



REPORT — AUTUMN 2020

After the ice

The Arctic and European security



Submarine and Polar Bears in the Arctic



This report is part of Friends of Europe's Peace, Security and Defence programme. Written by Paul Taylor, it brings together the views of scholars, policymakers and senior defence and security stakeholders.

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Paul Taylor is a Paris-based journalist who writes the "Europe at Large" column for POLITICO. He previously spent four decades working for Reuters as a foreign correspondent in Paris, Teheran, Bonn and Brussels, as bureau chief in Israel/Palestine, Berlin and Brussels, as chief correspondent in France, as diplomatic editor in London, and finally as European affairs editor.

As a Senior Fellow at Friends of Europe, Paul has also written the reports "Crunch time: France and the future of European defence" (April 2017), "Jumping over its shadow: Germany and the future of European defence" (October 2017) and "Safer together: The United Kingdom and the future of European Security and Defence" (June 2018), "'Fort Trump' or bust?" Poland and the future of European defence (January 2019), "Molto Agitato: Italy and Mediterranean security" (June 2019) and "A minefield of opportunity – Transatlantic Defence Cooperation in the Trump era" (January 2020). With our European defence cooperation series, we aim to contribute to the overall debate on international security developments and offer a country and region specific in-depth analysis with interesting insights and specific recommendations, relevant to high-profile and senior decision-makers as well as thought-leaders from around the world.

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Foreword



Jamie P. Shea
Senior Fellow,
Friends of Europe

The Arctic was once a vast expanse of the world's territory that received very little attention from strategists and defence experts. It was more the domain of naturalists, explorers and adventure seekers. Admittedly during the Cold War, both NATO and the Soviet Union kept a close eye on what was termed the High North, the area stretching from the Greenland- Iceland-UK (GIUK) gap right up to the Kola Peninsula. It was here that the Soviet Union kept most of its Northern Fleet and nuclear submarines ready to surge out into the northern Atlantic and cut NATO's vital sea lines of communication between North America and Europe. The Alliance had to be prepared to defend Norway, its only ally in the region with a border with the Soviet Union. Accordingly, it staged regular exercises and cold combat training in the north and Canada maintained a high readiness brigade (the Canadian Air-Sea Transportable or CAST brigade) for immediate deployment to Norway in the event of crisis or conflict. This said, the northern flank of NATO was generally less tense than the confrontation with the Soviet Union elsewhere, whether along the border between the two German states or in the Mediterranean or the Middle East.

When the Cold War ended, the Arctic went back to being a sleepy backwater of global geopolitics. The focus shifted to the politically unstable areas of the Balkans and the Middle East. The war on terrorism unfolded in Afghanistan and Iraq. Subsequently, the rise of China and rapid economic modernisation and growth rates in the Asia-Pacific region turned the attention of strategists to the Far East rather than the Far North. Russia in the wake of the breakup of the Soviet Union had too many economic problems to invest in its Arctic capabilities. The ships stayed in port, the submarines rusted away and Russian bases inside the Arctic Circle were abandoned. Finding a think tanker or academic scholar specialising in Arctic security became something of a challenge.

Yet, over the last two decades, the geopolitical horizons of global security have once again shifted. The Arctic has returned to the agenda, and is even in vogue. Think tanks, military planning staffs and national intelligence agencies have produced a plethora of studies and reports on Arctic developments and their implications for Western security. NATO ambassadors have held a seminar in Iceland to assess the changes and the alliance has gone back to holding major, combined arms exercises in Norway and even sending its ships as far north as the Barents Sea. Across the region listening posts and early warning sensors are being re-established, and Russia is reopening its old Soviet bases. Not only have the traditional regional powers – the US and Russia – increased their presence and visibility in the High North but also rising powers such as China. Meanwhile many countries from outside the region have sought to become observers on the Arctic Council. Suddenly everyone seems to want a piece of the Arctic action. So, what has changed?

In the first place, climate change and global warming are proceeding at twice the speed in the Arctic as elsewhere on the planet. The polar ice pack has been rapidly receding and over the past few summers it has been possible for some commercial shipping to use the northern passage from Asia to Europe, shaving around 10 days off the normal journey time. The melting ice has initiated a debate on the feasibility of oil and natural gas extraction in the Arctic, where 10% of global oil and 25 % of gas reserves are thought to be located. Many projections have been made on how all this shipping and mining and drilling activity would impact on the Russian economy, draw in potential investors such as China, and help develop the region, including for its indigenous peoples. Is the Arctic a new El Dorado?

Second is the return of rivalry and tensions between NATO and Russia following Russia's annexation of Crimea in 2014. Although the initial focus of the alliance's return to collective defence duties was in Poland and the Baltic states, Russia's extensive modernisation of its naval, air and nuclear forces in the High North, and its projecting of those forces across the Atlantic, has inevitably obliged NATO to overhaul its own defensive posture

in the region. It has been conducting numerous exercises in anti-submarine warfare and has re-established an Atlantic military command. US fighter jets have returned to their former Cold War base at Keflavik in Iceland. The task for NATO is to increase its visibility and preparedness in the High North without tipping the region into a constant state of tension and confrontation with Russia. Northern allies would prefer cooperation, as they have in the past have been able to work with Russia on economic and environmental issues. The 'Northern Balance' of a region quieter than the rest of Europe and with its own *modus vivendi* was a concept dear to them even in Cold War times.

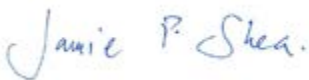
Third, and finally, is the increased diplomatic activity focusing on the Arctic region. The mineral riches under the ice and the oceans have given rise to numerous territorial claims under the UN Law of the Sea Convention; and even to extravagant gestures, such as Russia planting its flag on the sea bed under the North Pole in 2007 or President Trump's offer to buy Greenland from Denmark in 2019. New consulates and trade offices are opening up as the sense of a new 'Great Game' seems to be gaining hold. There is renewed interest in the work of the Arctic Council. Even US Secretary of State, Mike Pompeo, turned up at the last ministerial meeting to set out the US policy for the region.

Some see the Arctic as the new locus of East-West military rivalry, strategic competition and the quest for influence. Others hope that the Arctic can serve as a unifier and bridge builder in a rapidly deteriorating international situation, not made any easier by the impact of COVID-19 on the West's economies and resources. They point to environmental cooperation or search and rescue or transport routes and economic development as areas where the West, Russia and China might still be able to have a constructive dialogue and work together. They hope also that the Arctic can somehow keep itself out of contentious geopolitics and be a self-governing oasis of calm as it managed to be in the past. Is there here a greater role for the EU as it seeks to uphold the cause of multilateralism and the rule of law especially in its immediate neighbourhood?

So, what is the hype and what is the reality when it comes to the Arctic? Zone of peace or of military tension? Zone of enticing economic opportunities and fabulous mineral wealth or economic backwater of frustrated hopes and abandoned projects? Zone of diplomatic cooperation in support of the Arctic as a global commons or zone of diplomatic squabbles and bullying to secure purely national interests? For some time already, the analytical pendulum has swung between these opposing concepts. The Arctic has certainly generated more interest but that interest has also produced confusion and a sometimes-breathless over-interpretation of the facts on the ground.

Consequently, Friends of Europe asked its Senior Fellow for Peace, Security and Defence, Paul Taylor, to get to the bottom of this issue and to assess for us what is really going on in the High North. We asked him to use his journalistic rigour honed in a 40-year distinguished career with Reuters and Politico to distinguish myth from reality and provide a balanced but insightful picture of where the Arctic lies today on the map of contemporary geopolitics. Paul as usual has left no stone unturned and has conducted dozens of interviews with political leaders, key opinion formers and experts from the region and beyond. This gives his findings and recommendations an unquestionable authority.

This present study is the seventh in a series on European and transatlantic security that Paul has written for Friends of Europe. It is certainly one of the most ambitious and far reaching. I wish you all an interesting read in the confidence that Paul's overview of security in the Arctic will command the attention that it rightly deserves.

A handwritten signature in blue ink that reads "Jamie P. Shea." The signature is written in a cursive, flowing style.

Jamie P. Shea

Senior Fellow, Friends of Europe

Methodology and Acknowledgements



Paul Taylor
Senior Fellow,
Friends of Europe

This is the seventh in a series of reports I have written for Friends of Europe on European defence issues. It follows country studies on France and Germany in 2017, the United Kingdom and Poland in 2018, Italy and Mediterranean Security in 2019, and a report on Transatlantic Defence Cooperation in the Trump Era published in January 2020.

I first travelled to the Arctic during the Cold War as a defence reporter for Reuters in winter 1985, flying nerve-rackingly close to the North Atlantic waves aboard a Dutch navy P3 submarine-hunting aircraft, with a stopover at Keflavik air base in Iceland. I have drawn on those memories since I was, alas, unable to spend any time in the Arctic this year.

My research took place under the exceptional circumstances of the COVID-19 pandemic, forcing me to cancel planned trips to Canada, Norway, Finland and Sweden, as well as to Brussels and London, and to do the reporting and interviewing almost entirely from home in France by videoconference, telephone and email. Fortunately, interlocutors were perhaps more available than they might have been in normal circumstances.

The report is based on some 55 in-depth interviews and roundtables with present and past Arctic Council, European Union, NATO, Canadian, Danish, Icelandic, Finnish, Greenlandic, Norwegian, Swedish, Finnish, and US officials, members of parliament, military officers, strategists, diplomats, climate scientists and a couple of

industry executives, as well as senior policy analysts in Russia and China. The interviews were conducted between March and July 2020.

Some serving officials, soldiers, diplomats and executives whom I interviewed were able to talk only on condition they were not identified, due to the nature of their positions. Others, such as NATO Secretary-General Jens Stoltenberg and Admiral Keith Blount, commander of NATO's Maritime Command, agreed to on-the-record interviews, for which I am most grateful.

Many other people in the think-tank community, the academy and the media helped with information, analysis, questions and perspectives.

In addition to those named in the report, I would like to thank Jim Bergeron, Piers Cazalet, Jonny Didriksen, Benedikt Franke, Luc van der Goer, Niklas Granholm, Juha Jokela, Steen Kjaergaard, Minningauc Kleist, Pamela Lesser, Dorte Nyemann, Andreas Raspochnik, Terkel Petersen, Joel Plouffe, Jorgen Staun and Treena Watson for their kind help. The report also benefited from insights gleaned in online roundtables organised by the Munich Security Conference, the Carnegie Endowment for International Peace, the Istituto per gli Studi di Politica Internazionale (ISPI) and the German Marshall Fund of the United States.

At Friends of Europe, I am as always grateful to Geert Cami and Nathalie Furrer for their support, to Patrick Vandewalle, Alex O'Mahony and Elena Saenz Feehan in the Peace, Security and Defence Programme for their tireless assistance, and to my fellow senior fellow Jamie Shea for frequent brainstorming and precious comments on my manuscript. Alex O'Mahony created the Arctic timeline in Annex 1, and analysed a dozen national Arctic strategies and policy documents to write the summary in Annex 2.

I am especially grateful to Arne O. Holm, Mike Sfraga and Jari Vilen for agreeing to read the first draft of my study and offering helpful comments and suggestions.

Needless to say, the views expressed here, and any errors, are mine and not theirs.

I'm ever thankful to my wife Catherine for her companionship and support while I worked on this project through an anxious period of confinement, and to my daughter Rachel for her stimulating conversation and for the wonderful fruit and vegetables she picked, which made our lockdown a gastronomic adventure.

A handwritten signature in blue ink, appearing to read 'Paul Taylor', with a long, sweeping horizontal line extending to the right.

Paul Taylor
Senior Fellow, Friends of Europe



United States Secretary of State Michael Pompeo gives a speech at the 11th Arctic Council Ministerial Meeting in Rovaniemi

Executive summary

For most of the three decades since the end of the Cold War, the Arctic has been a zone of low tension, a glacial oasis of multilateral cooperation and a geopolitical backwater.

That relative harmony is now under growing strain chiefly because of the resurgence of great power competition worldwide against a backdrop of accelerating global warming which is melting the polar ice cap at a record pace. This threatens disaster for the environment and the indigenous peoples of the Arctic, but also whets appetites for new shipping routes and access to undeveloped oil, gas and mineral resources.

“The world has come closer to the Arctic,” says Nina Buvang Vaaja, director of the secretariat of the Arctic Council, the intergovernmental forum that promotes cooperation, coordination and interaction between the eight Arctic states. (1)

Greater global interest is a distinctly mixed blessing. US Secretary of State Mike Pompeo turned up the heat in a forceful speech in Finland in May 2019, declaring: “We’re entering a new age of strategic engagement in the Arctic, complete

with new threats to the Arctic and its real estate, and to all of our interests in that region.”

Pompeo used the normally consensual Arctic Council diplomatic forum to denounce China’s claim to be a “near-Arctic state”, saying that entitled it to “exactly nothing”. Beijing’s pattern of investing in critical infrastructure and beefing up its scientific research presence “raise doubts about its intentions”, he said. He also attacked what he called “a pattern of aggressive Russian behaviour” in the Arctic, including Moscow’s moves to control access to the waters of the Northern Sea Route. He even took a swipe at Canada, a NATO ally, over sovereignty in the North-western Passage. (2)

To some, Pompeo was merely tearing away a veil of political correctness to spotlight the changing reality in the High North. To others, the US secretary, who blocked a joint statement of priorities by Arctic Council states to prevent any mention of climate change, was wilfully exaggerating security and economic threats to fit a global narrative of US-China confrontation.

To be sure, the size and frequency of Russian and Western military exercises in the European Arctic have increased sharply in the last two years. Yet despite the gruff new tone from Washington, media headlines about a new Cold War over the North Pole, or a looming High Noon in the High North seem overblown. So too are expectations of new East Asia-to-Europe polar shipping highways to rival the Suez and Panama Canals, or of an Arctic hydrocarbons bonanza, at least in the near to medium term and perhaps ever.

This report will consider the implications of the changing strategic and physical environment in the Arctic for European and Euro-Atlantic security. It will seek to disentangle fact from hype, examine the functioning of regional institutions, consider possible triggers for conflict and explore whether more can be done to defuse tensions and build confidence in the region.

“A lot of hype”

“There’s a lot of hype about how the Arctic is heating up and the Cold War is back,” says former Icelandic president Ólafur Grímsson, founder of the non-profit Arctic Circle organisation which hosts the largest annual international dialogue on the region. “If you ask yourself the question: who is creating this new security situation in the Arctic? It is not the Chinese. It is not the Russians. It’s primarily the Trump administration. And nobody knows if that policy will still exist after the next election because all three previous American presidents didn’t see it that way.” (3)

The Arctic states – Russia, Canada, the United States, Norway, Denmark Finland, Sweden

and Iceland – have collaborated pragmatically since the 1990s on issues ranging from border delimitation to fisheries, maritime safety, polar science, tourism, the rights of indigenous peoples, environment protection, people-to-people contacts and sustainable development. The five Arctic coastal nations agreed in Ilulissat, Greenland in 2008 to settle overlapping claims to continental shelves peacefully within the United Nations Convention on the Law of the Sea (UNCLOS).

An array of toothless but functional bodies such as the Arctic Council, the Barents Euro-Arctic Council and the Northern Dimension, promote cooperation in civilian affairs, though none addresses hard security. While bilateral and unofficial channels exist to discuss emerging security questions, the region lacks any formal structure or collective organisation to manage these geopolitical issues.

Arctic coastguard commanders meet annually to discuss safety at sea, environmental clean-ups, law enforcement and mutual assistance with search and rescue. An annual Arctic Security Forces Roundtable was created in 2011 at the initiative of the US European Command to build trust through military-to-military dialogue, but Russia has not been invited since 2014 due to its annexation of Crimea. The same applies to a Northern Chiefs of Defence Conference convened at Canada’s initiative in the same period.

Arctic states have long discouraged outsiders from interfering in their affairs, wary of attempts to internationalise Arctic governance or constrain their economic development in the name of nature

conservation or ‘global commons’. By contrast, China and the European Union, while respecting the territorial rights of the Arctic states, assert the international community’s shared responsibility to protect the endangered ecosystem. Effectively, Beijing and Brussels concur that the Arctic is too important to be left to the Arctic states alone.

The sparsely populated region cannot remain permanently immune from inter-state disputes present elsewhere. Yet none of the Arctic nations would appear to have an interest in triggering a conflict in the High North or importing one. Increased engagement by China, the world’s second-largest economy and a rising military power, creates new dynamics. The reality of the Chinese presence and investment in the Arctic is far smaller than the rhetoric around it, especially when compared to Beijing’s massive involvement in Africa and central and southern Asia.

The 2020 coronavirus pandemic and the resultant global economic recession, slump in oil prices and shrinkage and uncertain outlook for world trade make any forecasting hazardous. One possible side-effect of COVID-19 may be to reduce the economic interest and available investment for the Arctic, given other more pressing priorities and uncertain returns.

That, however, does not guarantee greater stability. States that are not driven primarily by market forces may double down on strategic investments regardless of medium-term profitability. If Russia fails to harvest the economic and strategic benefits it has been pursuing at great cost in its vast northern region, it may become more brittle internally and perhaps

more inclined to use hard power externally to compensate for a loss of status and influence.

The Ibsen factor

The Arctic community of nations, says Ulf Sverdrup, director of the Norwegian Institute of International Affairs (NUPI), is a bit like the cast of one of 19th century Norwegian dramatist Henrik Ibsen’s plays. “A dysfunctional family with dark secrets is shaken up by the intrusion of an outsider who triggers processes of interaction and introspection,” he said. “In some sense, we are now in such a drama. China is that external actor, and technology is the catalyst.” (4)

Others argue that climate change is the biggest catalyst.

The opening of a shipping channel from East Asia to Europe along Russia’s north coast, navigable several months a year, has spurred Chinese interest in a significantly shorter and potentially cheaper alternative to the traditional passages through the Suez and Panama Canals that would be less prone to US control, and free of queues and pirates. As a rule of thumb, costs fall with the number of days at sea. However, the commercial viability of the Northern Sea Route appears questionable, other than to transport Russian oil, gas and minerals. Western shipping lines insist they have no plans to use it for technical, environmental and business model reasons.

Beijing, on the other hand, is encouraging its enterprises to build infrastructure and conduct trial voyages to develop a maritime ‘Polar Silk Road’ as part of its global Belt and Road Initiative

(BRI) of east-west trade and digital connections. Chinese companies are also eyeing a major undersea digital cable project from Norway to China via the Arctic.

Ambitious plans are on the drawing board for a rail connection from Norway's Arctic coastline to European industrial and population hubs and to Mediterranean BRI terminals, via Finland and the Baltic states, although the proposed mega-project may be hard to finance and faces resistance both from environmentalists and from Saami people in Finnish Lapland. It may well never be built.

China has probed for investment opportunities in mineral exploration and airports in Greenland, port infrastructure and real estate in Iceland, and mobile phone networks across the Nordic region, notably in the thinly populated Faroe Islands, a strategically located archipelago midway between Iceland and Norway. Nordic governments have deflected many of these approaches, often due to pressure from the United States.

Receding ice will ease access to vast but hitherto hard to exploit offshore hydrocarbon reserves, rich fishing waters and rare earth minerals, both in Greenland and in Russia's exclusive economic zone, in which China is keen to invest. Some 13% of the world's undiscovered oil and 30% of undiscovered gas are estimated to lie under the Arctic, prompting some to speak of a "second Middle East". (5)

Climate change, accelerating faster in the polar regions, is also opening new areas to tourism and economic development, but magnifying the risks

of devastation to the environment, indigenous populations and wildlife.

Russia's bastion

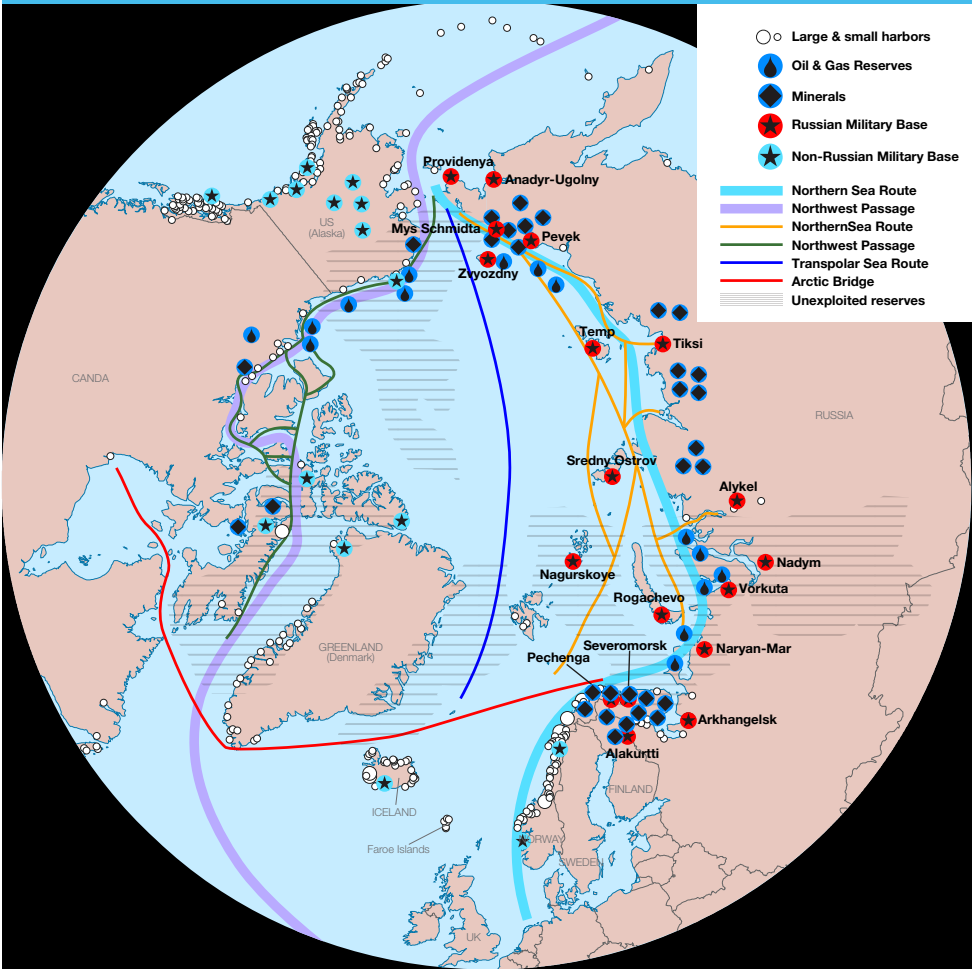
For geographical and historical reasons, the Arctic has always had a special place in the hearts and minds of Russians.

