ATLANTIC CENTRE

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The transformation of Arctic geopolitics and its implications for the North Atlantic

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INTRODUCTION

The Arctic[2] is changing in fundamental ways. After the Cold War, serious threats to Arctic security went into abeyance, inspiring talk of a 'pole of peace', and of a 'global Arctic'. This trend seems to have now gone into reverse. Two main factors are driving Arctic securitisation: global warming and great-power rivalry. Both appear set to accelerate in the coming years, generating further incentives for stakeholder states and organisations to increase their military and civilian presence in the Arctic as they seek to exploit untapped resources, ply newly-viable routes, and keep tabs on each other's activities in the Arctic.

This policy brief considers the implications of the changing geopolitics of the Arctic for the contiguous North Atlantic area and for the transatlantic security community. It is divided in two parts. First, we consider ongoing changes to Arctic geopolitics, focusing on three main arenas for international competition:

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[2] *The Arctic* refers to the area north of the Arctic Circle, at latitude 66.5 degrees north, marking the limit of 24-hour polar nights and polar days. This area includes the Arctic Ocean and portions of land and ice under the sovereignty of the Arctic states. *Arctic states* refers to the eight states with territory above the Arctic Circle, namely Iceland, the Kingdom of Denmark, the Republic of Finland, the Kingdom of Norway, the Kingdom of Sweden, the Russian Federation, the United States of America, and Canada.

resources, routes, and law and governance. The second part deals with the implications of those dynamics on the geopolitics of the North Atlantic Ocean, locating risks relating to climate security and to maritime security, while highlighting the demands that these implications place upon the transatlantic security community.

1. THE TRANSFORMATION OF ARCTIC GEOPOLITICS

1.1. Resources

The Arctic is home to a significant share of the planet's untapped hydrocarbon reserves. In 2008, the U.S. Geological Survey estimated that the Arctic holds about 13% of the world's undiscovered oil and 30% of undiscovered conventional natural gas resources, most of it offshore (Bird et al., 2008; EIA, 2012). However, these reserves have been largely locked-in by the ice and the Arctic's inhospitable conditions. Technological development has gradually facilitated resource exploitation, but always at an increased cost. There are also important reserves of metallic minerals including nickel and copper.

Specific obstacles make Arctic resource exploration costly. One of them is exacerbated by climate change: thawing permafrost damages infrastructure such as roads, railways, pipelines, housing, industry, and military facilities (Miner et al., 2022). The transportation of products out of the Arctic is another major hurdle to resource exploitation, but it is now being eased by Arctic warming, as shipping routes are cleared of ice, facilitating the transport of oil and gas by sea.

As the dominant state in the Arctic in terms of territory, population, economic footprint, and force posture, the behaviour of Russia is especially important for the future of the region (Botillen and Riddervold, 2022). Arctic resources are an important strategic asset for Putin's regime. In the past, hydrocarbon reserves from the Yamal peninsula have pulled Russian gas production from the brink of failure, and, together with reserves from the Gyda peninsula, are crucial for the strategy of gaining influence by supplying cheap energy to global markets, especially European ones. Receding ice may make it even more cost-effective for

Russia to explore new sources of hydrocarbons, such as the Shtokman gas field under the Kola peninsula (Emmerson, 2010).

1.2. Routes

In the 20th century, the opening of the Panama and the Suez Canals had systemic effects on global shipping patterns. Newly-viable Arctic shipping routes have the potential to operate a similar change in today's system of maritime trade, redirecting some of the traffic from today's most used transcontinental routes by providing shortcuts from the Pacific to the Atlantic.

But although these routes are much shorter than the alternatives for transcontinental shipping (the Suez, Malacca, and Panama routes), several factors dictate costs that other routes are free of. The necessity of escort by icebreaker ship for some segments of the voyage and of experienced crews to navigate adverse polar weather conditions and shifting sea ice represent significant costs and drive up insurance premiums, leading companies to prefer longer routes.

However, receding summer sea ice is now opening interesting prospects regarding the Transpolar Sea Route (TSR), which crosses the Central Arctic Ocean. The area used to be accessible only by icebreakers, but that is changing. Winter sea ice is still not expected to disappear from the North Pole, unless average temperatures spiral out of control (McKay et al., 2022), and so the TSR will remain a seasonable route, but one becoming navigable for longer periods each year.

