UNIVERSITY OF COPENHAGEN
CENTRE FOR MILITARY STUDIES

Hybrid Threats in the North Atlantic

Challenges and recommendations for the Kingdom of Denmark

April 2025

Hybrid threats in the North Atlantic

This policy paper has been prepared with financial support from the 'Foreign Affairs, Security and Defence Policy in the North Atlantic' research program, administered by the Research Council of the Faroe Islands.

The purpose of the paper is to is to explore the evolving international security landscape and its implications for hybrid threats in the North Atlantic, particularly in Greenland and the Faroe Islands. By assessing seven key hybrid threats, the paper provides comprehensive governance guidance for the Kingdom of Denmark, offering recommendations to enhance resilience and address the complex hybrid landscape in the region.

The paper is published by the Centre for Military Studies in cooperation with the University of Greenland and the University of the Faroe Islands. The Centre for Military Studies is a research centre at the Department of Political Science at the University of Copenhagen. The Centre undertakes research on security and defence issues as well as military strategy. This research constitutes the foundation for the policy research services that the Centre provides for the Ministry of Defence and the political parties to the Defence Agreement.

This policy paper contains analyses based on academic research methodology. Its conclusions should not be understood as a reflection of the views and opinions of the Danish Government, the Danish Armed Forces or any other authority

Read more about the Centre and its activities at http://cms.polsci.ku.dk/.

Editor:
Tobias Liebetrau, Researcher, PhD, Centre for Military Studies, University of Copenhagen

Authors:
Alexander Behrndtz, André K. Jakobsson, Jeppe T. Jacobsen, Laura Kocksch, Merete Lindstrøm, Mette S. Abildgaard, Rasmus L. Nielsen and Robert Imre

Citation:
Liebetrau, Tobias, Alexander Behrndtz, André K. Jakobsson, Jeppe T. Jacobsen, Laura Kocksch, Merete Lindstrøm, Mette S. Abildgaard, Rasmus L. Nielsen and Robert Imre (2025). *Hybrid Threats in the North Atlantic: Challenges and recommendations for the Kingdom of Denmark*. Centre for Military Studies. University of Copenhagen.

Acknowledgements:
The authors would like to thank all those involved in the publication of this policy brief, including interviewees, organizers and participants at the conference in Tórshavn in November 2025, and colleagues at various institutions.

ISBN: 978-87-94550-20-8

ILISIMATUSARFIK
University of Greenland

FRÓÐSKAPARSETUR FØROYA
University of the Faroe Islands

UNIVERSITY OF COPENHAGEN

Table of contents

Abbreviations

APMA - Atlantic Private Maintenance Agreement
CCP – Chinese Communist Party
CFCS – Centre for Cyber Security (Denmark)
EEZ – Exclusive Economic Zone
FAO – Food and Agriculture Organization
IAEA – International Atomic Energy Agency
MSC – Marine Stewardship Council

1 Introduction: Hybrid threats in the North Atlantic

Tobias Liebetrau, PhD, Researcher, Centre for Military Studies, Department of Political Science, University of Copenhagen

International security politics is being transformed by intensified great power rivalry, the Russian invasion of Ukraine, the Donald J. Trump U.S. presidency, challenges to the institutional liberal world order, climate change, and the weaponisation of trade, technology, and supply chains. This transformation has repercussions for security in the North Atlantic region, creating an urgent need to understand threats and qualify debates about threat mitigation across the Faroe Islands, Greenland, and Denmark.

This policy paper explores how the changing international security situation gives rise to hybrid threats and associated security and defence governance challenges in the North Atlantic. It foresees that hybrid threats are likely to continue to form a central aspect of security and defence issues in the region in the short-to-midterm future. Greenland and the Faroe Islands are increasingly caught up in regional grey power politics, as exemplified by the terminated collaboration with Russia in the Arctic Council, the controversy around the Faroese fishery agreements with Russia, and the recent over whelming U.S. interest in Greenland. This trend is likely to intensify due to the current upheaval in Western security and defence politics, the ongoing melting of Artic sea ice, and the increasing integration of security and defence policy with other policy areas (e.g., trade, industry, energy and communications).

Written as an anthology, this policy paper examines and assesses seven hybrid threats to the North Atlantic, which are related to cybersecurity, economic security, food security, influence campaigns, telecommunication infrastructure, fisheries, and foreign policy. The paper suggests how these threats can be mitigated through national and regional governance measures performed by actors and sectors across the Faroe Islands, Greenland, and Denmark. It thereby systematises and synthesises the complex hybrid threat landscape in the North Atlantic and offers comprehensive governance guidance for the Kingdom of Denmark.

In so doing, the policy paper considers specific characteristics of both the North Atlantic region and the Kingdom of Denmark. As hybrid threats thrive on the authority, responsibility, and legitimacy gaps between institutions, sectors, and jurisdictions, malign actors can exploit complex distribution of responsibility within the Danish Realm, where Denmark maintains authority over security, defence, and foreign policy, while Greenland and the Faroe Islands exercise autonomy over numerous domestic policy areas.

While each of the contributions offers a particular direction for addressing hybrid threats in the North Atlantic, the policy paper as a whole identifies three overarching recommendations.

Stronger governance structures

What emerges from the analysis is that hybrid threats thrive on authority gaps, responsibility fragmentation, and jurisdictional ambiguities between the constituent parts of the Kingdom of Denmark. The Kingdom should focus on enhancing governance structures to address the loopholes that hybrid threats can exploit. This can be achieved by creating a tri-capital entity aimed at identifying emerging hybrid threats, improving real-time information sharing, and coordinating and harmonising response strategies and communication. To enhance collaboration and develop trust between the parties to the entity, personnel exchanges, joint training programmes, and collaborative exercises that acknowledge the unique security contexts of each constituent part could be considered.

Expansion of security and defence issues

The analysis demonstrates how it is becoming increasingly difficult to separate security and defence issues from other issues areas, such as trade, industry, energy, and communications. The Kingdom of Denmark should focus on the challenges this raises for the distribution of authority and responsibility between Denmark, the Faroe Islands, and Greenland. It should consider proactively identifying potential grey areas and develop framework agreements to resolve issues regarding decision-making processes, responsibilities, and coordination mechanisms.

Embracing trust and transparency

A key insight emerging from the analysis is that, in the North Atlantic context, the traditional security approach of opacity and concealment may be counterproductive. The study demonstrates how the trust and openness that is characteristic of Danish culture can be leveraged as a strength rather than a vulnerability when countering hybrid threats. Rather than attempting to resolve gaps and ambiguities through further centralisation or secrecy, the Kingdom of Denmark's distinctive strength may lie in embracing transparency, community engagement, and open coordination. By openly acknowledging challenges, engaging local communities, and building inclusive governance mechanisms, the Kingdom of Denmark can develop resilience that is both technically effective and socially sustainable.

1.1 Contributions

The analysis section opens with a contribution by Jeppe T. Jacobsen and Alexander Behrndtz, who introduce the main cyber threats against the Kingdom of Denmark. The authors examine the current Danish, Greenlandic, and Faroese strategies for dealing with these threats. They then examine ways to strengthen cybersecurity partnerships between Copenhagen, Nuuk, and Tórshavn. Such partnerships must navigate the fact that cybersecurity occupies a grey zone between the Danish responsibilities for defence, security, and foreign policy, and the Faroese and Greenlandic responsibilities for domestic security, ultimately positioning cybersecurity collaborations within the complex negotiations over sovereignty.

André Ken Jakobsson presents the Chinese strategic use of hybrid instruments of power against small-state actors. He outlines three overarching vectors of opinion warfare, psychological warfare, and legal warfare, and he assesses the challenge from Chinese grey zone statecraft through the concept of strategic integrity of the Danish realm, which covers its ability to make autonomous political decisions without illegitimate interference. Building on this analytical mapping, he ends by exploring mitigating measures in the form of policy advice aimed at strengthening the strategic integrity of all aspects of the Danish realm.

The next contribution, by Mette Simonsen Abildgaard and Laura Kocksch, considers hybrid threats to fibreoptic submarine cables in the North Atlantic, specifically cables to the Faroe Islands and Greenland. Drawing on their examination of the interruption of the SHEFA-2 fibreoptic submarine cable in October 2022, they spell out governance challenges related to fibreoptic submarine cables and suggest that future efforts to encounter hybrid threats in the North Atlantic require the careful balance of technical, social, and ecological considerations.

Robert Imre explores challenges to food security in the North Atlantic. While the Nordic countries – Denmark, Finland, Iceland, Norway, and Sweden – are often lauded for their robust welfare systems and innovative approaches to social issues, including food security, the Faroe Islands and Greenland present unique cases due to their remote locations, harsh climates, and distinctive socio-economic and cultural contexts. Imre's analysis explores the concept of food security in the Nordic region, emphasising the challenges and strategies employed in the Faroe Islands and Greenland.

Rasmus Leander Nielsen investigates the challenges that arise when policy issues simultaneously fall within security and 'home taken' areas.[i] Using the uranium case as a point of departure, he demonstrates how grey areas between competencies and prerogatives between Copenhagen and Nuuk constitute a complex challenge, with tipping points between security and commercial/sector development issues that are difficult to delineate clearly.

In the penultimate study, Robert Imre scrutinises hybrid threats to economic security. He reveals how unique challenges and opportunities arise in the context of the Faroe Islands and Greenland. Although part of the Danish Realm, these territories navigate distinct economic landscapes shaped by geographic isolation, reliance on natural resources, and evolving geopolitical dynamics. His analysis delves into the concept of economic security in the Nordics, with special emphasis on the Faroe Islands and Greenland, highlighting their unique contexts and the strategies employed to bolster resilience and self-sufficiency

Fishing is Greenland's largest industry, accounting for over 90% of all exports. Key products include prawns, Greenland halibut, cod, and snow crab. In the final contribution, Merete Lindstrøm unfolds how Royal Greenland, as one of the major players in this sector, approaches hybrid threats and ensures its operational stability and security. This contribution focuses on how Royal Greenland addresses complex challenges in three critical areas: cybersecurity, supply chain security, and market volatility.