Russia, which has by far the longest Arctic coastline spanning seven time zones from the Bering Strait to the Barents Sea, has re-fortified its 'bastion' defences in the Kola Peninsula, home to its crucial second-strike nuclear submarine force and strategic bombers. Since 2014, it has rebuilt a chain of coastal military bases abandoned after the Cold War, deployed troops in some of them, refurbished airfields, reopened ports and substantially modernised its Northern Fleet.

Moscow has upgraded its nuclear and conventional submarine force, tested hypersonic missiles that could drastically reduce early warning time before striking an adversary, and developed ultra-deep-diving submarines and unmanned underwater vehicles.

With Chinese assistance, Russia is investing heavily in oil, gas and coal extraction in its Arctic region. But relations between Moscow and Beijing, which see themselves as strategic partners against US hegemony, remain tinged by mutual suspicion and divergent national and commercial interests. Chinese plans to increase a \$15bn investment in Russia's giant Yamal peninsula gas liquefaction project have been slowed by differences over ownership and transport rights.

Polar projection of whole Arctic region



Moscow is building up its fleet of nuclear-powered icebreakers and requiring that commercial vessels that wish to ply the Northern Sea Route apply for permission, comply with its safety and insurance regulations, be escorted by a Russian pilot and icebreaker and pay fees to the Russian state. It also insists that Russian oil, gas and coal extracted in the Arctic be shipped only on Russian-flagged vessels.

After a French navy ship sailed from Norway to the Bering Strait without requesting permission in 2019, Moscow issued a decree demanding 45 days' notice of any passage of foreign naval vessels. Pompeo called these demands illegal. The United States has vowed to uphold freedom of navigation in international waters, including on the Northern Sea Route. China too does not accept the Russian claims in principle, although it has complied with them in practice.

Russia sent a letter of complaint to Norway on the centenary of the Svalbard Treaty in 2020 expressing dissatisfaction with the way Oslo manages the archipelago, restricting Russian helicopter, fisheries and economic access. China also operates a research centre on Svalbard.

Norway is drilling for oil and gas in the Barents Sea, right up to its maritime border with Russia.

Military analysts differ over whether the Russian build-up in the High North is largely defensive or more menacing. NATO and US military commanders are concerned that Moscow is developing capabilities to interdict the reinforcement of Europe from North America by sea and air, and to cut vital underwater cables

on which the West's internet connections rely. A senior NATO commander, US Admiral James Foggo, has said a "Fourth Battle of the Atlantic" is already underway – so far non-violently – in and beneath the seas that border Europe, from the Arctic to the Mediterranean.

Other military thinkers say Moscow's objectives and means are more modest and its aim is not to cut North Atlantic sea lines of communication but to hold economic targets and NATO reinforcement hubs in western Europe at risk without having to traverse the so-called Greenland-Iceland-UK gap, the key hunting ground for submarines during the Cold War. Russia has bolted longer-range cruise missiles onto its naval platforms, greatly increasing its ability to strike European ports, airfields and rail hubs without having to sail far beyond the Barents Sea.

NATO awakens

While the United States, Russia, China, Canada, France, Germany, Norway, Sweden and Finland have all published Arctic strategies in the last few years, and some are about to update them, NATO has yet to adopt a strategy for the region. The alliance has long been vague about how far north its area of responsibility stretches, not least due to differences among its member nations.

Canada, which has the second-longest Arctic coastline, was reluctant to permit any discussion of the Arctic in the North Atlantic Council. Norway too has been keen to avoid antagonising Russia, its north-eastern neighbour, while ensuring it has visible NATO solidarity.

“So far there has been a lot of reluctance, at least during my tenure. The Canadians were very opposed to discussing an Arctic strategy within NATO,” said Anders Fogh Rasmussen, a former Danish prime minister who was the alliance’s secretary-general from 2009 until 2014. (6)

Many of those reservations fell away after Russia’s seizure and annexation of Crimea and military destabilisation of eastern Ukraine in 2014. That prompted a major pivot of NATO’s priorities back to territorial defence and away from far-flung crisis management. Moscow’s use of force in Crimea to change borders in Europe for the first time since 1945, led to a sustained increase in allied defence spending and the deployment of a small rotating NATO presence in the Baltic states and Poland, as well as a new emphasis on readiness and reinforcement.

NATO has created a Joint Forces Command for the Atlantic based in Norfolk, Virginia, which was home to the alliance’s supreme Atlantic headquarters during the Cold War, while the United States has resurrected its decommissioned Second Fleet, initially with a headquarters staff but no permanently assigned ships. A double-hatted US commander is in charge of both. Several NATO nations have made enhancements to their monitoring and situational awareness capabilities in the High North without new permanent bases, but with an increased tempo of exercises in Arctic conditions at sea and on land, and more frequent anti-submarine warfare patrols.

NATO conducted its largest transatlantic reinforcement exercise since the end of the Cold

War – Trident Juncture – in central Norway in 2018, including bringing a US aircraft carrier into the Arctic. Russian warships entered the exercise area in international waters and carried out missile drills. US and UK warships and aircraft staged an exercise in the Barents Sea in May 2020, just off Russia’s strategic Kola Peninsula, to “demonstrate the strength, flexibility, and commitment of the NATO Alliance to freedom of navigation throughout the Arctic and all European waters.” (7)

Norway did not participate and maintains restrictions on how close to the Russian border NATO ground and air forces may operate, as it tries to strike a delicate balance between deterrence and reassurance towards Moscow. Oslo says there are no permanent allied bases on its soil, but it has hosted a rotating US Marines training presence since 2017, increased to 700 soldiers in 2019, as well as pre-positioned US equipment stored at Norwegian bases.

Russian aircraft frequently buzz Norwegian airspace. In an incident that Moscow initially hushed up, 14 people died in a fire aboard a secret nuclear-powered Russian submarine which had been surveying the seabed in the Barents Sea in July 2019. Western officials said the dead included senior military intelligence officers.

Such tensions co-exist with historic patterns of cooperation between Oslo and Moscow, including annual search and rescue exercises, a rarely used hotline between their northern military headquarters, economic exchanges, cross-border movement of people and collaboration among local authorities. European Nordic states are all

increasing defence spending, modernising their anti-submarine warfare capabilities and stepping up vigilance, but they are keen to preserve a low-tension environment in the High North.

President Trump's startling suggestion in 2019 that the United States might buy Greenland from the Kingdom of Denmark, which drew instant rebuffs from Nuuk and Copenhagen, highlighted both the growing strategic importance of the Arctic in US eyes and Washington's frustration at the status quo. The US has since reopened a consulate-general in Nuuk and given Greenland \$12.1mn in aid for education and economic projects – less than one-third of what the Greenlanders receive every year from the European Union, despite having voted to leave

the EU. Washington has also budgeted over \$100mn to modernise aircraft shelters and reception facilities at its former military base in Iceland, now a civilian international airport.

For several reasons, members of the Arctic Council are keen to keep security and military issues out of the remit of the organisation, which operates by consensus. The Council includes representatives of indigenous peoples, and several non-Arctic states, including China and India, have observer status.

The European Union has so far failed to secure a full seat at that table, even as an observer, due initially to Canadian reluctance and more recently to Russian objections. Brussels would like to extend its regulatory influence in the region to



Inuit man on a boat in Greenland

fight climate change on Europe's northern flank, but of the three Arctic EU member states, only Finland seems keen to see the Union take a much bigger role.

Mirages and realities

As this report will illustrate, it is unlikely, though not impossible, that an armed conflict would start in or over the Arctic. But a conflict that flared elsewhere — say, in the Baltic or Black Sea regions — might spread to the High North, chiefly because Russia has so much at stake there, and so much of its military capability resides in and around the Kola Peninsula.

The so-called 'Arctic great game' is often exaggerated. The first task is to distinguish between mirages and realities.

SEA MIST - A commercially viable round-the-year Northern Sea Route for anything but bulk cargo and hydrocarbons may be decades away. The route will remain unattractive to Western shipping companies, not least because it does not suit the omnibus business model of container transport serving major population centres en route. Russia will use it to export commodities, mostly in its own ships. China's state-owned shipping giant COSCO may use it for non-commercial reasons, to build strategic ties with Russia and diversify away from US-policed choke points in the Straits of Malacca, Bab al-Mandab and the Suez Canal. In that case, Beijing would have to subsidise the likely higher cost. In the very long run, if global warming is not curbed, sea routes will open across the mid-Arctic Ocean. But life on earth

will have changed so much by then that this is hardly an investable prospect.

OILLUSIONS - While deposits are abundant, Arctic hydrocarbons and minerals are unlikely ever to give rise to a 'second Middle East' due to the high cost and technical difficulty of extraction, especially in a lower-for-longer price environment, and with the industrialised world transitioning to cleaner energy.

Arctic oil and gas projects have exceptionally high break-even costs compared to other locations, and Russia's face the additional handicap of sanctions over Crimea denying access to advanced Western drilling technology and capital. US hydrocarbon development in and off Alaska's North Slope remains slight despite fiscal and regulatory incentives from the most drilling-friendly president in recent history. Big Oil can do the math and is not convinced of the economic return.

If COVID-19 durably reduces consumption of fossil fuels due to recession, permanently reduced air and oil-fuelled car travel and a faster transition to electric vehicles and renewable energy sources, much of the Arctic's reserves may stay in the ground or beneath the sea as stranded assets.

Risks may emanate from an economically weaker Russia dragged down by a failed High North hydrocarbons/minerals strategy, rather than from an overmighty Russia pumped up on oil, gas and missiles. Or perhaps from a toxic combination of the two: a muscle-bound Russia facing economic and demographic decline and political instability.

TALKING BIG, ACTING SMALL - The US at times talks like a revisionist power in the High North, but it has yet to match its Arctic rhetoric with much money. Washington is focusing most of its defence dollars on preparing to confront China in the Indo-Pacific region, with a modest insurance policy against Russian aggression in central/eastern Europe, leaving small change for the Arctic. While Washington has threatened to conduct freedom-of-navigation patrols on the Northern Sea Route, it has not done so in practice, not least because it would be embarrassingly dependent on Russian search-and-rescue if anything went wrong.

China is looking for ways into the Arctic geopolitical game with a very long-time horizon and so far with a relatively modest, largely civilian face. Investments in infrastructure, mining, oil and gas extraction and transport, plus participation in scientific work, seem to be the preferred entry points. When it encounters pushback, Beijing tends back off.

Arctic policy does not appear to have strong top leadership prestige attached to it and is receiving nothing like the financial resources allocated to investments in Africa, central Asia, southeast Asia or southern Europe. Actual Chinese investment in the Arctic – as opposed to highly publicised sniffing around – doesn't add up to much, except in Russia's Yamal gas liquefaction venture.

Triggers and defusers

Without stretching political fiction too far, there are a handful of imaginable triggers for Arctic incidents that might escalate:

- an aggressive US freedom of navigation operation in the High North that got into trouble and/or encountered Russian obstruction;
- an incident between Russia and Norway over the application of the Svalbard Treaty;
- a standoff over search-and-rescue or disaster relief involving an Arctic cruise liner, or a shipping accident, a major oil spill or radiation leak;
- heightened geopolitical tension over Greenland's quest for independence from Denmark;
- an unclaimed sabotage attack on undersea communication cables or a military accident caused by jamming or spoofing of satellite navigation equipment.

Some strategists have speculated that Russia might be tempted pre-emptively to seize a thinly defended slice of coastal northern Norway – as it did in Crimea – in a gamble to show NATO to be impotent, although such a reckless act would risk a collective Article V response to defend an alliance member.

It seems more plausible that a confrontation elsewhere, for example over Georgia's or Ukraine's bids for NATO membership, over frozen conflicts in other former Soviet republics, or over Taiwan or the South China Sea, might escalate horizontally into the Arctic.

None of these scenarios has a high probability, but it is worth doing more now to try to defuse tensions, build confidence, and increase transparency and predictability among Arctic states and other major powers.



Longyearbyen, Svalbard, Norway

Talking down tension

The Arctic Council serves that purpose on civilian affairs but there are strong grounds not to overload a forum that survived the post-Crimea NATO-Russia chill precisely because it does not address military matters. Besides, Arctic nations would not relish discussing hard security questions in the presence of outside observers such as China and India, or of representatives of indigenous peoples.

Though it has met only episodically since 2014, the NATO-Russia Council is one forum that could be used theoretically to discuss security in the Arctic. But Moscow has never been comfortable

with the format, in which it feels in the dock, facing a well-drilled caucus of members of its old nemesis.

There are, however, other existing or dormant bodies – both official and unofficial – that could be revitalised to address Arctic security issues without the need to create yet another institution.

For example, it would make sense to resurrect a much more intensive military-to-military dialogue – regardless of the current impasse in Ukraine and Crimea – by including Russia once again in the Arctic Security Forces Roundtable. This would not be a reward for Moscow, nor signal acceptance of its behaviour in Ukraine.

But it would provide an opportunity to explore pragmatic rules of the road to avoid accidents or miscalculations.

Among unofficial forums, the Munich Security Conference's Arctic Security Roundtable, inaugurated in 2017, offers perhaps the most promising venue for track-two diplomacy, including meetings of intelligence officials, and for confidence building. Russian and Chinese officials attend, and it could help generate proposals for a military code of conduct.

The European Union, NATO and the United States can all do much more to improve the resilience and assist the economic and human development of fragile Arctic territories. Chinese money and infrastructure would be less alluring in Greenland, Iceland, the Faroe Islands and northern Norway if European and American companies and institutions were more willing to invest there. Financial institutions such as the European Investment Bank, the European Bank for Reconstruction and Development and their US and Canadian equivalents should be more active in the region.

Preserving an open, cooperative Arctic as an area of relatively low tension will require more

active stewardship by Western institutions while maintaining vigilance towards security challenges. Rather than trying to exclude China or quarantine Russia, Europe and North America should take better care of their own sectors of the Arctic and engage with Moscow and Beijing on common interests such as mitigating climate change and preserving the environment.

Chapter 1 examines the acceleration of climate change in the Arctic and its impact on human security, notably of the indigenous peoples, as well as on shipping, fisheries and the accessibility of new resources. Chapters 2 and 3 consider the economic and energy potential and challenges of the Arctic, the real prospects for new sea routes, and the outlook for mineral extraction, physical and digital infrastructure and tourism. Chapter 4 documents the evolving Arctic policies of the main regional and external actors and the changing political dynamics of their interaction. Chapter 5 analyses military competition in the Arctic, the impact of developments in military technology and capabilities, and the potential triggers for incidents. Chapter 6 contains conclusions and recommendations.

(1) - Interview with the author, May 2020

(2) - ISpeech to Arctic Council participants by Secretary of State Mike Pompeo, Rovaniemi, Finland, May 6, 2019; <https://www.state.gov/looking-north-sharpening-americas-arctic-focus/>

(3) - Interview with the author, June 2020

(4) - Interview with the author, May 2020

(5) - The term "a second Middle East" was used frequently by former French prime minister Michel Rocard, who was France's ambassador for the poles from 2009 to 2016; <http://karimbitar.org/geopolitique.pdf>

(6) - Interview with the author, April 2020

(7) - https://www.navy.mil/submit/display.asp?story_id=112907



Polar bear on thin ice

CHAPTER 1

Geography, demography, ecology

Hotter, wetter, busier

The images are dramatic. Forlorn polar bears stranded on ice floes; coastal storms washing away native Alaskans' homes; crumbling pack ice crashing into the ocean as the polar cap shrinks before our eyes; burning forests in once permanently frigid Siberia; diesel fuel spilling into Russian Arctic waterways as melting permafrost engulfs storage tanks.

The facts and figures are just as dramatic. The impact of climate change is being felt more severely in the Arctic than in any other part of the globe. The Arctic is warming twice as fast as the rest of the world on average, and it is a self-perpetuating vicious cycle.

Northern Siberia has experienced the most extreme warming conditions of anywhere on Earth in 2020. When the permafrost thaws, carbon dioxide and other greenhouse gases that had been locked away for centuries are released, accelerating global warming. Moreover, northern Russia has suffered catastrophic wildfires linked to a mixture of drought and climate change, which are disturbing the ecosystem in the tundra and boreal as well as mountain regions. (1)

The Northern Sea Route along Russia's Arctic coast, which usually opens for navigation only in July for three months, saw the first crossing completed in May 2020 by an ice-breaking Russian LNG tanker. While Moscow trumpeted the early passage as a landmark achievement, it was also an alarming measure of accelerating climate disruption. (2)

The human and environmental consequences are stark. In the first days of June, Russia suffered one of its worst pollution disasters in the High North when a power plant storage tank collapsed due to melting permafrost, spilling 20,000 tonnes of diesel into a river and a lake near Norilsk, one of the country's main northern industrial cities.

Definitions of the Arctic and the High North vary from one country to another. While the Arctic is strictly speaking the part of the planet north of the 66° 33' 44" latitude (the Arctic Circle), for the purposes of this report we use a broader geostrategic definition including the whole of Alaska and Iceland (only a tip of which is inside the Arctic Circle), the Faroe Islands (which are well south of the Arctic Circle) and the northern regions of Russia, Canada, Norway and Finland.

(1) - <https://www.washingtonpost.com/weather/2020/05/22/siberia-heat-wave/>

(2) - <https://seanews.ru/en/2020/06/11/en-sovcomflot-s-christophe-de-margerie-completes-early-nsr-voyage/>

Today, around 4.3 million people live in the Arctic, of whom roughly 10% are indigenous. About half of all Arctic dwellers live in Russia, which has the only cities with more than 100,000 residents inside the Arctic Circle – Murmansk and Norilsk. The Russian north has suffered severe depopulation since the collapse of the Soviet Union. The most northerly areas of Finland, Sweden and Norway have seen their population stagnate and only Iceland, a fast-growing tourist destination before the COVID pandemic, has experienced healthy population growth.

“For four million people who live in the Arctic, the tipping point is already passed,” says Victoria Herrmann, president and managing director of the Arctic Institute, a non-profit research organisation in Washington DC. “Indigenous residents’ security is in question every single day. How can they afford dinner for the next week if they can’t hunt marine mammals on the ice?” (3)

Herrmann believes climate change in the Arctic is irreversible, though it can still be slowed by determined action. “Sea ice will likely be lost, with ice-free summers within our lifetime. Extreme weather events will be made more intense and extreme because of the Arctic ice melt,” she said. “But glacial ice in Greenland and the Antarctic doesn’t need to disappear.”

She cites multiple impacts on indigenous communities across the High North – fishing towns washed away by coastal erosion in Alaska, animal disease and ticks moving north

to decimate wildlife that lacks immunity, and reindeer falling to early frost.

But climate changes in the Arctic also affects the future of some 680 million people living in low-lying coastal areas around the globe. If Greenland’s central glacier melts, it will raise sea levels around the world by an estimated six meters, flooding large areas of coastal Western Europe, the US East Coast and Asia’s eastern seaboard, and engulfing low-lying island nations in the Pacific and Indian Ocean.

“If only a quarter of the Greenland ice sheet melts, it will cause a two-meter rise in sea levels, making the great cities of coastal China uninhabitable,” former Icelandic president Ólafur Grímsson told an Arctic Circle conference in Shanghai in 2019. “The security of Shanghai in the future will be determined in the Arctic.” (4)

(3) - Interview with the author, April 2020

(4) - <https://m.youtube.com/watch?v=BBYASgDkb7c>



Diving for snow crabs

Shrinking icecap

The size of the permanent Arctic sea ice cap is declining in every month of the year, and it is getting thinner, according to a special report by the Intergovernmental Panel on Climate Change on the Ocean and Cryosphere in a Changing Climate published in 2019. If global warming is stabilised at 1.5°Celsius above pre-industrial levels, the Arctic Ocean would be ice-free in September – the month with the least ice – only once in every 100 years. With global warming of 2°C, this would occur up to one year in three. The world is currently on a far higher warming trajectory. (5)

Arctic dwellers, especially indigenous peoples, have already adapted their traveling and hunting activities to the seasonality and safety of land, ice and snow conditions, and some coastal communities have planned for relocation. But the pace of climate change poses an existential threat to their lifestyles.

Permafrost ground that has been frozen for many years is warming and thawing and widespread permafrost thaw is projected to occur in the 21st century. Even if global warming is limited to well below 2°C, around 25% of the near-surface (3-4-meter depth) permafrost will

(5) - <https://www.ipcc.ch/srocc/>

thaw by 2100. If greenhouse gas emissions continue to increase strongly, there is a potential that around 70% of near-surface permafrost could be lost.

This means homes, towns, factories, roads, airports, power lines, rail tracks and pipelines will become unanchored and may collapse, sink or shift with unpredictable harmful consequences.

Arctic and boreal permafrost hold large amounts of organic carbon, almost twice the carbon in the atmosphere, and have the potential to significantly increase the concentration of greenhouse gases in the atmosphere if they thaw. It is unclear whether there is already a net release of carbon dioxide or methane due to the ongoing thaw of the Arctic permafrost.

Increased plant growth due to warmer weather may increase the storage of carbon in soils and offset carbon release from thawing permafrost,

but not on the scale of large long-term changes. Melting ice also poses a potential risk to oil and gas platforms, if an iceberg were to drift into an offshore rig.

Climate experts warn that melting ice is a self-accelerating phenomenon, sometimes called Arctic amplification, because snow and white ice reflect sun rays back whereas dark ocean water, grass and soil absorb solar radiation in what is known as the albedo effect. Changes in the polar regions can thus cause more warming across the entire planet through feedback effects.