The North-West Passage route (NWP), which passes through Greenland and Canada's archipelagos, is also being eyed with interest by North American Arctic states, with 2014 marking the first time a cargo vessel was able to complete the journey without an icebreaker escort. Canada's claim to sovereignty over the waters of some straits in the NWP is worrying to the US, for whom freedom of navigation and overflight in the Arctic is a key concern (DoD, 2019).

More viable routes also increase accessibility to previously locked-up resources. The Northern Sea Route (NSR) lies within Russia's Exclusive Economic Zone (EEZ), presenting a valuable strategic opportunity for Russia to deliver hydrocarbon resources from the Arctic to global markets (Yermakov and Yermakova, 2021).

Russia claims that parts of the NSR are in its internal waters and therefore under its sovereignty, again raising eyebrows from other Arctic states, including the US. With its capable fleet of icebreakers (the world's largest) and sailing know-how in Arctic conditions, Russia may have expected to become indispensable for NSR navigation. However, a Belgium-bound ship completed the first unassisted commercial crossing of the NSR in 2019.

These routes can change the political dynamics by drawing new players to the Arctic. China has stated its desire of creating a Polar Silk Road (PRC, 2018), for which it has built and continues to develop icebreakers, which would guarantee it access to northern reserves and reduce its dependence on energy imports via the Malacca straits (Lanteigne, 2014).

1.3. Law and governance

Governance in the 'pole of peace' is under threat. Even without accounting for the melting and thawing of its landscape, the recent ramp up of great-power competition would suggest an increase in political tensions. The Arctic was an important theatre in Second World War and a security frontier between the West and the Soviet Union during the Cold War. It was only in the 1990s that cooperation between the US and Russia in the Arctic enabled a more stable environment, and regional diplomatic frameworks were established since.

Scientific cooperation in the region has been a bright spot since. It might be hoped that global warming creates the incentives to continue such collective endeavours, with more climate-sensitive public opinions pushing governments to maintain their efforts of collaborative governance and research in such an important region for the planet's climate (Hamilton, 2008; Hamilton and Fogg, 2019). However, this

is probably more likely to happen in democracies, and Russia's poor track record of prioritising global common goods such as the environment does not augur well (Henry, 2022).

Other hopes for the continuation of stable Arctic governance rest on the Arctic Council, which remains active despite the suspension of interstate meetings in the aftermath of the 2022 invasion of Ukraine (U.S. Department of State, 2022). Though it is a soft-law organisation and does not deal with security issues, the intergovernmental Arctic Council has delivered important agreements and is still apparently respected by its parties. It was formed in 1996 and brings together the eight Arctic States as full Members, six indigenous community councils as Permanent Participants, and several Observer states, including in 1998 Germany and the UK and in 2013 China, Japan, and India, all of which have sponsored scientific expeditions in the Arctic.

China appears to take its role as Arctic stakeholder quite seriously, envisioning the creation of a Polar Silk Road (PRC, 2018), getting involved in gas projects, and investing in the construction of ice-breakers (Drewniak et al., 2014). The European Union (EU) also appears to be awakening to the importance of the Arctic. The bloc's 2013 application for Observer status at the Arctic Council is still pending, but in 2021 the European Commission published a watershed statement of intent for the region (European Commission, 2021), and appointed an EU Special Envoy for Arctic Matters.

Despite the region's relative peacefulness, 'lawfare' (interstate conflict conducted through legal disputes) was already a feature of Arctic geopolitics before the start of the war in Ukraine in 2014. For the past few decades, Arctic states have been staking overlapping claims under the United Nations Convention on the Law of the Sea (UNCLOS), which is the main legal framework regulating the Arctic Ocean, despite the US not yet having ratified it.

Famously, a 2007 expedition led by Duma member Artur Chilingarov planted a titanium flag of the Russian Federation in the seabed under the North Pole. Currently, Russia argues that the Lemonosov ridge is an extension of its continental shelf, which under UNCLOS rules would extend its EEZ beyond 200 nautical miles to encompass 70% of the Arctic Ocean seabed.

The 2022 invasion of Ukraine may now lead two (non-coastal) Arctic states, Finland and Sweden, to join NATO, leaving Russia as the only non-NATO state in the Arctic and raising the possibility of the Arctic becoming a frontier as it was during the Cold War. The EU, Iceland, and Norway have already suspended regional cooperation with Russia both within the framework of Northern Dimension joint policy, and within the framework of the Council of the Baltic Sea States (CBSS) forum (EEAS, 2022a; 2022b). Arctic Council meetings have also been paused (U.S. Department of State, 2022), and the organisation faces an uncertain future (Exner-Pirot and Bloom, 2022).

