

June 2021

**Authors**

Kristen Csenkey

Balkan Devlen

Charlotte Duval-Lantoine

Annika Schulz



©Bundeswehr/Mario Bähr

# A Not So Frozen 2035: The Future of NATO in the European Arctic and High North

---

## About the Authors



### **Kristen Csenkey<sup>1</sup>**

PhD Candidate, Balsillie School of International Affairs

Kristen Csenkey is a PhD Candidate at the Balsillie School of International Affairs. She holds numerous fellowships including with the Canadian Global Affairs Institute (CGAI) and North American and Arctic Defence and Security Network (NAADSN). She is a Women in International Security (WIIS) Emerging Thought Leader in Digital Security and was the 2020 Women in Defence and Security (WiDS)-CGAI Fellow. Kristen is a Junior Fellow with the Defence and Security Foresight (DSF) Group and a member of the European NATO team.



### **Balkan Devlen, PhD.**

Senior Fellow, Macdonald-Laurier Institute and Director, Centre in Modern Turkish Studies, Carleton University

Balkan Devlen is Senior Fellow at the Macdonald-Laurier Institute and the Director of Centre in Modern Turkish Studies at Carleton University. Dr. Devlen is interested in decision-making under uncertainty, geopolitical forecasting and strategic foresight, and the foreign policies of Russia and Turkey. He is also a “Superforecaster” and a consultant with Good Judgment, Inc., a US-based forecasting company.

<sup>1</sup> The authors would like to thank Robert Kam for his valuable contributions to this paper and Chris Earle for his research assistance and patience in facilitating this project. We are grateful for Victoria Tait, Joël Plouffe, and Dr. Alexander Lanoszka’s feedback on earlier versions of this paper. We would like to thank Dr. Bessma Momani and Kersty Kearney for providing this opportunity to publish our paper with the DSF Group.

## About the Authors



### **Charlotte Duval-Lantoine**

Fellow, Canadian Global Affairs Institute

Charlotte Duval-Lantoine is a Fellow and Manager with the Canadian Global Affairs Institute (CGAI) in Ottawa. She holds a Master's degree in military history from Queen's University. Her research expertise focuses on critical perspectives on gender integration policies within the Canadian Armed Forces (CAF). Charlotte also has research experience on gender mainstreaming initiatives within NATO and military to civilian transition projects. She is in the process of publishing a book on toxic leadership in the CAF during the 1990s.



### **Annika Schulz<sup>2</sup>**

Graduate Student, Leiden University - German MoD's 2020 Professional Year Cohort

Annika Schulz is a Desk Officer in the German Federal Ministry of Defense's Strategy and Operations Department. She is also a Reserve Officer in the German Air Force and has served at NATO as well as national posts conducting research and providing strategic analysis. Miss Schulz is currently obtaining her graduate degree MAIR Global Conflict at Leiden University. Her research is focused on defence and military policy analysis in relation to perceived threats and political shocks.

---

<sup>2</sup> The views expressed in this document are hers alone and do not represent the German Federal Ministry of Defense or the German Air Force.

## **FUNDING ACKNOWLEDGEMENT**

This Working Paper was funded by the Defence and Security Foresight Group which receives funding from the Mobilizing Insights in Defence and Security (MINDS) program designed to facilitate collaboration and mobilize knowledge between the Department of National Defence, the Canadian Armed Forces, and academia and other experts on defence and security issues. Through its Targeted Engagement Grants, collaborative networks, scholarships, and expert briefings, MINDS works and collaborates with key partners to strengthen the foundation of evidence-based defence policy making. These partnerships drive innovation by encouraging new analyses of emerging global events, opportunities, and crises, while supporting a stronger defence and security dialogue with Canadians.

For more information on the Defence and Security Foresight Group (DSFG), please visit our website at [uwaterloo.ca/dsf-group](http://uwaterloo.ca/dsf-group), or contact us at [dsfgroup@uwaterloo.ca](mailto:dsfgroup@uwaterloo.ca)

## **ABSTRACT**

This paper aims to examine the possible future of the Arctic in the next fifteen years and its implications for the North Atlantic Treaty Organization (NATO), the Arctic Council, and Arctic States. Through a pre-mortem foresight examination, this paper envisions an Arctic in 2035 where economic activity is soaring, state and corporate interests have merged, and arenas of multilateral cooperation are deadlocked. Informed by an analysis of the Arctic strategies and interests of Russia and NATO, and of the Arctic Council's governance, this work identifies tools that different actors can leverage in order to respond to ongoing developments that will transform the Arctic into a highly militarized region within a few years. The considerations and tools outlined in this paper are intended to prevent systems of collective defence from remaining on the sideline of these changes. This paper argues that NATO, Arctic States, and the Arctic Council should adopt a more proactive stance in addressing the multitude of security concerns threatening the stability of the High North without alienating actors with seemingly competing interests. The Arctic can remain a zone for peace and cooperation if the stakeholders adopt a strategic mindset and posture supplemented with heightened dialogue and governance efforts.

## **KEYWORDS:**

Arctic, Defence, NATO, Russia, Northern Sea Route, Foresight, Arctic Council

## **Introduction**

The Arctic is becoming an increasingly militarized region. Actors like Russia do not only possess the capabilities, but there may be a willingness to use alternative means for the protection of their economic visions. This should be an urgent concern to organizations like NATO and the Arctic Council, as they are not adequately prepared for the potential military escalation of competing economic interests into conflict. There is an urgent need for states to revise their Arctic strategies and collaboratively work for a minimization of conflict in the High North. Therefore, the purpose of our paper is to provide foresight on emerging issues in the Arctic by exploring how interlinkages between actors and interests can create or avoid conflict.

We tie this analysis into a broader discussion about NATO strategies and changing roles and responsibilities for systems of collective security, specifically in working with non-state actors. We begin this discussion by first introducing a 'worst case' scenario for the future. This hypothetical future takes place in 2035 and sets the tone for the foresight analysis. Thereafter, we provide a detailed look at the current geopolitical landscape of the European Arctic. Hereby, Russia serves as an example of an actor developing extensive military capabilities to protect high economic stakes. We analyze the changing bilateral and multinational cooperation in the region in order to illustrate the complex web of involved stakeholders. Hereafter, we focus on Russia's Arctic Council Chairmanship as a starting point for discussion on the changing roles and composition of traditional and non-traditional stakeholders. This leads into a detailed analysis of current NATO Arctic-related strategies and activities. From this analysis, we introduce the details of foresight analysis and present our hypothetical scenarios over three consecutive five-year time periods (starting in 2020). We include recommendations based on these scenarios and conclude with future considerations for NATO and Canada.

Due to the geographic positioning of the Arctic and the opacity of its frontiers, an increase in activity will have diverse political, economic, environmental, social, and military effects that will span beyond the region. Therefore, it is important that institutional actors like NATO and the Arctic Council fully appreciate the complexity of these challenges, and the urgency to respond to current developments. We explore an emphasized political and defence diplomatic role for NATO in proactively navigating and addressing these challenges within current frameworks, while interrogating new venues for cooperation.

## **2035: A Hypothetical Future**

The Arctic and High North region is a site of increased interest between traditional and non-traditional actors. Non-traditional actors include private and state-backed corporations, special interest groups, and individuals, among others. This trend will continue in the foreseeable future. A key point of contestation is the challenges this region and its traditional inhabitants will face now and in the future. Governments have already begun establishing their vision for the region through national strategies and economic as well as military activities. We may see some of these visions come to fruition during and following Russia's upcoming two-year Chairmanship of the Arctic Council. In this section, we contextualize Russia's current strategies and activities in the region. We also highlight the existing mechanisms for multinational cooperation and collaboration, including NATO and the

Our paper explores the roles of important stakeholders like NATO and Canada in avoiding engagement in grey-zone conflicts in the Arctic. First, we provide a strategy review of three major Arctic actors: Russia, NATO, and the Arctic Council. We expand on our proposed worst-case scenario by exploring the details in three consecutive five-year periods. We identify problem areas and pair this with recommendations to address potential issue areas. Our goal is to identify the *status quo*, the security gaps therein, and provide insights into a worst-case scenario for the region. Finally, we address key considerations for NATO and Canada, and propose new ways of approaching security in the Arctic. The bottom line is that if NATO aims to keep the Arctic as a zone of low tension, stakeholders should engage in new forms of cooperation that consider the intersections of military security, human security, and the well-being of local communities. We provide recommendations on collaborative opportunities, such as the creation of a NATO special Arctic reaction force, Arctic strategy, and environmental frameworks. We reiterate the importance of moving beyond the *status quo*.

***“The bottom line is that if NATO aims to keep the Arctic as a zone of low tension, stakeholders should engage in new forms of cooperation that consider the intersections of military security, human security, and the well-being of local communities.”***

### **Current Russian Activities in Northern Europe and the Arctic<sup>3</sup>**

Russia is one of the key drivers of increased economic and military presence in the region. Russia’s Arctic Strategy is directed at the development of the Arctic Zone, encompassing the Far North of the Russian Federation, and the Arctic Ocean, including Russian Territorial Waters and especially the Northern Sea Route (NSR) (see **Figure 1**). The strategy considers various policy fields, and identifies reforms required to advance infrastructure, economic diversification, and the regional standard of living, through 2035. However, in consideration of the various actors with access and interest in the Arctic Zone, the subordinate goal of the strategy is to strengthen national security. The Arctic Strategy is aligned with other Russian strategic publications on foreign affairs, technological and scientific developments, and the national security strategy itself. Considering its high strategic relevance for Russia, political considerations as well as investments into the region are growing.

#### **Economic Interests and Natural Resources**

To Russia, the Arctic Zone is an area of major economic potential. The Arctic bears a broad array of minerals, like copper, as well as rare earths and hydrocarbon reserves. According to the U.S. Geological Survey (USGS), the fields beyond the Arctic circle are estimated to contain about 240 billion barrels of oil and similar natural gases (Gautier et al, 2008). Its undiscovered reserves are estimated at

---

<sup>3</sup> This section provides an overview of the current priorities of Russia’s Arctic Strategy, economic opportunities, and military efforts, while outlining possible future strategic considerations. Although we draw on diverse sources, experiences, and focusing on different geographical regions within the Arctic, some sources are inaccessible or biased. For example, a majority of primary sources on Russian strategy and policy are only available in Russia and some data is linked to the Russian state while it does not account for Indigenous voices and diversity.

ca. 90 billion barrels of oil, 1,669 trillion cubic feet of gas, and 44 billion barrels of natural gas liquids (USGS, 2008). According to Ernst and Young (2013), 43 out of 61 natural oil and gas fields in the Arctic belong to Russia. Today, the oil giant Gazprom owns 11 licenses for exploration and hydrocarbon production in the Kara Sea and five in the Barents Sea (Warsaw Institute, 2019), the two waters which contain the majority of oil and gas reserves in the Arctic realm.