But the warming is also unevenly distributed. One unpredictable effect of climate change is the weakening of the polar vortex, a thin layer in the atmosphere that holds cold air in the Arctic and prevents it drifting south. This can cause cold snaps that are hard for meteorologists to predict. Some models forecast a long-term cooling of Scandinavia as a result.



Fishing Port of Oldervik, Norway

Black carbon, acid water

Finnish President Sauli Niinistö tried unsuccessfully to convene a summit of Arctic Council leaders including US President Donald Trump and Russian President Vladimir Putin in 2019 to discuss a pact to radically cut emissions of black carbon, one of the greenhouse gases blamed for the most severe erosion of the Arctic ice cap.

Black carbon is a sooty material emitted from coal-fired power plants and by burning fossil fuels. It causes warming of the atmosphere by absorbing and trapping heat, and accelerates melting when it lands on snow and ice. According to a 2015 study, cutting black carbon emissions and other minor greenhouse gases by roughly 60% could cool the Arctic by up to 0.2°C by 2050.

Unlike carbon dioxide emissions, which are the main cause of climate change and can stay in the atmosphere for hundreds of years or longer, black carbon has a much shorter lifespan that ranges from days to decades. Niinistö tried to make a business-friendly pitch to Putin and

Trump that cleaning up old-fashioned factories and power plants and working to stop oil fields flaring extra gas can yield results.

But Trump, who has withdrawn the United States from the Paris agreement on climate change, disputes the man-made nature of global warming. And Putin, while nominally supportive of the Paris accord, is reluctant to commit to any step, such as restrictions on flaring, that could inhibit the development of Russia's northern oil and gas industry.

Like an ice cube melting in your drink, melting Arctic pack ice does not in itself change the sea level. But it does affect the composition of the sea and hence also movements of shoals of fish. Ocean warming and acidification, loss of oxygen and changes in nutrient supplies, are already affecting the distribution and abundance of marine life in coastal areas, in the open ocean and at the sea floor. Melting sea ice threatens the survival of many species such as polar bears and walrus. Acidification is affecting entire

oceans and underwater ecosystems, with the international scientific community anticipating mass extinctions.

Some species need colder, more saline water and are being driven north and east into the Arctic Ocean, with a major impact on North Atlantic fishing grounds around Greenland, Iceland and Norway. Shifts in the distribution of fish populations have reduced the global catch potential and are driving staple fish stocks out of the exclusive economic zones of those north Atlantic nations.

Given the wider damage that climate change will wreak on food supplies, the impact of migrating fish resources could turn geopolitical, says Jonathan Lynn, head of communications at the IPCC. A contest over Arctic fishing grounds has been postponed by a moratorium on fishing in the central Arctic Sea agreed in 2018, but perhaps not indefinitely. The agreement applies initially for 16 years from the date of ratification, and can be extended for 5-year periods if all signatories agree. (6) (7)

(6) - Interview with the author, May 2020

(7) - <https://www.dfo-mpo.gc.ca/international/arctic-arctique-eng.htm>



Norilsk oil spill



Sami woman with a reindeer

Saami suffer

These macro-trends have micro-implications, particularly for the lives of indigenous people living around the Arctic.

Gunn-Britt Retter is head of the Arctic and Environment unit of the Saami Council, the non-governmental organisation representing up to 80,000 Saami people in Norway, Sweden, Finland and Russia. She lives on the only east-facing fjord in Norway's northern Finnmark province, close to the Russian border, and knows well the impact on the nomadic reindeer herders spread over some 1,500 km from Roros in central Norway to the Barents Sea in the High North.

"We are generally seeing wetter seasons, warmer winters and cooler summers due to climate change," she explains. "This winter has been extremely tough. We had so much snow, then thawing during the winter that makes the surface wet and causes ice formation. Reindeer dig through snow to lichen but they can't drill through ice. With warmer winters, we get thaws and several layers of ice in the snow. They can smell food through one meter of ice, but not more." (8)

As a result, Saami herders have had to provide expensive fodder for their reindeer, using

(8) - Interview with the author, April 2020

snowmobiles to reach them and receiving pallets of feed delivered by helicopter. “In some areas, this has spread disease in the reindeer herds. Different feed has led to stomach disease and some lung disease, sometimes fatal. Moose have also suffered massive deaths from starvation.”

Longer growing seasons mean more undergrowth, darkening the earth surface and absorbing more heat. This affects livestock access to large areas. In Finnmark, it also reduces access to the berries that are part of the staple diet. Birch forests across the Arctic from Alaska to Iceland, Norway, Sweden and Finland are beset by larvae that eat the leaves and turn the forests brown. Swarms of moths and other insects are blighting the forests and reducing the crop of berries.

The Saami have differing legal and political rights in the European Arctic states, although all three Nordic countries have Saami parliaments that have influence but not land ownership or tax-raising powers.

In Finland, they are recognised in the constitution and their parliament has extensive consultation rights. The Saami have the right to manage their own protected areas in three large northern Finnish municipalities. Norway’s Saami parliament has self-determination rights over language and cultural heritage. The Finnmark Act provides for co-management of public estates by Saami and non-Saami populations. “The Saami in Norway have a much stronger position in reality than on paper,” Retter says.

Sweden’s Girjas Saami won a landmark victory in January 2020 when the supreme court recognised their exclusive right to manage hunting and fishing in a 5,000 sq km grazing area south of the town of Kiruna without state involvement, overruling a 1993 land reform. The court ruled that the Sami had used the land “since time immemorial” and hence their claims pre-dated the “tax lands” taken by the Swedish crown during the mid-19th century settlement of Lapland.

The ruling ended a 10-year court battle with Swedish hunters but has triggered a racist backlash against the Saami, as well as vigilante attacks on reindeer.

Sweden has also refused to ratify an International Labour Organisation convention on the rights of indigenous peoples. Another unresolved dispute involves demands for compensation from a giant state-owned iron ore mine, the world’s second-largest, in the middle of Kiruna which has expanded twice, forcing almost a third of the town’s 18,000 residents to resettle.

The Saami Council is one of six indigenous peoples’ organisations that participate as observers in the Arctic Council, the intergovernmental body for cooperation on civilian affairs in the High North.

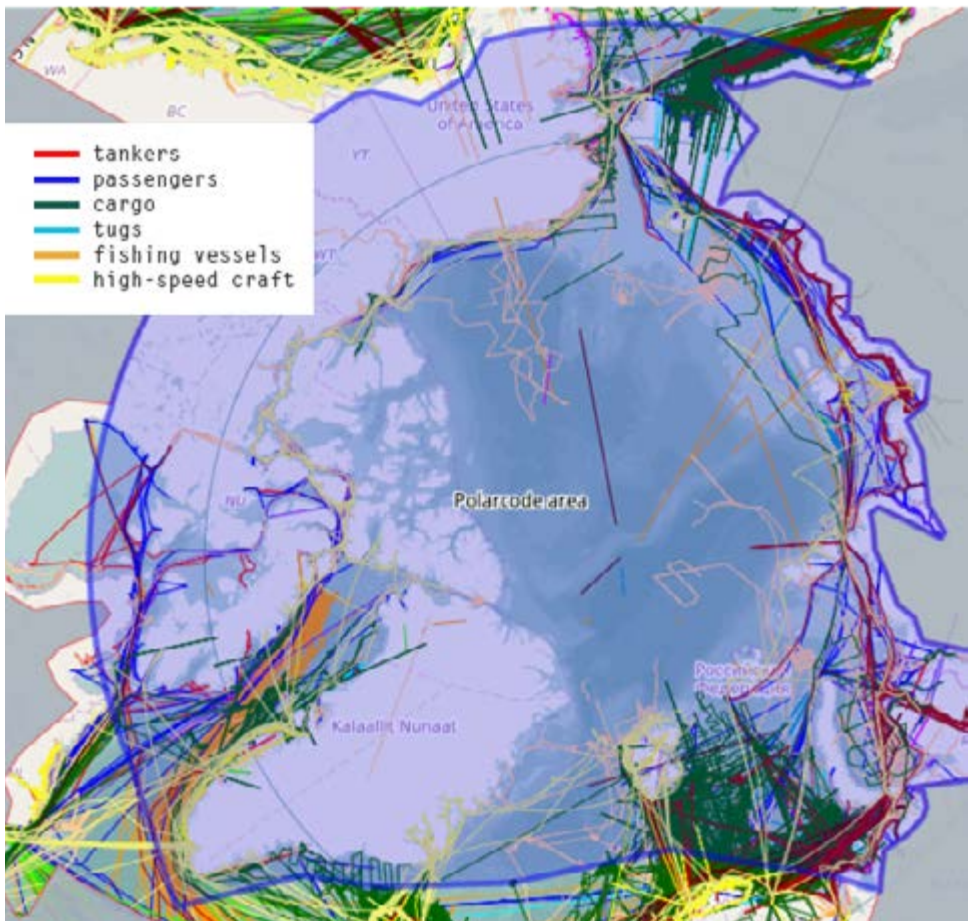
The largest are the Russian Association of Indigenous Peoples of the North (RAIPON), which represents some 250,000 people, and the Inuit Circumpolar Council, which represents some 150,000 people spread mostly across Canada, Alaska and Greenland. The 50,000 Inuit

in Greenland are by far the largest population group there and have been supportive of seeking independence from the Kingdom of Denmark.

Indigenous peoples, also known as ‘first nations’, have stronger land rights in Canada and the United States than their European counterparts but they often do not enjoy the same cultural,

media and educational rights as in northern Europe. Their traditional lifestyle is everywhere under threat.

While climate change may offer seeming economic opportunities in the Arctic, it is already acting as an amplifier of geopolitical tensions and of the problems of the indigenous people.



Ship tracks of all ships of all ship types in September 2019

PAME – Arctic Shipping Status Report#1 <https://storymaps.arcgis.com/stories/592bfe70251741b48b0a9786b75ff5d0>



Heidrun Oil Field in the Norwegian Sea

CHAPTER 2

The Arctic economy

- energy and shipping

The Arctic mirage

Like an Arctic mirage caused by the inversion of temperature, the High North will always have a brilliant economic future on the horizon. But the present and the medium-term outlook are far less dazzling than is frequently stated or imagined, and the horizon may never be attained. Many of the assumptions on which geopolitical strategists base their scenarios are built on thin ice.

Economic activity, especially in oil and gas development and shipping, has yet to pick up as long forecast. Major new investment projects are few and far between, and the impact of

the global COVID-19 pandemic may be to further delay investment plans and cast some previously booming sectors, notably Arctic tourism and cruises, into deep decline for an extended period.

The gulf between ambition and reality is a common feature across almost the entire Arctic. From Alaska to northern Canada, from Greenland to Iceland to northern Norway and northern Finland, and despite strong support from President Vladimir Putin, even in Russia's High North.

Permanent decline?

The Soviet Union began extracting oil in the Arctic in the 1930s and developed oil and gas resources more intensively in the Far North from the 1960s. Currently, the north of the West Siberian province is the world's largest gas producing region and a major oil extraction centre.

The United States began prospecting for Arctic oil in Alaska in 1946 and the first crude from the Prudhoe Bay field was transported via a

1,290-km Trans-Alaskan Pipeline to the port of Valdez in 1977. The first offshore gas field was discovered in 1969.

But despite President Trump's vocal support for the domestic oil and gas industry, and his lifting in 2017 of the Obama administration's ban on oil drilling in the Alaskan Natural Wildlife Refuge, a new Arctic oil boom has not materialised. Federal regulators approved in May 2020 construction and operation of a \$43bn 1,100-



km Alaskan gas pipeline from the North Slope to a proposed liquefaction plant and LNG export terminal in the southern Alaskan port of Nikiski. But the project lacks investors after the main energy companies withdrew in 2016. (1)

Alaska's production has declined from some 2mn bpd in the 1980s to less than 500,000 bpd in 2019. Oil major BP, one of the pioneers of Alaskan drilling, pulled out of the state in 2019 to focus on cheaper-to-produce US shale oil and gas. Exxon-Mobil Corp may be the next major to exit Alaska, industry experts say, leaving the field mostly to small independent producers. (2)

While Arctic hydrocarbons are marginal to the US economy, they are central to Russia's.

Roughly 15% of Russia's gross domestic product is produced in the Arctic. More than 80% of Russian gas, as well as nickel, diamonds and rare earth metals are extracted there.

The petroleum industry provides one-third of state budget revenues and produces more than 13% of global liquid hydrocarbon exports. Oil and gas condensate production hit a record combined high of 11.25mn bpd in 2019, according to the Energy Ministry. (3)

(1) - <https://www.adn.com/business-economy/energy/2020/05/21/alaska-lng-project-gets-federal-approval-the-next-step-is-to-find-investors/>

(2) - <https://www.bloomberg.com/opinion/articles/2019-08-28/bp-s-alaska-sale-is-a-sign-of-oil-s-times>

(3) - <https://www.reuters.com/article/russia-energy-production/update-1-russian-oil-condensate-output-surges-to-record-high-in-2019-idUSL8N2970BX>

(4) - <https://www.rcinet.ca/eye-on-the-arctic/2019/04/10/arctic-forum-nordic-leaders-meet-russia-putin-st-petersburg/>

“The resources are truly titanic, they are of global proportions,” Russian President Vladimir Putin boasted at an Arctic Forum in St Petersburg in 2019, where he met leaders of Nordic countries. (4)

However, the sudden slump in demand for oil and gas due to the lockdown of the world economy in the second quarter of 2020 may turn out to be the precursor of a permanent decline in demand for fossil fuels, just as prices were falling due to a politically induced glut in global supply.

That poses a challenge to Putin’s updated Arctic strategy, promulgated in March 2020, which calls for a major boost to natural resource exploitation and measures to further develop the Northern Sea Route. Moscow is offering big tax breaks for oil and gas exploration and production, particularly offshore, in the far north and especially in the east Arctic. (5)

According to pre-COVID government estimates, the tax incentives will unleash up to 15tn roubles (€216bn) of new investment in the Russian Arctic by 2035. Among prospective new industries in the region are petrochemicals and plastics, according to the Ministry of the Far East and the Arctic, responsible for the plan.

It sounds impressive, and Russia’s energy giants - state controlled Gazprom and Rosneft and privately owned Novatek and Lukoil - are eager

to drive the expansion. But experts say they lack sufficient investment capital and advanced technology due to Western sanctions imposed over Russia’s actions in Ukraine in 2014. That makes Moscow uncomfortably dependent on Chinese investment for mega-projects, over which it is reluctant to share ownership or control with foreign partners - be they Western or Chinese.

Even before the sanctions, Western energy multinationals had pulled out of Gazprom’s project to exploit one of the biggest offshore natural gas deposits ever discovered, the Shtokman field in the Barents Sea. Gazprom postponed the project indefinitely in 2012 due to high costs and low gas prices. The Swiss-registered subsidiary created to develop the field was quietly wound up in 2019.

(5) - <https://www.ft.com/content/2d84fc23-f38d-498f-9065-598f47e1ea09>

'Peak oil'

Energy analysts normally use the term 'peak oil' to pinpoint a date in the future - often situated in the 2040s - when global production will hit a maximum and output will begin to slow because of dwindling reserves and the transition to renewable energy sources. However, 'peak oil' in terms of demand may arrive sooner - perhaps in the early 2030s - as a consequence of the coronavirus. Western energy majors now expect that air and fossil-fuel car travel may never return to pre-pandemic levels, and that the shift to cleaner forms of energy may occur faster than previously forecast. (6)

The US Geological Survey estimated in 2008 that the Arctic contains 13% of the world's untapped oil, 30% of undiscovered natural gas and 20% of undiscovered natural gas liquids. (7) These are estimates of technically recoverable resources. But whether they can be extracted at a profit largely depends on the global oil price.

"Most Arctic oil and gas will likely not be competitive under conditions of lower-for-longer oil prices and expectations of peak demand within a decade or so," says Geir Westgaard, Vice-President of Political and Public Affairs at Norway's state-owned oil and gas producer, Equinor. (8)

Equinor, formerly known as Statoil, is well placed to know, since it has drilled more than 100 wells north of the Arctic Circle over the last three decades and has begun producing oil and gas in the Barents Sea.

Oil multinationals were already backing away from the Arctic before COVID, both because other resources are cheaper to exploit and for reputational reasons. Environmental activist groups such as Greenpeace and the World Wildlife Fund have mounted high-profile campaigns to demand a complete halt to Arctic drilling and called for making the region a "global sanctuary", raising pressure on companies in Russia, Norway, the Netherlands, the UK and the United States. (9)

Several factors make Arctic exploration and production more expensive. Harsh, wintry conditions mean that equipment must be specially designed to withstand low temperatures. Onshore, poor soil conditions often require special preparation to prevent equipment and structures from sinking. Offshore, icepack can damage facilities and hinder shipment of personnel, materials, equipment and oil for long periods of time.

(6) - <https://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf>

(7) - Interview with the author, May 2020

(8) - <https://www.arctictoday.com/putin-signs-russias-new-arctic-master-plan/>

(9) - <https://arcticwwf.org/work/oil-and-gas/>; <https://www.greenpeace.org/usa/issues/protect-the-arctic/>

Remoteness makes for long supply lines and increased transportation costs.

Equinor divides the Arctic into three: the ‘workable Arctic’, where it is exploring near-shore resources in the Barents Sea right up to the sea border with Russia; the ‘stretch

Arctic’, which may be exploitable using existing technology with some adaptation, including some offshore Alaskan deposits; and the ‘extreme Arctic’, with considerable obstacles of ice, depth and geographical distance that would require new technology and engender far higher costs.

Prepared for a long crisis

Energy experts differ on the breakeven price for Russian Arctic oil. The Russian government assumed an oil price of \$42.50 a barrel as the baseline for the 2020 state budget and has dipped into its huge sovereign wealth fund to cover part of the shortfall due to prices as low as \$23 a barrel and the COVID-19 impact on the economy. Extra barrels from offshore fields have a much higher breakeven cost.

Vitaly Yermakov of the Oxford Institute for Energy Studies reckons that Russia can live with oil as low as \$25 a barrel for three years by drawing on savings in its sovereign wealth fund and will not change its long-term hydrocarbon development plans due to the pandemic. (10)

“Russia is well prepared for a long crisis and can get through it,” Yermakov told an online seminar organised by the Italian think-tank ISPI in May

2020. At the time, he said Gazprom was losing money on supplying gas to clients in Europe and the Far East, owing to the slump in prices caused by a Saudi-Russian oil output war and the worldwide COVID-19 economic shutdown.

Ekatarina Klimenko, an expert on Russian Arctic policy at the Stockholm International Peace Research Institute (SIPRI), also believes that Moscow will try to “look beyond the collapse of oil prices” and press ahead regardless. (11) In Russian strategic thinking, power is a function of resources in the ground and military might. Besides, Russia has few alternative economic options.

By far China’s biggest investment in the Arctic is an estimated \$15bn in the Yamal LNG plant since 2013 and more recently in the Arctic LNG 2 project, both controlled by Novatek,

(10) - <https://www.ispionline.it/it/eventi/evento/covid-19-and-cheap-oil-russia-explosive-mix>

(11) - Interview with the author, April 2020

Russia's privately-owned number two natural gas producer. France's Total also has a 20% stake in the projects.

The Chinese involvement is a combination of minority equity stakes bought by the Chinese National Offshore Oil Corp and a unit of the Chinese National Petroleum Corp, and loans from the Export-Import Bank of China and the Silk Road Fund. Chinese money helped launch Yamal LNG ahead of schedule. Leonid Mikhelson, chairman of Novatek's management board, said China was one of the key consumer markets for his company's LNG sales.

Gazprom began delivering small volumes of natural gas from central Siberia to China via the Power of Siberia pipeline for the first time in late 2019. But transporting Arctic hydrocarbons from the Yamal peninsula to China by pipeline, enabling Moscow to switch supply away from the European market, remains at the pre-investment stage after several postponements and would require a long-term price agreement. The feasibility is also complicated by melting permafrost, which could cause havoc with the stability of pipelines.

Putin has also been personally involved in trying to attract Indian investment in gas and mining projects elsewhere in the Arctic planned by Rosneft, headed by Igor Sechin, one of the president's closest advisers who is often described as the second most powerful man in Russia.



Ischudt Arctic Transit's LNG Ship to Ship transfer operation at Honningsvåg, Norway

All at sea

The second intertwined strand in Putin's Arctic strategy to 2035 is the development of the Northern Sea Route (NSR), also known as the northeast passage, as the main export conduit for Russian hydrocarbons and minerals, and a potential money-spinner from intercontinental navigation by halving the number of days at sea between East Asia and Western Europe.

Former Soviet leader Mikhail Gorbachev was the first Kremlin leader to set ambitious objectives for the 5,600-km-long maritime channel in a 1987 speech in Murmansk on the prospects for international cooperation in the Arctic. Putin gave high priority from the mid-2000s to building up the marine transport artery, which Klimentenko says has become more crucial for Russia as melting permafrost makes overland infrastructure ever less practicable. (12)

In 2018, when Russia's Arctic strategy was adopted, Putin decreed: "The Northern Sea Route will be the key to the development of the Russian Arctic and the regions of the Far East. By 2025, its traffic will increase tenfold to 80mn tons." (13)

Whether that ambitious goal is attained depends partly on whether substantial port infrastructure can be built along the route that runs north of the Eurasian mainland between and around Russian Arctic islands. As a reality check, in 2019 the total volume transported on the NSR was 31.5 mn tons, mostly LNG, and less than 1mn tons transited the full route. 95% of NSR traffic was short-sea shipping. More than 1.2bn tons of goods transited the Suez Canal in the same period. In an average year, between 15,000 and 17,000 ships pass through Suez, 40,000 cross the Malacca Straits, while in a big year about 80 ships pass along the Northern Sea Route.

