Forschung – Abschlussarbeiten

Breaking the Ice: A Pathway to Military Confidence-Building in the Arctic

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Abstract To what extent could confidence- and security-building mechanisms aimed at reducing the risk of unintended escalation be applied to the High North? While the Arctic's militarization and the ensuing security dilemma have received increased scholarly attention in recent years, there has been little scientific discussion on how this dilemma might be overcome or how the resulting risks of escalation might be mitigated. This article suggests that the West requires a long-term strategy that complements deterrence with reassurance and persuasion to enable Russia's gradual return to cooperation. As trust grows over time, confidence- and security-building agreements inspired by existing treaties, such as the 2011 Vienna Document and the 2014 Eastern Asian Code for Unplanned Encounters at Sea, could be gradually concluded. Although it is challenging to advance confidence- and security-building measures in the current tense geopolitical situation, implementing a long-term, step-by-step strategy could be a starting point for breaking the ice.

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Zusammenfassung

Inwiefern sind auf Eskalationsreduktion ausgerichtete Mechanismen der Sicherheits- und Vertrauensbildung auf den Hohen Norden anwendbar? Während die Militarisierung der Arktis und das damit verbundene Sicherheitsdilemma in den vergangenen Jahren intensiv erforscht wurden, blieb die Frage nach der Auflösung dieses Dilemmas ebenso wie jene nach der Verringerung von Eskalationsrisiken weitgehend unterbelichtet. Die vorliegende Arbeit argumentiert, dass der Westen einer erweiterten Strategie bedarf, die Abschreckung durch Sicherheitszusagen und strategische Überzeugungsarbeit komplementiert. Erst ein solcher Ansatz ermöglicht Russland eine schrittweise Rückkehr zur Kooperation. Das dadurch aufgebaute Vertrauen könnte mittelfristig das Fundament für vertrauens- und sicherheitsbildende Massnahmen bilden. Diese könnten sich konzeptionell an bestehenden Abkommen wie dem Wiener Dokument von 2011 oder dem ostasiatischen Verhaltenskodex für ungeplante Begegnungen auf See von 2014 orientieren. Obschon vertrauens- und sicherheitsbildende Massnahmen in der aktuell angespannten geopolitischen Situation zweifellos einen schweren Stand haben, wäre ein solches graduelles strategisches Vorgehen ein möglicher Ausgangspunkt, um das Eis langfristig zu brechen.

Approaching the Emerging Security Dilemma in the Arctic

The Arctic[1] is increasingly becoming an arena of global power competition with the potential for unintended escalation. Two primary dynamics have led to this situation. Firstly, climate change is dramatically altering the geopolitical situation in the northern polar region.[2] Melting ice has opened access to natural resources, new maritime trade routes, and fishing grounds. Simultaneously, however, these opportunities have also led to strategic rivalries involving not only the eight Arctic states (Canada, Denmark (Greenland), Finland, Iceland, Norway, Russia, Sweden, and the United States) but also the People's Republic of China (PRC).

Secondly, over the past fifteen years, Moscow has significantly increased its military presence in the polar region, particularly in the European part, the High North.[3] This expansion mainly aims to protect vulnerabilities resulting from Russia's more easily accessible northern borders. At the same time, it is part of an increasingly nationalistic policy under President Putin, in which Russia's north polar region plays a crucial role. The Western Arctic states have responded to Russia's military build-up by strengthening their deterrence. This has led to a security dilemma,[4] "a situation in which policies that increase one state's security tend to decrease that of others."[5]

With more armed forces deployed to the Arctic, military activities have significantly risen through exercises, patrols, demonstrations of strength, and provocations. These activities can be hazardous, especially in the current climate of mistrust that characterizes the era of global strategic competition.

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Mistrust can lead to misperceptions about the intentions associated, for example, with the deployment of armed forces or the conduct of military exercises. Even minor incidents can set off a dangerous spiral of unintentional (inadvertent or accidental) escalation in motion.[6] This is particularly concerning, as Putin's war of aggression against Ukraine, which has now been going on for over four years, has brought cooperation and information exchange between the Western Arctic states and Russia to a virtual standstill. Confidence- and security-building measures developed in Europe since the early 1990s have proven ineffective.

This article aims to outline a strategic approach to how the security dilemma in the High North and the associated risk of incidents spiraling out of control and unintentionally escalating into conflict can be resolved in the long term. To what extent could confidence and security-building mechanisms aimed at reducing the risk of unintended escalation be applied to the High North? What could an international regime for enhancing trust and increasing transparency regarding military forces and activities look like? And what information relevant to Arctic security should be included in such measures?

Putin's Russia Creating an Arctic Security Dilemma

Russia has considered the northern polar region strategically crucial for decades, particularly for military reasons.[7] However, after the collapse of the Soviet Union, the Russian north experienced a decline.[8] This changed in 2007 and even more so after Vladimir Putin's return to the presidency in 2012 when a "nationalist turn" was initiated in Russia's domestic, foreign, and security policy that also affected the Arctic.[9]

The Importance of the Arctic for Russia's Security

Two reasons were decisive for this Arctic revival. Firstly, the melting of the polar ice not only enables access to natural resources and establishes new shipping routes, it also impacts Russia's security. For centuries, the country has been protected by its northern border. With the ice retreating, an attack on the Russian homeland from the Arctic is now possible, at least theoretically.[10]

Secondly, Moscow reprioritized the Arctic as part of Putin's vision to restore the country's status as a great power.[11] Russia's polar policy is increasingly belligerant, emphasing external threats and a sense of "encirclement" by foreign powers – particularly the United States, NATO, or "the West" in general.[12] While legitimate security interests, such as protecting the northern border, are essential, they are overshadowed by a "besieged fortress logic" fueled by the fear that "the collective West" could drive Russia out of the region if the country does not increase its military presence.[13]

The High North, the European part of the Arctic, holds a significant place in Russian military strategy. Murmansk, located just a few miles away from the Norwegian and Finnish borders, is home to the main base of the Russian Northern Fleet. A substantial part of Russia's sea-based nuclear arsenal is stationed on the Kola Peninsula, where the city is located. Therefore, the region is of vital strategic importance to Moscow, especially since Murmansk is Russia's only year-round ice-free port in the north and the Navy's sole access to the Atlantic via the Arctic Ocean.[14]

Military Build-up

With the region expected to become increasingly vulnerable, Russia has massively expanded its military capabilities along its entire northern coastline over the past fifteen years.[15] This military build-up is based on the "bastion concept," which dates back to the Soviet era and was revived in the 2000s.[16] As part of this re-militarization, the country has established and refurbished approximately fifty military facilities, stationed dozens of bombers and modern fighter aircraft, and deployed specialized Arctic brigades. Additionally, the Northern Fleet, the largest maritime unit of the Russian navy, has received significant investments.[17]

"The result is the security dilemma that has become a reality and which has the potential to worsen the region's security situation even further."

In response, the Scandinavian countries and the United States have strengthened their deterrence, which Moscow has used as a pretext to additionally increase its military build-up, claiming that Western efforts are aimed at containing Russia.[18] The result is the security dilemma that has become a reality and which has the potential to worsen the region's security situation even further.

Intensified Military Activities in the High North

Part of Russia's militarization of the Arctic includes a significant increase in military activities over the last decade and a half. Whether these activities are exercises and training, demonstrations of military strength, a part of hybrid warfare, or a mixture of all these elements, is often difficult to ascertain.

In 2007, for the first time since the end of the Cold War, Russia began patrolling international airspace over Greenland, the Arctic Ocean, and the North Atlantic with long-range bombers. The following year, the Russian Northern Fleet resumed patrols with nuclear submarines.[19]

In addition, the Russian armed forces are conducting exercises in the High North with growing intensity and scope, often as part of large-scale exercises such as Vostok, Tsentr, or Zapad.[20] Thereby, the main goal is

to improve jointness and increase readiness. To test the troops' quick reaction alert capability, exercises are often not announced in advance.[21] Such combat readiness tests – sometimes referred to as "snap exercises" – have an exceptionally high potential for escalation, as Western intelligence services can easily misinterpret them.

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While mainly focusing on air and maritime, exercises with ground and airborne units have also been carried out since 2014.[22] Exceptionally provocative are air force activities in which – often in violation of national airspace – bombers and escort aircraft in tactical formation conduct simulated attacks against critical infrastructure of neighboring countries or allied naval units. Similarly, Russian forces have repeatedly jammed GPS signals with electronic warfare measures, endangering both the targeted Western military troops as well as civilian air and sea traffic.[23]

In addition to training purposes, military exercises serve as political signaling. The aim is to demonstrate the capabilities of the Russian armed forces, influence NATO's cost-benefit calculus, and thus strengthen deterrence and restrict the opponent's freedom of action by creating a zone of uncertainty.[24] Western experts believe that the large number of malicious activities below the threshold of open conflict is part of the hybrid warfare campaign Russia has been waging against the West for years.[25] With Finland and Sweden joining NATO, their intensity has even increased.

Impact of Russia's 2022 War of Aggression against Ukraine

The illegal annexation of Crimea in 2014 and the following proxy war by Russian-backed separatists in the Donbas had already increased tensions in the Arctic due to the general deterioration in relations between Russia and the West. With the 2022 full-scale invasion, these have reached a veritable freezing point. Overall, the Russian aggression against Ukraine will seriously affect the security situation in the High North, both in the short and medium to long term.

From a short-term perspective, it is not only critical that Arctic cooperation has practically come to a standstill in the wake of the diplomatic ice age between Russia and the West. The war in Ukraine has also directly impacted the military balance of power in the High North. Experts suggest that Russian Arctic units deployed in Ukraine have suffered substantial casualties, although exact figures are not yet available. However, it is worth noting that the naval and air forces stationed in the north are still mostly intact, and these are the critical capabilities of Russia's military posture. Nevertheless, Western sanctions will likely delay the planned military build-up by several years. Consequently, the Kremlin will presumably continue to rely mainly on hybrid tactics to pursue its aggressive goals in the foreseeable future.[26]

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The medium to long-term security situation in the Arctic will depend on several factors, including the impact of Western sanctions, the general Russian perception of threats, and the role of China.[27] Regardless of the outcome of the Ukraine conflict and its possible long-term effects on Russia, the future of the Arctic looks bleak. As a result, the West must acknowledge that tensions, military activity, and strategic rivalries will continue to characterize the region.

