

# How Climate Change Can Worsen Security Dilemmas in the Norwegian High North

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**Abstract.** Security dilemmas are well-known in international relations, where one state's efforts to enhance its security might provoke reactions from other states, potentially leading to decreased security for all states involved. One of Norway's security and defence policy aims in the Norwegian High North (the Norwegian Sea, Barents Sea, and Svalbard) is to maintain low tensions by co-operating with Russia in common interests areas, like fisheries and the Incidents at Sea Agreement. This aim remains valid after the Russian attack on Ukraine in 2022. In an era of growing great power rivalry, climate change might function as a threat multiplier. Sensitivity to climate change is higher in the High North because the initial warming leads to events that amplify warming, mainly due to a decreasing albedo effect, which makes Arctic warming three times faster than the global average. This article contributes to our understanding of High North security dynamics by analysing how climate change affects NATO's patterns of operations and exercises in the Norwegian High North. It specifically asks how climate change affects the way actors like NATO members and Russia interact in this area. We also ask how Norway's approach to security and defence changes due to the continuing warming of the High North. Our article is meant as a contribution to the growing debate within NATO on how climate change functions as a threat multiplier and as an addition to our understanding of how NATO addresses climate change as seen in the 2021 *Climate Change and Security Action Plan*.

**Keywords.** Climate change; Security dilemmas; The Norwegian High North; The Arctic; NATO; Russia; Defence; Security.

## 1. Introduction

Norwegian policy in the High North is summarised in the axiom 'High North, Low tension'. This includes avoiding a militarisation of great power relations in the region. However, the security situation in Europe has changed dramatically, especially since the Russian attack on Ukraine in February 2022. Avoiding any kind of escalation of the war to include NATO, including in Northern Europe, is a particular challenge. The High North is central to Norway's security concerns, especially due to the shared land and sea border with Russia (Østhagen, 2021: 77).

The Norwegian government has stood by its traditional goal of avoiding the securitisation of the High North since the invasion of Ukraine in 2022. This has required stability and predictability in Norwegian policies towards other state actors in the area

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(Huitfeldt, 2023), particularly a dual policy of deterrence and reassurance in its relations with Russia (Bjur, 2023). Co-operation continues with Russia on important policy areas, particularly fishing arrangements and search and rescue (SAR). These policies aim to prevent new security dilemmas in the High North as a consequence of great power rivalry and an emerging multipolar international order. The Norwegian Minister of Foreign Affairs stated that while '[w]e monitor and protect our own areas, but we are completely dependent on allied help if we were to be attacked. The climate crisis means that we need more cooperation to deal with effects on ecosystems and people in the Arctic' (Huitfeldt, 2023).

The purpose of this article is to analyse the effects of climate change on tensions in the High North and whether climate change acts as a threat multiplier. A threat multiplier can increase the risk of conflict (Ide, 2023: 51). Climate change and security are becoming more interlinked, a phenomenon that preoccupies both policy-makers and scholars alike. NATO identifies climate change as 'one of the defining challenges of our times. It is a threat multiplier that impacts Allied security, both in the Euro-Atlantic area and in the Alliance's broader neighbourhood' (NATO, 2021).

We analyse our research question from a Norwegian perspective. Our approach is based on interviews with key personnel in the Royal Norwegian Navy, the Coast Guard, the Joint Headquarters (Joint HQ), and NATO HQ. In our analysis of how climate change is a threat multiplier, we give attention to which state actors are present in the Norwegian part of the High North, how these actors operate on a day-to-day basis, and how and where in the High North they conduct military exercises. Our aim is to measure the degree to which climate change is a threat multiplier in the Norwegian High North.

To answer our research question, we first discuss security dilemmas as a source of potential conflict in the High North and analyse how climate change functions as a threat multiplier. We also include a short literature review and define our position in the current research debate. Then we discuss how climate change affects operations and exercises in the Norwegian High North and how Norway's approach to security and defence is affected. This section is based on semi-structured interviews with key Norwegian personnel with extensive insights into these issues. In the final section, we discuss to what extent climate change will affect High North security in a longer-term perspective based on what we know as of today.