The Russian Federation remains the largest supplier of gas to Europe, with record numbers exceeding 1600 bcm/per year since the mid-2000s. State-owned energy giant Gazprom's share of the European gas market has risen to a record 36.7% in 2018 (Soldatkin, 2019). Since 2013, its oil branch, Gazprom Neft, shipped more than 40 million tons of Arctic oil to Europe (Reuters, 2020). Models show that even if long-term contracts are terminated for good, European states will still require approximately 100 bcm/year of gas from Russia, until 2030 (Dickel et al, 2014). This may result in European vulnerability to political pressure from the Kremlin (see **Figure 2**).

Beyond hydrocarbons, the large marine ecosystem of the Arctic comprises stocks of living marine resources. According to the World Wide Fund for Nature, about 70% of the world's white fish supplies come from the Arctic (WWF, 2008). The region thereby provides opportunities to expand fishing, and economic development. Modern harbors and funding for new factories in the region could provide major economic potential as fishing activities continue to increase. An EU study on *Fisheries Management and the Arctic in the Context of Climate Change* characterized fisheries as a field of future tension as economic opportunities give rise to competition (Blomeyer, 2015).

### **Urban Development and Infrastructure**

Since the collapse of the Soviet Union, Russia's Arctic population decreased by about 20 percent, due to a challenging climate, poor infrastructure, and growing urbanization. Only the oil and gas regions of Khanty-Mansi and Yamal-Nenets Autonomous Okrugs, which were exceptionally fostered as industrial areas in Soviet times, are recording an increase (Heleniak, 2020). One objective of the Russian Arctic Strategy, and Russia's upcoming chairmanship of the Arctic Council, is to improve the quality of life for the local population. The goal is to foster better social conditions for economic activity in the Arctic and potentially attract more people to settle there (Arctic Council, n.d.). The strategy also specifically mentions the Federation's indigenous population. There are about 40 indigenous peoples in Russia, making up around 10 percent of the Russian Arctic population of approximately 2.5 million (see **Figure 3**). Most of this population lives in small communities, within larger settlements (Arctic Council, n.d.) (See **Figure 4**). The strategy of infrastructure is consequently not only economically but also socially motivated. Investments in Russia's Far North provide hope for an upward trend in the Northern population (ibid.). Efforts, like Gazprom's Yamal Project which combines the liquefaction and transport of natural gas into a modular complex, show that economic incentives can be transformed into infrastructural opportunities (Gazprom, n.d.).

### **Further Opening of the Northern Sea Route**

According to traffic volume forecasts, Russia can expect a significant economic boost from a rise in shipments passing through the NSR. The resources and the knowledge base needed for extraction are already accessible. The government continues to support corporations in their efforts to build facilities and infrastructure to foster production. The opening of the passage also provides

opportunities for trade between Asia and Europe, significantly shortening the trips of cargo ships (Lee and Song, 2014).

Today, Russia is actively limiting the passage to foreign vessels. Especially, warships require a 45-day notice, as well as a government permission, to pass (Melino and Conley, 2020). From the perspective of the Russian state, it is clear that the economic prosperity that comes with the melting of ice in the Arctic lies in the use of the NSR as a major route for international trade (see **Figure 5**). With it comes a variety of economic opportunities that would allow Russia to fully reestablish itself as a global superpower in the long term. In order to advance this vision, the NSR needs to be protected.

### **Military Activity, Capabilities and Strategic Advancement**

Traffic on the NSR is expected to reasonably increase in due time. Consequently, it is of utmost importance to Russia that this maritime passage is adequately protected. To enforce its claims and protect its own drilling installation and its territorial waters, the Northern Fleet of the Russian Federation has been assigned to protect the Arctic within its own Military District (MD)<sup>4</sup> as “*a multiservice force strategic association*” (TASS, 2020). For this purpose, Russia’s Ministry of Defence announced that it will provide facilities and equipment for the growing fleet, and its purpose to ensure security in the Arctic (Fouche and Solsvik, 2018). The Northern Fleet consists of missile-carrying and anti-submarine aircraft, and surface ships with missiles. Further, it possesses aircraft-carrying and anti-submarine capabilities, and has coastal troops at its disposal. Most interestingly, Russia has nuclear-powered submarines (SSBNs) in their Northern Fleet, equipped with missiles and torpedoes (Melino and Conley, 2020). Their nuclear power source allows them to move faster than ordinary submarines (e.g. diesel powered) and to endure underwater for long periods of time, as their reactors last for years.

Further, Russia has created an icebreaker fleet that has supposedly surpassed that of the United States in scope with more than 40 ships for the protection of the coastline as well as for observational duties along the NSR. The icebreakers are allegedly intended to have scientific as well as military use, while gathering data and clearing passages. The Russian icebreakers can be armed with cruise missiles and electronic warfare (EW) systems, thereby combining offensive and defensive capabilities (Melino and Conley, 2020).

In addition to its fleet, Russia has regularly conducted air patrols over the Arctic since 2007 (Kluge and Paul, 2020). The purpose is to enhance their imagery on the surroundings in order to identify environmental changes, and for reconnaissance purposes to detect foreign vessels and planes. Its detection efforts are complemented by the early-warning radar outposts like the one on Wrangler Island, approximately 500 kilometers Northwest off the coast of Alaska (Melino and Conley, 2020). Its range does not allow for a glimpse of U.S. soil, but it still serves as Russia’s most eastern observation point for the protection of the NSR.

The Arctic Strategy of the U.S. Air Force describes Russian activities as focused on the modernization of airbases and the development of supplementary infrastructure (U.S. DAF, 2020). According to a statement by the head of the National Defence Control Center, Lt. Gen. Mikhail

---

<sup>4</sup> On December 21st, 2020, Russian President Vladimir signed a decree that transformed the Northern Fleet military command into a MD. The decree came into force on January 1st of this year, The fleet was previously assigned to the Western Military District.



Mizintsev, in 2015, Russia's build-up in the Arctic includes the construction of 13 airfields and 10 radar stations. (RT, 2015). In fact, Temp air base (Kotelny Island), Tiksi air base (near the city of Tiksi) and Nagurskoye air base (Aleksandra Island) have all undergone major renovations in recent years. Combined they offer a variety of capabilities, ranging from surface-to-air, over area denial weapons (A2/AD) and air surveillance, to coastal defence systems. Additional anti-aircraft capabilities combined with signal intelligence and EW are stationed at Novaya Zemlya (Melino and Conley, 2020.).

Nagurskoye is not only equipped with air-sea-land capabilities but is also responsible for the protection of the Northern Fleet headquarters and surrounding military bases, including important assets at Kola Peninsula, such as the nuclear submarine fleet. With its geographic proximity to the Greenland-Iceland-United Kingdom (GIUK) gap, it is the most vigilantly observed military base in the Arctic. The fear is that Russia could disrupt NATO's sea lines of communication (SLOC). In the end, that would cut the communication between Europe and its North American allies. In a moment of attack, this would cause a delay in reinforcements with unforeseeable consequences (ibid).

Russia's considerable investments and strategic developments highlight its long-term interest in establishing itself as an Arctic power, as well as the Federation's interest in preparedness for potential escalation in the region (Zysk, 2020). Especially, the development of new capabilities like hypersonic cruise missiles (TASS, 2019) and nuclear-powered undersea drones has raised concerns about the true character of the projected force in the region (Read, 2019). Russia's activities in the Arctic, especially its strategic development of capabilities and of a regional strategy that combines infrastructure and economic opportunities with national security, have made western countries precautionary. By modernizing its forces across all branches and enhancing its Arctic facilities, Russia is creating a strong defence network in the Far North (Zysk, 2020).

### **Russian Arctic Cooperation**

With the longest Arctic coastline of all, reaching more than 24,000 km (Arctic Council, n.d.) Russia evidently considers the Arctic to be part of its direct sphere of influence. Military presence, or simply the projection of power in Arctic proximity, could trigger a conflict. As tensions grow between traditional Arctic and non-Arctic actors (including China), current frameworks for cooperation do not provide a specific forum for discourse on security in the Arctic. The discourse on Russian cooperation with NATO has been limited since the annexation of Crimea.

Sino-Russian cooperation in the Arctic stretches from research, to maritime passage access, to infrastructure projects. Accordingly, their relationship is *quid-pro-quo*. As a non-Arctic state, China has little opportunity to engage in the region. Russia provides China with access to the Arctic and could allow it to establish a presence in the long term. China, on the other hand, could support Russian infrastructure goals through financial investments. In the words of one assessment by the U.S. Department of the Air Force, "*China's Arctic narrative attempts to normalize Chinese presence in the region, enhance polar operating capabilities, and gain a regional governance role.*" (U.S. DAF, 2020). Thus, Russia serves as an enabler to support the legitimization of China as a "near arctic" stakeholder, with the ability to advocate for its ally within the Arctic Council. In addition, Russia's increasing control of the NSR may provide the opportunity to ensure the protection and passage of Chinese cargo.

Currently, China does not have a military presence in the Arctic. Even if it were to develop such capabilities, it may prove unwise to compete with Russia. China could benefit from Russia's protection and may aim to maintain a friendly relationship. While Russia protects the NSR, China could further develop its plans for the "Polar Route". Viewing China's inclusion of the Arctic as part of a broader strategy, the aim will be to secure influence in the Arctic through various economic, diplomatic, and even research efforts (Chen, 2021).

While military cooperation remains on the sideline of Sino-Russian cooperation in the Arctic, the progress in economic cooperation and governance may lay the foundation for an increase in trust between the state partnership - beyond investment and legitimization.

## **NATO's Approach to the Arctic and the High North**

When thinking about counterbalancing Russian activities, Western countries turn to the Alliance whose founding mission was to protect Europe from Russian threats: NATO. Of its 30 members, only five are Arctic states: Canada, Denmark, Iceland, Norway, and the United States (NATO n.d.). Two additional Arctic states, Sweden and Finland, are NATO partners, thereby participating in certain aspects of collective defence in a bilateral fashion (NATO 2020b; 2020d; 2020f). However, as a multilateral alliance made up of sovereign states, decision-making in NATO occurs on the basis of consensus. Any action taken by NATO as an institution is the result of a collective agreement between all members, and so the breadth of strategic action NATO can undertake as an institution is limited. This is reflected in NATO's approach to security in the Arctic and High North.

### **Strategic Visions of the Arctic and the High North**

NATO and its members express their collective vision through strategic concepts and Summit communiqués. Summit meetings are a high-level gathering of NATO members' heads of states that are scheduled when deemed necessary –usually when members perceive changes in the security environment that require discussion (NATO 2018b). Strategic concepts guide the direction of summit declarations, the most recent one dating back to 2010. It outlines three core missions for the Alliance: collective defence, crisis management, and cooperative security, which all NATO Summits have reiterated since its publication (NATO 2010; 2012; 2014; 2016; 2018a; 2019a). The Strategic Concept outlines what the Alliance saw as a threat at the time and how it should adapt to the security environment. In 2010, the Alliance considered the Euro-Atlantic region at peace, despite the presence of some conventional threats. The regions of concerns were the "Southern Border" (i.e., the Middle East), the Balkans, and the Black Sea. The Alliance remained concerned with issues related to the proliferation of ballistic missiles, terrorism, the safety of supply chains, and climate change. Its approach of choice to collective security continued to be deterrence, complemented with greater cooperation and dialogue with Russia. (NATO 2010, 10; 11-13; 15-16).