China: Not an Arctic State but a Relevant Actor

The Arctic security dynamic is becoming more complex due to the presence of another strategic competitor, the PRC.[28] Although China is not an Arctic coastal state, in its 2018 White Paper on Arctic Policy, Beijing articulated its understanding of

being at least a "near-Arctic state"[29] – with ambitions to become a "polar great power" by 2035.[30]

China's growing interest in the polar region can be attributed to its need for raw materials and energy resources, as well as the potential presented by the Northern Sea Route as a new trade lane between East Asia and Europe, the so-called "Polar Silk Road".[31] However, the country has also identified the region as strategically important in the event of a future conflict. This means China's growing Arctic involvement should be considered part of global great power competition. Western experts are concerned that the PRC may act aggressively to impose an international order that aligns with its authoritarian model, similar to its behavior towards Taiwan and in the South China Sea.[32] At least as regards this goal, China's interests in the Arctic overlap with those of Russia. Hence, the two authoritarian regimes should not be considered separate rivals in isolation. Instead, their Arctic policies must always be considered in tandem, as Rebecca Pincus, former Director of the Polar Institute at the Wilson Center in Washington, points out.[33]

The PRC's Growing Arctic Presence

After Xi Jinping assumed power in 2012, the polar region gained significant importance in China, similar to what happened in Russia after Vladimir Putin returned to the presidency. Since then, China's Arctic strategy has become increasingly security-oriented. Nevertheless, Beijing is very cautious in pursuing its long-term goals, aware that an open demonstration of military power would be counterproductive.[34]

China's ambition to become a polar great power seems to be more of a general vision than a closely coordinated grand strategy that follows a predetermined plan.[35] To achieve its goal, the PRC is pursuing a comprehensive approach comprising four closely interwoven arms –political,[36] economic,[37] scientific research, and military. Scientific research is given vital importance, as it plays a crucial role in understanding climate change, which will significantly impact Chinese coastal cities and the country's economy.[38] However, scientific projects often have a dual-use dimension as part of the "military-civilian fusion concept", China's main channel for regional power projection.[39] What is being done in reality under the guise of "science" is exceptionally challenging to assess in the extremely remote areas that characterize the polar region. But it can be assumed that Chinese activities also serve military purposes, if not primarily so.[40]

The fourth arm of the comprehensive approach is the military. China's military strategy suggests that projecting military power into the Arctic region should be done cautiously, at least initially, by utilizing the legitimate cover provided by dual-use projects.[41] According to sparse publications by Chinese military experts, the People's Liberation Army (PLA) plans to enhance its naval presence in the polar region, as it already has done in recent years, and to establish bases later on.[42]

At the same time as the PRC demonstrates its growing interest in the Arctic with various activities, it has also been investing considerably in naval assets capable of operating in extreme weather conditions.[43] Even more than the opaque statements in strategic documents, this capability expansion of the PLA Navy reveals that an increased Chinese military presence in the Arctic must be expected in future years. Nevertheless, it is essential to avoid becoming overly concerned. P. Whitney Lackenbauer, a Canadian expert in Arctic security, recently warned that viewing the PRC as a peer or near-peer competitor in the northern polar region could divert attention from Eastern Asia, where Chinese capabilities and interests do, in fact, warrant such concerns.[44]

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The Sino-Russian Arctic Tandem

Even though Russia generally tolerates rather than welcomes the growing Chinese presence in the region, the two countries have steadily expanded their Arctic partnership in recent years, for example, by conducting combined naval exercises, including in near-Arctic waters.[45] Nevertheless, given the region's vital importance for national

defense, the Russian military leadership has strong reservations about the PRC gaining even more influence.[46]

How Sino-Russian relations regarding the Arctic will develop depends heavily on the medium to long-term consequences of the war in Ukraine.[47] If Russia succeeds in maintaining a certain level of autonomy despite Western sanctions, the two countries will likely form a closer partnership, more or less at eye level. In such a scenario, China may extend its support for exploiting natural resources and infrastructure projects. However, if Russia were to become Beijing's de facto vassal state, the PRC would gain significant bargaining power over the Kremlin. This could even lead to a permanent presence of the PLA in the Arctic, which Moscow has consistently opposed so far.[48]

Evolving Security Dilemma: The Western Reaction

"We are not, as a nation, keeping pace with the rapidly changing security situation in the Arctic,"[49] criticized Colonel Michael J. Forsyth, former chief of staff of the Alaskan NORAD region, in early 2018.[50] Indeed, for a long time, the West has been hesitant to recognize Russia's and China's efforts to undermine the international order in the Arctic through their increased military presence and gray zone activities.[51] The situation is particularly problematic since the military build-up took place during a time marked by the expansionist policies of both authoritarian regimes and a general growth in geopolitical tensions, further fueling the situation in the Arctic.[52]

Overall, Russian militarization in the High North has created a difficult situation. It is nearly impossible to determine whether Russia's motives are purely defensive or offensive, i.e., intending to gain military dominance in the region and intimidate neighboring states.[53] China's opaque behavior is even more challenging to estimate, as its intentions remain largely unclear.[54]

Increased U.S. and NATO Presence

Regardless of which administration has been in power in the White House, the United States has gradually expanded its military presence in the Arctic in recent years.[55] Nevertheless, President Trump's announcement that Greenland is crucial for U.S. national security, particularly to limit the influence of Russia and China, and that the United States therefore need direct control over the island, abruptly made the Arctic a central focus of geopolitical interest, triggering a veritable diplomatic crisis among the Western allies.[56] However, with the Indo-Pacific being the U.S. Armed Forces' top priority, the United States can only allocate limited resources to improve their capabilities in the polar region's unique climatic conditions. Given the significant capability gaps,[57] there is a risk that the intention of deterring the two strategic competitors by significantly strengthening the U.S. Arctic presence may ultimately remain an empty threat.

"NATO, on the other hand, does not have a common view of the Arctic despite its importance for ensuring open sea lines of communication in the North Atlantic."

NATO members, on the other hand, do not have a common view on the Arctic despite the alliance's importance for ensuring open sea lines of communication in the North Atlantic. Until recently, most allies have objected to an increased NATO presence in the region, fearing that Russia may interpret it as a provocation.[58] Because it has been impossible to reach a consensus within the Alliance, the polar region has long been neglected in NATO strategic documents.[59] Nevertheless, to counter Russia's increasingly aggressive behavior, all Nordic countries have expanded their national defense capabilities and increased their training activities.[60]

Russian Perception

Russia views the increased presence and activities of the United States and NATO in the Arctic with suspicion and perceives them as a threat. Commentators frame measures taken by the "collective West" in response to Russian militarization as provocative, hostile, and part of hybrid warfare aimed at containing both Russia and China, as well as establishing Western control over the region's resources and trade routes. In contrast, Russia's military build-up is presented as purely defensive, i.e., as countermeasures

to defend a just and orderly world that Russia is supposedly creating.[61]

Yuri A. Raikov of the Moscow State Institute of International Relations provides illustrative insights into this Russian perspective. Referring to several U.S. strategic documents and outlining the constant expansion of the U.S. military presence in Alaska, Greenland, and Iceland, he concludes that the United States is pursuing a single goal with this "militarization", which is "to put competitive pressure on Russia and establish its control over the Arctic under the cover of the alliance of the Arctic states and NATO."[62]

As mentioned earlier, there is undoubtedly a core of real Russian (and Chinese) security interests in the Arctic. In both authoritarian regimes, however, this is overlaid by increasingly shrill anti-Western propaganda,[63] making it challenging to identify the actual perception of Western activities objectively. On the other hand, however, Western experts also tend to view Russia's and China's activities as exclusively threatening, usually without recognizing their security interests. This leads to a security dilemma, where each side increases its deterrence measures, perceiving the other's actions as a threat. Breaking out of this spiral is difficult. James K. Wither, who has extensively studied the Arctic security dilemma, summarizes that "in the current circumstances, the basic level of trust […] required to convince both parties that the other's military activities are not intended to be a threat is lacking."[64]

Lack of Binding Norms, Regulations, and Institutions

Despite political tensions and disagreements both among Arctic nations and globally, the polar region has long been a place of peaceful cooperation. Russia's aggressive behavior has disrupted this so-called "Arctic exceptionalism," however, which means that resolving the nascent security dilemma will be challenging.[65]

Arctic Security Dialogue on Hold

One major challenge the Arctic region faces is the lack of a suitable platform for addressing security issues in a comprehensive regional dialogue. The leading intergovernmental forum for addressing such problems could be the Arctic Council, established in 1996 to promote peace, stability, and constructive cooperation in the Arctic region.[66] However, the Council's agenda does not include military security topics since the United States and Russia insisted on removing them from the outset to allow progress on other, less controversial issues.[67]

As a result, an agreement focused on enhancing the security of Arctic states has never been established. Although various norms and instruments effectively deal with most issues in the "soft security" category, such as search and rescue at sea, the situation concerning military challenges is different. Except for the 1920 Svalbard Treaty, which prohibits using the Norwegian island for war-like purposes, no binding norms or institutions can prevent the increasing militarization of the Arctic or help avoid unintended military escalation.[68]

In late fall 2021, some authors were still optimistic that Russia's upcoming two-year Arctic Council chairmanship starting in spring 2022 could provide an opportunity to discuss hard security issues.[69] But this hope was shattered after Russia attacked its neighboring country on February 24, 2022. As a collective response, the seven Western member states declared a boycott of the council, which ceased their participation in all high-level meetings for the following year.[70] Since Norway took over the chairmanship on May 11, 2023, Russia has no longer participated.[71]