## **2. Security Dilemmas in the High North**

The research literature on security dilemmas in the High North is vast and presents widely different perspectives on the security dynamics present in the region. The literature varies from presenting the High North as an area '... that feels the burn of rising instability and competition' (Ciolan, 2022) to describing Europe's northern flank as 'likely to remain stable and mostly quiet in the short and medium term' (Bekkevold and Hilde, 2023). These perspectives vary according to theoretical perspectives. Neo-realists tend to view the region as an area of more intense great power rivalry, while liberal scholars and social constructivists emphasise common interests, interdependencies, changing security identities and norms (Keil, 2014; Steinveg, 2023: 3-7). Neo-realists dominate popular writing and media accounts, focussing on the 'race to the North Pole', but little empirical evidence is present to underpin such a claim (Steinveg, 2023: 4).

From a Norwegian perspective, the most important current question is to what extent it is possible to maintain low tensions in the High North, particularly after February 2022. Obviously, the High North is central for Norway's security considerations with its shared land and sea border with Russia (see e.g. Heier and Kjølberg, 2015; Olsen, 2018). Norway has actively pursued diplomatic efforts to ensure low tensions in the High North (Østhagen, 2023) in line with its liberal approach to international relations. The most recent research literature claims, however, that Norway's traditional reassurance policies towards Russia need some clarifications in light of Russia's attack on Ukraine as well as Finland's and Sweden's accession to NATO (Bjur, 2023). The reassurance efforts are characterised as crisis management, deterrence calibration and conciliation. They include measures like

risk reduction and avoiding unintended incidents, taming the deterrence posture in order to maintain status quo of low tensions, and to transform the reassurance policies to include efforts ranging from ‘civilian people-to-people contact, military co-operation, and efforts to enhance disarmament and increase détente’ (Bjur, 2023).

All of these measures might become even more relevant in times of geopolitical shifts and changes in the High North due to climate change. There is a rich research literature on how global warming transforms Arctic security, which might necessitate a new military architecture in the region (Boulègue and Depledge, 2021). Keil (2014) investigates the likelihood of confrontation over resources in the High North, concluding that a geopolitical rush for resources is unlikely to occur, despite climate change. Newer research introduces the Arctic Military Exercise (ArcMilEx) dataset that shows that exercises have become more frequent in the High North since 2006. These exercises act as a barometer of both Arctic and non-Arctic states’ concern about regional stability and security. The number of exercises range from one or two annually to as much as four in 2019 (Depledge, 2022: 280). Baudu (2022) addresses how climate change acts as a catalyst of interests in the region, concluding that the High North ‘can be a test bed for NATO to advance its climate engagement’ in light of climate change as a threat multiplier.

Nevertheless, a Norwegian perspective on how climate change can act as a threat multiplier and amplify already existing security dilemmas in the High North is missing from the research literature. With this paper, we wish to fill this gap. We will adhere to a realist approach, but we will not make unsubstantiated claims based on core realist tenets. Instead, we apply realism as a theoretical toolkit to analyse empirical insights we have collected based on qualitative interviews.

### *2.1. Qualitative Interviews*

In this article, we rely on semi-structured interviews. In a semi-structured interview, a prepared interview guide facilitates digression and reflection on the part of the interviewee, and the interviewer may ask follow-up questions. This creates a feeling of process ownership for the interviewee, and the interview guide ensures that the research topic remains centred (Drageset and Ellingsen, 2010; Roulston and Choi, 2018).

We conducted expert interviews, a category of semi-structured interviews. For such interviews, the sample is made up of relevant experts on the chosen topic (Muskat *et al.*, 2012). We interviewed seven subjects. Our subjects came from the Joint HQ, the Navy, the Coast Guard, and NATO HQ. We have identified these departments, sections, and missions as the most relevant to the High North context.