[i] Policy areas taken over by the governments of Greenland and the Faroe Islands.

2 Cybersecurity in the Kingdom of Denmark: Getting the Danish-Greenlandic-Faroese partnership operable

Jeppe T. Jacobsen, PhD, Strategic Advisor and Chief of Information, The National Defence Technology Centre

Alexander Behrndtz, PhD Fellow, University of Southern Denmark and the Royal Danish Defence College

After outlining the key cybersecurity threats against the Kingdom of Denmark, this chapter examines the current Danish, Greenlandic, and Faroese strategies for dealing with them. On this background, it then turns to how the cybersecurity partnership can be nurtured between Copenhagen, Nuuk, and Tórshavn. The partnerships must navigate the fact that cybersecurity lies in a grey zone between Danish defence and foreign policy responsibilities and Faroese and Greenlandic domestic security responsibilities, ultimately positioning cyber security collaborations within the complex negotiations over sovereignty.

2.1 Cyber threats against the Kingdom of Denmark

The Danish Centre for Cybersecurity characterises the threats from cybercrime and cyber espionage as being very high.[1] This means that the Danish intelligence services are aware of capable and willing actors who are currently conducting acts of cybercrime and cyberespionage against the Kingdom of Denmark. In the North Atlantic context, two threat actors are particularly interesting: Russia and China.

In the context of cyberespionage, both states pursue several objectives. Russian and Chinese government entities have strategic interests in understanding Danish, Greenlandic, and Faroese positions ahead of internal negotiations within the Kingdom including the deployment of surveillance and reconnaissance capabilities in the region or the acquisition of 5G networks. Utilising 'cyberspies' to obtain sensitive information about internal disagreements, budget restraints, and product specifications enables Russia and China to better apply political pressure on the various parties. While Russia uses such information mainly in targeted dis- and misinformation campaigns to sow doubt and division among and between constituencies, China is known more for using the information to outcompete other bidders for lucrative contracts or to improve Chinese companies' own products.[2]

Cybercrime is not necessarily linked to state actors but encompasses all economically motivated actors who exploit the interconnected, transboundary nature of cyberspace to steal, deceive, or extort online. The most sophisticated cybercriminals are the Russian criminal networks, which serve the government's hybrid strategy. Cybercrime influences citizen confidence in the government's ability to protect and thereby support Russian ambitions to undermine Western democracies. It is therefore hardly surprising that cybercriminal networks that refrain from targeting Russian cyberspace operate with impunity within Russia.

2.2 Cybersecurity strategies

The Danish, Greenlandic, and Faroese governments are all working strategically to mitigate cyber threats. Since its establishment in 2012, the Danish Centre for Cyber Security (CFCS) has worked to heighten the cybersecurity in the Danish government and critical infrastructures. Despite consolidating its role as a key cybersecurity player, both public and private entities continue to criticise CFCS for being too inaccessible and not providing useful guidance. In the relation to the Kingdom of Denmark, the CFCS has published two cyber-threat assessments for Greenland.[3] The assessments were made possible by the Greenlandic government's 2020 decision to adopt a law for Centre for Cyber Security, which increased CFCS's access to the Greenlandic networks and provided the basis for increased collaboration between CFCS and the Greenlandic Agency for Digitisation. In 2022, both entities further committed to ongoing information sharing and the enhancement of cybersecurity competences in Greenland, while CFCS expressed its interest in expanding the sensor network to include more Greenlandic agencies and companies.[4] At the same time, Greenland is finalising its digitalisation strategy, which places greater emphasis on cybersecurity.

Although the Faroe Islands have no agreement with CFCS like Greenland does, this does not imply that the Faroese Government fails to take cyber-threats seriously. The Faroe Islands published its first national cybersecurity strategy in 2023, which included a three-year implementation plan.[5] The government also amended the law on electronic communication to enhance the electronic communication agency's ability to monitor, collect, process, and share information from other agencies and companies, ultimately enabling the mapping of the Faroese critical digital infrastructure.[6] The Faroe Islands are also seeking inspiration from and collaboration with the United States,[7] as well as collaborating in other joint Nordic initiatives. The Faroes, Greenland, and Denmark have signed a joint memorandum of understanding concerning the Arctic and North Atlantic, expressing their willingness to support one another on cyber defence and cybersecurity issues.[8] Greenlandic and Faroese experts have also joined the Danish delegation at the annual EU cybersecurity exercise.[9]

2.3 Strengthening cybersecurity partnerships in the Kingdom

National cybersecurity remains a complex issue. It cuts across public–private, national–international, and virtual–material divides, and the rapid technological development – and subsequent developments in the threat landscape – render the task of ensuring networks never-ending. When critical societal functions are managed by the private sector or influenced by governments outside one's own legal jurisdiction, alternative forms of governance become necessary. While public–private and public–public partnerships have become

one of the buzzword solutions in cybersecurity, scholarship has repeatedly emphasised the difficulty of getting entities with different political and economic motivations to voluntarily collaborate through partnerships.[10] The following three elements are important to getting cybersecurity partnerships operable.[11]

First, cybersecurity partnerships require a common understanding of the cyber threat and risk landscape. While the attention to the threat has not always been aligned across the Danish Realm, the most recent iterations of the cybersecurity strategies by all three governments indicate a common understanding of the problem: Cybersecurity is a national security issue and requires serious political initiatives to improve the cyber resilience of critical systems. Important, however, is the need to acknowledge the unique differences across the Kingdom of Denmark in terms of access, dependability, and the management of technical solutions and competencies, as such differences in setup require tailormade cybersecurity approaches for each region.

Second, cybersecurity partnerships require resources. The most recent cybersecurity strategies and initiatives in Denmark, Greenland, and the Faroe Islands have all been accompanied by extra funding. The allocation of resources for security, however, has always been contested within the Kingdom. Although Denmark is responsible for the defence and foreign policy of the entire Realm, as cyber threats are notoriously difficult to pin down as either a security or defence issue, political negotiations over who has responsibility and who is paying are likely to be persistent issues.[12] For now, it seems to have settled on each entity being responsible for and funding its own cybersecurity. Nonetheless, CFCS is ready with various degrees of support, and which Greenland and the Faroe Islands have accepted to varying degrees. The CFCS's future role is no longer certain, however, as it is being relocated from the Danish Intelligence to the recently established 'Ministry of Societal Security and Preparedness' (Ministerie for Samfundssikkerhed og Beredskab).[13] The exact wording of the CFCS mandate and its role within the ministry have yet to be fully disclosed, and the effects this will have on the cybersecurity partnerships within the Kingdom of Denmark are therefore hard to say. With these and other changes in the strategic environment together with more serious defence-related cyberattacks, negotiations about responsibility are likely to reemerge recurrently, possibly highlighting fundamental political differences in the future of the Kingdom of Denmark.

The latter is also linked to the third requirement for a strong cybersecurity partnership: mutual trust. Trust must be understood in the context of the colonial history and an interest in self-governance. For centuries, Denmark has sent experts to Greenland and the Faroe Islands to govern (and later support in the governing of) the two states. With growing political interest in Greenland and the Faroe Islands for independence and foreign policy self-determination, any expert from Denmark explaining how to govern is naturally met with scepticism. Thus, it is by no means sufficient to merely stand firm on and refer to the rights granted to one party through official political intentions or legal agreements concerning cybersecurity when attempting to collaborate in practice. Overcoming trust issues is, thus, a slow and complicated act of building personal relations between the individuals working on cybersecurity in Copenhagen, Nuuk, and Tórshavn. Having familial or cultural ties to Greenland or the Faroe Islands, along with drawing on past professional work experience, are valuable but rare starting points. The relocation of CFCS will undoubtedly test the already established relations. Clear communication and

proactive engagement between Denmark, Greenland, and the Faroe Islands will therefore be important to mitigating uncertainty and ensuring the continuity of existing relations and partnerships. Overall, CFCS and the digitisation agencies in Greenland and the Faroe Islands must acknowledge the importance and intricacies of building trust at both the technical and personal levels as the foundation for a successful and transparent cybersecurity partnership across the Kingdom of Denmark.

3 Building strategic integrity against Chinese grey zone attack vectors in the Danish realm

André Ken Jakobsson, PhD, Associate Professor, Head of Studies of Master of Intelligence and Cyber Studies, Center for War Studies, University of Southern Denmark

This section introduces the Chinese strategy for using hybrid power instruments in their relations to small-state actors. This challenge from Chinese grey zone statecraft will be assessed through the concept of the strategic integrity of the Danish realm, which covers the ability to make autonomous political decisions without illegitimate interference. The section will map overarching attack vectors based on the Chinese approach found in the 'Three Warfares' (public opinion, psychological, and legal warfare). Building on this analytical mapping, the brief will explore mitigation measures in the form of policy advice aimed at strengthening strategic integrity of all parts of the realm

3.1 Strategic integrity: Defending against Chinese grey zone attack vectors

Chinese grey zone methods and attack vectors against the Danish Realm present a clear and present danger. While these risks are unevenly distributed across the constituent parts of Denmark, Greenland, and the Faeroe Islands, the ultimate threat consists of the subversion of the strategic integrity of the Realm; that is, the ability within the Realm and in each constituent part to make coordinated political decisions that maximise self-interested security concerns. Fostering polarisation is the foremost tool in the hybrid warfare toolbox to challenge the strategic integrity of the Realm. Recognising that the Chinese grey zone methods are rooted in the political domain is vital, radiating from there into all other overt and covert relationships; be they interpersonal, business, or state. The distribution of responsibilities within the Danish Realm on security and foreign policy is the main vulnerability that can be exploited.