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Additionally, the Nordic countries suspended their regional cooperation with Moscow not only in the Arctic Council but also in the Barents Euro-Arctic Council and the European Union's Northern Dimension policy framework.[72] Already years earlier, following the 2014 annexation of Crimea, Russia was no longer invited to the annual Arctic States' Chiefs of Defense meetings,

an important regional forum for military-to-military dialogue.[73] With any political dialogue and direct military contact having come to a halt, Russia and the Western Arctic coastal states are currently exchanging less security-related information (e.g., concerning military exercises or troop deployments) than they did in the final phase of the Cold War.[74]

Future Perspectives

It is difficult to predict how the current unsatisfactory situation will develop. Only a few years ago, some experts were still confident that a common basis for Arctic cooperation with Russia could again be found.[75] However, Putin's full-scale invasion of Ukraine has created a new situation. Some experts believe that the general relations between Moscow and the West are so strained that resolving issues in the High North through negotiation or de-escalation will be impossible in the foreseeable future. Russia's hostile behavior toward the West and its disruptive role on the world stage make it challenging to build trust and mitigate the Arctic security dilemma. Therefore, the only appropriate strategy is to increase deterrence. According to Mathieu Boulègue, an expert on Russian foreign and security policy, "any opportunity that existed to constructively engage Moscow in parallel discussions over military security in the Arctic has now gone […] at least for as long as the current leadership remains in the Kremlin."[76]

Existing Regimes as a Potential Blueprint for the High North

To reduce the likelihood of unintentional incidents escalating into a crisis or even armed conflict, in the 1990s, Europe implemented three complementary agreements known as "Confidence- and Security-Building Measures" (CSBM). These agreements include the Treaty on Conventional Forces in Europe (CFE),[77] the Vienna Document, and the Treaty on Open Skies.[78] Unfortunately, given the lack of political will to adapt them to current requirements, all three agreements are outdated.[79]

While the Treaty on Open Skies would not be of much help in addressing the security concerns in the High North, especially since the United States and Russia withdrew from it in 2021/22, the Vienna Document could form a basis for improving the security situation in the polar region. However, the agreement lacks a maritime dimension, which is essential in this context. To address this, an agreement in the form of a so-called "Code for Unplanned Encounters at Sea" (CUES) could serve as a model for the High North.

Enhancing Transparency among Armed Forces in Europe: The Vienna Document

The Vienna Document is a central instrument for military confidence-building between the 57 member states of the Organization for Security and Cooperation in Europe (OSCE), which includes all Arctic states. Based on the principles of the 1975 Helsinki Final Act, it was agreed upon in 1990 and has been updated several times. Since the last update in 2011, various attempts have been made to modernize it, but all of them have failed.[80]

The agreement aims to increase transparency among armed forces in Europe, reduce mutual mistrust, and implement mechanisms to prevent conflicts. To this end, the participating states have agreed to exchange detailed information on their armed forces, defense budgets, force planning, and upcoming major exercises on an annual basis.[81] The military activities that must be reported are regulated based on binding threshold values.[82] Verification procedures, such as inspections and evaluations, may be performed to ensure the accuracy of the information provided.[83]

Unfortunately, the limitations of the Vienna Document have been clear since the 1990s and have only grown more pronounced over time.[84] The main objective of the document is to prevent a party from using a military exercise to launch a surprise attack against a neighboring country – a scenario that was the dominant concern when the agreement was negotiated. However, the document does not take sufficient account of the changes in warfare over the past three decades. Since the Cold War ended, most armed forces have been significantly reduced in size, which means that the notification thresholds outlined in the document are not often met.[85] Additionally, as demonstrated by Russia in recent years, particularly in the polar region, these thresholds can be easily circumvented by splitting large exercises into several smaller ones, conducting snap exercises, or including troops not covered by the agreement.[86]

Furthermore, a considerable increase in professionalism and readiness has accompanied the reduction in manpower. Since the 1990s, it has been the case that military thinking is no longer dominated by large tank armies but smaller, mobile units equipped with long-range, lethal weapons. This shift in organization and doctrine has fundamentally changed the character and scope of military exercises.[87]

The last point is linked to another shortcoming. The Vienna Document focuses almost exclusively on land forces. Training and exercises of air forces, which play a significant role in modern warfare, only need to be notified "if it is foreseen that in the course of the activity 200 or more sorties by aircraft, excluding helicopters, will be flown."[88] Naval forces, paramilitary forces (e.g., coast guards), and non-state actors are not regulated at all. This is particularly problematic in creating transparency in the High North, as naval and maritime forces play a crucial role in this vast and watery theater of operations.

The focus of the Vienna Document on ideas pertinent to the immediate post-Cold War era is also reflected in the fact that many enablers essential to contemporary warfare are not mentioned, such as unmanned systems, long-range air defense, medium-range missiles, air and sealift capabilities, command and control, logistics and support.[89] However, it remains uncertain whether the inclusion of modern military systems into such an agreement could alone create more transparency. Hans-Joachim Schmid, a scholar at the Peace Research Institute Frankfurt specializing in arms control and disarmament, argues that qualitative information on capabilities and potential intentions (e.g., objectives defined in policy papers) would also need to be exchanged to achieve the required level of transparency.[90]

Finally, it should be noted that the Vienna Document does not address hybrid warfare. Nevertheless, it is questionable whether any agreement can effectively regulate covert activities, such as those assumed to be part of the PRC's Arctic presence, since the intent behind such hybrid tactics is precisely to remain in a gray area uncovered by international law.

Overall, the transparency measures outlined in the 2011 Vienna Document do not sufficiently address the current political, military, or technical complexities.[91] While this applies to the entire European region, it is especially true for the Arctic and the High North, posing distinctive security challenges.

Russia's attack on Ukraine has massively damaged the spirit of the Vienna Document, which is based on openness, trust, and cooperation. As if to confirm its disregard for international norms, Moscow suspended verification visits to its territory about a month before the invasion. At the beginning of March 2022, it announced it would no longer provide the OSCE states with information about its armed forces. Gabriela I. Rosa-Hernández, an associate research analyst in the Russia Studies Program at the Center for Naval Analyses in Washington D.C., draws a sobering conclusion from the resulting situation, stating that "the future of confidence- and security-building mechanisms with Russia looks grim. […] A world without the Vienna Document – or similar mechanisms – is one with more bluster and coercive threats, and perhaps, even further aggression."[92]

"Russia's attack on Ukraine has massively damaged the spirit of the Vienna Document, which is based on openness, trust, and cooperation."

Reducing Maritime Risks: Code for Unplanned Encounters at Sea (CUES)

In a sea-dominated environment like the Arctic, confidence and security-building measures that take into account naval forces would be a high-priority requirement. However, as mentioned above, European discussions have mainly focused on large-scale land operations, neglecting the importance of the maritime domain. This is particularly problematic given the significance of naval forces for deterrence and global power projection.

During the Cold War, the Soviet Union promoted naval confidence-building measures, a concern Russia took up again in the 1990s and early 2000s, introducing various proposals to the OSCE, such as prior notification and observation of exercises at sea. However, the problem with declaring or restricting the movement of naval forces is that such regulations conflict with the

freedom of navigation in international waters, making NATO member states skeptical of such ideas. Therefore, they have rejected all Russian proposals.[93]

Even if actual naval CSBMs are lacking, there are at least agreements to reduce technical risks of incidents at sea, known as INCSEAs. Such agreements, which were first concluded by the Soviet Union and later by Russia with almost all European naval powers,[94] serve to increase safety and manage incidents that could endanger the lives of sailors. However, most of these agreements need to be updated due to technological progress in communication systems.[95]

Modern agreements do exist in Asia, however. In 2014, twenty-one countries (including the United States and Russia) agreed to the CUES at the Western Pacific Naval Symposium. The document contains safety procedures, a basic communication plan, and maneuvering instructions for ships and naval aircraft during unplanned encounters at sea.[96] The CUES is an instrument to reduce risks and prevent incidents at sea from spiraling out of control and, at worst, escalating into unintended conflict.[97]

"The CUES is an instrument to reduce risks and prevent incidents at sea from spiraling out of control and, at worst, escalating into unintended conflict."

In September 2016, the PRC and the countries comprising the Association of Southeast Asian Nations (ASEAN) agreed that the regulation would also apply to the South China Sea. While this may not prevent all incidents in this region of strategic competition, especially since the agreement does not cover paramilitary forces or underwater operations,[98] it is an essential sign that many countries are committed to respecting the rules and consider them valid.

In 2015, a proposal in Europe to create an agreement similar to the one in East Asia was made for the Baltic Sea. Because NATO was concerned that such an agreement might limit its freedom of action, the idea was not pursued, however.[99] Nevertheless, reconsidering this proposal might be worthwhile given the growing number of incidents between NATO and Russian naval forces, particularly in the High North.

Melting the Ice: A Strategy to Overcome the Arctic Security Dilemma

As long as the war in Ukraine continues, policymakers will presumably have little appetite for deals on confidence- and security-building measures. But when the guns fall silent one day and a new status quo regarding the European security architecture emerges, agreements to minimize risk and increase security will be unavoidable – also in the High North. Ultimately, neither the West nor Russia or China are likely to be interested in turning the Arctic into a zone of armed conflict.[100]

"But when the guns fall silent one day and a new status quo regarding the European security architecture emerges, agreements to minimize risk and increase security will be unavoidable – also in the High North."

With the end being to overcome the Arctic security dilemma, the West needs a long-term strategy based on three ways – deterrence, reassurance, and persuasion – to gradually entice Russia to reengage with cooperative efforts.

Deterrence

The Western Arctic states have invested heavily in deterrence in recent years. Given the unpredictable behavior of Russia and China in other parts of the world, it is appropriate to continue these efforts. Although an active initiation of armed conflict in the polar region by the strategic competitors is deemed unlikely, the West must not entice aggressive actions through deficiencies in expanding its own defense capabilities. However, NATO members should adopt a purely defensive posture, as Russia has always used Western military build-up as an excuse to militarize the Arctic further.

