Cold calculations

The future of Arctic security and the role of the Netherlands

Karen van Loon
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Clingendael Report

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Cover photo: Soldiers disembark from a helicopter and advance through snow during Exercise Joint Viking 2023. © Defensiekrant.

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The Clingendael Institute
P.O. Box 93080
2509 AB The Hague
The Netherlands

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Email: info@clingendael.org
Website: www.clingendael.org

About the authors

Karen van Loon is a Research Fellow in the Security and Defence programme within the Security Unit at the Clingendael Institute. Her research encompasses Arctic security as well as European security and defence matters.

Ben Bekkering gathered operational, international and managerial knowledge and experience in his 40 years as a naval officer. Soon after his retirement he joined the Clingendael Institute as Senior Associate Fellow, where his focus is on military strategy in relation to wider security challenges, NATO and EU and the maritime domain.

Youri Verschoor is a researcher at Clingendael's Security Unit, primarily working on the institute's Security & Defence programme. His research revolves around the security and defence domain, such as in relation to dynamic military developments, national and international defence policy, as well as EU and NATO affairs.

Dick Zandee is leading the Security and Defence programme of the Security Unit at the Clingendael Institute. His research focuses on European security and defence issues, EU-NATO, military forces and capability development, defence industry and other security topics.

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Executive summary

The Arctic has become increasingly relevant for the Netherlands and its citizens. Climate change and shifting geopolitical dynamics are reshaping the region. As the Arctic ice retreats, new maritime routes – potentially faster and more efficient than existing shipping lanes – are emerging, while access to vital resources such as oil, gas, critical raw materials, and rare earth elements is gradually expanding. At the same time, the military interest in the use of the Arctic region is increasing, also as a result of the Russian war against Ukraine. These developments directly affect global trade, environmental stability, and international security – all areas that touch upon Dutch interests and daily life, from economic growth and energy supply to digital infrastructure and climate resilience, and to stability and security in Northern Europe.

For a trading nation like the Netherlands, which relies heavily on secure and open sea routes, developments in the Arctic have significant implications. The Northern Sea Route (NSR), if opened further, could shorten shipping times between Europe and Asia, thereby impacting Dutch ports and logistics hubs. However, this potential gain is balanced by broader strategic concerns. As access increases, so too does geopolitical competition, with major powers reinforcing their military presence in the region. Therefore, considering the upcoming review of the Netherlands' Polar Strategy (2021-2025), this report aims to contribute to this task by analysing the most prominent Arctic security challenges, opportunities and interests of the Netherlands.

Arctic positions of Russia, China, and the US

Russia continues to assert a strong presence in the Arctic. Since its 2022 full-scale invasion of Ukraine, it has upgraded military infrastructure and continues to adapt its Northern Fleet and invests in dual-use facilities that blend civil and military functions. Its activities focus on securing economic interests along the NSR and protecting strategic assets such as submarines and oil fields. While framed in terms of national development, these moves have raised concerns among NATO allies and Arctic nations, given their implications for regional security.

China, although not geographically close to the Arctic, has made inroads through research partnerships, infrastructure investments, and technological collaboration-particularly with Russia. Presenting itself as a 'near-Arctic state', China emphasises science and sustainable development but pursues a long-term strategy that integrates economic and security interests. Its presence in Arctic research stations and satellite networks raises questions about dual-use technologies and the potential for surveillance or data collection capabilities that could affect European and Dutch interests.

The Sino-Russian partnership is not without tension: Russia's Arctic regions are traditionally sensitive to external influence, and there are signs that Russia views Chinese involvement with scepticism or reluctance. This underscores the complex and sometimes uneasy nature of Sino-Russian cooperation in the Arctic.

The US has also expanded its Arctic engagement, modernising early warning systems, strengthening military infrastructure in Alaska, and reinforcing ties with Nordic allies. Greenland has become a focal point of American policy, as it is strategically located near key Arctic transit routes and communications systems. President Trump's claims on Greenland are challenging Danish and Greenlandic sovereignty, potentially questioning the logic of transatlantic defence collaboration.

Arctic positions of NATO allies

A comparative assessment of Arctic strategies among ten Arctic and non-Arctic NATO allies reveals broad alignment in regional priorities. Military capabilities are being strengthened, NATO cooperation intensified, and investment in climate-resilient infrastructure increased. Canada and certain Nordic states have expanded their military and logistical presence in the region, while France, Germany, the UK, and the Netherlands emphasise environmental stewardship, legal norms, and hybrid threat mitigation. These trends underscore the need for the Netherlands to align more closely with its allies in safeguarding Arctic stability and ensuring access to strategic sea routes and digital infrastructure.

The weakening of Arctic governance

Established Arctic governance mechanisms, such as the Arctic Council, have been strained by geopolitical tensions, particularly since Russia's international isolation following its full-scale invasion of Ukraine. It is important to note that the Arctic Council, as a result of its founding mandate, is not authorised to discuss military or security issues – a limitation that was already a point of contention before 2022. In the absence of a comprehensive Arctic-wide forum that includes security matters, regional cooperation frameworks – many involving NATO and European partners – have grown in importance. These include formats like the Joint Expeditionary Force (JEF) and Nordic Defence Cooperation (NORDEFCO). While these efforts promote coordination and cooperation in strengthening security and defence, they also reflect a fragmentation of the broader institutional landscape, as no single body provides an overarching framework for addressing security challenges in the Arctic.

NATO and the EU

For NATO, the Arctic area has an increased importance, not only in view of the Russian threat but also after Finland and Sweden joined the Alliance. All the Nordic countries are now NATO allies, which has profound consequences for collective defence. The Regional Defense Plan Northwest will steer the capabilities that allies have to provide for this region. Thus, more NATO in the Arctic will impact Dutch defence planning, notably regarding the navy and the air force, whereas the Dutch army is focused on Central and Eastern Europe. Any rebalancing of NATO, resulting in the European Allies sharing a bigger part of the transatlantic burden, would deepen the impact of the increasing importance of the Arctic on Dutch defence planning. In any scenario, the Netherlands armed forces will not be starting from scratch. Military partnerships, such as the UK/NL Landing Force and the Joint Expeditionary Force (JEF), as well as the longstanding close collaboration with Norway, provide a solid foundation for additional responsibilities.

The EU is closely connected to the Arctic. Denmark, Finland, and Sweden are closely connected to the region, while Denmark's constitutional link to Greenland reinforces the EU's Arctic connection. The EU maintains a formal Arctic policy focused on sustainability, environmental protection, and international cooperation, emphasizing its commitment to a peaceful, sustainable, and

prosperous Arctic. Its 2022 Strategic Compass for Security and Defence highlights the Arctic's importance for EU security, economic development, and energy supply, but includes no Arctic-specific actions. The European Maritime Security Strategy and its Action Plan (EUMSS) acknowledge the Arctic as a zone of growing maritime activity and calls for improved maritime domain awareness (MDA), greater cooperation, and strengthened capabilities among EU member states. Given the intergovernmental nature of the Common Security and Defence Policy (CSDP), the development and implementation of Arctic-focused military initiatives is unlikely. However, against the backdrop of the fundamental geopolitical changes facing the EU, in particular the US reappraisal of the transatlantic relationship, future Arctic-focused EU-led or EU-supported military initiatives cannot be ruled out.

Technological innovations

The Arctic has also seen an increase in hybrid threats, including cyberattacks, electronic interference, and the suspected sabotage of undersea infrastructure – activities that can disrupt maritime traffic, digital networks, and communications. These threats are also of importance for the Netherlands, given its reliance on digital connectivity and maritime trade. The country's expertise in cybersecurity, satellite monitoring, and undersea cable protection is highly relevant in this context and can contribute to broader efforts to strengthen Arctic resilience.

Impact on the Netherlands

For the Netherlands, the strategic importance of the Arctic is clear. The country is directly affected by changes to global trade routes, energy supply chains, and the international security environment. It also has a strong track record in climate adaptation, maritime innovation, and international diplomacy – particularly in efforts to strengthen the international rules-based order – areas that are becoming increasingly important in Arctic policymaking. As a member of the EU and NATO, and as an Observer in the Arctic Council and a participant in other Arctic forums, the Netherlands has both the opportunity and responsibility to help shape regional outcomes.

To remain an effective and engaged actor, the Netherlands should align its objectives in the Dutch Polar Strategy with current geopolitical realities. This includes contributing even more actively to NATO's deterrence and defence posture in the High North, to EU-led initiatives, and by deepening partnerships in areas such as environmental monitoring and infrastructure resilience.

In sum, developments in the Arctic are not abstract or distant. They entail direct implications for the Netherlands in terms of trade, security, environmental policy, and technological resilience. A clear, pragmatic approach – grounded in the international rules-based order and cooperation, strategic foresight, and Dutch expertise – will be essential as the Arctic becomes an increasingly integral part of the global landscape.

1 Introduction

The Arctic is rapidly transforming. Climate change is accelerating the melting of sea ice, opening new maritime routes and increasing access to critical resources such as oil, gas, and rare earth elements. At the same time, the region is becoming a strategic pressure point, where the interests of major powers – Russia, the US, and China – increasingly intersect and compete. Russia's full-scale invasion of Ukraine has further heightened tensions, undermining decades of cooperation and stability in the Arctic. For the Netherlands, a globally connected trading nation, these developments have direct implications: from the security of trade routes and energy supply chains to the stability of the European neighbourhood and the resilience of critical digital and maritime infrastructure.

In this context, the Dutch government is preparing to update the Netherlands Polar Strategy (2021–2025). This report aims to inform and support that process by identifying the key trends shaping Arctic security, outlining the opportunities and risks for the Netherlands, and providing concrete recommendations for Dutch engagement in the region.

The central research question guiding this report is the following:

How can the Netherlands effectively contribute to stability, security, and resilience in the rapidly changing Arctic region?

To answer this question, the report focuses on three overarching trends that define the evolving Arctic landscape:

- **Geopolitical competition and militarisation:** The Arctic is no longer an isolated zone of peaceful cooperation but a contested arena where Russia's assertive posture, China's strategic ambitions, the US' increasingly aggressive rhetoric and actions, and NATO's growing interests intersect – thereby raising the stakes for regional stability.
- **Climate change and economic opportunity:** Melting ice opens up new shipping routes, access to resources, and economic potential-but also amplifies environmental risks, legal uncertainties, and governance challenges that demand international cooperation.

- **Technological transformation:** Advances in artificial intelligence, satellite capabilities, cyber infrastructure, and autonomous systems are reshaping Arctic security, offering new tools for resilience but also creating vulnerabilities, from hybrid threats to critical infrastructure risks. Emerging topics like geo-engineering further complicate the strategic landscape.

For the Netherlands, these trends converge into a pressing question: how to safeguard its interests – economic, environmental, and security-related – while contributing to the stability and sustainability of the Arctic region? As a NATO and EU member, a trading nation reliant on maritime flows, and a country with sound expertise in climate adaptation and technology, the Netherlands has a stake, a responsibility, and expertise in shaping Arctic outcomes.

This report is structured as follows:

- Chapter 2 analyses key trends in Arctic security, focusing on the regional implications of great power competition, climate change, and evolving military postures.
- Chapter 3 assesses the Arctic strategies and actions of key stakeholders, including the Arctic states, France, Germany, the United Kingdom, and the Netherlands.
- Chapter 4 examines the roles of NATO and the EU in Arctic security.
- Chapter 5 discusses governance challenges and the future role of institutional frameworks in managing Arctic affairs.
- Chapter 6 explores the risks and opportunities arising from technological developments in the region.
- Chapter 7 presents conclusions and recommendations to help the Netherlands navigate the increasingly complex and contested Arctic environment up to 2031 and beyond.

This study is based on a mixed-methods approach, combining a comprehensive literature review with interviews conducted under the Chatham House Rule among experts from the Arctic states, Germany, the Netherlands, the United Kingdom, the EU, and NATO. The interviews provided valuable insights into evolving security dynamics, technological trends, and regional cooperation mechanisms, although names and affiliations are not disclosed to protect confidentiality.

In addition, as part of the report's annex, four notable experts have contributed written analyses focusing on specific geopolitical and legal topics regarding Arctic security:

- Andreas Østhagen explores the geopolitics of Svalbard;
- Karsten Friis examines Norway's defence policy in the High North;
- Romain Chuffart analyses the legal status of the Northwest Passage and its alignment with the Ilulissat Declaration;
- Jon Rahbek-Clemmensen discusses the strategic relevance of Greenland within Arctic security dynamics.

The authors would like to express their gratitude to these experts for their valuable contributions, the content of which remains their sole responsibility.[1]

By offering an integrated perspective on the Arctic's evolving security environment, this report aims to support a clear-eyed, pragmatic, and forward-looking Dutch strategy-one that combines environmental stewardship, technological innovation, and a proactive role in NATO and EU frameworks.

1 The authors would like to thank David Alders and Bart van der Wal for their valuable contributions to this report.

2 Geopolitical developments in the Arctic

Map 1 The Arctic states

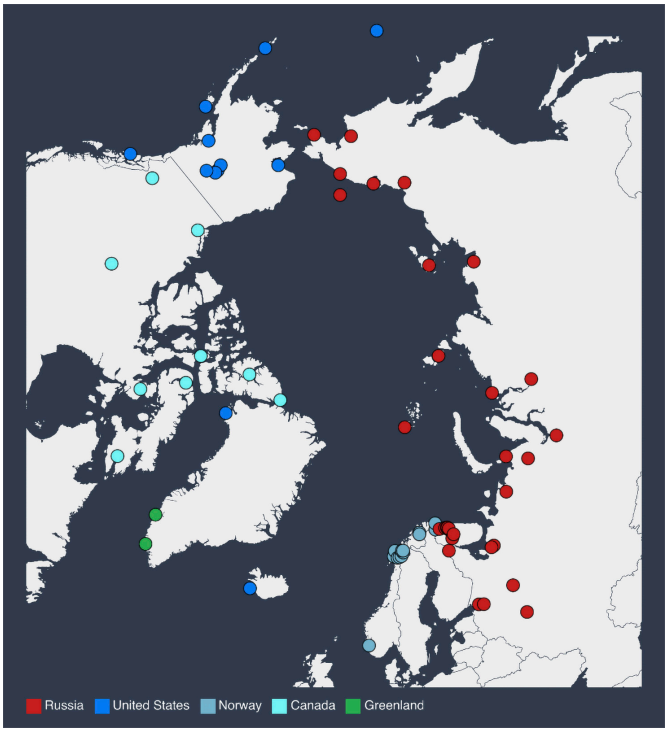
Created with datawrapper.

While climate change remains the main threat to the Arctic,[2] these environmental changes unfold against the backdrop of escalating global tensions – especially since Russia's 2022 full-scale invasion of Ukraine – transforming the Arctic into a contested geopolitical theatre.

2 See map. The Arctic region is defined as the area around the North Pole, north of the Arctic Circle (latitude 66 degrees, 32 minutes North). It includes the Arctic Ocean, the territories of the 8 Arctic States and their Extended Economic Zones (EEZs): Canada, the Kingdom of Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway, the Russian Federation, Sweden and the United States. This definition was adopted by all Arctic states with the establishment of the Arctic Council in 1996 and is de facto accepted by all Observer States. Other definitions, based on average temperature or tree growth exist but are less commonly used.

Russia and China have expanded their military, economic, and hybrid activities in the region, thereby challenging the existing security balance and regional governance frameworks. In parallel, the United States has significantly intensified its Arctic engagement in recent years. Its growing interest in Greenland and long-term infrastructure investments signal a broader commitment to regional presence and deterrence.

Infographic 1 Military facilities in the High North



Source: The Simons Foundation. Created with Datawrapper.

Russia

Russia views the Arctic as a vital military and economic zone, spanning from the European High North[3] to the North Pacific. The region is home to the Northern and Pacific Fleet's strategic nuclear deterrence, including Russia's second-strike SSBN capability. Moreover, both fleets enable Moscow to rapidly redeploy military assets between the Atlantic and the Pacific, thereby providing it with the unique opportunity to connect two theatres of operation. As sea ice diminishes due to climate change, Moscow perceives both increased economic opportunities and a heightened sense of vulnerability along its 14,000-kilometre Arctic coastline.[4]

Economically, the Arctic constitutes approximately 10% of Russia's GDP, which is primarily derived from oil and gas exploration.[5] Amidst international sanctions following its 2022 full-scale invasion of Ukraine, Moscow identifies particularly the opening of the Northern Sea Route (NSR) and an enhanced access to hydrocarbons and rare earth elements as essential to national resilience.[6] Meanwhile, however, Russia sees this potential for economic gain as a strategic threat as well, thereby justifying a more assertive Arctic posture. Nowhere is this dual logic more apparent than in Russia's approach to the NSR. While it offers significant economic promises as a shorter alternative to traditional shipping lanes, its increased accessibility through receding ice levels also exposes a once-protected frontier.[7] Moscow's interpretation of this shift – as either an economic enabler or a strategic liability – plays a central role in shaping its Arctic

3 Many publications use the term "the High North" interchangeably with "the Arctic". However, whereas the Arctic refers to a clear geographically demarcated area, "the High North" is a concept that is not often defined. The notion originally stems from Norwegian policy, where it refers to a subregion: "the European Arctic". This area stretches from Greenland in the West to the Norwegian-Russian border in the Barents Sea in the East and encompasses areas of strategic importance such as the Greenland-Iceland-UK (GIUK) Gap and Svalbard. This report uses this term when it refers to the European Arctic or when an original publication uses the term.

4 Mathieu Boulègue, 'The Impact of the War Against Ukraine on Russia's Arctic Posture: Hard Power on Vulnerable Ice', *Wilson Center*, June 2024.

5 Elizabeth Buchanan, 'Russia's Arctic strategy: Drivers, hybridity and possible future', *Hybrid CoE*, December 2021.

6 Patrick Cullen, 'NATO and the EU in the Arctic: Engagement with Russian and Chinese hybrid challenges', *Hybrid CoE*, December 2021.

7 Mathieu Boulègue, 'The militarization of Russian polar politics', *Chatham House*, June 2022.

behaviour and informs the broader geopolitical dynamics faced by Western (non-)Arctic states.

In response to these pressures, Russia has prioritised asserting sovereignty over the Arctic Zone of the Russian Federation (AZRF) and the NSR. It has reactivated the Cold War-era Bastion defence concept, centred around an anti-access/area-denial (A2/AD) network tasked with securing its northern coastline and ensuring freedom of operation for its nuclear submarines.[8] The strategy covers key maritime zones, including the Barents Sea, the Norwegian Sea, and the Greenland-Iceland-UK (GIUK) and Greenland-Iceland-Norway (GIN) gaps.

This A2/AD network, which includes air defence and sea-denial systems, represents a significant challenge to NATO, particularly as it affects Sea Lines of Communication that are vital for transatlantic reinforcements. The Bastion strategy underscores the broader security implications of Russia's Arctic militarisation for the alliance.

Russia's Arctic (re)militarisation

Russia began rebuilding Arctic capabilities in 2007 as part of a broader push to restore its great power status.[9] Although continuing to fall short of Moscow's Cold-War era levels of Arctic military capabilities, this effort has particularly accelerated following the 2022 invasion of Ukraine.[10] A major shift occurred in 2024, when Russia reversed its decision to transform the Northern Fleet into a Northern Military District, instead including it as part of the Soviet-era Leningrad Military District located in Russia's North-West.[11]

New capabilities include the Borei-A SSBNs and the Yasen-M SSGNs equipped with Zircon missiles, as well as innovative nuclear weapons such as the Burevestnik cruise missile and the Poseidon torpedo. In 2025, President Putin

8 Information from interviews.

9 Heather A. Conley et al., 'The Ice Curtain: Russia's Arctic Military Presence', *Center for Strategic & International Studies*, 26 March 2020.

10 Information from interviews.

11 On the military-administrative division of the Russian Federation', *Official Publication of Legal Texts*, 26 February 2024.

announced additional plans to expand Arctic ground forces,[12] thereby enhancing Russia's regional capabilities particularly in the context of heavy losses suffered by the 80th and 200th Arctic Brigades in Ukraine.[13]

Russia is also investing in dual-use and dual-purpose infrastructure.[14] It has rebuilt over 50 Soviet-era forward bases, continues its efforts to arm at least part of its icebreaker fleet under Project 23550,[15] as well as is involved in the construction of Arctic-capable 'research' vessels.[16] These developments blend civil and military functions and aim to assert Russian control while appearing to be harmless and cooperative.

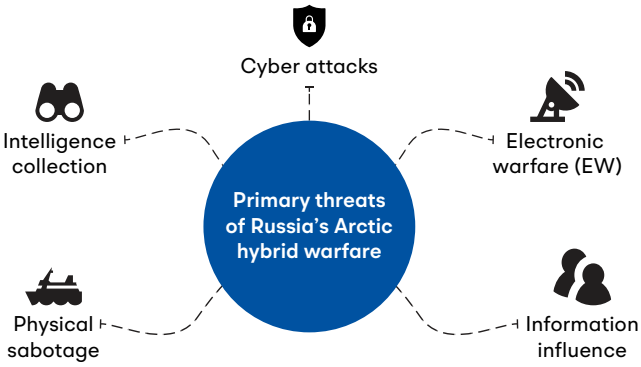
This dynamic is particularly evident along the NSR, where Russia's economic ambitions intersect with contested legal interpretations. While other states view the route as international waters governed by the United Nations Convention on the Law of the Sea (UNCLOS) and the principle of freedom of navigation, Russia asserts sovereignty based on Article 234 – the so-called 'ice clause.'[17] As climate change reduces ice cover, thereby weakening the legal basis for this claim, Moscow fears increased NATO activity, including potential Freedom of Navigation Operations (FONOPs), which it views as a challenge to both its national security and authority.[18]

In practice, this remilitarisation strategy including dual-use and dual-purpose elements has enabled Russia to assert its sovereignty over the NSR while simultaneously presenting its military build-up as being civilian in nature, thereby positioning it as supportive of international economic cooperation in shipping and resource development.

12 'The Arctic: Territory of Dialogue international forum', *President of Russia*, 27 March 2025.
13 Thomas Nilsen, 'Arctic Brigade severely weakened', *The Barents Observer*, 19 December 2022.
14 Mathieu Boulègue, 'The militarization of Russian polar politics'.
15 Heather A. Conley et al., 'The Ice Curtain: Russia's Arctic Military Presence'.
16 Elizaveta Vereykina, 'Construction begins on a "new flagship of Russian polar research"', *The Barents Observer*, 30 October 2024.
17 United Nations, 'United Nations Convention on the Law of the Sea', 10 December 1982.
18 Elizabeth Buchanan, 'Russia's Arctic strategy: Drivers, hybridity and possible futures'.

Russia's Arctic hybrid warfare

Infographic 2 Primary threats of Russia's Arctic hybrid warfare



Russia's Arctic hybrid activities have grown in complexity. These include, most notably, intelligence collection, cyberattacks, electronic warfare, information operations, and physical sabotage.[19] The objective is to undermine Western cohesion while remaining below the threshold of open conflict.[20] See box 1 for an overview of these hybrid threats.

19 Information from interviews.

20 Andreas Østhagen, 'The Arctic after Russia's invasion of Ukraine: The increased risk of conflict and hybrid threats', *Hybrid CoE*, May 2023.

Box 1. Russia's Arctic hybrid warfare instruments

Intelligence collection

Russia uses cyber tools, human intelligence operations within municipalities[21] and research institutions,[22] surveillance near subsea cables,[23] and even beluga whales and sealions for reconnaissance and intelligence collection purposes.[24]

Cyberattacks

These include Distributed Denial-of-Service (DDoS) attacks against Greenland's Parliament[25], Icelandic infrastructure,[26] and Sweden's election authority.[27] Although they are largely unsuccessful in having long-lasting impacts, such operations take place on a continuous basis.[28]

Electronic warfare (EW)

Russian electronic warfare (EW) activities in the Arctic have been on the rise since Moscow's 2022 full-scale invasion into Ukraine as well. GPS jamming and spoofing activities are regularly traced to Russian installations on the Kola Peninsula. These have disrupted NATO exercises,[29] civilian aviation,[30] and maritime navigation.[31]

21 Ben Taub, 'Russia's Espionage War in the Arctic', The New Yorker, 9 September 2024.
22 'Norway charges man accused of being a Russian spy', BBC News, 28 October 2022.
23 Niels Fastrup et al., 'Russian spy ships are preparing possible sabotage against offshore wind turbines, gas pipelines and power cables in Denmark and the Nordic countries', *Danish Broadcasting Corporation (DR)*, 19 April 2023.
24 'Beluga whale with Russian harness raises alarm in Norway', *AP News*, 29 April 2019; Elisabeth Braw, 'Has Hvaldimir, Putin's Secret Weapon, Defected?', *Foreign Policy*, 5 June 2023.
25 Nina-Vivi Møller Andersen & Thomas Veirum, 'Naalakkersuisut: IT problems are due to serious cyber-attack', *Sermitsiaq*, 18 May 2022.
26 Larissa Kyzer, 'Icelandic Websites Under Cyber Attack', *Icelandic Review*, 15 April 2022.
27 'Sweden's Election authority has been hit by three DDoS cyber-attacks in the space of less than 24 hours on the day of Sweden's general election', *TheLocal.se*, 11 September 2022.
28 Katarina Kertysova & Gabriella Gricius, 'Countering Russia's Hybrid Threats in the Arctic'.
29 Ryan Browne, 'Russia jammed GPS during major NATO military exercise with US troops', *CNN*, 14 November 2018.
30 Thomas Nilsen, 'Russian jamming is now messing up GPS signals for Norwegian aviation practically every day', *The Barents Observer*, 26 February 2024.
31 Anna Kauranen, 'Finland detects satellite navigation jamming and spoofing in Baltic Sea', *Reuters*, 31 October 2024.