Three grand geopolitical movements situate the relationship between the Danish Realm and China. First, the Chinese Communist Party's (CCP) material and political support of the Russo–Ukrainian War and the intensified Chinese–Russian cooperation on security and economic matters. Relations with the CCP should therefore be viewed as exposure to a threat from a state actor supporting Russian aggression and hybrid attacks against Europe. Second, China's immense military buildup is aimed at turning the country into a 'world class military' to rival and challenge American military power (including NATO) and the Western-led world order. Relations with the CCP should thus be viewed as exposure to a militarily expansionist state actor pursuing power projection and presence in new geographical locations, including within the

Danish Realm. Third, the establishment of asymmetrical power relations based on the Chinese occupation of global network nodes together with control over global supply chains and market access. Relations with the CCP should therefore be viewed as exposure to a state actor with the ability and demonstrated willingness to weaponize interdependencies for their own political objectives.

3.2 Chinese three warfares

Interactions between the Danish Realm and its constituent parts, on the one hand, and Chinese and CCP-related actors, on the other, must be grounded in both the aforementioned geopolitical context and a recognition of the resulting threats to its strategic integrity. This requires a focus on both present and long-term threats arising from accumulated dependencies and leverages, such as critical infrastructure, financing schemes, or business models based on asymmetric risk distribution. Three CCP operating methods provide strategic support structures for Chinese objectives and should inform any resilience initiatives. First, the CCP *whole-of-government* and *whole-of-society* approaches, which co-opt Chinese citizens, organisations, and businesses under national security laws to follow directions from Chinese intelligence services and through embassies. Second, the CCP strategy of *military–civil fusion*, which co-opts innovation processes, cross-country research and development relations, joint business ventures, and other types of (especially) technology-focused advances to pursue military uses and buildup. *Military–civil fusion* exploits China's outsized industrial base and its ability to gather cutting-edge insights in a mosaic fashion (which only allows China to synergise them), which would also extend to questions of mining or establishing research installations. The two methods converge under the third: the *Three Warfares* of the People's Liberation Army. It serves as China's foremost military strategy for subverting the enemy by all means available to the state to achieve victory, preferably without having to fight. The *Three Warfares* blurs the lines between peace and wartime – applying across them – which frustrates the traditional Western conceptions of clear distinctions between war and peace. Table 1 displays the logics and objectives.

Table 1:
The CPP's three warfares

The CCP's Three Warfares				
Public opinion (media) warfare				
Propaganda on various media to undermine the opponent's willingness to fight	Exploit opponents' weaknesses and demoralise them by demonstrating great strength	Achieve and retain the right of initiative by actively guiding public attitudes	Fight the opponent's attempts to engage in public debate	Establish consensus and willpower between military and civilian views on own side
Psychological warfare				
Utilise, reinforce, and create the opponent's internal factions to undermine decision-making and organisations	Seek and achieve transformation, using psychology to manipulate emotions	Utilise psychological forces of war from armed forces, reserves, and society to strike first and exploit unforeseen opportunities	Integrate psychological attacks and armed attacks	Perform offensive and defensive psychological operations simultaneously, but prioritise the offensive
Legal warfare				
Delegitimise the opponent using the law	Take advantage of national, international, and laws of war to gain legal superiority	Establish legal support and justification to ensure (military) operational success	Adopt legal standards and use them flexibly to protect national interests	Establish limitations for the opponent by having the right of initiative in legal warfare
Based on Elsa Kania: 'The PLA's Latest Strategic Thinking on the Three Warfares'. *China Brief* Vol. 16, No. 13 (2016).				

3.3 Vulnerabilities and resilience of the Danish realm

Awareness of Chinese grey zone methods must inform resilience-building efforts, as other actors can also exploit the logics, objectives, and vulnerabilities. It should be recognised that the 'High North, Low Tension' mindset has left attack vectors open by not incentivising actionable handling of internal tensions within the Realm.

Three resilience-building initiatives should be prioritised. Firstly, all constituent parts of the Realm should develop and implement broad-ranged, investment-screening mechanisms as the primary policy tool for resisting threats to strategic integrity. A broadened scope allows for high politics and delicate cases to be subsumed under the administrative processes of such a mechanism, which deters subversive methods. Second, all constituent parts of the Realm should implement safeguards against illegitimate outside election interference and political donations. Third, these resilience-building initiatives must rely on high quality information and intelligence. Increased local intelligence efforts are therefore necessary in Greenland and the Faeroe Islands, together with increased cooperation with the Danish intelligence services. These are fundamental building blocks for enabling the Realm and each of its constituent parts to make coordinated political decisions that maximise self-interested security concerns.

4 SHEFA-2 and the case of subsea data cables

Mette Simonsen Abildgaard, Associate Professor, TANTlab, Aalborg University

Laura Kocksch, Assistant Professor, TANTlab, Aalborg University

On 20 October 2022, shortly after damage to the SHEFA-2[ii] fibreoptic submarine cable, reports of landline, internet, and mobile service disruptions reached authorities in the Faroe, Shetland, and Orkney Islands. Occurring just a few weeks after the Nord Stream gas pipeline sabotage, news reports quickly speculated that the damage was intentional.[14] The outage contributed to a disturbing pattern of increased cable damage in 2022, but the reason why the SHEFA-2 rupture especially drew investigator and media attention was that the cable had been damaged in two different spots, leading analysts to speculate that it may have been a 'dry run by Russia to test a larger attack against undersea cables'.[15]

News of a wave of mysterious hybrid attacks made the rounds.[16] The SHEFA-2 rupture was quickly included in such reporting, although proof of sabotage was lacking. In a statement to *The Record* on 27 October 2022, Managing Director Páll Højgaard Vesturbú from NET, a subsidiary of Faroese Telecom, declared that the organisation has 'reason to believe that the cable [SHEFA-2] was damaged by a fishing vessel'. A Faroese investigation since determined the cut to be accidental.[17] The media outcry, perceived increased threat to infrastructures, as well as the relatively calm and coordinated response by authorities, highlight three key lessons about hybrid threats to North Atlantic digital infrastructures.

4.1 Lesson about hybrid threats to North Atlantic digital infrastructures

Firstly, when a cable is cut, it immediately impacts the communities depending on it. For SHEFA-2, some services were temporarily restored on the same day. However, the *Cable Vigilance* repair ship[18] was already in the process of fixing the same cable west of Shetland, so the repair was queued and first performed when the ship became available. Widespread loss of internet and phone services occurred across Shetland and the Faroes – for some, no internet for at least three days – which frustrated private users and impacted the productivity of local businesses.

Secondly, cable cuts and other recurring forms of damage to infrastructure systems in the North Atlantic raise questions about the emerging European threat landscape, playing not only into national debates about redundancy and maintenance but also increased hyper-alertness and alarmism in

[ii] SHEtland–FAroes.

relation to critical digital infrastructures. For SHEFA-2, Faroese Telecom actively addressed the British press to counter panic and speculation. While media were quick to judge the SHEFA-2 damage as a case of sabotage, the government authorities and local communities reacted in a coordinated and calm manner. Local communities responded with solidarity and support, seeing outages as common (rather than extraordinary) events.

Thirdly, communication and data-sharing practices between actors in telecommunication and government agencies increased following the SHEFA-2 incident, making it easier to trace and identify the vessels causing damage to cables. 'Dark vessels' – fishing vessels that have disabled their open tracking systems – cannot be monitored and therefore cannot be contacted if they approach cable paths. This enhanced collaboration can be regarded as a significant improvement in the ability of telecommunication actors to investigate and prevent cable cuts. A pressing dilemma became apparent in the aftermath: While concealing the location of fibreoptic submarine cables can result in accidental cable cuts, sharing that information offers opportunities for deliberate sabotage. The current strategy in both Greenland and the Faroes is to focus on what can be prevented: Damage from shipping vessels, which along with ocean currents are the sole reason for ruptures in North Atlantic subsea cables. Both countries therefore follow a policy of openness with cable locations. In the case of SHEFA-2, the Faroese Telecom website shares the exact location of the cable (https://www.shefa.fo/notices-to-fishing-vessels/); similarly, Tusass, a Greenlandic postal and telecommunications company, provides publicly accessible information packages about the sea cables and tools for integrating the exact routes of Greenland Connect and Greenland Connect 2 into navigational systems used by the fishing industry.

4.2 Governance challenges

Small countries like the Faroe Islands and Greenland have limited local resources and rely on international collaboration. Moreover, digital infrastructures, such as submarine cables, are built and maintained by large-scale actors. For small countries and territories with limited leverage to develop infrastructure tailored to their needs, submarine cables are rarely bespoke, leaving them reliant on incidental benefits.[19] Telecommunication actors depend on collaborations with organisations such as the Atlantic Private Maintenance Agreement (APMA), whose cable repair ships service and repair ruptures at sea, while the Faroe Islands and Greenland typically manage cable cuts closer to shore.

While the opacity and complexity of the subsea data cable industry are not unique to the North Atlantic, they may have disproportionate effects in this region, as cables are comparatively old. Complying with international security standards adds pressure, especially when pursuing business opportunities such as attracting data centres. Furthermore, building redundant infrastructures is not feasible due to various factors, including limited financial resources, restricted access to expertise and networks, and geographic and environmental considerations. New technological advances in low-orbit satellites offer promising paths to redundancy or even alternatives to terrestrial infrastructures, although this comes with the risk of destabilising current national models.[20] Moreover, Arctic landscapes are experiencing unprecedented climatic changes (e.g., permafrost deterioration). Digital infrastructure, such as subsea cables, must account for both the geological and social consequences of these changes. The warming of the Atlantic Ocean has put both the local

fishing industry and local fauna in a precarious position. Fishing industries may move closer to cables as other other areas become less profitable, while changing seabeds and animal populations could present additional challenges. Lastly, public awareness of infrastructure security may conflict with concerns about sustainability.

Open communication must be considered a strength, not a weakness, in the North Atlantic states. The Faroe Islands and Greenland are moving towards collectivising security efforts and fostering a sense of community responsibility. This strategy should be further supported, as trust in governments and institutions is vital to North Atlantic communities. Corporate entities, in turn, must be responsive to the requests of civic communities and contribute to the culture of trust. Mistrust and concealment, common in security considerations elsewhere, may be the wrong approach in the North Atlantic.