Reassurances

Trust plays a vital role in avoiding misunderstandings, promoting transparency, and restoring dialogue and cooperation. To regain trust, Western

decision-makers must critically evaluate whether their assumptions about Russian behavior in the Arctic are not, at least in part, common misperceptions. Taking Russian security concerns seriously would be a significant step towards easing tensions.[101]

Building trust also involves reassurances in the form of small but at least somewhat costly gestures that benefit the other side and involve a certain amount of risk. Such so-called "costly signals" are essential to demonstrating that one is moderate, trustworthy, and willing to cooperate. They should improve the opponent's security without unduly weakening one's own.[102]

As Putin's Russia has increasingly evolved into an authoritarian state with pointedly anti-Western rhetoric, such costly signals can realistically only come from the West.[103] An option to consider is intentionally avoiding military activities around the Kola Peninsula. Doing so would not mean giving in to Moscow's aggressive behavior. Instead, it would send a clear message that NATO acknowledges Russia's vital interests in protecting the crown jewels of its national security located there.[104]

Persuasion and Return to Cooperation

To resume cooperation in the medium to long term, a three-step approach is recommended, starting with the mitigation of immediate safety risks through a military code of conduct and ending with the conclusion of a comprehensive confidence- and security-building agreement similar to the Vienna Document, or even as an amendment to it.

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First Step: Concluding a CUES Agreement

An essential first step in reducing the risk of escalation would be to negotiate an Arctic CUES agreement.[105] The likelihood of this happening is realistic, as all parties have a shared interest in ensuring that unplanned encounters at sea do not inadvertently lead to the use of force. The goal would be to establish rules for the behavior of crews in case of an unplanned approach by aircraft or ships, similar to the existing East Asian CUES, which some but not all Arctic states have signed. As emphasized by Liselotte Odgaard and Sune Lund, a CUES is not a conflict resolution tool but an "effective instrument to avoid escalation."[106] Since no hard security issues are at stake, reaching a technical agreement should be feasible.

Determining the appropriate forum for negotiating such an agreement is a complex issue. In 2020, the Newport Arctic Scholars Initiative (NASI) study group at the U.S. Naval War College stated that "given [...] the rising geopolitical tensions, current fora are inadequate to address and mitigate conflicts within the Arctic."[107] Therefore, the group proposes creating a new high-level political-military platform. However, this proposal may face problems in the foreseeable future as NATO decided in 2014 that there would be no "business as usual" with Russia until the Ukraine crisis is resolved.[108] Nevertheless, resuming military-to-military contacts may become unavoidable in tackling the challenges that must be resolved in the post-February 2022 world.

The extent to which the PRC should also be involved in negotiations must be examined in depth, taking into consideration the fact that China's open military presence in the Arctic and particularly in the High North has been relatively marginal so far. In principle, it is better to focus on Russia first. If the West succeeds in concluding an agreement with Moscow, this will increase the pressure on the PRC to behave according to the rules.

Second Step: A Military Rules-of-the-Road Agreement

The next step to gradually overcome the Arctic security dilemma is to establish a military rules-of-the-road agreement or a military code of conduct that exceeds the safety measures defined in the CUES. Such an agreement aims to regulate what military prac-

tices are legitimate and acceptable and what behavior is unacceptable to stakeholders. This includes, for example, banning dangerous tactical maneuvers and simulated attacks with aircraft and ships, and placing restrictions on electronic warfare during peacetime, such as jamming GPS and radar.[109]

Implementing a military code of conduct is more complex than a CUES agreement because it restricts military freedom of action. Therefore, negotiations should only be initiated once a minimum level of trust and willingness to cooperate has been restored.

Third Step: A Comprehensive CSBM Agreement The third step towards achieving long-term stability in the High North region involves establishing a comprehensive agreement on confidence- and security-building measures preferably based on the model of the Vienna Document. Such an agreement should focus on two key areas: 1) exchanging information on military potential, including, if possible, operational capabilities such as sustainability, deployability, intelligence, surveillance, as well as reconnaissance, readiness and network-centric capabilities, and logistics,[110] and 2) providing prior notification of military activities and conducting verifications.[111]

Because land forces are now smaller, more mobile, and more combat-effective than in the early 1990s, the notification thresholds must be significantly reduced compared to the Vienna Document.[112] Furthermore, the agreement must include air and naval exercises, whereby all concentrations of warships near the coast should be announced above a threshold to be defined. The verification of naval forces requires special regulations. Conducting inspections on the high seas is hardly realistic because they would interfere with ongoing operations, which is why the naval powers would scarcely allow them.[113] On the other hand, visiting home ports makes little sense, as two large navies relevant to the High North, the American and the Canadian, are primarily stationed outside Europe. One solution might be to agree on satellite observation or aerial observation flights over the northern seas,[114] similar to regulations according to the Treaty on Open Skies.

Finally, it is necessary to establish regulations for snap exercises. One possible solution is to implement a "quiet notification mode," where an advanced notice is confidentially transmitted at a high level.[115] Another option is limiting the time frame for conducting such drills by defining slots for specific sub-regions within a year.[116]

There are two potential venues for negotiating a CSBM agreement in the Arctic, each with advantages and disadvantages.[117]

Although Russia suspended its participation in the spring of 2023, the Arctic Council could still be a suitable place to discuss security issues as it includes all Arctic states and China as an observer. As mentioned earlier, the 1996 Ottawa Declaration, which established the Arctic Council, states in a footnote that the council "should not deal with matters related to military security."[118] However, the wording of this statement leaves some room for interpretation and does not entirely rule out the possibility of the council addressing hard security issues.[119] While this could potentially jeopardize the other areas that the council deals with, it is essential to consider that strategic stability is a prerequisite for addressing other vital issues, such as climate change, which neither Russia nor China can deal with alone.[120]

The other possible platform is the OSCE. Its advantage is that it unites all Western states and Russia precisely to discuss security, confidence-building, and risk reduction in the wider Euro-Asian area. A security arrangement in the High North would not have to include all participating OSCE countries but only those affected. The Vienna Document's Chapter 10 explicitly allows for regional bilateral or multinational agreements. Negotiations within a regional group would benefit from building on the Vienna Document, and the regulations could be set out in an addendum to the existing agreement.[121]

However, there are a few arguments against the OSCE. Firstly, the PRC, now an essential player in the northern polar region, is not represented in the organization. Secondly, the United States and Russia have thus far opposed discussing Arctic security issues in this forum.[122] Lastly, the future of the OSCE is generally uncertain since, by attacking Ukraine, Russia violated every single principle on which the organization is based. As long as the Kremlin maintains an imperial stance and

questions the right of neighboring countries to exist, the organization will no longer be effective.[123]

Conclusions

The objective of this article was to outline a strategic approach to how – long term – it might be possible to resolve the security dilemma in the High North as well as the associated risk of incidents spiraling out of control and unintentionally escalating into conflict.

Climate change is causing significant changes in the Arctic – also in terms of security. Russia claims the northern polar region as its sphere of influence, but this does not mean that Moscow intends to attack its neighboring countries directly. Instead, it aims to limit the freedom of action of Western nations by bolstering its deterrence and testing Western vulnerabilities and resolve through military and paramilitary activities, thus creating a zone of insecurity.

In February 2022, Europe definitively entered a phase of enmity between Russia and NATO that could last for years or even decades. Consequently, the presence of troops and military activities will further increase both in Europe and the Arctic. With more armed forces deployed to the High North, the likelihood of incidents that could unintentionally escalate is growing.

The fact that China is also striving for more influence in the Arctic complicates the polar power play. Even if Beijing has primarily used civilian instruments of power to achieve its goal of becoming a polar great power by the mid-2030s, the development of specialized naval capabilities indicates that the PRC intends to strengthen its hitherto relatively marginal military presence in the medium to long-term. The extent to which this will succeed will depend largely on how the Sino-Russian partnership evolves in the aftermath of the war in Ukraine.

The West has so far responded to the growing military presence of the two strategic competitors primarily by strengthening its deterrence. This is undoubtedly appropriate given Russia's and China's aggressive behavior in other parts of the world. Beyond that, however, it is recommended to expand on the current strategy by pursuing two additional ways: reassurance and persuasion.

Reassurances are crucial to gradually rebuilding the trust Russia has destroyed with its war of aggression against Ukraine. A minimum level of trust is necessary for any international cooperation. To regain it, small risky gestures, so-called costly signals, are appropriate, such as NATO refraining from military activities near the Kola Peninsula, where Russia has stationed most of its nuclear second-strike capability.

The major obstacle is persuading Moscow to resume collaborative behavior in the long run. To achieve this, identifying common interests is crucial. Apart from maintaining stability in the polar region, which is fundamental to all parties involved, climate change is another vital issue of shared interest. Cooperation in dealing with the consequences of global warming could even be a catalyst for tackling hard security issues later on.

To collaboratively address the Arctic security dilemma and avoid escalatory risks, a three-step approach is recommended, starting with a technical code of conduct for unplanned encounters at sea alongside the existing CUES in East Asia. As trust grows, the next step would be a military rules-of-the-road agreement that defines legitimate and unacceptable military behavior in peacetime. The final long-term step would be a comprehensive Arctic confidence- and security-building agreement. The 2011 Vienna Document could serve as a model. However, it would need to be improved by addressing its shortcomings, such as the inadequate notification thresholds for military exercises and the absence of provisions for air and naval activities.

"In the current geopolitical situation, advancing measures to reduce mistrust and increase transparency is undoubtedly challenging. Nevertheless, it remains essential to address how to improve the long-term security situation in the Arctic and, thereby, to involve all relevant stakeholders."

In the current geopolitical situation, advancing measures to reduce mistrust and increase transparency is undoubtedly challenging. Nevertheless, it remains es-

sential to address how to improve the long-term security situation in the Arctic and, thereby, to involve all relevant stakeholders. Implementing a long-term, step-by-step strategy that includes deterrence as well as reassurance and persuasion could be the starting point for breaking the ice. ◆

Endnotes

1 There are many definitions of the Arctic; see, e.g. Arctic Center of the University of Lapland, "The Arctic Region", accessed March 24, 2024, https://www.arcticcentre.org/EN/arcticregion. For the purposes of this article, the Arctic is the region that includes the terrestrial and marine areas north of the Arctic Circle (66° 32›N).