Nevertheless, Moscow continues to invest heavily in nuclear powered and conventional icebreakers. It has by far the world's largest fleet with 46 plus 11 under construction and another four planned - more than all other Arctic nations combined. (14)

However, all the main Western shipping lines have said they have no intention of using the route. Danish giant Maersk, the world's largest shipper by volume, did a trial run

(12) - https://www.barentsinfo.fi/docs/Gorbachev_speech.pdf

(13) - <https://thebarentsobserver.com/en/arctic/2018/05/its-order-kremlin-shipping-northern-sea-route-increase-80-million-tons-2024>

(14) - <https://www.dco.uscg.mil/Portals/9/DCO%20Documents/Office%20of%20Waterways%20and%20Ocean%20Policy/20170501%20major%20icebreaker%20chart.pdf?ver=2017-06-08-091723-907>.

with a containership on the NSR in 2018 but decided not to pursue the experiment, citing environmental and business reasons.

“We fully recognise the environmental challenges of sailing on the Northern Sea Route. Maersk will always seek to minimise the negative impact on the environment of our operations, with special attention to any sensitive environment. In 2018 Maersk conducted a safe trial voyage on the Northern Sea Route to gain operational experience in a new area and to test vessel systems on ice class container vessels. We found that the Northern Sea Route is not a commercially viable alternative to our current routes. Based on the above, we have no plans to pursue the Northern Sea Route,” the company said in an emailed statement. (15)

France’s CMA CGM, Germany logistics giants Hapag Lloyd and Kuehne & Nagel and Swiss-Italian company MSC all announced decisions in 2019 to shun the Arctic shipping route, chiefly on environmental ground. Climate campaigners have targeted the shippers over their carbon emissions, especially black carbon, which warms the atmosphere by absorbing and trapping heat.

“Operations in the Arctic pose completely different demands on ships and their design. The passage is feasible for around three months during the summer, marked by a lack of obstructive ice. That said, ice conditions can vary and are in general difficult to predict. Thus, assistance by icebreakers which are around

to support safe navigation all year will still be necessary,” said Michael Meisel, who led the Maersk trial.

Expensive ice-class vessels are required for the passage, and with the entry into force of the International Maritime Organisation’s Polar Code, additional investments would be required, he said. Conditions can be extreme, with storms bringing 12-14-metre waves and unpredictable ice floes. Search and rescue services are far away.

Industry sources say there is no prospect of the NSR becoming suitable for the globally dominant operation model of container shipping. On the world’s main maritime highways, giant container ships stop like omnibuses at regional hubs along fixed intercontinental routes, offloading part-cargoes for trans-shipment and picking up others on the way. The system serves industry and consumer markets in population centres all along the route.

None of this applies to the NSR. There are no significant ports or population centres between the Bering Strait and the Barents Sea, very little industry to supply and no road or rail networks to carry goods on to their end destination. Additionally, the NSR is too shallow in key straits for large container ships.

(15) - Statement emailed to the author, March 2020



Russian Prime Minister Dimitri Medvedev at Yamal LNG

“Smooth and quick”

To be sure, the China Ocean Shipping Company (COSCO) has expressed its intention to expand its use of the NSR. “Our development strategy is to serve the Polar Silk Road and international trade between the North Atlantic region and the Far East,” Chen Feng, General Director of Marketing and Sales for COSCO Shipping Specialised Carrier subsidiary, told an Arctic Circle conference in Shanghai in 2019. (16)

“It is smooth and quick,” he said. China too is investing in modernising and upgrading its icebreaker capacity. But whether the potential 10-day time saving on shipments from Asia to Europe via the NSR compared to traditional routes is actually achieved depends on weather and ice conditions as well as customer demand.

COSCO carried out 22 transcontinental bulk cargo shipments along the NSR from 2013 to 2018, more than any other foreign company. But only a handful of its 1,285 ships are built for ice conditions. Chinese interest may also be limited by Russian regulations mandating that oil, gas and coal produced in the Russian far north must be transported on Russian-flagged ships.

Felix Tschudi is a Norwegian shipping veteran who chairs a family transport, logistics and minerals conglomerate that is one of the largest employers in northern Norway. His company has been involved in trans-shipping Russian LNG and gas condensates for Yamal LNG and Novatek, and crude oil for Lukoil onto larger tankers offshore from Honningsvåg on

the Northern Cape and delivering them to western Europe. However, the contracts have been short-term and are unlikely to become a sustainable business opportunity because “the Russians want to do it all for themselves”.

Tschudi, who co-founded the Centre for High North Logistics based at Nord University in Bodo, northern Norway, has been a pioneer and cheerleader for Arctic shipping and spent much of the last decade promoting it in speeches and presentations, including to the World Economic Forum Global Agenda Council on the Arctic. He says it is clear that developments have been different from what was initially anticipated, with fewer transit voyages than expected using the Northern Sea Route between the Pacific and the Atlantic, but a big increase in destination shipping out of Siberia.

“Russia has massive resources and needs to find logistics and transportation solutions... Western companies and countries have shown surprisingly little interest while Far Eastern nations, especially China, are getting involved, bearing in mind it is a very long-term project. The Arctic is relatively speaking a minute trade flow compared to the volumes transported worldwide. It’s not going to be competitive with Suez for the large volumes moving via the southern shipping lanes. Where it is a viable alternative is for north-north trade and for transporting resources from the north to the east and to the west,” he said. (17)

Other factors may affect the viability of the Northern Sea Route, such as global freight rates, transit fees, bunker fuel prices, the availability of search and rescue and its impact on insurance rates, and the risks of war or piracy closing or affecting the other main arteries. For now, all those factors except piracy work against the NSR.

Victoria Herrmann of the Arctic Institute says the viability of the NSR faces permanent security issues. “All it takes is for one ship to go down, due to ice floes or poor Arctic charts. It’s a continual risk,” she said. (18)

Tschudi said it was “totally legitimate” for Russia to want to take a cut from NSR traffic, as Egypt did from the Suez Canal traffic, since it was investing in expensive icebreakers and infrastructure along the route and taking responsibility for safety. However, he added: “If they charge less, they will get more traffic which will translate into less cost for everyone including themselves. If they charge too much, there will be no use of the Northern Sea Route for third party transit trade, as it will be uncompetitive compared to the traditional routes.”

In Tschudi’s view, Western governments have been short-sighted and are driven by short-term thinking while Russia and China are playing a long game with investments in the Arctic that will pay off in the long run.

(17) - Interview with the author, May 2020

(18) - Interview with the author, April 2020



CHAPTER 3

The Arctic economy

- minerals, connectivity, tourism

Dig deeper

Minerals offer one of the other frequently touted prospects of economic development in the High North. Russia's second largest city of Norilsk has the world's largest nickel-copper-palladium deposits. Its smelters are also responsible for severe sulphur dioxide pollution that causes acid rain.

The hunt for rare earth minerals used in smart phones, fuel cells, batteries, electric cars, magnets, plasma screens, fibre optics, lasers and medical imaging has prompted a race to develop deposits in several Arctic regions, including eastern Siberia, Greenland and Canada's Northwest Territories and Nunavut. But progress is slow because of the difficulty of access, technical complexity and national and local sensitivities.

China is the world's dominant supplier of rare earth elements, so Chinese interest in investing in exploration and extraction in Arctic countries has aroused Western suspicion. Some Western officials question whether Chinese companies are genuinely interested in mining these minerals in remote corners of Greenland or Russia, or whether Beijing is merely seeking to buy up licences to keep potential new supply off the market and tighten its near monopoly on some rare earths.

China produced 120,000 tonnes of rare earth oxide in 2018, accounting for about 70% of the world total. The United States has just one functioning mine, the Chinese-owned Mountain Pass operation in California, which produced 15,000 tonnes in the same period. Australia took second place with output of 20,000 tonnes a year. (1)

The remote Kvanefjeld site on the southern Greenland coast is believed to hold one of the largest unmined rare earth deposits in the world, attracting the attention of both the United States and China. It may be one of the factors behind President Trump's startling public offer to buy Greenland from Denmark in 2019, which set off a diplomatic ice-storm.

Three linked deposits contain an estimated 1bn tonnes of mineralised ore, with significant quantities of both rare earths and uranium, making the site even more sensitive because of the potential nuclear fuel uses. The Kvanefjeld project is owned by Greenland Minerals and Energy (GME), an Australian-based company, which acquired the licences in 2007 and has spent approximately \$60mn on the project, according to Damien Krebs, the metallurgy manager for the field. In 2016, Shenghe Resources Holding Co. Ltd, listed on the

(1) - <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/russia-struggling-to-capitalize-on-rare-earth-reserves-52525919>

Shanghai Stock Exchange, became the largest shareholder in GME with an 11% stake. (2)

GME has applied for a mining permit for the Kvanefjeld deposit and submitted an updated environmental impact assessment in May 2020 in a drive to secure approval from the Greenland autonomous government.

Washington has exerted pressure on Copenhagen and on the Greenland authorities to freeze Chinese investors out of work to develop the Kvanefjeld rare earths deposit, as well as from tenders to upgrade old airstrips and expand the existing airport in Nuuk, the island's capital, and develop a deep-water port for booming Arctic tourism. (3) When the US announced a \$12.1mn aid package for Greenland in May 2020, it included funds earmarked for mineral exploration and development.

Mining licences are a prickly issue in sensitive relations between Nuuk and Copenhagen because the relatively poor, sparsely populated island's self-governing statute within the Kingdom of Denmark gives the autonomous government control over economic development and minerals. (4)

"Greenland is a self-governing territory within the Kingdom of Denmark, responsible for its own economic development, social policy and

education. It is looking to actively partner with others to help development. The Chinese have cottoned on and tried to weasel their way into Greenland," a senior US official said. (5)

Russia is believed to have the world's fourth-largest reserves of a group of 17 metals with unique electronic and magnetic properties that are vital to most modern electronic products, but it has struggled to exploit them and produces only 2% of global output of rare earth oxides. The reserves are mostly located in remote areas of eastern Siberia and require capital-intensive advanced refining technology to exploit.

President Putin has described the metals as critical to Russia's defence capability, modern weapons and military equipment. But despite state support, Moscow has made little progress so far in extracting and processing rare earths. A 2019 report by credit ratings agency Standard's & Poor said China was interested in investing in the most promising Russian project at a remote site with no paved road connections in Tomtorskoye, in the Sakha Republic in eastern Siberia, owned by ThreeArc, a company controlled by businessman Alexander Nesis. (6)

(2) - <https://www.technology.matthey.com/article/61/2/154-155/>

(3) - Interviews with Danish, Greenland and US officials, April/May 2020

(4) - For a map of Greenland mineral licences issued, see: <https://asiaq.maps.arcgis.com/apps/webappviewer/index.html?id=819ff201b76f44f99b31da7ef630c18e&locale=en>

(5) - Interview with senior US official, May 2020

(6) - S&P Market Intelligence report, July 2019, op cit



Norilsk

Railroads to nowhere

Onshore infrastructure projects in the High North are closely tied to the prospects for the Northern Sea Route, port development and mineral extraction. It's only worth investing billions of euros in railroads if there is a serious prospect of goods and commodities to transport.

One such possible mega-project, in which China has expressed interest as part of its global Belt and Road Initiative, involves a proposed railroad from Norway's north-eastern port of Kirkenes, close to the Russian border, across Finnish Lapland to Helsinki and then potentially connecting via a tunnel under the Gulf of Finland to Tallinn in Estonia and the EU-backed Rail Baltica transport corridor to central Europe and Berlin.

Unsurprisingly, the mayor of Kirkenes (population 5,300) is eager for Chinese investment to create jobs and economic dynamism in his remote corner of the Arctic, which has an open border

with Russia but suffers from poor connections to the rest of Norway and with the potential hinterland of Finland and northern Sweden. "I will do everything I can to stimulate more trade and better connections, also with China," mayor Rune Rafaelsen said. (7)

That was Norway's official policy until 2019, despite setbacks over human rights disputes. A 350-strong business delegation accompanied King Harald on a state visit to China in late 2018 and the government was working flat out to attract Chinese investment, including in mobile telephony, and to sell more Norwegian fish to Beijing.

However, under US pressure, Oslo and its intelligence services are increasingly wary of Chinese intentions, creating a dilemma for the business community which feels pressured to avoid Chinese money but sees little Western

(7) - <https://www.politico.eu/article/norway-kirkenes-china-influence-arctic-shipping-opportunity/>

cash arriving to create jobs in a region that has suffered a chronic lack of investment.

“We are actively encouraging them to desist by screening investments in critical infrastructure,” the senior US official said, adding that Washington was talking about “ports, telecoms and key routes we don’t want in the hands of adversaries.”

A Finnish government study in 2018 concluded that an ‘Arctic Corridor’ rail link from Kirkenes to Rovaniemi in northern Finland would be too expensive and not economically viable. But private Finnish and Norwegian companies have signed an agreement to study developing the route at an estimated cost of between €3 and 5bn. The track would cut through indigenous Saami people’s most important grazing land for reindeer, prompting political conflict between those who give priority to protecting the traditional lifestyle of reindeer herding and those eager for economic development. (8)

“There is no way that railroad is happening in our lifetime, or in our children’s lifetime,” says Pamela Lesser, a researcher on sustainable mining at the University of Lapland’s Arctic Centre. “The Saami have legal protection and will fight it all the way. It’s pie in the sky.” (9)

The same Finnish company – FinEst Bay Development, owned by former Angry Birds video game executive Peter Vesterbacka – has signed an agreement with three Chinese

engineering and construction companies with the financial backing of a Chinese investment group to develop the Gulf of Finland tunnel project, which has yet to be approved by the Finnish and Estonian governments.

Former Finnish prime minister Paavo Lipponen, who has advocated publicly for both the Arctic Corridor rail connection and a Helsinki-Tallinn link, says that after the coronavirus crisis, Europe will have to rethink its dependence on China and be more careful. (10)

A Chinese company – Sichuan Road and Bridge Co – built the biggest bridge in the Arctic, opened in 2018 spanning the Rombaksfjord near the northern Norwegian port of Narvik, showcasing Chinese prowess with giant infrastructure projects. The Chinese government indirectly became one of the biggest shareholders of troubled Norwegian Airlines after the low-cost carrier was forced to turn debt into equity to survive the COVID-19 crisis. (11) Another Chinese company has bought Norway’s fourth largest public transport operator, which runs buses and ferries in the High North.

“Norway has had good results with long-term Chinese investment, but the political situation changed overnight and all of a sudden, China is seen as bad. That makes it difficult for countries like Norway, Sweden, Finland and Denmark to balance,” says Arne O. Holm, Editor-in-Chief of the High North News, an independent news website on the region. (12)

(8) - <https://www.reuters.com/article/arctic-railways/finland-norway-rail-link-planned-to-fit-arctic-sea-routes-idUSL5N22L2ZA>

(9) - Interview with the author, March 2020

(10) - Interview with the author, April 2020

(11) - <https://www.ft.com/content/ae1fc18f-f95b-4d6a-8036-8b9a98679d4d>, <https://www.newsenglish.no/2020/05/20/norwegian-falls-into-chinese-hands/>

(12) - Interview with the author, April 2020

Cables to somewhere

One promising project to develop infrastructure links between Europe and Asia via the High North is a proposed undersea fibre optic data superhighway being studied by the Cinia alliance, a Finnish-led joint venture of Nordic and Japanese partners chaired by former Finnish prime minister Esko Aho, in partnership with Russian telecoms giant MegaFon. The Finnish government is the majority stakeholder in Cinia, which designs, builds and operates data networks across northern Europe.

Arctic Link (originally named Arctic Connect) is a plan to create a digital bridge between Europe and East Asia via a submarine communication cable along the Northern Sea Route. It promises to deliver faster and more reliable Internet connections between Europe, Russia and Asia due to shorter distances than existing data routes, and less disruption caused by human activity along the seaway.

Anu Fredrikson, Director of the Arctic Economic Council, a private sector forum created by the Arctic Council to promote sustainable development, says the project is “a potential game changer” to boost connectivity and economic development in the High North, as well as improving maritime search and rescue

capacity. “It will have a massive impact on the European Arctic when built during the 2020s,” she said. An estimated 48% of the area inside the Arctic Circle has limited or no connectivity – a big handicap for business. (13)

Better connectivity could help foster a sustainable digital economy in the High North and reverse the ageing and stagnation or decline of the population in the most northerly regions of Norway, Sweden, Finland and Russia. But Arctic Link too may yet fall foul of geopolitics.

Diplomats say the US administration has expressed concern about the project to Nordic governments, warning that it could create vulnerabilities and dependence. A recent report by the Estonian Foreign Policy Institute called for a security review in the light of potential involvement of cable-layer Huawei Marine, a unit of Chinese telecoms equipment giant Huawei, in the project.

“With the construction of Arctic Connect, China would increase its defensive intelligence gathering capabilities, because its data transfer with Europe would no longer go through foreign data cables and as such would be better shielded from outside actors. Chinese offensive

(13) - Interview with the author, April 2020

intelligence gathering capabilities would also increase; the Chinese companies contracted to build the project are obliged by PRC law to collaborate with intelligence services,” Estonian Foreign Policy Institute (EFPI) researcher Frank Juris wrote. (14)

However, Taneli Vuorinen, Executive Vice-President of Cinia for global connectivity, said there was no such agreement with Huawei and the EFPI report appeared to be based on a misunderstanding of a 2016 corporate press release on the Chinese firm’s participation in another project related to one of the optical transport platforms used in Cinia’s international network, including the C-Lion1 sea cable connection between Finland and Germany. (15)

Asked whether his company had an agreement with Huawei on participation in Arctic Link, Vuorinen said: “Cinia has not made such decisions and we are not aware that anyone else has made it either. It is far too early in this project to make such decisions ... We are in the early stage of the development phase, so by no means has any decision been made for implementation of the project yet.” (16)

He said Cinia was talking to many parties, including governments, on financial, technical, environmental and security aspects of the project. “Currently, we believe the business case is feasible. There was a feasibility study initiated a few years ago by the Finnish ministry

of transport and communications which gave more or less a green light in that respect,” he said. If it goes ahead, Arctic Link could be built by the mid-2020s at a cost estimated initially at some €700mn.

Hopes of a great leap forward to high-speed broadband for the entire Arctic Circle suffered a setback in 2020 when UK-based satellite-maker OneWeb filed for bankruptcy after launching just 74 of a planned constellation of 648 cheap low-earth orbit satellites that was due to bring fast Internet connections to the entire region north of the 60th parallel from early 2021. The UK government stepped in to rescue OneWeb, and the project, which was of interest to the US military as well, may yet be completed with new investors. (17)

Washington has also pressed Denmark to shut Huawei out of fifth generation mobile phone installation in the strategically located Faroe Islands, where Huawei installed the 4G network. The Chinese ambassador to Copenhagen reportedly threatened to cancel a trade deal with the Faroe Islands if Huawei didn’t get the deal. (18)

(14) - <https://sinopsis.cz/en/arctic-digital-silk-road/>

(15) - <http://web.archive.org/web/20200222093028/https://www.cinia.fi/en/archive/cinia-is-building-direct-digital-silk-road-between-asia-and-europe-by-selecting-huawei-transport-platform.html?p859=5>

(16) - Interview with the author, July 2020

(17) - <https://spaceflightnow.com/2020/07/03/uk-government-commits-500-million-in-bid-to-rescue-bankrupt-oneweb/>

(18) - <https://telecoms.com/504302/huawei-threatened-to-pull-investment-from-denmark-in-response-to-new-screening-law/>

Tilting at windmills

While Russia presses ahead to develop its Arctic hydrocarbons and minerals, Norway and other European Arctic countries see the High North as holding huge potential for renewable energy. For the first time in 2019, investment in renewables has topped investment in oil and gas in the European Arctic, according to Anu Fredrikson. Governments and business see big potential in wind energy in northern Norway and Sweden, funded by green bonds.

But those projects, too, face resistance from the indigenous Saami people.

The Saami Council's Gunn-Britt Retter says plans to erect giant wind farms on traditional Saami lands in Finnmark, Norway's most northerly province, are a form of 'green colonialism'. She sees them as an attempt to solve a rich, industrialised country's problems by disrupting the traditional lifestyle of a vulnerable, rural people who have herded reindeer there for millennia. (19)

"Many people look at the Arctic as an empty land, for example for the energy transition. This is very worrisome for each local community that is impacted," Retter said. "These big windmill parks are not very environmentally

friendly and are located far from where the electricity is needed, requiring lots of land. It fragments reindeer herding on our land and disrupts migration routes in the existing Saami economy."

Fisheries provide a major source of income in Iceland, Greenland and Norway, with much of the catch exported to Russia and, increasingly, China. But here too, climate change is making life more difficult, driving fish further north in search of colder waters as the sea warms. As a result, Iceland's mainstay cod fishing has been pushed increasingly out of its Exclusive Economic Zone, while less popular and lower-value species such as mackerel are now plentiful around the volcanic island. (20)

Shifting fish stocks can lead to international disputes. For example, Norway and the European Union are at loggerheads over the right to fish for snow crab around the Svalbard archipelago, Norway's most northerly territory. The EU claims its exclusive competence for the conservation of the living resources of the sea gives it the responsibility to ensure that the fishing rights of its member states are respected. According to the EU, Norway must respect the non-discriminatory access clauses of the 1920

(19) - Interview with the author, April 2020

(20) - Interview with the author, April 2020

Svalbard Treaty in the territorial sea and also areas corresponding to the exclusive economic zone and the continental shelf adjacent to the archipelago. (21)

Norway argues that the treaty only applies to the narrow territorial waters around the islands and not to the much wider exclusive economic zone. In 2017, it arrested a Latvian-registered trawler for fishing for snow crab without a Norwegian licence. The dispute, which remains unresolved after recourse to Norway's and the EU's highest courts, has implications for offshore oil and gas exploration rights.

However, fisheries have also been an area of international cooperation in the Arctic despite the post-Crimea tensions. In 2018, after a decade of negotiations, the United States, the European Union, Russia, China, Japan, South Korea, Norway, Iceland and the Kingdom of Denmark (on behalf of Greenland and the Faroe Islands) signed an agreement to prevent unregulated commercial fishing in the high seas of the Arctic Ocean most of which are covered by ice. The agreement provides a framework for all signatories to cooperate to better understand the area's ecosystems, and to prevent commercial fishing initially for at least 16 years, renewable for five-year periods if the parties agree, until adequate scientific information is available to inform management measures.

