



U.S.-Germany Collaboration in Arctic and High North Security: A Strategic Partnership within the Trans-Atlantic Alliance

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Abstract

Rooted in NATO's collective defense framework, their partnership strengthens deterrence against Russian militarization and Chinese expansionism through joint military exercises, maritime operations, and infrastructure protection. Economically, they align to secure critical minerals and maintain open sea lanes, essential for transatlantic prosperity. Diplomatically, they advocate for a rules-based order through the Arctic Council and the United Nations Convention on the Law of the Sea (UNCLOS). This analysis underscores that U.S.-Germany cooperation is a linchpin for Arctic stability, blending military prowess, economic strategy, and governance leadership to safeguard a region increasingly vital to global security and sustainability.

This article examines and urges the strengthening of strategic collaboration between the United States and Germany in the High North, exploring how the U.S. and Germany could jointly address military presence, governance, and economic dimensions of Arctic security. It begins by exploring their military contributions, anchored in NATO and bilateral initiatives, which enhance deterrence and operational readiness in the European High North and the broader Arctic region. It then analyzes their governance efforts, which promote a rules-based order through international institutions and bilateral dialogues. Finally, it assesses their economic strategies, from securing critical supply chains to fostering sustainable trade routes. The discussion recommends that this alliance is not merely a tactical necessity but a strategic cornerstone, shaping the Arctic's future and reinforcing transatlantic unity in an era of global uncertainty.



Introduction

The Arctic, long perceived as a remote and inhospitable expanse, has undergone a dramatic transformation in recent decades. Sea ice retreat has unlocked vast economic opportunities, new shipping routes, untapped energy reserves, and critical mineral deposits while simultaneously exposing the region to heightened geopolitical risks. For the United States, an Arctic nation through Alaska, the High North represents both a strategic asset and a vulnerability, necessitating a robust and collaborative approach to its security. Though lacking Arctic territory, Germany has emerged as an indispensable partner in this endeavor, leveraging its status in NATO, a leader in the European Union (EU), and a close U.S. ally to contribute to regional stability.

This partnership has gained urgency in the wake of Russia's 2022 invasion of Ukraine and China's expanding Arctic ambitions, events that have reshaped the security landscape of the Arctic. Germany's policy shift, encapsulated in the 2022 "Zeitenwende" (times-turn or turning point), has broadened its usual scientific and environmental focus in the Arctic to emphasize energy, defense, and security, aligning closely with U.S. objectives. The U.S., meanwhile, views the Arctic as a critical component of its national security (White House, 2025), with the Department of Defense identifying it as a potential theater for great power competition (U.S. Department of Defense, 2021). Together, these nations are fortifying transatlantic resilience through joint patrols with US and Nordic allies in key areas like the GIUK gap, countering emerging threats from Russia's militarized Arctic bases to China's investments in infrastructure and shipping.



The stakes in the Arctic are immense. The U.S. Geological Survey estimates that the region contains 13% of the world's undiscovered oil, 30% of its undiscovered natural gas, and significant reserves of rare earth elements critical for advanced technologies (Gautier et al., 2009). New maritime routes, such as the Trans-Arctic Route (TSR), could reduce shipping times by 50% (Bennett et al, 2020), and the Northern Sea Route (NSR) promises to cut shipping times between Europe and Asia by up to 40%, reshaping global trade dynamics (Humpert, 2014). However, risks shadow these opportunities, and actual savings depend on future ice conditions and navigational feasibility, with potential variations due to operational challenges. Russia understands the value of the Arctic and has bolstered its Arctic presence with advanced missile systems and submarines and reopened Soviet-era bases, threatening NATO's northern and western flanks (Pezard et al., 2020). Hoping to gain a foothold in the Arctic, China has pursued economic projects like the Polar Silk Road, raising concerns about its long-term intentions (Lanteigne, 2014). In this complex environment, U.S.-Germany collaboration offers a multifaceted response, integrating military cooperation, economic alignment, and diplomatic leadership to ensure the Arctic remains a zone of stability rather than conflict.