2 Eric Post et al., "The Polar Regions in a 2°C Warmer World," *Science Advances* 5 (December 2019): 1–12, https://www.science.org/doi/epdf/10.1126/sciadv.aaw9883; Lassi Heininen, "Climate Change and the Great Power Rivalry in the Arctic," *Insight Turkey* 24, no. 2 (Spring, 2022): 25–38, https://www.proquest.com/scholarly-journals/climate-change-great-power-rivalry-arctic/docview/2813049729/se-2; Ekaterina Klimenko, *The Geopolitics of a Changing Arctic* (Stockholm: SIPRI, 2019), 3–8, http://www.jstor.org/stable/resrep20067; Stephanie Pezard, "The Coldest War: Toward a Return to Great Power Competition in the Arctic," *Great Decisions*, no. 4 (2021): 43–52; Dick Zandee, Kimberley Kruijver, and Adája Stoetman, *The Future of Arctic Security. The Geopolitical Pressure Cooker and the Consequences for the Netherlands* (The Hague: Clingendael Institute, 2020), https://www.clingendael.org/sites/default/files/2020-04/Report_The_Future_of_Arctic_Security_April_2020.pdf.

3 The term High North is often used interchangeably with the Arctic, but it has a narrower geographical definition. As the European part of the Arctic, it encompasses the area stretching from Greenland in the west to the northern Russian border in the Barents Sea in the east.

4 James K. Wither, a professor of national security studies at the George C. Marshall European Center for Security Studies in Garmisch-Partenkirchen, analyzes the situation that has arisen in the High North in the wake of the Russian annexation of the Crimea in 2014, describing it precisely as a "security dilemma". See James K. Wither, "An Arctic Security Dilemma: Assessing and Mitigating the Risk of Unintended Armed Conflict in the High North," *European Security*, vol. 30, no. 4 (2021): 649–666, https://doi.org/10.1080/09662839.2021.1942850. In addition, Julie Wilhelmsen and Anni Roth Hjermann reconceptualize the traditional understanding of the security dilemma as the problem of lacking understanding and expand it to include the discursive dimension. See Julie Wilhelmsen and Anni Roth Hjermann, "Russian Certainty of NATO Hostility: Repercussions in the Arctic," *Arctic Review on Law and Politics*, vol. 13 (2022): 114–142, https://arcticreview.no/index.php/arctic/article/view/3378/6333.

5 Robert Jervis, "Cooperation under the Security Dilemma," *World Politics* 30 (January 1978): 167–214, https://doi.org/10.2307/2009958. The term "security dilemma" goes back to the German scientist John H. Herz and the British historian Herbert Butterfield, who first described the phenomenon in the early 1950s. At the end of the 1970s, Robert Jervis developed the concept further and related it to the contrast between the "spiral" and "deterrence" models. Spirals are typical of arms races in which defensive actions on one side trigger reactions on the other because they are misinterpreted as being offensive.

6 For a theory of escalation, see Forrest E. Morgan et al., "The Nature of Escalation," in *Dangerous Thresholds. Managing Escalation in the 21st Century* (Santa Monica, CA: RAND, 2008): 7–45, https://www.rand.org/content/dam/rand/pubs/monographs/2008/RAND_MG614.pdf.

7 For the general relevance of the Arctic for Russia, see in detail Stephanie Pezard, Abbie Tingstad, Kristin Van Abel, and Scott R. Stephenson, *Maintaining Arctic Cooperation with Russia: Planning for Regional Change in the Far North* (Santa Monica, CA: RAND Corporation, 2017), 7–50, https://www.rand.org/pubs/research_reports/RR1731.html, 7–50. During the Cold War, the Arctic was vital in the context of nuclear warfare since it was the shortest way between the United States and the Soviet Union for an attack with long-range bombers and intercontinental cruise missiles. Like Washington, Moscow assumed that a surprise attack would be carried out via the northern polar region. Accordingly, the Soviet Union built numerous radar surveillance facilities and airfields in the Arctic and steadily expanded the Northern Fleet from the late 1950s onwards. See Jonas Kjellén, "The Russian Northern Fleet and the (Re)militarization of the Arctic," *Arctic Review on Law and Politics*, vol. 13 (2022): 39–40, https://doi.org/10.23865/arctic.v13.3338. Towards the end of the East-West confrontation, the situation eased after President Mikhail Gorbachev defined the region in his 1987 Murmansk speech as a "zone of peace and cooperation", thus paving the way toward an over twenty-year period of "Arctic exceptionalism".

8 The Arctic region was more of a burden for the government under Boris Yeltsin. In the 1990s, Russia lacked funds both to exploit resources and to maintain and renew military assets and infrastructure. See Jakub Godzimirki and Alexander Sergunin, "Russian Expert and Official Geopolitical Narratives on the Arctic: Decoding Topical and Paradigmatic DNA," *Arctic Review on Law and Politics*, vol. 11 (2020): 22–46, 32, http://dx.doi.org/10.23865/arctic.v11.1350.

9 Katarzyna Zysk, *Russia's Military Build-up in the Arctic: To What End?* (Washington, DC: CNA, 2020), 2, https://www.cna.org/reports/2020/09/russian-military-in-the-arctic.

10 Michael Paul and Göran Swistek, *Russia in the Arctic. Development Plans, Military Potential, and Conflict Prevention* (Berlin: Stiftung Wissenschaft und Politik, 2022), 37–39, https://www.swp-berlin.org/publications/products/research_papers/2022RP03_Russia_Arctic.pdf.

11 Zysk, *Russia's Military Build-up*, 9.

12 The United States, NATO and "the West" are often used interchangeably in Russian propaganda discourse and explicitly referred to as identical. See in detail, Wilhelmsen and Roth Hjermann, "Russian Certainty," 114–142.

13 Zandee, Kruijver, and Stoetman, *Future of Arctic Security*, 26–29; Gonzalo Vàzquez, "2022 Russian Maritime Doctrine: Implications for NATO and the Future of Great Power Competition in the Arctic," *The Arctic Institute, Center for Circumpolar Security Studies*, April 11, 2023, https://www.thearcticinstitute.org/2022-russian-maritime-doctrine-implications-nato-future-great-power-competition-arctic/.

14 Klimenko, *Geopolitics*, 8–9; Paal Sigurd Hilde, "Auf Eis gelegt: Sicherheitspolitik und internationale Beziehungen in der Arktis nach der Zeitenwende," *Bundesakademie für Sicherheitspolitik, Arbeitspapier Sicherheitspolitik* 8, 2022, https://www.baks.bund.de/de/arbeitspapiere/2022/auf-eis-gelegt-sicherheitspolitik-und-internationale-beziehungen-in-der-arktis.

15 For details on Russia's military build-up, see Mathieu Boulègue, *The Militarization of Russian Polar Politics*. Research Paper Russian and Eurasia Program (London: Chatham House, 2022), https://www.chathamhouse.org/2022/06/militarization-russian-polar-politics; Mathieu Boulègue, *Russia's Military Posture in the Arctic. Managing Hard Power in a "Low Tension" Environment*. NDC Research Paper, no. 4, (Rome: NDC, 2019), XIII, https://www.chathamhouse.org/sites/default/files/2019-06-28-Russia-Military-Arctic_0.pdf; Heather A. Conley, Mattew Melino, and Jon B. Alterman, "The Ice Curtain: Russia's Arctic Military Presence," *Center for Strategic and International Studies*, March 26, 2020, https://www.csis.org/analysis/ice-curtain-russias-arctic-military-presence; Katarzyna Zysk, *Russia's Military Build-up in the Arctic: To What End?* (Washington, DC: CNA, 2020), https://www.cna.org/reports/2020/09/russian-military-in-the-arctic; Pezard, Tingstad, Van Abel, and Stephenson, *Maintaining Arctic Cooperation*, 20–57; Paul and Swistek, *Russia in the Arctic*, 37–39; Colin Wall and Njord Wegge, "The Russian Arctic Threat: Consequences of the Ukraine War," *CSIS Briefs* (January 2023): 2–6, http://www.jstor.org/stable/resrep47094; Stefan Hedlund, "The Arctic in Russia's Crosshairs," *GIS Reports*, April 7, 2023, https://www.gisreportsonline.com/r/the-arctic/

16 The "bastion" concept focuses on ensuring Russia's nuclear second-strike capability, protecting the necessary delivery systems, and, at the same time, securing naval access to the North Atlantic via the space between Greenland, Iceland, and the United Kingdom. This so-called "GIUK" gap would be crucial for NATO to deploy forces and supplies from the United States to Europe in a war. The operationalization of this concept is a system of Anti Access/Area Denial (A2/AD), which Russia has massively expanded in recent years. A2/AD aims to deny or at least impede access to the geographic zone around the Barents Sea by deploying layered, interlinked, and networked military capabilities. The A2/AD zone on and around the Kola Peninsula is primarily defensive. Still, as it covers the entire northern part of Scandinavia, it poses a permanent potential threat to neighboring forces operating there. Moreover, it also includes offensive elements to project military power in the North Atlantic. See Boulègue, *Russia's Military Posture*, 2; Paul and Swistek, *Russian in the Arctic*, 31; Ian Williams, "The Russia-NATO A2/AD Environment," *Missile Threat*, January

3, 2017, last modified November 29, 2018, https://missilethreat.csis.org/russia-nato-a2ad-environment/; Colin Wall and Njord Wegge, "The Russian Arctic Threat: Consequences of the Ukraine War," *CSIS Briefs* (January 2023): 1–2, http://www.jstor.org/stable/resrep47094.

17 Boulègue, *Russia's Military Posture*, 17–19. The Northern Fleet comprises nearly forty large surface ships, just as many submarines, including combat-ready strategic missile submarines, and the world's largest icebreaker fleet by far. The growing Russian interest in the Arctic is also reflected in the fact that in December 2014, an Arctic Joint Strategic Command was formed based on the Northern Fleet's headquarters. In 2021, it was upgraded to the fifth Military District, responsible for defending the northern border. See Kjellén, "Northern Fleet," 35–38.