Information influence

Another facet of Russia's hybrid warfare strategy in the Arctic involves intensified information influence operations, shaped by broader geopolitical tensions. These campaigns advance a dual narrative-projecting Russian Arctic dominance while portraying NATO as a looming threat. Rather than a uniform approach, Russia tailors its messaging to specific audiences, often exploiting existing societal divisions, particularly among Russian-speaking minorities. Examples include disinformation campaigns in Greenland[32] and Gotland,[33] and narratives around NATO misconduct.[34]

Physical sabotage

Russia has reportedly engaged in sabotaging critical undersea infra-structure (CUI), including energy pipelines and subsea cables – assets that are vast, difficult to monitor, and lightly regulated. The low threshold for physical disruption enables Russia to target Arctic infrastructure without triggering open conflict.[35] Of particular concern are Russia's Main Directorate of Deep-Sea Research (GUGI)-operated assets like the *Losharik* submarine and the *Yantar* intelligence ship, both capable of mapping and potentially severing cables. Additionally, Russia's increasing use of its shadow fleet – including cargo and fishing vessels – for covert operations reflects the blurred civil-military lines that are characteristic of its hybrid strategy. Notable incidents occurred in Norway (2021[36], 2022[37]) and the Gulf of Finland (2024[38]).

32 Alistair Coleman & Matilda Welin, 'Greenland minister at centre of fake letter affair', *BBC News*, 13 November 2019.

33 Whitney Lackenbauer et al., 'Russian Information Operations: The Kremlin's Competitive Narratives and Arctic Influence Objectives', *Journal of Peace and War Studies*, 2022.

34 Whitney Lackenbauer et al., 'Russian Information Operations: The Kremlin's Competitive Narratives and Arctic Influence Objectives'.

35 Sophia Besch & Erik Brown, 'Securing Europe's Subsea Data Cables', *Carnegie Endowment for International Peace*, December 2024.

36 Thomas Newdick, 'Norwegian Undersea Surveillance Network had its Cables Mysteriously Cut', *The War Zone*, 11 November 2021.

37 Jordan Robertson & Drake Bennett, 'A Subsea Cable Went Missing: Was Russia to Blame?', *Bloomberg*, 11 July 2024.

38 David Crossland, 'Anchor drag marks found in investigation into Russia-linked 'spy-ship'', *The Times*, 30 December 2024.

China

China sees the Arctic as a new strategic frontier and aims to become a 'Polar Great Power' by 2035.[39] Although geographically distant, China declared itself a 'near-Arctic state' in its 2018 Arctic Policy White Paper and has since promoted the idea that the Arctic is part of the Global Commons, thereby seeking to justify an enhanced Chinese presence.[40]

Since 2022, China has moderated its public Arctic messaging due to global tensions.[41] Yet, it has established and continues to expand its regional footprint through primarily scientific, economic, and hybrid activities.

China's military Arctic presence

While previously being present in the Barents Sea,[42] China does not currently maintain a permanent military presence in the Arctic. Instead, it has engaged in joint operations with Russia. These include a 2024 bomber patrol entering Alaska's Air Defense Identification Zone (ADIZ),[43] joint coastguard patrols in the Bering Strait after a 2023 Memorandum of Understanding (MoU) between the Chinese Coast Guard and Russia's secret service FSB,[44] and the Ocean-2024 naval exercise.[45] While relatively limited in scope, such cooperation raises concerns about miscalculation and escalation, while highlighting the need to monitor China's hybrid footprint as well.

China's hybrid Arctic presence

China approaches Arctic security in a holistic sense through its broad concept of 'total national security,' in which the state's overall security relates to such

39 Camilla T.N. Sørensen, 'The Evolving Chinese Strategy in the Arctic: Entering the Grey Zone?', In: Hybrid Threats and Grey Zone Conflict (Edited by: Mitt Regan & Aurel Sari), *Oxford University Press*, April 2024.

40 The State Council Information Office of the People's Republic of China, 'China's Arctic Policy', 26 January 2018.

41 Information from interviews.

42 Ibid.

43 North American Aerospace Defense Command, 'NORAD detects, tracks and intercepts Russian and PRC aircraft operating in the Alaskan ADIZ', 24 July 2024.

44 Astri Edvardsen & Birgitte Annie Hansen, 'China's Coast Guard on First Patrol in the Arctic With Russia', *High North News*, 4 October 2024.

45 Thomas Nilsen, 'Admiral Moiseev launches massive Ocean-2024 strategic exercise', *The Barents Observer*, 10 September 2024.

dimensions as scientific, economic, societal and informational security.[46] As part of this, Beijing has adopted a 'military-civil fusion strategy' whereby seemingly civilian efforts have potential military applications as well.[47] Therefore, in assessing China's overall Arctic presence and its security implications, the military domain must be complemented by the state's regional presence through the hybrid domain as well. In particular, the most fundamental challenges emanating from China's hybrid regional presence are found to be derived from its scientific and economic activities in the Arctic.

China's Yellow River station on Svalbard and the China-Iceland Joint Arctic Science Observatory (CIAO) conduct polar research but are suspected of supporting military surveillance, including NATO airspace monitoring.[48] Moreover, China has developed underwater acoustic sensor networks and has launched satellites – such as Ice Pathfinder (2019) – as part of its tripolar observation satellite constellation to improve Arctic situational awareness.[49] Its BeiDou-3 satellite system, meanwhile, is progressively integrating with Russia's global positioning system (GLONASS), providing positioning data with potential military applications.[50]

Through the Polar Silk Road, China has sought to strategically invest in Arctic infrastructure and energy projects as well. However, its initiatives in Western Arctic states have largely failed due to security concerns – such as blocked airport and mining projects in Greenland and Canada – which exemplifies the importance of Western security screening complementing such economic projects.[51] Meanwhile, Chinese economic cooperation with Russia has intensified, particularly in the light of Russia being targeted by a Western sanctions regime in response to its invasion of Ukraine.[52] Most notably, China

46 Matti Puranen & Sanna Kopra, 'China's Arctic Strategy: a Comprehensive Approach in Times of Great Power Rivalry', *Scandinavian Journal of Military Studies* 6(1), 2023.

47 Xiao Tianliang, 'The Science of Military Strategy', *National Defense University Press*, 2020.

48 Gregory Falco et al., 'Undercover Infrastructure: Dual-Use Arctic Satellite Ground Stations', *Centre for International Governance Innovation*, April 2024.

49 Stephanie Pezard et al., 'China's Economic, Scientific, and Information Activities in the Arctic: Benign Activities or Hidden Agenda?', *RAND Corporation*, 23 January 2025.

50 Roman Kolodii et al., 'High Tech, High Risk? Russo-Chinese Cooperation on Emerging Technologies', *RUSI*, 1 March 2024.

51 Information from interviews.

52 Ibid.

holds a combined 29.9% stake in the Yamal LNG project,[53] is involved in the development of the Arctic LNG 2 project[54] and is investing in the Arkhangelsk deep-water port.[55]

Sino-Russian cooperation

With Russia seeking Chinese capital in the face of a comprehensive Western sanctions regime in response to Moscow's 2022 invasion of Ukraine, and with China seeking Russian entry points into the Arctic as a non-Arctic state, Moscow and Beijing have increasingly widened their Arctic cooperation, primarily through joint military exercises and Arctic economic ventures. However, fundamental strategic differences persist. While Russia seeks to limit non-Arctic actors and to enforce its sovereignty,[56] China promotes the internationalisation of the region to justify an enhanced non-Arctic presence.[57] Although often described as a strategic partnership, the relationship could therefore more aptly be viewed as an 'axis of convenience.'[58] Future cooperation levels will likely depend on the broader geopolitical environment.

United States

Although recent Russian and Chinese military activity in the region has intensified American concern, the United States' Arctic posture is also shaped by long-term strategic planning. In 2024, the Department of Defense released a new

53 'Russia, China discuss Beijing's participation in Russian LNG projects', *Gas Processing & LNG*, 8 May 2025.

54 Malte Humpert, 'Russia Continues Working on Sanctioned Arctic LNG 2 with Wison Power Modules Installation and Gas Flaring', *High North News*, 3 April 2025.

55 Thomas Nilsen, 'New mega-port in Arkhangelsk with Chinese investments', *The Barents Observer*, 21 October 2016.

56 Adam Lajeunesse et al., 'Friction Points in the Sino-Russian Arctic Partnership', *Joint Force Quarterly* 111, 30 October 2023.

57 Andrei Dagaev, 'The Arctic is Testing the Limits of the Sino-Russian Partnership', *Carnegie Endowment for International Peace*, 18 February 2025.

58 Andrew Foxall, 'The Sino-Russian Partnership in the Arctic', In: On Thin Ice? Perspectives on Arctic Security (Edited by Duncan Depledge & P. Whitney Lackenbauer), *The North American Arctic Security and Defence Network*, 2021.

Arctic Strategy,[59] reflecting growing urgency amid intensifying great-power competition. It focuses on enhancing US military capabilities in the region, deepening alliances, and maintaining a credible presence to bolster readiness and deterrence, especially considering increasing Russian-Chinese cooperation.

This defence-oriented approach complements the broader objectives of the 2022 *National Strategy for the Arctic Region* (NSAR),[60] which prioritises security, sustainable development, climate resilience, and international cooperation.

In 2024, Dr. Mike Sfraga became the first US Ambassador at Large for Arctic Affairs -a milestone in formalising Arctic diplomacy. Confirmed in September and sworn in on October 1, he coordinated Arctic policy across agencies and represented the US in international forums. He stepped down after President Trump's inauguration in January 2025. Currently, the position remains vacant, raising concerns about the continuity of the American diplomatic Arctic engagement.[61] These concerns are also linked to the Trump administration's strategic intentions towards Russia, with a particular focus on economic cooperation and benefits.[62] Any change in the US-Russia relationship may likewise impact the US's engagement in the Arctic region as well.

Geoeconomic interests also feature prominently in US Arctic engagement, especially in Alaska. The Willow Oil Project,[63] approved in March 2023, is progressing despite opposition from environmental groups and Indigenous communities. With construction underway and the first production anticipated by early 2029, the project is expected to peak at 180,000 barrels per day, reinforcing domestic energy security. Meanwhile, critical mineral development has gained momentum. Alaska contains 49 of the 50 critical minerals identified by the US Geological Survey. In early 2025, the University of Alaska Fairbanks received £7.5 million (EUR 8.9 million) in federal funding for research, and ten domestic mining projects were added to a fast-track permitting scheme.[64]

59 U.S. Department of Defense, '2024 Arctic Strategy', June 2024.

60 The White House, 'National Strategy for the Arctic Region', October 2022.

61 Nathaniel Herz, 'As Trump eyes Greenland and Arctic resources, America's ambassadorship for the region goes unfilled', *Northern Journal*, 21 April 2025.

62 ''US, Russia Mull Cooperation on Arctic Trade Routes, Exploration', *Bloomberg*, 26 February 2025.

63 Alexandra Kay, 'ConocoPhillips Alaska Update: Plans for Greater Mooses Tooth 2, Nuna, and Willow', *Alaska Business*, 20 May 2024.

64 Shane Lasley, 'UAF awarded $9.4M for critical materials', *North of 60 Mining News*, 10 January 2025.

Infrastructure development, however, has faced setbacks. Plans for the Port of Nome – intended as the first US deep-water port in the Arctic – were disrupted when bids exceeded budget allocations, and the Alaska Senate's April 2025 decision to withdraw state funding has cast doubt on the project's viability.[65] For an overview of US activities, see box 2.

Box 2. US Arctic defence footprint and allied cooperation

Air & missile defence

- 54 F-35A jet aircraft deployed to Eielson Air Force Base; enhanced capabilities at Joint Base Elmendorf-Richardson establish Alaska as a strategic hub.[66]
- Fort Greely missile defences upgraded with additional interceptors to counter intercontinental threats.[67]

NORAD modernisation

- US and Canada undertaking a joint overhaul of Arctic early-warning systems.
- Canada committed over $38B to a 20-year plan including over-the-horizon radar, satellite comms, and new command/control infrastructure.[68]

Maritime expansion

- US Coast Guard increasing Arctic patrols; Polar Security Cutters program delayed, with Polar Sentinel now expected by 2030.[69]
- Patrols increasingly include NATO partners to assert freedom of navigation.

65 Ben Townsend, 'USACE cancels solicitation for Nome's port expansion project, future uncertain', *KNOM*, 17 October 2024.

66 'Arrival of final 2 F-35s completes complement at Alaska base', *Defense News*, 18 April 2022.

67 'Boeing delivers additional Ground-Based Interceptors to MDA', *Boeing*, 19 December 2022.

68 Department of National Defence, 'NORAD modernization project timelines', Accessed 14 May 2025.

69 Eric Haun, 'Bollinger cleared for full production of long-delayed Coast Guard Icebreaker', *WorkBoat*, 4 May 2025.

Nordic integration

- New Defense Cooperation Agreements (DCAs) with Finland, Sweden, Denmark, and an expanded deal with Norway.[70]
- Agreements grant US access to military facilities and infrastructure across Northern Europe.[71]

Joint operations

- First US Bomber Task Force deployment to Sweden.[72]
- Participation in Nordic Response exercises in Norway.[73]

ICE Pact (2024)

- Trilateral initiative by the US, Canada, and Finland to coordinate Arctic shipbuilding and to boost icebreaking capabilities amid rising Russian/Chinese presence.[74]

Renewed interest in Greenland

Under the current US administration, Greenland has re-emerged as an important component of American Arctic strategy.[75] However, this renewed focus has at times been accompanied by assertive rhetoric and proposals that echo earlier, more controversial suggestions such as expanded military basing rights or even the possibility of a long-term strategic lease or acquisition of Greenland. While these ideas have not advanced through formal diplomatic channels, their periodic resurfacing has raised serious concerns in both Denmark and Greenland, potentially complicating transatlantic relationships and shared objectives in the Arctic.

70 U.S. Embassy Finland, 'The United States and Finland Signed a Defense Cooperation Agreement on December 18, 2023', 21 December 2023; The Government of Sweden, 'Defence Cooperation Agreement with the US signed', 6 December 2023; Isabelle Yr Carlsson & Stine Jacobsen, 'Denmark inches towards ratifying US defence deal despite Greenland dispute', *Reuters*, 11 April 2025.

71 Astri Edvardsen & Birgitte Annie Hansen, 'New Agreement Gives US Access to Four New Military Areas in the North', *High North News*, 7 February 2024.

72 Karsten Friis, 'Reviving Nordic Security and Defense Cooperation', *Carnegie Endowment for International Peace*, 2 October 2024.

73 North Atlantic Treaty Organization, 'NATO's marines brave the Norwegian arctic for exercise Nordic Response 24', 13 March 2024.

74 U.S. Department of Homeland Security, 'Joint Statement on Signing of "ICE Pact" MOU between the United States, Canada, and Finland', 13 November 2024.

75 See Annex 4.

In his March 2025 speech at the International Arctic Forum in Murmansk, President Putin described the US interest in Greenland as part of a long-standing strategic agenda,[76] framing it as a predictable extension of past efforts. While criticising Western expansionism, his remarks implicitly endorse the idea that historical claims justify modern ambitions-a rationale that echoes Russia's own justification for its actions in Ukraine and challenges international norms concerning sovereignty. Renewed interest in Greenland has thus not gone unnoticed by global rivals, which interpret such moves through the lens of their own geopolitical narratives.

Greenland's strategic significance continues to underpin American interest in the region. Infrastructure upgrades at Pituffik Space Base reflect ongoing defence priorities. These objectives are already supported through long-standing frameworks, most notably the 1951 US-Denmark Defense Agreement[77], which provides the legal foundation for an American military presence in Greenland. At its height during the Cold War, the United States maintained 17 military installations across Greenland, underscoring its critical role in Arctic defence strategy. However, the overall US military presence has since decreased in absolute terms, both in the number of installations and personnel.

Among these agreements, the 2018 Defense Statement of Intent[78] between the United States, Denmark, and Greenland outlined plans for US investment in dual-use infrastructure aimed at benefiting both civilian and military stakeholders. That same year, Denmark and Greenland reached a separate agreement to address the environmental remediation of 20+ abandoned American military sites.[79] This pattern reflects pragmatic engagement that can appear cooperative when interests align, rather than being truly driven by mutual interests.

Taken together, these existing mechanisms suggest that the United States already has effective tools to support its strategic goals in Greenland without the need for provocative proposals. Nevertheless, it remains to be seen whether the Trump administration will follow up on its assertive rhetoric and more controversial suggestions.

76 'Putin says US push for Greenland rooted in history, vows to uphold Russian interest in the Arctic | AP News', *Associated Press*, 28 March 2025.

77 The Avalon Project, 'Defense of Greenland: Agreement Between the United States and the Kingdom of Denmark, April 27, 1951', n.d.

78 Danish Ministry of Defence, 'The Kingdom of Denmark, including Greenland, welcomes the United States "Statement of Intent on Defense Investments in Greenland"', 17 September 2018.

79 'Denmark, Greenland sign deal to clean up US military waste', *Army Times*, 12 January 2018.

3 Positions of Arctic states and selected NATO allies

This chapter compares the Arctic security priorities of six Arctic states – Canada, Denmark, Iceland, Norway, Finland, and Sweden – and four non-Arctic NATO allies: France, Germany, the United Kingdom, and the Netherlands. It focuses on developments since early 2022 across five dimensions: strategic orientation, military posture, alliances and defence cooperation, sovereignty and resource interests, and infrastructure and climate resilience. A detailed country-by-country breakdown is provided in **Annex 6**, along with relevant references. The Arctic strategies of Russia, the US, and China are analysed separately in Chapter 2.

Why these states?

The six Arctic states considered here are key regional stakeholders, with sovereign territories, legal claims, and governance responsibilities in the Arctic. Their policies directly shape the region's security landscape. The four non-Arctic NATO allies – France, Germany, the UK, and the Netherlands – have been selected because of their growing engagement in the Arctic, their influence within NATO and the EU, and their evolving role in European Arctic policy. While they are geographically distant, these countries are increasingly involved through scientific, environmental, and military contributions, with the UK standing out for its leadership within frameworks such as the Joint Expeditionary Force (JEF).

Comparative analysis

Strategic orientation and policy frameworks

All ten states recognise the Arctic's strategic importance, but their policies diverge in their focus, ambition, and urgency. Canada and Denmark continue to prioritise sovereignty and territorial integrity in their Arctic policies. Canada's defence strategy positions the Arctic as a "core national interest," framing its engagement around patrols, resource protection, and Indigenous partnerships.

Denmark similarly anchors its Arctic posture in sovereignty protection, with an added layer of complexity stemming from its governance responsibilities towards Greenland and the Faroe Islands, which increasingly seek greater autonomy over Arctic policy.

Norway stands out for having the most explicit military orientation in its Arctic strategy. The Norwegian armed forces consider the High North as their primary theatre of operations, and this is reflected in the country's Long-Term Defence Plan, which prioritises Arctic capabilities. Finland and Sweden, by contrast, have experienced the most profound shifts since 2022. Their accession to NATO has transformed their Arctic roles, moving from neutral observers to active contributors within a collective defence framework. This is a reorientation of their security postures, placing greater emphasis on deterrence, resilience, and interoperability within the Arctic.

France, Germany, and the Netherlands continue to view the Arctic primarily through environmental, legal, and scientific lenses. Their policy updates since 2022 reaffirm their commitments to multilateral governance, climate action, and support for international law, but they show limited adjustment considering increased security competition. The UK, however, has markedly repositioned itself, framing the Arctic as a key strategic theatre. Its Defence Arctic Strategy (2022) identifies undersea infrastructure protection, freedom of navigation, and hybrid threats as core challenges, aligning its policy closely with NATO's broader strategic priorities.

Military capabilities and security posture

While all ten states have increased their Arctic military engagement since 2022, the scale, scope, and rate of development vary considerably. Norway maintains the most robust and operationally focused Arctic military presence, with permanent brigades, advanced maritime patrol aircraft, F-35 fighter aircraft, and reactivated Cold War-era bases. Its forces train regularly in Arctic conditions, with a specific emphasis on deterrence and rapid response in the High North.

Finland and Sweden have expanded their Arctic capabilities, integrating their armed forces into NATO structures, reactivating Arctic units, and participating in major Arctic exercises such as Cold Response and Arctic Challenge. This represents a shift from their previous limited military footprint in the region,

with both countries now embedding Arctic defence into their national security frameworks.

Canada has also increased its Arctic military presence, but its progress is more gradual. While the procurement of Arctic and Offshore Patrol Ships (AOPS), radar modernisation under NORAD, and investment in logistical hubs demonstrate a growing commitment, Canada's capacity to sustain a persistent presence across its vast Arctic territory remains limited. Operational challenges in logistics, mobility, and domain awareness continue to constrain Canada's Arctic posture.

Denmark maintains a relatively modest Arctic military presence, focused on airspace surveillance and search and rescue capabilities over Greenland. However, the increase in rotational US forces in Greenland has partially compensated for Denmark's limited assets. Iceland remains unique in that it lacks standing military forces but serves as a critical NATO hub for air surveillance and maritime domain awareness, hosting allied forces without contributing its own Arctic capabilities.

Among the non-Arctic allies, the UK stands apart for its active military engagement. It maintains regular submarine patrols in Arctic waters, invests in undersea infrastructure protection through its Multi-Role Ocean Surveillance (MROS) vessels, and plays a leadership role within the JEF. France, Germany, and the Netherlands contribute to NATO's Arctic efforts through participation in exercises and by offering specialised capabilities, such as cyber defence and logistics. Their support reflects a commitment to NATO's presence in the region, with a focus on engagement that is complementary rather than centred on sustained operational capacity.

Alliances and defence cooperation

Defence cooperation has intensified across the Arctic states and NATO allies since 2022, but the depth of integration varies. The Nordic countries have developed increasingly interoperable defence postures, participating in joint exercises, enhancing the pre-positioning of equipment, and establishing coordinated surveillance networks. The accession of Finland and Sweden to NATO has unlocked new opportunities for defence integration, thereby reshaping the security architecture of the region.

Canada maintains a strong bilateral partnership with the United States through NORAD, but it remains less embedded in European Arctic defence structures. Nonetheless, Canada's participation in multilateral exercises such as Cold Response signals a willingness to deepen its cooperation. Denmark, Iceland, and Sweden now regularly host rotational US forces, reinforcing NATO's forward presence in the High North.

The UK plays a pivotal role as the leader of the JEF, providing a flexible and deployable force capable of operating in Arctic conditions. However, its Arctic-specific coordination with other NATO partners remains somewhat ad hoc, with no formalised burden-sharing agreements or integrated command structures in the region. France, Germany, and the Netherlands contribute to Arctic defence primarily through exercises, hybrid threat mitigation, and technological support, but they remain limited in their operational roles.

Sovereignty, resources, and economic interests

There is a shared emphasis among Arctic states on protecting sovereignty and regulating access to critical resources, including rare earths, hydrocarbons, and fisheries, although the intensity and focus of these priorities vary. Canada and Denmark maintain firm sovereignty claims, supported by active submissions to the United Nations Convention on the Law of the Sea (UNCLOS). Norway asserts its rights over Svalbard and the Barents Sea, balancing a strong sovereignty stance with a commitment to Arctic cooperation.

Greenland's resources, particularly rare earth elements, have attracted renewed interest from the US and the EU, with Denmark taking steps to block certain Chinese investments on security grounds. However, Greenland has also indicated that it may consider Chinese partnerships if Western investment does not materialise.

France and the Netherlands advocate a precautionary approach to Arctic resource exploitation, aligning with EU environmental norms and the EU's Arctic policy, which emphasises legal frameworks, environmental protection, and sustainable development over extraction. Sweden and Finland focus on mining, critical minerals, and sustainable regional development as part of their green and economic transitions. Germany views Arctic access as crucial for securing raw materials that are vital to its industrial base. The UK maintains a commercial focus on Arctic shipping routes, subsea infrastructure, and the protection of maritime trade, reflecting its global maritime interests.

Infrastructure development and climate resilience

Climate change has driven a significant increase in Arctic infrastructure investments across all states, but the various approaches remain fragmented. Norway, Finland, and Canada are prioritising the development of dual-use logistic hubs, climate-resilient airstrips, and military facilities capable of supporting both civilian and defence needs in extreme conditions. Sweden has an enhanced critical northern infrastructure, integrating resilience into national security planning.

Germany, France, and the Netherlands have focused on building scientific infrastructure, including polar research stations, satellite monitoring systems, and research vessels, contributing to global climate data and scientific understanding rather than military presence. The UK's strategy centres on undersea infrastructure protection, particularly the safeguarding of seabed cables and pipelines that are critical for global communications and energy flows. Iceland, in keeping with its non-militarised approach, has focused on integrating climate adaptation into civilian infrastructure development to build resilience without contributing to regional militarisation.

Despite these investments, there is little evidence of coordinated planning or shared infrastructure strategies. National priorities continue to drive individual investments.

Post-2022 strategic shifts and trends

Russia's full-scale invasion of Ukraine has fundamentally altered Arctic security dynamics. Finland and Sweden's accession to NATO marks an end to their long-standing policy of military non-alignment, while Canada and Norway have adopted more assertive defence postures, and Denmark has deepened military ties with the United States, particularly in relation to Greenland.

Arctic exceptionalism-the idea that the region could remain insulated from broader geopolitical rivalries, protected by a shared interest in scientific cooperation, environmental protection, and legal frameworks, was a widely held belief among Arctic and non-Arctic actors alike. Even Russia, until recent years, promoted the Arctic as a "territory of dialogue" and engaged constructively in multilateral institutions. However, this consensus has eroded.