(21) - For an impartial summary of the dispute see: <https://www.asil.org/insights/volume/24/issue/4/snow-crab-dispute-svalbard>



MSC Opera docked in Honningsvåg, Norway

Tourism boom and bust

The Arctic has experienced a boom in tourism, including from China, in the last decade but the COVID-19 pandemic has made travel to remote, exotic locations impossible in the short-term and may make it much less alluring for years to come.

In particular, the rapid growth in Arctic cruise holidays is likely to have been dealt a severe blow by the coronavirus, following heart-rending pictures of cruise vacationers stranded at sea for weeks around the world's oceans, with ports refusing to let them ashore after outbreaks of COVID-19 aboard. It's hard to imagine wealthy seniors getting back on a cruise liner to a remote corner of the globe, or insurance companies being willing to insure such voyages.

Safety at sea is another issue. Norway is re-examining safety measures for cruise ships following a 2019 incident when the tour liner Viking Sky with 1,373 people aboard suffered engine failure in a storm off central Norway and nearly ran aground. Rescue vessels had to turn back because of high seas. Helicopters took nearly a day to evacuate 479 of the passengers before the engines were restored. That was a lucky escape south of the Arctic Circle and close to the country's main search and rescue

assets. Neither Norway nor Alaska has the resources to rescue hundreds or thousands of passengers from a stricken ship in the Arctic. "If a cruise boat got into trouble off Svalbard, the most we could do would be to fly over them and wave as they went down," a Norwegian defence official said. (22)

Norway received more than 9mn tourists in 2019 after peaking at 10mn in 2018, but tourism suffered a massive hit from COVID-19, which prompted the government to close borders and extend some travel restrictions through till August 2020. The Enterprise Federation of Norway business lobby warned that the exclusion of foreign tourists without offering substantial financial support to travel firms would trigger a string of bankruptcies.

Iceland, which long relied on fisheries as its mainstay and then on financial services during a brief bubble in the 2000s that ended in disaster, has been the biggest winner from Arctic tourism over the last decade. The island with a population of 364,000 registered a record 2.3mn tourists in 2018, including nearly 700,000 high-spending Americans, by far the largest group. Chinese tourists rose to seventh in the rankings with nearly 90,000. But the number

of visitors declined in 2019 due to the collapse of a low-cost airline, and fell off a cliff due to COVID-19 in 2020. (23)

Greenland too has sought to encourage tourism, notably from Denmark, Canada and the United States, to develop its economy. The number of tourists topped 100,000 – twice the island's population – for three years from 2017-2019. The Malaysian business group Berjaya Corp announced plans in 2020 to build a luxury hotel and 90 apartments in Nuuk to take advantage of tourism once the new international airport is completed. The autonomous government is also trying to upgrade a series of old airstrips around the island since there are no road connections between the main towns.

Tourism may eventually recover, but it will take several years before the industry returns to pre-crisis levels of activity – if ever.

(22) - Interview with the author, April 2020

(23) - <https://www.ferdamalastofa.is/en/research-and-statistics/tourism-in-iceland-in-figures>



11th Arctic Council Ministerial Meeting in Rovaniemi

CHAPTER 4

Diplomatic dynamics

Private property - keep out!

After half a century in the deep freeze during the east-west confrontation of the Cold War, the Arctic enjoyed a diplomatic thaw from the early 1990s when green shoots of economic and political cooperation sprouted through the pack ice.

The eight states within the Arctic Circle began to meet and work together in a process initiated by Finland in 1989, first on the environment, then on economic cooperation, fisheries, safety at sea, search and rescue and cleaning up nuclear waste and industrial pollution left over from the wreckage of the Soviet economy.

The first international agreement on the Arctic since the 1920 Svalbard Treaty was signed in 1991, the year the Soviet Union collapsed, establishing a common environmental protection strategy. Two years later, the Barents Euro-Arctic Council became the first intergovernmental and interregional institution for cooperation on the environment, forestry, transport, search and rescue and the economy, involving Russia, Norway, Finland, Sweden and the European Commission.

Finland and Sweden, which had been neutral during the Cold War, rushed to join the European Union in 1995, though not the NATO military alliance. Norway, a founder member of NATO, also negotiated an EU accession treaty but,

rolling in cash from its offshore oilfields, its voters rejected membership for the second time in a 1994 referendum. Iceland also chose to stay out despite several dalliances with EU negotiations. Both countries instead joined the European Economic Area, giving them full access to the EU's internal market in return for payment and the obligation to adopt EU regulatory standards.

The centrepiece of Arctic diplomacy was the creation of the eight-nation intergovernmental Arctic Council in Ottawa in 1996, including the United States and Canada alongside Russia and the five European Arctic states. The body, which works by consensus on civilian issues such as environment protection, scientific research, sustainable development, shipping and health also includes representatives of indigenous peoples and of the autonomous authorities of Greenland and the Faroe Islands, both part of the Kingdom of Denmark. Foreign ministers of the eight meet once every two years. A small secretariat supports their work and helps run their programmes.

At Finland's initiative, Russia, the European Union, Norway and Iceland, as equal partners, created the Northern Dimension in 1999 as a joint policy for cross-border cooperation focused particularly on local and regional authorities. It promotes practical collaboration on a range of civilian issues including economy,

business and infrastructure, education, culture, transport and logistics, scientific research, health, the environment, nuclear safety, natural resources, and justice and police matters. It also has a parliamentary forum which meets once every two years.

This phase of post-Cold War engagement and institution-building climaxed with a solemn 2008 declaration by foreign ministers of the five Arctic coastal states in Ilulissat, Greenland, pledging to resolve their overlapping claims to continental shelves beneath the ice cap by negotiation within

the framework of the UN Convention on the Law of the Sea. (1)

By this time, a scramble for resources in the Arctic was gathering pace, driven by high world oil prices. The declaration was partly intended to rebut calls to turn the Arctic into an internationally managed “global commons” by telling the rest of the world that the coastal states were taking full responsibility for their own region with their own rulebook, and that outsiders should keep out.

Room at the top

The Ilulissat agreement was reached the year after Russian explorers in mini-submarines had planted a titanium Russian flag and a capsule with a message to future generations on the seabed 4,200 meters beneath the North Pole, raising alarm in some Western quarters about Russian territorial ambitions.

Canadian Foreign Minister Peter MacKay warned: “You can’t go around the world and just plant flags and say ‘We’re claiming this territory’.” Russian officials say that like American astronauts who left a US flag on the moon, the Russian submariners were simply marking a national achievement, not staking a

real estate claim. However, their mission was also to collect geological samples to support Moscow’s continental shelf claims. (2)

In the Ilulissat declaration, Canada, Denmark, Norway, Russia and the United States said: “The law of the sea provides for important rights and obligations concerning the delineation of the outer limits of the continental shelf, the protection of the marine environment, including ice-covered areas, freedom of navigation, marine scientific research, and other uses of the sea. We remain committed to this legal framework and to the orderly settlement of any possible overlapping claims.”

(1) - <https://cil.nus.edu.sg/wp-content/uploads/2017/07/2008-Ilulissat-Declaration.pdf>

(2) - <http://news.bbc.co.uk/2/hi/europe/6927395.stm>

Since the existing legal framework offered a solid foundation for responsible management of the ocean, “we therefore see no need to develop a new comprehensive international legal regime to govern the Arctic Ocean,” they added. (3)

The vast majority of the Arctic seabed known to contain gas and oil resources is already within uncontested Exclusive Economic Zones. That leaves only a small unclaimed area at the very top of the world subject to the International Seabed Treaty potentially available for open gas and oil exploration, if it were ever to become technically feasible and economically viable.

Canada, the Kingdom of Denmark (via Greenland), and Russia each assert that the Lomonosov Ridge - a sort of underwater mountain chain - is an extension of their own continental shelf. Proof of its continuation would give the state access to the sea bed and natural resources beyond the current 200 nautical mile limit of their EEZ.

The UN Commission on the Limits of the Continental Shelf is examining the rival claims and has said that Russia’s geological data, submitted in 2001, look sound. It has not yet commented on the data advanced by Denmark in 2014 and Canada in 2019, both claiming a shelf stretching beyond the North Pole. The United States argues that the Lomonosov Ridge is an “oceanic ridge” and thus not an extension of any state’s continental shelf, and therefore rejects any claim to its ownership.

There are a couple of outstanding differences over uninhabited rocks and sea borders. Canada and Denmark dispute the status of the small, uninhabited Hans Island in the Nares Strait between Canada’s Ellesmere Island and northern Greenland. Canada and the United States both claim an area of the Beaufort Sea on the border between Alaska and the Canadian province of Yukon.

But the main differences concern sovereignty and control over sea passages.

Russia asserts the right to control and administer the Northern Sea Route which encompasses navigational routes through waters within Russia’s Arctic EEZ east from Novaya Zemlya to the Bering Strait that pass through Russian territorial and internal waters in the Kara, Vilkitsky, and Sannikov Straits. It bases its legal position on Article 234 of UNCLOS, which states that coastal states have the right to adopt and enforce rules to prevent marine pollution from vessels “in ice-covered areas within the limits of the exclusive economic zone, where particularly severe climatic conditions and the presence of ice covering such areas for most of the year create obstructions or exceptional hazards to navigation”. (4)

Russian legislation requires prior notification of passage, the use of Russian pilots and icebreaker escorts, and the payment of fees.

The United States, China and European states all consider the area to be international waters with the right of innocent passage for all users.

(3) - Ilulissat declaration, op cit

(4) - https://www.un.org/Depts/los/convention_agreements/texts/unclos/part12.htm

Washington has asserted the right to conduct a naval operation along the route to uphold the principle of freedom of navigation, but has so far refrained from doing so.

Canada, which has the second longest Arctic coastline after Russia, considers the Northwest Passage sea routes between its northern islands to be part of its internal waters according to the UNCLOS. The United States considers them to be an international strait, which means that foreign vessels have a right of "transit passage". Canadian officials played down the dispute after

US Secretary of State Mike Pompeo called the Canadian interpretation "illegitimate" in 2019. "We've agreed to disagree on the Northwest Passage for a very long time and the US respects our arrangements in practice," one Ottawa policymaker said. (5)

With the ice cap melting and navigation becoming possible for longer periods of the year, these disputes may become more active. It seems likely that while Russian and Canadian claims are not universally accepted in theory, they will continue to be respected in practice.

(5) - Interview with the author, March 2020



Arctic Circle Opening Assembly, Reykjavik, Iceland

EU out in the cold?

As global concern about climate change and the prospect of easier access to Arctic resources has grown, the number of countries pressing to join the Arctic family has increased. Six European states - the UK, Germany, the Netherlands, Poland, France and Spain - became observers in the Arctic Council between 1998 and 2006.

However, the biggest enlargement of the circle occurred in 2013 with the entry as observers of China, India, Japan, South Korea and Singapore as well as Italy. The European Union has been trying unsuccessfully to secure observer status since 2008. It was blocked first by Canada over an EU ban on the import of seal products, then by Russia in retaliation for European sanctions over Moscow's annexation of Crimea and military intervention in eastern Ukraine.

The three EU member states in the Arctic Council - Sweden, Denmark and Finland - failed to use China's application as leverage to secure simultaneous admission of the EU. Only Finland, and non-Arctic member states such as Germany, France and Italy, strongly support a bigger EU role in Arctic governance. Sweden and Denmark are lukewarm at most,

fearing regulatory overreach by Brussels or interference by non-Arctic EU partners or the European Parliament in their sovereign rights.

"We do see the EU becoming more engaged because they see the Arctic as part of the foreign policy chessboard. But we don't like it," said one diplomat from a Nordic EU state. (6)

The EU's new roving Arctic ambassador, Michael Mann, says the lack of permanent observer status doesn't make much difference in practice, since the EU is fully engaged with the work of the Arctic Council and is making a practical contribution. (7)

EU research funds, climate mitigation and environment programmes, economic assistance to Greenland, financing of Kolarctic cross-border regional cooperation, and fisheries and maritime regulation serve the interests of member states in the High North. The EU also plays a growing role in environmental surveillance and transport connectivity via its Copernicus earth observation satellite and Galileo satellite navigation system. But with the exception of Helsinki, European Arctic states are not eager for a bigger political role for Brussels. (8)

(6) - Interview with the author, May 2020

(7) - Interview with the author, March 2020

(8) - Interview with the author, April 2020

“Security issues are not an area where there is a natural role for the EU to engage. Other fora are better placed,” another senior Nordic government official said.

In Brussels, pressure for a stronger EU role in the Arctic comes largely from European Parliament members who fear Europe is losing out to China, Russia and the United States, and from some EU officials who say the self-proclaimed “geopolitical” European Commission led by Ursula Von Der Leyen is focused on Africa and the Middle East but neglecting the High North. A report to her predecessor, Jean-Claude Juncker, by the Commission’s in-house think-tank recommended a much stronger EU commitment to the region, but Von Der Leyen has shown no sign of acting on it so far.

“The EU must step up its engagement with Arctic states and other stakeholders. Never has ensuring a peaceful and sustainable Arctic been so important,” the 2019 report by the Commission’s European Political Strategy Centre concluded. It also urged the EU to initiate a dialogue with China and other Asian states on common interests in the Arctic, including climate change and connectivity. (9)

“It’s disappointing that the Commission doesn’t even mention the Arctic in its 2020 work programme,” said Urmas Paet, MEP, a former Estonian foreign minister who follows Arctic affairs. “The EU should have an Arctic strategy that reflects all the changes that have occurred

since its 2016 (Arctic policy) document, which said nothing about security, new business and navigation.” He laments that “nobody owns the Arctic” in the EU executive. Responsibility is split among departments that handle foreign policy, maritime issues, regional development, energy and climate change and the environment, with no overall coordinator. (10)

In July 2020, EU High Representative for Foreign Policy Josep Borrell did launch a consultation process as a prelude to updating the Union’s Arctic policy.

Paet was a co-sponsor of a 2017 non-binding resolution in the European Parliament calling on the EU to work towards “a future total ban on the extraction of Arctic oil and gas”, which infuriated Norway. The motion was defeated but an amended text called for a ban on drilling in “icy waters”.

While the EU has a roving envoy for Arctic affairs, it does not have any representative in Greenland, where the United States has just reopened a consulate in a highly political gesture and announced a \$12.1mn aid package. The EU’s relationship with Greenland is complicated by the fact that Greenlanders voted in a 1982 referendum to leave the bloc in a dispute over fishing rights. The sparsely populated island of 56,000 residents is an autonomous entity within the Kingdom of Denmark, which is an EU member. Brussels provides roughly €32mn in aid annually to Greenland, mostly

(9) - <https://tem.fi/documents/1410877/8582211/EPSC+Strategic+Notes+-+Walking+on+Thin+Ice+-+A+Balanced+Arctic+Strategy+for+the+EU/e7c6c21d-7cbe-fb01-af42-d556773e920b/EPSC+Strategic+Notes+-+Walking+on+Thin+Ice+-+A+Balanced+Arctic+Strategy+for+the+EU.pdf>

(10) - Interview with the author, April 2020

for education plus a payment for access to fishing grounds. Denmark provides more than half of the autonomous authority's budget with an annual grant of 3.6bn krone (€483mn). (11)

David McAllister, Chairman of the European Parliament's Foreign Affairs Committee, believes the EU should pay more attention to its northern neighbourhood. "I'm really advocating for the Arctic to be a real priority," the senior German MEP said. (12)

For now, EU interest in Arctic security issues is intermittent at best. For example, Canadian officials who attended the annual EU-Canada security and defence dialogue in Brussels in early 2020 said the Arctic did not feature in the discussion at all. (13)

Enter the dragon

While Europe's attention is elsewhere, China is slowly advancing its interests in the Arctic. Beijing promulgated its first Arctic strategy in 2018, declaring itself a "near-Arctic state" and adding the objective of a Polar Silk Road, connecting east Asia to Europe via an Arctic maritime trade route, to its flagship Belt and Road Initiative for global infrastructure. (14)

The document recognised the territorial rights and responsibilities of the Arctic states but said the Arctic was "a global issue that cannot be left to the Arctic states alone". China's policy goals were "to understand, protect, develop and participate in the governance of the Arctic,

so as to safeguard the common interests of all countries and the international community in the Arctic, and promote sustainable development of the Arctic".

China has no national identity connection to the Arctic and only began to think about the Arctic in the 1990s. But as a rising economic, political, technological and military power, it assumes, just as the United States does, that it should not be excluded from any area of the world. Its main aim is to secure a seat at the table and an economic foothold. Its interest in the Arctic appears to be a modest, opportunistic hedging bet rather than a grand strategic gamble.

(11) - [https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/637922/EPRS_BRI\(2019\)637922_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2019/637922/EPRS_BRI(2019)637922_EN.pdf)

(12) - Interview with the author, April 2020

(13) - Interview with the author, March 2020

(14) - http://english.www.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm

China's view of the Arctic

- Arctic route of Belt and Road Initiative
- Overland route of Belt and Road Initiative
- Maritime route of Belt and Road Initiative



"To China, the Arctic is nothing exceptional, just another chess piece they play in the long-term game from Africa to the Arctic," says Mike Sfraga, Director of the Polar Institute of the Wilson Center for Scholars in Washington DC. "The US always needs a foil. It's in their DNA. China is not going to be a major player in the Arctic." (15)

Chinese experts say the Communist Party leadership does not wake up every morning thinking of the Arctic, nor is it putting a lot of resources into that box, compared to the scale of its investments in Africa, Asia or southern Europe.

"China doesn't want to be left out if there is anything it can get out of the Arctic," says Yun Sun, Director of the China programme at the Stimson Centre think-tank in Washington DC. "The policy is not static but evolutive and reactive." She said the top leadership was not involved in drafting the Arctic strategy, and policy is overseen at a lesser bureaucratic level by the Chinese Arctic and Antarctic Administration. (16)

Chinese companies have made investments in Russia, Iceland, the Faroe Islands and Norway and sought contracts in Greenland and Finland. But only the stake in Russia's gas sector is of

(15) - Interview with the author, April 2020

(16) - Interview with the author, April 2020

truly significant size, driven partly by China's need to substitute imported gas for its heavily polluting coal-fired power stations. Beijing is also active in Arctic scientific research, in some cases working jointly with Japan and South Korea. It maintains a research station on Norway's Svalbard Archipelago, has a shared observation facility on Iceland and has two state-of-the-art icebreaker Arctic scientific vessels. US officials suspect the scientific presence is a front for intelligence gathering.

"In the paper, China put itself forward as a relevant stakeholder in the Arctic," said Wang Huiyao, President of the Centre for China and Globalisation in Beijing, who says it is natural that the world's second biggest economy - a major industrial manufacturer, infrastructure builder and signatory of the Paris climate accord - should provide its expertise to help preserve "a kind of green space for the planet". (17)

He said China had no military presence or ambition in the Arctic, noting that unlike the United States, it is a signatory of the UN Convention on the Law of the Sea. Wang, who stressed he did not represent the Chinese government, said his impression was that the Arctic was low on Beijing's priority list. "If there is big potential to tap into in the Arctic, it may need other countries to help, just as China invited multinationals to come and help it develop," he said.

(17) - Interview with the author, June 2020

“Wolf warriors” in sheep’s clothing?

Western attitudes to China’s activities in the Arctic have evolved mostly due to mounting US-Chinese global rivalry, with European states under strong pressure to side with Washington and shut Chinese firms out of infrastructure, telecoms and minerals contracts.

“The main change in the last couple of years has been that our ally, the United States, has increasingly identified China as its main strategic rival. That has played fully through into the Arctic,” a senior Nordic government official said. “China’s interest is not specifically military, but in the long term it would threaten the strategic interest of one of our partners,” the official said. (18)

The US government has pressed Denmark to exclude Chinese telecoms equipment provider Huawei from 5G mobile phone infrastructure in the Faroe Islands and Chinese construction firms from tenders to modernise airfields in Greenland. Huawei is already providing key infrastructure to upgrade Greenland’s offshore domestic telecom cables and links to Canada and Iceland. Washington has also lobbied Norway and Finland to exclude Chinese firms from a proposed railroad from the north-eastern Norwegian port of Kirkenes on the Barents Sea to Helsinki.

Chinese investment in Arctic gold, zinc and copper mining has also become divisive in Canada, with the government in Ottawa trying to exert greater caution while the sparsely populated regions of Northwest Territories and Nunavut are keen for any investment they can attract. “If the Canadian government and industry won’t invest, they’ll take that money wherever it’s coming from,” a Canadian official said. (19)

Several north European governments had felt the rough edge of Beijing’s so-called “wolf warrior” diplomacy over human rights issues well before its aggressive response to criticism of its handling of the COVID-19 crisis. Norway endured years of Chinese wrath after the non-governmental Nobel peace prize was awarded to dissident Chinese author Liu Xiaobo in 2010. Beijing warned Sweden would “suffer the consequences” after a jailed Chinese-born Swedish publisher was awarded a Swedish PEN club freedom of speech prize in 2019. And Denmark incurred a threat of Chinese retaliation if it shut Huawei out of the Faroe Islands.

In Washington’s eyes, China’s involvement in the Arctic is part of a global predatory pattern.

(18) - Interview with the author, May 2020

(19) - Interview with the author, March 2020

“China is seeking to grow its economic and diplomatic and scientific presence - it's got less of a military presence - and that's problematic given the dual-use nature of some of what is happening, and given the way we've seen China behave in the past in other parts of the globe where things start out benign and then become more problematic over time,” a senior US official said. He cited Chinese behaviour in Sri Lanka, Djibouti and the South China Sea as examples. (20)

“We've seen a very hard edge to China's soft power... They've demonstrated more than a willingness to use coercion and influence operations and other methods to get what they want.”