18 Wilhemsen and Roth Hjermann, "Russian Certainty," 130.

19 Boulègue, *Russia's Military Posture*, 4–5; Paul and Swistek, *Russia in the Arctic*, 24.

20 Conley, Melino, and Alterman, "Ice Curtain," 12.

21 A high level of readiness and strategic force deployment capabilities are crucial since the Russian military leadership assumes that in case of war, the nuclear assets stationed on the Kola Peninsula would be particularly exposed to an enemy surprise attack, which is why an armed conflict in the High North should be decided on Russian terms as quickly as possible. Zysk, *Russia's Military Build-up*, 21–25.

22 Boulègue, *Russia's Military Posture*, 21–22.

23 Zysk, *Russia's Military Build-up*, 28–29; Paul and Swistek, *Russia in the Arctic*, 28; Boulègue, *Russia's Military Posture*, 5.

24 Zysk, *Russia's Military Build-up*, 21.

25 In Norway, in particular, an increasing number of assumed Russian gray zone activities have been observed in recent years, ranging from espionage and drone flights around military installations to communication jamming. There has also been interference on the high seas, for example, with fishing boats off the coast of Norway and Alaska. Western experts are very concerned about the possibility that the Russian navy could disrupt underwater cables that are critical for internet communication. See Wall and Wegge, "Russian Arctic Threat," 8–9.

26 Wall and Wegge, "Russian Arctic Threat," 8.

27 Should Beijing turn its back on Moscow, it cannot be ruled out that a largely isolated Russia will increasingly play the nuclear card to underpin its self-declared status as a great power. In this case, the Arctic would take on great significance, and it is possible that Russia would even further intensify its aggressive behavior towards its neighbors. Consequently, the risk of escalation would increase, especially as there is currently almost no dialog between Russia and the West. On the other hand, increasing isolation of Russia and, as a result, its growing dependence on Chinese investment would give Beijing leverage over Moscow to impose better access to the region. This could particularly impact the PRC's future military presence in the Arctic. The considerations on the region's possible medium to longer-term development are based on scenarios developed by a team of researchers from the independent U.S. think tank *Center for New American Security* and published in September 2022. See Andrea Kendall-Taylor et al., *Russia in the Arctic. Gauging How Russia's Invasion of Ukraine Will Alter Regional Dynamics* (Washington: Center for a New American Security, 2022), https://www.cnas.org/publications/reports/russia-in-the-arctic-gauging-how-russias-invasion-of-ukraine-will-alter-regional-dynamics.

28 Matti Puranen and Sanna Kopra, "China's Arctic Strategy – a Comprehensive Approach in Times of Great Power Rivalry," *Scandinavian Journal of Military Studies* 6 (2021): 239–253, https://doi.org/10.31374/sjms.196.

29 People's Republic of China, *China's Arctic Policy* (Beijing: The States Council Information Office of the PRC, 2018), https://english.www.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm; see also David Merkle, "The Self-Proclaimed Near-Arctic State. China's Policy in the Northern Polar Region," in *The Arctic – between Conflict and Cooperation,* Konrad Adenauer Stiftung, International Reports, Issue 1, April 18, 2023, 66–75, https://www.kas.de/documents/259121/23894752/The+Self-Proclaimed+Near-Arctic+State.pdf/63c0b6de-296a-8190-6d96-66773fde5722?version=1.1&t=1682011641527.

30 Puranen and Kopra, "China's Arctic Strategy," 240.

31 Malte Humpert, *The Future of Arctic Shipping: A New Silk Road for China?*: (Washington, DC: The Arctic Institute, 2013), https://www.thearcticinstitute.org/wp-content/uploads/2013/11/The-Future-of-Arctic-Shipping-A-New-Silk-Road-for-China.pdf?x62767.

32 Pezard et al., *China's Strategy*, 18.

33 Rebecca Pincus, "Three-Way Power Dynamics in the Arctic," *Strategic Studies Quarterly* 14, no. 1 (Spring 2020): 40–63, https://www.jstor.org/stable/26891883.

34 The 2018 Chinese Arctic Policy White Paper emphasizes the cooperative elements of the strategy and stresses that the PRC "as a permanent member of the UN Security Council [...] shoulders the important mission of jointly promoting peace and security in the Arctic [...] in accordance with such treaties as the UN Charter and the UNCLOS and general international law." See PRC, *China's Arctic Policy*, 2 and 4.

35 Erdem Lamazhapov, Iselin Stensdal, and Gørild Heggelund, "China's Polar Silk Road: Long Game or Failed Strategy." *The Arctic Institute Center for Circumpolar Security Studies*, November 14, 2023, https://www.thearcticinstitute.org/china-polar-silk-road-long-game-failed-strategy/.

36 Beijing wants to use the political arm to strengthen its influence in international bodies and negotiations and, not least, to create an internationally legitimized basis for China's presence in the region. See Puranen and Kopra, "China's Arctic Strategy," 244–245 and Pincus, "Power Dynamics," 50–53.

37 The economic arm advances trade interests along the "Polar Silk Road" and ensures access to natural resources (e.g., through investments in infrastructure projects in Russia's north). At the same time, however – as with the Belt and Road Initiative in other parts of the world – the PRC seeks to create dependencies to increase its influence in the Arctic. See Puranen and Kopra, "China's Arctic Strategy," 245–246, and Pincus, "Power Dynamics," 43–50.

38 Pezard, "Coldest War," 49.

39 Puranen and Kopra, "China's Arctic Strategy," 246.

40 For example, the PRC maintains a "research station" on the Norwegian Svalbard Island and an observatory for the northern lights in Iceland, which is suspiciously used more for intelligence gathering than scientific research. After the Pentagon repeatedly warned of the dual-use nature of such facilities, Chinese plans to open further "scientific" infrastructures in other western Arctic states have failed. See Matthew P. Funaiole et al., "Frozen Frontiers. China's Great Power Ambitions in the Polar Regions," *Center for Strategic and International Studies (CSIS), Hidden Reach*, April 18, 2023, https://features.csis.org/hiddenreach/china-polar-research-facility/; Pezard, "Coldest War," 49; Boulègue, *Militarization*, 36; Punanen and Kopra, "China's Arctic Strategy," 246–247.

41 Puranen and Kopra, "China's Arctic Strategy," 247.

42 In 2015, the PLA Navy sent a naval mission to the Bering Sea for the first time and, in the same year, a small fleet task force paid "goodwill visits" to several Scandinavian countries. See Rush Doshi, Alexis Dale-Huang, and Gaoqui Zhang, *Northern Expedition. China's Arctic Activities and Ambitions* (Washington, DC: Brookings, 2021), 29, https://www.brookings.edu/wp-content/uploads/2021/04/FP_20210412_china_arctic.pdf; Conley et al., *America's Arctic Moment*, 18.

43 Western experts believe that nuclear-powered submarines, in particular, are central to China's Arctic security strategy, combined with icebreakers, of which the country now has a more extensive fleet than the United States. The PRC commissioned its second (and first domestically built) icebreaker in 2018 and has ambitions for a nuclear-powered variant. See Zandee, Kruijver, and Stoetman, *Future of Arctic Security*, 15; Puranen and Kopra, "China's Arctic Strategy," 247; Doshi, Dale-Huang, and Zhang, *Northern Expedition*, 30.

44 In 2015, the PLA Navy sent a naval mission to the Bering Sea for the first time and, in the same year, a small fleet task force paid "goodwill visits" to several Scandinavian countries. See Rush Doshi, Alexis Dale-Huang, and Gaoqui Zhang, *Northern Expedition. China's Arctic Activities and Ambitions* (Washington, DC: Brookings, 2021), 29, https://www.brookings.edu/wp-content/uploads/2021/04/FP_20210412_china_arctic.pdf; Conley et al., *America's Arctic Moment*, 18.

45 In early August 2023, eleven Chinese and Russian military vessels sailed from the Sea of Japan through the Bering Sea, passing close to the U.S. Aleutian Islands off the coast of Alaska. See Daniel Kochis, "China is Determined to Push its Way into the Arctic," *The Heritage Foundation*, August 11, 2023, https://www.heritage.org/asia/commentary/china-determined-push-its-way-the-arctic.

46 Pincus, "Power Dynamics," 53–55; Zandee, Kruijver, and Stoetman, *Future of Arctic Security*, 14 and 29; Boulègue, *Militarization*, 36–38. Richard Weitz summarizes the complicated Sino-Russian military marriage of convenience as follows: "Though by no means a traditional defense alliance, the Sino-Russian military relationship has become a more balanced (though limited) security partnership between two countries that are neither adver-

saries nor allies, but share certain security concerns, such as avoiding direct military conflicts, managing security along their borders [...], and balancing the United States and its allies." Richard Weitz, *Parsing Chinese-Russian Military Exercises* (Carlisle, PA: US Army War College, Strategic Studies Institute, 2015), 2.

47 Following the Western sanctions imposed on Russia in response to the illegal annexation of Crimea, Moscow sought to increase economic cooperation with the PRC. The 2022 full-scale invasion, however, led to various joint projects being put on hold as China fears secondary sanctions from the West. Puranen and Kopra, "China's Arctic Strategy," 246; Pincus, "Power Dynamics," 50.

48 Kendall-Taylor et al., *Russian in the Arctic*, 5.

49 Michael J. Forsyth, "Why Alaska and the Arctic are Critical to the National Security of the United States," *Military Review* 98, no. 1 (January-February 2018): 113–119, 114.

50 Heather A. Conley, et al., *America's Arctic Moment. Great Power Competition in the Arctic 2050*. A report of the Center for Strategic and International Studies (CSIS) Europe Program, (Lanham, MD: Rowman and Littlefield, 2020), https://www.csis.org/analysis/americas-arctic-moment-great-power-competition-arctic-2050; Michael Paul, "U.S. Arctic Security Policy. North American Arctic Strategies, Russian Hubris and Chinese Ambitions," *SWP Comment*, no. 40 (July 2023): 1–8, https://www.csis.org/analysis/americas-arctic-moment-great-power-competition-arctic-2050.

51 Zysk, *Russia's Military Build-up*, 4. Many experts played down the Russian build-up for a long time, assessing it as legitimate modernization after the post-Soviet decline of the 1990s and emphasizing that it was relatively moderate and defense-oriented overall.