The renewed emphasis in 2025 by the Trump administration on Greenland's strategic value, including public statements on potential acquisition, has

reignited tensions within NATO. While the US has long recognised Greenland's importance, the rhetoric of potential annexation-however it is politically framed-has been firmly rejected by Denmark and Greenland, highlighting sensitivities around Arctic sovereignty and the need to uphold established governance norms.

Hybrid threats such as cyberattacks, subsea sabotage, and infrastructure disruption now feature prominently in Arctic strategies, reflecting the region's growing exposure to global geopolitical tensions.

4 The roles of NATO and the EU

As the geopolitical impact on the Arctic is increasing, the question arises what this means for the roles of NATO and the EU. The Alliance is strengthening its deterrence and defence posture in reaction to the Russian aggression. What might this entail for NATO's role and presence in the High North? The EU aims to become an autonomous strategic actor, for which less dependency on raw materials and other natural resources is a key requirement. Will this also have military implications? How do regional formats fit in? In this chapter the roles of these organisations will be addressed in view of the changing geopolitical situation in the Arctic region, including what it may imply for the Netherlands.

NATO

The relevance of the Arctic for NATO and Russia

The Arctic is emerging as a strategic priority for NATO, shaped by rising geo-political tensions. Eight states possess sovereign territory in the region – seven NATO members and Russia, which controls the longest Arctic coastline and has made the region central to its national security strategy. This blend of allied and Russian interests makes the Arctic a shared space – still marked by cooperation, but increasingly characterised by strategic competition and the need for a credible deterrence.

Russia deems American aircraft carriers and Tomahawk missile-carrying surface ships and submarines to be a major threat to its critical military facilities on the Kola Peninsula and the island of Novaya Zemlya. All these capabilities provide Russia with leverage in a rising confrontation with NATO.[80] The missile-carrying submarines form a notable threat. They are difficult to detect and identify and, when undetected, can attack with little or no warning.

A further opening of the NSR provides an additional strategic advantage, as it allows for the relatively swift deployment of naval assets from the Atlantic to the Pacific region and vice versa. This offers the 'strategic friends', Russia and

80 Information from interviews.

China, opportunities to deepen operational cooperation, improve strategic and operational flexibility and enhance strategic signalling against NATO, and particularly the US.

Russia considers Northern Norway and Finland as a land gate into the Barents Sea and a steppingstone for land operations against the Kola Peninsula.[81] Although the ongoing war in Ukraine has forced Russia to redeploy land units away from the Arctic region, on their return and after modernisation they will again constitute the capability to invade Northern Norway, Sweden and Finland. Invading these NATO countries can be done in response to alleged NATO operations against the Kola Peninsula. Also, it offers Russia an option to conduct a limited incursion to test NATO's resolve with operations in a far-away and sparsely populated area that some have considered to be a forgotten front for a long time.[82]

NATO and the Arctic

For a considerable time, the Arctic was a topic not to be discussed within the Alliance, as NATO allies participating in the Arctic Council considered NATO involvement as threatening the peaceful situation of this 'zone of exceptionalism'.[83] The Russian invasion of Ukraine has changed this. Due to Russia's behaviour and the accession of Finland and Sweden to the Alliance "there is now equally more Arctic in NATO and more NATO in the Arctic."[84] This has raised the issue of how the northern part of Europe should be defended. Together with the classified NATO Military Strategy, the NATO Strategic Concept (2022) set in motion the development of plans for the collective defence of the Alliance.[85]

NATO perceives the Russian threat emanating from the Arctic region as covering all phases of conflict, ranging from hindering freedom of navigation and blocking access to crucial resources via the possibility of a (limited) incursion

81 Ibid.

82 See Annex 2 for a further explanation.

83 Information from interviews.

84 Mathieu Boulègе, et al., 'Chapter 1: Military security affairs in a changing Arctic', 5 December 2024, p. 8.

85 Known as 'the family of plans'. These plans are classified. The relevant text in this chapter is based on open sources.

to the continuous threat of Russia's second-strike capability.[86] During the elaboration of the NATO defence plans and after Finland and Sweden joined the Alliance, the High North received increasing attention. One of the many topics was the delineation between the area of responsibility (AOR) of Joint Forces Command (JFC) Brunssum and JFC Norfolk: should JFC Brunssum cover the complete border with Russia, from northern Norway down to the Black Sea or should the High North, including the Arctic region, merit a separate, integral approach? Although the exact delineation is classified, the territory of Sweden and Finland falls within the AOR of JFC Norfolk. This headquarters is now the joint, multinational operational level headquarters that projects stability, deters aggression and stands ready to defend a vast area of NATO territory from the US to the High North.

The initial Regional Defense Plan (RDP) Northwest focused on so-called dark-blue operations, e.g. naval operations on the high seas. After the accession of Finland and Sweden to NATO this RDP has been adjusted, and it will now also contain instructions for the air and land battle in the area. New NATO land and air commands will be established.[87] The north and northwest coast of Norway is considered to be an area that requires the specific attention of amphibious forces. This will also be part of the rewritten RDP. For the latter, a multilateral forum has been established. This so-called Quadlat, with representation by the US, the UK, Norway and the Netherlands, meets regularly to discuss relevant input for the RDP, particularly regarding amphibious operations. The recently signed Letter of Intent (LoI) between Norway and the Netherlands aims to enable a Dutch marine unit to quickly achieve combat readiness in times of rising tensions, amongst others through the pre-positioning of equipment. The LoI and the subsequent Memorandum of Understanding will provide a sound basis to conduct training and operations on Norwegian soil and ease more frequent deployments, reinforcing the deterrent force posture.

With the regional concept and under the leadership of JFC Norfolk, NATO should be able to develop multidomain integrated plans and the required command & control structures, including for information- and intelligence-sharing, to optimise the deterrence and defence posture in the continued area from the

86 Ibid.

87 The Multi Corps Land Component Command (MCLCC), to be based in Mikkeli (Finland), and a Combined Air Operations Centre (CAOC)

Baltic Sea to the High North and the North Atlantic Ocean. To achieve this, JFC Norfolk must work closely with the domain-responsible Maritime Command Northwood and the land command in Finland. Sweden will act as the Framework Nation for the NATO Forward Land Forces in northern Finland, without a permanent presence but based on a rolling system of sequential exercises.[88]

Contrary to the enhanced Forward Presence, established in 2016 – after pressure from Poland, Estonia, Latvia and Lithuania – Norway opted for another approach. Sensitive to disturbing effects on Russian-Norwegian relations in the High North and given that operations in (near-)Arctic conditions require specialist units and skills, Norway focused on setting conditions for frequent exercises together with American, British and Dutch marine units. Although Norway continues to place its Cold War restrictions on allied movements in order not to antagonise Russia, these frequently held exercises prove the ability of capable NATO forces to be able to operate under extreme weather conditions and demanding terrain, whilst limiting the burden, exposure and the potentially intimidating permanent presence.[89] Although the High North is of increasing importance for the Alliance, a NATO Arctic Strategy is unlikely to be drafted soon for political and military reasons. Politically, such a dedicated strategy could provide the impression of marking the area as top priority for NATO's deterrence and defence posture – which, no doubt, would raise objections by allies with other regional interests. Furthermore, it could disturb unity among the Allied-7[90] as European Arctic states in particular wish to maintain the region as a zone of stability and predictability.[91] In the words of an Arctic expert: "The main objective is to determine NATO's exact perimeter of operation in the region while establishing deterrence against competitors, but without overtly escalating or militarising Arctic discussions."[92]

The Nordic nations remain conscious of the fact that the permanent presence of numbers of NATO troops may have an escalating rather than a deterring effect on Russia.[93] This remains a careful balancing act. In military capability and means, it requires a robust intelligence and strategic reconnaissance

88 Information from interviews.
89 See Annex 2.
90 The seven Arctic states which are NATO Allies.
91 Information from interviews.
92 Ibid.
93 Information from interviews.

(ISR) capability to monitor and increase warning time, coupled with naval, air and land elements with proven capabilities through frequent exercises, firmly embedded in NATO's overall plans such as RDP Northwest and not in a separate, attention-drawing Arctic Strategy. At the same time, it also requires countries in the region to develop non-military capabilities to address the effects and needs of economic developments such as tourism, fisheries and the exploration of resources, such as icebreaking and search and rescue.

The Alliance's approach to the increasing instability in the Arctic should be to reinforce its deterrence and defence posture in the area (see below). However, as soon as the international circumstances allow for discussions with Russia on Arctic security, the priority should be to start negotiations on a set of risk-reduction measures to avoid any misinterpretation of military activities and avoid unnecessary escalation. Such a set of measures – which could be labelled as an Arctic Military Code of Conduct[94] – should encompass the notification of military exercises, missile tests and other activities. Once agreed upon, an Arctic Risk Reduction Forum could be created to discuss implementation issues and to negotiate additional measures.

Another avenue of early contact could be through the few nations that have so-called agreements on the prevention of Incidents at Sea (INCSEA). The Netherlands is one of the participants. The biannual INCSEA talks have in the past already served as a sole line of communication between NATO and Russia. Given the relevance Russia places on the Russian-Dutch naval relations, these INCSEA talks could again prove to be a valuable line of communication

Regional cooperation formats

Regional cooperation formats – such as the Nordic Defence Cooperation (NORDEFCO) – should be linked to the Alliance, now that all Nordic countries are member of the Alliance. The Joint Expeditionary Force (JEF) is led by the UK in cooperation with nine other allies.[95] The members, meeting at heads of state and government level, at defence minister level as well as at military and defence policy levels, share views on the threat in order to have a common understanding of the security risk. They also use the JEF to exchange strategic operational experience. The JEF can deliver at short notice a flexible, integral Joint Force

94 Mathieu Boulègue, et al., 'Up North: Confronting Arctic Insecurity', *CEPA*, November 2024.

95 See Chapter 5 for additional info on NORDEFCO and JEF.

able to respond quickly, anytime and in any environment. As it is linked to NATO but is not a NATO force contribution, the JEF can be deployed without a decision by the North Atlantic Council and, thus, act as a quickly deployable first responder in case of growing international tensions. The focus of the JEF is on the Baltic Sea and the High North. In short, the JEF provides a credible capability, able to respond quickly to an emerging crisis, ahead of for instance wider decision-making in NATO, with like-minded and operationally aligned nations. The Netherlands takes part in the JEF.[96]

Impact on the Netherlands armed forces

The 2024 Netherlands Defence White Paper (DWP) describes Russia as a confrontational neighbour, continuously active in testing NATO's resolve and seeking a dominant role in a world without multilateral institutions. It describes China as an assertive nation, also seeking a dominant, global position with a special focus on markets and resources. In the text of the DWP the Arctic is barely mentioned. Yet in the included strategic map, the DWP highlights Northern Europe and the Arctic region as a key element in the deterrence and defence contribution, alongside Central Europe.[17] With the Royal Netherlands Army's focus on the central region, contributions to the Regional Defense Plan Northwest are likely to come from the Royal Netherlands Navy and Air Force. Indeed, under the heading 'maritime capabilities', attention is given to the Dutch (near-)Arctic capabilities, particularly in the field of anti-submarine warfare.

It can be assumed that the Netherlands will allocate forces, first and foremost naval and air assets, to the RDP Northwest. Ships, aircraft and marine elements regularly participate in exercises in Northern Norway. They possess the means, experience and skills to operate under the adverse conditions that are characteristic of the region. The emphasis, both in NATO planning and the contribution of the Netherlands, appears to be on integrated air and missile defence, anti-submarine warfare, land attack strike and amphibious capabilities, all contributing to reducing the risk of deployments of Russian ships, aircraft and land units into the North Atlantic and onto the territory of Northern Norway, Sweden and Finland. This is achieved through containment, preventing Russian ships, submarines and aircraft reaching attack positions on allied territory or shipping.

96 For further information, see: Dick Zandee & Adája Stoetman, 'Countering hybrid threats – The role of the Joint Expeditionary Force', *Clingendael*, March 2023.

The Dutch contribution is firmly embedded in NATO plans and structures. For qualitative limitations, such as ISR and maritime reconnaissance, the Netherlands relies on its NATO allies. It does however offer investment in crucial capabilities, nationally or multilaterally, in unmanned and manned systems such as the P8 maritime patrol aircraft and the naval version of the Reaper Unmanned Aerial System (UAS). The current fleet modernisation programme, including the replacement of all capital ship types and doctrinal developments of fleet and marine forces, will guarantee a qualitative edge in the field of anti-submarine warfare and integrated air and missile defence. The need for increasing the number of frigates and submarines comes out of the NATO Defense Planning Process and the requirements of operations led by the Alliance or coalitions of the willing, but ultimately it is based on national political decisions. New programmes, such as the acquisition of the Tomahawk land attack missile and unmanned systems, will further enhance capabilities, also in the field of strike capability. Given the other tasks of naval forces within NATO and the EU, the question of quantity remains, notably in the field of ASW and the ability to project and support (marine) power ashore through littoral manoeuvres and amphibious operations, where mobility and surprise trump mass. As air support is vital, the deployment of fighter aircraft should be an integral part of Dutch defence planning as well.

To retain relevance and increase qualitative capabilities, the Netherlands actively participates in the Joint Expeditionary Force and recently hosted a meeting with the US, the UK and Norway to address challenges and opportunities when planning and conducting combined operations in the Arctic region. At the level of political leaders, the JEF countries also play an important role in signalling shared positions, first and foremost to Russia.[97]

The EU

The European Union has a natural stake in the Arctic, given that three of its member states – Denmark, Finland, and Sweden – are closely connected to the region. Although Greenland is not part of the EU, Denmark's constitutional link

97 The most recent example is the JEF Heads of State and Government meeting in Oslo on 8-9 May. See: Government of Norway, 'Norway to host Joint Expeditionary Force Leaders' Summit on security', 4 May 2025.

to the territory reinforces its Arctic connection. These countries provide regional knowledge and strategic interests that shape the EU's engagement in Arctic affairs.

Since 2008, the EU has maintained a formal Arctic policy focused on sustainability, environmental protection, and international cooperation. This approach has evolved to reflect growing commercial and geopolitical pressures. The latest update, published in October 2021,[98] reaffirmed the EU's commitment to a peaceful, sustainable, and prosperous Arctic. More recently, the security implications of Russia's 2022 invasion of Ukraine have further elevated the Arctic on the EU's strategic agenda.

To support this evolving engagement, the EU established the position of Ambassador at Large for the Arctic in 2017.This role was later redefined as Special Envoy for Arctic Matters, continuing to advance the EU's Arctic policy by strengthening coordination with internal and external stakeholders, ensuring that climate action, sustainable development, and the interests of Indigenous and local communities remain central, while also supporting the EU's efforts on critical mineral resources and supply chain resilience within the Arctic context.[99]

EU policy frameworks and their Arctic relevance

In 2021, the European Commission and the High Representative published the updated EU Arctic Policy,[100] prioritising dialogue, climate action, and investment, but notably avoiding hard security issues.

In contrast, the 2022 Strategic Compass for Security and Defence[101] does reference the Arctic, recognising it as a region affected by climate change, geopolitical rivalries, and strategic competition. It highlights the Arctic's importance for EU security, economic development, and energy supply. However, despite its broad agenda under the pillars of "act, secure, invest, and partner," it includes no Arctic-specific actions.

98 European Commission, 'A stronger EU engagement for a peaceful, sustainable and prosperous Arctic,13 October 2021.

99 European Union External Action Service, 'The EU in the Arctic', 22 January 2025.

100 Ibid.

101 Council of the European Union, 'Outcome of Proceedings: A Strategic Compass for Security and Defence - For a European Union that protects its citizens, values and interests and contributes to international peace and security', 21 March 2022.

The 2023 update of the European Maritime Security Strategy and its Action Plan (EUMSS)[102] adds more substance. It acknowledges the Arctic as a zone of growing maritime activity due to melting ice and newly accessible routes, warning of increased environmental and security threats. It highlights hybrid and cyber threats targeting critical infrastructure and calls for improved maritime domain awareness (MDA), greater cooperation, and strengthened capabilities among EU member states.

Operational tools for situational awareness

To support MDA, the EU employs a range of tools that are increasingly relevant in the Arctic context. One of the primary platforms is the maritime surveillance (MARSUR) project[103], managed by the European Defence Agency (EDA). MARSUR facilitates real-time data sharing between European naval forces, helping to track vessel activity and enhancing coordination in increasingly busy Arctic waters.

The EU's space programmes also play a critical role. Copernicus[104] provides Earth observation data that is essential for monitoring sea ice, iceberg movement, and environmental shifts in the Arctic. Galileo[105] offers high-precision navigation capabilities that support safe maritime operations in the remote and often hazardous Arctic environment. IRIS2,[106] the upcoming secure satellite communications constellation, is designed to enhance connectivity for EU operations in underserved regions, including the Arctic.

Additionally, the EU Satellite Centre (SatCen)[107] provides geospatial intelligence and supports the EU's Single Intelligence Analysis Capacity. Through satellite imagery and analysis, SatCen enables the detection of unregistered maritime activities, infrastructure development, and signs of environmental degradation in the Arctic.

102 European Commission, 'On the update of the EU Maritime Security Strategy and its Action Plan "An enhanced EU Maritime Security Strategy for evolving maritime threats"', 10 March 2023.
103 European Defence Agency, 'Maritime Surveillance (MARSUR)', n.d.
104 Copernicus, 'Arctic Hub', n.d.
105 European Space Agency, 'Enhancing satnav for Arctic voyagers', 1 August 2019.
106 European Commission, 'IRIS²: the new EU Secure Satellite Constellation', n.d.
107 European Union, 'SatCen - European Union Satellite Centre', n.d.

Complementing these EU-led initiatives, national-level efforts also contribute to Europe's Arctic situational awareness. Sweden is developing the Esrange Space Center,[108] the EU's first orbital launch facility, which will provide critical infrastructure for launching satellites into polar and sun-synchronous orbits-ideal for Arctic monitoring. Norway is a key collaborator in this venture and hosts important Arctic ground stations such as those on Svalbard,[109] providing data relay and telemetry for polar satellites. These national projects enhance EU capacity by expanding access to space-based services that are essential for surveillance, navigation, and environmental monitoring in the Arctic.

Capability enhancement

Alongside information tools, the EU has expanded efforts to strengthen the maritime capabilities of its member states. This is achieved through several instruments, including the Coordinated Annual Review on Defence (CARD),[110] the Permanent Structured Cooperation (PESCO),[111] and the European Defence Fund (EDF).[112] These initiatives collectively support research and development as well as the construction and upgrading of physical maritime infrastructure and defence systems. For example, PESCO promotes collaborative defence projects, including naval technologies that may be applicable to Arctic operations. The EDF co-finances projects that enhance resilience and readiness, potentially contributing to operations in cold climates and harsh maritime environments.

Institutional and political limits

Despite expanding capabilities in maritime security and situational awareness, the EU's military role in the Arctic remains limited by political, legal, and strategic constraints. A significant factor is the status of Arctic EU members – Finland, Sweden, and Denmark – as NATO allies, who continue to prioritise collective defence through NATO together with all other EU/NATO nations. The EU's Common Security and Defence Policy (CSDP) is focused on crisis management missions outside EU territory. On the European continent, the CSDP focuses on missions in Eastern and Southeastern Europe, particularly supporting Ukraine

108 Swedish Space Corporation, 'Esrange Space Center', n.d.
109 European Space Agency, 'Managing signals at the top of the world', n.d.
110 European Defence Agency, 'Coordinated Annual Review on Defence (CARD)', n.d.
111 European Union, 'Permanent Structured Cooperation (PESCO)', n.d.
112 European Union, 'The European Defence Fund (EDF)', 28 April 2021.

and Moldova in strengthening their defence capacities and political resilience.[113] There is no precedent for CSDP missions in the Arctic, and proposals to extend its reach face both institutional inertia and political resistance.

This resistance is partly rooted in divergent strategic interests among EU member states. Northern European countries, notably Finland and Sweden, advocate a more proactive EU role in Arctic security in response to increasing tensions with Russia and growing Chinese involvement in the region.[114] Conversely, Southern and Western EU members often regard the Arctic as peripheral to their strategic agendas, hampering political consensus.[115] Given the intergovernmental nature of the CSDP, such divergences significantly restrict the Union's ability to develop or implement Arctic-focused military initiatives.[116] However, the current restrictions are being questioned by the fundamental geopolitical changes facing the EU, in particular the US reappraisal of the transatlantic relationship. Against that backdrop, future Arctic-focused EU-led or EU-supported military initiatives cannot be ruled out.

Strategic outlook and future relevance

The EU's role in the Arctic is poised to grow amid a confluence of economic, environmental, and geopolitical shifts. One critical development is the gradual opening of the NSR, which has the potential to become a vital commercial corridor connecting Asia and Europe. As the EU seeks to safeguard global trade routes that are essential to its energy and supply chain security, there may be increasing momentum for a more assertive security presence in the Arctic – particularly if such involvement is integrated within NATO frameworks.

Another driver is resource security. The Arctic holds vast reserves of critical raw materials, vital for the EU's green and digital transitions. The Critical Raw Materials Act[117] underscores the EU's commitment to diversifying and securing supply chains for materials like rare earths, lithium, and cobalt – many of which are accessible via Arctic regions. To that end, the EU has forged strategic

113 As an exception, the EU Military Assistance Mission to Ukraine (EUMAM) is conducted in Germany and Poland, due to the situation in Ukraine.

114 Information from interviews.

115 Ibid.

116 Ibid.

117 European Commission, 'Critical raw materials', n.d.

partnerships with key Arctic actors including Canada,[118] Norway[119], and Greenland[120]. These partnerships focus on sustainable extraction, technological cooperation, and market access.

The EU has also made symbolic and institutional strides to consolidate its Arctic presence. A notable milestone was the opening of a diplomatic office in Nuuk, Greenland,[121] reflecting the territory's strategic importance and its deep ties to the EU through Denmark. This office enhances collaboration on sustainable development, research, and natural resources management. Although Greenland is not an EU member, its Arctic location and untapped potential position it as a key strategic partner. Given the former adversarial relations between Greenland and the EU[122], one can truly speak of a turnaround having taken place.

In the long term, these developments could set the stage for a CSDP engagement in the Arctic. However, such a shift would require internal consensus and close coordination with NATO. For now, the EU's Arctic approach remains primarily civilian and diplomatic, but it is increasingly informed by strategic imperatives tied to resource access, global shipping, and climate resilience.

118 European Union, 'Framework for a Strategic Partnership on Raw Materials Between Canada and The European Union', n.d.

119 European Commission, 'EU and Norway sign strategic partnership on sustainable land-based raw materials and battery value chains', 21 March 2024.

120 European Commission, 'EU and Greenland sign strategic partnership on sustainable raw materials value chains', 30 November 2023.

121 European Commission, 'President von der Leyen inaugurates the EU Office in Nuuk and signs cooperation agreements to strengthen the EU-Greenland Partnership', 15 March 2024.

122 Greenland was the first 'state' to leave the EU (not the UK) and the relationship has long been hampered by the (Indigenous) fur seal hunting issue.

5 Governance of the Arctic

Since Russia's full-scale invasion of Ukraine in February 2022, the Arctic has entered a period of institutional fragmentation and geopolitical realignment. Longstanding multilateral governance frameworks have been strained, particularly where cooperation with Russia was foundational. Civil, scientific and environmental collaboration among Western Arctic states continues, but political-military and scientific engagement (e.g. on climate) with Russia has effectively ceased.

In response, NATO allies and European partners-including the Netherlands-have intensified defence cooperation and regional engagement. This chapter provides an updated overview of the Arctic's key governance bodies, categorized into civil/environmental and security/defence cooperation mechanisms, and analyses their evolving implications for Dutch foreign and security policy.

Civil and environmental governance

Arctic Council

- ✅ **Core functions:** environmental protection, sustainable development, and Indigenous rights
- ✅ **Participation of Russia:** excluded from high-level engagements post-2022
- ✅ **Role of the Netherlands:** observer state, involved in Arctic scientific research via the EU framework

The Arctic Council[123] remains the core intergovernmental forum for Arctic cooperation. Established in 1996, it comprises the eight Arctic states, six Indigenous Permanent Participants, and 13 observer states and 25 observer organisations. Its mandate includes environmental protection, sustainable development, and Indigenous rights, but explicitly excludes military security.

123 The Arctic Council, 'Arctic Council', n.d.

Since 2022, the Council has operated primarily among the Western Arctic states, with Russia largely excluded from high-level diplomatic and political engagements. While technical work through its working groups continues, the absence of Russian contributions-both data and funding-has introduced biases in climate assessments,[124] restricted access to essential scientific information, and hindered the Council's ability to address pan-Arctic environmental challenges in a fully coordinated manner.[125]

In parallel, Russia has promoted Arctic scientific cooperation with BRICS countries, focusing on plans for a research centre in Pyramiden, Svalbard.[126] Though still early and limited in scope, the initiative reflects Moscow's effort to sustain Arctic engagement through multilateral channels outside the Western-led framework.

Barents Euro-Arctic Council (BEAC)

- ✅ **Core functions:** cross-border environmental and regional development cooperation
- ✅ **Participation of Russia:** withdrew in 2023; Finland to follow in 2025
- ✅ **Role of the Netherlands:** indirect, through EU institutions

The Barents Euro-Arctic Council[127], founded in 1993, facilitates cross-border cooperation in the Barents region, focusing on environmental, Indigenous, and regional development issues. Russia's participation was suspended in 2022, and it withdrew from the organisation in the autumn of 2023.[128] Finland will also withdraw from the BEAC after 2025, claiming that the 6-member Barents Region's intergovernmental cooperation body no longer meets current needs due to changes in the European security landscape and the international

124 Lopez-Blano et al. 'Towards an increasingly biased view on Arctic Change', *Nature Climate Change*, 22 January 2024.

125 Ibid.

126 'Moscow continues to push for BRICS science centre at Svalbard – Arctic Today', *Arctic Today*, 17 June 2024.