In today's heightened state of great-power rivalries, states will likely be keener to demonstrate capabilities and to preserve their prestige. The need for reputation can take them to uncompromising stances in Arctic affairs, especially in cases where the Arctic occupies an important place in national identity, as happens with Russia and Canada. In a more crowded Arctic, perceived threats, slights, and humiliations may lead to conflict.

2. SECURITY IMPLICATIONS FOR THE NORTH ATLANTIC

The large-scale Russian invasion of Ukraine in February 2022 may come to be regarded as a tipping point for the Arctic, as it risks compromising international cooperation in the High North and turn it into a geopolitical shatterbelt, where NATO (perhaps extended to include the Arctic states of Finland and Sweden) meets Russia, and possibly also China.

That is a likely scenario if current global geopolitical trends continue. The spillover of Arctic securitisation into the North Atlantic is increasingly recognised in the

literature (Wegge, 2020; Lozier, 2022) and acknowledged in various strategy policy documents on both sides of the Atlantic, including NATO's 2022 Strategic Concept (NATO, 2022), the US Department of Defense's 2019 Arctic strategy (U.S. Department of Defense, 2019) and the recent Arctic strategy publications of Norway (Norwegian Government, 2021), Finland (Finnish Government, 2021), and the UK (House of Commons, 2018). Multiple sources of geopolitical risk can be identified; this section groups some of them under the headings of climate security and (broadly-defined) maritime security.

2.1. Climate security

Environmental degradation of the Arctic, largely frozen since the Quaternary glaciation 2.6 million years ago, threatens the entire planet. Many climate tipping points (CTPs) are expected to be crossed in the Arctic in the next few years. These CTPs are caused by warming feedback loops specific to the region and may end up triggering CTPs elsewhere.

A recent synthesis of multiple studies has found that even in the unlikely scenario where the rise in the average global temperature rise is limited to 1.5°C, we risk the collapse of the Greenland ice sheet, the abrupt thaw of Arctic permafrost, ice loss in the Berents sea, and the collapse of the Labrador Sea current (McKay et al., 2022). Other Arctic CTPs loom if the rise in temperature is much higher than 1.5°C.

One possible knock-on effect of such warming is the reversal of the planet's belt of deep ocean currents (thermohaline circulation), which is likely if the average temperature rise surpasses 2°C. This would slow down the Gulf Stream, which presently warms the east coast of North America and Europe's Atlantic seaboard. A stark change of the weather patterns of North America and Western and Northern Europe would follow (McKay et al., 2022).

In general, any increased human activity in the Arctic leads to more warming, especially shipping and resource-extraction. Governance arrangements should act on various risks posed by such activities, including the prevention and clean-up of oil spills and other accidents that further disturb a fragile ecosystem. The 2020 oil spill in Norilsk, Siberia, one of the world's largest ever, was caused partly by the infrastructural damage wrought by thawing permafrost (BBC, 2020).

The High North is home to global assets besides the ice and other ecosystems such as peatlands. From the cultures and languages of indigenous communities to the highly-adapted fauna and flora, all of them are worth the effort to preserve. But perhaps issues which threaten non-Arctic peoples more directly and in the short-term could be used to mobilise public opinion. For instance, permafrost thaw now endangers the Svalbard Global Seed Vault, the world's foremost strategic backup of genetic variety for crops, could also become vulnerable to environmental disasters such as floods, avalanches, and landslides during especially hot summers (Carrington, 2017).

North Atlantic states should then be concerned with climate change mitigation and adaptation in the Arctic, as well as at home. The scientific study of Arctic climate processes is one area where they can give a valuable contribution, as shown by the European Space Agency's programme of sea ice monitoring through satellite imagery (ESA, 2022).

Maintaining and improving governance arrangements that enhance the status of the Arctic Ocean as a global commons should remain, whenever possible, near the top of the agenda. However, enforcing rules and regulations may become more of a challenge as interstate relations in the Arctic become more confrontational. North Atlantic states should be careful not to let governance arrangements be used as a cover behind which Arctic and non-Arctic states such as Russia and China can endanger global common goods such as the climate and maritime security.