### *2.2. The Security Dilemma Theory and the High North*

According to security dilemma theory, actions taken by a state to enhance its own security can make other states perceive themselves as less secure and lead them to respond in kind (Walt, 2022; Jervis, 1978). This can lead to an overall reduction in the first state’s security. Robert Jervis shows that the security dilemma is particularly strong when a state finds it challenging to distinguish offensive forces from defensive forces, and when offence has the advantage over defence. Additionally, geography and military technology affects the balance between offence and defence (Jervis, 1978). Technology may tilt the balance in favour of either offensive or defensive strategies, while geography tends to favour defence due to barriers to manoeuvres and distance (Glaser, 1998: 61-66).

States can never be entirely sure about the current and future intentions of other states that are able to harm them (Booth and Wheeler, 2008). Due to misperceptions about these intentions, ‘states with fundamentally compatible goals may nonetheless end up in competition and war’ (Jones, 2003: 117). The ‘offence-defence’ theory may explain the threat level derived from this dilemma (Lynn-Jones, 1995). If the nature of forces can be distinguished, a state seeking security can alleviate the security dilemma by deploying purely defensive forces (Glaser, 1997: 186).

The nature of forces is challenging to measure, as it is usually a subjective measurement: ‘[W]hat seems sufficient to one state’s defence will seem, and will often be,

offensive to its neighbours' (Posen, 1993: 28). For instance, Russia presents its military build-up in the Arctic as fundamentally defensive against what it considers a hostile NATO alliance. As such, an Arctic build-up by any NATO member will likely be considered offensive from a Russian perspective. Thus, as Wilhelmsen and Hjermeran (2022) show, other political factors may weaken factors that alleviate the security dilemma.

Threats usually travel more easily across short distances, especially in the military and political sectors (Buzan and Wæver, 2003: 12). Within these sectors, states tend to be far more concerned with the capabilities and intentions of their neighbours, rather than distant countries (Friedberg, 1993). This makes the Arctic particularly vulnerable to security dilemmas, because Russia has four Arctic NATO countries as neighbours, only separated by the Arctic Ocean. Regional factors may however alleviate the Arctic security dilemma. For instance, the rather barren nature of the Arctic offers troops and military installations limited concealment, simplifying their detection and monitoring. Nevertheless, the fact that all other Arctic states are in NATO may shore up Russian fears of a four-against-one scenario. Russia's military build-up could likewise cause a security dilemma for NATO, fearing that they will be outnumbered by Russian troops in the region (Byers and Covey, 2019: 507).

The nuclear age has shifted the balance considerably in favour of defence (Lynn-Jones, 1995). The main cause for this is that the High North is host to an important leg of the Russian nuclear triad – ballistic missile submarines (SSBNs) – which detracts considerably from other states' offensive incentives. This alleviates the security dilemma.

The Arctic region finds itself in a security dilemma closely tied to militarisation. If a state does not strengthen its military resources, other, more powerful states could more easily exploit them. On the other hand, if a state increases its military resources, neighbours may perceive this as a threat and militarise further (Åtland, 2014). The regional hegemon, Russia, has spent years increasing its military forces and infrastructure in the Arctic, particularly on the Kola Peninsula. These forces have, however, been severely depleted by the war in Ukraine. Nonetheless, the strategic weapons systems remain.

Climate change acts as a *threat multiplier*. According to Goodman and Baudu (2023: 5), threat multipliers refer to the 'tendency of climate change to multiply existing threats to security'. The impact and magnitude of climate change varies by region, and the threat multiplying effect of climate change in the Arctic will be unique. In particular, climate change will increase the risk of competition and confrontation in the High North due to new resources becoming accessible (Keil, 2014). As such, the security risks of climate change in the High North are closely tied to territory. In the Arctic security dilemma context, tensions rise when states move to secure their territory and assert sovereignty over it (Dyer, 2017: 21).