Yet many European officials say perceptions of Chinese inroads in the Arctic are highly exaggerated. “I am under the impression that people think China is taking over the Arctic. They are a player as they are everywhere in the world, but I don't think China is taking over the Arctic. I really don't see that,” says Michael Mann, the EU's new Arctic Special Envoy. (21)

Similarly, former Icelandic president Grímsson, the elder statesman of the European Arctic, notes that “with the exception of the Russian Arctic, where China has a growing presence, you would be hard pressed to find a single big Chinese investment.” (22)

That said, China has by far the largest embassy of any country in Iceland, although the United States is due to open a new, enlarged mission in 2020. The two buildings symbolise the high stakes the two powers see in the small, north Atlantic nation.

(21) - Interview with the author, April 2020

(22) - Interview with the author, June 2020

Competing claims

Canada, Denmark/Greenland, Norway and Russia have all submitted Arctic Ocean territorial claims to the United Nations Commission on the Limits of the Continental Shelf. Canada, the Kingdom of Denmark and Russia have all announced that the Lomonosov Ridge – a 1 800 km-long underwater mountain range that reaches the

North Pole and divides the Arctic in the Eurasia Basin and the Amerasia Basin – is an extension of their respective territory. With sovereign rights over the territory, the claimant state would gain exclusive rights to the sea bottom and resources below.

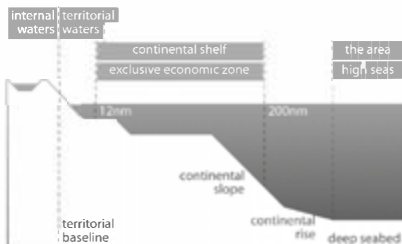
Exclusive economic zones

EEZs extend from the edge of the territorial sea out to 200 nautical miles (370 kilometres; 230 miles) from the baseline. Within this area, the coastal State has sole exploitation rights over all natural resources.



The continental shelf

is, according to UNCLOS, the natural prolongation of the land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance.



Melting Arctic Sea ice

The dark area shows the Arctic sea ice extent in September 2016 (averaging 4.72 million square kilometres, the fifth lowest in the satellite record). The lighter grey area shows the Arctic sea ice in 1979.



Turning point

While China's gradual entry into the Arctic has affected the regional dynamics, the major turning point was Russia's military action in Ukraine in 2014 to seize and annex Crimea, and foment an armed rebellion by Russian-speaking separatists in south-eastern Ukraine.

President Vladimir Putin's willingness to use force to change international borders and destabilise a former Soviet republic to prevent it moving closer to the European Union and NATO sent a shock wave around Europe and into the High North. It triggered a reassessment of Russia's military modernisation and intentions in the Arctic as well as the Baltic and Black Sea regions.

We will examine the military consequences in more detail in Chapter 5 but the political and diplomatic impact was to trigger Western economic sanctions against individuals, banks and companies close to the Kremlin as well as on access to Western credit and technology, notably for oil and gas exploration. France stopped the planned sale of two naval helicopter carriers to Moscow. Britain agreed to crack down on Russian money in the City of London financial centre.

The sanctions have had a limited effect on the Russian economy, shaving an estimated 1 to 1.5 percent a year off gross domestic product,

according to the International Monetary Fund, without denting Putin's popularity at home.

Russia's actions in Ukraine pushed Finland and Sweden closer to the United States in defence cooperation and deeper into NATO's strategic orbit, although they remain non-members. The two became "enhanced opportunity partners" in 2014, taking part in Article V territorial defence exercises and attending many NATO meetings by invitation. Both signed bilateral defence pacts with Washington, as well as a trilateral military cooperation agreement with the United States.

Western sanctions have also pushed Russia and China closer together, both strategically and economically, despite their persistent mutual suspicion. Moscow needs capital, technology and a diplomatic ally but is wary of China's global ambitions and intrusion in the Arctic, while Beijing sees opportunities in energy and minerals cooperation, as well as access to military technology, but does not want to be constrained by a monogamous relationship with Russia.

"While China is charging ahead, Russia is merely trying to protect its positions, its sovereignty, territorial integrity, national control over navigation and the precedence of international law (i.e. interstate bargaining) over any kind of

universal rules-based order,” says Dmitri Trenin, director of the Carnegie Moscow Centre think-tank. “Russia is, in a word, a status quo power, while China is seeking to open up the region for the world and capitalise on that.” (23)

“Russia’s main goal now is to reclaim the mantle of the leading Arctic power,” Trenin said.

Seen from Beijing, there are distinct limits to strategic cooperation with Moscow. “China does not see eye-to-eye with Russia on everything,” said Wang Huiyao, noting differences for example on the law of the sea. “By bashing China, the US is certainly pushing Russia and China closer together, but China seeks more global cooperation with other countries... I don’t think China has a preferred fixed partner. I’m sure some day America will come back.”

Investment in Russian oil and gas development, transportation infrastructure and potentially in mining for rare earth minerals offers Beijing a way into the Arctic as well as energy resources for its own economic development and gas as a substitute for heavily polluting coal.

Yun Sun says Beijing would be willing to invest more if the terms were more attractive and Russia were more welcoming. When China was invited to help build the Yamal LNG project, she noted, Putin refused to accept Chinese money in the construction of the Sabetta port on national security grounds.

“China and Russia are in a sort of tug-of-war, waiting to see whose patience runs out first,” she said. “Russia sees it as their High North”, and “anyone who wants to come to the Arctic goes through me. We hold the assets”. China says, “OK, hold your assets and watch them rust and rot without our investments”. We’ll see who will blink first. For now, they are waiting each other out, and China has a much longer time horizon.”

In a telling sign of the depth of mistrust, Russia arrested the veteran head of its Arctic Studies Institute of St Petersburg in 2020 and charged him with high treason for allegedly passing state secrets to China. Valery Mitko, 78, denied the charges, saying he had only carried open source information as background to his lectures in China, according to his lawyer. (24)

(23) - <https://carnegie.ru/commentary/81407>

(24) - https://www.reuters.com/article/us-russia-china-scientist/russia-accuses-scientist-of-treason-for-passing-secrets-to-china-lawyer-idUSKBN23M0Z4?fbclid=IwAR037wU7wH1RVbmkwgZWYQfeVs4ICSTcRL1irk44iLIAHs2XXuRxBNpg2_

Arctic resilience

Despite the Ukraine conflict and the return of great power competition, Arctic diplomacy has so far remained relatively shielded from the full blast of renewed east-west tension.

After Russia was ejected from the G8 group of major industrialised democracies and NATO suspended practical cooperation with Russia, the Arctic Council continued to meet at ministerial level and maintained practical civilian cooperation. Several agreements on managing the Arctic have been concluded or ratified since Crimea, including the International Maritime Organisation's Polar Code regulating Arctic shipping (2015), an agreement on enhancing scientific cooperation (2017) and a moratorium on fishing in the central Arctic Ocean (2018).

"The shared ambition among the Arctic nations to keep Arctic cooperation separate from international security policy issues has been a key reason why Arctic cooperation has continued despite increased tensions between the West and Russia," Denmark's defence intelligence service wrote in its annual risk assessment report in December 2019. (25)

Relations between Russia and Norway have become more prickly. Russian Foreign Minister Sergei Lavrov sent a message to Oslo on the 100th anniversary of the Svalbard Treaty, complaining of "restrictions on the use of the

Russian helicopter, the deportation procedure adopted exclusively for Russian citizens on Spitsbergen, the unlawfulness of Norway's fisheries protection zone, the unreasonable extension of nature protection zones where economic operations are limited, as well as several other problems". (26) Norway rejected the complaints, saying it is abiding fully by the treaty and treating all parties to it equally.

Hundreds of Russians are registered as living on Svalbard and a Russian coal mining company has for decades operated in the town of Barentsburg. Diplomats say Moscow's deeper concern is that Norway may allow the US military to use Svalbard. Oslo says it has no such intention. Norway says a large satellite ground station on Svalbard is strictly for civilian purposes. Russia doubts this.

At the same time, Norway and Russia continue to cooperate pragmatically on cross-border movement of goods and people and coastguard exercises.

(25) - <https://fe-ddis.dk/SiteCollectionDocuments/FE/EfterretningsmaessigeRisikovurderinger/Intelligence%20Risk%20Assessment%202019.pdf>

(26) - https://www.mid.ru/en/maps/no/-/asset_publisher/f4MKo6byouc4/content/id/4019093

The Trump factor

The second major turning point in Arctic security came in 2019 when the Trump administration launched an outspoken challenge to the status quo in the region. With the bulk of its land-mass south of the 49th parallel, the United States has never identified strongly as an Arctic state. Interest flickered after Alaska, purchased from Russia in 1867, began gushing oil in the late 1960s.

Environmental concern aroused by former vice president Al Gore's 2006 film "An Inconvenient Truth" influenced the Obama administration's 2013 Arctic strategy, which defined US policy largely through the prism of climate change. By contrast, the 2019 Arctic strategy published by the US Department of Defence defines the area as a theatre of strategic competition with Russia and China, an aspect not mentioned six years earlier. While the two documents contain common threads, highlighting the importance of preserving freedom of the seas and the Arctic as a factor in US energy security, the shift in tone and focus is striking. (27)

In a combative speech ahead of an Arctic Council ministerial meeting in Finland in May 2019, Secretary of State Mike Pompeo set out the new US approach starkly, accusing both

Russia and China of aggressive behaviour and warning of the risk of Beijing turning the Arctic into "a second South China Sea." (28)

The Rovaniemi speech was the harbinger of a concerted drive to increase the US diplomatic and military footprint across the North Atlantic and into the Barents Sea, and to push back systematically against Chinese efforts to build an economic presence in the economically fragile territories of the European High North.

Three months later, President Trump stunned the international community by confirming publicly he had raised the idea of the United States buying Greenland from Denmark, something the Truman administration had secretly tried to do in 1946. Greenland's autonomous government swiftly responded that the island was not for sale and Danish Prime Minister Mette Frederiksen called the idea "absurd". The put-down prompted Trump to call off a planned state visit to Copenhagen at short notice and to brand her statement "nasty". (29)

While Trump's Greenland gambit drew ridicule, it revealed the depth of US anxiety about the risk of Chinese inroads in the giant, sparsely populated island, that is part of the Arctic geographical

(27) - See Annex 2 for a comparison of national Arctic strategies; Obama administration strategy:

https://obamawhitehouse.archives.gov/sites/default/files/docs/nat_arctic_strategy.pdf

Trump administration Department of Defence Arctic Strategy: <https://media.defense.gov/2019/Jun/06/2002141657/-1/-1/1/2019-DOD-ARCTIC-STRATEGY.PDF>

(28) - <https://www.state.gov/looking-north-sharpening-americas-arctic-focus/>

(29) - <https://eu.usatoday.com/story/news/politics/2019/08/21/donald-trump-danish-pm-mette-frederiksen-nasty-over-greenland-spat/2072705001/>

shield of the North American continent. It also reflected a desire to extract more strategic value from its location. Washington has an early warning radar station and satellite sensors at Thule Air Base in northwest Greenland, vital for its ballistic missile and space defence, with a runway long enough to accommodate strategic bombers and the world's most northerly deep-water port. (30) Greenland also hosts Denmark's small Joint Arctic Command in Nuuk, which struggles to fulfil a surveillance mission over the vast territory and its coastal waters up to the Arctic Sea as well as the Faroe Islands and its waters.

With a strong undercurrent among Greenland's Inuit majority aiming for eventual independence from Denmark, the self-rule government is keen to attract foreign investment and develop revenue streams that might substitute for the Danish subsidy that currently provides half its budget. The temptation to play US, Chinese and Asian investors off against each other is clear. The dearth of significant US, Canadian or European investments makes this quest more pressing. Seen from Beijing, Greenland may offer the cheapest entry ticket into the Arctic on America's doorstep.

"The United States thinks of Greenland strategically as the missing piece of North

America," says a military analyst for a Nordic government. "It doesn't want to see China gain a foothold so close to the US homeland." (31)

For now, Greenland's leaders are pursuing a softly-softly approach to separatism, aware of their financial constraints. "I don't believe Greenland will become independent any time soon," says Andreas Østhagen, a senior fellow at the Fridtjof Nansen Foundation in Oslo and at the Arctic Institute in Washington DC. "They do not have enough financial means, and the alternative is to become a subsidiary of the US or of China. Greenlanders are more realistic." The territory may become more of a factor of instability in the Arctic, but not of conflict, he said. (32)

Even if Chinese probing for infrastructure and mining opportunities has largely been deflected for now, Beijing's interest in the European Arctic region will remain a source of friction.

(30) - <https://www.peterson.af.mil/Units/821st-Air-Base-Group/>

(31) - Interview with the author, May 2020

(32) - Interview with the author, April 2020



SNMG2 vessels escort amphibious task group, HNLMS Johan de Witt , HNLMS Karel Doorman, and FS Dixmude in the Molde Fjords to conduct Amphibious Assault for Exercise Trident Juncture 2018

CHAPTER 5

Military dynamics

Russia's bastion defence

For geographical and historical as well as military reasons, the Arctic region has always held a special place in the hearts and minds of Russians.

Two-thirds of the Russian Navy is based in the Arctic in the Northern Fleet, including the so-called 'second strike' nuclear submarine force which must be able to survive and respond to any first use of atomic weapons by the United States. While some US and European strategists see Russia as a revanchist power in the light of its actions in Ukraine and Georgia, Moscow is the incumbent Eurasian continental power in the Arctic seeking to preserve a status quo it sees as threatened by climate change and by US moves to neutralise its nuclear deterrent through missile defences.

"Ice was Russia's main defence shield in the North. Hence it is investing massively in military capabilities to defend a newly vulnerable coastal border," says a senior Nordic government official. "But some of those capabilities obviously have an offensive potential." (1)

There are big differences among military thinkers, within NATO and in the wider expert community, about the scope and intention of Russia's military modernisation in the north. At the hawkish end of the spectrum is Admiral James Foggo, Commander of US naval forces

in Europe and Africa, who declared in 2016 that a silent "fourth battle of the Atlantic" was already under way.

"Once again, an effective, skilled, and technologically advanced Russian submarine force is challenging us. Russian submarines are prowling the Atlantic, testing our defences, confronting our command of the seas, and preparing the complex underwater battlespace to give them an edge in any future conflict," Foggo and Alarik Fritz wrote in an influential article in the US Naval Institute's proceedings. (2)

Most analysts agree that Moscow has not rebuilt its northern bastion back to the size and capacity it had during the Cold War, but some argue that the smaller, more nimble air and naval forces, deep-diving submarines and longer-range missiles it has built up over the last decade pose a serious threat to NATO and to Russia's Nordic neighbours.

Differences of analysis among NATO nations persist, although all agree that Russia's increased strength in the High North calls for better surveillance, anti-submarine warfare assets, air and missile defences and maritime interdiction capabilities to detect, track and if necessary, intercept Russian submarines well before they reach the so-called Greenland-Iceland-United Kingdom (GIUK) gap. That

(1) - Interview with the author, April 2020

(2) - <https://www.usni.org/magazines/proceedings/2016/june/fourth-battle-atlantic>

notional line was considered the gateway to the North Atlantic during the Cold War.

Some military veterans also see a potential Arctic land threat.

“The top 10% of Norway is the most important part strategically,” says retired General Ben Hodges, who was commander of US Army Europe in 2017 and is now Pershing Chair of Strategy at the Centre for European Policy Analysis in Frankfurt. “If Russia could seize that, with its air and missile defence capabilities, it would change the whole situation in the GIUK gap.” (3)

A high-profile exercise in April 2020, when Russian paratroopers were dropped from 10,000 meters on the remote Franz Josef Land island closest to Norway’s Svalbard Archipelago, simulating what

some saw as the capture of an Arctic bridgehead, accentuated such concerns. (4) The US military has conducted similar airdrop exercises in Alaska, but not from such a great height.

The Norwegian and Danish defence intelligence services highlighted growing security challenges from both Russia and China in declassified versions of their annual reports, including cyber attacks and hybrid disinformation and disruption operations as well as Moscow’s military build-up. (5)

“We continue to think that Russia is so weak that it doesn’t pose a real threat in the Baltic,” says a Danish official summarising the country’s latest assessment. “But in the Arctic, there is a real threat.” (6)

(3) - Interview with the author, March 2020

(4) - <https://www.highnorthnews.com/en/russian-paratroopers-perform-first-ever-high-altitude-jump-over-arctic-0>

(5) - <https://www.regjeringen.no/contentassets/b6f5ea0d2d6248b4ae4131c554365e93/rand-rr-4381-enhancing-deterrence-and-defence-on-natos-northern-flank.pdf>

(6) - Interview with the author, April 2020



Russian paratroopers

Short war strategy

Admiral Keith Blount, the British commander of NATO's Maritime Command, says it is natural for Russia to have rebuilt its northern and Baltic fleets which were run down after the Cold War. "Why wouldn't they? The Kola Peninsula (the northwest corner of Russia adjoining Norway and Finland) is very much their bastion, and they would want to defend that in the same way that we take our own bastion seriously," he said in an interview for this study. (7)

Blount highlighted the modernisation of the Russian submarine fleet and a very capable, cost-efficient shipbuilding programme, as well as modern missiles "that are definitely challenging for us."

While he sees "bastion defence" as Moscow's main motive, Blount said: "Russia realises a long war with NATO is not something it would wish to find itself drawn into, because it would lose. So, the short war strategy is something I would envisage Russia trying to play out, trying to inflict quick damage."

Western militaries observed with concern Kalibr land-attack cruise missiles fired from Russian surface ships and submarines in the Caspian and Mediterranean Seas between 2015 and 2018

from ranges of up to 1,500 km during Moscow's military intervention in Syria. That would put Rotterdam, western Europe's largest port, within range of a submarine north of the Faroe Islands and hence north of the GIUK gap.

"From relatively far north of the GIUK gap, they can reach most of Europe. I don't think we're facing a Russian anti-shipping campaign in the North Atlantic. Sinking ships is harder. Ports and airports don't move," says Magnus Nordenman, a US strategist associated with the Atlantic Council and author of "The New Battle for the Atlantic". (8)

Russia's increasing conventional missile reach and so-called Anti-Access/Area Denial capabilities such as S-400 air defence missiles covering much of Norwegian territory led researchers for the US-based Rand Corporation defence think-tank to suggest in a 2020 report for the Norwegian Ministry of Defence that a more northerly line, the so-called Bear Gap between northern Norway and the Svalbard Archipelago should be considered a key threshold for interdicting Russian Northern Fleet operations and sea-denial efforts against NATO. Bear Island is an uninhabited rocky outcrop roughly half way between the North Cape and Svalbard.

(7) - Interview with the author, April 2020

(8) - Interview with the author, April 2020, book: The New Battle for the Atlantic: Emerging Naval Competition with Russia in the Far North; Naval Institute Press, Annapolis, United States, 2019

“Once deployed beyond the Bear Gap, Russian Navy surface vessels and submarines, armed with Kalibr and other modern cruise missiles, pose an increased threat to Allied activities in the North Atlantic and Norwegian Sea,” the report said. “They also pose a direct challenge to transatlantic sea lines of communication that are essential to Allied reinforcement of Europe in the event of any major conflict.” (9)

US and NATO strategists are increasingly concerned at perceived Russian threats to the undersea fibre-optic cables that carry data and telecoms traffic vital to the functioning of the Western economy, financial markets and allied forces, and to satellites essential for navigation, intelligence and surveillance. Russian submarines have been observed close to key seabed cables. A fire aboard a top-secret nuclear-powered Russian mini-submarine, the Losharik, in July 2019 in which 14 Russian sailors including highly decorated senior officers died, drew attention to Moscow’s development of deep-diving “special missions” underwater vessels carried beneath the hull of a ballistic missile submarine. (10)

Blount and Nordic defence officials also highlight routine Russian jamming and spoofing of Global Positioning System (GPS) signals as an increasingly brazen form of hybrid action reported by both military and merchant vessels. “Years ago, Russia would do anything to make sure it didn’t display any hybrid, unusual or novel capability. It would keep it very closely under wraps. But now you can see pictures in the free press of GPS jammers on the top of radar masts,” Blount said.

“GPS spoofing is something that we’re very aware of. That’s more concerning because you can move ships and their navigational records into areas where they haven’t been and use that to your advantage,” he said. As a result, NATO has reviewed its over-reliance on GPS to ensure its ships are able to operate safely, both by adding anti-jamming security features to its GPS receivers and by a partial return to the “first principles” of pre-digital navigation instruments.

(9) - <https://www.regjeringen.no/contentassets/b6f5ea0d2d6248b4ae4131c554365e93/rand-rr-4381-enhancing-deterrence-and-defence-on-natos-northern-flank.pdf>

(10) - <https://www.nytimes.com/2020/04/20/world/europe/russian-submarine-fire-losharik.html>

NATO strategy missing in action

NATO has struggled to develop a strategy for the Arctic. Some allies question the interpretation of the alliance's geographical scope described in the 1949 treaty as "the North Atlantic area", with a subsidiary reference to "north of the Tropic of Cancer".

Blount said "of course our area of responsibility goes all the way up as far as the North Pole". Yet Canada, the ally with by far the largest Arctic territory, is uncomfortable with such an extensive definition of the alliance's perimeter. It long worked diplomatically to keep the Arctic off NATO's agenda. That reluctance has eased somewhat since Prime Minister Justin Trudeau, a liberal internationalist, took office in 2015.

Canadian officials say that while Ottawa recognises a Russian military challenge in Europe, it does not consider Russia a threat to Canada. "We don't talk about it much at NATO. Canada has not encouraged a lot of discussion on the Arctic. We see it as our area of responsibility and we work with other allies in the Arctic Council," a Canadian official said. (11)

Asked how far north the area of responsibility of NATO's Supreme Commander reached, the official said: "It goes up to the GIUK gap but not much further."

Ottawa is now reassessing its defence posture in the High North as part of a joint continental defence review launched with the United States. The issue is framed in terms of what additional tools and infrastructure the Canadian military needs to increase its presence and capability in the Arctic, and potentially to respond to natural disasters.

The main challenge for Canada is the high cost of increasing its Arctic capabilities, given that the country spends just 1.3% of its GDP on defence, and 13.3% of its defence budget on equipment, well short of NATO's 2% overall goal and 20% equipment spending target. While the Trudeau government perceives a greater Russian military as a challenge in the North Atlantic and the High North, the price tag for upgrading air and missile defences is politically unattractive, especially at a time when relations between the US and Canadian leaders are at a historic low.

