

EUROPE

# Enhancing deterrence and defence on NATO's northern flank

Allied perspectives on strategic options for Norway

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Published by the RAND Corporation, Santa Monica, Calif., and Cambridge, UK

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## Preface

This study examines strategic options for enhancing deterrence and defence on the northern flank of the North Atlantic Treaty Organisation (NATO). To inform ongoing strategy and policy development, the Norwegian Ministry of Defence (MOD) commissioned RAND to examine selected Allied perspectives on strategic opportunities and challenges in the North Atlantic region and High North. This involved a multidisciplinary and multinational team, involving RAND Europe and its US-based parent organisation, the RAND Corporation. RAND is a not-for-profit research institute whose mission is to help improve policy and decision making through objective research and analysis.

This report presents findings from a targeted document review, supported by expert workshops in Oslo and a series of field visits to defence establishments in Denmark, France, Germany, the UK and the US, along with NATO institutions on both sides of the Atlantic. It provides insight into areas of convergence and divergence between Norwegian and Allied perspectives on key strategic issues for Norway

and NATO in the High North. Finally, it outlines a number of proposed Strategic Options (SOs) for consideration as the Norwegian MOD continues to evolve its national defence strategy and configure its wider contributions to collective security within the Alliance.

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## Summary

### Context and purpose of this study on Allied perspectives for Norway

The strategic environment in and around Europe is characterised by increased competition among major powers, evolving threats from weak or failing states and non-state actors, and rapid change in the means of influence available to all of these actors. This presents the Norwegian government, including the Ministry of Defence (MOD), with both challenges and opportunities as it reviews its strategy and policies to ensure Norway's continuing security, prosperity and way of life. These efforts are not only important to the country's own security interests, but also form part of Norway's contribution to collective efforts from the North Atlantic Treaty Organisation (NATO) to enhance deterrence, crisis management and regional security in the North Atlantic region and High North. A fuller appreciation of NATO Allies' perspectives, expectations and capabilities concerning the defence of Norway can help to ensure effective delivery of all these tasks and the safeguarding of the Alliance's common interests and values.

To this end, the MOD commissioned the not-for-profit research institute RAND – comprising both RAND Europe and the US-based RAND Corporation – to conduct an independent study in support of Norwegian strategy development, planning and defence policy. The central focus of this study is on providing a fuller

understanding of how other Allies perceive the key strategic issues for Norwegian and NATO defence on the northern flank. Specifically, RAND was tasked to examine the perspectives of defence officials from Denmark, France, Germany, the UK, the US and NATO institutions. This involved a mixed-method approach combining desk-based research, expert workshops and field visits.

Perceptions matter in defence. If they are to be deterred from aggressive courses of action, potential adversaries must perceive a nation's or alliance's defence capabilities to be credible. Partners and allies must similarly perceive each other as competent, reliable and committed, in order to maintain bonds of trust and avoid tensions over burden-sharing. Those who seek to undermine NATO recognise that achieving cohesion and coherence among 29 Allied nations – in the face of practical barriers to interoperability and various enduring differences over national priorities and strategic culture – is both the Alliance's greatest challenge and its source of strength.

These perceptions are subjective, fluid and contested: how a nation such as Norway sees its own role on the world stage may differ significantly from how its friends or rivals perceive it. To shine a spotlight on this issue, this report presents a summary of findings from consultations with both Norwegian and Allied officials. These insights enable a gap analysis

**Figure 0.1. Map of Russian Bastion Defence in relation to Norway and the Bear and GIUK Gaps**

Source: adapted from Mikkola (2019).

between areas of convergence or divergence on key strategic issues affecting NATO deterrence and defence on the northern flank.