The Strategic Concept and the six subsequent Summit declarations do not make a single mention of either the Arctic or the High North. The North Atlantic has appeared in the communiqué of the 2016 Warsaw Summit, but remained at the margins of the Alliance's concerns. (NATO 2016). Considering the geopolitical developments since the 2010 document, it appears that these omissions reflect the absence of an Arctic strategic outlook for the Alliance. But, if looking at the evolution of

the Arctic as a region of strategic importance, the functioning of NATO as an institution, and official declarations from Alliance officials, this silence could be by design.

After the Cold War, the strategic importance of the Arctic declined. In fact, it became a region of peace and state cooperation, thanks to the multiple agreements signed between the Arctic states since the 1987 Murmansk speech by Mikhail Gorbachev. These culminated with the creation of the Arctic Council in 1996, an arena of cooperation between the eight Arctic states, including Russia. The successful implementation of a multilateral platform for dialogue in the region led to the state-centric perception of the High North as a region of low tensions –and in which they are unlikely to rise again – “Arctic exceptionalism” (Käpylä and Mikkola 2015).

But as Russia resumed its defence activities in the region around 2007 (Mikkola 2019), anxieties over Arctic stability resurfaced. Two incidents, both unfolding in 2007, exacerbated these concerns. First, the planting of a flag by a Russian deep-water submersible on the North Pole seabed induced fears of an Arctic “scramble” among Western Arctic states (Holtmark 2009). Second, Russia’s seizure of a Dutch boat sailed by Greenpeace protesters near the Prirazlomnoye oil rig cast doubt on the longevity of the cooperative spirit in the Arctic. In response to the ship’s arrest by Russian authorities, the Netherlands brought a case to the International Tribunal for the Laws of the Sea (ITLOS), to whose hearings Russia refused to participate. ITLOS ruled in the Netherlands’ favour, finding that Russia had violated the United Nations Conventions on the Laws of the Sea (Käpylä and Mikkola 2015).

Those events preceded NATO’s 2010 Strategic Concept – which brings the question as to why the Arctic remained absent from the document. The functioning of the Alliance explains this situation partially. NATO’s consensus-based decision-making means that, if a single state opposes an action, the Alliance cannot not move forward with it. In fact, it is this feature of NATO’s structure that prevented the institution to respond to renewed Russian activities in a unified fashion. In early 2009, Iceland hosted a NATO conference on Arctic security, during which the Secretary General at the time, Jaap de Hoop Scheffe, presented new ideas for the involvement of the Alliance. Areas of involvement included search and rescue, energy security, disaster response, protection of critical infrastructure, the creation of a consortium for Arctic states, and the introduction of Arctic issues to the NATO-Russia Council, a forum for cooperation and discussion between the Alliance and Russia established in 2002 (Smith-Windsor 2013; NATO-Russia Council n.d.). But at the 2009 Strasbourg/ Kehl Summit that same year, Canada rejected the inclusion of a statement on NATO’s role in the Arctic in the final declaration (Charron 2017).

### **Keeping NATO out of the Arctic: Canadian Connections**

Canada has been consistent in its opposition to an allied involvement in the Arctic. This is well illustrated by then-Canadian Prime Minister Stephen Harper telling then-Secretary General Anders Fogh Rasmussen that he did not see a role for NATO in the region. In fact, he expressed perceiving the push from non-Arctic states to increase allied engagement in the region as their attempt to expand their influence in the High North (Bergh 2012, 17). At the same time, Prime Minister Harper made clear that he did not consider Russia a threat (Landriault 2020, 258).

The factors keeping NATO out of the Arctic were Canada’s reluctance to have NATO play

a greater role in the region, the fact that Arctic states are a minority among allies, and the threat environment was mainly characterized by terrorism and remaining Cold-War era territorial tensions in the Black Sea and the Balkans (NATO 2010). A statement by Secretary General Rasmussen encapsulated this situation quite clearly: NATO would not increase its activities in the High North, a decision “simply reflecting the consensual level of ambition currently set by the 28 member states” (Smith-Windsor 2013, 1).

### **NATO- Russian Tensions: A Turning Point?**

The 2014 Russian invasion and annexation of the Ukrainian region of Crimea changed the security landscape in meaningful ways. A month following Russia’s military maneuver, NATO suspended civilian and military cooperation with the Russian Federation under the NATO-Russia Council (NATO 2020d). Then, during the Warsaw Summit of 2016 the Alliance announced the implementation of enhanced Forward Presence (eFP), the goal of which is to reassert the principle of Article 5 and to deter any potential attack on the NATO members bordering Russia. This mission has been in operation since January 2017 and is present in Poland, Lithuania, Estonia, and Latvia (NATO 2020a). The shift in geopolitical dynamics this event provoked were also felt in the Arctic.

Relations between NATO and Russia have yet to improve since the Ukraine crisis. The Alliance perceives Russia to be engaging in “destabilising actions”, e.g., “provocative military activities near NATO’s borders stretching from the Baltic to the Black Sea; irresponsible and aggressive nuclear rhetoric, military posture and underlying posture; the risks posed by its military intervention and support for the regime in Syria; and the nerve agent attack in the United Kingdom in March 2018, a clear breach of international norms.” Additionally, NATO supported the U.S.’s withdrawal from the Intermediate-Range Nuclear Force (INF) Treaty, for which the Alliance holds Russia responsible (NATO 2020e).

Discussions within the NATO-Russia Council may have resumed since 2016, but relations remain tense. The Alliance’s concerns over Russia’s behaviour in Europe also influence its approach to the Arctic, although additional engagement continues to be limited.

### **Increasing Presence in the North: Return to a Strategic Outlook?**

Over the past couple of years, NATO appears to have turned its attention back to the High North. The execution of Trident Juncture 18 in Norway and the operationalization of Joint Force Command Norfolk (JFCNF) in 2020 are clear manifestations of a potential strategic rethinking of NATO’s Northern Flank. Trident Juncture was the largest exercise in NATO’s post-Cold War history. At its origins is the 2012 Chicago Summit, during which Allies have expressed their will to enhance their readiness by increasing the number of joint exercises. Norway had offered to host a NATO-wide joint exercise in 2014, which the Alliance accepted during the February 2015 Minister of Defence of 2015 (Norway Ministry of Defence 2015).

Trident Juncture constituted the first opportunity for the Alliance to test the 2018 Brussels Summit “Four Thirties” goal of mobilizing 30 combat battalions, 30 naval ships, 30 air squadrons for use within a 30-day’s notice (Flanagan 2018). The exercise also aimed at training troops in difficult climatic conditions, as it was to take place in Northern and Central Norway, the surrounding seas,

and the Swedish and Finnish airspaces (NATO 2018c). Trident Juncture 18 mobilized all 29 NATO members, plus Sweden and Finland, and involved the deployment of 65 ships, 250 aircraft, 10,000 vehicles, and 50,000 personnel. The constructed scenario was an Article 5 response to an attack on Norway (NATO 2018b). In many press conferences and releases, Secretary General Jens Stoltenberg, while noting increased Russian activity in the High North, repeatedly stated that the exercise was defensive in nature, with its purpose being to train troops in difficult circumstances, and that it included itself in a larger NATO initiative to improve readiness and deterrence.

The second development is the establishment of the JFCNF in September 2020. The creation of this new command, responsible for anti-submarine warfare activities and the protection of shipping lanes in the North Atlantic – more specifically the GIUK Gap– was decided over the February and June 2018 meetings of the Allied Defence Ministers (Sevunts 2020; Flanagan 2018). The creation of this new command can be seen as a response to Russian military modernization, especially Nagurskoye base’s extensive capabilities and its proximity to the GIUK Gap.

But the signal that NATO is returning to the North Atlantic with JFCNF might not necessarily translate into a greater involvement in the High North. First, JFCNF’s area of responsibility excludes the North American Arctic, which is the jurisdiction of the Canadian-American North American Aerospace Defense Command (NORAD). Second, its mandate does not extend far enough North or East to include the European High North. The yet-unresolved Ukraine crisis is a motivating factor, as it instilled worries among certain Arctic states, especially Canada, that a greater involvement of NATO in the Arctic might trigger a similar response from Russia (Huebert 2019, 88; Mikkola 2019). As mentioned earlier, as long as one Ally pushes back against an initiative, the range of action for NATO is limited.

### **NATO: Not Yet Arctic**

NATO has kept the Arctic at arm’s length over the past decade, and it seems that direct engagement remains unlikely. NATO has left the High North out of its official declarations and strategic positioning. As activities in the region increase and the rise of great power competition, NATO is beginning to turn its attention to the region. But NATO’s involvement in the Arctic is a highly challenging endeavour, as the Alliance views it as an exercise of balancing military presence with cooperation with Russia (NATO 2019d).

NATO continues to consider the likelihood of escalation in the Arctic as low, despite increased military activities. As such, NATO supports maintaining the status quo. Most recent public declarations from NATO officials have defined the Alliance’s presence in the region as reflected through the actions undertaken by the Arctic allies (NATO 2019a; 2019b; 2020b; 2020g).

The Alliance is committed to the idea of the Arctic as a region of peace and low tensions, made possible by the sustained cooperative efforts in the Arctic Council. NATO sees its role as that of a careful observer, and the 2020 strategic revision recommended NATO “enhance its situational awareness” and develop strategic plans that considers the concerns of NATO’s Arctic member states (Sprenger 2020). This signals that NATO’s objective is to let the Arctic Council be the central institution for the region.

## **Arctic Council and Arctic Governance**

The Arctic Council is a 'high level forum' for Arctic governance through cooperation. The Council was established in 1996 through the *Ottawa Declaration* by eight states (including 5 NATO members): Canada, Denmark, Finland, Iceland, Norway, Russian, Sweden, and the United States (also known as the 'Arctic States'). Additionally, six associations of indigenous people are granted permanent participation, giving them full consultation rights. The Arctic Council does not have a formal treaty and was designed to function based on cooperation between members and international law. This cooperation extends to 'non-Arctic States' and other actors through 'Observer Status', which can include inter-governmental and inter-parliamentary organizations and non-governmental organizations (NGOs). There are 13 non-Arctic states with Observer Status, including France, Germany, and China (see **Figure 6**).

The Council functions through Working Groups and Task Forces to establish agreements, projects, and declarations on regional issues. The *Ottawa Declaration* (1996) and the *Iqaluit Declaration* (1998) established the Council's focus on sustainable development and environmental protection and explicitly stated that the Council would not deal with military issues. Council decisions are made based on the consensus of the Arctic States before project approval and the Council operates on a rotating biennial Chairmanship. These decisions set the tone and shape the governance of Arctic issues.