NATO Secretary-General Jens Stoltenberg says the alliance has become more willing to address Arctic security and modernise its forces since Russia's seizure of Crimea in 2014 and its military build-up in the High North. Diplomats say Canada and Norway remain wary of too assertive a NATO posture in the region.

“What we have done is strengthened NATO’s ability to operate in the High North with significantly more capabilities from land, air, on the sea and under the sea, all of that together with more exercises and a new (joint forces) command for the North Atlantic, which also covers the Arctic,” Stoltenberg said in an interview for this report. (12)

He cited new Norwegian frigates, submarines, and fighter jets, UK and Norwegian purchases of state-of-the-art submarine-hunting planes, an increase in NATO, US and multinational exercises and training in the High North, including NATO’s 2018 Trident Juncture reinforcement exercise, the largest allied war games since the end of the Cold War. That 50,000-strong exercise was an exacting test of logistics and multinational coordination in Arctic conditions, and a deterrent signal with the deployment of a US aircraft carrier in the Arctic Circle for the first time in decades.

So, while there may be no glossy brochure setting out NATO’s Arctic Strategy, and no designated owner of Arctic policy at NATO headquarters, the alliance is raising its game in the region in practice, NATO officials and military commanders say.

“NATO is adapting ... We seek to find a balance between predictability and military strength, but without unnecessarily contributing to increased tensions,” Stoltenberg said. As Norwegian prime minister from 2005 to 2013, he worked to maintain a constructive dialogue between Oslo and Moscow, underpinned by NATO’s defence and deterrence. He also tried to draw NATO’s attention back to security challenges closer to home at a time when the alliance was largely preoccupied with out-of-area crisis management operations in Afghanistan and counter-terrorism.

(12) - Interview with the author, May 2020



Two French Mirage 2000C and one Italian KC-767 Tanker in the Norwegian airspace during the exercise Trident Juncture 2018

Division of labour

Norway maintains a policy of not permanently basing NATO forces on its territory in peacetime, nor allowing nuclear weapons to be stationed on Norwegian soil, but it now quietly hosts a rotational presence of 700 US Marines and large quantities of pre-positioned US military equipment. That falls short of the high-profile multinational Enhanced Forward Presence (EFP) of rotating allied units that NATO deployed as a tripwire force in the three Baltic states and eastern Poland to deter Russian intervention after the Crimea annexation.

Asked whether such a token multinational force had been considered for Norway, a senior US official said: “NATO moves at a glacial pace sometimes... We had a first discussion of the High North in NATO about three or four months ago... Canada and Norway are now more prepared to talk about it. It’s a big jump from that to something akin to an Enhanced Forward Presence in the Arctic. My personal view is that it makes sense. There’s a lot of logic in that. I could imagine our Marines partnering with other allies there to do cold weather training. The UK and Canada could be interested if Norway was prepared to allow it.” (13)

When US and British warships staged a demonstrative joint naval exercise in the Barents Sea close to the Kola Peninsula in May 2020 in the midst of the COVID-19 crisis, trumpeting a signal about freedom of navigation

in international waters, Norwegian ships did not join them. Officially, this was because they were on duty elsewhere. But Norway prefers to keep a lower profile as NATO’s eyes and ears in the High North, peering across the Barents Sea and the border into the bastion, without “getting in Russia’s face”. (14)

These political sensitivities point to what Nordenman says could become a “de facto division of labour” in which NATO guards up to or just beyond the GIUK gap while smaller groups of like-minded allies such as the US, UK and perhaps France police the seas further to the north, and Norway, in the knowledge of NATO backing, takes responsibility for its own northern air and sea space, including Svalbard, and for monitoring Russian movements closely.

“We may be fine with a division of labour with NATO going up to the GIUK gap and having the US and perhaps some others going beyond,” said Nordenman. “That would make perfect sense and be almost the Arctic equivalent of what NATO is trying to do in the Baltic states - calibrate deterrence without tipping into provocation and escalation.”

He said the US and allies needed to operate “well into the Barents Sea to interdict them coming out, and invest much more in cruise missile defence”.

(13) - Interview with the author, May 2020

(14) - https://www.navy.mil/submit/display.asp?story_id=112907

US shift questioned

Despite the Trump administration's rhetorical shift in Arctic policy, many US experts question how serious Washington is about putting resources behind its new strategy in the High North, given its strategic pivot to Asia, and how much of that declared intention will survive the 2020 presidential and congressional elections.

After the end of the Cold War, US military interest in the Arctic dwindled amid bipartisan indifference. A Republican administration closed the strategic naval air station in Iceland in 2006, leaving only a few aging hangars for occasional visits. The Keflavik airstrip had served as a vital anti-submarine warfare base and gateway to the North Atlantic since World War Two. A Democratic administration deactivated the Second Fleet, responsible since 1941 for the North Atlantic, at a time in 2011 when Russia was no longer perceived as a peer competitor.

The Second Fleet was reactivated in 2018, with a headquarters staff of about 150 but no permanently assigned ships. The 2020 Barents Sea exercise was one of its first operations. The administration has budgeted some \$100mn to upgrade facilities at Keflavik in Iceland to accommodate more modern patrol aircraft and bombers and housing for visiting air crews, but no permanently based unit at what is now an international airport. (15)

In 2019, a US Air Force contingency response squadron surveyed the unpaved airstrip on Jan Mayen Island, a Norwegian volcanic outcrop north of the Arctic Circle between Greenland and Norway, which is home to a military radio communications station and a meteorological station. Norwegian and US officials insisted the visit was just to ensure US C-130 transport planes could land to service the stations and help the Norwegians and there were no plans to develop the site.

In a symbolic announcement in June 2020, President Trump ordered the construction of a fleet of icebreakers and bases to pursue US interests in the Arctic and Antarctic by the end of the decade in a "Memorandum on Safeguarding U.S. National Interests in the Arctic and Antarctic Regions". Strategists who advocate a greater US commitment to the High North welcomed the announcement but questioned how the administration would pay for them. (16)

Heather Conley, Senior Vice-President for Europe, Eurasia and the Arctic at the Centre for Strategic and International Studies (CSIS) in Washington, said that while policy momentum for a more proactive Arctic posture was coming from a handful of members of Congress, "for the Pentagon, it just one more unfunded mission. They want to focus on Indo-Pacific". (17)

(15) - <https://breakingdefense.com/2019/07/us-expands-icelandic-airfield-for-tankers-big-cargo-lift/>

(16) - <https://www.highnorthnews.com/en/us-speed-its-icebreaker-program-may-develop-nuclear-arctic-vessels>

(17) - Interview with the author, April 2020(14) - https://www.navy.mil/submit/display.asp?story_id=112907

“The real tragedy is that you’d need a crisis in the Arctic to get the momentum, but then it’s already too late,” said Conley, a former State Department official who had campaigned for much greater US attention to the High North. The current approach was piecemeal, she said. Procuring one heavy icebreaker by 2024-25 before the US Coast Guard retires its aged Polar Star vessel, and spending a little money on hangars in Keflavik did not add up to a policy.

Conley noted that Washington had caused offence in Greenland by awarding the maintenance

contract for the Thule Air Base to a US company in 2014 in place of the Greenland Contractors company partly owned by the self-rule authority, that had traditionally provided lucrative services. Another Greenlandic company lost a sea-lift contract for the base in 2017.

“We’ll get nowhere until the base support services issue is resolved,” she said. A senior US official said the administration was giving the issue high priority but had to abide by US tendering laws.

Reality gap

The gap between the declared ambitions of the new US Arctic policy and the reality was illustrated by talk by then US Navy Secretary Richard Spencer in January 2019 of conducting a freedom of navigation operation (known in military jargon as a FONOP) in the Arctic that summer. Spencer did not specify where the operation would take place, but he was widely assumed to have been talking about sending navy ships along the Northern Sea Route, rather than challenging Canada’s claims in the Northwest Passage. (18)

No such operation materialised and Spencer was fired in November 2019 after differences with President Trump on an unrelated military discipline issue. When US and British warships staged their exercise in the Barents Sea in undisputed international waters off the Kola Peninsula in May

2020, the US Navy declared it was demonstrating the right of freedom of navigation.

Asked whether Washington was still considering a FONOP on the Northern Sea Route, a senior US official said: “That’s been talked about inside the US government but there has been no decision, no determination that something like that should happen.” (19)

The value of conducting such a patrol is hotly debated within the US strategic community, with many analysts pointing to the risk of embarrassment if the ships encountered ice, and the danger of military escalation in an area which is of vital interest to Russia but of little use to the West.

(18) - <https://www.arctictoday.com/us-navy-plans-to-send-surface-vessels-through-the-arctic/>

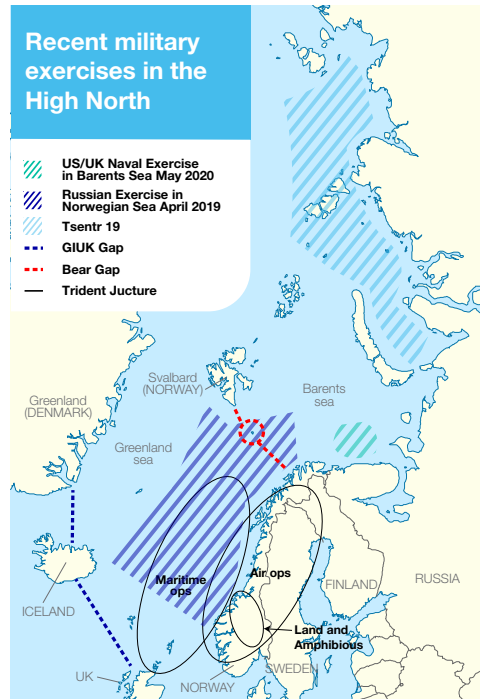
(19) - Interview with the author, May 2020

“Conducting an Arctic FONOP is a bad idea. In the short run, it is likely to result in disaster given inadequate U.S. icebreaking capabilities. It could also trigger a military confrontation given Russian vital interests in the region and their military advantages along the route,” David Auerswald, a professor of security studies at the US National War College wrote in a personal capacity in an article published in 2019. (20)

“The United States should be very, very cautious about sabre-rattling in the Russian Arctic, and do so only after thinking through the long-term implications of failure and success,” Auerswald said.

Such concerns do not deter some politicians from arguing that unless the West challenges Russian claims, it will be accepting de facto exclusion from parts of the Arctic. Tobias Ellwood, Conservative chairman of the UK House of Commons Defence Select Committee and a former junior defence minister, compares the NSR to the South China Sea.

“I fear that this is Russia’s South China Sea,” said Ellwood, a former army officer. “It’s so important that we set the parameters, the precedents, rather than allowing Russia to dictate the rules... This is the way the world has gone, and China has leveraged it to its effect. It sets up new rules that do not really get checked and then that becomes the new normal. We must make sure that doesn’t happen in the Arctic.” (21)



(20) - <https://warontherocks.com/2019/10/now-is-not-the-time-for-a-fo-nop-in-the-arctic/>

(21) - <https://www.csis.org/events/online-event-enhancing-security-high-north>

One alliance?

Ellwood contends that Russia and China “should be treated as one alliance” in the Arctic, despite perceptible differences on issues ranging from Arctic governance to the application of the law of the sea and the terms and conditions of Chinese investment in the Russian economy. They are at most temporary and partial allies of convenience. Both tactically and strategically, it would appear to make more sense to distinguish between Russia and China in the High North than to lump them together.

If they were one alliance, why did Russia arrest one of its most eminent Arctic academics in 2020 and charge him with high treason for allegedly passing secrets to China?

Beijing does not currently present a military challenge to European or Western interests in the High North. While Chinese warships have made first appearances in the Mediterranean and the Baltic, taking part in joint exercises with the Russian navy, none has been sighted in the European Arctic. The nearest the Chinese military has come was in 2015, when five warships were spotted in the Bering Sea off the west coast of Alaska while President Obama was visiting the state.

The US Department of Defence's 2019 report to Congress on China's military power included for the first time a brief section on China in the

Arctic, but gave no evidence of any Chinese military presence in the region. It voiced concern - in the conditional tense - about the potential. “Civilian research could support a strengthened Chinese military presence in the Arctic Ocean, which could include deploying submarines to the region as a deterrent against nuclear attacks,” the report said. (22)

US and NATO officials make much of China's prolific military shipbuilding programme. Stoltenberg said China had built more naval vessels in the last five years than the entire inventory of the UK navy. Beijing is also planning a large nuclear-powered icebreaker in addition to its existing smaller diesel-powered civilian and military icebreakers.

Talk of an ‘icebreaker gap’ with Russia and China recalls warnings of a ‘missile gap’ between the US and the Soviet Union in the 1950s - an argument advanced to press for greater spending on particular big-ticket weapon systems rather than a cool-headed strategic case. As Paul Avey, a political scientist at Virginia Tech, notes, “the icebreaker gap doesn't mean America is losing in the Arctic.” (23)

If China is building more icebreakers, it may be precisely because it does not want to be dependent on Russia's icebreaker fleet, by far the world's biggest. That could pose an implicit

(22) - https://media.defense.gov/2019/May/02/2002127082/-1/-1/1/2019_CHINA_MILITARY_POWER_REPORT.pdf

(23) - <https://warontherocks.com/2019/11/the-icebreaker-gap-doesnt-mean-america-is-losing-in-the-arctic/>

challenge to Moscow's insistence that shipping using the Northern Sea Route be escorted by a Russian icebreaker and a Russian pilot. The Chinese, who look further ahead than any other power, may also be eying the opening of a direct transpolar shipping channel in decades to come.

From a Western perspective, the problem about China is that everyone knows it is the world's rising power, but all that people see in the Arctic is Chinese businessmen and polar researchers. "China is like a submarine hidden under the ice," says Damien Degeorges, a French strategic consultant based in Iceland. "You don't see it until it suddenly bursts through." (24)

US Naval Commander Foggo makes the same point about potential Chinese ambitions. "With China having its own precedent for making bogus claims over international waterways in the South China Sea, it's possible that China will also seek to bend the rules in their favour in the Arctic," he told an International Institute for Strategic Studies online seminar. (25)

In Chinese thinking, the main military relevance of the Arctic may be not on or beneath the high seas but in the air. "The most direct relevance of the Arctic for China is the travel time for intercontinental ballistic missiles. If the US has nuclear submarines in the Arctic, it cuts the travel time (to strike China) by one-third," said the Stimson Centre's Yun Sun. "That doesn't mean that China itself has the deployment capability in the Arctic, which would also upset Russia. I would not say that China regards the Arctic as a front line."

If Beijing were one day to deploy ballistic missile submarines in the Arctic, it could reduce the distance to targets in the US or Europe by more than half. But such a move, for which there is no evidence so far, would not go undetected, since the vessels would have to traverse waters heavily monitored by the Japanese, US and Russian militaries, making them vulnerable to interception.

(24) - Interview with the author, July 2020

(25) - <https://www.scmp.com/news/china/diplomacy/article/3090916/us-admiral-warns-risk-bogus-chinese-claims-arctic>

Possible triggers

While the risk of a conflict starting in the Arctic remains very low, it is worth considering five potential triggers for escalation.

Northern Sea Route - As we have seen, Russia asserts the right to control and administer the Northern Sea Route, and demands 45 days' notice of the passage of foreign naval vessels, while the United States rejects Moscow's rules as illegal. One clear source of military tension would be a US decision to send warships on a FONOP along the northeast passage to challenge Russian claims. This would be a high-risk gesture with unpredictable consequences.

How might Russia respond? President Putin might treat it as a sequel to the 1962 Cuban missile crisis, when US warships intercepted Soviet cargo ships transporting ballistic missiles to Cuba, and Moscow had to back down and recall the vessels after a standoff that brought the world to the brink of nuclear war.

The Kremlin could warn US vessels to stay out of specific zones, possibly saying it had laid anti-ship mines. The Pentagon would not want to yield to such an order. At the very least, the prospect of a confrontation would raise international tensions and spook financial markets.

If Russia did grudgingly let the US ships pass, it might well retaliate against American interests elsewhere, perhaps through proxies. It could also raise military tensions in the Black Sea or the Eastern Mediterranean. And it would almost certainly want to stage a show of strength to counter any perceived humiliation, for example by testing more hypersonic missiles in the Arctic, as a showcase for its new military technology, or perhaps by sending its own vessels on a demonstrative patrol close to sensitive US coastal centres.

Svalbard - Russia has expressed public dissatisfaction with Norway's implementation of the Svalbard treaty, under which Oslo has sovereignty over the demilitarised archipelago but all signatory states have equal rights to conduct economic activity and enjoy visa-free access.

If Moscow wanted to apply pressure on the Norwegians, there are several potential ways in which it could raise tensions, for example by sending a large number of its citizens there, expanding its coal mining activity, sending a fishing flotilla, perhaps with military protection, to catch snow crab or other species, seeking to inspect fishing vessels within Svalbard's waters or increasing its civilian helicopter presence and flights to the island.

However, it seems highly unlikely that Russia would stage a military challenge around Svalbard, given its sensitivity around the Kola Peninsula bastion, unless Norway or its allies appeared to be using the archipelago to military advantage.

Accidents at sea, environmental disasters - Some European officials see the possibility of an escalating dispute over unforeseen events such as an accident aboard a Russian nuclear submarine, a radiation leak, a collision at sea or severe oil spill, or differences over search and rescue perhaps involving a stranded cruise liner, in which Western environmental or humanitarian concerns could clash with the Russian cult of secrecy.

Such incidents have occurred sporadically since the end of the Cold War, starting with a non-fatal collision between US and Russian submarines north of Murmansk in 1993, and more recently the deadly fire aboard the top-secret Losharik submarine in the Barents Sea in 2019, and the giant Norilsk diesel fuel leak in 2020. None has escalated so far. But a major ecological disaster related to more intensive Arctic shipping, hydrocarbons extraction or rotting infrastructure could raise European political and public pressure for more sanctions against Russia.

Whether such disputes could lead to a military standoff seems more improbable.

Hybrid and cyber activity - The COVID crisis has highlighted the way information wars and

narrative battles can poison inter-state relations with economic and security consequences. The North Atlantic maritime space, up to the Arctic, has become a theatre for forms of hybrid action such as GPS jamming and spoofing, the use of electronic warfare against military and civilian signals, and perceived threats to vital subsea data cables that could escalate.

If a NATO ship were to suffer a severe incident at sea due to electronic interference attributable to Russian activity, it could raise pressure for a commensurate Western response.

While Finland, Denmark and Norway are ranked as among the world's most cyber secure countries in multiple surveys, Sweden ranks less well and Iceland is regarded as vulnerable. A state-based cyber attack linked to geopolitical stress in the High North could also heighten tension.

Greenland independence drive - One of the potentially most destabilising factors in Arctic geopolitics could be a drive by Greenland's Inuit majority for independence from the Kingdom of Denmark, especially if it turned into an open contest between the United States and China for influence on the strategic island. Greenland will need to achieve economic viability to attain political independence.

So far, the competition has been largely indirect, with Beijing seeking to invest in developing airfields and mineral resources that Copenhagen had neglected, and Washington exerting pressure to keep the Chinese out and

sending a small aid cheque and a consulate after upsetting Greenlanders over the base service contracts, and President Trump's bid to buy their country.

Characteristically, China has backed off for now after realising it was coming on too strong. But the Greenland government will continue to seek major investments that would make statehood economically feasible. If US, Canadian and European aid and investment continue to fall short and tourism takes a durable hit from COVID-19, China's chequebook diplomacy could get a second chance.

Would the United States stand by and watch Greenland go independent under Chinese influence without intervening?



US/UK naval vessels exercising in Barents Sea in May 2020



Russian nuclear icebreaker

CHAPTER 6

Conclusions and recommendations

If it ain't broke...

In security terms, the Arctic ain't broke and does not need fixing.

As this report has illustrated, there is less than meets the eye to many of the projections of vast Arctic hydrocarbon and mineral riches, shipping short-cuts and grand infrastructure projects. The consequences of COVID-19 are likely, if anything, to reduce the available investment in and economic interest of the High North, at least for the next decade and perhaps durably. Whether that will reduce strategic competition in the region is less certain. But it may raise the premium on cooperation rather than confrontation.

If anything needs urgent repair, it is the climate. In the words of French explorer Jean-Louis Étienne, "it's as if someone had opened the door of the world's refrigerator". The key to fixing that lies not in the Arctic but in a radical reduction of greenhouse gas emissions in the industrialised and developing world, far from the North Pole. The fate of the indigenous peoples of the Arctic, of all residents of the High North and of those photogenic polar bears depends largely on what happens elsewhere.

Western politicians and strategists obsessing about new sea routes, Russian submarine and missile designs or potential Chinese investments in critical infrastructure in the High North would

do better to focus first on the threat to the survival of humanity, to biodiversity and to their coastal cities posed by rising sea levels due to their own countries' factory chimneys and exhaust fumes.

Ice savers will be more important than icebreakers to the future of mankind, and of the Arctic.

Russia has been the dominant power in the Arctic for centuries. It controls more than half the Arctic coastline and the whole northern seaboard of the Eurasian landmass except for a small Western corner in Norway. The Soviet Union had far more military assets in the High North than Russia has today, even after the build-up and modernisation of the last decade.

That doesn't mean that there are no security issues to be addressed in the Arctic, or that Western commanders are wrong to consider worst-case scenarios. Some disturbing trends in the conduct of great power competition in this fragile region call for greater dialogue, more transparency, rules of the road, and, yes, modest but robust Western military insurance measures.

As we have seen, there are a handful of situations and issues in the High North that might conceivably spark incidents or

(1) - *Fateful Choices: Ten Decisions that changed the World 1940-41*, Ian Kershaw, London, Allen Lane 2007

miscalculations and escalate. More likely is that a conflict that began outside the Arctic Circle, perhaps in the Baltic, the Black Sea, the Caucasus or the South China Sea might draw in the Arctic, chiefly because of the location of key Russian military assets.

