individual municipal entities of the Republic of Sakha (Yakutia) are:

a) dredging of the Anabar, Lena, Yana, Indigirka and Kolyma rivers;
b) integrated development of the regions of the Anabar and Lena basins, taking into account the development of mineral resource centers, including the Tomtorskoye deposit, which is the world's largest deposit of rare-earth metals; alluvial diamond deposits in the Anabarsky, Bulunsky and Oleneksky districts; the Verkhne-Munskoe diamond deposit; the Taimylyrsky coal deposit; and the Zapadno-Anabarsky oil and mineral resource center;
c) comprehensive development of Tiksi, including the development of dual-use infrastructure, including the reconstruction of the Tiksi seaport and its terminals;
d) comprehensive development of territories located in the Yana river basin, providing for the construction of energy and transport infrastructure, and development of the solid mineral resource base in the Yana river basin, including the Kyuchus gold deposit, the Prognoz silver deposit, the Deputatsky tin ore deposit and the Tirekhtyakh tin deposit;
e) comprehensive development of territories located in the Indigirka river basin, ensuring their energy security and economy diversification by developing the Krasnorechenskoye coal deposit and organizing the

production of construction materials based on basalt and building stone deposits;

f) comprehensive development of the territories located in the Kolyma river basin providing for the modernization of the Zeleny Mys river port and the development of the Zyryansk coal mineral resource center;

g) creation of modern infrastructure for storage and study of paleontological finds to implement the World Mammoth Center project, as well as the development of a scientific, cultural, ethnographic and expeditionary tourism cluster;

h) creation of a network of trade and logistics centers to ensure the delivery of fuel, food and other vital goods to remote settlements;

i) creation of an emergency rescue unit and an Arctic crisis management center in Tiksi.

27. The main areas of implementation of this Strategy in individual municipal entities of the Krasnoyarsk Territory are:

a) comprehensive socio-economic development of the single-industry municipal formation Norilsk urban district;

b) development of the Norilsk industrial area, specializing in the extraction and enrichment (processing) of non-ferrous and platinum group metals, including introduction of technologies that reduce emissions of harmful substances by enterprises located in this area;

c) construction of new production facilities at the Zapolyarnaya mine and its modernization;

d) creation and development on the basis of the Western Taimyr deposits of an oil and mineral resource center focused on the export of manufactured products through the water area of the Northern Sea Route;

e) creation of the West Taimyr coal-mining cluster, focused on the export of manufactured products through the water area of the Northern Sea Route;

f) creation of a mineral resource center on the basis of the Popigaysky industrial diamond deposit;

g) development of the resources of the Taymyro-Severozemelskaya gold-bearing province;

h) development of the seaports of Dikson (including the construction of new coal terminals and an oil terminal) and Dudinka;

i) reconstruction and modernization of the airport network, including the Khatanga airport;

j) creation in Norilsk of a research center for construction technologies and monitoring the condition of buildings and structures in the northern and Arctic territories;
k) creation of an emergency rescue unit and an Arctic crisis management center in Dikson;
l) development of a tourism and recreational cluster in the Taimyr Dolgan-Nenets municipal district, Norilsk and Dudinka.

28. The main areas of implementation of this Strategy in individual municipal entities of the Arkhangelsk Region are:

a) increasing the competitiveness of the Arkhangelsk seaport, including the modernization of the existing sea terminals, dredging, the creation of a new deep-water area, production and logistics complexes and access infrastructure, and the introduction of systems for the coordination and digital management of the transport hub;
b) development of transport infrastructure (railways, waterways and highways) connecting the Arkhangelsk seaport with the North-West of Russia, Urals and Siberia, including a feasibility study of the construction of the Karpogory-Vendinga and Mikun-Solikamsk railway sections;
c) development of the international airport of Arkhangelsk;
d) development of the woodworking industry and the pulp and paper industry, including the formation of a modern full-cycle timber processing complex, and introduction of technologies for the production of biofuel from wood processing waste;
e) development of the shipbuilding and ship repair industry, including the formation of additional capacities on its basis to ensure the construction of structures and the production of equipment for oil and gas production on the continental shelf;
f) development of a lead-zinc mineral resource center on the Novaya Zemlya archipelago;
g) development of diamond mineral resource centers;
h) creation and development of a federal Arctic medicine center;
i) development of a fishery cluster, including construction, modernization and repair of the fishing fleet, creation of facilities for the production of fish products and other products from aquatic biological resources, and development of biotechnology and aquaculture;
j) development of a cultural, educational, ethnographic and environmental tourism cluster in the Arctic territories and sea cruise tourism on the Solovetsky Islands.