### **Setting the Tone: the Russian Chairmanship of the Arctic Council**

The Chairmanship of the Arctic Council is meant to provide the opportunity for the founding Arctic States to set themes and define priorities for their term. The Council proposes projects based on these themes, and members and permanent participants can sponsor or champion these projects. This includes designing project plans and securing funding. The Working Groups realize the projects for the Council. Canada was the first state to host the Chairmanship in 1996. Russia held the position in 2004-2006 and is set to assume the Chairmanship again in 2021-2023. Russia plans to use their Chairmanship to "focus on economic, social and environmental sustainable development in the Arctic region" (Arctic Council 2020). Russia also emphasizes the use of the NSR as an area of focus for the Council. Generally, Russia is active in the Council both as a member and as a past Chair. Chater (2016) contends that Russia's contributions for their involvement in the Council have generally followed a trend focused on national interests and economic benefits. Russia's contributions to the Council have increased over time since 1998.

### **Governance Challenges**

The effectiveness of the Council has suffered its fair share of criticisms. The changing nature of Arctic issues, including geopolitical and environmental factors, the interconnected actors and influences among other stressors, have had an impact on the Arctic Council. Chater (2019; 2020) sees the domestic politics of Arctic States as a stressor on the Council. Koivurova (2009) shows that these issues present governance challenges to the Council's ability to cooperate and to adapt to change. For example, since its establishment, the Council has aimed to facilitate cooperation in the fields of sustainable development and environmental protection. However, when Russia increased missile testing in the Arctic in the first decade of the 21st century, the Arctic Council members felt growing unease. At the same time, increasing economic interests for the harnessing of resources became a

recurring topic. This led observers of the May 2011 Arctic Council session to highlight not the sustainability discussions, but the increasing tensions amongst states, as competing commercial interests collided (Macalister, 2011).

While these concerns are not new in the Arctic, their complexity and interconnectedness have the potential to cause further tensions between actors and governance frameworks. As others (see Lackenbauer 2020) have shown, these issues are trans-regional and present multi-domain challenges. Cooperation remains important to navigate this complex environment.

***“While these concerns are not new in the Arctic, their complexity and interconnectedness have the potential to cause further tensions between actors and governance frameworks.”***

## **On the Horizon: NATO, Russia, and Arctic Problems Past 2021**

The Russian Chairmanship of the Arctic Council provides insights into its vision for the Arctic. Current Russian activities in the region have raised numerous concerns for actions within a collective security network. New actors, like China and states-owned and private corporations, have also begun to increase their influences as stakeholders in the region. In addition to the large number of actors, there are sometimes competing national, bilateral, and multinational governance frameworks at work in the Arctic. Traditional and non-traditional actors are dependent on each other for cooperation to address the increasing complex and interconnected challenges in the Arctic. These issues are not siloed and require a holistic approach to address emerging trends. Security, governance, climate change, infrastructure, and search and rescue (see Heininen et al. 2019), are just a few of the interlinked challenges that Arctic and non-Arctic actors must face now and in the future.

As a multinational security cooperation, NATO’s strategic vision has many considerations. For example, it may be impacted by an increasing globalist-nationalist divide (Charron 2021) and guided by geopolitical events. Applying a foresight approach can help anticipate for a largely uncertain future.

### **Methodology**

One of the commonly used foresight methods is prospective hindsight. Prospective hindsight includes techniques such as pre-mortems and backcasting and is designed to provide us with roadmaps to both success and failure, while forcing us to sharpen our focus on what can be done to increase the chance of success while decreasing the probability of failure.

In order to conduct a pre-mortem analysis, we convened a workshop on January 10th, 2021 with the participation of the authors and Robert Kam.<sup>5</sup> Balkan Devlen was the facilitator. In this workshop, we used a modified version of pre-mortem, a technique initially developed and popularized by Gary Klein (2007). In a pre-mortem, the organization/actor envisions a future where the desired goals/end-states failed to materialize completely. Taking this hypothetical end-state as given, the organization/actor explores why and how the desired end-state failed. We have modified the traditional pre-mortem in three ways:

---

<sup>5</sup> Robert Kam’s views are his alone and do not represent the U.S. Department of Defense nor the U.S. Army.

First, the participants were provided with a brief description of the Arctic in 2035 (see **Appendix 2**) and collected their initial reasons for why we ended up with that state of the world in 2035 in a pre-workshop survey rather than asking the participants to come up with them during the exercise. This was done to enable deeper reflection on the potential causes for failing to achieve the desired end-state in the Arctic by the participants. Those reasons are then collated and combined when similar themes/reasons were identified prior to the workshop in order to facilitate a more efficient workshop.

Second, we added an additional step after identifying the reasons/pathways to the 2035 scenario. In this step, the participants were asked to offer concrete policy suggestions that could decrease the probability of each pathway to 2035 from materializing or at the least mitigate the negative effects of the event in question. The participants were instructed to focus on policies that are plausible, broadly viable within the timeframe they were proposed, and could be implemented either by NATO as an organization or by individual member states.

Lastly, although the end-state is envisioned to be in 2035, the workshop participants are asked to imagine reasons why we ended with the state of the world presented in the pre-mortem scenario in three discrete and consecutive time periods (2020-2025, 2025-2030, and 2030-2035). For instance, what happened between 2020 and 2025 that we ended with the state of the world in the Arctic in 2035. This was done in order to provide a more granular view of causal pathways to the end-state and therefore offer more actionable policy suggestions to alter those pathways.

The reasons for why the Arctic ended with the above-mentioned scenario in 2035 and policies that could be pursued to reduce the likelihood of ending there, together with the broader discussions at the workshop were then used to develop the foresight analysis in the next section.

## **Scenarios and Results**

Human activity is expected to increase in the Arctic and High North in the future and this will have a variety of economic, social, environmental, and security implications. Based on the assumption that these implications are intertwined – yet remain largely unmanaged in the next 15 years – they may develop into additional governance challenges in the region. Each 5-year increment until 2035 highlights this worst-case scenario and reflects the complexities of evolving security challenges. Specific recommendations are paired with each time period in an attempt to navigate these challenge areas (for additional recommendations per time period and factor, please see **Appendix 2, Table 2.1**).

### **2020-2025**

During this period, we see accelerated climate change open the door to a host of challenges as new stakeholders begin to bring their diverse and sometimes competing interests to the region. Unfortunately, climate change cannot be reversed at this point. This results in increasing instability as traditional governance structures are rendered weak by non-traditional actors and challenges. State actors, like Russia and China, use disinformation campaigns targeted at Northern Communities to sow distrust. This period also experiences a failure of agreement on a clear set of rules and legal limitations to military presence in the region.

There are three recommendations to address these challenges:



**Recommendation 1:** Increased activities in this region will include economic components, such as fisheries, resource extraction, and tourism activities. More supervision and surveillance of this is needed (via satellite or other technologies) to identify actors and monitor illegal activities.

**Recommendation 2:** Develop an assessment framework for disinformation campaigns that targets Northern Communities in order to understand applied techniques and their effectiveness.

**Recommendation 3:** Focus efforts on engagement between NATO and Russia plus other states (for example, Sweden and Finland) in the High North to specifically address security issues in a Northern context. Engagement could take shape as facilitated talks within NATO's framework.

### **2025-2030**

Private stakeholders and their interests become more prominent in the region. Private and some state-backed companies like Rosneft, Gazprom, Novatek, and Lukoil extend their presence in the High North as Arctic oil drilling becomes a major factor for economic growth in Russia. NATO fails to develop capabilities (including ice breakers) to access the Arctic, while other Arctic and 'near' Arctic states like Russia and China expand theirs. Economic decline caused by unmanageable annual pandemic outbreaks causes NATO countries to continue to focus on national issues such as health. The Arctic is officially sidelined.

There are three recommendations to address these challenges:

**Recommendation 1:** Increase cooperation with non-governmental organizations (NGOs) and relevant stakeholders to establish norms, standards, and frameworks around oil drilling as it pertains to environmental dangers as well as the associated security risks. Sanction states that do not take adequate precautions against oil drilling-related risks.

**Recommendation 2:** Leverage expertise and best practices to maintain or increase NATO funding of Arctic-capable military technologies. This could come with a renewed focus on Northern security within the Alliance to defend the High North.

**Recommendation 3:** NATO should focus on the full scope of security threats even while dealing with immediate threats (including pandemic, etc.). This includes maintaining long term thinking when addressing security in the Arctic and making explicit linkages between health and security in the region.

### **2030-2035**

Increased security efforts cause miscalculations and misinterpretations between stakeholders. As a result, tensions escalate further. NATO creates a special Arctic reaction force, after failing to adequately include the High North in its strategic consideration of the past decade. The reaction force aims to address the plethora of issues, actors (including state and non-state), lack of governance, and strategic decision-making on security-related concerns. However, its slow bureaucratic processes and internal

issues create barriers to tangible policy action.

There are two recommendations to address these challenges:

**Recommendation 1:** Take a holistic approach to security to avoid making a military-only solution paradigm while developing a coherent Arctic strategy for NATO. This could materialize as a NATO Arctic committee that could act to formalize decisions and create actionable items through summits. The role could be to create political momentum to support certain issues and develop mechanisms to avoid making rapid decisions without proper forecasting assessments.

**Recommendation 2:** Manage strategic communication of the NATO special Arctic reaction force to position it as focused on search and rescue. This would empower other actors, including coast guard groups, with capabilities and expertise, without an exclusive focus on military action. State actors such as Russia and China could also be included in this project.

### Considerations for NATO and Canada

Stability and security in the Arctic are essential to NATO. With seven of the eight Arctic countries being member or partner-states, the High North is under the Alliance's territorial umbrella. While great power competition in the Arctic will not affect the majority of member-states in the short term, the principle of collective defence implies their involvement.

***“While great power competition in the Arctic will not affect the majority of member-states in the short term, the principle of collective defence implies their involvement. ”***

Additionally, the future of the Arctic will have an effect on each member of the Alliance in the long-term. As such, NATO can no longer stay idle to the developments in the Arctic that impact security. There are steps that NATO can take to prevent adverse geopolitical and security developments in the region that are not increasing military presence (and running the risk to antagonize Russia). Rather, the Alliance could leverage its political arm and embrace a more geographically and thematically holistic approach to security. Here, NATO should reflect on how its defence policy and posture could impact the security and well-being of the Arctic states' northern communities, as well as public health and environmental protections. As a political and military institution, NATO should put the Arctic on its priority list and actively monitor defence activities in the region in order to properly assess threats, engage in capability development, and identify joint strategic goals. NATO could also reopen dialogue with Russia by resuming the meeting of the NATO-Russia Council, and advocate for a position as an observer within the Arctic Council that would report to a newly created NATO Arctic Committee. Geopolitical frictions may have stalled or halted this process in the past, but renewed opportunities for dialogue are important for a future of proactive cooperation. This would serve to entrench a deeper understanding of the region's complexity within the Alliance's decision-making.