Germany's role, while distinct from that of Arctic states, is grounded in its strategic position within NATO and the EU. Historically, Berlin's Arctic engagement focused on scientific research, exemplified by initiatives like the MOSAiC expedition, which advanced global understanding of climate dynamics (Alfred Wegener Institute, 2020). However, the *Zeitenwende* has marked a turning point, with Germany's 2023 National Security Strategy



explicitly framing Arctic stability as a NATO priority and pledging enhanced cooperation with Arctic allies (Federal Foreign Office, 2023).

This shift recognizes that developments in the High North, whether Russian naval activity in the Greenland-Iceland-UK (GIUK) gap or Chinese investments in Greenland, directly impact European and transatlantic security. For the U.S., Germany's contributions strengthen the transatlantic alliance, directly supporting America's interests by providing logistical support, maritime capabilities, and diplomatic weight in the Arctic – a region critical to US security, where acting alone isn't enough. Moreover, Germany can leverage its proximity and E.U. influence to shape policy and economic engagement in the European Arctic, such as fostering sustainable development or countering Chinese infrastructure bids, in a way the U.S., as a non-E.U. power geographically distant from the region, cannot.

Military, Governance, and Economic Dimensions of U.S.-Germany Collaboration

The U.S.-Germany partnership in the Arctic operates across three interlocking domains: military cooperation, governance and policy, and economic strategy. Each dimension reflects a shared commitment to countering threats, seizing opportunities, and upholding a stable, rules-based order in the High North.

Strengthening NATO's Northern and Western Flanks

At the heart of U.S.-Germany military collaboration lies their shared commitment to NATO, which has designated the Arctic and North Atlantic as critical theaters for collective defense. The U.S. brings unparalleled Arctic expertise through its Alaskan bases, Coast Guard icebreakers, and Northern Command, while Germany contributes maritime and logistical capabilities that enhance NATO's reach. Russia's militarization of the Arctic,



evidenced by its deployment of S-400 missile systems and nuclear submarines along the Kola Peninsula, has heightened the need for a robust allied presence (Conley et al., 2020). Joint exercises like NATO's 2018 Trident Juncture, conducted in northern Norway with 50,000 troops, showcased this synergy, with German infrastructure facilitating the rapid deployment of U.S. and allied forces (NATO, 2018). Similarly, the 2022 Cold Response exercise saw German naval and air units train alongside 26 NATO nations in Arctic conditions, refining their interoperability in extreme environments (NATO, 2022).

Germany's maritime contributions are particularly significant. The German Navy has shifted focus to the North Atlantic and Arctic-adjacent waters, patrolling key gaps and seams like the GIUK gap alongside U.S. and Nordic allies. Following the 2022 Nord Stream pipeline sabotage, Germany deployed frigates and supply ships to Norwegian waters to protect critical infrastructure, including oil rigs and undersea cables, underscoring its role in NATO's deterrence posture (Arctic Today, 2022). Bilaterally, Germany and Norway are collaborating on a new and improved submarine, the Type U212CD, a stealth vessel designed for Arctic operations, with delivery expected by 2029 (Thales, 2023). In 2024, the German Navy's U-36 submarine participated in Exercise Arctic Dolphin, a multinational anti-submarine warfare drill off Norway, enhancing NATO's ability to counter Russian underwater threats (Navy Leaders, 2025).

The U.S. complements these efforts with its deployments, including P-8 Poseidon maritime patrol aircraft and Virginia-class submarines, which monitor Russian naval movements in the Arctic Ocean (U.S. Department of Defense, 2021). Germany is set to bolster this capability by acquiring P-8 Poseidons, replacing aging P-3C Orions, and



aligning its anti-submarine warfare capacity with U.S. standards (Federal Foreign Office, 2023). On land, Germany's hosting of NATO's Joint Support and Enabling Command in Ulm ensures rapid reinforcement of the High North during crises, a role tested in exercises like Trident Juncture (NATO, 2018). Looking forward, Germany's 2023 National Security Strategy commits to designating Bundeswehr units for Arctic duties and expanding cold-weather training, reflecting a long-term investment in High North security (Federal Foreign Office, 2023).