4.3 Recommendations

We suggest that future efforts to counter hybrid threats in the North Atlantic require a careful balance of technical, social, and ecological considerations

Narratives of hyperalert situations and opaque treats may be detrimental to the North Atlantic cultures of trust and shared responsibility. Critical infrastructures and their security must be understood in the context of local social orders. Security in this area is not about concealment but about sharing information with citizens. International corporations must be included in such community engagement. In a worst-case scenario, mistrust and scepticism risk jeopardising the protection of critical infrastructures.

New technological opportunities can create redundancy, but ownership structures must remain transparent. The changing threat landscape does offer some technological solutions. The introduction of low-orbit satellite technology could provide Arctic communities with a fallback option, scalable without the need for additional infrastructural investment. However, such solutions must be open to public scrutiny and include accessible information on ownership.

New technologies must integrate into existing practices and trust networks. Small communities may possess informal communication strategies that can be valuable assets. From interlocutors in cable protection committees, we know that strong trans-local networks and coordination among small communities are essential, in addition to the top-down dissemination of regulations and best practices.

Defence against hybrid threats must include an **understanding of specific regional geological conditions and ocean currents, as well as the effects of changing climatic conditions (e.g., development of permafrost).** Maintenance and repair are currently mostly in the hands of corporations responsible for servicing peripheral digital infrastructures. Local competencies, supplies, and equipment need to be further developed and supported. Discreet dilemmas related to building redundancy while respecting environmental change must be considered and brought to the public's attention.

5 Food security in Nordic countries: A focus on the Faroe Islands and Greenland

Robert Imre, Associate Professor, Faculty of History and Social Sciences, University of Faroe Islands

The Nordic countries, comprising Denmark, Finland, Iceland, Norway, and Sweden, are often lauded for their robust welfare systems and innovative approaches to social issues, including food security. However, within this region, the Faroe Islands and Greenland present unique cases due to their remote locations, harsh climates, and distinctive socio-economic and cultural contexts. This analysis explores the concept of food security in the Nordic region, emphasising the challenges and strategies employed in the Faroe Islands and Greenland.[21]

5.1 Food security in the Nordic context

As defined by the Food and Agriculture Organization (FAO), food security involves ensuring that all people have access to sufficient, safe, and nutritious food to meet their dietary needs for an active and healthy life. The Nordic countries generally perform well in global food security rankings, owing to their advanced agricultural practices, strong economies, and progressive policies. Nevertheless, challenges persist, particularly in remote areas such as the Faroe Islands and Greenland, where traditional food systems and modern demands intersect in complex ways.

The Nordic approach to food security is built on four pillars: availability, access, utilisation, and stability. Governments emphasise sustainable agriculture, fisheries management, and innovative food technologies. However, these efforts are not uniformly applicable across the region, as geographical and cultural differences necessitate tailored strategies.

5.2 The Faroe Islands: A Case of resilience and adaptation

The Faroe Islands, an autonomous territory of Denmark, is an archipelago in the North Atlantic with a population of around 54,000. Its rugged terrain and unpredictable weather pose significant challenges for agriculture, limiting crop cultivation and increasing reliance on imported foods. Despite these constraints, the Faroese have developed a food system that is deeply rooted in fishing, aquaculture, and traditional practices.

Fishing comprises the backbone of the Faroese economy and a critical component of food security. The islands possess an exclusive economic zone (EEZ) of approximately 274,000 square kilometres, teeming with valuable fish stocks such as cod, haddock, and mackerel. Sustainable fisheries management is central to ensuring long-term food security, with quotas and international agreements playing a vital role in maintaining stock levels.

Aquaculture, particularly salmon farming, has emerged as a key industry in recent decades. The Faroese aquaculture sector is renowned for its stringent environmental standards and commitment to sustainability, which have made Faroese salmon a sought-after product globally. These industries not only provide food but also contribute significantly to the economy, enhancing the population's ability to access other nutritional resources. However, the Faroes faces limitations in terms of the growing industrial production of fish, the subsequent export economy, and the dominance of industries not designed with domestic food security in mind. While sustainable fisheries may provide income, reliance on food imports remains a challenge. Food sovereignty in terms of greenhouse development, local gardens, seed exchanges, and similar initiatives, has proven successful in other parts of the Nordics and should be further developed in the Faroe Islands.

Traditional Faroese food culture revolves around preserving methods, such as drying, fermenting, and smoking, which allow food to be stored for extended periods. Dishes like *skerpikjøt* (air-dried lamb) and *ræstkjøt* (fermented lamb) are integral to Faroese identity and demonstrate the community's resilience in adapting to a harsh environment. The local exchange of traditional foodstuffs can provide a foundation for food sovereignty, inclusive of a more diverse array of vegetables and fruits through hydroponic, vertical farming, and greenhouse systems. The shift towards globalisation and urbanisation has introduced challenges, including growing dependence on imported foods and dietary changes that sometimes conflict with traditional eating habits. Balancing modern dietary needs with cultural heritage remains a continuing concern for policymakers and communities.

5.3 Greenland: Navigating extreme conditions and food sovereignty

Greenland, the world's largest island and another autonomous territory within the Kingdom of Demark, faces even greater food-security challenges. With a population of about 56,000 spread across a vast and icy landscape, Greenland's food system is constrained by its extreme Arctic climate, remoteness, and limited agricultural potential.

For centuries, Greenland's indigenous Inuit population has relied on subsistence hunting and fishing as the cornerstone of their food system. Seals, whales, fish, and caribou form the basis of the traditional diet, providing essential nutrients in an environment where agricultural produce is scarce. This reliance on local resources aligns with food-sovereignty principles emphasising a community's right to define their own food systems. Climate change is disrupting traditional practices, however, as warming temperatures affect sea ice, fish stocks, and animal migration patterns. These changes threaten the stability of Greenland's food supply, necessitating adaptive strategies to ensure food security.

Greenland imports a significant portion of its food, particularly processed and fresh produce, from Denmark. While these imports provide dietary diversity, they also increase the territory's vulnerability to global market fluctuations and logistical challenges. The high cost of imported food combined with low average incomes creates disparities in food access, particularly in remote settlements. Efforts to improve food security in Greenland often involve strengthening the local food systems. Initiatives to support small-scale agriculture (e.g., greenhouse farming, hydroponics) are gaining traction, of-

fering potential solutions to increase local production. However, these approaches face logistical and financial hurdles, requiring substantial investment and community buy-in.

Greenland's food security challenges are not solely about availability; they also involve nutrition and cultural significance. Imported foods often lack the nutritional density of traditional diets, leading to health concerns such as obesity and diabetes. Balancing the introduction of healthier imported options with the preservation of traditional foodways is critical for both physical and cultural well-being.

5.4 Policy and international collaboration

Both the Faroe Islands and Greenland benefit from their association with Denmark and the broader Nordic region, which provide financial support and policy frameworks for addressing food security. Initiatives such as the Nordic Food Policy Lab and the Arctic Council's Sustainable Development Working Group promote knowledge sharing and collaboration on sustainable food practices.

Denmark's role is particularly significant in Greenland, where subsidies and development projects aim to enhance infrastructure and food access. In the Faroe Islands, the government has focused on supporting sustainable fisheries and aquaculture, ensuring that these industries continue to thrive amid global competition. This is successful in terms of business enterprises but remains insufficient in terms of developing food sovereignty.

International agreements, such as the UN Sustainable Development Goals, also influence food security strategies. The Faroe Islands and Greenland contribute to and benefit from global efforts to promote sustainable fisheries and combat climate change, recognising the interconnected nature of these challenges.

Recommendations: The Future of food security in the Faroe Islands and Greenland

The Faroe Islands and Greenland exemplify the complexities of food security in remote and extreme environments. Their experiences highlight the importance of resilience, adaptability, and innovation in overcoming geographical and climatic challenges. By drawing on their rich cultural heritage and leveraging modern technologies, these territories can continue to build food systems that support their populations and contribute to the broader goals of the Nordic region. Achieving sustainable food security in these unique contexts will not only benefit the local communities but also provide valuable insights for other regions facing similar challenges. Local communities can develop higher levels of food sovereignty through local but state-funded garden and greenhouse production. Looking ahead, achieving sustainable food security in the Faroe Islands and Greenland will require a multifaceted approach. Key priorities include:

- Strengthening local food systems: It is essential to expand local agriculture, enhance fisheries management, and support traditional practices to reduce dependence on imports and to ensure long-term sustainability. This must include emphasis on greenhouse and vertical farming experimentation supported by local government initiatives to create a much stronger level of food sovereignty and lower reliance on imports.

- Adapting to climate change: Both territories must continue to develop adaptive strategies to address the impacts of climate change on food systems. This includes investing in research and technology to monitor and respond to environmental changes.
- Promoting health and nutrition: Policymakers must prioritise initiatives encouraging healthy eating habits while respecting cultural traditions. Educational campaigns, subsidies for nutritious foods, and support for local producers can contribute to better outcomes.
- Fostering collaboration: Regional and international cooperation will remain vital in addressing shared challenges. Platforms for knowledge exchange and joint projects can amplify the impact of local efforts.

6

Grey zones in Greenlandic foreign policy: How they relate to hybrid threats

Rasmus Leander Nielsen, Associate Professor & Head of Nasiffik – Centre for Foreign & Security Policy, Institute of Social Science, Economics & Journalism, Ilisimatusarfik (University of Greenland)

Greenlandic foreign policy has evolved over several decades, especially regarding fisheries exports, through engagement in international and Arctic fora, and with respect to enhanced cooperation with great powers such as the US, China, and the EU. Formally, de jure, the Danish constitution stipulates that foreign, security, and defence policy is a Danish prerogative. In practice, de facto, Greenlandic foreign policy has a multifaceted focus and is still evolving over time and space, particularly in comparison to other semi-autonomous and paradiplomatic actors.[22] In recent years, security and defence policy has gained increased attention in Greenland, as explicitly reflected in the title of a strategy on international and Arctic affairs published in spring 2024: Greenland in the World: Nothing about Us without Us. Greenland's Foreign, Security and Defense Policy 2024–2033 – an Arctic Strategy.[23]

As regards 'home-taken' policies (e.g., fisheries, mining, and telecommunications), Greenland has the authority to negotiate international agreements. However, policies sometimes enter a grey zone of competencies where the distinction between Greenlandic and Danish jurisdiction becomes blurred, particularly when security policy considerations are involved. In relation to hybrid threats, this piece will argue that the double hazard of these alternating threats combined with foreign policy grey zones, using the uranium case as a point of departure, elucidate a possible conundrum when trying to mitigate, circumvent, and prepare for solutions to possible future hybrid threats, as these solutions can be slow and complicated. The uranium-case exemplifies how it was (partially) solved a decade ago, but only after heated debates somewhere in-between constitutional, practical, and normative arguments.