52 Boulègue, *Russia's Military Posture*, 28.

53 Wither, "Arctic Security Dilemma," 653.

54 Pezard, "Coldest War," 49.

55 For example, the U.S. Armed Forces reactivated Keflavik Air Base in Iceland and Pituffik Space Base, formerly known as Thule Air Base, in northern Greenland, stationed the largest F-35 fleet at Joint Base Elmendorf-Richardson in Alaska, re-established the U.S. Navy's Second Fleet focusing on counting Russian naval forces in the North Atlantic, regularly trained Marines in cold weather operations in Norway, and announced the construction of an Arctic port and new icebreakers. See Paul, "U.S. Arctic Security Policy," 6; Pezard, "Coldest War," 48; Klimenko, *Geopolitics*, 11; Zandee, Kruijver, and Stoetman, *Future of Arctic Security*, 30–32.

56 Andreas Østhagen, Trump & Greenland. Is there Logic in the Chaos? The Arctic Insitute, January 8, 2026, https://www.thearcticinstitute.org/trump-greenland-logic-chaos/

57 Abbie Tingstadt et al., *Report on the Arctic Capabilities of the U.S. Armed Forces* (Santa Monica, CA: RAND Corporation, 2023), https://www.rand.org/pubs/research_reports/RRA1638-1.html.

58 Norway called for more involvement after its efforts to find a positive relationship with Russia had failed. It is foreseeable that the High North will gain greater weight within the Alliance with Finland and Sweden's accession. Moreover, including the two militarily strong Scandinavian countries is likely to change the security dynamics in the High North, making a Russian attack against Norway much more difficult. On the other hand, a growing sense of insecurity on the Russian side could increase the risk of miscalculation and escalation. See Kandell-Taylor et al., *America's Arctic Moment*, 2.

59 The new Strategic Concept, adopted at the Madrid Summit on June 22, 2022, mentions the High North at least once – unlike the previous 2010 version – but only in connection with the Russian ability to disrupt allied reinforcement and freedom of navigation across the North Atlantic: "In the High North, [Russia's] capability to disrupt Allied reinforcements and freedom of navigation across the North Atlantic is a strategic challenge to the Alliance. Moscow's military build-up [...] challenge our security and interests." *NATO 2022 Strategic Concept*, adopted by Heads of State and Government at the NATO Summit in Madrid, June 29, 2022 (Brussels: North Atlantic Treaty Organization, 2022), 4, https://www.nato.int/nato_static_fl2014/assets/pdf/2022/6/pdf/290622-strategic-concept.pdf.

60 Under the code name *Trident Juncture* 2018, the alliance carried out the largest exercise since the end of the Cold War in the North Sea and off Norway. In March 2023, more than 10,000 Norwegian and allied troops took part in the biannual exercise *Joint Viking*. The United States has also intensified its exercise activities in the High North. In May 2020, for example, the U.S. Navy patrolled the Barents Sea with several warships together with the British Royal Navy after, a year and a half earlier, showing a presence in the High North for the first time since 1991. Paul and Swistek, *Russia in the Arctic*, 33. For the Scandinavian countries' military build-up, see Pezard, Tingstad, Van Abel, and Stephenson, *Maintaining Arctic Cooperation*, 53–54.

61 Julie Wilhelmsen and Anni Roth Hjermann, two academics who analyzed numerous official statements to extract Russian anti-western narratives, argue that the image of a hostile NATO, which has become progressively entrenched under Putin, spilled over from other regions into the Arctic, an area formerly characterized as a "zone of low tension". Thereby, the official Russian perception is ultimately a conspiracy theory, portraying the North Atlantic Alliance as "a vehicle in an anti-Russian plot in which the United States pulls all the strings." See Wilhelmsen and Roth Hjermann, "Russian Certainty," 118 and 129–132.

62 Yuri A. Raikov, "Russian and the United States in the Arctic: from Competition to Confrontation," *Herald of the Russian Academy of Science*, vol. 92, suppl. 2 (2022): 148–154, https://link.springer.com/article/10.1134/S101933162208010X. Official bodies have expressed similar views. For example, the Russian Ministry of Foreign Affairs assessed recent announcements by NATO to increase its presence as "systemic and provocative, transferring the Arctic into a ground of geopolitical competition." Defense Minister Sergei Shoigu announced in December 2022 that "NATO's desire to build up military potential near the Russian borders" must be answered by creating an "appropriate grouping of troops." See Wilhelmsen and Roth Hjermann, "Russian Certainty," 129 and Thomas Nilsen, "Shoigu Vows More Troops Near Nordic Countries," *The Barents Observer*, December 21, 2022, https://thebarentsobserver.com/en/security/2022/12/shoigu-vows-more-troops-near-nordic-countries.

63 The PRC portrays the increased U.S. and NATO presence in the Arctic similarly to Russian propaganda. For example, the *Global Times*, one of the two English-language daily newspapers in the PRC published under the auspices of the Chinese Communist Party, stated that "Biden's new strategy, citing the increasing strategic competition in the Arctic with China and Russia, actually aims to ensure the US dominance and control in the region, analysts noted, stressing that the pressing task for the international community is to uphold the international system with the UN at its core and establish rules of conduct in the Arctic region, which will be the most powerful tool to deter the US from seeking hegemony there. [...] The US is likely to militarize and privatize the region in future moves with its allies in NATO, pushing the region to a dangerous crossroads." Zhang Hui, "US New Arctic Strategy Seeks to 'Militarize' Region; International Rules Needed for Peaceful Development", *Global Times*, October 8, 2022, https://www.globaltimes.cn/page/202210/1276695.shtml.

64 Wither, "Arctic Security Dilemma," 660.

65 See, for example, Paul and Swistek, *Russia in the Arctic*, 37–39; Marzia Scopelliti and Elena Conde Pérez, "Defining Security in a Changing Arctic: Helping to Prevent an Arctic Security Dilemma," *The Polar Record* 52, no. 6 (November 2016): 675–677, https://doi.org/10.1017/S0032247416000528; Andrea Kendall-Taylor, Jim Townsend, Lawson W. Brigham, and Nick Lokker, "Navigating Relations with Russia in the Arctic. A Roadmap for Stability," *Center for a New American Security, Policy Brief*, November 18, 2021, 4–6, https://www.cnas.org/publications/reports/navigating-relations-with-russia-in-the-arctic.

66 The Arctic Council comprises all eight Arctic states, thirteen observers (including the European Union and China), and representatives of indigenous peoples. See Arctic Council Secretariat, *The Arctic Council: A Quick Guide* (Tromsø: Arctic Council Secretariat, 3rd edition (revised) 2023), 13, https://oaarchive.arctic-council.org/items/5b1cf319-c3d0-427a-b874-78ce0e32bba4.

67 Klimenko, *Geopolitics*, 11–13.

68 See Henri Féron, "A New Ocean: The Legal Challenges of the Arctic Thaw," *Ecology Law Quarterly* 45, no. 1 (2018): 83–128, https://www.jstor.org/stable/26568788.

69 Kendall-Taylor, Townsend, Brigham, and Lokker, "Navigating Relations," 3.

70 Sana Kopra, "The Ukraine War and Arctic Cooperation," *The Arctic Institute, Center for Circumpolar Security Studies, Commentary,* May 16, 2023, https://www.thearcticinstitute.org/ukraine-war-arctic-collaboration-final-remarks/; Emilie Canova and Pauline Pic, "The Arctic Council in Transition: Challenges and Perspectives for the Norwegian Chairship," *The Arctic Institute Center for Circumpolar Security Studies*, June 13, 2023, The Arctic Council in Transition: Challenges and Perspectives for the new Norwegian Chairship | The Arctic Institute – Center for Circumpolar Security Studies; Daniel McVicar, "How the Russia-Ukraine War Challenges Arctic Governance," *Council on Foreign Relations*, Mai 10, 2022, https://www.thearc-

ticinstitute.org/arctic-council-transition-challenges-perspectives-new-norwegian-chairship/.

71 Brett Simpson, "The Rise and Sudden Fall of the Arctic Council," *Foreign Policy*, May 31, 2023, https://foreignpolicy.com/2023/05/31/arctic-council-russia-norway/.

72 Kendell-Taylor, et al., "Navigating Relations," 4.

73 Scopelliti and Conde Pérez, "Defining Security," 672–679, 676.

74 Wither, "Arctic Security Dilemma," 654.

75 Katarzyna Zysk, Professor of International Relations at the Norwegian Institute for Defense Studies, for example, pointed out in a report published in September 2020 that Russia had so far made efforts to keep the level of tensions in the High North relatively low since—soberly considered—cooperation was at least as much in Russia's interests as in those of its neighbors. See Zysk, *Russia's Military Build-up*, 5. Even in the summer of 2021, James Wither was similarly confident, emphasizing that Russia, the United States, and the other western coastal states have always been able to cooperate over matters of common regional interest and conclude several agreements, even after tensions steadily increased following the Russian annexation of the Crimea in 2014. Wither, "Arctic Security Dilemma," 656.

76 Boulègue, *Militarization*, 42.

77 The Treaty on Conventional Forces in Europe (CFE) was intended to limit land and air forces in Europe. It is a classic disarmament treaty rather than a confidence-building agreement. In 2007, Russia withdrew from the treaty as a warning to NATO. See Schmid, *Verified Transparency*, 1.

78 The Treaty on Open Skies, signed by 25 states (including all Arctic states) on March 24, 1992, gives each contracting state the right to carry out a certain number of agreed observation flights each year over the territory of the other participating countries using specially equipped aircraft in order to detect military installations and troop movements. For details on the Open Skies Treaty, see Pál Dunaz et al., *Open Skies: A Cooperative Approach to Military Transparency and Confidence Building* (Geneva: United Nations Institute for Disarmament Research, 2004), https://unidir.org/files/publication/pdfs/open-skies-a-cooperative-approach-to-military-transparency-and-confidence-building-319.pdf. On the withdrawal of the United States and Russia, see Wolfgang Richter, "Attack on the Open Skies Treaty: President Trump Wants to Withdraw from the Open Skies Treaty," *SWP Comment*, no. 29 (June 2020): 1–8, https://www.swp-berlin.org/publications/products/comments/2020C29_OpenSkies.pdf; Vladimir Isachenkov, "Putin Confirms Exit from Open Skies Treaty," *Defense News*, June 7, 2021, https://www.defensenews.com/air/2021/06/07/putin-confirms-russian-exit-from-open-skies-treaty/.