127 The Barents Euro-Arctic Council, 'About us', n.d.

128 Astri Edvardsen, 'Russia withdraws from the Barents Cooperation', *High North News*, 29 September 2023.

environment.[129] The remaining members (the other Nordic countries and the EU institutions) are currently considering the future of the BEAC.[130]

Arctic Coast Guard Forum (ACGF)

- ✅ **Core functions:** search and rescue (SAR), maritime safety, pollution response
- ✅ **Participation of Russia:** excluded from joint exercises since 2022
- ✅ **Role of the Netherlands:** not a member, but with interests in maritime safety and environmental governance

The Arctic Coast Guard Forum,[131] established in 2015, facilitates operational cooperation among the coast guards of the eight Arctic states. Its focus is on search and rescue (SAR), maritime safety, and pollution response. Although Russia has not participated in joint exercises since 2022, there is still limited contact for deconfliction in emergency scenarios. The forum has grown in importance as a platform for civil-military cooperation in the Arctic maritime domain.

Security and defence coordination

Arctic Security Forces Roundtable (ASFR)

- ✅ **NATO relationship:** increased post-2022 coordination among NATO Arctic allies
- ✅ **Exercises and coordination:** joint planning on military mobility, logistics, and regional force posture in the Arctic environment
- ✅ **Dutch role:** active observer and 2024 virtual host

129 Necva Tastan Sevinc, 'Finland to withdraw from Barents Euro-Arctic Council after 2025', *Anadolu Ajansı*, 21 November 2024.

130 Birgitte Annie Hansen, 'Norway to Consider the Future of the Barents Euro-Arctic Council as Finland Withdraws', *High North News*, 27 November 2024.

131 The Arctic Coast Guard Forum, 'About the ACGF', n.d.

The ASFR is a military-to-military dialogue platform founded in 2011 to support regional transparency, confidence-building, and coordination among Arctic and interested European states. It includes all Arctic states (minus Russia since 2014), France, Germany, the United Kingdom, and the Netherlands.

Post-2022, ASFR activities have intensified among NATO Arctic allies and partners. The format now consists of:

- A non-classified session open to all participating members (excluding Russia).
- A classified "Northern Flank" session, involving largely the same group-NATO's Arctic members and close partners-but focused on sensitive operational topics.

The ASFR continues to play a vital role in fostering multilateral security cooperation in the Arctic. The Netherlands is an active contributor, particularly in discussions on maritime posture, climate-security linkages, and force mobility in extreme environments. It hosted the autumn 2024 ASFR virtual gathering. [132]

Arctic Security Policy Roundtable (ASPR)

- ✅ **NATO integration (strategic):** supports high-level policy alignment
- ✅ **Foresight and climate-security focus**
- ✅ **Dutch role:** potential for leadership in policy exchange and climate-security planning

The Arctic Security Policy Roundtable (ASPR) is a newly emerging, informal forum aimed at fostering strategic-level dialogue on Arctic security. It is designed to bring together defence officials, policymakers, and experts from Arctic and non-Arctic states to address challenges such as deterrence, regional tensions, and the long-term security implications of climate change and technological change in the Arctic.

The ASPR was first publicly referenced in the US Department of Defense's 2024 Arctic Strategy,[133] which outlined it as a venue to support coordination on Arctic

132 United States European Command, 'Military leaders advance Arctic security, cooperation in semi-annual forum', 16 October 2024.

133 U.S. Department of Defense, '2024 Arctic Strategy', 22 July 2024.

security policy among allies and partners. In a subsequent interview, a US official confirmed that an initial ASPR meeting had already taken place,[134] suggesting that the forum is in its early operational stages.

While it is not yet a formalised institution, ASPR is expected to complement existing platforms like the Arctic Security Forces Roundtable (ASFR) by enabling more strategic, policy-level exchanges.

Nordic Defence Cooperation (NORDEFCO)

- ✅ **NATO relationship:** intensified after Finland and Sweden's NATO accession
- ✅ **Exercises and mobility:** "Cold Response," Nordic airspace monitoring, High North logistics
- ✅ **Dutch role:** indirect via NATO and bilateral ties

NORDEFCO[135] was launched in 2009 by Denmark, Finland, Iceland, Norway, and Sweden to enhance defence cooperation in the Nordic region. In the Arctic context, NORDEFCO has become increasingly important following Finland and Sweden's NATO accession.

The framework supports:
- Joint Arctic training and exercises (e.g. "Cold Response").
- Shared airspace monitoring (Nordic Air Command).
- Defence logistics coordination in the High North.

Although the Netherlands is not a member of NORDEFCO, it engages closely with its members through NATO and bilateral defence cooperation. In addition, the Netherlands participates in the Northern Group-a broader regional defence forum that includes NORDEFCO countries as well as the UK, Germany, Poland, and the Baltic States. This grouping, often described as "NORDEFCO-Plus," enhances regional security coordination and complements NATO efforts. The growing synergy between NORDEFCO, the Northern Group, and NATO

134 'A conversation with Iris Ferguson, former US Deputy Assistant Secretary of Defense for Arctic and Global Resilience', *Medium*, 8 May 2025.

135 Nordic Defence Cooperation, 'About NORDEFCO', n.d.

presents expanding opportunities for Dutch involvement in Arctic and High North security affairs.

Joint Expeditionary Force (JEF)

- **NATO relationship:** not part of the NATO forces, but coordinates with NATO
- **Exercises and rapid deployment:** focused on the High North and the Baltic region
- **Dutch role:** founding member, strategic stakeholder and military contributor

The Joint Expeditionary Force (JEF)[136] is a high-readiness military coalition comprising ten like-minded nations: Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, the Netherlands, Norway, Sweden, and the United Kingdom. Designed to respond rapidly to crises across the full spectrum of military operations, the JEF can operate independently or alongside larger international missions such as those led by NATO. It focuses on security challenges in the High North, North Atlantic, and Baltic Sea regions but remains capable of deploying further afield. The JEF enhances deterrence, supports member interests – including those of the Netherlands – and is shaped by global pressures such as cyber threats, climate change, and disinformation, making it a flexible and credible force for modern conflict environments. Also, in response to Russia's war against Ukraine, the JEF is increasingly playing a role as a forum for high-level political meetings (Heads of State and Government; Defence Ministers).

Organization for Security and Co-operation in Europe (OSCE)

- **Core functions:** conflict prevention, arms control, human rights, and environmental security
- **Arctic relevance:** limited, but applicable to the wider Euro-Arctic security environment
- **Role of the Netherlands:** active OSCE member with an interest in confidence-building and dialogue

136 Joint Expeditionary Force, 'About the JEF', n.d.

Although the OSCE does not focus exclusively on the Arctic, it provides a broader European security architecture that includes Arctic stakeholders and has mechanisms that are relevant to the region. These include confidence-building measures, conflict prevention tools, and environmental monitoring. The OSCE's comprehensive security approach can indirectly support Arctic stability, particularly through its work on arms control, military transparency, and dialogue facilitation.

While the OSCE does not focus exclusively on the Arctic, its mechanisms for dialogue, transparency, and environmental security remain relevant. Since 2015, the OSCE Parliamentary Assembly has had a Special Representative on Arctic Issues,[137] who promotes Arctic cooperation and engages with international organisations on climate and sustainability. Though limited by geopolitical tensions, the role offers a rare platform for multilateral engagement.

Bilateral talks as part of INCSEA arrangements

- ✅ **Core function:** prevention of naval incidents through agreed communication and operational protocols
- ✅ **Arctic relevance:** indirect, but relevant for broader maritime security involving Arctic coastal states
- ✅ **Role of the Netherlands:** signatory to a bilateral INCSEA agreement with Russia; meetings suspended since 2022

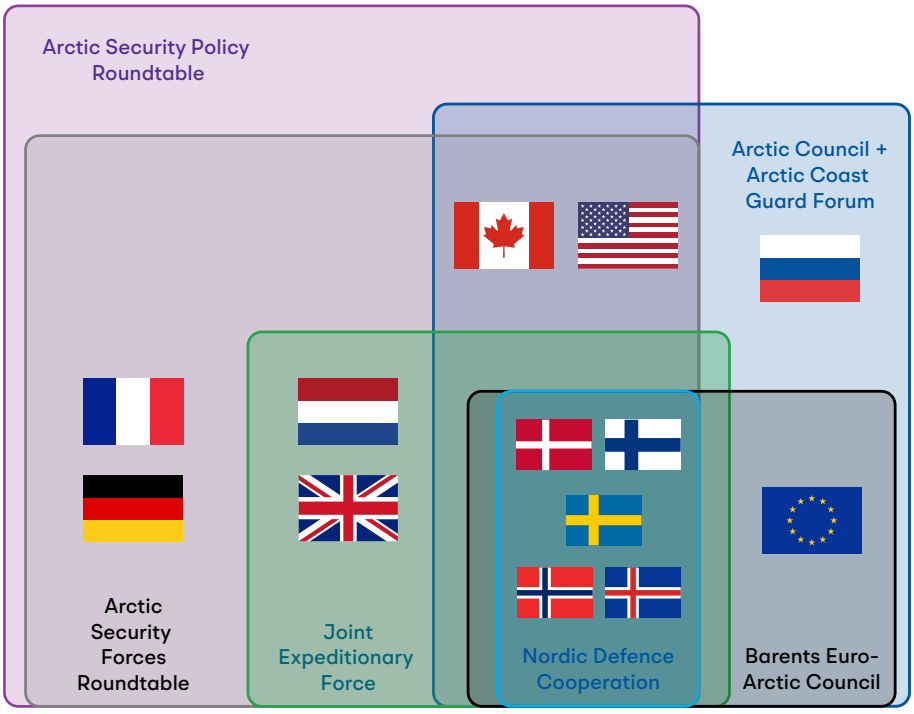
Several NATO nations have signed bilateral arrangements with Russia with the aim of preventing incidents at sea (INCSEA) through mutually agreed standards and norms on communications, manoeuvring and information. The first INCSEA arrangement was signed between the US and the Soviet Union.[138] The Netherlands followed swiftly thereafter. Since then, both countries have met biannually, mostly on navy-to-navy level. The Netherlands-Russia INCSEA

137 Organization for Security and Co-operation in Europe, 'Norway's Elvestuen appointed OSCE PA Special Representative for Arctic Issues', 16 December 2015.

138 U.S. Department of State, 'Agreement Between the Government of the United States of America and the Government of the Union of Soviet Socialist Republics on the Prevention of Incidents On and Over the High Seas', 25 May 1972.

arrangement was last updated in December 2021.[139] Since the 2022 Russian invasion of Ukraine, the biannual meetings have ceased.

Infographic 3 Selected Arctic security and defence cooperation frameworks[140]



139 'Russia and the Netherlands have approved amendments to the agreement on the prevention of incidents at sea', *VPK News*, 24 December 2021.

140 Estonia, Latvia and Lithuania also participate in the JEF but are not listed in this infographic as they do not belong to the ASFR. Russia was a founding member of the ASFR but is no longer invited to participate in its meetings.

Governance gaps and opportunities for reform

The post-2022 Arctic governance landscape is marked by growing institutional fragmentation and weakened multilateralism. Previously inclusive forums-most notably the Arctic Council-now operate with limited or no Russian participation, severely constraining their capacity to coordinate across environmental, civil, and security domains. This fragmentation not only challenges the coherence of Arctic governance but also gives rise to risks in terms of strategic miscommunication, environmental degradation, and regional instability.

- **Security-military void:** Russia's exclusion from nearly all defence-related Arctic forums has created a significant security dialogue gap. Although the OSCE does cover the Arctic, there is currently no comprehensive multilateral mechanism for military risk reduction, deconfliction, or transparency in the region. This is particularly concerning given increased military activity, surveillance operations, and the proximity of NATO and Russian forces in and around the High North.
- **Civil cooperation disruption:** Russia's suspension from key civil and environmental platforms has significantly disrupted international collaboration in research, environmental monitoring, and Indigenous engagement. The withholding of crucial data, especially in climate science and biodiversity, has led to incomplete data exchanges. This gap undermines evidence-based policymaking and hampers progress toward sustainable development goals.
- **Fragmented institutional landscape:** the proliferation of regional initiatives has led to overlapping mandates and memberships. While these can enhance coordination among like-minded states, they also risk duplication, inefficiency, and a lack of strategic coherence in areas such as climate-security, infrastructure development, and maritime governance.

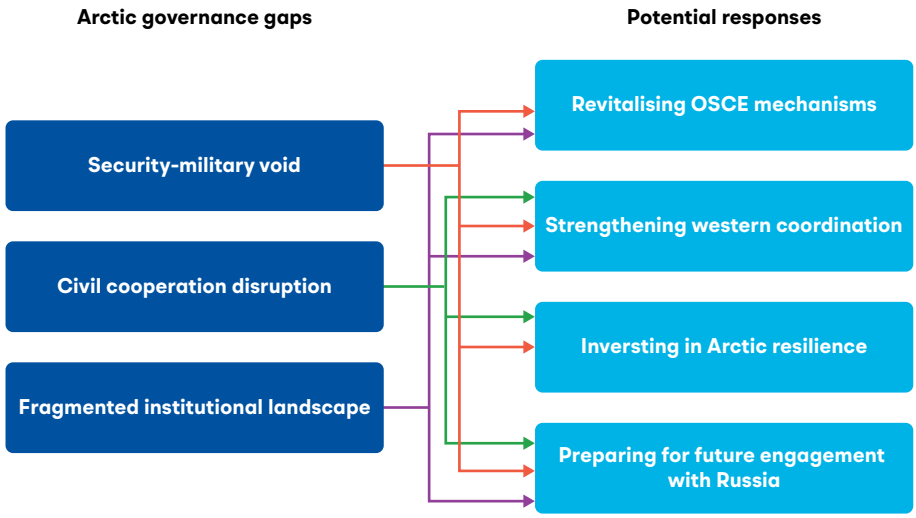
Recommended responses to these gaps include:

- **Revitalising OSCE mechanisms:** although the OSCE has limited Arctic-specific programming, its inclusive membership and its mandate on conflict prevention, military transparency, and environmental cooperation make it a potentially valuable venue for dialogue. Reinvigorating Arctic-relevant OSCE discussions-particularly on military risk reduction, climate-security linkages, and confidence-building measures-could provide a low-threshold, multilateral platform that includes both Western states and Russia.
- **Strengthening Western coordination:** in the absence of pan-Arctic cooperation, deeper policy alignment among the European partners and the US is vital. This could involve synchronising environmental monitoring frameworks, coordinating Arctic infrastructure investments, and enhancing information-sharing on climate-related security threats.

- **Investing in Arctic resilience:** building long-term resilience in the High North is essential, not only for sustainability but also for regional stability. This includes increased support for local and Indigenous communities, cross-border research networks, and investments in dual-use infrastructure adapted to Arctic conditions. Such efforts can serve as a buffer against the risks posed by geopolitical tensions.
- **Preparing for future engagement with Russia:** looking ahead, it is essential to prepare for future scenarios in which engagement with Russia may become possible-whether due to regime change, the stabilisation of relations, or sector-specific cooperation (e.g., search and rescue, fisheries, or scientific research). Modular and scalable governance frameworks could allow for the conditional reintegration of Russia into specific Arctic forums, without compromising core norms such as territorial integrity, the rule of law, and environmental protection.

While the current geopolitical environment constrains full-spectrum Arctic cooperation, it also offers a window to reform and future-proof existing institutions. A strategic mix of short-term adaptations-like reinforcing OSCE and NATO-Arctic links-and longer-term resilience-building and modular planning could help fill the emerging governance vacuum. These steps are not substitutes for a truly inclusive Arctic order, but they do represent pragmatic pathways to safeguard regional stability and prepare for more constructive engagement when conditions permit.

Infographic 4 Arctic governance gaps and potential responses



6 Emerging technologies and Arctic security

As technological innovation accelerates, emerging technologies are rapidly transforming Arctic security. They include artificial intelligence (AI), big data, autonomous systems, satellite communications, quantum technologies, and cyber capabilities. These technologies offer valuable enhancements to situational awareness, command and control, and crisis response in a challenging environment. At the same time, they introduce new risks – ranging from miscalculation and dual-use ambiguity to infrastructure vulnerabilities – that could destabilise an already tense region.

AI and big data

AI and big data are revolutionising Arctic defence by enabling more precise and timely decision-making. These technologies support real-time maritime domain awareness, predictive modelling for environmental and geopolitical changes, and automated surveillance systems. AI-enhanced analytics allow Arctic nations to manage vast datasets from satellites, radars, and sensors, optimising force posture and long-term strategic planning. For example, AI applications can identify anomalies in shipping patterns, predict ice drift, or support autonomous targeting systems.

Yet, with these benefits come profound risks. AI systems often lack transparency, making it difficult to audit or explain critical decisions. Misidentification of vessels or incorrect threat assessments can escalate tensions, especially in the Arctic where military postures are already sensitive. Moreover, the dual-use nature of these technologies complicates verification and fosters mistrust.

Despite these challenges, countries are actively integrating AI into their Arctic strategies. For instance, Canada is advancing its Arctic defence capabilities

through AI-enabled geospatial intelligence,[141] aiming to better monitor maritime traffic and environmental changes that affect national sovereignty and emergency response. Similarly, Sweden is investing in AI and big data for security-focused environmental monitoring and is contributing to NATO-led initiatives to strengthen Arctic cyber defence capabilities.

Satellite communications and surveillance

Satellite communications and surveillance systems are critical to Arctic security, enabling real-time situational awareness across vast and inhospitable terrain. These platforms support command and control, environmental monitoring, and both civilian and military ISR (intelligence, surveillance, and reconnaissance). In high-latitude regions where traditional networks fail, space-based capabilities serve as lifelines for operations, coordination, and deterrence.

However, as reliance on these systems intensifies, so do the associated risks. Satellites are increasingly vulnerable to cyber intrusions, signal jamming, and kinetic threats from rival powers. The growing militarisation of space assets, particularly those serving dual use purposes, raises concerns about potential escalation and system fragility during crises.

Multilateral cooperation has become essential. The European Union's Copernicus programme[142] provides Earth observation data to monitor Arctic ice, pollution, and infrastructure, while Galileo[143] enhances navigation in GPS-challenged regions. National efforts like Canada's RADARSAT[144] and the US-Norway Arctic Satellite Broadband Mission[145] highlight a trend toward integrating satellite platforms with AI and autonomous systems to create robust Arctic ISR networks.

Yet, governance frameworks remain weak. Calls for space traffic management, interference regulations, and norms around dual-use satellite transparency are

141 Benjamin T. Johnson, 'Enhancing Arctic Intelligence, Surveillance, and Reconnaissance (ISR) in Our North, Strong and Free', *North American and Arctic Defence and Security Network*, 15 May 2024.
142 Arctic Hub, 'New Copernicus Arctic: a leap forward in Arctic Monitoring', n.d.
143 European Union Agency for the Space Programme, 'GNSS: addressing the challenges of Arctic navigation', 24 April 2018.
144 Canadian Space Agency, 'RADARSAT program', n.d.
145 eoPortal, 'ASBM (Arctic Satellite Broadband Mission)', 11 September 2024.

increasing. Without these safeguards, an incident involving satellite denial or degradation could escalate quickly, especially in an environment as strategically sensitive as the Arctic.

Autonomous systems

Autonomous systems are rapidly transforming Arctic operations. Uncrewed aerial vehicles (UAVs), uncrewed underwater vehicles (UUVs), and uncrewed surface vessels (USVs) now perform tasks ranging from surveillance and mapping to logistics and infrastructure monitoring. These platforms are ideal for the Arctic, where extreme weather, ice cover, and remoteness limit traditional operations.

They act as force multipliers-extending military reach, reducing risk to personnel, and enabling persistent Intelligence, Surveillance, and Reconnaissance (ISR) coverage. With advances in AI and sensor integration, Arctic-capable drones can now adapt to rapidly changing conditions, detect undersea threats, and support both search-and-rescue and combat scenarios.

However, their rapid adoption brings risks. Autonomous systems, especially when deployed in contested areas, can be misinterpreted as hostile, malfunction unpredictably, or trigger accidents due to poor communication protocols. Their dual-use nature again complicates attribution: is a drone surveying sea ice or enemy activity? This ambiguity heightens the risk of unintended escalation.

Efforts are underway to improve interoperability and coordination. NATO's push for standards in autonomous ISR, combined with discussions on AI ethics and human oversight, offers a potential path forward. Yet, as more actors deploy these platforms, rules of engagement must be clarified to reduce miscalculations in the region's increasingly complex operational environment.

In this context, Denmark is strengthening its Arctic defence posture with a $2 billion package[146] that includes new naval vessels and long-range drones to enhance surveillance and military presence. Likewise, Sweden is preparing to

146 Tim Martin, 'Denmark strengthens arctic defense with $2B package for naval vessels, drones', *Breaking Defense*, 28 January 2025.

test cutting-edge drone swarm technology during the upcoming Arctic Strike exercise.[147]

They act as force multipliers-extending military reach, reducing risk to personnel, and enabling persistent ISR coverage. With advances in AI and sensor integration, Arctic-capable drones can now adapt to rapidly changing conditions, detect undersea threats, and support both search-and-rescue and combat scenarios.

Quantum technologies

Quantum technologies hold transformative potential for Arctic security. Quantum sensors can detect subtle environmental changes and undersea infrastructure anomalies with unprecedented precision. Quantum communication, especially through quantum key distribution (QKD), offers ultra-secure links for sensitive Arctic missions. Eventually, quantum computing may revolutionise encryption and data processing.

These tools offer vital advantages in Arctic conditions, where traditional sensors and communications often falter. For example, quantum navigation systems could enable accurate positioning even in GPS-denied environments near the magnetic poles. Quantum sensors may detect undersea incursions or disruptions to seabed cables, crucial for both economic and military security.

However, quantum technologies are inherently dual-use and strategic. Their integration into national defence strategies-often shielded from public scrutiny-raises fears of an emerging quantum arms race. Without transparency, states may develop offensive quantum capabilities in secret, thereby undermining trust and stability in the Arctic theatre.

Collaborative programmes such as the EU's Quantum Flagship[148] and national strategies in Canada and the US reflect a growing recognition of quantum's strategic importance. These efforts must be balanced with safeguards against unchecked proliferation and destabilising competition.

147 'Sweden to test new drone swarm technology, defence minister says', *Reuters*, 13 January 2025.
148 Quantum Flagship, 'Introduction to the Quantum Flagship', n.d.

Concrete advancements are already underway: in Finland, VTT and IQM have launched Europe's first 50-qubit quantum computer,[149] solidifying the country's role in the quantum computing race. Meanwhile, in the United States, DARPA's Robust Quantum Sensors (RoQS) programme[150] aims to develop quantum sensing technologies capable of operating under real-world conditions, with the goal of enhancing the capabilities of defence platforms.

Cyber and electronic warfare

As Arctic infrastructure digitises, cyber and electronic warfare (EW) threats are mounting. GPS jamming cyberattacks on undersea cables, and signal interference targeting satellites pose serious threats to Arctic operations. These attacks often occur in a legal grey zone – below the threshold of armed conflict – making deterrence and attribution particularly difficult.

The region has seen growing use of electronic warfare, particularly from Russia, which has jammed GPS in Norway, Finland, and Greenland. Such tactics can impair navigation, disrupt emergency responses, and undermine confidence in shared infrastructure. Meanwhile, Arctic internet cables-vital for global connectivity-have become targets for potential sabotage.

Cyber resilience is therefore becoming as important as kinetic deterrence. Arctic states are updating cyber strategies, fortifying digital infrastructure, and integrating cyber security into military planning.

At the same time, hybrid threats are becoming more prominent; Denmark, for instance, has accused Russia of spreading disinformation about Greenland to inflame tensions between Copenhagen and Washington – an example that highlights the complex and evolving nature of cyber and information warfare in the region.[151]

149 Pekka Pursula, 'VTT and IQM launch first 50-qubit quantum computer developed in Europe', *VTT Research*, 4 March 2025.

150 DARPA, 'Taking quantum sensors out of the lab and into defense platforms', 7 February 2025.

151 Sanne Wass, 'Denmark Blames Russia for False Greenland News to Stoke US Spat', *Bloomberg*, 25 April 2025.

Geo-engineering

Geo-engineering – deliberate interventions in the climate system, such as enhancing cloud reflectivity or restoring Arctic sea ice – has gained attention as a potential tool to slow Arctic warming. Proposed techniques include solar radiation management (SRM), like aerosol injections or reflective materials on ice, and carbon dioxide removal (CDR) methods, such as ocean fertilisation or permafrost carbon capture.[152]

While no large-scale geo-engineering projects are currently active in the Arctic, small-scale experiments and proposals have explored the feasibility and risks of such interventions. The region's unique vulnerability to climate change makes it a tempting testing ground for future efforts. However, such actions could unintentionally disrupt ecosystems, Indigenous livelihoods, and regional weather patterns. The dual-use potential of geo-engineering technologies – such as obscuring satellites or altering an adversary's environment – also raises security concerns, blurring lines between environmental mitigation and strategic manipulation.

Governance frameworks for Arctic geo-engineering remain weak. While global agreements like the ENMOD Convention[153] provide some safeguards, Arctic-specific norms are lacking, and unilateral action could spark geopolitical tensions.