## Allied perspectives on NATO in the High North

**Norway and key NATO Allies share common perceptions of the Alliance's role and missions in the High North, with nuances in the emphasis placed on different threats**

- Allied threat assessments of the High North consider the most significant threat to be horizontal escalation of a crisis or conflict triggered in another region. Allied officials highlight the strategic importance of the High North to Russia's Bastion Defence as the potential trigger for horizontal escalation. Environmental and geopolitical developments provide other
- internal and regional drivers for potential conflict, though Allies' primary focus remains on external threats.
- The Norwegian and Allied officials consulted for this study share a common threat assessment regarding Russian capabilities and intent in the High North. Improved Russian capabilities mean that Norwegian and NATO strategy must plan for possible future operations in a highly contested environment, while also recognising the enduring internal and structural challenges that Russia faces.
- Norwegian and Allied officials see the Bear Island–North Cape and GIUK gaps as key to warning of Russian Northern Fleet operations and sea-denial efforts against NATO. Once deployed beyond the Bear Gap, Russian Navy surface vessels and submarines, armed with Kalibr and other



modern cruise missiles, pose an increased threat to Allied activities in the North Atlantic and Norwegian Sea. They also pose a direct challenge to transatlantic sea lines of communication (SLOCs) that are essential to Allied reinforcement of Europe in the event of any major conflict.

- While recognising the need to consider the strategic implications of a rising China, Allied perceptions of the urgency and scale of this challenge differ. Norway and the Allies consulted also recognise the evolving challenges posed by terrorism and non-state actors, with NATO seen as having a support role to primarily national responses.
- There remain some differences in the level of emphasis placed on certain issues in defence strategy and planning – most notably, for example, between the degree to which China is seen as a direct and imminent security threat by the US or by European officials – or in projections of how quickly certain emerging trends are likely to mature.
- Overall, Norway and key Allies share a similar assessment of the pressing challenges to deterrence and defence on NATO's northern and eastern flanks. To varying levels, Allies also stress the importance of a 360° perspective on NATO security, and welcome an enduring role for Norway on the southern flank and beyond.

## **Allied perspectives on strategic considerations for Norway**

**NATO Allies recognise Norway as an important contributor to and beneficiary of collective defence, while also identifying challenges and opportunities for the future**

- NATO forms an indispensable pillar of Norwegian defence and security, and in turn

benefits from Norway's active contributions to the Alliance. Leading Allies perceive Norway as having an impressive mix of high-end capabilities for a nation of its size, and a mature Total Defence Concept.

- These capabilities and commitments, coupled with a well-respected approach to nuanced strategy-making, mean that Norway is seen by key NATO Allies as able to 'punch above its weight' as a medium power that has made a significant impact on strategic thinking within the Alliance. Allies recognise Norwegian contributions to collective security on the eastern and southern flanks as delivering important benefits to both Norway and NATO alike.
- Despite these perceived areas of strength, like other NATO Allies Norway continues to face a number of pressing challenges across different levels – political, strategic and military – and in the context of sub-threshold threats to national and societal resilience.
- Perceived challenges at the political level include maximising the benefits of Norway's key defence relationships while hedging against uncertain change. The political and institutional landscape through which Norway must implement its defence strategy is complex, as partnerships and multinational defence frameworks continue to evolve within Europe. At the strategic-military level, perceived challenges include: enhancing the readiness and resilience of Norwegian forces to deter aggression, alongside the capacity to receive Allied reinforcements in the event of a future crisis.
- Below the threshold of armed conflict, Allied officials recognise the importance of continuing to bolster the Total Defence Concept to address threats both new and old, while recognising that Norway is

seen as being ahead of many other Allies in implementing measures for societal resilience.

- Allied officials also report a number of potential opportunities that Norway could seek to exploit through its national defence strategy. Perceived opportunities to leverage Norway's strengths include shaping NATO thinking on topics such as Russia, societal resilience and innovation. Allied officials also highlight the potential long-term benefits of leveraging Norway's varied partnerships and promoting cooperation among different multilateral groupings and NATO.

## Strategic implications and options for Norway

Norway is already taking action to address known and emerging challenges. It is also seeking to exploit opportunities to deepen cooperation with Allies and partners; as well as to maximise Norway's contributions to shaping the future of NATO strategy. While these ongoing initiatives are welcome, the MOD also recognises the need to continuously reappraise and refine its defence strategy, policy and plans.