2.2. Maritime security

Russian military activity and capabilities have been increasing in the Arctic. Russia now has greater power projection to the North Atlantic through the improved surface and submarine capabilities of the Northern Fleet and the reactivation of several ex-Soviet bases in the High North (Larsonneur, 2021). Part of its nuclear arsenal, supposedly the world's largest, is hosted in Arctic locations, and could be used for deterrence and perhaps even compellence of European and North American countries.

Geographically and historically, the interface between the Russian Arctic and the North Atlantic is the 'GIUK gap', the maritime choke point between Greenland and Iceland and Iceland and the United Kingdom. In the Cold War, this was a key area of Soviet submarine activity. Submarine bastions formed an essential part of soviet grand strategy, with undetected ballistic missile submarines (SSBN) giving it the nuclear second-strike capability which meant the Soviet Union could be bolder in its confrontations with the West. Denying Soviet bastion strategy in the 1980s through effective surveillance was a fundamental part of the successful Western containment of the Soviet Union (Ford and Rosenberg, 2005).

Russia's submarine activity in the GIUK gap has expanded as much as tenfold recently, according to a UK House of Commons Defence Committee report (House of Commons, 2018). If unchecked, we may expect this increase in Arctic militarisation to spill over into the North Atlantic through the GIUK gap. Soviet submarines in the North Atlantic could target the critical infrastructure of subsea cables in the Atlantic seabed (Bueger et al., 2022) and severely disrupt European and American digital communications (Soames, 2019). This threat was highlighted recently by a series of submarine acts of sabotage which damaged the fibre-optic data cables serving Svalbard (Staalesen, 2022) and those serving the Shetland and Faroe Islands (Cope, 2022), as well as the explosions in both Nord Stream gas pipelines (Thomas and Maishman, 2022).

Such developments may encourage public awareness of subsea infrastructure and drive NATO to invest in its lagging submarine capabilities (Stringer, 2022).

Currently, NATO's anti-submarine warfare (ASW) capabilities may not be sufficient to counter Russia should it decide to pursue geopolitical goals in the Arctic and North Atlantic. A replay of the strategy of bastion defence is apparently underway and could leave the transatlantic security community on the back-foot. NATO intelligence, surveillance and reconnaissance (ISR) capabilities are needed in the North Atlantic to cover the GIUK gap and deny Russia a naval bastion in the area.

Threats to freedom of navigation in the Arctic should also concern North Atlantic states. These include Russia's claims to parts of the Northern Sea Route as internal waters (along with Canada's analogous claims to straits in the North-West Passage) should be a matter for international discussion. President Putin's recent behaviour of disregard for international norms makes Russian control of critical shipping routes especially troubling. China's apparent bid to become, with Russia, an indispensable provider of Arctic shipping through its icebreaker ship programme should also be monitored, as does its naval build-up more generally.

For these ends, ISR capabilities are crucial for North Atlantic states and organisations. Here, space is an important domain, and satellite data is not only important for military ends, but also for monitoring the volatile conditions in the Arctic and enable safer navigation, as well as for tracking civilian marine traffic, especially since the current transponder-reliant system of tracking, the Automatic Identification System (AIS), is frequently abused by scofflaw ships (Global Fishing Watch, 2021).

North Atlantic navies and coast guards should also be aware that they could face increased demands as regards search and rescue and disaster relief as a consequence of increased activity in the Arctic, especially if traffic along the NWP picks up. As for the NSR, one possible response from the US to increased Russian military presence and claims to sovereignty over marine passageways could be to conduct Freedom of Navigation Operations in the Arctic as a response. These would necessarily entail a risk of retaliation that the transatlantic security community should be prepared for.

CONCLUSION

The recent behaviour of Russia has made the transatlantic community pay closer attention to security challenges arising from the Arctic. China's global assertiveness, coupled with its newly-stated interest in the Arctic, compounds a possible threat from the High North. The EU has responded through its Arctic strategic document in 2021 (European Commission, 2021) and after the invasion of Ukraine, NATO Secretary-General Jens Stoltenberg called for an increased focus on Arctic security (Treeck, 2022).

These developments raise the question of closer EU-NATO cooperation in order to protect the transatlantic community's ability to maintain the integrity of the GIUK gap and the security of the Arctic's global public goods, should the need arise. Information sharing, joint planning, and operational cooperation between EU and NATO allies will be increasingly useful to meet the challenges originated by Arctic geopolitical dynamics.

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