The goal of NATO's Arctic involvement should be to tackle military issues in a way that keeps the High North a region of low tensions. This is not to ask of the Alliance to replace or take on responsibilities traditionally held by the Arctic Council, but NATO could fill a void in terms of defence

and security diplomacy in the Arctic. This could be accomplished by becoming an observer state member and by playing an active role in facilitating dialogue through consultations with member states. Its collective nature helps resolve complexities associated with having too many involved in the region and have them act as a single unit, giving way to the traditionally marginalized voices of those who make the Arctic secure on the ground.

Issues in the High North are especially important to Canada, in that the particular geography of the region means that developments have the potential to spill over into Canada's Arctic territory. As such, Canada should not view its northern territory as part of a vacuum and instead play a proactive role in the protection of the region, extending eastward from North America to Eastern Russia. Keeping NATO away from the Arctic may in the long term prevent the Alliance from adequately tackling military security and defence issues before they escalate. NATO, as a primarily political Alliance, can provide a useful, unified voice on the matter. Alternatively, Canada may have to reluctantly agree to Arctic-related decisions that could go against its interests.

The COVID-19 pandemic has shown that human and natural catastrophes do not slow down geopolitical developments. Canada currently occupies an advantageous position to engage in defence and military-related cooperation in the Arctic. Canada could take an active or even a leadership role in implementing the above recommendations. Canada can adopt a defence posture that embraces a more holistic approach to security in order to help sustain peace in the entire Arctic region.

***“Keeping NATO away from the Arctic may in the long term prevent the Alliance from adequately tackling military security and defence issues before they escalate.”***

### **Opportunities for Empowerment and the Limits of the Status Quo**

The Arctic is a geostrategically complex region where many state and non-state actors constantly interact and often compete. Despite such diversity, the popular discourse on security in the Arctic often focuses on state-centric approaches within the frame of Great Power competition. These discourses sometimes overlook the particulars within the breadth of regional challenges.

The purpose of this pre-mortem foresight analysis is to offer alternative pathways to a state-centric vision of the future of the Arctic. Our analysis and recommendations draw attention to the diverse drivers for insecurity in the region. We show that the future of security in the Arctic needs to account for non-state actors. This in-depth analysis shows that the *status quo* is no longer sufficient. Climate change is likely to create new economic interests, human security challenges, and military issues. Institutions like NATO and the Arctic Council need to consider these challenges in a holistic and non-siloed way and develop future-oriented strategies. Part of this consideration is recognizing the importance of engaging with non-state actors, especially local populations.

***“Canada can adopt a defence posture that embraces a more holistic approach to security in order to help sustain peace in the entire Arctic region.”***

Governments and institutions need to consider, consult, and actively work with local populations in the Arctic. The goal should be to gain a better understanding of the human security challenges of the local populations by considering how gender, sexuality, ethnicity, identity, and generational diversity influence these peoples' lived experiences. Inserting intersectional approaches to strategic, operational, and tactical thinking may further integrate this holistic approach in practice. This could include consultations and would involve critically examining current approaches to defence and security policies. As the Alliance works toward an Arctic strategy, it could engage with the Arctic Council and its Indigenous Secretariat could be a path forward.

NATO and Canada have the tools, capacities, and the interests to tackle challenges without militarizing the region. Contributing to the stability of the region requires that they consider the human security consequences of defence and military decisions. Leveraging the political arm of the Alliance to obtain and utilize the input of diverse stakeholders, and more particularly those at the margins of security and military decision-making, will become increasingly necessary as geostrategic concerns continue to destabilize the Arctic. The emphasis should be on dialogue and a more flexible definition of what security and defence means as we move towards 2035.

Some of our recommendations reinforce a state-centric approach of *Realpolitik* that views governments and their competitions on the global stage as the sole relevant drivers of security considerations in the region, and their interests as practical and rational. These recommendations target heads of states and high-level decision-makers within governments, presenting non-state actors as subject to the recommended policies. But they do not exclude non-state stakeholders as agents of security of the Arctic, as they require states to give them a seat at the table.

## Conclusion

A better understanding of the Arctic is necessary in order to plan for future challenges that are both regional and international in nature. Multinational institutions like NATO and the Arctic Council have the opportunity to address areas of concern related to their mandates. However, there is an urgency to act now. NATO has not adequately adapted its strategy to incorporate the Arctic and counter capability development and increased militarization of the region, yet. Similarly, there is a need to review the role of the Arctic Council and to consider the establishment of legal frameworks for future developments. This approach should not remain siloed. Increased foresight initiatives, more information gathering projects, and better institutional frameworks are still needed to tackle the many possible futures in the European Arctic and High North.

The main players involved in the Arctic include traditional and non-traditional actors. States, private and state-owned corporations, institutions, and committees are often the main actors in this security environment and exert the most influence and power in decision-making. Yet, a place for the traditional inhabitants and communities of the Arctic region to contribute to meaningful decision-making remains a critical piece in addressing the multiple challenges the region faces. These challenges are intertwined with the human and environmental dimensions of the region. It is through an inclusive and holistic approach to problem solving, rooted in cooperation, where there may be progress in addressing issues ahead of time, to prevent escalation.

## Works Cited

- Amadeo, Kimberley. 2020. "Ukraine Crisis: Summary and Explanation," *The Balance*, <https://www.thebalance.com/ukraine-crisis-summary-and-explanation-3970462>
- Arctic Council. 1996. *The Ottawa Declaration on the Establishment of the Arctic Council*. Ottawa, Canada: Arctic Council, 1996. [https://oaarchive.arctic-council.org/bitstream/handle/11374/85/EDOCS-1752-v2-ACMMCA00\\_Ottawa\\_1996\\_Founding\\_Declaration.PDF?sequence=5&isAllowed=y](https://oaarchive.arctic-council.org/bitstream/handle/11374/85/EDOCS-1752-v2-ACMMCA00_Ottawa_1996_Founding_Declaration.PDF?sequence=5&isAllowed=y)
- . 1998. *The Iqaluit Declaration*. Tromsø, Norway: Arctic Council Secretariat. [https://oaarchive.arctic-council.org/bitstream/handle/11374/86/01\\_iqaluit\\_declaration\\_1998\\_signed%20%282%29.pdf?sequence=1&isAllowed=y](https://oaarchive.arctic-council.org/bitstream/handle/11374/86/01_iqaluit_declaration_1998_signed%20%282%29.pdf?sequence=1&isAllowed=y)
- Arctic Council Secretariat. 2020. "Arctic States: The Russian Federation." Arctic Council. <https://arctic-council.org/en/about/states/russian-federation/>
- Arctic Council. nd. "The Russian Federation (About-Arctic States)" <https://arctic-council.org/en/about/states/russian-federation/>
- BBC. 2018. "China to develop Arctic shipping routes opened by global warming", <https://www.bbc.com/news/world-asia-china-42833178>
- Bergh, Kristofer. 2012. "The Arctic's Policies of Canada and the United States: Domestic Motives and International Context." SIPRI Insights on Peace and Security 1 (2012). <https://www.sipri.org/sites/default/files/files/insight/SIPRIInsight1201.pdf>
- Blomeyer, R., K. Stobberup, K. Erzini, V. Lam, D. Pauly, and J. Raakjaer. "Fisheries management and the Arctic in the context of climate change." *Policy Department B: Structural and Cohesion Policies. Brussels European Parliament* (2015).
- Center for Strategic and International Studies (CSIS). 2018. "The Arctic Portlet". CSIS Energy and National Security Program <https://www.csis.org/analysis/china-launches-polar-silk-road>
- Charron, Andrea. 2017. "NATO, Canada and the Arctic." Canadian Global Affairs Institute. [https://www.cgai.ca/nato\\_canada\\_and\\_the\\_arctic](https://www.cgai.ca/nato_canada_and_the_arctic)
- . "Structural Challenges Facing NATO to 2040." *Policy Perspective*. Canadian Global Affairs Institute. [https://d3n8a8pro7vhmx.cloudfront.net/cdfai/pages/4597/attachments/original/1611188687/Structural\\_Challenges\\_Facing\\_NATO\\_to\\_2040.pdf?1611188687](https://d3n8a8pro7vhmx.cloudfront.net/cdfai/pages/4597/attachments/original/1611188687/Structural_Challenges_Facing_NATO_to_2040.pdf?1611188687)
- Chater, Andrew. 2016. "Explaining Russia's relationship with the Arctic Council." *International Organizations Research Journal* 11, no. 4: 41-54.
- . 2019. "Takeaways from the 11th Arctic Council Ministerial Meeting in Rovaniemi." *The Polar Connection*. <http://polarconnection.org/arctic-council-ministerial-rovaniemi/>
- . 2020. "The Arctic Council: A Key Moment of Challenge." North American and Arctic Defence and Security Network (NAADSN) Policy Brief. <https://www.naadsn.ca/wp-content/uploads/2020/02/Chater-The-Arctic-Council-A-Key-Moment-of-Challenge-2020.pdf>
- Chen, Gang. 2012. 'China's emerging Arctic strategy', *The Polar Journal* 2(2) 2012.
- De Micco, Pasquale. "A Cold Winter to Come? The EU Seeks Alternatives to Russian Gas", European Union, 2014.
- Dickel, Ralf. et al. 2014. "Reducing European Dependence on Russian Gas: distinguishing natural gas security from geopolitics". *OIES PAPER: NG 92, October 2014. The Oxford Institute for Energy Studies*.
- Ernst & Young. 2013. Arctic oil and gas. Ernst & Young.
- Flanagan, Stephen J. 2018. "NATO's Return to the North Atlantic: Implications for the Defense of North Europe." *FIIA Briefing Paper* 250. <https://www.fiaa.fi/en/publication/natos-return-to-the-north-atlantic?read>
- Gautier, Donald L. et al., "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle," *U.S. Geological Survey, USGS Fact Sheet 2008-3049, 2008*.