This report therefore outlines five Strategic Options (SOs) for consideration to inform those ongoing discussions and debates within Norway and across NATO more widely:

### SO1: Strengthen deterrence in Norway

The core mission of the Norwegian Armed Forces is to deter or defeat aggression against the nation's territory, airspace and waters. This fundamental security contribution to the welfare of the Norwegian people underpins all other aspects of national strategy, enabling the pursuit of prosperity, influence and other government policy goals in line with Norway's national interests and values. In turn, a robust

national defence posture in Norway provides important benefits to the collective security and credibility of NATO: enhancing deterrence; reducing vulnerabilities on the Alliance's northern flank; and positioning Norway to defeat or at least contain potential armed incursions without relying on the arrival of Allied reinforcements that could be employed elsewhere in the European theatre.

**Figure 0.2. Summary of possible supporting actions for SO1**



### SO1: STRENGTHEN DETERRENCE IN NORWAY

Enhance the capability and readiness of Norwegian Armed Forces to deter or defeat aggression in Norwegian territory, airspace and waters.

**SUPPORTING ACTIONS:**

- Develop more robust ISR coverage to ensure situational awareness
- Consider steps to increase the deterrence posture in Northern Norway
- Enhance the protection of bases and forces against air and missile threats
- Maximise the F-35's potential as an enabler for joint operations
- Prepare for operations in contested cyber, space and electromagnetic environments


### SO2: Expand capacity to receive Allied reinforcements

While Norway should continue to make robust preparations for its own national defence and deterrence, in any large-scale conflict against a major power, Norwegian forces will require support from NATO Allies. This, of course, is the logic behind collective defence. Military planners in Norway have not lost sight of the importance of rapid reinforcement for



Norwegian security, even when other nations shifted their focus away from territorial defence and protection of SLOCs in the North Atlantic in recent decades. Since 2014, defence planning, training and exercising across NATO have begun to rebuild expertise and capacity in this area, but more can be done at both the national and collective levels.

**Figure 0.3. Summary of possible supporting actions for S02**



**S02: EXPAND CAPACITY TO RECEIVE ALLIED REINFORCEMENTS**

Increase Norway's ability to receive, support and operate alongside large-scale Allied land, air and naval forces in a possible future crisis.

**SUPPORTING ACTIONS:**

- Enhance planning for Allied reinforcement under challenging conditions
- Increase the scale and complexity of field exercises
- Ensure sufficient prepositioned stocks of key consumables and equipment
- Upgrade and expand infrastructure along with concepts for dispersal
- Deepen cooperation to enhance military mobility and interoperability

### **S03: Explore concepts to hold the adversary at risk**

The most credible deterrent posture is one that confronts the adversary with the prospect of failure to achieve the objectives of any campaign of aggression (providing deterrence by denial, not just by punishment). NATO forces prepare to conduct defensive campaigns aimed at doing just that. Capabilities to damage selected 'deep' targets in the adversary's rear areas can contribute by suppressing the adversary's tempo of

operations and disrupting their offensive. Within limits, creating doubts in the adversary's mind regarding the security of key assets in its rear areas could strengthen deterrence without creating instability – if nested within an overall strategy and posture geared to defensive operations and reassurance through continued dialogue and cooperation with Russia. By presenting multiple strategic dilemmas for the adversary in this way while maintaining communications channels, NATO can seize the initiative and provide Allied commanders with additional options for controlling escalation in a conflict or crisis.

**Figure 0.4. Summary of possible supporting actions for S03**



**S03: EXPLORE CONCEPTS TO HOLD THE ADVERSARY AT RISK**

Disrupt any adversary's tempo of operations and seize the initiative for Norway through ways and means for achieving strategic and deterrent effects at range.