V. Stages and expected results of the implementation of this Strategy

29. This Strategy shall be implemented in three stages.

30. The first stage of implementation of this Strategy (2020-2024) shall comprise:

a) formation of mechanisms for accelerated economic and social development of Arctic territories, including the creation of a regulatory framework for the functioning of the special economic regime of the Arctic Zone;

b) modernization of primary health care, equipping medical organizations providing primary health care with automobile and air transport, including to ensure the medical evacuation of ship crew members in the water area of the Northern Sea Route;

c) improving the system of social guarantees for citizens of the Russian Federation living and working in the Arctic Zone;

d) approval of a state support program for traditional economic activities of indigenous peoples;

e) bringing the secondary vocational and further education systems into compliance with the projected demand of employers in the economic and social area of the Arctic Zone, including supplying educational organizations with modern equipment and materials;

f) implementation of pilot projects for the comprehensive development of settlements in which bodies and organizations are located that perform functions in the field of ensuring national security and/or the functions of a base for the development of mineral resource centers, the implementation of economic and/or infrastructure projects in the Arctic, and projects for improving the organization of the delivery of fuel, food and other vital goods to settlements located in remote areas;

g) introduction of a mechanism for subsidizing local transportation in the Arctic Zone;

h) ensuring the application of a new model for the implementation of economic projects on the continental shelf;

i) acceleration of development of the western part of the Northern Sea Route, construction of four project 22220 universal nuclear icebreakers, 16 rescue and towing vessels of various capacities, three hydrographic ships and two buoy tenders;

j) beginning of the implementation of measures to replace inefficient diesel power generation in isolated and hard-to-reach areas with generation based on liquefied natural gas, renewable energy sources and local fuel;

k) ensuring the possibility of providing Internet access to households in settlements with a population of 100 to 500 people;
l) creation of a satellite constellation in highly elliptical orbits, providing stable uninterrupted satellite communications in the Arctic Zone;
m) creation of a world-class scientific and educational center carrying out research and development for the development of the Arctic;
n) development of technologies for preserving health and increasing the life expectancy of the population of the Arctic Zone;
o) design and construction of research vessels and commissioning of a drifting ice-resistant self-propelled platform for complex scientific research in the high latitudes of the Arctic Ocean;
p) creation of a state system for monitoring and preventing the negative consequences of the degradation of permafrost;
q) intensification of international economic, scientific and humanitarian cooperation on the development of the Arctic Zone;
r) updating the system of baselines from which the width of the territorial sea of the Russian Federation and the exclusive economic zone of the Russian Federation in the Arctic is measured.

31. The second stage of implementation of this Strategy (2025-2030) comprises:

a) ensuring an increase in the competitiveness of economic sectors of the Arctic Zone, taking into account the application of a special economic regime, investors' needs, and the conditions of performance of business activities in the Arctic;
b) ensuring the availability of services of a network of educational organizations and cultural, fitness and sports organizations for the population of the Arctic Zone, including for indigenous peoples;
c) completion of the formation of a competitive system of professional educational organizations, centers of advanced vocational training and higher education institutions;
d) full implementation of the program for integrated development of settlements in which bodies and organizations that perform the functions of ensuring national security and/or the functions of a base for the development of mineral resource centers and the implementation of economic and/or infrastructure projects in the Arctic are located;
e) ensuring year-round navigation throughout the entire water area of the Northern Sea Route, building an additional universal nuclear icebreaker under the 22220 project and two icebreakers under the Leader project,