- Gazprom. Nd. “*Obskaya – Bovanenkovo Railroad- A vital element of the Yamal megaproject*”, <https://www.gazprom.com/projects/obskaya-bovanenkovo/>
- Heininen, Lassi, Karen Everett, Barbora Padrtova, and Anni Reissell. 2019. *Arctic Policies and Strategies — Analysis, Synthesis, and Trends*. International Institute for Applied Systems Analysis, Ministry for Foreign Affairs of Finland. [http://pure.iiasa.ac.at/id/eprint/16175/1/ArticReport\\_WEB\\_new.pdf](http://pure.iiasa.ac.at/id/eprint/16175/1/ArticReport_WEB_new.pdf)
- Heleniak, Timothy. 2020. “Polar Peoples in the Future: Projections of the Arctic Populations.” *Nordegio Magazine*, 2020:3.
- Holtmark, Sven G. 2009. “Towards cooperation or confrontation? Security in the High North.” *NATO Research Briefing* 45. <http://www.ndc.nato.int/download/downloads.php?icode=3>
- Huebert, Rob. 2019. “Canada and NATO in the Arctic: Responding to Russia?” In *Canada’s Arctic Agenda: Into the Vortex*, edited by John Higginbotham and Jennifer Spence, 85-92. Waterloo: Centre for International Governance Innovation. <https://www.cigionline.org/sites/default/files/documents/Arctic%20Report%202019%20web.pdf>
- Käpylä, Juha and Harri Mikkola. 2015. “On Arctic Exceptionalism: Critical Reflections in the light of the Arctic Sunrise case and the crisis in Ukraine.” *FIIA Working Paper*. <https://www.fiaa.fi/wp-content/uploads/2017/01/wp85.pdf>
- Kluge, Janis and Paul, Michael. 2020. “Russia’s Arctic Strategy through 2035 - Grand Plans and Pragmatic Constraints”; *SWP Comment No. 57, November 2020*; p.3.
- Koivurova, Timo. 2009. “Limits and possibilities of the Arctic Council in a rapidly changing scene of Arctic governance.” *Polar Record* 46, no. 2: 146-156.
- Lackenbauer, P. Whitney (editor). 2020. *Understanding the Future Arctic Security Environment: Applying NATO Strategic Foresight Analysis to Canadian Arctic Defence and Security*. North American and Arctic Defence and Security Network (NAADSN). Peterborough: Trent University. <https://www.naadsn.ca/wp-content/uploads/2021/01/NAADSN-Arctic-Strategic-Foresight-Analysis-WEB-Final-2020.pdf>
- Landriault, Mathieu. 2020. *La sécurité arctique 2000-2010: Une décennie turbulente?* Peterborough: Réseau sur la défense et la sécurité nord-américaines et arctiques. [https://ruor.uottawa.ca/bitstream/10393/24353/1/Landriault\\_Mathieu\\_2013\\_these.pdf](https://ruor.uottawa.ca/bitstream/10393/24353/1/Landriault_Mathieu_2013_these.pdf)
- Lee, Sung-Woo, and Song, Ju-Mi. 2014. “Economic Possibilities of Shipping through Northern Sea Route”, *The Asian Journal of Shipping and Logistics, Volume 30, Issue 3, 2014*.
- Macalister, T. 2011. “*US and Russia stir up political tensions over Arctic*”. The Guardian, <https://www.theguardian.com/world/2011/jul/06/us-russia-political-tensions-arctic>
- Melino, Matthew and Conley, Heather A. 2020. “*The Ice Curtain: Russia’s Arctic Military Presence*,” Center for Strategic and International Studies (CSIS), March 26, 2020.
- Mikkola, Harri. 2019. “The Geostrategic Arctic: Hard Security in the High North.” *FIIA Briefing Paper*. [https://www.fiaa.fi/wp-content/uploads/2019/04/bp259\\_geostrategic\\_arctic.pdf](https://www.fiaa.fi/wp-content/uploads/2019/04/bp259_geostrategic_arctic.pdf)
- NATO-Russia Council. n.d. “About NRC.” <https://www.nato.int/nrc-website/en/about/index.html>
- North Atlantic Treaty Organization (NATO). 2010. “Active Engagement, Modern Defence: Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization.” Brussels: NATO Public Diplomacy Division. [https://www.nato.int/nato\\_static\\_fl2014/assets/pdf/pdf\\_publications/20120214\\_strategic-concept-2010-eng.pdf](https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_publications/20120214_strategic-concept-2010-eng.pdf)
- . 2020a. “Boosting NATO’s presence in the east and southeast.” [https://www.nato.int/cps/fr/natohq/topics\\_136388.htm?selectedLocale=en](https://www.nato.int/cps/fr/natohq/topics_136388.htm?selectedLocale=en)
- . 2018a. “Brussels Summit Declaration, Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Brussels 11-12 July 2018.” [https://www.nato.int/cps/en/natohq/official\\_texts\\_156624.htm?selectedLocale=en](https://www.nato.int/cps/en/natohq/official_texts_156624.htm?selectedLocale=en)

- . 2012. “Chicago Summit Declaration, Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Chicago on 20 May 2012.” [https://www.nato.int/cps/en/natohq/official\\_texts\\_87593.htm?selectedLocale=en](https://www.nato.int/cps/en/natohq/official_texts_87593.htm?selectedLocale=en)
  - . 2019a. “Conversation with NATO Secretary General Jens Stoltenberg at the Brussels Forum.” [https://www.nato.int/cps/en/natohq/opinions\\_167246.htm](https://www.nato.int/cps/en/natohq/opinions_167246.htm)
  - . 2018b. “Joint press conference with NATO Secretary General Jens Stoltenberg and the Minister of Defence of Norway, Frank Bakke-Jensen at the Trident Juncture 2018 distinguished visitor’s day.” [https://www.nato.int/cps/en/natohq/opinions\\_159853.htm](https://www.nato.int/cps/en/natohq/opinions_159853.htm)
  - . 2019a. “London Declaration, Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in London 3-4 December 2019.” [https://www.nato.int/cps/en/natohq/official\\_texts\\_171584.htm](https://www.nato.int/cps/en/natohq/official_texts_171584.htm)
  - . 2020b. “Partnership projecting stability through cooperation.” [https://www.nato.int/cps/en/natohq/topics\\_84336.htm](https://www.nato.int/cps/en/natohq/topics_84336.htm)
  - . 2018c. “Press conference by NATO Secretary General Jens Stoltenberg ahead of exercise Trident Juncture 2018.” [https://www.nato.int/cps/en/natohq/opinions\\_159666.htm](https://www.nato.int/cps/en/natohq/opinions_159666.htm)
  - . 2019b. “NATO: Maintaining Security in a Changing World, Speech by NATO Secretary General Jens Stoltenberg – Ambassador Donald and Vera Blinken Lecture on Global Governance, Columbia University.” [https://www.nato.int/cps/en/natohq/opinions\\_169183.htm](https://www.nato.int/cps/en/natohq/opinions_169183.htm)
  - . 2019c. “NATO and the INF Treaty.” [https://www.nato.int/cps/en/natohq/topics\\_166100.htm](https://www.nato.int/cps/en/natohq/topics_166100.htm)
  - . 2020c. *NATO 2030: United for a New Era*. Brussels: North American Treaty Organization. [https://www.nato.int/nato\\_static\\_fl2014/assets/pdf/2020/12/pdf/201201-Reflection-Group-Final-Report-Uni.pdf](https://www.nato.int/nato_static_fl2014/assets/pdf/2020/12/pdf/201201-Reflection-Group-Final-Report-Uni.pdf)
  - . 2019d. “Questions and Answers by NATO Secretary General Jens Stoltenberg at the ‘NATO Engages: Innovating the Alliance’ conference.” [https://www.nato.int/cps/en/natohq/opinions\\_171550.htm](https://www.nato.int/cps/en/natohq/opinions_171550.htm)
  - . 2020d. “Relations with Finland.” [https://www.nato.int/cps/en/natohq/topics\\_49594.htm](https://www.nato.int/cps/en/natohq/topics_49594.htm)
  - . 2020e. “Relations with Russia.” [https://www.nato.int/cps/en/natohq/topics\\_50090.htm](https://www.nato.int/cps/en/natohq/topics_50090.htm)
  - . 2020f. “Relations with Sweden.” [https://www.nato.int/cps/en/natohq/topics\\_52535.htm](https://www.nato.int/cps/en/natohq/topics_52535.htm)
  - . 2020g. “Remarks by NATO Deputy Secretary General Mircea Geoana at the Hudson Institute public event ‘NATO and the New Decade: Assessing the Transatlantic Alliance’.” [https://www.nato.int/cps/en/natohq/opinions\\_173209.htm?selectedLocale=en](https://www.nato.int/cps/en/natohq/opinions_173209.htm?selectedLocale=en)
  - . 2018d. “Summit Meetings.” [https://www.nato.int/cps/en/natolive/topics\\_50115.htm](https://www.nato.int/cps/en/natolive/topics_50115.htm)
  - . 1949. “The North Atlantic Treaty.” [https://www.nato.int/cps/en/natolive/official\\_texts\\_17120.htm](https://www.nato.int/cps/en/natolive/official_texts_17120.htm)
  - . 2018c. “Trident Juncture 18: Media Resources.” [https://www.nato.int/cps/en/natohq/news\\_158620.htm](https://www.nato.int/cps/en/natohq/news_158620.htm)
  - . 2014. “Wales Summit Declaration, Issues by the Heads of States and Government participating in the meeting of the North Atlantic Council in Wales.”
  - . 2016. “Warsaw Summit Communiqué, Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Warsaw 8-9 July 2016.” [https://www.nato.int/cps/en/natohq/official\\_texts\\_133169.htm](https://www.nato.int/cps/en/natohq/official_texts_133169.htm)
  - . n.d. “What is NATO?” <https://www.nato.int/nato-welcome/index.html>
- Norway Ministry of Defence. 2015. “NATO says ‘Yes’ to major exercise in Norway in 2018.” <https://www.regjeringen.no/en/aktuelt/nato-sier-ja-til-stor-ovelse-i-norge-i-2018/id2394173/>
- Fouche, Gwladys and Solsvik, Terje. 2018. Russian buildup worries Norway before big NATO military exercise. *Reuters*. <https://www.reuters.com/article/us-norway-arctic-nato-russia/russian-buildup-worries-norway-before-big-nato-military-exercise-idUSKCN1MC123>
- Reuters. 2020. “Russia’s Gazprom Neft sends its first oil cargo to China via Arctic route”. <https://www.reuters.com/article/us-russia-oil-gazpromneft-china/russias-gazprom-neft-sends-its-first-oil-cargo-to-china-via-arctic-route-idUSKCN24E1X6>
- Russia Today (RT). 2015. Russian army beefs up Arctic presence over Western threat. <https://www.rt.com/news/200419-russia-military-bases-arctic/>. *RT Online*.

- Sevunts, Levon. 2020. "NATO's new Atlantic command to keep watch over the European Arctic." *Radio Canada International*. <https://www.rcinet.ca/eye-on-the-arctic/2020/09/17/natos-new-atlantic-command-to-keep-watch-over-the-european-arctic/>
- Smith-Windsor, Brooke A. 2013 "Putting the 'N' back into NATO: A High North policy framework for the Atlantic Alliance?" *NATO Research Paper* 94. <http://www.ndc.nato.int/download/downloads.php?icode=381>
- Soldatkin, Vladimir. 2019. "Record Russian gas sales to Europe help Gazprom profits double", Reuters. <https://www.reuters.com/article/us-gazprom-results/record-russian-gas-sales-to-europe-help-gazprom-profits-double-idUSKCN1S51DU>
- Sprenger, Sebastian. 2020. "NATO's Camille Grand on the alliance's Arctic tack." *Defence News*. <https://www.defensenews.com/global/europe/2020/05/11/natos-camille-grand-on-the-alliances-arctic-tack/>
- Starling, Clementine G. 2018. "Trident Juncture: NATO's crisis response put to the test." *Atlantic Council*. <https://www.atlanticcouncil.org/blogs/new-atlanticist/trident-juncture-nato-s-crisis-response-put-to-the-test/>
- TAS-Russian News Agency. 2019. "Russian General Staff confirms Kinzhal missile was test-launched in the Arctic". <https://tass.com/defense/1100389>
- . 2020. "Putin signs decree to transform Northern Fleet into military district". <https://tass.com/defense/1238053>
- United States Department of the Air Force (U.S. DAF). 2020. "Arctic Strategy: Ensuring a Stable Arctic through Vigilance, Power Projection, Cooperation, and Preparation"; p.6.
- United States Department of States. 2015. "The Arctic Region - Political Map". <https://www.state.gov/key-topics-office-of-ocean-and-polar-affairs/arctic/>
- USGS, 2008, Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle. *U.S. Geological Survey*.
- Warsaw Institute. 2018. "Russia reacts to Trident Juncture 18." *Baltic Monitor*. <https://warsawinstitute.org/russia-reacts-trident-juncture-18/>
- Warsaw Institute. 2019. "Gazprom Advances Its Arctic Projects", *Russia Monitor*. <https://warsawinstitute.org/gazprom-advances-arctic-projects/>
- World Wide Fund For Nature (WWF). 2008. "Illegal fishers plunder the Arctic", <https://wwf.panda.org/?131081/Illegal-fishers-plunder-the-Arctic>
- Zysk, Katarzyna. 2020. "Russia's Military Build-up in the Arctic: To What End?". *CNA Occasional Paper, September 2020*. Norwegian Institute for Defence Studies.