Opportunities and challenges

Emerging technologies offer valuable opportunities in the Arctic. They enhance situational awareness, improve crisis response, and support communication, navigation, and environmental monitoring across one of the world's most remote and challenging regions. Yet they also introduce significant challenges. The dual-use nature of these technologies, limited transparency around their deployment, and the absence of strong governance frameworks increase the risks of miscalculation, escalation, and strategic ambiguity. As Arctic states

152 J.B. Horton, & J.L. Reynolds, (2016). 'The international politics of climate engineering: A review and prospectus for international relations'. International Studies Review, 18(3), 438–461.

153 United Nations, 'Convention on the prohibition of military or any other hostile use of environmental modification techniques', 1977.

push the boundaries of what is technologically possible, they must also manage these risks through transparency, cooperation, and shared norms tailored to the Arctic's unique context. Only then can technological progress contribute to stability rather than heightening tensions.

The evolving technological landscape is further shaped by differences in capability between NATO countries and Russia. NATO members have incorporated advanced AI, quantum technologies, and autonomous systems into Arctic security strategies. By contrast, Russia continues to pursue military applications of AI, such as AI-guided drones and the formation of the Russian Unmanned Systems Forces, but faces constraints due to sanctions, limited access to advanced components, and the emigration of skilled personnel.[154] Russia has also made progress in quantum research, including the unveiling of a 50-qubit prototype quantum computer[155], although these developments have yet to translate into significant operational capability.

While this disparity may provide NATO with an operational advantage, it also entails risks. Russia's use of simpler, potentially less reliable systems – such as AI-enabled drones, GPS jamming, and interference with undersea cables – could increase the likelihood of misinterpretation or unintended escalation in an already sensitive and competitive environment. These dynamics highlight the need for clear rules of engagement, confidence-building measures, and shared frameworks for responsible technological development and deployment in the Arctic. Without such measures, the introduction of advanced systems risks exacerbating tensions rather than promoting stability.

154 Anna Nadibaidze, "Russia's Drive for AI: Do Deeds Match the Words?', *The Washington Quarterly*, 47(4), 137–154, 2024.

155 GQI, 'Russia Unveils Its First 50-Qubit Rubidium-Based Neutral Atom Quantum Computer Prototype', 31 December 2024.

7 Conclusions and recommendations

The Arctic is undergoing a profound and accelerating transformation. Once viewed primarily through the lens of environmental preservation and scientific cooperation, it has become a critical arena for strategic competition. While the militarisation of the region predates Russia's full-scale invasion of Ukraine in 2022, the conflict has significantly intensified existing geopolitical frictions. Traditional forums for cooperation, such as the Arctic Council, have been disrupted. NATO's footprint in the High North has expanded with the accession of Finland and Sweden, reinforcing collective defence structures and security integration.

In this shifting landscape, hybrid threats – including cyber operations, undersea infrastructure sabotage, and disinformation campaigns – present acute challenges. These are compounded by the long-term implications of climate change, which is altering the operational environment, undermining infrastructure resilience, and opening new areas to geopolitical contestation. As a result, many Arctic and non-Arctic states are reconfiguring their policies and investments to reflect these multidimensional risks.

The US, Canada, the UK, and the Nordic countries are significantly increasing their Arctic defence readiness, infrastructure investments, and alliance coordination. France and Germany have enhanced their scientific and digital infrastructure contributions, while the Netherlands has emphasised cyber resilience, maritime innovation, and rule-of-law frameworks. These developments reflect a convergence around three pillars: strategic preparedness, infrastructure resilience, and multilateral defence cooperation.

While not geographically Arctic, the Netherlands is an Arctic Council observer, a NATO ally, and a member of the EU. Although the most recent Dutch Defence White Paper does not explicitly focus on the Arctic, the region's significance is implicitly acknowledged. The Arctic features in the 2024 Defence White Paper through its connection to key themes such as deterrence and defence in Northern Europe, the security implications of climate change, and the deployment of anti-submarine warfare frigates. Furthermore, the Arctic is addressed in

internal documents that are part of the Netherlands' Strategy and Armed Forces Development cycle. While the White Paper may not dedicate a specific section to the Arctic, the region's growing strategic importance – especially in the context of NATO's increased attention to the High North – will undoubtedly shape Dutch defence planning, particularly regarding naval and air capabilities. Dutch naval forces are equipped and trained for Arctic conditions, contributing to anti-submarine warfare, missile defence, and amphibious operations in Northern Europe and consequently to the deterrence posture of NATO. The Netherlands also offers added value in climate adaptation, scientific diplomacy, legal norm-setting, and innovation in dual-use technology.

But the Netherlands' stake in Arctic affairs goes beyond defence. Shifts in Arctic shipping routes and supply chains may have implications for the Port of Rotterdam and the Dutch economy. Undersea cable networks transiting the Arctic are critical to Dutch digital security. The Arctic's climate crisis and strategic instability will be felt in Dutch flood management, energy prices, and infrastructure resilience.

Dutch expertise is already having a tangible impact. Dutch engineers support cold-region infrastructure in allied states. Dutch researchers contribute to projects funded by the EU. Institutions such as TNO and QuTech are helping secure NATO's digital edge through quantum technologies. Through diplomacy, the Netherlands supports Arctic governance norms and Indigenous rights while upholding international law.

Recommendations for the Netherlands

1. **Integrate the increasing geopolitical relevance of the Arctic priorities into core national security strategies and defence policies**
   a. In adapting the Dutch Polar Strategy, take into account the increasing tensions in the Arctic region due to the Russian invasion of Ukraine and the deteriorated relations with Moscow.
   b. Use the updated Polar Strategy to embed Arctic policy into the Integrated Foreign and Security Strategy and Defence White Papers.
   c. Continue to address Arctic security in defence policy and planning, in education modules and in training programmes.

2. **Contribute to deterrence and readiness through NATO and the Joint Expeditionary Force (JEF)**
   a. Formalise the Netherlands' commitment to the Regional Defense Plan Northwest with enhanced contributions from the navy and air force.
   b. Support NATO Arctic logistics coordination and contribute to integrated air and missile defence, anti-submarine warfare, and strike capabilities.
   c. Continue regular participation in exercises like Cold Response, Nordic Response, Arctic Challenge, and Operation Nanook.
   d. Expedite the forward positioning of stocks for the Dutch Marines in Northern Norway.

3. **Promote the implementation and further development of EU Arctic policies, strategies and capabilities**
   a. Advocate, against the backdrop of fundamental geopolitical changes, the importance of the updated EU Arctic Policy, as well as the inclusion of Arctic-specific actions on the EU (security) agenda.
   b. Support the implementation of the European Maritime Security Strategy and its Action Plan (EUMSS), in particular to counter hybrid and cyber threats targeting critical infrastructure and to improve maritime domain awareness (MDA).
   c. Connect the EU's space programmes (Copernicus, Galileo and IRIS2) closer to the Arctic. They can play a critical role in enhancing Arectic security as well as strengthening the role of the EU.
   d. Advocate EU funding for Arctic satellite communications, broadband, and port modernisation with the EU as a regional and global player. They can complement Europe's Arctic situational awareness.

4. **Invest in climate-resilient and dual-use infrastructure**
   a. Actively seek cooperation with regional actors in the field of water management and cold-region engineering.

5. **Champion the legal and governance order and multilateral stability**
   a. Uphold United Nations Convention on the Law of the Sea (UNCLOS) and promote responsible Arctic governance through International Maritime Organization (IMO), the Commission on the Limits of the Continental Shelf (CLCS) and Arctic Council initiatives.
   b. Support the continued evolution of the Arctic Security Forces Roundtable (ASFR) and of the newly formed Arctic Security Policy Roundtable (ASPR).

6. **Bolster technological edge in Arctic innovation**
    a. Leverage TNO and QuTech to support NATO efforts in quantum-secure communications and satellite ISR resilience, with a particular focus on collaboration with our strategic partner countries.
    b. Launch defence innovation calls for Arctic-relevant dual-use startups focused on drones, sensor fusion, and AI resilience.

7. **Monitor and respond to hybrid threats**
    a. Increase intelligence contributions to NATO's Arctic situational awareness networks, including through greater integration with EU Maritime Surveillance, which facilitates real-time maritime data sharing and enhances coordination among EU member states and agencies in the Arctic maritime domain.
    b. Track, inform and consult (NATO) Arctic states and partner countries on Russian and Chinese hybrid activity, including undersea infrastructure sabotage and dual-use scientific operations, and how to respond to these challenges.

8. **Deepen Arctic partnerships**
    a. Expand operational coordination in the High North through joint deployments, information-sharing agreements, and cold-weather capability development.
    b. Consider using the existing Agreement on the Prevention of Incidents On and Over the High Seas (INCSEA) arrangement with Russia as a potential avenue to establish bilateral relations once the situation in and around Ukraine would allow for this.

9. **Balance security with human and environmental priorities**
    a. Ensure Dutch Arctic engagement remains rooted in values of sustainability, Indigenous partnerships, and environmental stewardship.
    b. Integrate climate-security risks into defence planning, including base resilience and permafrost impact modelling.

This report shows that the Arctic is not distant, but nearby. Developments in and around the Arctic significantly affect the Netherlands – economically, strategically, and militarily. Due to its extreme conditions, the Arctic also serves as a warning for environmental trends and disputes over the international rules-based order. At the same time, the Netherlands brings unique capabilities and expertise across technological, military, and economic fields – assets that can serve both its own interests and those of close partners in the region. This underscores the need to maintain a coherent national strategy.

Annex 1. Contribution by Andreas Østhagen

The Geopolitics of Svalbard

I. Introduction

With all the attention given to statements concerning the future of Greenland, the Arctic has become popular in geopolitical analyses. Common conceptions of 'geopolitical rivalry' being caused by sea ice melting are, however, too simplistic. They underestimate the complexity of the political and legal dynamics at play in a space that covers 4 % of the globe.

Moreover, it is not Greenland that should have geopolitical pundits scrambling. Another set of islands – the Norwegian archipelago of Svalbard – is in a more dire situation. However, also here, misconceptions and myths concerning this archipelago abound in popular media and some academic scholarship – concerning everything from sovereignty disputes to its legal and military status. Such misconceptions are intertwined with the actual geopolitical issues that concern Svalbard or stem from different interpretations of the Svalbard Treaty from 1920 which conferred sovereignty upon Norway.

This short article examines the geopolitical aspects of this Norwegian Arctic Archipelago, in order to provide greater accuracy to the growing popular and academic discussion about Svalbard and the wider Arctic.[1]

II. Svalbard and related misunderstandings

The origin of Svalbard's unique political situation can be traced back to its role as a locality for commerce and trade in the Arctic, centuries ago. Initially named *Spitsbergen* by the first verified discovery of the archipelago by the Dutch explorer Willem Barentsz in 1596, the archipelago was renamed Svalbard by

Norway in 1925. Today, Spitsbergen is the name of the largest island. The name 'Svalbard' originates from 'Svalbarði fundinn', mentioned in the Icelandic annals from 1194, and means 'the cold coast found' – possibly referring to Viking-era observations of the islands (Arlov 2003, 50–51).

Located approximately 650 kilometres north of the Norwegian mainland and just 1,000 kilometres from the North Pole, Norway's most northern territory has political and economic aspects which are suitable for an analysis of the links between geography and power politics. The presence of Russian nationals residing in separate Russian communities on what is Norwegian territory, as well as the proximity of Svalbard to military activity and fortifications – primarily the Russian Northern Fleet on the Kola Peninsula – make the archipelago particularly relevant in Norway–Russia relations, and NATO–Russia relations writ large.

Image 1 Map of Svalbard, drawn by Anders Skoglund, Norwegian Polar Institute (Norwegian Ministry of Justice and Public Security 2024, 10). Source: https://www.regjeringen.no/contentassets/f8407df1f6a641fbae2ca00f4509a64e/no/pdfs/stm202320240026000dddpdfs.pdf

Moreover, while Norway is the sovereign of Svalbard as per Article 1 of the Svalbard Treaty from 1920, several states have maintained a sense of entitlement linked to the archipelago – ranging from the presence of research stations to a focus on historic activity through fisheries, exploration and coal mining. All these issues revert back to the special provisions in the Svalbard Treaty which, in essence, had two primary functions: settling the question of sovereignty over Svalbard by conferring it upon Norway, and ensuring that nationals of other states could still enjoy certain economic privileges on the archipelago (Svalbard Treaty 1920).

When Russia launched its full-scale invasion of Ukraine in February 2022, Svalbard received a surge in attention from both Norwegian and international media, as a focal point for interest in Arctic security concerns. Although Norway has 'full and absolute sovereignty' (Art. 1 of the Svalbard Treaty) over Svalbard, misconceptions about governance and legal issues continue, in both media and scholarly work. Here the focus is on the latter. The most common misconception concerns Svalbard's status as a 'shared space' or its legal status as being 'ambiguous' (Zimmerman 2018). Another claim is that the 'Norwegian interpretation of the Svalbard Treaty is disputed by other signatories' (Wither 2018).

However, no state has ever challenged Norwegian sovereignty over Svalbard (with the exception of the Soviet proposal in 1944). The issue was settled with the Treaty in 1920. Subsequent accessions to the Treaty, especially by the USSR in 1935, have affirmed its relevance. The notion that its sovereignty is in dispute, or that there exists a legal 'ambiguity', might arise from a conflation of the dispute that concerns the Treaty's relevance for activities beyond 12 nautical miles, as described in more detail in the next section. Similarly, the only aspect of the Svalbard Treaty that is in 'dispute' is its geographical scope – does it extend beyond 12 nautical miles seaward, or not? Here, however, it is important to note that sovereign rights and jurisdiction on the sea are not the same as sovereignty over land or a group of islands.

The second misconception confuses the wording of the Treaty's Article 9 with a 'demilitarised' zone (Koivurova and Holiencin 2017; Coffey 2020). Moreover, some argue that the archipelago is shrouded in 'NATO ambiguity' and question whether it is covered by the defence alliance's territorial security guarantee (McVicar 2022).

In response, it is important to revert to the Treaty and its Article 9, which is the source of this confusion. What Article 9 states is that 'Norway undertakes not to create nor to allow the establishment of any naval base in the territories specified in Article 1 and not to construct any fortification in the said territories, which may never be used for warlike purposes.' A demilitarised zone, however, is traditionally defined as a geographic space where military activity is completely forbidden (ICRC 2023) – examples being the DMZ between North and South Korea, or the green line zone between the Turkish Republic of Northern Cyprus and the Republic of Cyprus.

This is not what is stated in the Treaty, however: in fact, military activity *could* take place on Svalbard as long as it does not have 'warlike purpose' or constitutes 'naval bases' or 'fortifications. Norway does make use of Longyearbyen for resupplying Coast Guard vessels that are frequently in Svalbard waters to perform various tasks ranging from sovereignty enforcement to fisheries inspections and emergency responses (Østhagen 2016, 2018). As Norway has 'full and absolute' sovereignty over Svalbard, the islands are also covered by NATO's collective security guarantee – a point confirmed by the USA in the 1950s (Tamnes 2020, 148).

Finally, a note on the rights of other states and their presence is warranted. Writings about Svalbard tend to conflate rights to access and certain economic activities (Coffey 2023), and the mention of research activity in the Treaty's Article 5. It has been argued that 'Signatories to the Treaty [...] have full rights to economic activities and scientific research' (Lanteigne 2023). Similarly, the use of science and research activities for more than just scientific purposes has increasingly become a concern in a Svalbard context, especially after Russia's invasion of Ukraine in 2022. Svalbard has even been highlighted as a 'A Strategic Battleground for Scientific Research' (Rhodes 2023).

However, as even a quick reading of Article 5 of the Treaty makes clear, there is no explicit mention of the right to scientific activity. Beyond references to an international metrological station, 'Conventions shall also be concluded laying down the conditions under which scientific investigations may be conducted in the said territories' (Svalbard Treaty 1920). Such conditions have not, however, been negotiated or concluded since 1920, and the Norwegian government views this is as no longer being relevant (Norwegian Ministry of Justice and Public Security 2022, 18). However, there are others that hold a slightly different view – both amongst states and Svalbard-oriented researchers. Erik Molenaar, for

example, argues that an interpretation of Articles 1 and 3 of the Svalbard Treaty could lead to an implicit right for research (Molenaar 2022).

Similarly, there is a tendency in much of the Svalbard literature to highlight that *states* have rights on Svalbard – in fact, the Treaty confers special privileges only on the *nationals* of the acceding states. This is an important distinction, as it invalidates statements that indicate that 'other countries' have settled on the archipelago (Nikel 2023). It is nationals (or related companies) that can make use of the privileges conferred by the Treaty from 1920, not states as such.

III. Undermining Norwegian sovereignty

The above facts notwithstanding, several geopolitical challenges linked to the archipelago persist, and these have become increasingly important in the security policy situation in which Norway finds itself.

The first challenge concerns the fear that Russia, as the only other country besides Norway that has separate communities on Svalbard, will create problems for Norway. In the aftermath of Russia's invasion of Ukraine in 2022, an even more assertive and nationalistic Russia has emerged, including on Svalbard. This is exemplified by Russia's illegal use of a helicopter during a symbolic parade in Barentsburg (Staalesen 2023), the erection of a cross in the conservation area outside Pyramiden (Nilsen 2023b), and far-reaching plans for a new research centre also in Pyramiden together with, among others, China (Edvardsen 2023).

Moreover, a regular drip feed of statements pertaining to Svalbard from Moscow appears to be intended to underscore Russia's strategic ambiguity and to exert pressure on Norway. These statements assert, for example, that Russian rights on Svalbard must be respected or that Norway is violating the Svalbard Treaty (Staalesen 2024; Kruse et al. 2020). Owing to economic, strategic, and – not least – capacity considerations, Russia is unlikely to desire large-scale conflict over Svalbard. Nonetheless, it is clear that Svalbard has become a pawn in several campaigns.

First, Russian central authorities wish to demonstrate strength vis-à-vis the "West," and Svalbard offers an excellent arena for this purpose, given that Russian citizens are allowed to reside and conduct business activities on Norwegian soil due to the provisions in the Svalbard Treaty. Second, the head

of the Russian state-owned company Trust Arktikugol – which is responsible for Russia's activity in Svalbard – wants attention and support domestically, and symbolic and nationalistic actions are a great way to achieve this.

While these actions and complaints do not directly challenge Norwegian sovereignty over Svalbard, the sum of complaints could amount to a larger challenge to how Norway adheres to and interprets the Treaty. This also ties into concerns that some have voiced after 2022 about the Norwegian authorities losing control over foreign activities on the islands. The concern has been that if Russia wanted to escalate a conflict while retaining some form of plausible deniability, it could initiate actions with a basis in these complaints to undermine Norwegian sovereignty.
In particular, Russia has complained about Norway allegedly using Svalbard for military purposes, in breach of the Treaty's Article 9 (Tamnes 2020). Russian sensitivities to the question of military activity on Svalbard relate, to some extent, to the proximity of Svalbard to the Northern Fleet on the Kola Peninsula and its strategic position for defending Arctic territory and projecting power in the GIUK-N (Greenland, Iceland, and the United Kingdom-Norway) and Bear (after Bear Island) gaps. Similar complaints have come from Russia concerning the Norwegian satellite station located on Svalbard – which is the world's largest commercial ground station (KSAT 2021) – where Russia has questioned whether the data gathered are used for 'warlike purposes' (Pettersen, Schaubert, and Eriksen 2022). This point is difficult to prove or refute, as satellite data concerning weather and climate might be used for various purposes and be dispersed to a wide range of users.

Another issue that has drawn particular attention to diverging interests in Svalbard has been Norwegian efforts through the Norwegian Polar Institute to better coordinate research in Ny-Ålesund (Norwegian Research Council 2019), which is a small research settlement on the island of Spitsbergen. The response from some research institutions, like the British Natural Environment Research Council, was negative, indicating disappointment and fears that this coordination effort could undermine the British symbolic presence in the Arctic (Hanger 2018; Moe 2020, 128). However, it was the Chinese response that attracted the most attention. Norwegian efforts to improve research coordination in 2018 led to Chinese research actors expressing concerns over whether Norway was extending its reach too far (Liu 2021, 4; Hanger 2019). In an official note from the Chinese Arctic and Antarctic Administration it was argued that these matters should have been decided through an international process

and that they violate the principle of equal access and the right to certain activities – despite acknowledging that research does not constitute any of these matters (Moe 2020, 128–29).

IV. Access to resources at sea

The second geopolitical challenge concerning Svalbard is about access to the resource-rich waters and seabed around Svalbard. Although Norwegian sovereignty over Svalbard is not disputed, a dispute over whether the provisions of the Svalbard Treaty should also apply *at sea*, beyond 12 nautical miles, is ongoing, as reflected in the infamous snow crab and cod quota cases (Østhagen and Raspotnik 2019). Here, it is the EU (or, at least, some EU countries) that often poses problems for Norway. The Svalbard Treaty itself refers only to 'territorial waters', initially 4 and today 12 nautical miles from the baseline. The question in dispute is whether this 200-nautical mile zone and the continental shelf around the islands are covered by the provisions in the 1920 Treaty.

Although this disagreement with Norway's relatively close NATO allies is unlikely to flare up, Russia is also an actor in this situation. When Norway established a Fisheries Protection Zone in these waters in 1977, the USSR claimed – and Russia continues to claim – that Norway has no right to create any management regime around Svalbard without consulting Moscow. In practice, Russia accepts the inspection and fining of Russian trawlers around Svalbard, but several cases in recent decades have attested to how situations with Russian trawlers can escalate (Østhagen 2018).

There are two aspects of this geopolitical dispute that may intensify further. The first is the issue of access to resources, and possible attempts by vessels from various states to claim their rights, as seen with the EU in the snow-crab case. The fact that snow crabs are defined by all relevant parties as sedentary species also means that how they are managed sets a precedence for other shelf resources such as hydrocarbons and seabed minerals.

The attention given to oil and gas development on the shelf around Svalbard has somewhat subsided since the heyday of Norwegian Arctic oil and gas interest around 2007-2010, although that might change in the future. Seabed minerals, however, have become more relevant in recent years. In 2020, the Norwegian government initiated a process for allowing mining operations on the Norwegian

continental shelf. About a third of the area in question as the opening process was approved in 2024 overlaps with the continental shelf and the Fisheries Protection Zone around Svalbard (Hvinden and Østhagen 2024).

Second, questions are emerging regarding the activity of both Russian fishing vessels and research vessels in Norwegian waters. A disrupted fibre-optic cable shortly before the invasion of Ukraine in 2022 and the sabotage of gas pipelines in the Baltic Sea exemplify the vulnerability of offshore infrastructure (Fredriksen et al. 2022). Matters are further complicated for Norway by the fact that both fishing vessels and research vessels from Russia have access rights to Norwegian waters, which are difficult to restrict as a result of both Law of the Sea provisions and the co-management regime for fish stocks in the Barents Sea (Juul Stensrud and Østhagen 2024).

V. Svalbard Geopolitics

It is important to reiterate that no other signatory has directly challenged Norwegian sovereignty or actively undermined Norwegian authority. First and foremost, this is because the signatories themselves are content with the status quo of the Svalbard regime. As regards the dispute as to whether the Treaty's provisions apply to the maritime zones, Russia is thought to be satisfied with the current regime, no doubt as its application is advantageous to Russian interests, whereas the EU (or its member states) has bigger fish to fry with various security concerns along its eastern and southern borders. And in the case of the strategic use of Svalbard in military planning and a possible conflict between NATO and Russia, Svalbard's relevance was perhaps overstated both during the Cold War and today.

None of these points undermines my overarching conclusion here: there are still serious geopolitical issues concerning Svalbard; and disentangling misconceptions and misunderstandings about these is a continuous endeavour. Moreover, nuancing these legal and political developments add layers of complexity to analyses of Arctic security writ large.

Turning to how the geopolitics of Svalbard might evolve, the main concern as seen from a Norwegian decision-maker's perspective is undoubtedly Russia. Apprehension with regard to Russian activity on Svalbard, or actions concerning the archipelago, has been prevalent ever since 1925. Russia looms large in all

the geopolitical dimensions highlighted above. Military use of the archipelago is relevant only in a scenario with a NATO–Russia conflict. Other potential adversaries in a large-scale conflict (e.g., China) are simply too far removed from Svalbard.

Small-scale challenges to Norwegian policy on land, or jurisdiction at sea, however, include a range of actors other than Russia alone. The most active challenge to the Norwegian position regarding maritime zones in recent years has come from the EU and some of its member states: first, over access to snow-crab fisheries; then, over the share of the cod quota in the FPZ after Brexit. It is also possible to imagine entities other than Russia and EU member states – like China – wanting to challenge the Norwegian position and/or claiming equal rights to economic activity in the water column or on the shelf (Liu 2021).

Chinese encroachments facilitated by an isolated Russia might complicate the Arctic security landscape in the longer term. The coastguard agencies of Russia and China signed a cooperation agreement on strengthening maritime law enforcement in 2023 (Nilsen 2023a), and both states have expanded their naval exercise collaboration off the coast of Alaska in recent years (Mahadzir 2023). When all other Arctic coastguard agencies suspended their participation in the Arctic Coast Guard Forum, Russia invited China to join the forum (Nilsen 2023a). These are signs of China's expanding presence in Arctic safety, governance and even – perhaps – security issues. As put by a US official, such efforts by China aim 'to normalise its presence and pursue a larger role in shaping Arctic regional governance and security affairs' (Rosen 2022).