and starting the construction of hub ports for transshipment of international container cargo;

f) beginning of the implementation of the program for the development of navigation in the river basins of the Arctic Zone;

g) implementation of the program for development of the tourism infrastructure of the Arctic Zone;

h) creation of a transarctic trunk underwater fiber-optic communication line;

i) creation of a highly elliptical orbit space system providing high time resolution hydrometeorological data for the polar region of Earth;

j) commissioning of new equipment models created using innovative materials, including samples of robotics, shipbuilding equipment, unmanned transport systems and portable energy sources;

k) beginning of the formation of the Russian research fleet, necessary for the performance of comprehensive research in the high latitudes of the Arctic Ocean;

l) completion of the rehabilitation of the territories on which there are flooded and sunken objects with spent nuclear fuel and radioactive waste;

m) increasing the efficiency of the unified state system for the prevention and elimination of emergency situations in the Arctic Zone.

32. The third stage of implementation of this Strategy (2031-2035) comprises:

a) a progressive increase in the capacities of liquefied natural gas, gas chemical products, and oil production facilities on the continental shelf and in the land areas of the Arctic Zone and advanced processing of other minerals and natural resources;

b) modernization of the urban environment and social infrastructure of settlements in which bodies and organizations that perform the functions of ensuring national security and/or the functions of a base for the development of mineral resource centers and the implementation of economic and/or infrastructure projects in the Arctic are located;

c) ensuring the availability of high-quality social services for indigenous peoples and intensive development of their traditional economic activities;

d) formation, on the basis of the Northern Sea Route, of national transport communication of the Russian Federation which will be competitive on the world market and construction of hub ports for transshipment of

international container cargo and an additional icebreaker under the Leader project;

e) completion of the replacement of inefficient diesel power generation in isolated and hard-to-reach areas with generation based on liquefied natural gas, renewable energy sources and local fuel;
f) completion of the implementation of the program for the development of navigation in the river basins of the Arctic Zone;
g) completion of the formation of the Russian research fleet, necessary for the performance of comprehensive research in the high latitudes of the Arctic Ocean;
h) reduction and prevention of the negative impact of economic activities on the environment.

33. The target indicators for the implementation of this Strategy correspond to the indicators characterizing the effectiveness of the implementation of the state policy of the Russian Federation in the Arctic provided for by the Basic Principles of the State Policy in the Arctic. The values of the target indicators for the results of each stage of the implementation of this Strategy are given in the annex.

VI. Main mechanisms for the implementation of this Strategy

34. The Government of the Russian Federation shall develop and approve a unified action plan for the implementation of the Basic Principles of the State Policy in the Arctic and this Strategy which shall reflect all stages of the implementation of this Strategy.

35. The implementation of this Strategy shall be ensured by coordinated actions of federal government bodies, executive bodies of the Subjects of the Russian Federation, local government bodies, state academies of sciences, other scientific and educational organizations, funds for supporting scientific, scientific, technical and innovative activities, nonprofit organizations, state corporations, state companies, joint stock companies with state participation and the business community.

36. To implement this Strategy, it will be necessary to amend the state program of the Russian Federation "Socio-Economic Development of the Russian Arctic Zone", other state programs of the Russian Federation, state programs of the Subjects of the Russian Federation, and the infrastructure development plan of the Northern Sea Route for the period up to 2035.

37. Objectives in the field of military security and the defense and protection of the state border of the Russian Federation shall be achieved through the implementation of measures provided for by the state armament

program within the framework of the state defense order and state programs of the Russian Federation.

38. The general management of the implementation of this Strategy shall be carried out by the President of the Russian Federation.

39. The objectives, functions, procedure for coordinating the activities and interaction of state authorities, local authorities and organizations during the implementation of this Strategy shall be determined in accordance with the legislation of the Russian Federation.

40. The implementation of this Strategy shall be carried out at the expense of the budgets of the budgetary system of the Russian Federation, including at the expense of funds provided for the implementation of the state program of the Russian Federation "Socio-Economic Development of the Russian Arctic Zone", and extra-budgetary sources.