### 3. Analysis

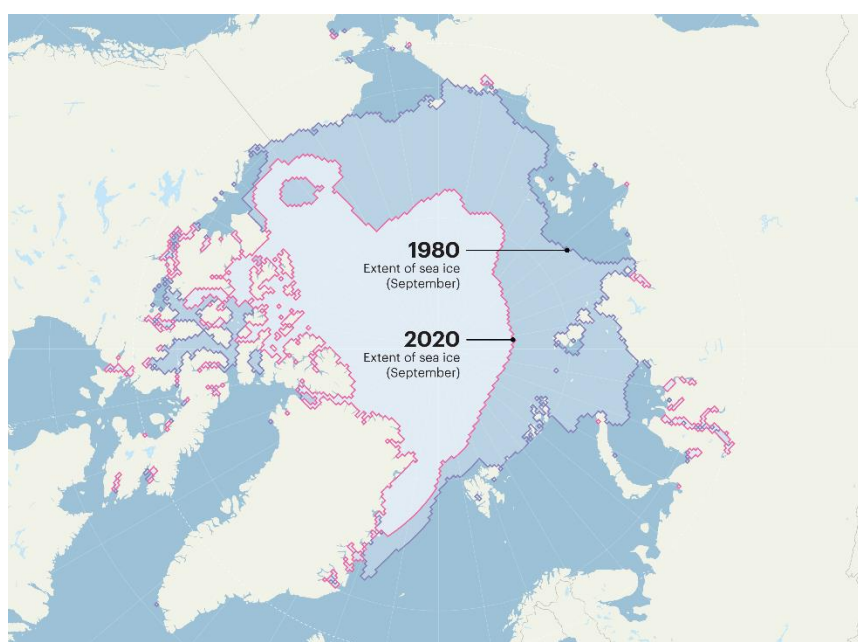
The Coast Guard, operating in the maritime domain, already observes an effect of climate change in the High North: increased accessibility, which has resulted in increased traffic. This leads to a higher SAR workload of the Coast Guard. The Joint HQ, on the other hand, does not observe any major immediate impacts of climate change on Norwegian security in the High North. According to our interviewee, the High North is currently in a state of *competition*, rather than peace, due to higher tensions.

Climate change acts as a *threat multiplier*. According to the Joint HQ, the currently most noticeable threat multiplier in the High North is the war in Ukraine. In the long term, however, the Joint HQ views climate change as a salient threat multiplier, especially in terms of the status of and operations on the Svalbard archipelago. Our Coast Guard interviewees emphasised the effect on fishing activities. Ocean warming will likely precipitate the migration of fish towards the High North, accompanied by less favourable conditions in other oceans. This will increase interest in fishing in the High North.

In addition to the impact on SAR, increased commercial activity from additional states will lead to an increase in military activity. In such a situation, the Coast Guard aims to be a neutral and apolitical actor: 'The Coast Guard is a de-escalating actor in the High North.'

We act according to law, no matter who is fishing up there'. It is not merely the number of ships and actors present in the High North that will challenge the Coast Guard, but also the cold weather experience of the ships and personnel: 'If you do not have experience with sailing in the High North, you have no business being there'.

The interviews revealed that new state actors are expected to enter the High North in the future, primarily to exploit resources such as fish. China has already defined itself as a 'near-Arctic state' (Kossa, 2020), and interest from the UK and France is expected to increase. According to representatives of the Coast Guard, German interest in the High North has increased after imports of Russian gas plummeted after the Russian invasion of Ukraine. Our subjects cited two primary motivations for the increasing interest in the High North: the increasing accessibility to resources such as fish, minerals, and oil, and the increasing accessibility of the Northeast Passage.



**Figure 1.** The extent of sea ice in the Arctic is at its lowest in September. Due to climate change, the extent of sea ice in September has shrunk considerably during the past decades. This figure was retrieved from the report of the Norwegian Defence Commission of 2021 (Defence Commission of 2021, 2023).

The High North has benefitted from the stability and pragmatism of *Arctic exceptionalism* for decades. Our Coast Guard interviewees asserted that this situation is unlikely to change dramatically. While the war in Ukraine has certainly affected states' views on one another on the international stage—also in the High North—this is unlikely to spill over to the High North in a considerable way. According to the Coast Guard, it is in the interest of Norway that the High North remains accessible to everyone.