Still, from a geopolitical perspective, Russia remains the primary security concern, due to the high number of Russian fishing vessels operating around Svalbard each year (as per the co-management regime of shared fish stocks in the Barents Sea), and the Russian government's refusal – in principle, if not in practice – to acknowledge the Norwegian right to inspect and levy fines for violations in the FPZ (Østhagen 2018). Despite the brief rise of concerns over Chinese protests regarding research coordination, the same conclusion holds true for possible disputes on land over Norwegian policies, and over what are sometimes claimed by Russian officials to be violations of the principles set out in the Svalbard Treaty. If tensions were to mount even further between NATO and Russia at large, it is also likely that Russia could decide to engage in so-called 'hybrid warfare' in or around Svalbard. Concerns in Norway over the activities

of Russian trawlers and research vessels in Norwegian waters are already prevalent.

However, there are more lenses through which to view Russian actions and interests in Svalbard beyond the security-oriented or military ones. As the only other state with communities on Svalbard, and with interests in various economic activities ranging from coal mining to tourism and fisheries, Russia benefits from maintaining the status quo. The current situation on Svalbard favours Russian economic interests, as well as the wider Russian desire to ensure that regional relations in the Barents Sea remain politically stable. Many scholars have thus concluded that undermining the Svalbard regime or disregarding the Treaty itself have so far not been in Russia's interests (Østhagen, Jørgensen, and Moe 2020; Todorov 2020; Hønneland and Jørgensen 2015).

Instead, continuous statements from Russia seem to support an underlying policy of maintaining a form of 'strategic uncertainty' concerning challenges to Norwegian rules and regulations on Svalbard, and its legal position regarding the maritime zones around Svalbard. It seems that although Russia prefers to continue to pressure Norwegian authorities on Svalbard issues, it is not interested in instigating further regional instability and tension – unless the security situation should deteriorate further. How and where Norway and its allies manage potential mishaps, misunderstandings and miscalculations, alongside potential provocations, also matters in avoiding conflict escalation related to Svalbard.

VI. Arctic Geopolitics in 2025

Arctic geopolitical analyses often tend to be too general and are driven by sweeping conclusions that fail to take into account regional complexity and the disparity in the security challenges found north of the Arctic Circle. Svalbard is undoubtedly a *sui generis* case study of Arctic security and geopolitics, given the provisions of the 1920 Treaty that affirmed Norwegian sovereignty. Some of the geopolitical concerns and developments addressed here stem from that unique status.

However, other issues related to the role that parts of the Arctic hold in strategic military considerations or increased great power competition could be equally relevant when discussing other locations in the Arctic. By examining one specific

part of the Arctic, as done here, we can thus delve deeper into its political concerns and how scenarios might unfold in the North, while also recognising the inherent complexity of Arctic security and geopolitics.

For Norway, Trump's statements concerning Greenland have also led to questions about Svalbard. The international press and analysts claim that a barter deal with Russia is conceivable, or that Trump may want to 'buy' the Norwegian archipelago. This overestimates the American interest in Svalbard and underestimates Russia's satisfaction with the current situation in Svalbard, where it has free access, its own settlements, and a limitation on military use due to the Svalbard Treaty.

At the same time, the increased interest in the Arctic, both in the White House and in the rest of the world, is helping to place Svalbard at the centre of events. Ambitions for an increased presence there by, among others, India and Turkey must be seen in the context of why Trump wants to gain control of Greenland. This will put further pressure on Norway, and Russian authorities are already actively working to promote their own 'Arctic narrative' where the West and NATO are the cause of increased tension in the north. Countering this with facts and steadfastness is an endeavour which is only going to become more important in the years to come.

Andreas Østhagen is a Research Professor at the Fridtjof Nansen Institute and affiliated with the High North Center at Nord University and Harvard Belfer Centre's Arctic Initiative.

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Annex 2. Contribution by Karsten Friis

Norway's defence policy in the High North – new constellations in the making

Background

The European Arctic – or 'High North' – emerged as an important strategic region amidst the Cold War. From around the 1960s the Soviet Union built up its Northern Fleet on the Kola Peninsula, equipping it with strategic submarines capable of carrying nuclear ballistic missiles. These, combined with long-range bomber aircraft, posed a direct threat to the North American continent across the Arctic. As a result, NATO increased its focus on the European Arctic, which had previously been referred to as 'the forgotten flank'. Moreover, the Soviet defence concept for the forces stationed on the Kola Peninsula implied a forward defence that extended far into the Norwegian Sea, toward the so-called GIUK (Greenland–Iceland–United Kingdom) gap. This forward defence – the so-called 'bastion defence' – was perceived to rely on disrupting and repelling NATO operations approaching the Barents Sea and the Kola-based Soviet military installations. It was also presumed to include Soviet offensive land operations into northern Norway.

In response, Norway built up a substantial defence system to deter and counter a potential Soviet attack. Norwegian forces were, however, outnumbered by the Soviets, meaning the country would have to rely heavily on allied reinforcements should a land offensive take place. At the same time, Norway imposed a number of restrictions on its defence posture in the north. The so-called 'base policy' and 'nuclear policy' (no NATO bases or nuclear weapons in Norway in peacetime), alongside other initiatives, aimed to reassure the Soviet Union that NATO had only defensive intentions in the region. Thus, no allied combat forces were

permanently stationed in Norway, military exercises in the county bordering Russia were very limited, and military aircraft/vessels were prohibited from crossing east over a demarcation line while in or over Norwegian territory.

As a consequence of these policies, northern Norway was left vulnerable to hostile attacks. The government therefore concluded that the absence of permanently stationed troops should be 'compensated' by frequent in-country allied training and exercising, leading to American, British, Canadian, German, French, Dutch and other allied troops undertaking regular winter training in Norway. Given that Sweden was not a NATO member at the time, all allied reinforcements for Norway had to be delivered by air or sea, meaning that the country was, in effect, acting as a NATO island. This prompted the United States, the United Kingdom, Canada and Germany to establish a number of pre-positioning programmes across Norway to facilitate rapid deployment, should it be required.

After the Cold War ended, the US Marine Corps retained its large storage facilities in mid-Norway, despite the material stationed there later being shipped to Iraq and Afghanistan. Nevertheless, as NATO increasingly focussed 'out of area', the northern flank once again became more or less 'forgotten' within the alliance, irrespective of Norwegian and Icelandic attempts to maintain interest among other members. Over the course of the 1990s and 2000s, much of NATO's activity in the European Arctic, Iceland and Norway was terminated.

Arctic defence posture today

Following Russia's first invasion of Ukraine in 2014, and its more assertive operational behaviour in the Arctic beginning a few years later, the interest of the NATO allies in the northern flank was reignited. British, American and Dutch marines recommenced regular exercising in Norway, as did other units. The biannual air exercise Arctic Challenge (ACE) executed over Norwegian/Swedish/Finnish airspace grew steadily to become the largest in NATO, with about 100 participating aircraft in 2015 and 150 in 2023. The NATO flagship exercise, Trident Juncture, was executed in Norway in 2018, involving 50,000 participants from 31 nations. Other exercises, such as Northern Viking over Iceland, the North Atlantic maritime exercise Dynamic Mongoose, and the Cold Response in Norway, also grew in size and the numbers of participants. In addition, NATO allies intensified their maritime operations in the north in order to re-learn cold

weather operational skills, as well as to signal alliance cohesion and deterrence towards Russia. Hence, from about 2018–2020, the allied focus on the High North increased significantly.

Russia's full-scale invasion of Ukraine in 2022 reinforced this trend. Although Russian ground troops stationed on the Kola Peninsula were transferred to Ukraine and were largely dissipated, the country's Arctic air and naval forces continued to operate more or less as before. NATO countries therefore chose to maintain their increased level of engagement in the north.

Following 2014, Norway gradually returned to its Cold War defence outlook. Despite the country having significantly slashed its armed forces since the Cold War, coupled with considerable advances in military technology – meaning the volumes, structures and platforms involved were now very different compared to the previous era – concerns regarding Russia's bastion defence were again the main determining factor in Norwegian defence planning. Reductions in available Russian ground forces at Kola meant that the primary concern was less one of full-scale occupation, but rather of smaller incursions, partial occupation, amphibious operations and cruise missile attacks. Nonetheless, the Cold War-era restrictions – the nuclear and base policies, as well as restrictions on allied activity in and over Finnmark county – remain in place to this day, albeit in a revised form. A desire to avoid misunderstandings or unintended escalation in the north continues to be the driving motivation for the Norwegian authorities in this regard.

As such, the government is seeking to attract allied engagement in the north, while simultaneously reducing such activity in the close vicinity of Russia's border or its territorial waters. As a general rule, the Norwegian Navy seeks to accompany allied vessels sailing into the High North, especially if they are heading east into the Barents Sea. The purpose here is partly to influence the ally's operational patterns and route, and partly to signal to Russia that Norway is the principal NATO representative (and counterpart) in the region.

In 2024, the Norwegian Parliament passed a long-term defence plan, which envisages a significant increase in the defence budget during the period in question (12 years), up to a total of NOK 1624 billion (ca. EUR 144 billion). Norway's defence budget reached 2% of GDP in 2024 and is estimated to reach 3.3% in 2025 (defence aid to Ukraine is included in these numbers). It may well increase further over the coming period. Given the recent developments in

the United States, there is a political push to expedite the implementation of the defence plan, thereby increasing the pace at which Norway gains military capability.

Even so, when it comes to the defence and security of the Arctic and Nordic region, the single most important recent development is undoubtedly the enlargement of NATO to include Finland and Sweden. Having the two countries integrated into NATO's force structure, defence plans and command structure makes a significant difference, as it leaves Norway operationally and logistically far less isolated. In particular, rather than treating the respective land and air forces as separate national entities, it will be possible over time to bring them together operationally as a single Nordic force. Integrated air operations will be facilitated through a new NATO Combined Air Operations Centre (CAOC), while Nordic land forces will be commanded through the new Multi Corps Land Component Command (MCLCC) HQ in Finland and elsewhere. These enhanced structures will also facilitate the reception of other allies in the event of a crisis in the region.

The outlook

Norway signed a Supplementary Defence Cooperation Agreement (SDCA) with the United States in 2021 as an update to existing agreements. Following a subsequent revision, the agreement currently allows for American investments in 12 Norwegian bases, with a view to facilitating the swift movement of US personnel and equipment during a potential crisis. The United States has also signed similar agreements with the rest of the Nordic countries and other allies. The extent to which these investments will be fully implemented is, however, uncertain given the present political climate in Washington, with trust in US support and reinforcements not as ironclad as it used to be.

Norway, just like everyone else, must therefore consider how European allies can further assist each other should a diminished American footprint in Europe become a reality. 'Hedging strategies' implies building stronger partnerships with key allies, involving not only securing support during a crisis, but achieving stronger impacts by combining and integrating military units, platforms and systems. For smaller NATO allies, this first and foremost entails closer ties with the major powers in Europe: the United Kingdom, France and Germany. Norway has, for example, intensified cooperation with Germany over recent years

through the joint procurement of German-built submarines. These vessels are similar and interchangeable between the two naval forces, and there is also a programme for shared maintenance and joint operations. The United Kingdom has also expanded its engagement in Norway, including a steep increase in fleet visits, the establishment of 'Camp Viking' in northern Norway for the Royal Marines Commandos, and close cooperation on F-35, P-8, SOF and intelligence. Alongside this, the Joint Expeditionary Force is another framework through which the United Kingdom is seeking to lead Nordic–Baltic and Dutch activities in Northern Europe.

Hedging is not just restricted to the larger allies. The Netherlands and Norway have a long history of cooperation within NATO, being largely like-minded in terms of their security outlook, strategy and values. In fact, Norwegian cooperation with the Netherlands has historically been closer than with its Nordic neighbours, not least in terms of research and development (e.g. space technology).

The Dutch Marines have exercised in Norway since the 1970s, increasingly in cooperation with the British Royal Marines, the United States Marines Corps and the Norwegian Army. The amphibious Dutch Navy vessel HNLMS *Rotterdam* regularly performs exercises in Norway, as do other Navy vessels and the Dutch Air Force. In addition, Norway and the Netherlands use similar fighter jets (such as F-16s, and now F-35s). There have also been exchanges of Army staff officers, staff college cadets and liaison officers at HQs, while Dutch simulators have been utilised by Norway for Leopard battle tank and CV-90 combat vehicle training. Alongside this, there is defence industrial cooperation between the two countries.

Given NATO's new suite of defence plans, the Netherlands will likely have a significant role to play in the north-west regional defence plan. Although the details are classified, the capability requirements that NATO is developing and assigning to each ally provide a clear opportunity for members to strengthen bilateral ties and cooperation. Pre-positioning of equipment may further facilitate this. In April 2025, a bilateral Letter of Intent between the Netherlands and Norway was signed with a view to enhancing such collaboration.

The implications of the US's reduced footprint in Europe and seemingly less supportive approach towards Ukraine is already apparent. Various 'coalitions of the willing' are meeting regularly on different levels in both civilian and

military circles. Despite the presence of both Canada and Türkiye, the northern Europeans constitute a clear majority within these constellations of allies, which may over time lead to a framework for intensified collective defence preparations, collaboration and joint procurement programmes – within or outside of NATO. Going forward, while the defence of the High North will almost certainly still feature a US contribution (given that it involves American homeland defence), Washington will most likely expect a European lead and significant European force.

Karsten Friis is Research Professor at the Norwegian Institute of International Affairs (NUPI).

Annex 3. Contribution by Romain Chuffart

How does Canada's position on the status of the Northwest Passage align with international law and the principles of the 2008 Ilulissat Declaration?

Introduction

To understand Canada's legal position regarding the Northwest Passage (NWP), a maritime route that runs in Canada's Arctic Archipelago, it is essential to understand that this view and the opposing views are largely centred around diverging interpretations of UNCLOS. They do not challenge it. Canada's main position was clearly stated in its 2024 Arctic Foreign Policy:

> "*The waters of Canada's Arctic Archipelago, including the various channels comprising the Northwest Passage, are internal waters of Canada by virtue of historic title and in accordance with international law*" (Canada's Arctic Foreign Policy, 2024, p. 23).

The strategic value of the NWP has become increasingly evident as climate change accelerates the melting of Arctic Sea ice, making commercial navigation such as cruise tourism a more frequent occurrence. In this context, the question therefore becomes how far Canada can restrict navigation under environmental protection or through historical usage arguments.

For Canada, the NWP has become more than just a maritime route. It is a fundamental expression of national identity and sovereignty (Rothwell 2018, 9–10). Historically, the Canadian authorities have viewed the waters of the

archipelago as internal waters (see figure 1), a position mainly building on Canada's colonial history with the presence of Canadia Indigenous communities, particularly the Inuit, and Canada's longstanding legislative framework designed to regulate and protect its Arctic waters. Opposing this view, the United States and certain European states have been arguing that the NWP constitutes an international strait subject to transit passage under UNCLOS. In their view, no single state can claim exclusive jurisdiction over such a strategic route that connects the Atlantic and Pacific Oceans.

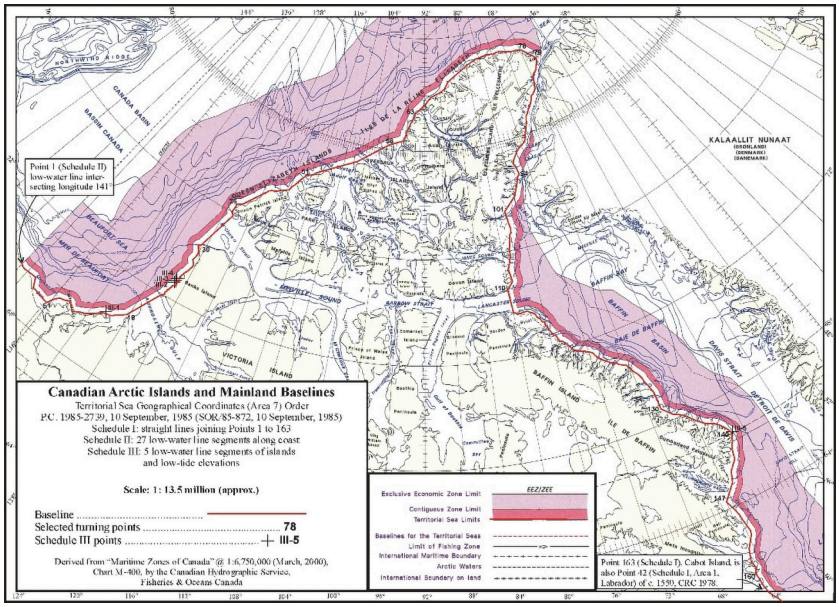

Figure 1 Canadian Arctic Islands and Mainland Baselines

The tension underlying these competing positions underscores critical debates about the scope of coastal state rights versus the freedom of navigation in international law. UNCLOS, which codifies much of contemporary maritime law, sets out specific provisions dealing with navigational rights, the protection of the marine environment, and the legal status of ice-covered waters. For Canada, these provisions are instrumental in justifying its legislative and policy initiatives, including the Arctic Waters Pollution Prevention Act (AWPPA, 1970) and the Northern Canada Vessel Traffic Services Zone Regulations (NORDREG). Specifically, UNCLOS Article 234 grants coastal states the authority to adopt and enforce non-discriminatory laws and regulations for the prevention, reduction,

and control of marine pollution from vessels in ice-covered areas within the limits of their Exclusive Economic Zone (EEZ). As the Canadian government interprets it, Article 234 does not only provide an environmental regulation prerogative but, in practice, strengthens Canada's broader sovereignty over the NWP. Critics view this expansive interpretation as an attempt to stretch Article 234 beyond its intended purpose (see Kraska 2007; 2009).

In 2008, the five Arctic Ocean coastal states (Canada, the Kingdom of Denmark, Norway, Russia, and the United States; hereinafter A5) agreed to the Ilulissat Declaration (28 May 2008) in which they asserted the following:

> *Notably, 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.*
>
> *This framework provides a solid foundation for responsible management by the five coastal States and other users of this Ocean through national implementation and application of relevant provisions. We therefore see no need to develop a new comprehensive international legal regime to govern the Arctic Ocean. We will keep abreast of the developments in the Arctic Ocean and continue to implement appropriate measures.*

In short, what the A5 agreed reinforced the idea that state sovereignty and the United Nations Convention on the Law of the Sea (UNCLOS) made up the principal international legal framework regulating state conduct and obligations in the Arctic Ocean. In their view, there was therefore no need for a new Arctic Ocean-specific treaty akin to the 1959 Antarctic Treaty.

The following sections provide an analysis of Canada's sovereignty claims under UNCLOS and the positions advanced by other states to understand whether Canada's stance effectively aligns with international legal norms and the guiding principles of the Ilulissat Declaration.

The UNCLOS framework and Canada's sovereignty claims

The UNCLOS, which entered into force in 1994, serves as the comprehensive legal framework regulating the rights and responsibilities of states in their use

of the world's oceans. Central to the debate around the Northwest Passage are UNCLOS provisions concerning internal waters, territorial seas, international straits, and ice-covered waters. Articles 5 to 16 set out the conditions for drawing baselines along a state's coastline which states use to determine which waters are deemed internal. Once a state establishes valid baselines, the enclosed waters are, in principle, under that state's sovereignty and are not territorial waters (figure 2). Canada's Oceans Act 1986, section 6 defines Canada's internal waters as "the waters on the landward side of the baselines of the territorial sea of Canada." While section 7 affirms that "[f]or greater certainty, the internal waters of Canada and the territorial sea of Canada form part of Canada." Canada effectively asserts that all the waters in the Canadian Arctic Archipelago (CAA), including the NWP, fall within internal waters where Canada has full sovereignty.

Regardless of Canada's position, Article 8(2) of UNCLOS, however, moderates that principle by indicating that where a state's newly drawn baselines enclose waters not previously considered internal, the right of innocent passage may persist. Consequently, Canada's sovereignty argument boils down to whether the waters of the NWP were historically regarded as internal or were functionally considered part of the high seas prior to drawing the baselines under UNCLOS, thus open to navigation.

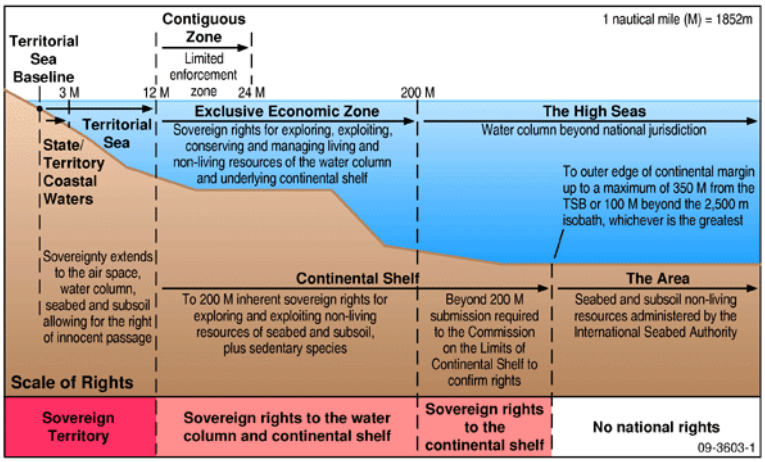

Figure 2 Maritime zones under the UNCLOS (Geoscience, Australia)

Transit passage under UNCLOS Article 37 also needs to be taken into consideration. Transit passage applies to straits used for international navigation connecting one part of the high seas (or an EEZ) to another. In the divergent views of opposing states, the voyages of vessels such as the SS Manhattan in 1969 and the Polar Sea in 1985 served as precedents establishing an international navigation route (McDorman 1986). According to this argument, occasional use, even if limited, demonstrates that this route is not strictly internal. Canada counters by pointing out that these transits required its consent or cooperation, rendering them neither routine nor sufficient to "internationalize" the strait (Elliot-Meisel 2009). Canada further underscores that Indigenous occupation and control of the region date back centuries, reinforcing continuous and exclusive governance over these waters and its historic title claim. Canada's position is that the historical context, which relies on Inuit usage and the nominal acceptance of Canadian authority, precludes any notion that the NWP was previously open to all forms of navigation.

The scope of UNCLOS Article 234, known colloquially as the "Arctic Exception," is perhaps the most contested provision in this matter. Drafted behind closed doors between Canada, Russia, and the United States during the third United Nations Conference on the Law of the Sea between 1973 and 1982 (Solski 2021), it allows coastal states to enact more stringent environmental regulations in ice-covered areas within their EEZ. The crux of the matter is the "ice-covered area" language of Article 234. With the melting of sea ice due to climate change, legal scholars such as Rothwell (2013, 272–75) have suggested that Article 234 provisions will only provide for enhanced marine environmental protection measures for Arctic coastal States for as long as EEZ waters are ice-covered for half a year plus one day, after which the ongoing application of pre-existing measures would be legally dubious. This leads Gavrilov and others (2019) to ponder whether states such Canada and the Russian Federation may need to reassess some of their Arctic marine environmental protection laws.

Canada's AWPPA, which predates UNCLOS, already instituted strict regulations for pollution prevention and control, allowing Canada to assert an environmental stewardship role. By extension, Canada argues that it has, for decades, regulated navigation in these waters under domestic law, in conformity with UNCLOS's objectives of preventing marine pollution in harsh and vulnerable Arctic environments. Proponents of Canada's claim emphasize that historical compliance with Canadian regulations by foreign vessels (or at least tacit acquiescence) implies an acceptance of Canada's de facto jurisdiction.

Detractors note, however, that acceptance of environmental regulations does not necessarily equate to acceptance of sovereignty, pointing instead to customary international law's emphasis on the freedom of navigation. Kraska (2009) argues that Canada's mandatory NORDREG regulations represent a unilateral expansion of Article 234's original environmental scope into a sphere of sovereignty assertion.

Concurrently, Canada has drawn straight baselines around its Arctic Archipelago, a method used by other states such as Norway, in the context of its northern territories. Straight baselines can simplify coastlines that are deeply indented or fringed with islands. Yet whether Canada's baselines meet the UNCLOS criteria involves technical and historical considerations, including the presence of coastline irregularities and the level of actual control exercised. Critics of Canada's baseline approach reference Article 8(2)'s caution about preserving historic navigational rights if the waters were previously considered part of the high seas. Nonetheless, Canada maintains that no such prior usage existed except under Canadian oversight, thereby upholding a claim that the region was never considered to be open ocean.

Counterarguments and Indigenous governance

Despite Canada's confidence in its legal position, some states, mainly the US, hold a different view. Although other states have divergent views on the NWP than Canada's, the principal opposing state is the United States. While the 1988 Canada-US Arctic Cooperation Agreement allows US icebreakers to transit the passage with Canada's consent, it does not resolve the broader sovereignty dispute (Kennair 2009; McDorman 2008). Although it is not a party to UNCLOS, the US regards most of the convention as customary international law. This includes freedom of navigation and related provisions. In this context, the US emphasizes that UNCLOS is fundamentally oriented toward preserving navigational freedoms unless those freedoms are clearly and legitimately curtailed by specific provisions. From the perspective of these opposing states, the NWP meets the criteria of a strait used for international navigation: it connects two major bodies of water, and transits, however minimal, indicate that states have used it for that purpose. Relying on UNCLOS Article 37, these actors argue that the right of transit passage supersedes national claims of internal waters, requiring Canada to allow the uninterrupted passage of foreign vessels,

subject only to internationally recognized regulatory measures and not to AWPPA regulations.

Such diplomatic and legal friction is also filtered through the lens of the 2008 Ilulissat Declaration. By reaffirming the primacy of UNCLOS in Arctic governance, the Declaration was intended to stave off calls for a separate Arctic treaty. Signatory states recognized that the existing legal framework, including mechanisms for fisheries management, environmental regulation, and maritime delimitation, sufficed for peaceful cooperation. However, the Declaration remains equivocal on the precise scope of freedom of navigation in the Arctic. Canada points to the acknowledgment within the Declaration of sovereign rights and the need to respect coastal states' legal entitlements, portraying it as support for the more expansive interpretations of Article 234 and for the drawing of baselines. Conversely, the US underscores the Declaration's emphasis on freedom of navigation, reading it as an implicit acknowledgment that vital straits cannot be exclusively claimed by a single state. Steinberg (2014) and Jia (2013) respectively highlight that this ambiguity was likely purposeful to allow states with diverging interpretations to align under a broad framework without explicitly giving up their legal positions.