Further Reading

Auerswald, David. 2019. "China`s multifaceted Arctic strategy". *War on the Rocks*, https://warontherocks.com/2019/05/chinas-multifaceted-arctic-strategy/.

Baev, Pavel. 2019. "Russian Strategic Guidelines and Threat Assessments for the Arctic." *Marshall Center Security Insights*, https://www.marshallcenter.org/en/publications/security-insights/russian-strategic-guidelines-and-threat-assessments-arctic-0#:~:text=%20Russian%20Strategic%20Guidelines%20and%20Threat%20Assessments%20for,submarines%20in%20the%20Barents%20Sea%20could...%20More%20.

Blank, Stephen. 2017. "Russia's "Pivot to Asia": The Multilateral Dimension." *The National Bureau of Asian Research*, Working Paper, https://www.nbr.org/wp-content/uploads/pdfs/publications/workingpaper_blank_062817.pdf.

Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." *Chatham House*, https://www.wilsoncenter.org/sites/default/files/media/uploads/documents/2019-06-28-Russia-Military-Arctic_0.pdf.

Braun, Aurel. Blank, Stephen. 2020. "The Cold Reality Behind Russia's Charm Offensive: Why Canada needs a realistic Arctic Policy." *Macdonald-Laurier Institute*, https://www.macdonaldlaurier.ca/russias-arctic-strategy-requires-realistic-response-canada-new-mli-report-aurel-braun-stephen-j-blank/.

China's Arctic Engagement: Following the Polar Silk Road to Greenland and Russia, edited by Justin Barnes, Heather Exner-Pirot, Lassi Heininen, and P. Whitney Lackenbauer, March 2021.

Conley, Heather and Rohloff, Caroline. 2015. "The New Ice Curtain, Russia's Strategic Reach to the Arctic." *Center for Strategic & International Studies*, https://www.csis.org/analysis/new-ice-curtain#:~:text=The%20New%20Ice%20Curtain%20explores%20Russia%E2%80%99s%20strategic%20ambitions,future%20will%20increasingly%20depend%20on%20robust%20Arctic%20development.

Depledge, Duncan, and P. Whitney Lackenbauer, eds. 2021. *On Thin Ice? Perspectives on Arctic Security*. Peterborough: North American and Arctic

Defence and Security Network. https://www.naadsn.ca/wp-content/uploads/2021/04/Depledge-Lackenbauer-On-Thin-Ice-final-upload.pdf.

Gabuev, Alexander. 2016. "Friends With Benefits? Russian-Chinese Relations After the Ukraine Crisis." *Carnegie Endowment for International Peace*, https://carnegie.ru/2016/06/29/friendswith-benefits-russian-chinese-relations-after-ukraine-crisis-pub-63953.

Hein, Robert N. 2015. "Stability in the Arctic: dancing with polar bears". *War on the Rocks*, 2015, https://warontherocks.com/2015/06/stability-in-the-arctic-dancing-with-polar-bears/.

Huebert, Rob. 2021. "Understanding Arctic Security: A Defence of Traditional Security Analysis." In: Wilfrid Greaves and P. Whitney Lackenbauer (eds.). *Breaking Through: Understanding Sovereignty and Security in the Circumpolar Arctic* (Toronto: University of Toronto Press, 2021): 80-96.

Kluge, Janis and Paul, Michael. 2020. "Russia's Arctic Strategy through 2035", *SWP* (Berlin), NO.57, https://www.swp-berlin.org/publications/products/comments/2020C57_RussiaArcticStrategy.pdf.

Konyshev, Valery. Sergunin Alexander. Subbotin Sergei. 2017. "Russia's Arctic strategies in the context of the Ukrainian crisis." *Polar Journal* 7, no. 1: 104-124, https://www.tandfonline.com/doi/abs/10.1080/2154896X.2017.1335107?journalCode=rpol20.

Lackenbauer, P. Whitney. 2010. "Mirror Images? Canada, Russia, and the Circumpolar World." *International Journal* 65:4: 879-97.