The above issues are closely related to the global trend of increasing great power rivalry. According to the Norwegian Armed Forces, the great power rivalry itself does not have a strong current impact. Rather, tensions arising from the war in Ukraine cause friction, even in the High North. As the Coast Guard pointed out, this has led to more military exercises and a visit from the world's largest aircraft carrier, the USS *Gerald R. Ford*. Moreover, the Coast Guard assesses the Russian maritime capabilities in the High North as limited and outdated, which should incentivise Russia to pursue stable conditions in the High North. Increasing regional tensions between China and Western states are strongly against Russian interests.

Norwegian daily operations in the High North primarily comprise SAR, assertion of sovereignty, oil spill preparedness, and inspection of fishing vessels. According to the Coast Guard, SAR will be affected the most. Climate change will render new maritime areas accessible to commercial, research, and military activity. Moreover, the areas tend

to be poorly charted, or even altogether uncharted. The increased traffic in these areas will likely increase SAR-related incidents. In anticipation of this increased accessibility, Russia has expanded its network of bases and its military infrastructure in the High North, as noted by our interviewees. According to the Coast Guard, this involves both the construction of new bases and the reopening of decommissioned bases.

Until recently, Norway had the sole NATO land-border with Russia in the High North. Norway hosts two important multinational exercises: *Cold Response*, a biennial NATO exercise focused on cold weather operations, and *Joint Viking*, a biennial exercise to which several NATO and Partnership for Peace nations are invited. Since 2013, Norway, Sweden, and Finland have conducted the biennial aerial exercise *Arctic Challenge Exercise* as a part of the *Nordic Defence Cooperation* (NORDEFCO). Norway also participates in the bilateral SAR exercise *Barents* with Russia. However, *Barents 2022* was cancelled, likely because of the Russian invasion of Ukraine. No *Barents 2023* has been announced.

Interestingly, our Joint HQ interviewee claimed that the issue of payment to host nations will be the most significant factor when it comes to allied exercises in the Norwegian High North because Norway charges a fee to host NATO exercises. Conversely, especially due to particularly strong public support for anything NATO related, Sweden and Finland are unlikely to charge such fees. They are more interested in attracting a NATO presence, as new members. Thus, NATO may elect to opt for the lower-cost recent NATO additions, rather than Norway, when planning exercises in the High North. Indeed, Norwegian winters are likely to become shorter and less cold due to climate change, but the impact of this on allied military exercises would pale next to the exercises being moved to other countries altogether.

#### 4. Discussion

NATO operates with a 360-degree security approach (NATO, 2022: 6). The Strategic Concept from June 2022 emphasises that NATO ‘... will retain a global perspective and work closely with our partners, other countries and international organisations, such as the European Union and the United Nations, to contribute to international peace and security’ (NATO, 2022: 1).

Our analysis shows how Arctic climate change establishes new frameworks for security regarding state actors, day-to-day operations, and military exercises in the Norwegian High North. Based on our chosen realist approach, the main question remains how climate change affects the character and extent of security dilemmas in the High North in its capacity as a threat multiplier. Another important question is whether climate change favours offensive or defensive strategies by relevant state actors, the members of the Arctic Council, and the non-Arctic states France, Germany, the United Kingdom, and China. The latter has defined itself as a ‘near-Arctic state’.

The offense-defence balance theory states that the security dilemma is at its most intense when offensive strategies are favoured (Jervis, 1978: 187). Climate change acts as a threat multiplier when it strengthens offensive strategies. And if climate change acts as a threat multiplier, a state’s reaction to aggravated international tension increases the chances of war. This will undermine the long-standing Norwegian aim of maintaining low tensions in the High North.

Several factors suggest that climate change acts as a threat multiplier in the High North. The most important factor is the receding ice cap. For Russia, this is a major challenge because Russia will lose its icy buffer against the United States. Furthermore, climate change affects the thickness of the ice. The thickness is not uniformly distributed around the North Pole: Due to the Gulf Stream, the ice is thinner towards Russia, making the country vulnerable as other state actors may reach Russia’s northern shores by sea. On the Norwegian side, the islands in the Svalbard archipelago as well as the Norwegian islands of Bear Island, Hopen, and Jan Mayen will be surrounded by an increasingly navigable sea. As mentioned in our interviews, these islands have had their ‘backs against the ice’. The receding ice will influence day-to-day operations in the High North and the areas in which military exercises can take place, especially in light of the principle ‘train

where you expect to fight' (Depledge, 2022). The most recent example is when the US Navy's newest supercarrier, the USS *Gerald R. Ford*, arrived in Oslo in May 2023 and is due to participate in enhanced US-Norwegian military co-operation amid increased Russian activity 'in the Arctic circle' (Parcken, 2023).