The 'grey zone warfare' and 'hybrid threats' concepts are somewhat interlinked and sometimes used interchangeably. They encompass issues such as election meddling, economic coercion, and the ambiguous use of unconventional force, depending on the definition applied. In this brief, however, the notion of the grey zone is applied differently, referring to the dynamic nature of when and how an issue becomes a security concern.

In sum, the persistent and potentially escalating challenge of hybrid threats in the North Atlantic and the Arctic region, as examined from various perspectives in this anthology, is further explored through the concept of hybrid sovereignty. This approach highlights the grey zone conundrums of competencies between Nuuk and Copenhagen (i.e., home-taken areas vs. security issues).[24] Next, using the uranium case as a point of departure, this analysis

demonstrates how grey zones in competencies and prerogatives between Copenhagen and Nuuk present a complex challenge, with tipping points between security concerns and commercial or sectoral developments that are difficult to delineate clearly.

6.1 Uranium as an example of a grey zone

An illustrative example par excellence of the aforementioned grey zones within the Kingdom of Denmark is the potential mining project at Kuannersuit (Kvanefjeld in Danish) in Southern Greenland. The mine is situated near Narsaq, a small town with a population of 1,300, located in Kujalleq Municipality. The abundance of uranium in the area has been known since the Second World War, particularly since the 1950s. Protests against the mine date back to the 1970s, initially targeting Danish politicians, including Prime Minister Anker Jørgensen. In the 2010s, opposition to the project led to the largest protests in Greenlandic history, and it has remained a prominent issue in several election campaigns, notably in the 2021 election.

In accordance with the Self-Government Act of 2009, Greenland 'took home' control over its mineral resources and enacted its first Mineral Resources Act in 2010. In 2013, an informal 'zero-tolerance' moratorium on uranium extraction, which had been in place for approximately 25 years, was lifted but subsequently reinstated in 2021.[25] For some stakeholders, the mine is a pivotal factor in the Greenlandic pursuit of greater economic independence and political autonomy; for others, it remains the most controversial mining project (by far) due to the potential environmental risks to the nearby local community and beyond.

The mine was on the verge of being greenlit in the early 2020s but was halted following the 2021 election, in which Inuit Ataqatigiit (IA) secured victory with an *Urani Naamik* (anti-uranium) campaign. This resulted in an indefinite suspension of the project and the reinstatement of the 'zero-tolerance' policy. Arbitration proceedings are currently ongoing, with the Australian company Energy Transition Minerals filing a substantial lawsuit.[26] A future election could potentially alter the current deadlock once again.

Domestically, the issue has divided both the population and political parties. Between 2016 and 2018, the governing coalition formally acknowledged the deadlock by establishing a 'truce' in which members agreed to disagree within the coalition agreement. A frequently invoked phrase at various levels of analysis is the iterative commitment to 'agree to disagree', effectively deferring difficult decisions indefinitely. Moreover, the case has implications across multiple levels, ranging from local sheep farmers to China's Arctic ambitions. Geopolitically, it remains contentious due to Chinese involvement, as Shenghe (盛和) has held approximately 10% of Greenland Mineral's shares (now Energy Transition Minerals) since 2016.

6.2 Mitigation and broader implications

Having briefly introduced the case, we now turn to the grey zone issue, which became particularly evident in 2013, when Premier Aleqa Hammond of Greenland and Prime Minister Helle Thorning-Schmidt of Denmark proper – both from Social Democratic parties – after extensive deliberations 'fiercely agreed to disagree'. Greenland maintained that since the minerals sector had been 'taken home' following the Self-Government Act, decisions regarding its governance were exclusively a Greenlandic matter. Conversely, Denmark argued that due to uranium's dual-use nature (i.e., having both civilian and

military applications), it constituted a security issue and therefore fell under Danish jurisdiction, as stipulated in Article 19 of the constitution. Dual-use items encompass goods, software, and technologies that can serve both civilian and military purposes. Preventing the export of uranium to hostile states with nuclear ambitions was also a critical concern. The arguments forwarded by both Greenland and Denmark appeared simultaneously valid, highlighting the complexities of navigating cases that straddle high and low politics within a hybrid sovereignty framework such as that of Greenland and the Kingdom of Denmark.

To a large extent, the uranium ordeal was partially resolved through a formal agreement between Greenland and Denmark in 2016. This agreement outlined compliance with international law, including regulations set by the International Atomic Energy Agency (IAEA). However, the mining project was indefinitely paused – arguably just before its anticipated launch – due to domestic Greenlandic politics and the outcome of the 2021 election. Consequently, the legal agreement designed to mitigate the issue has never been tested in practice. On the one hand, this demonstrates how the dispute was addressed in this particular case; on the other, it highlights the prolonged period required to reach a consensus between Denmark and Greenland.

What does this imply for hybrid threats more broadly? The uranium case primarily serves to illustrate the complexities of grey zone issues, which are likely to become more frequent and intricate due to evolving geopolitical dynamics in the Arctic and North Atlantic.

A few years ago in the Faroe Islands, telecommunications became a contested issue when the Chinese technology giant Huawei was initially contracted for the Faroese 5G rollout. While this did not pose a problem in Greenland, future technological developments and solutions could give rise to similar dilemmas, particularly in relation to seemingly routine infrastructure projects aimed at improving internet connectivity. Consequently, issues that appear uncontroversial at first glance can quickly become highly complex due to geopolitical considerations and intricate alliance dynamics in the Arctic and beyond.

Hence, the exacerbation of hybrid threat dynamics, particularly when considered alongside hybrid sovereignty within the Kingdom of Denmark, is an area that future research and diplomats across all three capitals within the Realm should examine more closely. A deeper understanding of these complex challenges is necessary to navigate the intricate interplay between hybrid threats, legal frameworks, and practical governance matters. While forecasting potential future issues remains difficult, they are likely to emerge across various sectors, requiring careful navigation of the often-ambiguous tipping points between security, mining, critical infrastructure, and commercial interests throughout the Danish Realm.

7 Economic security in the Nordics: A Focus on the Faroe Islands and Greenland

Robert Imre, Associate Professor, Faculty of History and Social Sciences, University of Faroe Islands

Economic security is a cornerstone of national stability, fostering resilient societies and sustainable development. Renowned for their robust welfare systems, economic security in the Nordic countries manifests in comprehensive social protections, advanced infrastructure, and innovative economies. However, within this broader regional narrative, unique challenges and opportunities arise in semi-autonomous territories like the Faroe Islands and Greenland. These territories, although part of the Danish Realm, navigate distinct economic landscapes shaped by geographic isolation, reliance on natural resources, and evolving geopolitical dynamics. This analysis delves into the concept of economic security in the Nordics, with special emphasis on the Faroe Islands and Greenland, highlighting their unique contexts and the strategies employed to bolster resilience and self-sufficiency.[27]

7.1 Economic security in the Nordic model

The Nordic model emphasises social equality, public welfare, and market efficiency, offering a blueprint for economic security. This approach integrates progressive taxation, comprehensive social safety nets, and investments in education and healthcare. The result is a high standard of living and low levels of poverty and inequality.

Key elements of economic security in the Nordic region include:Safety nets: Universal healthcare, unemployment benefits, and pension systems ensure that basic needs are met during economic downturns.
Diversified economies: Advanced sectors such as technology, green energy, and education reduce reliance on singular industries.
Sustainability: Investments in renewable energy and environmental stewardship promote long-term economic stability.

However, applying these principles in the Faroe Islands and Greenland involves adapting to their specific challenges and leveraging their unique strengths.

7.2 Economic security in the Faroe Islands

The Faroe Islands, an autonomous territory within the Kingdom of Denmark, have cultivated a strong economy despite geographic constraints. With a population of approximately 54,000, the islands depend heavily on the fishing industry, which contributes around 90% of their exports. This reliance on a single sector presents vulnerabilities that impact economic security. Three key challenges are:

1. Resource dependency: Over-reliance on fisheries makes the Faroese economy susceptible to fluctuations in fish stocks, global demand, and international trade regulations. 2. Geographic isolation: The remote location increases transport costs and limits access to larger markets, which poses challenges for economic diversification. 3. Climate change: Rising sea temperatures and shifting ecosystems threaten fish stock sustainability, undermining the islands' primary economic pillar.

To address these challenges, the Faroes have implemented measures to bolster economic resilience, including: 1. Diversification initiatives: While fisheries remain dominant, the Faroese government is exploring renewable energy projects and the expansion of tourism to reduce reliance on fishing. 2. Investment in education: Emphasis on higher education and research has facilitated the development of specialised knowledge in marine biology and sustainable fishing practices. 3. Geopolitical engagement: Active participation in international trade negotiations helps secure favourable terms for fish and seafood exports. 4. Infrastructure development: Investments in digital connectivity and transportation infrastructure have improved access to global markets and supported nascent industries, such as software development.

7.3 Economic security in Greenland

Greenland, another autonomous territory under Denmark, faces unique economic challenges due to its vast geography, small population (around 56,000), and reliance on a narrow resource base. The Greenlandic economy depends primarily on fisheries, mining, and public sector funding, the latter largely provided by Denmark through an annual block grant. Key challenges to Greenland's economic security include:

1. Resource constraints: The Greenlandic economy relies on shrimp and halibut fishing, as well as potential untapped resources like rare earth minerals. However, extraction and export are constrained by limited infrastructure and harsh environmental conditions.