79 More than ten years ago, Hans-Joachim Schmid warned that confidence building in Europe was at a crossroads. Either the existing agreements would be modernized or "they would simply fade away." Given the growing mistrust of Russia in the West and vice versa, the situation has worsened considerably since then. Schmid, *Verified Transparency*, I – II.

80 Gabriela I. Rosa-Hernández, "The Vienna Document," *Arms Control Association, Factsheet and Briefs*, February 2023, https://www.armscontrol.org/factsheets/ViennaDoc99.

81 Organization for Security and Cooperation in Europe (OSCE), *Vienna Document 2011 on Confidence and Security Building Measures*, November 30, 2011, Chapters I and II, 3–11, https://www.osce.org/files/f/documents/a/4/86597.pdf.

82 OSCE, *Vienna Document*, Chapter V, Article 40.3.1, 20. These include activities that involve at least 9,000 troops (including support), 250 main battle tanks, 5,000 armored combat vehicles, or 250 artillery pieces.

83 OSCE, *Vienna Document*, Chapter XI, 32–43.

84 Zdzislaw Lachowski, *Confidence- and Security-Building Measures in the New Europe*, *SIPRI Research Report*, No. 19 (Oxford: University Press, 2004), 67–69, https://www.sipri.org/publications/2004/confidence-and-security-building-measures-new-europe.

85 In the years after the Berlin Wall fell, there were no major military exercises in Russia or the West that could lead to a dangerous escalation. During this period, the Russian armed forces were in a state of decline after the collapse of the Soviet Union, while the Western armed forces underwent massive budget cuts in the aftermath of the peace dividend. Most of the military exercises that still happened, often supplemented by computer simulations, were so small in scale that they did not require any notification. Today, even larger European countries such as France or Germany would need to deploy almost all their heavy equipment to exceed the notification threshold.

86 Gabriella I. Rosa-Hernández and Olga Oliker, *The Art of the Possible: Minimizing Risks as a New European Order Takes Shape* (Philadelphia, PA: Foreign Policy Research Institute, 2022), 22, https://www.fpri.org/article/2022/11/the-art-of-the-possible-minimizing-risks-as-a-new-european-order-takes-shape/.

87 Benjamin Schaller, "Back to the Future? Revisiting Military Confidence-Building in Europe." *Sicherheit und Frieden (S+F) / Security and Peace* 36, no. 3 (2018): 115–120, 115–116, https://www.jstor.org/stable/26630034; Schmid, *Verified Transparency*, 11.

88 OSCE, *Vienna Document*, Chapter IV, Article 4.1.2, 20.

89 Ian Anthony, *Reducing Military Risk in Europe*, SIPRI Policy Paper, no. 51 (Solina: Stockholm International Peace Research Institute, 2019), 17, https://www.sipri.org/sites/default/files/2019-06/sipripp51_military_risk.pdf.

90 Schmid, *Verified Transparency*, 11–15.

91 The shortcomings of the regulations became apparent after the outbreak of the Ukraine conflict in 2014. Finally, in the immediate run-up to the invasion, the Russian deployment around Ukraine, conceived as a series of exercises, could not be cooperatively verified, even though an OSCE Special Monitoring Mission was on the ground and Ukraine had repeatedly requested that Russia disclose its troop movements along the line of contact before the invasion, in accordance with the provisions of the Vienna Document. On the implementation of the Vienna Document prior to the Russian invasion of February 2022, see Fred Tanner, "Arms Control in Times of Crisis," in *Reintroducing Disarmament and Cooperative Security to the Toolbox of 21st Century Leaders*. ed. Dan Plesch, Kevin Miletic, and Tariq Rauf (Stockholm: SIPRI, 2017): 37–42, http://www.jstor.org/stable/resrep24520.10.

92 Gabriela I. Rosa-Hernández, "How Russia's Retreat from the Vienna Document Information Exchange Undermines European Security," *Bulletin of the Atomic Scientists*, March 24, 2023, https://thebulletin.org/2023/03/how-russias-retreat-from-the-vienna-document-information-exchange-undermines-european-security/.

93 Anthony, *Reducing Military Risk*, 21.

94 The USSR/Russia concluded agreements on the prevention of incidents at sea outside territorial waters with the following states: USA 1972, United Kingdom 1986, Germany 1988, France 1989, Italy 1989, Norway 1989, Canada 1989, Spain 1991, Netherlands 1991, and Japan 1994. See Anthony, *Reducing Military Risk*, Annex A, 38–40.

95 Anthony, *Reducing Military Risk*, 10–11 and 23.

96 Western Pacific Naval Symposium, *Code for Unplanned Encounters at Sea* (Quin Dao, 2014), https://www.fpri.org/article/2022/11/the-art-of-the-possible-minimizing-risks-as-a-new-european-order-takes-shape/.

97 Anthony, *Reducing Military Risk*, 24; Liselotte Odgaard and Sune Lund, *Reducing Russia-NATO Tensions: Codes for Unplanned Encounters at Sea* (Washington, DC: Hudson Institute, 2020), 6–12, https://s3.amazonaws.com/media.hudson.org/Liselotte_Codes%20for%20Unplanned%20Encounters%20at%20Sea.pdf.

98 The lack of regulations for paramilitary forces is particularly problematic in the South China Sea since the PRC primarily uses the Coast Guard, the maritime militia, and "civilian" fishing boats for its gray zone activities. Although the East Asian CUES includes submarines in its definition of "naval ship", it is worth mentioning that regulating underwater activities is almost impossible, even if submarine operations have increased recently. The primary goal of such operations is to remain undetected, making prior notification wholly opposed to the stealth and military advantage of submarines to operate covertly and more freely. See Anthony, *Reducing Military Risk*, 29 and Odgaard and Lund, *Reducing Russia-NATO Tensions*, 11.

99 Odgaard and Lund, *Reducing Russia-NATO Tensions*, 7.

100 Viewed soberly, all the countries in the northern polar region are security-seeking states, not expansionist powers, despite their military posture and saber-rattling rhetoric.

101 Schmid, *Verified Transparency*, 28.

102 Andrew H. Kydd, *Trust and Mistrust in International Relations* (Princeton, NJ: Princeton University Press, 2005), 183–187.

103 Wither, "Arctic Security Dilemma," 658.

104 Paal Sigurd Hilde, an associate professor at the Norwegian Defense University College, points out that in a situation of heightened tensions and amplified Russian sensitivity to the safety of its nuclear submarine fleet, NATO allies should be cautious in reviewing their military activities around the Kola Peninsula since a weakened Russia may act more aggressively to

protect these crucial capabilities of its national security. See Hilde, “Auf Eis gelegt”, 5.

105 Proposals for concluding a CUES agreement have been presented multiple times, for example, by Odgaard and Lund, *Reducing Russia-NATO Tensions*, 15–18, and by Anthony, *Reducing Military Risk*, 3. In 2020, a study group of the Newport Artic Scholars Initiative (NASI) at the U.S. Naval War College also made a corresponding proposal. See Walter Berbrick and Lars Saunes, *Conflict Prevention and Security Cooperation in the Arctic Region. Framework for the Future. Report no. 1* (Newport, RI: U.S. Naval War College, 2020), 58, https://www.diva-portal.org/smash/get/diva2:1508235/FULLTEXT01.pdf.

106 Odgaard and Lund, *Reducing Russia-NATO Tensions*, 16.

107 Berbrick and Saunes, *Conflict Prevention*, 16.

108 Anthony, *Reducing Military Risk*, 9.

109 Duncan Depledge, Mathieu Boulègue, Andrew Foxal, and Dmitriy Tulupov, “Why We Need to Talk About Military Activity in the Arctic: Towards an Arctic Military Code of Conduct,” *Arctic Yearbook,* 2019, https://arcticyearbook.com/arctic-yearbook/2019/2019-briefing-notes/328-why-we-need-to-talk-about-military-activity-in-the-arctic-towards-an-arctic-military-code-of-conduct; Boulègue, *Russia’s Military Posture*, 33; Kendall-Taylor, Townsend, Brigham, and Lokker, “Navigating Relations,” 4; Paul and Swistek, *Russia in the Arctic*, 38.

110 Schmid, *Verified Transparency*, 18 and 22–23.

111 Scopelliti and Conde Pérez, “Defining Security,” 676.

112 Anthony, *Reducing Military Risk*, 14; Schaller, “Back to the Future,” 117; Schmid, *Verified Transparency*, 20.

113 Schmid, *Verified Transparency*, 20 and 23.

114 Schaller, “Back to the Future,” 120.

115 Paul and Swistek, *Russia in the Arctic*, 38.

116 Rosa-Hernández and Oliker, *The Art of the Possible*, 32.

117 The advantages and disadvantages of the various forums in which Arctic security issues could theoretically be addressed are discussed in detail by Zandee, Kruijver, and Stoetman, *Future of Arctic Security*, 41–48.

118 *Declaration on the Establishment of the Arctic Council*, Ottawa, September 19, 1996, https://oaarchive.arctic-council.org/server/api/core/bitstreams/bdc15f51-fb91-4e0d-9037-3e8618e7b98f/content.

119 Scopelliti and Conde Peréz, “Defining Security,” 676.

120 Wither, “Arctic Security Dilemma,” 657.

121 Rosa-Hernández and Oliker, *The Art of the Possible*, 32; Anthony, *Reducing Military Risk*, 14.

122 Zandee, Kruijver, and Stoetman, *Future of Arctic Security*, 47.

123 Claudia Crawford, “Die OSZE in Geiselhaft des russischen Angriffskrieges,” *Länderbericht Multinationaler Dialog Wien*, December 1, 2022, https://www.kas.de/documents/252038/16191335/Die+OSZE+in+Geiselhaft+des+russischen+Angriffskrieges.pdf/26fa9a9b-54e8-cf93-2bea-c50a03f0e92b?version=1.0&t=1669977132930.