Canada's posture on the NWP also intersects with Indigenous governance and rights, providing a complementary argument for sovereignty. Indigenous communities, specifically the Inuit, have lived, travelled, and subsisted in the Arctic region from time immemorial. Their presence and stewardship lend deeper historical continuity to Canada's claim, given that the archipelago's waters have been controlled and managed by communities that are now integrally part of the Canadian nation state.

More recent policy instruments, such as the Arctic and Northern Policy Framework (2019), underscore co-management principles and incorporate Inuit knowledge systems into decisions about environmental stewardship and resource management (Wilczynski 2021). By asserting that Inuit usage historically extended across the entire archipelago, Canada strengthens its argument that no portion of these waters was ever truly considered to be "high seas." The interplay of Indigenous rights and Canada's sovereignty claims resonates with broader Arctic and international legal developments that increasingly recognize the importance of Indigenous perspectives in territorial and resource governance. As Lalonde and Lasserre (2013) indicate, weaving Indigenous governance into sovereignty discussions not only amplifies

the legitimacy of Canada's claim domestically but also further emphasises Canada's obligations and commitments to human rights and community-based environmental management. Nevertheless, the significance of Indigenous rights, while supportive of Canada's internal waters stance, does not fully resolve the debate in the eyes of states that favour freedom of navigation. They may commend Canada's Indigenous co-management frameworks but still challenge whether such frameworks can override the fundamental principles of freedom of navigation enshrined in UNCLOS.

Conclusion

Although Canada's legal and ethical arguments appear substantial on paper, their actual weight depends on Canada's capacity and willingness to enforce them in an increasingly accessible Arctic. Climate change, by reducing sea ice, effectively lowers barriers to navigation with the potential for increased NWP transit. Whether it is based on historical usage, UNCLOS Art. 234, or Indigenous governance, Canada's argument is bound to be challenged with increased NWP traffic. As a solution, Lajeunesse and Huebert (2019) suggest that effective enforcement requires more than international legal arguments; it demands a robust Canadian Coast Guard presence, the development of deep-water ports, search-and-rescue capacity, and advanced surveillance technologies. Such an operational reality is essential if Canada is to demonstrate de facto control that supports its legal position.

Another Arctic example is Russia. Focusing primarily on the Northern Sea Route, Russia has similarly leveraged Article 234 to regulate maritime traffic, albeit in ways that sometimes appear more forceful than Canada's approach (Solski 2020; Vylegzhanin et al. 2020). It remains to be seen whether the interpretive differences among Arctic coastal states might eventually coalesce around a consensus that strengthens environmental protection over freedom of navigation in (contested) international straits.

Furthermore, in recent years, Canada has tried to find a middle ground to balance Indigenous rights and environmental protection with the practical needs of international shipping. Over the long term, Canada might adopt a policy of permitting relatively free passage under certain conditions, establishing mandatory fees, pilotage requirements, or robust reporting mechanisms that prioritise safety and environmental security without categorically denying

passage rights similar to what Russia's NSR legislation regulates (see Vylegzhanin et al. 2020). Such a framework would align with Canada's perspective on Article 234 while not wholly antagonizing other states. Although this remains speculative, if Canada's approach is perceived as overly restrictive, pushing the boundaries of environmental regulation into an outright denial of transit, it could provoke formal international challenges or greater pushback. Ultimately, it would undermine its position.

In conclusion, Canada's NWP position remains under considerable scrutiny from other states. The Ilulissat Declaration's affirmation of UNCLOS as the comprehensive regime for the Arctic helps to maintain cooperation, but it does not, and neither has it intend to, resolve the debate surrounding navigational rights in the NWP.

Romain Chuffart is Nansen Professor in Arctic Studies and President and Managing Director at The Arctic Institute.

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Annex 4. Contribution by Jon Rahbek-Clemmensen

The Greenland Affair

As of the spring of 2025, Greenland's future is undecided with the three parties – Denmark, Greenland, and the United States – occupying incommensurable positions that leave no room for a compromise. The Trump administration continues to insist on gaining political control of Greenland, but Denmark and Greenland both refuse to acquiesce. However, the situation remains fluid and relatively unpredictable and it is far from impossible that the positions of the parties will change over the coming months and years leading to some sort of compromise, just as it is possible that tensions will increase even further.

United States: in search of a coherent strategy

The American position remains simultaneously maximalist, unclear, and disjointed from realities on the ground and traditional American geopolitical interests in Greenland.

By now it is clear that President Trump's interest in political control is not a fluke idea that can easily be brushed aside. The United States is actively waging a campaign to gain control of Greenland against one of its allies and it is certainly possible that Washington will further escalate the situation. Even the use of military force cannot be ruled out at this point.

At the same time, the American endgame remains unclear. President Trump has time and again highlighted the importance of American control. "We'll get it [Greenland]. Yeah, 100 percent", he told reporters on March 29th.[1] But what is actually meant by control? Does President Trump imagine that Greenland should become the 51st state? Would he settle for an independent Greenland with

free association with the United States, an arrangement touted by people from the President's inner circle, which would give the United States military access to the island as well as control over certain policy areas, akin to Washington's agreements with Pacific Islands such as Palau and the Marshall Islands?[2] This is not just a semantic parsing of words. Free association would be more palatable to Greenland but would not give the United States the same degree of control and policy upsides as outright political integration into the United States.

Gaining control of Greenland would be unlikely to yield significant benefits, but would upset a set-up that has previously been to Washington's advantage.[3] The United States is already able to gain its security interests in Greenland, while allowing Denmark to cover the expenses necessary to keep Greenlandic society afloat, which are worth an estimated $ 700 million per year.[4] It is difficult to imagine a situation where the United States takes over Greenland – be it as free association or some other arrangement – where Washington would not sit back with a bill for a similar amount, if not significantly higher. It is therefore hard to see what the United States would gain from changing the status quo, besides additional expenses.

The United States pursues three interests in Greenland: maintaining access to Greenland's military geography, retrieving Greenlandic minerals, and avoiding a Chinese presence on the island. The United States does not need to gain control of Greenland to reach any of these objectives.

First, the United States already has wide access to Greenland's military geography under the existing defence agreements. The United States currently uses Greenland for ballistic missile early warning and satellite communications through its installations at Pittufik Space Base (formerly Thule Air Base) in the north-western corner of the island. Greenland currently plays an insignificant role in operations against Russian submarines in the seas to the south-east of the island – the so-called Greenland-Iceland-United Kingdom gap – but it is possible that the United States envisions that Greenland could potentially become more important for these operations in the years to come. If the United States wants to increase its presence beyond what the current agreements allow, it could easily achieve this access through negotiations with Denmark and Greenland, which are both very interested in additional collaboration with the United States.

Second, accessing Greenland's mineral wealth does not require political control of the island. Despite being home to significant mineral deposits,

most importantly rare earth elements, Greenland's mining industry remains insignificant, mainly due to a combination of factors such as harsh weather conditions, a lack of infrastructure, local resistance, and legislative barriers. Greenland has been very open to American involvement in its mining sector, having signed a memorandum of understanding regarding mining with the United States in 2019. Similarly, the Greenlandic government has responded to the newfound American interest in Greenlandic mining by highlighting mining as an area for additional collaboration under the existing arrangements.

Finally, in spite of President Trump's claims that Chinese ships sail around Greenland, the People's Liberation Army's Navy does not currently have a significant presence in the Arctic. Any military threat from China is likely to only materialize in coming decades.

The threat to Greenland from China instead comes from Chinese investments and other types of collaboration that can potentially be useful for security policy purposes. Several Chinese actors showed an interest in Greenland up until 2019, attempting to invest in mining and real estate, bidding for the contract to construct Greenland's new airports, and trying to establish collaboration on potential dual-use projects such as a satellite receiver station. However, none of these projects have resulted in a significant Chinese presence on the island. Since 2019, Chinese actors have focused on projects elsewhere in the region, predominantly in the Russian part of the Arctic.

However, the Chinese threat has not gone away and more can be done to prevent a geopolitically problematic Chinese presence in the future. Greenland currently does not have investment screening legislation, though it has promised to enact such legislation.[5] Furthermore, Greenland remains ambiguous when it comes to potential collaboration with Chinese actors, and it is unclear if Greenland would be open to, for instance, large Chinese investments in the mining sector.[6] An American takeover of Greenland could potentially close these gaps, depending on the exact arrangement, but it is not necessary for keeping China out of Greenland. A deal could be reached under the current arrangement, whereby Greenland shies away from close collaboration with China in exchange for, for instance, American investments and loans.

Denmark: trying to create an off-ramp

The Greenland affair has created a strategic dilemma for Denmark. Perhaps the United States' staunchest ally on the European continent, Denmark has for decades gone out of its way to support American interests, be it through dedicated participation in the sharp end of the American-led wars of the past decades or by helping the United States to maintain a presence in Greenland.[7]

Now this approach is in tatters. The Trump administration's actions have violated fundamental norms that have hitherto guided American-Danish-Greenlandic relations, whereby issues related to Greenlandic independence were considered an internal Danish-Greenlandic matter. Furthermore, claims coming out of Washington – posed most prominently by Vice President Vance – that Denmark has been "a bad ally" by not investing in its Arctic defence has hit a sour note, as most of the Danish investments in new military capacities in the Arctic, which were announced in 2021, have yet to be implemented.[8]

For a long time, the government in Copenhagen walked a tightrope, avoiding public criticism of the United States and stressing the importance of future collaboration with the United States, while simultaneously rejecting the American actions vis-à-vis Greenland. Lately, the Danish government has changed tack and has become more vocal in its criticism of Washington. The government has hit back against claims of Danish Arctic inaction by highlighting the 43 Danish soldiers lost in Afghanistan, the most of any ally relative to population size, as a clear demonstration of Denmark's dedication to the transatlantic alliance.[9]

Underneath the rhetoric, the Danish strategy pursues two additional tracks. First, in accordance with its long-time Arctic policy, Denmark highlights Greenland's fundamental right to determine its own fate. The Danish line continues to follow the phrase used by Prime Minister Frederiksen, when President Trump tried to buy the island in 2019: "Greenland is not for sale. Greenland is not Danish. Greenland belongs to the Greenlanders".[10]

Second, Denmark tries to move the debate to issues where a compromise is possible – most prominently defence spending and the American presence on the island. The government has recognized that Danish defence spending in the Arctic has been lagging behind, but has been quick to point out that the United States has not invested in Greenlandic defence either and that one of the reasons why Denmark has not spent adequately in the Arctic is that Denmark prioritized

supporting American out of area operations in Afghanistan, Iraq and elsewhere. Now is the time to change that together. In the words of Prime Minister Frederiksen,

> "it is possible to find a way to ensure stronger footprints in Greenland. They [the U.S.] are already there, and they can have more possibilities. And at the same time, we are willing to scale up from the Kingdom of Denmark. And I think NATO is the same. So if this is about securing our part of the world, we can find a way forward"[11]

In this way, Denmark is creating an off-ramp for the United States. If Washington is willing to give up the idea of gaining political control of Greenland, Denmark is seemingly willing to compromise on other issues that can be spun to strengthen American "control" of the island, thus allowing President Trump the opportunity to claim a great victory.

Greenland: rejecting American advances

The way the issue has played out, winning Greenland over has become the crux of the matter. As long as the Greenlandic government wants to remain within the Kingdom of Denmark, the United States has very few options left, short of actual military occupation of the island.

The Greenlandic position, however, cannot be taken as given. At the onset of the crisis, Greenland sent mixed signals regarding its political preferences. Only a few days after the then President-elect Trump had begun the crisis by stating his intent to gain control of the island, Erik Jensen, a government minister and then the leader of the influential Siumut party, publicly invited Trump to visit Greenland.[12] In his New Year's address, held a few days later, Greenland's Premier, Mute B. Egede, emphasized Greenland's wish to gain additional autonomy, if not outright independence, in the coming years.[13]

One can hardly blame the incoming American administration for reading these statements and thinking that perhaps now was the time to invite Greenland to leave the Kingdom of Denmark.

However, once the overtures from Washington became more forceful and were combined with not so veiled threats of the use of military force, this early

openness towards the United States was replaced by rejection as well as closer cooperation with Denmark.

The Greenlandic approach was in tune with the line coming out of Copenhagen: reject the idea of an American Greenland, while emphasizing an openness to collaboration on defence and security issues, thus creating a possible off-ramp for Washington. “Greenland and the future of Greenland will be decided by the Greenlandic people. We don’t want to be Danes and we don’t want to be Americans. Greenlanders want to be part of the Western Alliance as Greenlandic people,” the then Premier Egede told Fox News, continuing “[Greenland] will always be a part of NATO. We will always be a strong partner for the U.S. We are close neighbors and I believe the future has a lot to offer in terms of cooperation”.[14]

The Greenlandic rejection of the United States was echoed within the wider population. A poll showed that 85 percent of Greenlanders did not want the island to become a part of the United States. The Greenlandic election, held in March 2025, was won by the relatively pro-Danish Demokraatit party. While the secessionist Naleraq party also won many seats at the election, these votes seemingly came from Siumut, the other main secessionist party, and Naleraq was isolated politically after the election. The new Greenlandic Premier, Jens-Frederik Nielsen, was quick to reject the American advances as were all the leaders of the parties represented in parliament, including the leader of the Naleraq party.[15]

Etching towards a deadlock

The Greenland affair is thus etching towards a deadlock. The American government is reportedly preparing a large offer to Greenland, whereby Washington would offer Greenland more economic support than Denmark is currently providing. If media reports are to be believed, Greenland would have to give up control of its mineral resources as well as allowing enhanced American military authority in return. Whether this deal will be good enough to sway the Greenlandic government is hard to say, especially because the details of the deal have yet to be revealed, but there are reasons to be sceptical. The Greenlandic government will probably not be interested in giving up sovereignty over its underground that its leaders has fought for for decades. It is also hard to see how Greenland will trust Washington, given that President Trump’s remarks about

the island have indicated that he will not respect the wishes of the Greenlandic people.[16]

If the American offers are rejected, the situation will become stuck in a political limbo, possibly for the remainder of the Trump administration's tenure. The only way to get out of that limbo will be by some radical new development be it American escalation, possibly by the use of military force, or if the United States downscales its ambitions and agrees to the off-ramp offered by Denmark and Greenland. The Greenland affair has been full of unpredictable events and analysts cannot rule out any of these scenarios.[17]

Jon Rahbek-Clemmensen is Associate Professor at the Royal Danish Dence College's Center for Arctic Security Studies.

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Annex 5. US, Russia, and China: strategic interests

Category	United States	Russia	China
Strategic Goals	Ensure freedom of navigation; Deter adversaries; Secure homeland defense; Sustain economic & environmental interests	Enforce sovereignty; Secure nuclear deterrent; Exploit economic resources	Establish 'Polar Great Power' status; Access resources & routes; Legitimise Arctic governance role
Military Presence	Bases in Alaska; Reactivated 11th Airborne Division; NATO integration & Arctic drills	Re-militarization of Arctic; Bastion strategy; A2/AD networks, missile systems	No permanent military presence; Joint exercises with Russia
Hybrid Activities	Defensive countermeasures; NORAD modernization	Intelligence collection; Cyber, EW, info ops; Sabotage of critical infrastructure	Scientific research as hybrid tool; Economic influence via infrastructure investment
Legal Position on NSR	NSR is international waters; supports UNCLOS freedom of navigation	NSR is internal waters (Article 234 UNCLOS 'ice clause')	Ambiguous; benefits from cooperation with Russia
Scientific Presence	Research in Alaska; International Arctic cooperation; Environmental monitoring	Revived Soviet bases with dual-use cover	Stations in Svalbard/ Iceland; Space and subsea networks; Military-civil fusion
Economic Interests	Energy (Willow project); Critical minerals (Alaska); Infrastructure (e.g., Nome port)	10% of GDP from Arctic; NSR economic corridor; Increased focus post-sanctions	Polar Silk Road (BRI); Investments in Yamal LNG, Arkhangelsk port
Alliances & Partners	NATO allies; Bilateral DCAs with Nordic countries; NORAD with Canada	Strategic reliance on China; Increased isolation post-Ukraine	Strategic partnership with Russia; Economic & scientific outreach
Policy Implications for Others	Stronger NATO coordination; U.S. leadership in Arctic governance; Opportunity for alignment with non-Arctic allies	Military threat to NATO; Sovereignty claims challenge norms; Hybrid threat response needed	Hard-to-detect hybrid influence; Investment & science screenings needed; Challenge to governance norms

Annex 6. Comparison of states

Canada

Domain	Details
Strategic orientation and policy framework 	Canada views the Arctic as a vital element of national identity and national security. Its 2024 defence policy, *Our North, Strong and Free*, emphasizes sovereignty and strategic readiness through distributed Arctic operating hubs and enhanced cold-weather capabilities. Indigenous engagement is central to this framework. The Canadian Rangers, composed largely of Indigenous personnel, are a key component of Canada's Arctic defence presence, contributing to surveillance, logistics, and emergency response.[156]
Military capabilities and security posture 	Following Russia's 2022 invasion of Ukraine, Canada committed CA$38.6 billion (EUR 24.7 billion) to modernize NORAD,[157] with upgrades including over-the-horizon radar, new airborne early-warning aircraft, and High Arctic ground stations.[158] Canada is expanding its year-round Arctic presence with Arctic and Offshore Patrol Ships (AOPS) like the *HMCS Harry DeWolf* and acquiring new polar icebreakers.[159] The Nanisivik Naval Facility in Nunavut will serve as a refuelling and resupply hub.[160]
Alliances and defence cooperation 	Canada has shifted from caution to active engagement in Arctic defence cooperation. It participates in NATO exercises and in late 2024 launched the Arctic Security Dialogue with its Nordic allies,[161] aimed at strengthening regional surveillance and defence coordination.

156 Department of National Defence, 'Our North, Strong and Free: A Renewed Vision for Canada's Defence', 2024.

157 Department of National Defence, 'Minister Anand announces continental defence modernization to protect Canadians', 20 June 2022.

158 Laura Heckman, 'Canada Prioritizing Over-the-Horizon Radar in NORAD Modernization', *National Defense*, 13 May 2024.

159 Government of Canada, 'Harry DeWolf Class', n.d.

160 Arty Sarkisian, 'Nanisivik Naval Facility set to open next year', *Nunatsiaq News*, 17 September 2024.

161 Department of National Defence, 'Joint Statement on Arctic Security and Defence', 17 October 2024.

Domain	Details
Sovereignty, resources, and economic interests 	Canada asserts sovereignty over the Arctic Archipelago and the Northwest Passage, which it considers to be internal waters, despite contrary international views (notably by the US and the EU).[162] This legal position remains a key pillar of Arctic foreign policy. Canada continues to map its extended continental shelf under UNCLOS in collaboration with Denmark and Greenland. The region is also rich in hydrocarbons and minerals,[163] though exploration is limited by environmental and logistical challenges.
Infrastructure development and climate resilience 	Canada has pledged over CA$2.5 billion (EUR 1.6 billion) in 2025 to upgrade northern infrastructure, including transportation and logistics hubs. A CA$100 million (EUR 64 million) loan programme supports synthetic diesel production for community energy security.[164] Permafrost thaw is expected to cost CA$1.3 billion (EUR 832 million) over 75 years,[165] while thinning sea ice increasingly undermines the viability of seasonal ice roads.[166] Canada is strengthening Arctic Search and Rescue (SAR) capacity and integrating climate adaptation into defence and civil planning.[167]
Post-2022 strategic shifts and emerging trends 	Canada's Arctic posture has become more assertive and security-driven since 2022. It has elevated its role within NATO's northern strategies and prioritized Arctic military and infrastructure modernisation. The emphasis on Indigenous inclusion has grown in both visibility and scope. Canada is also adapting to new threats such as dual-use infrastructure vulnerability, grey-zone activities, and competition in polar science and shipping routes.

162 See Annex 3.

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The Kingdom of Denmark (including Greenland and the Faroe Islands)

Domain	Details
Strategic orientation and policy framework 	Denmark's Arctic policy is shaped by its constitutional ties to Greenland and the Faroe Islands, with a focus on sovereignty, NATO cooperation, sustainability, and multilateralism.[13].[168] In response to Russia's invasion of Ukraine and increasing pressure from the United States, Denmark has accelerated defence investments in the Arctic. However, the joint Arctic Strategy remains outdated, as Greenland and the Faroe Islands pursue independent approaches. Greenland emphasises civil preparedness and peace,[14],[169] while the Faroe Islands prioritise sustainability and regional cooperation[15][170] – reflecting a more decentralised Arctic engagement within the Kingdom.
Military capabilities and security posture 	In January 2025, Denmark announced a DKK 14.6 billion (EUR 2 billion) investment in Arctic-capable vessels, drones, and satellite capacity to bolster the operations of Joint Arctic Command.[171] While these capabilities were under development prior to 2022, the strategic climate prompted their rapid acceleration. A separate DKK 120 billion (EUR 16 billion) Acceleration Fund aims to fast-track these defence projects through 2026.[172]
Alliances and defence cooperation 	A 2023 DCA with the United States granted the US expanded access to Danish airbases, reinforcing NATO's Arctic posture. Greenland and the Faroe Islands remain covered by the longstanding 1951 US-Denmark defence framework.[173] Greenland also hosts the US-operated Pituffik Space Base, a critical installation for early-warning systems and space surveillance.[174] Denmark has also intensified Nordic defence cooperation, particularly through joint Arctic surveillance, data sharing, and military coordination with NATO partners.

168 Ministry of Foreign Affairs of Denmark, 'Kingdom of Denmark Strategy for the Arctic 2011-2020', August 2011.

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174 Miranda Bryant, 'Welcome to the top of the world: the Pituffik US space base in Greenland', *The Guardian*, 28 March 2025.

Domain	Details
Sovereignty, resources, and economic interests 	Greenland is rich in rare earth elements, hydrocarbons, and fisheries. However, the extraction of most of these minerals is not yet technically feasible, as they lie beneath an ice sheet up to 3 kilometres thick. In addition, the Greenlandic government has banned future oil and gas exploration and extraction due to environmental concerns and the potential impact on the climate. A renewed US strategic interest in Greenland has been evident, viewing it as vital to missile defence and raw material supply chains.[175] In 2023, Greenland and the EU signed an agreement to ensure European access to critical minerals.[176] Denmark has blocked Chinese infrastructure investments in Greenland on national security grounds.[177] Denmark, Canada, and Greenland also continue to coordinate overlapping continental shelf claims near the North Pole under UNCLOS.
Infrastructure development and climate resilience 	Greenland faces increasing threats to infrastructure from thawing permafrost and coastal erosion.[178] These environmental pressures affect not only civilian settlements but also resource extraction and logistics. Fisheries-the backbone of the Greenlandic economy-are being impacted by shifting fish stocks due to warming waters.[179] Denmark and Greenland are expanding adaptive planning and risk monitoring in response to these climate-driven challenges.
Post-2022 strategic shifts and emerging trends 	Russia's war against Ukraine has had a profound impact on Danish defence policy. It led to the termination of Denmark's EU defence opt-out and prompted a commitment to raise defence spending to 2% of GDP.[180] Arctic security was cited as one of the justifications for these policy shifts. Denmark and Greenland face US pressure to boost its Arctic military presence and align on economic interests.[181] Additionally, Denmark's coordination with the US and the EU on undersea infrastructure protection and space surveillance reflects a growing awareness of hybrid and non-traditional Arctic threats.

175 Danica Kirka, 'What makes Greenland a strategic prize for the U.S. at a time of rising global tensions?', *PBS News*, 10 March 2025.

176 European Commission, 'Memorandum of Understanding Between the European Union and the Government of Greenland on a Strategic Partnership on Sustainable Raw Materials Value Chains', December 2023.

177 Huw Jones & William Schomberg, 'Bank of England tells banks to speed up plans for climate change risks', *Reuters*, 26 September 2018.

178 Kelley Christensen, 'Thawing Permafrost Releases Industrial Contaminants into Arctic Communities', *Environmental Health Perspectives* 132(3), 27 March 2024.

179 Rikke Becker Jacobsen, 'Ten years of climate change adaptation in Greenlandic fisheries: key observations from local ecological knowledge', *Centre for Blue Governance* 91, 30 November 2023.

180 Eline Schaart, 'Denmark votes to scrap EU defense opt-out', *Politico*, 1 June 2022.

181 See Annex 4.

Finland

Domain	Details
Strategic orientation and policy framework 	Finland's accession to NATO on 4 April 2023[182] marked the end of its long-standing policy of military non-alignment and a fundamental shift in its Arctic posture. As part of the broader Sámi homeland (Sápmi), northern Finland plays a key role in national Arctic identity and strategic presence. Although Finland lacks a coastline on the Arctic Ocean, it considers itself to be an Arctic stakeholder through geography, infrastructure, and regional integration.
Military capabilities and security posture 	Finland brings considerable Arctic-ready military assets to NATO, including Jaeger Brigades trained in Arctic warfare, northern airbases, and advanced surveillance networks. Since 2022, it has ceased all defence and scientific cooperation with Russia and began constructing a 200 km border fence to counter hybrid threats. The Finnish Air Force continues to operate F-18s (to be replaced by F-35s from 2026), which now participate in joint Arctic patrols and exercises. Arctic operations prioritise deterrence and rapid regional readiness.[183]
Alliances and defence cooperation 	Finland has rapidly integrated into NATO's Arctic framework, taking part in major exercises such as *Nordic Response* and *Cold Response*. It works closely with Sweden and Norway, sharing surveillance data and conducting integrated training. In 2024, Finland joined the US and Canada in launching *ICEPACT*,[184] an initiative aimed at improving coordination on icebreaker deployment, Arctic operations, and emergency response.
Sovereignty, resources, and economic interests 	Northern Finland is rich in natural resources and hosts key industries including mining, forestry, and tourism.[185] The region is vital for domestic energy, raw materials, and digital infrastructure. Although Finland does not claim maritime Arctic sovereignty, it plays a significant role in trans-Arctic connectivity and logistics networks, which are increasingly important for trade and energy transition.[186]

182 North Atlantic Treaty Organization, 'Finland joins NATO as 31st Ally', 4 April 2023.

183 Allied Air Command, 'Finnish F/A-18 Hornets Protect NATO Airspace in the Arctic Region', 6 February 2025.

184 Ministry of Foreign Affairs of Finland, 'Joint Statement on Signing of "ICE Pact" MOU between the United States, Canada, and Finland', 13 November 2024.