Lackenbauer, P. Whitney. 2011. "'Use It or Lose It,' History, and the Fourth Surge." In: Canada and Arctic Sovereignty and Security: Historical Perspectives, ed. Lackenbauer (Calgary: Centre for Military and Strategic Studies).

Lackenbauer, P. Whitney. 2020. "Why Fear Russia in the Arctic?" *NAADSEN*, https://www.naadsn.ca/wp-content/uploads/2020/05/Why-Fear-Russia-in-the-Arctic-upload-20may.pdf.

Lackenbauer, P. Whitney. 2021. "From 'Defending Sovereignty' to Comprehensive Security in a Whole of Government Framework: Government Narratives of Arctic Sovereignty and Security in the Harper Era." In: "Understanding Sovereignty and Security in the Circumpolar

Arctic", ed. Wilfrid Greaves and P. Whitney Lackenbauer. Toronto: *University of Toronto Press*: 137-167.

Lackenbauer, P. Whitney. Lalonde, Suzanne. 2019. "Breaking the Ice Curtain? Russia, Canada, and Arctic Security in a Changing Circumpolar World." Calgary: *Canadian Global Affairs Institute*.

Laruelle, Marlene (2011). "Russian Military Presence in the High North: Projection of Power and Capacities of Action." In: S. Blank, ed., "Russia in the Arctic", Carlisle: Strategic Studies Institute.

Laruelle, Marlène. 2020. "Russia's Arctic Policy: A Power Strategy and Its Limits." Russie.Nei.Visions, No. 117, Ifri, https://www.ifri.org/en/publications/notes-de-lifri/russieneivisions/russias-arctic-policy-power-strategy-and-its-limits.

Lo, Bobo. 2021. "The Adaptation Game — Russia and Climate Change". Russie.Nei.Visions, No. 121, Ifri, https://www.ifri.org/sites/default/files/atoms/files/bobolo_russia_climate_change_2021.pdf.

Murray, Robert W. 2016. "Do not oversell the Russian threat in the Arctic". *War on the Rocks*, https://warontherocks.com/2016/05/do-not-oversell-the-russian-threat-in-the-arctic/.

Pincus, Rebecca. 2020. "Towards a New Arctic". *The RUSI Journal,* https://www.tandfonline.com/doi/abs/10.1080/03071847.2020.1769496.

Rumer, Eugene, Richard Sokolsky, and Paul Stronski. 2021. "Russia in the Arctic—A Critical Examination", *Carnegie Endowment for International Peace*, https://carnegieendowment.org/files/Rumer_et_al_Russia_in_the_Arctic.pdf.

Sokov, Nikolai. 2017. "Russia's New Conventional Capability: Implications for Eurasia and Beyond," *PONARS Eurasia*, Policy Memo 472, http://www.ponarseurasia.org/memo/russias-newconventional-capability-implications-eurasia-and-beyond.

Wallace, Ron. 2019. "The Arctic is Warming and Turning Red: Implications for Canada and Russia in an Evolving Polar Region." *Canadian Global Affairs Institute*, https://www.cgai.ca/the_arctic_is_warming_and_turning_red_implications_for_canada_and_russia_in_an_evolving_polar_region.

Index

Russia and the Arctic in an Era of Strategic Competition: Selected Writings

Sergey Sukhankin

In this compendium of articles, Sergey Sukhankin provides a comprehensive overview of Russia's policies in the Arctic region since 2014. Adopting a multidisciplinary approach, the author engages with a diverse array of thematic areas include security, economics and trade, the environment, and natural resources. Given Russia's declared strategic intent to re-orient towards Eurasia and its deteriorating ties with the West, which roles do Russian leaders assign to the Arctic? Will the Arctic remain a "territory of peace and dialogue," or is it fated to become another geopolitical region marked by disagreement and confrontation?

Sergey Sukhankin is a Senior Fellow with the Jamestown Foundation and a Postdoctoral Fellow with the North American and Arctic Defence and Security Network.

ISBN 978-1-989811-17-7