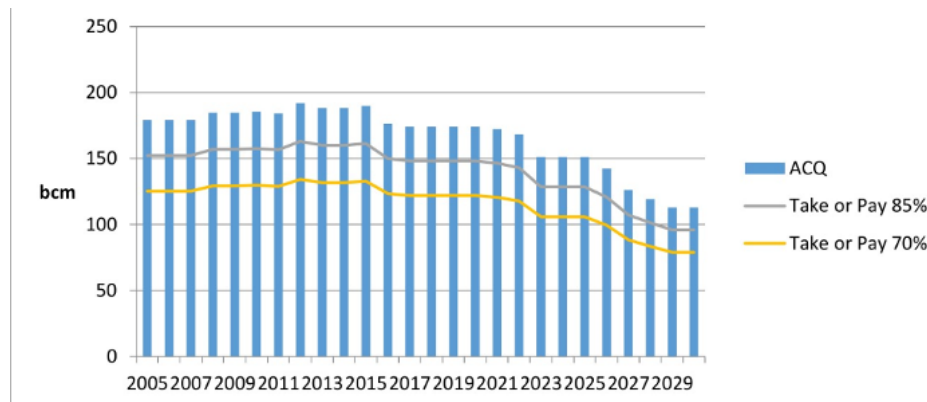


## Appendix 1



**Figure 1: The Arctic Region - Political Map** (from U.S. Department of State, 2015)

This map illustrates the geographic composition of the Arctic, including Arctic States with their respective borders and waters north of the Arctic circle.

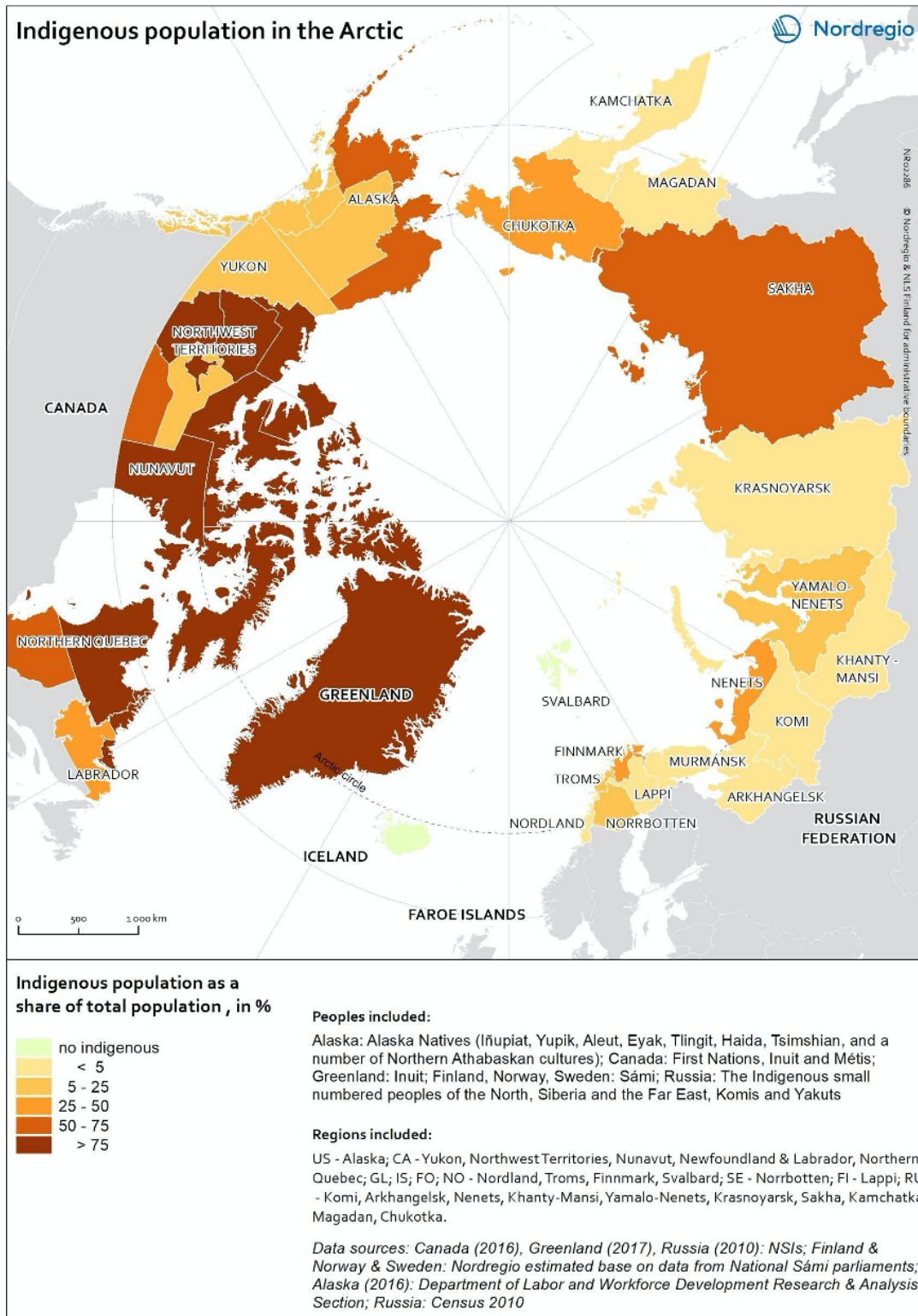


\*Data in Russian units; not including Baltic and south East European countries (aside from Turkey and Greece)

Source: ERI RAS in Henderson and Pirani (2014), Figure 3.3, p.60.

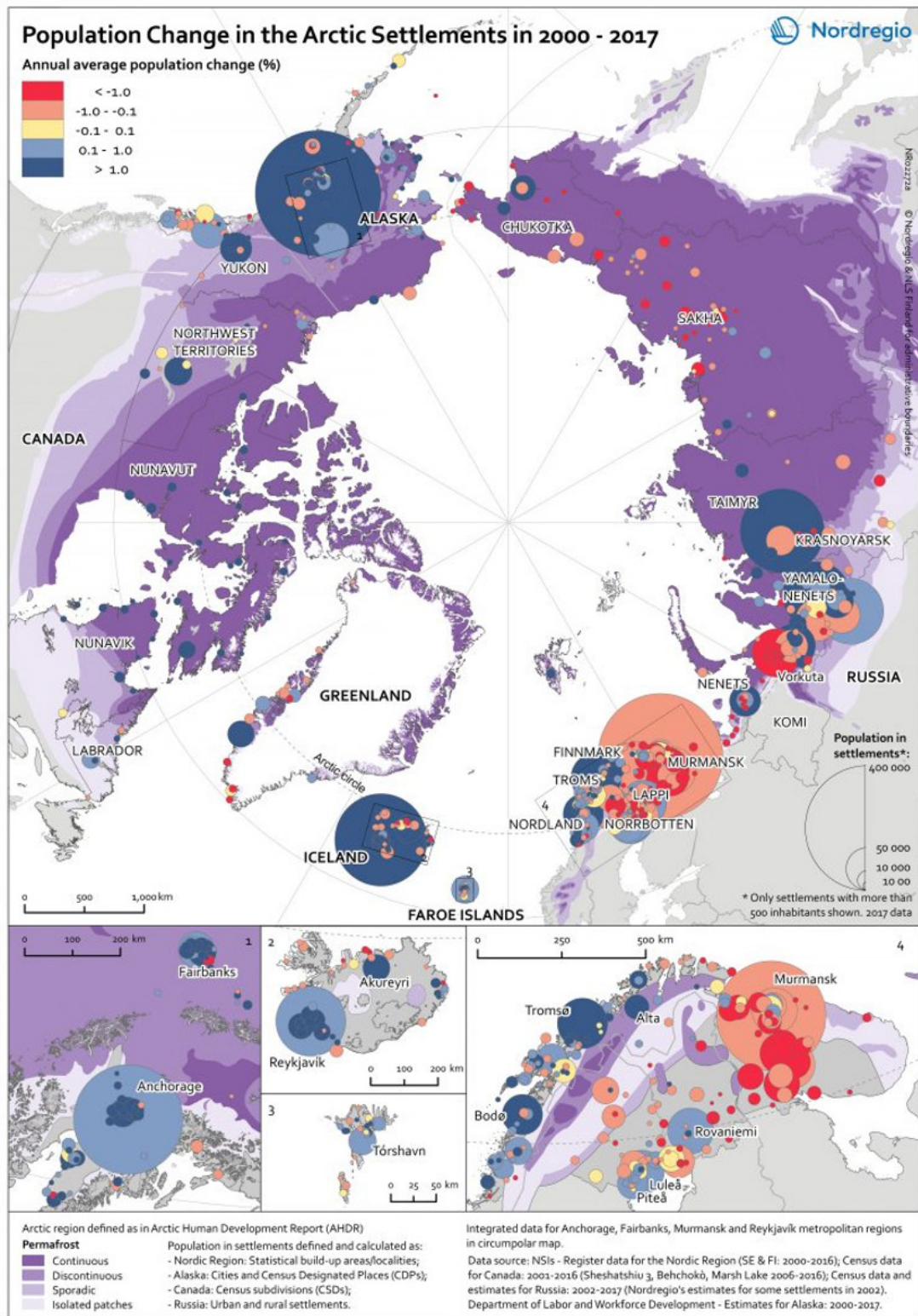
**Figure 2: Russian long-term export contracts with OECD European countries to 2030: annual contract quantity and take-or-pay-levels** (from Dickel et al, 2014).

Russian gas exports to Europe are subject to long-term contracts lasting up to 35 years and with defined purchase provisions. The graph illustrates a purchase obligation of more than 125 bcm in 2020, with a take or pay rate of 70%. In 2030, the buyers would still require more than 50% of the gas supply at the same take or pay rate.