Russia's build-up of highly capable modern submarines and long-range cruise missiles in the Kola Peninsula has sharpened the challenge for Western militaries.

One such scenario that particularly worries NATO planners is a possible Russian military build-up or hybrid action around the Baltic states, Belarus, Ukraine or Georgia that would prompt NATO's Supreme Allied Commander Europe to seek authority from the North Atlantic Council to start mobilising air and sea reinforcements. Russia might well respond by deploying elements of its Northern Fleet into the Barents Sea and the Norwegian Sea, putting west European ports, runways and rail hubs within range of its missiles. And then what?

Both Russia and China, unconstrained by democratic controls, have shown they are willing to make long-term strategic investments that may not necessarily make short-term economic sense. If Moscow's massive economic and political investment in Arctic energy, minerals and sea routes turns sour – due to energy oversupply and as a long-term consequence of COVID-19 – its behaviour could become more aggressive and unpredictable.

"The Arctic is essential for Russia's economic and security future, which is exactly why they will increasingly take risks to secure both," says Conley of the CSIS.

One of the lessons of history is that governments sometimes make 'fateful choices' based not entirely on rational calculation but for reasons of identity, ideology, military capability or because domestic politics or insufficient checks and balances lead them to miscalculate. (2)

(2) - Interview with the author, May 2020

Russian opportunity

Russia takes over the chair of the Arctic Council in 2021 for two years and could use that window, if President Putin so chooses, to shape a more cooperative future in a region where it will remain the dominant power. There is an opportunity for statesmanship in an area where Moscow has declared a desire to preserve a low-tension environment, though many in the West distrust the Russian notion of 'Arctic exceptionalism'.

"I've never seen Arctic exceptionalism in the Arctic," says Teija Tiilikainen, former director of the Finnish Institute of International Affairs. "It's part of Russian propaganda. It's the Russian way of signalling 'Don't come here, this is our sphere of interest'. Russia benefits most from the current balance of power in the Arctic. Change would challenge Russia's position." (3)

A lot depends on whether the Kremlin sees an interest in toning down its aggressive probing of Western countries' air and sea space, mock attacks on European ports and air bases, buzzing of NATO aircraft and electronic jamming, or whether it would prefer to keep the West on edge, at the risk of further fuelling political support for a military build-up by the United States and northern European countries in the High North that could change the status quo. There are grounds to believe Russia would not welcome an expensive conventional and nuclear arms race.

Putin may seek to host a first summit of Arctic Council heads of state and government, which his Icelandic and Finnish predecessors tried in vain to convene. Nordic leaders attended a Russian-organised unofficial Arctic Forum with Putin in Saint Petersburg in 2019 and held bilateral meetings with the Russian leader. For the United States, Canada and perhaps Denmark to agree to a formal summit would likely require a significant Russian disengagement in Ukraine.

Some measure of detente would be easier to imagine if the next US administration were to frame its Arctic policy less as a zero-sum great power confrontation and more as a balance between deterrence and reassurance – between maintaining security and achieving common objectives in climate, environment and sustainable economic development. Restoring practical military-to-military dialogue would be in both sides' interest and would not imply Western acceptance of Russia's annexation of Crimea, nor an easing of sanctions, but offer a potential ladder for de-escalation.

Whether Russia, China and the United States end up firing missiles at each other across the North Pole or clashing in Arctic waters will depend on a combination of deterrence and mutual trust, confidence-building, predictable behaviour and communication, including functioning hotlines, adherence to rules-based

(3) - Interview with the author, February 2020

international governance, and a willingness to pursue their own interests with respect for each other's interests.

"The Arctic will remain a rhetorical battlefield for the Americans while the Russians will continue to rebuild their lost military presence as the Chinese move forward systematically but with everlasting patience," says a senior Nordic diplomat specialised in Arctic affairs. (3)

Other actors in the High North and outside it can help remove possible triggers for conflict, contribute to confidence-building and reassurance, and build resilience in this fragile part of the world, but the keys to keeping the Arctic a zone of low tension and practical cooperation lie mainly in Washington, Moscow and Beijing.

Whatever the outcome of the 2020 US presidential election, the United States should recalibrate its approach to the Arctic to tone down the rhetoric, cooperate more pro-actively in fighting climate change, and seek solutions to its security concerns through negotiation and confidence-building as well as through a measured increase in its military vigilance in the High North.

The Arctic does not need new institutions to address its security issues. But Arctic stakeholders can make better use of existing ones, and develop informal channels for confidence-building.



Chinese Research Vessel Near Nome, Alaska

Recommendations

The following recommendations are formulated with that objective in mind.

Intensify Arctic Council cooperation

on regulating black carbon emissions and mitigating the impact of climate change, especially on indigenous people's herding and fishing activities. Promote renewable energy development with a regulatory framework to protect the interests of indigenous peoples. Launch timely studies on future joint fisheries management for the period after the Central Arctic Ocean moratorium expires.

Enhance cooperation on all aspects of civil security and emergency planning

among the eight Arctic Council members, with a focus on search and rescue, developing the Arctic Coast Guard Forum, and addressing issues such as oil spill response and common preparedness for natural disasters and health emergencies, such as the COVID pandemic. Such cooperation should be open to observers such as the EU and China.

Use Russia's 2021-22 Arctic Council presidency to revive military-to-military dialogue and seek to develop information

exchange and confidence-building measures in return for Russian commitments to refrain from intrusions into Nordic neighbours' airspace and territorial waters, and to stop dangerous GPS jamming and spoofing. While it is wise to keep security off the Arctic Council agenda, there is nothing to stop senior foreign and defence officials of the Arctic Eight holding informal political-military consultations on the sidelines of the ministerial session. An Arctic Council summit would make sense only if Russia made significant commitments on disengagement from Ukraine and scaled back provocative actions in the High North.

Use track-two unofficial dialogue, in particular through the Munich Security Conference's Arctic Security Roundtable, to explore an agenda for confidence-building measures and mutual steps to reduce military tension and provocative actions in the High North. Invite Chinese government officials to join that informal dialogue in an effort to build confidence and transparency, rather than trying to shut China completely out of Arctic security.

Preserve what is left of nuclear arms control, verification and confidence-building

measures, notably by extending the US-Russian New Start treaty when it expires in 2021 and upholding the Open Skies Treaty. Address alleged Russian violations of the now-defunct Intermediate Nuclear Forces treaty through negotiations with a time-limited moratorium on new deployments to test Moscow's good faith. Invite China and other nuclear powers to engage a dialogue on multilateral arms control.

Arctic members of NATO and the European Union should elaborate a set of consistent, objective and non-discriminatory criteria for screening foreign investments in critical infrastructure and strategic minerals. At the same time, the EU should engage with China to discuss responsible investment in cooperative projects in the High North, including digital connectivity that is key to sustainable economic growth.

The European Union should update its Arctic strategy to reflect the new security, environmental and economic realities. The EU should use its resources in climate and environment protection, regional development and regulatory expertise to the benefit of the European Arctic, while recognising the primacy of the Arctic states in governance of the region. Brussels should open a representative office in Greenland and offer increased assistance to the home rule government to promote investment in sustainable mining, connectivity, tourism and fisheries, as an alternative to excessive dependence on US or Chinese money.

NATO should continue to upgrade its surveillance, situational awareness and anti-submarine warfare capabilities in the North Atlantic and the Norwegian Sea, and enhance its ability to operate in harsh Arctic winter conditions through exercises and training. Nordic countries, which will publish updated Arctic strategies in 2020 or 2021 taking account of security issues for the first time, should further develop the integration and upgrading of their air forces and Arctic expeditionary forces. NATO allies should be willing to deploy a rotating Enhanced Forward Presence in northern Norway if the Norwegian government requests it.

The United States should rebalance its Arctic strategy to address the urgent challenge of climate change as well as hard security issues. It should refrain from staging a freedom of navigation operation on the Northern Sea Route as long as Russia abides by its UNCLOS obligations and does not restrict the free passage of foreign ships on the waterway.

None of the Arctic states or China has an interest in strategic tension in the High North. These recommendations are designed to avoid such tensions mounting on auto-pilot if the main global powers remain on their current course.

Annex A – Arctic timeline

1920

Russia and Finland sign the Treaty of Tartu, defining the Finnish-Russian border and ceding territory to Finland, giving Finland access to the Barents Sea.

1925

Amendment to the Northwest Territories Act. Canada becomes the first State to claim territory up to the North Pole.

1944

The Moscow Armistice is signed, ending the Continuation War between the Soviet Union and Finland. Under the armistice, the Petsamo region is handed back to the Soviet Union, severing Finland's access to the Barents Sea

1958

US nuclear-powered submarine Nautilus becomes the first vessel to cross the North Pole underwater. The following year, the nuclear-powered submarine Skate becomes the first to surface at the North Pole.

1962

Russia makes the first major Arctic energy discovery by uncovering the Tazovskoye Field.

1968

The first US Arctic oil and gas discovery is made in the Prudhoe Bay field in Alaska

1969

US oil tanker, the SS Manhattan, becomes the first commercial vessel to cross the Northwest Passage.

1982

The United Nations Convention on the Law of the Sea (UNCLOS) is signed

1991

Eight Arctic states sign the Arctic Environmental Protection Strategy

1993

Creation of Barents Euro-Arctic Council for cooperation in the Barents region, the first post-Cold War Arctic intergovernmental organisation; collision between US and Russian nuclear submarines in the Barents Sea north of the Kola Peninsula, the second such incident in a year

1994

UN Convention of the Law of the Sea (UNCLOS) enters into force after gaining sixty signatures. The United States has still not ratified it.

1996

Arctic Council established by eight countries, with the involvement of representatives of six indigenous communities.

1998

Canada hosts the first Ministerial meeting of the Arctic Council in Iqaluit.

Germany, the Netherlands, Poland and the UK become observers in the Arctic Council, followed by France in 2000 and Spain in 2006.

2001

Russia becomes first nation to submit a claim for an extended Arctic continental shelf beyond its Exclusive Economic Zone to the UN Commission on the Limits of the Continental Shelf. Moscow claims 1.2 sq. km, nearly half of the Arctic Ocean.

2006

Norway submits a claim for an extended continental shelf beyond its 200-nautical-mile Exclusive Economic Zone to the UN Commission.

2007

Canada announces plans to increase its Arctic military presence in an effort to assert sovereignty over the Northwest Passage.

Russian expedition plants flag on seabed beneath North Pole.

2008

Arctic coastal states issue Ilulissat declaration, pledging an orderly settlement of any overlapping continental shelf claims in the framework of the Law of the Sea.

2010

Russia and Norway sign Treaty on Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean. The treaty resolves decades of territorial dispute in the Barents Sea, believed to contain large reserves of oil and gas.

2011

Arctic Council members sign an agreement to coordinate search and rescue operations and pledge to create international protocols to prevent and clean up offshore oil spills.

2012

China signs accords on energy cooperation and the Arctic in Iceland as Premier Wen Jiabao starts a tour of northern Europe, focusing on Chinese investment; In Russia, the State Program for the Development of the Continental Shelf in the Period up to 2030 establishes the Arctic continental shelf as a territory for exploitation solely by state companies, namely Rosneft and Gazprom.

2013

Russia launches Yamal LNG project in the Arctic Yamal Peninsula, aiming to tap natural gas reserves totalling more than 4 billion barrels of oil with funding from Chinese National Petroleum Corporation (CNPC) and the China Development Bank; Iceland President Ólafur Ragnar Grímsson announces the formation of the Arctic Circle, a non-profit organisation dedicated to bringing together international stakeholders in an open venue to address the challenges in the Arctic.

China, India, Italy, Japan, South Korea, and Singapore are admitted as observers in the Arctic Council, followed by Switzerland in 2016.

2014

Russia annexes Crimea and triggers armed secession in eastern Ukraine; EU and United States impose economic sanctions in response including ban on investment in oil and gas development and on advanced oil exploration technology; Denmark files a submission to define the outer limits of its continental shelf in the Arctic Ocean with the UN Commission. The area consists of approximately 895 541 sq. km beyond the Exclusive Economic Zone of Greenland.

2015

Russia submits additional evidence to support its Arctic continental shelf claim; Coast Guard leaders from the US, Canada, Denmark, Finland, Iceland, Norway and Sweden sign an agreement setting up the Arctic Coast Guard Forum for stewardship of Arctic waters.

2017

The European Parliament rejects a call to ban Arctic oil and gas exploration

2018

China issues its first Arctic strategy and declares itself a “near-Arctic state”; NATO stages “Trident Juncture”, largest exercise since Cold War in central Norway.

2019

US Secretary of State Mike Pompeo denounces Russian, Chinese and Canadian claims in the Arctic in an outspoken address to the Arctic Council in Finland ; US President Trump raises the idea of buying Greenland from the Kingdom of Denmark; Greenland and Denmark both say it is not for sale ; Russia stages “Ocean Shield”, largest naval exercise since the Cold War in the Baltic Sea, including elements of its Northern and Baltic Fleets; Canada files its Arctic continental shelf submission to the UN Commission, claiming about 1.2 million sq. km of the Arctic Ocean seabed and subsoil including the North Pole.

2020

Russia issues new Arctic strategy to 2035, vowing to develop strategic resources and a globally comprehensive Northern Sea Route under Russian administration; US opens consulate in Greenland and announces aid package; President Trump announces decision to build a security icebreaker fleet to maintain a persistent presence in the Arctic and Antarctic.

Annex B – Comparison of Arctic strategies

Thirteen countries have produced Arctic strategies, including the eight Arctic states (US, Russia, Canada, Finland, Norway, Denmark, Sweden and Iceland) and five non-Arctic states (China, France, Italy, Germany and the UK), as well as the European Union. In fact, the US has produced two strategies in recent years, with significant disparities between the Obama administration's 2013 policy and the Trump administration's 2019 Department of Defense policy.

While the national strategies vary in length and scope, some common themes emerge: security and cooperation, the environment and climate change, economic development, and social development and the rights of indigenous peoples. Many of these are interlinked or mutually dependent, and some highlight the divergent views of states with Arctic interests.

Security and cooperation

All state the common goal of a stable and peaceful Arctic region. However, many also note that the changing Arctic environment could lead to increased strategic competition as the melting ice and permafrost opens

up access to new shipping routes, mineral resources and commercial opportunities. Some strategies prioritise security more than others, in particular, both the US strategies (although the Obama administration's 2013 document was more environment-oriented than the Trump administration's 2019 text), the UK's 2018 Defence Arctic Strategy, and Russia's 2020-35 plan. Others, such as France and Canada, adopt a more holistic approach, but still include a strong emphasis on security and defence. The common threads in these strategies are international cooperation, stability in the region and increased strategic competition. The Arctic states also emphasise the importance of national security and asserting sovereignty.

The US Department of Defence's 2019 strategy identifies Russia and China as strategic competitors and refers to them as the main threats to stability in the Arctic, unlike the 2013 US strategy, which emphasised international cooperation over competition. Similarly, Norway, the UK, and France portray Russia as a latent threat, with an awareness of its military activities in the region and the potential rise in tensions should it cease cooperation efforts.

The majority of strategies argue for the resolution of disputes through cooperation and dialogue and adherence to international law. They recognise the Arctic Council as the main forum for cooperation and dialogue concerning the region and many reference the United Nations Convention for the Law of the Sea (UNCLOS) as the basis for resolving territorial disputes, with the notable exception of the United States, which has not ratified the treaty.

The Russian document acknowledges the importance of international law but suggests that others are interpreting it so as to obstruct Russia's pursuit of legitimate interests. The concept of efforts aimed at "discrediting Russian Arctic activities" is mentioned as a central challenge.

These factors inform the divergent views on international cooperation. The Trump administration's policy highlights that the US does not recognise any claims to Arctic status by any state other than the eight Arctic nations – an implicit swipe at China, but also at the European Union. The UK emphasises the need for cooperation exclusively with "allies". Norway stresses the importance of cooperation with Russia, despite acknowledging it as a threat. Danish policy encourages cooperation with all non-Arctic states with an interest in the region, including China. Non-Arctic states also emphasise the need for international participation in the region, often for research and trade. The EU member states with Arctic territory acknowledge the Union's role in the region, particularly as an observer in the Arctic Council. Russia's declared interest in preserving the Arctic as a zone of peace and cooperation is

coupled with a call for "stable mutually beneficial" partnerships, a possible veiled reference to China's efforts to leverage its investments in Russian energy and infrastructure.

So, while all advocate international cooperation, opinions on how and where to pursue it, and with whom, diverge.

The environment and climate change

Except for Trump's US strategy and the UK's strategy – which are Department of Defense and Ministry of Defence policies, respectively – all others highlight the environment and climate change as critical priorities. These strategies perceive climate change as twofold. The melting ice and perma-frost provide new commercial opportunities and increased access to oil and gas reserves, but also serve as an ominous warning of global warming's rapid progression.

There is a consensus that research to determine the extent of the issue and learning more about how to reverse, or prevent, its advancement is necessary. The strategies note that increased economic activity is contributing to climate change, and all present and future activities in the region should be monitored and sustainable. The Arctic is also a region populated by diverse wildlife, which depends on the Arctic environment to maintain its fragile eco-systems. As such, the strategies stress the need to preserve biodiversity and limit the effect of human activities on the Arctic environment.

Economic development

While most strategies note that the changing Arctic environment is leading to increased commercial opportunity, they also refer to the challenges posed by extreme weather conditions, a lack of infrastructure and insufficient communications technology. The consensus is that all these factors must be addressed to enhance economic activity in the region.

The main areas of economic development mentioned in the strategies are the extraction of natural resources, shipping, tourism, and fisheries. Many strategies emphasise the need for sustainable development in these areas. Denmark, Sweden, Finland, France, and Italy, in particular, consider the benefits of pursuing economic activities such as renewable energy and environmental technology. Many Western countries, such as Canada, Denmark, Sweden and Iceland also link economic development to international cooperation, calling for increased international trade and investment.

Finland and Canada focus on the need for a more skilled workforce requiring higher levels of education and training in the region to propel economic development.

The Russian strategy cites declining population, inadequate development of social, transport and communications networks in its Arctic zone as well as low rates of geological resource exploration among its major national security challenges in the High North.

Economic opportunity is also an area where the interests of non-Arctic states are particularly apparent. China, for example, aims to build a "Polar Silk Road" through developing Arctic shipping routes. Italy dedicates a whole section of its strategy to "Eni and the Arctic". Eni is an Italian multinational energy company, partially owned by the Italian state, which is active in the Barents Sea. That may explain why Italy, a Mediterranean country far from the High North, went to the trouble of producing a national Arctic strategy tying itself to the region.

Social development and the rights of indigenous people

Canada's strategy places particular importance on the rights of indigenous people, with a people-centred policy considering the implications for First Nation people in all aspects of the strategy. Canada, Denmark and Finland all prioritise closing the gap in living standards between Arctic populations and the rest of their countries by improving access to work opportunities and social services, such as healthcare and education. These strategies, along with most others, emphasise that all activities in the Arctic should be in line with the preservation of the

culture and languages of indigenous people. The involvement of indigenous people in decision-making processes is vital to achieving these goals. Norway, Sweden, Finland all reference the importance of the Sami parliament for the representation of Sami interests and insights.

Conclusions

Arctic states tend to set out a balanced strategy, with roughly equal emphasis on cooperation and security, social and economic development, the environment and climate change, except for the United States, and to a certain extent, Russia. The most recent US policy document skews strongly towards defence and plays down climate change. Russian policy highlights national security and economic development as top priorities, but there is also some reference to the protection and support of Arctic populations and their environment.

Non-Arctic states tend to emphasise economic development, climate change and research. These areas can legitimise their interest in the Arctic through the pursuit of international trade links and investments, and by addressing the global issue of climate change.

In general, the strategies show broad agreement on social and economic issues and climate change, except for the US (2019) and the UK, whose defence-based policies do not extend to these issues. International cooperation is a priority for all in maintaining a peaceful and stable Arctic, research and knowledge sharing, and tackling climate change. Most strategies acknowledge that the Arctic is a shared space and that its challenges often have global

implications. However, there is some divergence in the extent to which Arctic states and non-Arctic states wish to cooperate.

Some welcome and encourage the participation of non-Arctic states in the region while others underscore that the Arctic states must be the sole decision-makers. Meanwhile, Russia is viewed by its European neighbours as a potential threat and a partner in equal measure, while China is identified as a key competitor by the US, but a potential research and investment partner by others.

As all the Nordic countries and the UK are due to update their Arctic strategies in the next year or so, it will be interesting to see if these views remain divergent, or if the geopolitical landscape prompts a rethink on cooperation with Russia and China and a reprioritisation of previously convergent goals.

Further reading

Arctic security is becoming a crowded field. My study benefited from reading dozens of think-tank, academic and media reports. Some are cited in footnotes. Here is a non-exhaustive list of worthwhile further reading on the topic:

Media:

The Independent Barents Observer, The High North News, Arctic Today and Eye on the Arctic (hosted by Radio Canada International) websites are indispensable journalistic resources and aggregators of information for any researcher on Arctic affairs, including on security topics.

Think-tank reports:

Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment; Mathieu Boulegue, Chatham House, London 2019; https://www.chathamhouse.org/sites/default/files/2019-06-28-Russia-Military-Arctic_0.pdf

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Canada's Arctic and Northern Policy Framework: A Roadmap for the Future?; Peter Kikkert and P. Whitney Lackenbauer, Arctic Yearbook 2019; https://arcticyearbook.com/images/yearbook/2019/Briefing-Notes/9_AY2019_BN_Kikkert_Lackenbauer.pdf

Walking on Thin Ice: A Balanced Arctic Strategy for the EU; European Political Strategy Centre, Brussels 2019; <https://tem.fi/documents/1410877/8582211/EPSC+Strategic+Notes+-+Walking+on+Thin+Ice+-+A+Balanced+Arctic+Strategy+for+the+EU/e7c6c21d-7cbe-fb01-af42-d556773e920b/EPSC+Strategic+Notes+-+Walking+on+Thin+Ice+-+A+Balanced+Arctic+Strategy+for+the+EU.pdf>

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