2. Climate vulnerability: Accelerating ice melt, while opening new shipping routes and exposing mineral resources, disrupts traditional industries and local communities.

3. Demographic pressures: A small, dispersed population complicates the development of a robust labour market and skilled workforce.

4. Dependency on Denmark: Economic reliance on the Danish block grant limits Greenland's fiscal autonomy and exposes the territory to external policy decisions.

Greenland has adopted multiple approaches to enhance its economic resilience and reduce dependency:

1. Mining and resource development: The exploration of rare earth minerals and other natural resources offers the potential for significant economic growth. However, such initiatives must carefully balance the economic benefits with environmental and cultural considerations, ensuring that development does not undermine the region's long-term sustainability and social values.

2. Climate adaptation: Efforts to mitigate climate risks include investments in sustainable infrastructure, research on fisheries management, and community support for traditional livelihoods. These initiatives aim to enhance resilience to environmental changes while safeguarding the region's social and economic fabric.

3. Tourism Expansion: Promoting ecotourism and adventure travel showcases Greenland's unique environment and culture, thereby diversifying sources of revenue.

4. Increased Autonomy: Political discussions regarding greater economic independence from Denmark emphasise the need for strategic planning and resource management to sustain self-sufficiency.

7.4 Comparing the Faroe Islands and Greenland

The Faroe Islands and Greenland share numerous commonalities, including (almost identical) small populations, dependence on fisheries, and geographic isolation. However, they also face distinct challenges:

1. Economic structures: The Faroe Islands have developed a relatively diversified economy compared to Greenland, which remains more dependent on public funding.

2. Geopolitical engagement: The Faroe Islands have established a stronger presence in international trade networks, whereas Greenland's economic future hinges more on resource extraction.

3. Climate impact: The Greenlandic economy is more directly influenced by melting ice and the subsequent environmental transformations, whereas the Faroe Islands face more localised ecological challenges.

Both territories exemplify resilience through their proactive approaches to economic security, leveraging their unique strengths to navigate global challenges. As a unifying force within the Kingdom of Denmark, the Danish government provides critical support to both the Faroe Islands and Greenland. This includes financial aid, defence, and access to broader markets through the European Economic Area. Denmark's involvement underscores a balancing act between fostering autonomy and ensuring economic stability within these territories.

7.5 Contributions to economic security

1. Financial transfers: The Danish block grant to Greenland and support for Faroese infrastructure provide fiscal stability.

2. Trade agreements: Danish diplomacy facilitates market access for goods and services from these territories. Some significant leeway remains in both territories in the capacity to sign trade agreements not limited to Denmark and subsequent EU regulations.

3. Research and innovation: Collaboration with Danish institutions enhances local capabilities in fields such as renewable energy and fisheries management.

7.6 Future prospects

Tensions arise over autonomy aspirations, particularly in Greenland, where calls for independence clash with economic realities. While the Faroe Islands are less focused on independence, balancing cultural identity with integration into the global economy remains a priority.

Economic security in the Nordic region, exemplified by the Faroe Islands and Greenland, demonstrates the interplay between resilience, adaptation, and innovation. While these territories face challenges rooted in resource dependency, geographic isolation, and climate change, they also possess opportunities for growth through diversification, sustainable development, and international cooperation. As part of the Danish Realm, their experiences offer

valuable insights into managing economic security in a dynamic and interconnected world. Through strategic planning and continued investment in resilience, the Faroe Islands and Greenland can navigate their unique paths towards sustainable prosperity.

The future of economic security in the Faroe Islands and Greenland hinges on adaptive strategies that address emerging challenges while capitalising on unique opportunities. Key areas of focus include: 1. Sustainability: Emphasising renewable energy, sustainable fisheries, and responsible mining ensures long-term economic viability. 2. Geopolitical positioning: Leveraging strategic locations in the North Atlantic for trade and cooperation strengthens economic ties. 3. Youth empowerment: Investing in education and workforce development equips the next generation to drive economic innovation. 4. Autonomy and collaboration: Balancing self-governance with beneficial partnerships fosters both independence and stability.

8 Navigating industry challenges: Royal Greenland's approach to hybrid threats

Merete Lindstrøm, Communication Manager, Royal Greenland

Fishing is Greenland's largest industry, accounting for over 90% of the country's exports. Key products include prawns, Greenland halibut, cod, and snow crab. As one of the major players in this sector, Royal Greenland faces numerous challenges and opportunities, from hybrid threats to ensuring the stability and security of operations. This brief explores how Royal Greenland addresses complex challenges in three critical areas: cybersecurity, supply chain security, and market volatility.

8.1 Cybersecurity at Royal Greenland

Cybersecurity has become a critical element in Royal Greenland's operational strategy. As digital threats have grown more sophisticated, the company has made it a priority to protect its digital infrastructure. A significant cyberattack in December 2021 highlighted the vulnerabilities of modern businesses, as Royal Greenland experienced severe disruptions, including payment issues and system access problems. Employees had to rely on alternative methods, including paper and pen, to maintain operations.

The impact of the cyberattack extended to the entire IT-infrastructure, office and mail systems, production systems, and payroll systems, where only partial payments could be made to employees. The attack was particularly challenging when the payroll system was compromised, meaning that only partial advance payments could be made to staff. We managed to set up a stand-alone IT-infrastructure, introduced extensive manual procedures and alternative communication channels in a global group, and in so doing – thanks to the extraordinary efforts and pragmatic approach of Royal Greenland's dedicated employees and external experts – these challenges were quickly addressed, ensuring that our operations could continue during the disruption. We did not miss a single delivery of any sales orders, despite it being December, our peak season. This incident underscored the importance of preparedness and a comprehensive cybersecurity strategy.

Since then, Royal Greenland has reinforced its security infrastructure by implementing stricter access controls, advanced firewalls, and monitoring systems. Regular security drills ensure effective responses to future threats, while ongoing employee training has improved awareness of potential risks. The company has also partnered with cybersecurity experts to continuously enhance its defences.

The lessons learned from the 2021 cyberattack have provided Royal Greenland with a deeper understanding of what it requires to protect a global business from digital threats.

8.2 Navigating market volatility

Volatile markets significantly impact Royal Greenland's operations, especially in terms of price fluctuations for fish and seafood. External factors drive these fluctuations, such as geopolitical tensions, trade policy changes, economic developments on key markets, unbalanced sales prices and raw material prices and general cost increases due to inflation and energy prices. One recent example is the ongoing Russo–Ukrainian War, which has resulted in a U.S. ban on Russian fish imports, leading to a surplus in the European markets where Royal Greenland operates.

Russia is a major supplier of MSC-certified cod from the Barents Sea, while Royal Greenland's cod remains uncertified due to Greenland's higher-than-recommended fishing quotas. This shift in supply has pressured prices immensely, contributing to a 35% drop in cod prices in 2023. Increased competition from Russian products has also made seafood prices more unpredictable, making it difficult for Royal Greenland to predict market developments and plan future activities.

Additionally, economic crises and stagnation have impacted consumer behaviour, particularly for luxury seafood products, depressing demand in Royal Greenland's main markets. Inflationary pressures have also increased operational costs, including those for raw materials and transport, driven by rising oil prices. To maintain profitability, Royal Greenland has had to adjust its pricing strategies accordingly. These factors collectively add to the complexity of navigating a volatile global market.

Beyond these immediate effects, regulatory changes driven by geopolitical tensions can influence trade agreements, fishing quotas, and access to fishing rights, further complicating market stability. This creates uncertainty for Royal Greenland, as access to key markets and resources may shift unexpectedly.

8.3 Ensuring supply chain security

In an era of increasing uncertainty and unpredictable market conditions, supply chain security has become a critical concern for Royal Greenland. The company recognises the upcoming challenges, particularly with climate change and geopolitical instability. Global supply chains are expected to remain under constant pressure over the next five to ten years, as extreme weather events caused by climate change affect both fishing operations in the North Atlantic and the stability of supply chains from remote locations like Greenland. Geopolitical tensions may further disrupt global supply chains, which will make it more challenging to ensure consistent product delivery.

Royal Greenland has increased its focus on securing stable supply chains. This involves closer collaboration with suppliers and a more strategic approach to raw material procurement. The company is working actively to diversify its supplier network to reduce the risks associated with dependence on single sources. By investing in sustainable and innovative solutions, Royal Greenland aims to mitigate the impact of climate change, ensuring that the company can maintain high-quality and stable supplies while contributing to a more sustainable future.

Flexible and agile supply chain management are key to navigating this new normal. By closely monitoring market trends and adapting strategies, Royal Greenland aims to remain a reliable supplier of high-quality fish and seafood, regardless of global uncertainties.

Conclusion

In an increasingly complex and volatile global market, Royal Greenland has demonstrated resilience and adaptability. By investing in cybersecurity, optimising supply chains, and responding swiftly to market fluctuations, the company has positioned itself as a forward-thinking leader in the seafood industry. Looking ahead, Royal Greenland will continue to innovate and strengthen its operations to ensure long-term success.

9 Conclusion: Strengthening collaboration to counter hybrid threats

Tobias Liebetrau, PhD, Researcher, Centre for Military Studies, Department of Political Science, University of Copenhagen

The North Atlantic region faces a complex hybrid threat landscape shaped by great power competition, climate change, technological vulnerabilities, and the weaponisation of economic dependencies. As this policy paper has demonstrated, these threats manifest in relation to multiple issues, spanning from cybersecurity and communications infrastructure to food and economic security, as well as foreign influence operations. With respect to the unique constitutional arrangement of the Kingdom of Denmark – distributing competencies between Copenhagen, Nuuk, and Tórshavn – hybrid threats are particularly vexing, creating an urgent need to understand and mitigate these threats across the Faroe Islands, Greenland, and Denmark.

The contributions revealed how the distribution of authority and responsibility within the Danish Realm, where Denmark maintains authority over defence and foreign policy while Greenland and the Faroe Islands exercise autonomy over numerous domestic affairs, creates grey zones that malign actors can exploit. This is exemplified by the uranium case in Greenland, where the determination of whether an issue falls under security (Danish prerogative) or commercial development (Greenlandic responsibility) became contentious. Similarly, areas such as communications infrastructure and cybersecurity are caught between security and defence policy on one hand and commercial and industrial policy on the other.