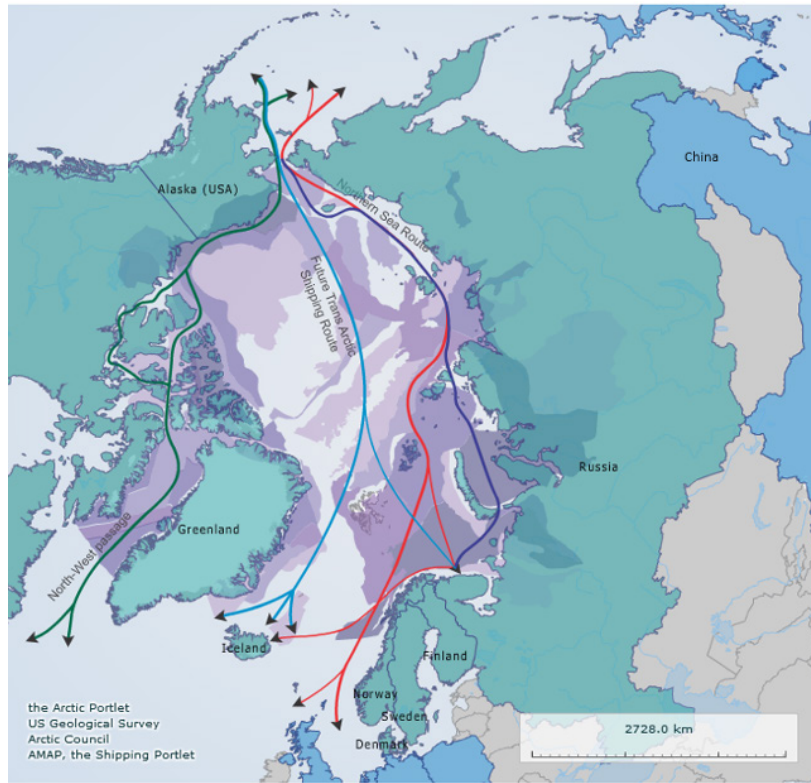
**Figure 3: Indigenous population in the Arctic (from Nordregio, 2019)**

This figure maps out the indigenous peoples of the Arctic and their share of the total population in their respective countries.



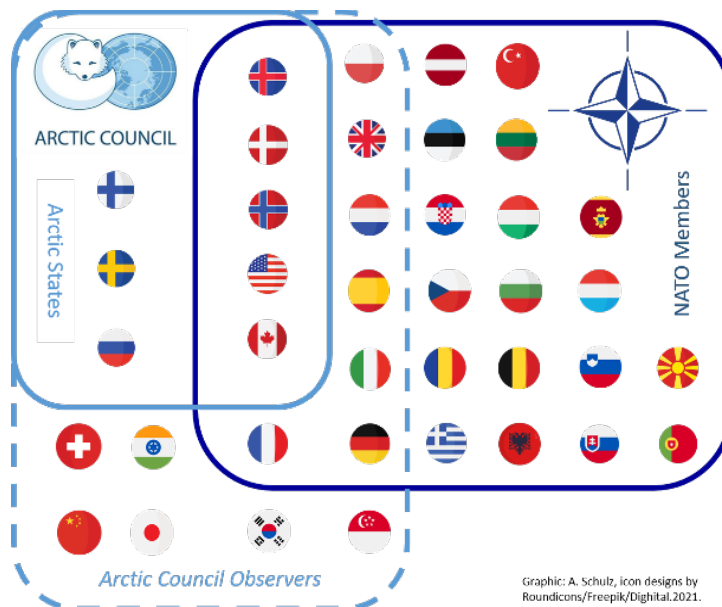
**Figure 4: Population Change in the Arctic Settlement in 2000-2017** (from Nordregio, 2017)

The Nordregio maps making up this figure illustrate the annual changes in population in the Arctic x 2000 until 2017. In Russia, the biggest rise in settlements is visible in the Yamal and the Krasnoyarsk region.



**Figure 5: Arctic Portlet** (from CSIS, 2018)

This map was created with Arctic Portal Mapping Tools and provides a view of the Arctic, by highlighting Arctic Council members (green), and observer states (blue). Additionally, it illustrates areas with oil and gas reserves based on the U.S. Geological Survey (purple) and the different shipping routes through the Arctic waters.



Graphic: A. Schulz, icon designs by Roundicons/FreePik/Digital.2021.

**Figure 6: The Arctic Council and NATO - A Member State Overview** (created by A. Schulz, 2021)

The eight Arctic States are full members of the Arctic Council, five of them are also members of NATO. Seven more countries of the alliance have an observer status in the Arctic Council. Although observing countries are not part of the decision-making process, they can participate in meetings and actively contribute to discussions.

## Appendix 2

### Pre-Workshop Questionnaires

**Title:** Not So Frozen: Arctic in 2035

**Scenario:** The year is 2035 and the European Arctic and High North have changed. There is increased traffic along maritime trade routes and newly established cities, as population growth expands around emerging economic activities. These economic activities focus primarily on resource extraction and the development of transportation and communications infrastructure. Private companies and non-Arctic states establish regional interests and develop partnerships. With an increase in actors, expanded economic zones, port ownership, competing goals and priorities, tensions in the region are rising, as older Arctic governance frameworks become less effective to address these complex issues. Once regional-specific issues are now fully global in nature and traditional avenues of cooperation are strained. The Arctic Council has moved away from a focus on sustainable development and environmental protection after the Russia Chairmanship in 2021 and began to focus on expanding economic interests. NATO is increasingly unable to cope with addressing security-related problems in the region, due to its Allies' competing interests and the complexities of conflict. The European Arctic and High North is defined by a new type of hybrid conflict - it is subtle and sees the complete fusion of public and private interests, making it difficult for states to distinguish sovereignty issues from corporate nationalism and military ones. NATO seems to have missed an opportunity to situate the organization in the region to address these issues in the European Arctic and High North.

**Questions/ tasks:** For each of the following 5-year time increments, please provide a short answer (one sentence per reason) to the following question. In your responses consider a wide range of reasons, including actions, inactions, faulty assumptions, policies, technological/economic/social/political developments, other actors, events etc. but choose those you think would contribute the most (within the timeframe) in getting us to the end state described in the scenario.

- *2020 and 2025: Assume that the scenario above is the reality in 2035. Please list 3 reasons why we end up with that reality in 2035? What happened or did not happen between 2020 and 2025 that lead us to that future in 2035?*
- *2025 and 2030: Assume that the scenario above is the reality in 2035. Please list 3 reasons why we end up with that reality in 2035? What happened or did not happen between 2025 and 2030 that lead us to that future in 2035?*
- *2030 and 2035: Assume that the scenario above is the reality in 2035. Please list 3 reasons why we end up with that reality in 2035? What happened or did not happen between 2030 and 2035 that led us to that future in 2035?*

**Table 2.1: Additional Recommendations by Time Period**

<b>2020-2025</b>	
<b>Accelerated climate change</b>	Identify stakeholders and mechanisms for future climate change policies. This process should have built-in transparency and focus on accountability and enforcement. Create more spaces for dialogue where existing institutions and stakeholders can establish responsibility over key issues as well develop mechanisms for implementation.
<b>Disinformation campaigns targeted at Northern Communities to sow distrust</b>	Reduce vulnerability of subversion by engaging with Northern Communities to address historical and ongoing wrongs.
	Establish a system of stewardship and governance of the Arctic driven by Northern Communities; increase territorial autonomy.
	Developing a more coherent NATO framework that all Northern EU states can work within.
	Leverage disinformation campaigns and create policies that counter the known disinformation by addressing the root causes.
	Investment in targeted media literacy training to help Northern Communities identify propaganda and disinformation. Diversify and invest in science and technology (S&T) based employment in the North to reduce dependence on foreign employment monopolies.
<b>Failure to agree on clear set of rules and legal limitations to military presence</b>	NATO should commission a study by academia and think-tanks on feasible legal limitations of military presence in the region. This could be used to form the basis of conventions and enforcement mechanisms.
	Negotiate legal framework for North West Passage (NWP) to create a limit on military activities in the region by the United Nations (for example, through the UNCLOS) or via the Arctic Council. Increase surveillance of the NWP to enforce a legal framework on military presence in the region.
	The Arctic Council should establish a framework on the rules of military presence in the region.

<b>2025 – 2030</b>	
<b>Rosneft, Gazprom, Novatek and Lukoil extend their presence in the High North as Arctic oil drilling becomes a major factor for economic growth in Russia</b>	Expand NATO's peace and security policy to include environmental protection.
	Individual countries should work to reduce reliance on fossil fuels and Russian energy.
	Maintain the Arctic Council's focus on environmental protection to address related issues while providing monitoring on the interlinked security dimensions.
<b>NATO fails to develop capabilities (including ice breakers) to access the Arctic and High North</b>	Streamline procurement process and adopt best practices across the Alliance.
	Observe what China and Russia are doing in terms of military procurement and identify required assets. Incentivize appropriate procurement of technologies.
	Canada could focus on NORAD modernization projects, including the development of capabilities and procurement of technologies that could benefit NATO capabilities.
	Invest in public-private collaboration on science and technology (S&T) improvements needed for Arctic-ready military assets.
<b>The Arctic and the High North is sidelined as an area of focus as domestic issues, like health, take priority.</b>	Communicate the consequences of not dealing with Arctic and High North Issues early. This means early commitments on issues to promote smart procurement and prevention in the future.
	Learn lessons from 2020: pandemics or other large-scale issues do not stop geopolitical events from occurring.

<b>2030 – 2035</b>	
<b>Boosted security efforts increase potential for miscalculations.</b>	Develop mechanisms that would reduce the security dilemma including confidence building measures and legal agreements on military activities in the region. This would establish verifiable mechanisms that reduce the possibility of miscalculations.
	Revise, Revisit, and Recommit: produce regular reports on the frameworks, policies, and agreements that worked in earlier years. Following this, meaningfully recommit to productive institutional frameworks from the years 2020-2030 that were effective in building a more secure Arctic.
	Learn from previous experiences and foster continued diplomacy and dialogue. It is important to encourage discussion between traditional and non-traditional actors.
<b>Non-Arctic actor (including non-states) presence increases</b>	Enable Non-Arctic states to formally become stakeholders within the framework of the Arctic Council. This would aim to create accountability and dually understand the objectives of Non-Arctic states. Perhaps this could be a joint Chairmanship or Deputy Chairmanship role.
	Establish framework and limitations on certain types of Arctic traffic (tourism, military, etc.) based on permission of Arctic and High North states.
	Canada should work with European allies to establish a regulatory framework in the Arctic that would consider environmental and economic concerns.
<b>Slow bureaucratic processes and internal issues within NATO make it difficult to enact tangible policy to address defence issues in the region</b>	Create an informal mechanism within NATO to work towards addressing Arctic issues within the Alliance. This would be actively involved in diplomacy within the institution. This could also refer to the best practices of other states in addressing parallel issues to guide further policies.