Other factors point in the opposite direction, contributing to mitigating climate change as a conflict multiplier. One of them is, somewhat unexpectedly, the war in Ukraine. As one of our respondents emphasised: 'Russia aims to keep the war in Ukraine as isolated as possible. They have not taken steps that would have provoked increased Western activity in the vicinity of the Russian naval bases on the Kola Peninsula.' Another respondent stated: '[We] have not changed our operational pattern. In the future, though, we will have to look at the islands in a different way, but we are not planning for climate change.'

But climate change is indeed taking place. The Norwegian Defence Commission of 2021 devotes a chapter to the security consequences of climate change in their report. They assert that the warming taking place on Svalbard is six times higher than the global average temperature rise (Defence Commission of 2021, 2023: 105-113). Consequently, the glaciers are melting faster than before, and this will lead to a sea level rise. Furthermore, the report states that the permafrost is thawing at a high rate and snow and landslides will increase. This will present the Norwegian authorities with many demanding issues in the future.

Our interviewees agreed with the findings of the Defence Commission but added that increased traffic in the area will challenge SAR and oil spill preparedness. As one interviewee said that the area north of Svalbard is 'the last frontier', but will become increasingly accessible. This will make the area even more vulnerable. The cancellation of the *Barents* exercise is an example of how climate change acts like a threat multiplier, making all parties more vulnerable. The war in Ukraine makes co-operation with Russia in the High North impossible on several issues. And in turn, fewer meeting points between state parties might make offensive strategies more favourable. What will mitigate the prevalence of offensive strategies is the Nordic countries' long experience in dealing with Russia, as seen under the Cold War and after, and experience with the risks in dealing with Russian military activity in the area (Bekkevold and Hilde, 2023). However, we do not underestimate the possibilities for climate change to become an important threat multiplier. Long experience with handling Russian activities on a day-to-day basis is an important mitigation strategy in this regard.

## 5. Conclusions

Until today, Arctic exceptionalism has protected the Norwegian High North from being detrimentally affected by global tensions. Despite these tensions increasing, local co-operation in the region has continued. There is currently no traditional security dilemma in force in the Norwegian High North that may be exacerbated by climate change. Rather, climate change acts as a threat multiplier which erodes Arctic exceptionalism and in turn paves the way for an emergent security dilemma in the Norwegian High North. Rather than exacerbating a regional security dilemma, climate change will likely *precipitate* one.

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## **A. Appendix**

### **General questions**

- How does climate change affect the Alliance in the High North? How will it affect the Alliance in the High North in the future?

- In what ways does climate change act as a threat multiplier in the High North?

In what ways do you expect climate change to act as a threat multiplier in the future?

- How will climate change affect NATO's defence and security aims in the High North in the future?

### **Actors in the High North**

- How will increasing great power rivalry in the High North affect future security in the region?

- How will climate change affect the regional-level relations between Russia and NATO members?

- Do you expect that any new state actors will engage themselves in the High North in the future?

- In what ways do you expect climate change to affect how actors in the High North perceive one another in the future?

### **Daily operations and activities**

- Has climate change affected Russian daily operations in the High North? Do you expect that climate change will affect Russian daily operations in the High North differently in the future?

- Has climate change affected the daily operations of NATO and NATO members in the High North? Do you expect this effect to be different in the future?

- Has climate change affected agreements such as Search and Rescue and the fisheries agreement in the High North? Do you expect this effect to be different in the future?

### **Military exercises**

- In what ways do you expect that climate change will affect military exercises in the High North in the future? Do you expect particular naval consequences? Do you expect particular land-based consequences?

- Do you expect climate change to affect how Russia conducts military exercises in the High North? Do you expect that this will change in the future?