The rising geopolitical interest in the North Atlantic from major powers like China, Russia, and the United States further complicates this situation. The paper demonstrated that the Chinese approach of opinion warfare, psychological warfare, and legal warfare presents complex challenges to the strategic integrity of the Kingdom. Submarine cable vulnerabilities, cybersecurity threats, food security challenges, and economic dependencies all represent potential vectors for hybrid interference. The SHEFA-2 subsea cable incident, while ultimately determined to be accidental, highlighted both the vulnerability of critical infrastructure and the risk of hyper-alertness and alarmism, which can itself be exploited.

For the Kingdom of Denmark to effectively counter hybrid threats in the North Atlantic, a coordinated approach that respects the autonomy of its constituent parts while ensuring collective security is essential. This requires institutional flexibility, enhanced cooperation, and strategic communication to strengthen the ties between Copenhagen, Nuuk, and Tórshavn. Three overarching recommendations derived from the studies can help achieve this.

Strengthening governance structures. What emerges from the analysis is that hybrid threats thrive on authority gaps, responsibility fragmentation, and jurisdictional ambiguities between the constituent parts of the Kingdom of Denmark. The Kingdom should focus on enhancing governance structures to address the loopholes that hybrid threats can exploit. This could be achieved by creating a tri-capital entity aimed at identifying emerging hybrid threats, improving real-time information sharing, and coordinating and harmonising response strategies and communication. To enhance collaboration and build trust between its constituent parts, personnel exchanges, joint training programmes, and collaborative exercises that acknowledge the unique security contexts of each region could be considered.

Attending to the expansion of security and defence issues. The analysis demonstrates how it is becoming increasingly difficult to separate security and defence issues from other areas (e.g., trade, industry, energy, communications). The Kingdom of Denmark should focus on how these developments challenge the distribution of authority and responsibility between Denmark, the Faroe Islands, and Greenland. It should proactively identify potential grey zone areas and develop framework agreements to resolve issues related to decision-making processes, responsibilities, and coordination mechanisms.

Embracing trust and transparency. A key insight from the analysis is that the traditional security approach of opacity and concealment may be counterproductive in the North Atlantic context. The study demonstrates how the Kingdom of Denmark's culture of trust and openness can be leveraged as a strength rather than a vulnerability in countering hybrid threats. Rather than attempting to resolve gaps and ambiguities through further centralisation or secrecy, the Kingdom of Denmark's distinctive strength may lie in embracing transparency, community engagement, and open coordination. By openly acknowledging challenges, engaging local communities, and building inclusive governance mechanisms, the Kingdom of Denmark can develop resilience that is both technically effective and socially sustainable.

Notes

1 Centre for Cyber Security (CFCS). 'Cybertruslen mod Danmark'. 20 september 2024. Available at https://www.cfcs.dk/da/cybertruslen/trusselsvurderinger/cybertruslen-mod-danmark/

2 Jeppe T. Jacobsen and Tobias Liebetrau, 'Indledning: Introduktion til Cybertrusler'. In Cybertrusler: Det digital samfunds skyggeside. Copenhagen: DJØF Publishing, 2022.

3 Centre for Cyber Security CFCS. 'CFCS vurderer cybertruslne mod Grønland'. 2023. Available at: https://www.cfcs.dk/da/nyheder/2023/cfcs-vurderer-cybertruslen-mod-gronland; Centre for Cyber Security CFCS. 'Trusselsvurdering: Cybertruslen mod Grønland'. 2024. Available at: https://www.cfcs.dk/da/cybertruslen/trusselsvurderinger/trusselsvurdering-cybertruslen-mod-gronland/

4 Centre for Cyber Security (CFCS). 'Center for Cybersikkerhed og Grønlands digitaliseringsstyrelse indgår samarbejdsaftale om cybersikkerhed'. 24 October 2022. Available at: https://www.cfcs.dk/da/nyheder/2022/center-for-cybersikkerhed-og-gronlands-digitaliseringsstyrelse-indgar-samarbejdsaftale-om-cybersikkerhed/

5 Jón Brian Hvidtfeldt and Brandar Heðinsson. 'National Cybersecurity Strategy Introduced'. Kringvarp Føroya—KVF. 16 September 2023. Available at: https://kvf.fo/node/162838

6 Lógasavnid. 'um broyting í løgtingslóg um fjarskifti'. 'Løgtingslóg nr. 42. 16 May 2024. Available at: https://logir.fo/Logtingslog/42-fra-16-05-2024-um-broyting-i-logtingslog-um-fjarskifti-Fjarskiftislogin

7 Høgni Djurhuus. 'Beinleiðis samskifti um trygd millum USA og Føroyar'. Kringvarp Føroya—KVF. 16 August 2024. Available at: https://kvf.fo/greinar/2024/08/16/beinleidis-samskifti-um-trygd-millum-usa-og-foroyar

8 Danish Ministry of Defence. 'Færøerne, Grønland og Danmark er enige om et fælles grundlag for forhold vedr. Arktis og Nordatlanten i forsvarsforliget'. 28 June 2023. Available at: https://www.fmn.dk/da/nyheder/2023/faroerne-gronland-og-danmark-er-enige-om-et-falles-grundlag-for-forhold-vedr.-arktis-og-nordatlanten-i-forsvarsforliget/

9 Centre for Cyber Security (CFCS). 'Tværeuropæisk øvelse testede energisektorens beredskab'. 1 July 2024. Available at: https://www.cfcs.dk/da/nyheder/2024/tvareuropaisk-ovelse-testede-energisektorens-beredskab/

10 Madeleine Carr. 'Public–Private Partnerships in National Cyber-Security Strategies'. International Affairs, vol. 92, no. 1 (2016), pp. 43–62.

11 Jeppe T. Jacobsen. 'Analyse: Private virksomheder er medansvarlige for Danmarks sikkerhed – på godt og ondt'. Royal Defence College. 2 March 2023. Available at: https://www.fak.dk/da/nyheder/2023/analyse-private-virksomheder-er-medansvarlige-for-danmarks-sikkerhed--pa-godt-og-ondt/

12 Jon Rahbek-Clemmensen. 'Denmark and Greenland's Changing Sovereignty and Security Challenges in the Arctic', in Routledge Handbook of Arctic Security. 2020. London: Routledge.

13 Centre for Cyber Security (CFCS). 'Center for Cybersikkerhed overføres til Ministerium for Samfundssikkerhed og Beredskab'. 30 August 2024. Available at: https://www.cfcs.dk/da/nyheder/2024/center-for-cybersikkerhed-overfores/

14 Daily Mail Online. 'Underwater Phone and Internet Links to the Shetlands "Were Severed by Fishing Boat Dragging Its Anchor".' 21 October 2022. https://www.dailymail.co.uk/news/article-11338705/Underwater-phone-internet-links-Shetlands-severed-fishing-boat-dragging-anchor.html and https://www.bbc.com/news/uk-scotland-north-east-orkney-shetland-63326102?xtor=AL-72-%5Bpartner%5D-%5Byahoo.north.america%5D-%5Blink%5D-%5Bnews%5D-%5Bbizdev%5D-%5Bisapi%5D

15 Daily Mail Online. 'Underwater Phone and Internet'.

16 James Billot. 'Hybrid Attacks on the Rise across Europe'. Unherd. 26 October 2022. Available at https://unherd.com/newsroom/hybrid-attacks-on-the-rise-across-europe/

17 Alexander Martin. 'Fishing Vessel Likely Cause of SHEFA-2 Fault'. Submarine Telecoms Forum. October 27, 2022. Available at https://subtelforum.com/fishing-vessel-likely-cause-of-shefa-2-fault/

18 Hans J. Marter. 'Community / Shetland Fully Connected Once Again'. Shetland News. 31 October 2022. https://www.shetnews.co.uk/2022/10/31/shetland-fully-connected-once-again/

19 Rafael Ruiz. Arctic Infrastructures: Tele Field Notes. communication +1. 3(1), Article 3. 2014.

20 Signe Ravn-Højgaard and Mette Simonsen Abildgaard. (2023). Det grønlandske samfundsrobusthed hvis søkablerne knækker. DIIS Policy Brief. https://www.diis.dk/publikationer/groenlandske-samfunds-robusthed-soekablerne-knaekker

21 This analysis draws from the following texts. Nordregio. Food Self-Sufficiency in Five Nordic Island Societies. Policy Brief 2022:4. Available at: https://pub.nordregio.org/pb-2022-4-food-self-sufficiency-in-five-nordic-island-societies/project-findings.html; Doaa Abdel-Motaal. 'A Changing Narrative on Arctic Food Security: Part 1'. Polar Journal. 17 February 2024. Available at: https://polarjournal.net/a-changing-narrative-on-arctic-food-security-part-1; Arctic Economic Council. The State of Arctic Food: Report on the Importance of Arctic Food Systems for Local Communities and Global Needs. 2023. https://arcticeconomiccouncil.com/wp-content/uploads/2023/09/aec-arctic-food-report-2023.pdf; Nordic Council of Ministers. Towards Sustainable Food Systems: The Nordic Approach. 24 June 2021. https://www.norden.org/en/declaration/towards-sustainable-food-systems-nordic-approach

22 Nielsen, Rasmus Leander (2021). "Global Greenlanders: Evolutionen af en grønlandsk udenrigspolitik i et foranderligt Arktis" in Aage Rydstrøm-Poulsen, Gitte Adler Reimer & Annemette Nyborg Lauritsen (eds.) "Tro og samfund i 300-året for Hans Egedes ankomst til Grønland", Aarhus: Aarhus Universitetsforlag, pp. 315-330

23 The strategy is available in Greenlandic, Danish, and English at: https://naalakkersuisut.gl/Publikationer?types=&subjects=&page=2&dates=&sc_lang=kl-GL.