**SUPPORTING ACTIONS:**

- Invite Allies with deep attack systems to deploy to Norway periodically
- Consider the potential role for longer range weapons for Norwegian forces
- Explore concepts for generating mass and persistence with unmanned assets
- Collaborate with key Allies on sea denial and littoral strike concepts
- Conduct parallel strategic communications to control the escalation ladder

### **S04: Enhance national and societal resilience**

Highly capable national forces and robust plans for reinforcement are of limited utility on their own, if NATO Allies lack the resilience

needed to maintain national and collective will to fight, or the means to prevent an adversary from using coercion and subversion to achieve their objectives below the threshold of armed conflict. Russia has recently employed a broad mix of military and non-military means to undermine the security, freedom and values of individual societies. Through these tactics, they also seek to undermine the cohesion of the NATO Alliance or frustrate its decision making by exploiting ambiguity and deniability, as well as the perceived 'grey zone' where they can compete most effectively without triggering escalation to a NATO Article 5 response.

**Figure 0.5. Summary of possible supporting actions for S04**



**S04: ENHANCE NATIONAL AND SOCIETAL RESILIENCE**

Continue to build on and adapt the Total Defence Concept in light of new trends, technologies and threats, preparing Norway for an uncertain future.

**SUPPORTING ACTIONS:**

- Refine and bolster the Total Defence Concept in light of evolving challenges
- Continue to promote and test Norway's whole-of-government approach
- Continue to deepen and refine mechanisms for civil support to the military
- Contribute to NATO's strategy for addressing sub-threshold operations
- Engage in dialogue over further measures to enhance collective will to fight

### **S05: Solidify Norwegian contributions to NATO and partners**

Allies look to Norway to play a leading role in shaping the Alliance's agenda, delivering

high-end capabilities, and participating in NATO's crisis management and stability operations around the globe. Oslo's political will to participate in international missions with effective contributions, combined with the Norwegian military's professionalism and track record, translate to a level of credibility that only a handful of NATO Allies enjoy. Stated another way, when Norway makes the case for measures needed to boost deterrence and defence in the High North, Allies will listen carefully and, more often than not, will be willing to advance a collective agenda. Looking to the future, Norway has concrete opportunities to further reinforce its relations with NATO, with other multinational groupings or on a bilateral basis.

**Figure 0.6. Summary of possible supporting actions for S05**



**S05: SOLIDIFY CONTRIBUTIONS TO NATO AND PARTNERS**

Identify and pursue opportunities for Norwegian leadership within NATO and other partnerships, maximising both national interests and collective security.

**SUPPORTING ACTIONS:**

- Continue to provide valuable contributions beyond NATO's northern flank
- Contribute to ongoing efforts to rebalance transatlantic burden-sharing
- Promote deepening of NATO engagement with enhanced opportunity partners Sweden and Finland
- Identify and pursue opportunities for Norwegian leadership
- Leverage innovation and industry as enablers of national influence in NATO



## Understanding and navigating the trade-offs among SOs

**These SOs are intended to be mutually reinforcing and scalable, depending on levels of strategic ambition and the availability of resources**

- None of these SOs is exclusive of the others. Initiatives could be selected from multiple SOs and implemented without contradictory effects. In this way, the SOs can be seen as mutually reinforcing.
- The resources available for defence are finite – choices and trade-offs are inevitable. There is also a need to strike a delicate balance between deterrence and reassurance, in line with longstanding Norwegian defence policy, and the SOs are designed to be scaled up or down with both political and resource considerations in mind.
- A range of considerations can frame and guide the trade-offs made between different options for enhancing Norwegian defence and deterrence. Close coordination with other actors beyond the Norwegian MOD, including through a whole-of-government approach and collaboration with partners and allies, will also continue to be important in regard of each of the SOs proposed.
- Similarly, any collective strategy for NATO's northern flank must be resilient and flexible enough to deal with a range of potential future scenarios. It should also continue to reflect on the central importance of cohesion and coherence across the Alliance, as recognised by ongoing initiatives to enhance NATO's collective responsiveness, readiness and capabilities for reinforcement.
- Posture and plans for the High North must also be seen as proportionate and credible by a range of different audiences: national, allied and adversary. This requires a clear strategic narrative and concerted efforts to secure buy-in from the relevant stakeholders, including most notably the public.
- Norway and its NATO Allies should therefore continue to stress-test the assumptions that underpin their strategy for the region, ensuring that NATO's posture and plans are robust to address a wide range of different plausible futures. Such a resilient, adaptable approach is essential in a strategic environment characterised by uncertainty, complexity and rapid change.