185 The Arctic Institute, 'Finland', n.d.

186 Matthew Gooding, 'Poles apart: Building the Arctic's first subsea cable', *Data Center Dynamics*, 28 February 2025.

Domain	Details
Infrastructure development and climate resilience 	Thawing permafrost, unstable terrain, and extreme weather are increasingly threatening Arctic infrastructure in Finland.[187] These conditions are raising costs for road and rail maintenance. In response, the Finnish government is investing in adaptive engineering, cold-weather design, and redundancy in logistics systems to ensure Arctic supply chain reliability and resilience.[188]
Post-2022 strategic shifts and emerging trends 	Since sharply reducing its diplomatic, economic, and security ties with Russia in 2022, Finland has undergone a rapid defence realignment, culminating in full NATO membership in 2023. Its Arctic posture now emphasises deterrence, Nordic defence integration, and infrastructure adaptation. Initiatives like ICEPACT and cross-border coordination reflect a broader shift from neutrality to active Arctic defence leadership within northern Europe.

Iceland

Domain	Details
Strategic orientation and policy framework 	Although Iceland has no standing military forces, it plays a critical geopolitical role in Arctic and North Atlantic security due to its location within the GIUK gap. Iceland promotes a non-militarised approach to the Arctic, focusing on maritime safety, human security, and environmental protection. As a founding member of NATO, Iceland contributes to security through civil infrastructure, multilateral coordination, and strategic hosting agreements.[189]
Military capabilities and security posture 	Iceland's defence posture relies on hosting allied forces and enhancing national surveillance and maritime security capabilities. Keflavík Air Base accommodates rotating deployments of US P-8 Poseidon aircraft, NATO fighter aircraft, and B-2 bombers. The Icelandic Coast Guard maintains three patrol vessels and the multipurpose surveillance ship *Þór*, which is used for Search and Rescue (SAR), maritime security, and undersea cable monitoring.[190]

187 Jan Hjort et al., 'Degrading permafrost puts Arctic infrastructure at risk by mid-century', *Nature Communications* 9(5147), 11 December 2018.

188 Information from interviews.

189 The Ministry of Foreign Affairs of Iceland, 'Iceland's Policy on Matters Concerning the Arctic Region', October 2021.

190 Daniel Michaels & Benoit Faucon, 'The NATO Country With No Military Gets Serious About Defence', *The Wall Street Journal*, 27 April 2025.

Domain	Details
Alliances and defence cooperation 	Iceland cooperates closely with the United States, the United Kingdom, Norway, and other Nordic partners through NATO and regional frameworks. It participates in Cold Response and other Arctic exercises and contributes to the Arctic Coast Guard Forum. Iceland also advocates civilian-military coordination and emphasises maritime safety and SAR operations within NATO forums.[191]
Sovereignty, resources, and economic interests 	Fisheries represent Iceland's most significant Arctic economic sector. However, warming seas are shifting fish stocks, challenging traditional economic models. Iceland is also positioning itself as a future logistics and tourism hub for transpolar air and maritime traffic.[192] Additionally, it is exploring the sustainable use of offshore energy and mineral resources, carefully balancing economic development with environmental protection.
Infrastructure development and climate resilience 	Climate change poses serious risks to Iceland's Arctic infrastructure. Rapid glacial retreat, permafrost degradation, and coastal erosion threaten roads, energy grids, and water systems. NATO is supporting the upgrade of Keflavík Air Base infrastructure,[193] while Iceland's 2020 Climate Action Plan aims for net-zero emissions by 2040 and prioritises climate-resilient infrastructure investments.[194]
Post-2022 strategic shifts and emerging trends 	Since 2022, Iceland has focused more explicitly on the security implications of infrastructure vulnerability, hybrid threats, and Arctic transit. While maintaining its commitment to non-militarisation, Iceland continues to deepen cooperation with NATO and Arctic partners in areas such as undersea cable protection, SAR, and climate resilience.

191 Information from interviews

192 Lea Rekow, 'Fishing in Warm Seas: Climate and Industry in Iceland', *Wright-Ingraham Institute*, n.d.

193 Mila Cisneros, 'Air Force awards multiple contracts for airfield construction at NAS Keflavik', *Air Force Civil Engineer Center*, 23 September 2020.

194 Ministry for the Environment and Natural Resources, 'On the Path to Climate Neutrality: Iceland's Long-Term Low Emission Development Strategy', October 2021.

Norway

Domain	Details
Strategic orientation and policy framework 	Norway plays a pivotal role in NATO's Arctic strategy, underpinned by its 196 km border with Russia and its long-standing identity as a High North power. National Arctic policy concentrates on deterrence, stability, and sustainable development.[195] Norway frames the Arctic as a zone of both strategic vulnerability and economic opportunity, with increasing emphasis on preparedness in response to geopolitical shifts since 2022.
Military capabilities and security posture 	Norway has significantly ramped up Arctic defence post-2022. It has rearmed northern brigades and reactivated bases in Finnmark.[196] Norwegian forces regularly conduct large-scale joint operations in Arctic conditions through exercises such as *Cold Response 2022*,[197] *Nordic Response 2024*,[198] and *Joint Viking 2025*.[199] P-8 Poseidon maritime patrol aircraft, based at Andøya, monitor activity in the Barents and Norwegian Seas.[200] These efforts reflect an emphasis on Arctic domain awareness and rapid operational readiness.
Alliances and defence cooperation 	As a core NATO member, Norway coordinates extensively with its NATO allies on Arctic security. US Marine Corps equipment is pre-positioned in Norway, and UK troops rotate through joint training. Norway shares an over-the-horizon radar system with Denmark, located in the Faroe Islands. It also contributes to NATO command structures and has supported allied deployments, such as the UK Carrier Strike Group in 2023.[201] Despite rising tensions, Norway maintains functional deconfliction arrangements with Russia in areas like fisheries[202] and search and rescue.

195 Government of Norway, 'The Norwegian Government's Arctic Policy', 26 January 2021.

196 Thomas Nilsen, 'Norway steps up high north defence, build fully equipped brigade in Finnmark', *ArcticToday*, 5 April 2024.

197 North Atlantic Treaty Organization, 'Exercise Cold Response 2022 – NATO and partner forces face the freeze in Norway', 7 March 2022.

198 The Norwegian Armed Forces, 'Nordic Response 2024', 20 December 2024.

199 The Norwegian Armed Forces, 'Joint Viking 2025', 15 March 2025.

200 Information from interviews.

201 Information from interviews.

202 Hilde-Gunn Bye & Birgitte Annie Hansen, 'Norway and Russia Decrease Cod Quotas By 25 Percent Next Year', *High North News*, 1 November 2024.

Domain	Details
Sovereignty, resources, and economic interests 	Norway's Arctic economy is extensively linked to offshore hydrocarbons and fisheries. The Barents Sea is a key site for gas extraction, critical to European energy diversification efforts since severing reliance on Russian supplies. Arctic exploration has expanded post-2022.[203] Fisheries, particularly cod, remain a major export. The Svalbard archipelago, governed by the 1920 treaty, is both economically and symbolically important.[204] It faces mounting pressure from climate change, resource competition, and geopolitical interest in shipping routes.
Infrastructure development and climate resilience 	Norway is investing in Arctic dual-use infrastructure to enhance both military capability and civilian resilience. The Arctic Satellite Broadband Mission (ASBM),[205] launched in 2024, provides comprehensive Arctic coverage for communications and surveillance. The Andøya Spaceport is being expanded to host satellite operations for NATO, the EU, and the United States.[206] Arctic roads and coastal infrastructure are being upgraded to account for thawing permafrost and coastal erosion, both of which are increasing with climate change.
Post-2022 strategic shifts and emerging trends 	Since 2022, Norway has adopted a more assertive Arctic security posture, reactivating Cold War-era infrastructure and intensifying alliance integration. The renewed focus on gas exports, space infrastructure, and joint exercises illustrates Norway's transition from static defence to forward-leaning deterrence. At the same time, Norway remains a strong proponent of Arctic cooperation in non-conflict areas such as search and rescue and environmental monitoring.

203 'Norway adds more acreage for Arctic oil, gas exploration', *Reuters*, 8 March 2024.

204 See Annex 1.

205 Northrop Grumman, 'Arctic Satellite Broadband Mission', n.d.

206 Trine Jonassen & Birgitte Annie Hansen, 'Norway Reopens Andøya Air Station as Base for Long-Range Drones', *High North News*, 4 April 2024.

Sweden

Domain	Details
Strategic orientation and policy framework 	Sweden formally joined NATO on 7 March 2024,[207] ending more than two centuries of military neutrality. This historic shift reflects Sweden's recognition of growing regional instability and the need to contribute to collective Arctic and northern European security. The Swedish Arctic region-while not Arctic Ocean-facing-forms a vital part of national identity and policy, especially regarding sustainable development, Indigenous inclusion, and regional resilience.[208]
Military capabilities and security posture 	Sweden has steadily strengthened its Arctic military posture since 2021. It reactivated the Arctic Ranger Regiment in Arvidsjaur[209] and expanded conscription to bolster northern defence. Sweden also operates the GlobalEye AEW&C aircraft for Arctic-Baltic airspace surveillance[210] and has hosted NATO Arctic exercises since before its formal accession.
Alliances and defence cooperation 	Sweden maintains close military cooperation with Finland and Norway. This includes the Cross Border Training air programme and a joint northern brigade with Finland.[211] A 2022 US–Sweden DCA[212] enables the training and deployment of American forces on Swedish territory. Sweden's integration into NATO is expected to deepen interoperability across Arctic and Nordic defence initiatives.
Sovereignty, resources, and economic interests 	Northern Sweden plays a critical economic role in the national Arctic strategy. The Kiruna region is home to major mining operations,[213] while Luleå is a hub for steel production.[214] The Esrange Space Center,[215] located above the Arctic Circle, supports satellite launches and Arctic research. Although Sweden lacks direct access to the Arctic Ocean, it remains deeply embedded in Arctic economic and logistical networks.

207 North Atlantic Treaty Organization, 'Sweden officially joins NATO', 7 March 2024.

208 Government Offices of Sweden, 'Sweden's strategy for the Arctic region', 2020.

209 Swedish Armed Forces, 'The Swedish Armed Forces expands', 7 October 2021.

210 Gareth Jennings, 'Sweden exercises option for third GlobalEye AEW&C aircraft', *Janes*, 27 June 2024.

211 Miranda Bryant, 'Norway, Sweden and Finland host NATO military exercises', *The Guardian*, 4 March 2024.

212 Government Offices of Sweden, 'Bilateral defence cooperation', n.d.

213 LKAB, 'Kiruna: mining and critical minerals for the future', n.d.

214 Hilde-Gunn Bye & Birgitte Annie Hanse, 'SSAB With New Billion Euro Investment in Fossil-Free Steel in Northern Sweden', *High North News*, 2 April 2024.

215 Swedish Space Corporation, 'Esrange Space Center', n.d.

Domain	Details
Infrastructure development and climate resilience 	Sweden's northern infrastructure faces increasing strain due to permafrost thaw, unstable ground, and extreme weather. In response, the government has hardened critical facilities and expanded surveillance capabilities in Arctic areas. National Arctic policy emphasises climate-resilient design, sustainable economic development, and the inclusion of Sámi perspectives in planning processes.[216]
Post-2022 strategic shifts and emerging trends 	Sweden's NATO accession marked a significant shift in its defence and Arctic posture. The country has moved from a policy of neutrality to one of active military integration, regional coordination, and resilience building. The emphasis on dual-use infrastructure, space capability, and climate adaptation reflects a comprehensive approach to emerging Arctic challenges.

France

Domain	Details
Strategic orientation and policy framework 	France considers itself a "polar nation" based on its longstanding polar research heritage and overseas territories in the Antarctic.[217] Its Arctic interests stem from its North Atlantic presence, NATO membership, and leadership in polar science. Since Russia's invasion of Ukraine, France increasingly views the Arctic as an area where the rules-based international order is under strain, particularly due to growing Russian and Chinese activity. The French government has positioned Arctic engagement within a broader geostrategic and environmental framework.
Military capabilities and security posture 	France supports NATO's involvement in Arctic defence and has taken part in joint exercises such as *Nordic Response 2024*.[218] Its Navy-including Rubis-class nuclear-powered attack submarines-and Air Force regularly operate in the sub-Arctic. French officials have publicly acknowledged the Arctic as a potential theatre of conflict, given the escalating great-power competition in the region.[219]

216 Government Offices of Sweden, 'Sweden's strategy for the Arctic region'.

217 Government of France, 'Polar strategy of France on the horizon 2030', 15 June 2021.

218 John Leicester, 'NATO's biggest drills since the Cold War send a signal to Russia and aim for a real-life feel', *AP News*, 9 March 2024.

219 Alix Renaudin, 'France's Strategic Role in NATO's Arctic Ambitions: A Non-Arctic Power's Perspective', *The Arctic Institute*, 12 November 2024.

Domain	Details
Alliances and defence cooperation 	France is strengthening Arctic cooperation with like-minded partners, including Norway, Denmark, Canada, and Iceland. These partnerships support both defence interoperability and scientific collaboration. As a NATO member, France reinforces collective security initiatives in the High North.[220]
Sovereignty, resources, and economic interests 	France advocates a precautionary approach to Arctic economic development, calling for a moratorium on new fossil fuel exploitation in the region. This aligns with both its national climate policy and the EU's Arctic strategy.[221] As a result of the Ukraine conflict, France has reduced its involvement in Russia's Arctic energy sector.[222] Nonetheless, it maintains commercial interests in Arctic logistics, maritime technologies, and satellite-based observation systems.[223]
Infrastructure development and climate resilience 	As part of its expanded polar agenda, France plans to construct a new Arctic research base in Greenland and to deploy a polar research vessel.[224] These investments aim to support the scientific monitoring of climate change and to enhance France's presence in Arctic research infrastructure. The initiatives are part of a broader strategy to strengthen environmental governance and climate resilience in the region.
Post-2022 strategic shifts and emerging trends 	France's Arctic engagement significantly intensified following the release of its 2022 Polar Strategy, which tripled national commitments to the region. In addition to boosting its scientific and diplomatic presence, France has repositioned itself as a leading voice for environmental governance and rules-based order in the Arctic. This shift is also visible in its more proactive stance on NATO Arctic operations and its distancing from Russian energy ventures.

220 Government of France, 'Polar strategy of France on the horizon 2030', 29 December 2022.

221 European Commission, 'A stronger EU engagement for a peaceful, sustainable and prosperous Arctic', 13 October 2021.

222 Malte Humpert, 'Total Announces $4.1bn write-off placing Future of Russian Arctic LNG Projects in Further Doubt', *High North News* 2 May 2022.

223 Airbus, 'Satellite imagery helping to navigate the Arctic ice', 19 October 2022.

224 Fondation Tara Océan, 'TARA POLAR STATION: Studying the Arctic, sentinel of the climate', n.d.

Germany

Domain	Details
Strategic orientation and policy framework 	Germany views the Arctic as strategically linked to European and transatlantic security. Since Russia's invasion of Ukraine in 2022, Berlin has shifted away from a previous stance of Arctic "exceptionalism" and now frames the region as vulnerable to global geopolitical tensions. The 2024 *Arctic Policy Guidelines*[225] identify Russian aggression and climate change as the two primary threats to regional stability. Germany stresses that the Arctic is a key domain for upholding multilateralism, environmental governance, and EU foreign policy objectives.
Military capabilities and security posture 	Germany contributes to NATO Arctic deterrence through maritime patrols near the GIUK gap, participation in cold-weather training in Norway, and an expanding naval presence.[226] In the wake of the Nord Stream pipeline sabotage, Germany co-launched an initiative with Norway to enhance the protection of undersea infrastructure.[227] Additionally, both countries are working to standardise their next-generation submarines, boosting interoperability and joint capability.
Alliances and defence cooperation 	Germany's Arctic security posture is closely tied to its NATO and Nordic partnerships. The submarine collaboration with Norway reflects deepening bilateral defence integration. Germany also plays a central role in the EU's Arctic engagement strategy and supports joint Arctic security initiatives, particularly in relation to hybrid threats and maritime infrastructure.
Sovereignty, resources, and economic interests 	Germany has scaled back its involvement in Russian Arctic energy ventures since 2022[228] but retains a strong strategic interest in the Arctic's economic potential-particularly in sustainable resource extraction and securing global access to critical raw materials. The Arctic is also viewed as a vital link in Europe's climate transition and industrial resilience strategies.

225 Federal Foreign Office, 'Germany's Arctic policy guidelines: Germany and the Arctic in the context of climate change and the Zeitenwende', 18 September 2024.

226 Information from interviews.

227 'Norway, Germany put critical underwater infrastructure on NATO agenda', *The Barent Observer*, 18 October 2024.

228 Michał Kędzierski, 'Wintershall Dea withdraws from Russia', *OSW Centre for Eastern Studies*, 27 January 2023.

Domain	Details
Infrastructure development and climate resilience 	Germany is advancing its scientific infrastructure in the Arctic, notably through the planned launching of *Polarstern II*,[229] a next-generation polar research icebreaker. The vessel will enhance Germany's ability to conduct long-term climate monitoring and environmental research in the Arctic. This forms part of a wider commitment to "climate security" as a core dimension of German Arctic engagement
Post-2022 strategic shifts and emerging trends 	Since 2022, Germany has firmly embedded Arctic priorities into its broader defence and foreign policy frameworks. Arctic concerns now feature prominently in NATO and EU strategies supported by Germany. Berlin continues to advocate for inclusive Arctic governance-though explicitly excluding Russia from current cooperation frameworks, and promotes Indigenous rights, scientific cooperation, and environmental protection within multilateral forums.

229 AWI, 'Polarstern II: German Bundestag greenlights the construction of new icebreaker', 3 June 2022.

United Kingdom

Domain	Details
Strategic orientation and policy framework 	The UK views the Arctic as part of its "deep north" strategic sphere, recognising the region's growing importance in security, climate, and geopolitical terms. The UK's 2023 Arctic Policy, *Looking North*,[230] emphasises international collaboration, environmental protection, and sustainable development, alongside a reaffirmed commitment to Arctic security. The 2023 *Integrated Review Refresh*[231] underscores the rising threats in the High North, particularly from Russian aggression, and positions the UK as a leading defender of Arctic allies. As the leader of the *Joint Expeditionary Force (JEF)*, the UK plays a key role in Northern European and Arctic defence coordination.
Military capabilities and security posture 	The UK's Arctic military strategy is outlined in the Ministry of Defence's 2022 paper, *The UK's Defence Contribution in the High North*.[232] It emphasises deterrence, NATO interoperability, the protection of undersea infrastructure, and freedom of navigation. The Royal Navy maintains a routine presence above the Arctic Circle, deploying assets such as HMS Protector and nuclear-powered submarines. The Royal Marines conduct annual Arctic warfare training in Norway, and UK forces have consistently participated in NATO's *Cold Response* and *Nordic Response* exercises.[233] In 2023, the Royal Navy launched RFA Proteus, a seabed warfare vessel dedicated to undersea infrastructure defence.[234]
Alliances and defence cooperation 	The UK maintains strong Arctic defence ties in the Arctic region, particularly with Norway and Canada, and plays a leading role within both NATO and the JEF framework. These relationships facilitate joint training, operational integration, and strategic maritime coordination. However, the Royal Navy's ability to project amphibious forces in the High North has been limited following the withdrawal of all Landing Platform Docks (LPDs) from service.

230 Foreign, Commonwealth & Development Office, 'Looking North: The UK and the Arctic. The United Kingdom's Arctic Policy Framework', 9 February 2023.

231 HM Government, 'Integrated Review Refresh 2023: Responding to a more contested and volatile world', March 2023.

232 Ministry of Defence, 'The UK's Defence Contribution in the High North', 29 March 2022.

233 Information from interviews.

234 'RFA Proteus begins operations as seabed warfare threats increase', *Navy Lookout*, 11 April 2025.

Domain	Details
Sovereignty, resources, and economic interests 	British companies, including BP, withdrew from Russian Arctic ventures following the 2022 full-scale invasion of Ukraine.[235] UK shipping and insurance sectors remain actively engaged with developments in Arctic sea routes, although current engagement is limited by sanctions. The UK has advocated a moratorium on deep-sea Arctic mining and remains committed to environmental safeguards in resource governance.[236]
Infrastructure development and climate resilience 	The UK has increased its focus on infrastructure protection in the Arctic region, especially concerning seabed networks and cyber vulnerabilities. The commissioning of RFA Proteus marks a tangible step toward safeguarding subsea cables and pipelines. The UK also maintains a long-standing Arctic research presence at Ny-Ålesund[237] on Svalbard, contributing to climate-security analysis and environmental resilience.
Post-2022 strategic shifts and emerging trends 	Since 2022, the UK has significantly enhanced its Arctic posture-deepening defence ties, advancing seabed and cyber infrastructure protection, and increasing visibility in NATO's northern command structures. Its policy has also become more assertive in environmental governance, with calls for a moratorium on Arctic deep-sea mining and continued support for climate-focused Arctic research.

235 Dee-Ann Durbin, 'BP exiting stake in Russian oil and gas company Rosneft', *AP News*, 27 February 2022.

236 UK Parliament, 'Comment: Government's backing of a moratorium on deep sea mining', 30 October 2023.

237 'Britain's Arctic Research Station celebrates 30 years of science and monitoring climate change', *British Antarctic Survey*, 28 September 2021.

The Netherlands

Domain	Details
Strategic orientation and policy framework 	The Netherlands' Polar Strategy 2021–2025, *Prepared for Change*,[238] outlines the country's approach to contributing to the protection of human interests, the environment, and international security and stability in the polar regions. It reaffirms the Netherlands' commitment to multilateral cooperation, climate action, and the rules-based international order in both the Arctic and Antarctic contexts. These objectives are reinforced in the 2023 National Security Strategy, which highlights the strategic importance of the polar regions for digital infrastructure, maritime resilience, and geopolitical stability.[239]
Military capabilities and security posture 	The Netherlands has long-standing cold-weather expertise through regular participation in Arctic NATO exercises such as *Cold Response*, via the Joint Expeditionary Force (JEF) and bilateral cooperation with Norway and the UK. Dutch marines have trained for decades in the High North, and this cooperation is expanding with US, UK, and Norwegian counterparts. The Dutch Armed Forces contribute to Arctic operations through logistics, command and control, and surveillance support.[240] Dutch research institutions like TNO and QuTech also support NATO's Arctic readiness through innovations in quantum, digital, and hybrid defence technologies.
Alliances and defence cooperation 	The Netherlands plays an active supporting role within NATO Arctic frameworks, particularly through the JEF and bilateral partnerships. It reinforces alliance objectives by contributing to strategic exercises,[241] hybrid resilience initiatives, and intelligence-sharing. Since 2022, Dutch defence policy has focused more explicitly on cyber and undersea infrastructure security, particularly in Arctic-adjacent maritime zones.
Sovereignty, resources, and economic interests 	Dutch ports-especially the Port of Rotterdam-are strategically positioned to benefit from emerging Arctic shipping routes between Europe and Asia. Dutch companies such as Boskalis and Damen Shipyards are active in Arctic-capable vessel design and offshore logistics.[242] While there is commercial interest in offshore energy development, this is tempered by a strong Dutch alignment with EU policy, which opposes new Arctic oil and gas projects. Subsea cables in Arctic regions are also critical to Dutch digital infrastructure and national economic security.[243]

238 Government of the Netherlands, 'The Netherlands' Polar Strategy 2021-2025: Prepared for change', 1 March 2021.

239 Ministry of Justice and Security, 'Security Strategy for the Kingdom of the Netherlands', 3 March 2023.

240 Information from interviews.

241 North Atlantic Treaty Organization, 'Exercise Cold Response 2022 – NATO and partner forces face the freeze in Norway', 25 March 2022.

242 Information from interviews.

243 Ibid.

Domain	Details
Infrastructure development and climate resilience 	The Netherlands monitors Arctic infrastructure risks-especially concerning undersea cables and global shipping networks-as part of its broader digital and maritime resilience strategy. Dutch research, engineering, and climate expertise feed into EU-led Arctic sustainability initiatives, contributing to broader regional adaptation and environmental monitoring.
Post-2022 strategic shifts and emerging trends 	Since Russia's invasion of Ukraine in 2022, the Netherlands has increased its engagement in NATO Arctic initiatives and diplomatic efforts that exclude Russia. While maintaining a presence within the Arctic Council, it has advocated for a stronger EU role in Arctic science, environmental governance, and hybrid threat preparedness. Dutch climate and maritime policies now place greater emphasis on precautionary principles, sustainability, and secure connectivity.