Upholding a Rules-Based Order

Beyond military power, U.S.-Germany collaboration extends to governance, where both nations advocate for a multilateral framework to manage Arctic challenges. The U.S., as an Arctic Council member, and Germany, an observer since 1998, view the Council as a cornerstone for dialogue and cooperation (Federal Foreign Office, 2019). Germany's 2023 Arctic Policy Guidelines emphasize working "closely with allies and partners to guarantee security and stability," primarily through NATO and the EU (Federal Foreign Office, 2023). Both nations staunchly endorse UNCLOS as the legal bedrock for Arctic governance, advocating its use to resolve territorial disputes and regulate maritime activities, a stance critical amid overlapping claims in the central Arctic Ocean (Federal Foreign Office, 2023).

Germany has shaped a unified Arctic policy within the EU, influencing the 2021 EU Arctic Strategy's focus on sustainability and opposition to unregulated resource extraction (European Commission, 2021). Berlin's advocacy for an Arctic oil and gas drilling ban, aligned with Paris Agreement goals, has sparked debate but underscores its environmental concerns (High North News, 2023). Washington's focus is on energy and national security



interests to strengthen the United States and its alliance (Rosen, 2025; DeVore, 2025). Post-2022, both nations joined the other seven Arctic states in suspending cooperation with Russia in the Council, redirecting efforts toward “like-minded partners” to sustain governance initiatives (Østhagen, 2024).

Germany’s participation in forums like the Arctic Security Forces Roundtable and its observer status at Nordic Chiefs of Defense meetings further deepen its governance role (U.S. European Command, 2023). It promotes confidence-building measures, such as the Arctic Coast Guard Forum and the Polar Code, while voicing concerns about Russia’s military buildup and China’s ambitions through diplomatic channels (Federal Foreign Office, 2023). The U.S., meanwhile, leads efforts to integrate Finland and Sweden into NATO’s Arctic framework, a process Germany supports through logistical and political backing (Federal Foreign Office, 2023). Together, they foster a governance model prioritizing peace, sustainability, and cooperation over confrontation.

Securing Resources and Trade Routes

Economically, the U.S. and Germany align to harness the Arctic’s potential while mitigating its risks. The region’s critical minerals, rare earths, cobalt, and nickel are vital for their high-tech economies, with Greenland and Northern Canada emerging as key sources (Hammond, 2023). The 2022 Minerals Security Partnership (MSP), a U.S.-led coalition including Germany, targets “friend-shoring” these resources with Arctic allies to counter China’s dominance in the rare earth market (Reuters, 2022). Germany’s 2023 Arctic Policy Guidelines highlight this as a priority, with joint U.S.-Germany funding supporting mining ventures in Greenland that adhere to high environmental standards (Pulitzer Center, 2022).



Shipping routes like the NSR offer another economic frontier. For Germany, a trading nation, these lanes could elevate Hamburg as a global hub, while the U.S. seeks to ensure freedom of navigation (Humpert, 2014). Both nations insist these routes remain open and governed by UNCLOS, with Germany pioneering green ice-class vessels to meet strict environmental standards (Federal Foreign Office, 2023). In energy, Germany has shifted to Norwegian Arctic gas following the curtailment of Russian imports. At the same time, the U.S. is exploring an all-energy sources solution, such as oil leasing in Arctic waters off Alaska, prioritizing energy security and economic development (Alaska Beacon, 2025). Naval deployments, including Germany's P-8 Poseidon investments and U.S. Coast Guard patrols, secure these sea lanes, particularly after the 2022 pipeline attacks heightened infrastructure vulnerabilities (Gosnell & Thomas, 2024).

Conclusion

The U.S.-Germany partnership in the Arctic is a testament to the power of transatlantic cooperation in addressing the region's multifaceted challenges. Militarily, their NATO-based collaboration deters aggression, protects infrastructure, and ensures readiness in a contested domain. In governance, their advocacy for a rules-based order through the Arctic Council, UNCLOS, and the EU counters destabilizing influences, promoting stability and sustainability. Economically, their alignment secures critical resources and trade routes, reinforcing transatlantic prosperity amid global competition.

As the Arctic's strategic importance grows, this alliance serves as a vital anchor, transforming a region of risk into one of opportunity. Far from being short-term and expedient, the multi-decadal U.S.-Germany collaboration in the Arctic is a long-term



strategic endeavor, safeguarding the Arctic and supporting global security and resilience.

As the Federal Republic of Germany plans its future investments in defense and security, it should consider the Arctic, a region of growing strategic importance, to further expand and enhance its contributions.

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