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## Abbreviations

A2/AD	Anti-Access/Area Denial
ABP	Assumptions-Based Planning
ACT	Allied Command Transformation
ASFR	Arctic Security Forces Roundtable
ATACMS	Army Tactical Missile System
C2	Command and Control
C4ISR	Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance
CCDCOE	NATO Cooperative Cyber Defence Centre of Excellence
CNI	Critical National Infrastructure
COE	Centre of Excellence
CONOPS	Concept of Operations
CSDP	EU Common Security and Defence Policy
DOD	US Department of Defense
DTIB	Defence Technological and Industrial Base
E2I	European Intervention Initiative
EABO	Expeditionary Advanced Base Operations
EDA	European Defence Agency
EDF	European Defence Fund
EEAS	European External Action Service
EFP	Enhanced Forward Presence



EM	Electromagnetic
EME	Electromagnetic Environment
EOP	Enhanced Opportunity Partner
EU	European Union
EUGS	European Union Global Strategy
EW	Electronic Warfare
FFI	Norwegian Defence Research Establishment
GDP	Gross Domestic Product
GMLRS	Guided Multiple Launch Rocket System
GPS	Global Positioning System
GIUK	Greenland-Iceland-United Kingdom
HMT	Human-Machine Teaming
IADS	Integrated Air Defence System
IAMD	Integrated Air and Missile Defence
IFS	Norwegian Institute for Defence Studies
INF	Intermediate-Range Nuclear Forces
IFS	Norwegian Institute for Defence Studies
ISO	International Standards Organisation
ISR	Intelligence, Surveillance and Reconnaissance
JASSM-ER	Joint Air-to-Surface Standoff Missile – Extended Range
JEF	Joint Expeditionary Force
JFC	Joint Force Command
JSF	Joint Strike Fighter
L-CAAT	Low-Cost Attritable
LRASM	Long Range Anti-Ship Missile
MARCOM	Allied Maritime Command
MCM	Mine Countermeasures

MINUSMA	UN Multidimensional Integrated Stabilisation Mission in Mali
MOD	Ministry of Defence
MRBM	Medium Range Ballistic Missile
NAC	North Atlantic Council
NALES	NATO Amphibious Leaders Expeditionary Symposium
NASAMS	National Advanced Surface-to-Air Missile System
NATO	North Atlantic Treaty Organisation
NORDEFCO	Nordic Defence Cooperation
NRI	NATO Readiness Initiative
NSM	Naval Strike Missile
NUPI	Norwegian Institute of International Affairs
OSK	Operational-Strategic Command
PESCO	Permanent Structured Cooperation
PNT	Positioning, Navigation and Timing
QA	Quality Assurance
RDM	Robust Decision Making
RSOI	Reception, Staging, Onward Movement and Integration
SACEUR	Supreme Allied Commander Europe
SHAPE	Supreme Headquarters Allied Powers Europe
SLOC	Sea Lines of Communication
SRBM	Short Range Ballistic Missile
SSBN	Nuclear Ballistic-Missile Submarine
TRJE-18	Trident Juncture 2018
UAV	Unmanned Air Vehicle
UK	United Kingdom of Great Britain and Northern Ireland
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea

USA	United States of America
USMC	United States Marine Corps
USV	Unmanned Surface Vehicle
UUV	Unmanned Underwater Vehicle
WP	Work Package



## Acknowledgements

In conducting this research, the RAND study team is grateful to the many defence officials from Allied nations or NATO institutions who provided their time, support and insights. The findings presented in this report would not be possible without their contributions and candour. Within RAND, thanks also go to Lucia Retter and Erik Silfversten for their comments and insight in reviewing the report, as well as to Jess Plumridge for her graphic-design support in generating the final document.