24 For further discussion of the KoD and grey zone problem, see Olesen, Mikkel Runge, Flemming Splidsboel Hansen, Luke Patey, Steen Kjærgaard, Camilla Sørensen, Rasmus Leander Nielsen, Marc Jacobsen & Cecilie Banke (2020). Nye sikkerhedspolitiske dynamikker i Arktis: Muligheder og udfordringer for Kongeriget Danmark. København: DIIS. Hybrid sovereignty is discussed in more detail in a forthcoming anthology by DIIS and Ilisimatusarfik, see https://www.diis.dk/projekter/organizing-foreign-security-and-defense-policy-hybrid-sovereignty-hybsov

25 See e.g. https://knr.gl/da/nyheder/i-dag-bliver-det-afgjort-nultolerance-mod-uran-eller-ej. For a thorough historical introduction to the uranium-case, see e.g. Nielsen, Henry & Henrik Knudsen (2016). Uranbjerget. Vandkunsten.

26 Alomar, Rafael Cox & Ulrik Pram Gad (2024). Wooing foreign investors: Greenland should prepare for the next dispute. Copenhagen: Danish Institute for International Studies (DIIS). DIIS Policy Brief

27 This analysis draws from the following texts. Ministry of Foreign Affairs of Denmark. 'Greenland and The Faroe Islands'. Available at https://um.dk/en/foreign-policy/the-arctic/greenland-and-the-faroe-islands; Astri Edvardsen. 'The EU Enters into New Era of Cooperation with the Faroe Islands and Greenland.' High North News, 20 March 2024. Available at https://www.highnorthnews.com/en/eu-enters-new-era-cooperation-faroe-islands-and-greenland; International Trade Administration (US). 'Denmark Country Commercial Guide: Other Areas in the Kingdom of Denmark'. 19

January 2024. Available at: https://www.trade.gov/country-commercial-guides/denmark-other-areas-kingdom-denmark; Torben M. Andersen. 'Fiscal Relations in the Realm of Denmark'. Academia Puertorriqueña de Jurisprudencia y Legislación. Available at https://www.academiajurisprudenciapr.org/fiscal-relations-in-the-realm-of-denmark-the-case-of-the-faroe-islands-and-greenland/

Bibliography

Abdel-Motaal, Doaa. 'A Changing Narrative on Arctic Food Security: Part 1'. *Polar Journal*. 17 February 2024. Available at: https://polarjournal.net/a-changing-narrative-on-arctic-food-security-part-1/

Andersen, Torben M. 'Fiscal Relations in the Realm of Denmark'. Academia Puertorriqueña de Jurisprudencia y Legislación. Available at https://www.academiajurisprudenciapr.org/fiscal-relations-in-the-realm-of-denmark-the-case-of-the-faroe-islands-and-greenland/

Arctic Economic Council. *The State of Arctic Food: Report on the Importance of Arctic Food Systems for Local Communities and Global Needs*. 2023. https://arcticeconomiccouncil.com/wp-content/uploads/2023/09/aec-arctic-food-report-2023.pdf

Billot, James. 'Hybrid Attacks on the Rise across Europe'. *Unherd*. 26 October 2022. Available at https://unherd.com/newsroom/hybrid-attacks-on-the-rise-across-europe/

Carr, Madeleine. 'Public–Private Partnerships in National Cyber-Security Strategies'. *International Affairs*, vol. 92, no. 1 (2016), pp. 43–62.

Centre for Cyber Security (CFCS). 'Center for Cybersikkerhed og Grønlands digitaliseringsstyrelse indgår samarbejdsaftale om cybersikkerhed'. 24 October 2022. Available at: https://www.cfcs.dk/da/nyheder/2022/center-for-cybersikkerhed-og-gronlands-digitaliseringsstyrelse-indgar-samarbejdsaftale-om-cybersikkerhed/

Centre for Cyber Security (CFCS). 'Center for Cybersikkerhed overføres til Ministerium for Samfundssikkerhed og Beredskab'. 30 August 2024. Available at: https://www.cfcs.dk/da/nyheder/2024/center-for-cybersikkerhed-overfores/

Centre for Cyber Security (CFCS). 'Cybertruslen mod Danmark'. 20 september 2024. Available at https://www.cfcs.dk/da/cybertruslen/trusselsvurderinger/cybertruslen-mod-danmark/

Centre for Cyber Security (CFCS). 'Tværeuropæisk øvelse testede energisektorens beredskab'. 1 July 2024. Available at: https://www.cfcs.dk/da/nyheder/2024/tvareuropaisk-ovelse-testede-energisektorens-beredskab/

Centre for Cyber Security CFCS. 'CFCS vurderer cybertruslne mod Grønland'. 2023. Available at: https://www.cfcs.dk/da/nyheder/2023/cfcs-vurderer-cybertruslen-mod-gronland.

Centre for Cyber Security CFCS. 'Trusselsvurdering: Cybertruslen mod Grønland'. 2024. Available at: https://www.cfcs.dk/da/cybertruslen/trusselsvurderinger/trusselsvurdering-cybertruslen-mod-gronland/

Daily Mail Online. 'Underwater Phone and Internet Links to the Shetlands "Were Severed by Fishing Boat Dragging Its Anchor".' 21 October 2022.

https://www.dailymail.co.uk/news/article-11338705/Underwater-phone-internet-links-Shetlands-severed-fishing-boat-dragging-anchor.html and https://www.bbc.com/news/uk-scotland-north-east-orkney-shetland-63326102?xtor=AL-72-%5Bpartner%5D-%5Byahoo.north.america%5D-%5Blink%5D-%5Bnews%5D-%5Bbizdev%5D-%5Bisapi%5D

Danish Ministry of Defence. 'Færøerne, Grønland og Danmark er enige om et fælles grundlag for forhold vedr. Arktis og Nordatlanten i forsvarsforliget'. 28 June 2023. Available at: https://www.fmn.dk/da/nyheder/2023/faroerne-gronland-og-danmark-er-enige-om-et-falles-grundlag-for-forhold-vedr.-arktis-og-nordatlanten-i-forsvarsforliget/

Djurhuus, Høgni. 'Beinleiðis samskifti um trygd millum USA og Føroyar'. *Kringvarp Føroya—KVF*. 16 August 2024. Available at: https://kvf.fo/greinar/2024/08/16/beinleidis-samskifti-um-trygd-millum-usa-og-foroyar

Edvardsen, Astri. 'The EU Enters into New Era of Cooperation with the Faroe Islands and Greenland.' *High North News*, 20 March 2024. Available at https://www.highnorthnews.com/en/eu-enters-new-era-cooperation-faroe-islands-and-greenland

Hvidtfeldt, Jón Brian, and Brandar Heðinsson. 'National Cybersecurity Strategy Introduced'. *Kringvarp Føroya—KVF*. 16 September 2023. Available at: https://kvf.fo/node/162838

International Trade Administration (US). 'Denmark Country Commercial Guide: Other Areas in the Kingdom of Denmark'. 19 January 2024. Available at https://www.trade.gov/country-commercial-guides/denmark-other-areas-kingdom-denmark

Jacobsen, Jeppe T. 'Analyse: Private virksomheder er medansvarlige for Danmarks sikkerhed – på godt og ondt'. Royal Defence College. 2 March 2023. Available at: https://www.fak.dk/da/nyheder/2023/analyse-private-virksomheder-er-medansvarlige-for-danmarks-sikkerhed--pa-godt-og-ondt/

Jacobsen, Jeppe T., and Tobias Liebetrau, 'Indledning: Introduktion til Cybertrusler'. In *Cybertrusler: Det digital samfunds skyggeside.* Copenhagen: DJØF Publishing, 2022.

Kania, Elsa. 'The PLA's Latest Strategic Thinking on the Three Warfares'. *China Brief* Vol. 16, No. 13 (2016). Available at: https://jamestown.org/program/the-plas-latest-strategic-thinking-on-the-three-warfares/

Kjærgaard Christensen, Kristoffer, and Karen Lund Petersen. 'Public–Private Partnerships on Cyber Security: A Practice of Loyalty'. *International Affairs*, vol. 93, no. 6 (2017), pp. 1435–1452.

Lógasavnid. 'um broyting í løgtingslóg um fjarskifti'. 'Løgtingslóg nr. 42. 16 May 2024. Available at: https://logir.fo/Logtingslog/42-fra-16-05-2024-um-broyting-i-logtingslog-um-fjarskifti-Fjarskiftislogin

Marter, Hans J. 'Community / Shetland Fully Connected Once Again'. *Shetland News*. 31 October 2022. https://www.shetnews.co.uk/2022/10/31/shetland-fully-connected-once-again/

Martin, Alexander. 'Fishing Vessel Likely Cause of SHEFA-2 Fault'. *Submarine Telecoms Forum*. 27 October 2022. Available at https://subtelforum.com/fishing-vessel-likely-cause-of-shefa-2-fault/

Ministry of Foreign Affairs of Denmark. 'Greenland and The Faroe Islands'. Available at https://um.dk/en/foreign-policy/the-arctic/greenland-and-the-faroe-islands

Nordic Council of Ministers. *Towards Sustainable Food Systems: The Nordic Approach. 24 June 2021.* https://www.norden.org/en/declaration/towards-sustainable-food-systems-nordic-approach

Nordregio. *Food Self-Sufficiency in Five Nordic Island Societies*. Policy Brief 2022:4. Available at: https://pub.nordregio.org/pb-2022-4-food-self-sufficiency-in-five-nordic-island-societies/project-findings.html

Rahbek-Clemmensen, Jon. 'Denmark and Greenland's Changing Sovereignty and Security Challenges in the Arctic', in *Routledge Handbook of Arctic Security*. 2020. London: Routledge.

Ravn-Højgaard, Signe, and Mette Simonsen Abildgaard. (2023). Det grønlandske samfunds robusthed... hvis søkablerne knækker. DIIS Policy Brief. https://www.diis.dk/publikationer/groenlandske-samfunds-robusthed-soekablerne-knaekker

Ruiz, Rafael (2014). "Arctic Infrastructures: Tele Field Notes." *communication* +1 3(1),