Finally, this study could not have been possible without the sponsorship and ongoing support

of the Norwegian MOD, and in particular of Keith Eikenes, Director and Head of Section, and Per Kristian Krohn, Senior Adviser, Security Policy Analysis and Policy Planning Section. The RAND team is also grateful to the many other officials from the Norwegian defence establishment and research organisations who supported and contributed to expert workshops in Oslo throughout the course of the project.

Despite these many valued contributions, any errors or omissions in the analysis presented in this report remain the sole responsibility of the authors.







# 1 Introduction

The strategic environment in and around Europe is characterised by increased competition among major powers, evolving threats from weak or failing states and non-state actors, and rapid change in the means of influence available to all of these actors. This presents the Norwegian government, including the Ministry of Defence (MOD), with both challenges and opportunities as it reviews its strategy and policies to ensure Norway's continuing security, prosperity and way of life. These efforts are not only important to the country's own security interests, but also form part of Norway's contribution to collective efforts from the North Atlantic Treaty Organisation (NATO) to enhance deterrence, crisis management and regional security in the North Atlantic region and High North.<sup>1</sup> A fuller appreciation of NATO Allies' perspectives, expectations and capabilities concerning the defence of Norway can help to ensure effective delivery of all these tasks and the safeguarding of the Alliance's common interests and values.

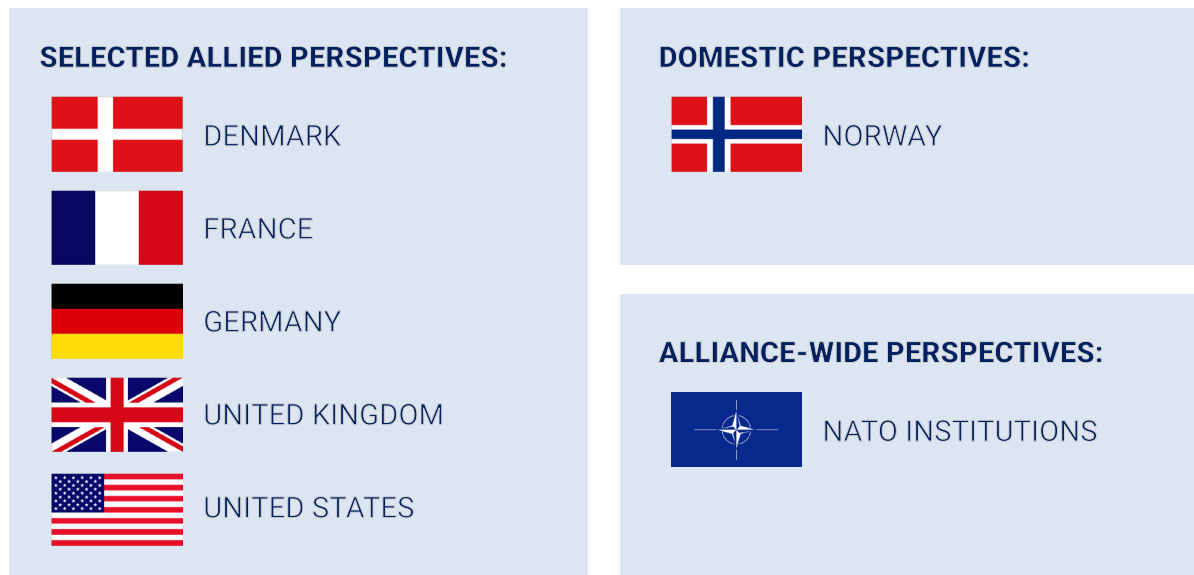
## 1.1. Background and research objectives

### 1.1.1. The Norwegian MOD has commissioned RAND to provide independent research and evidence to inform ongoing strategy and policy development

In addition to the Norwegian MOD's own internal long-term planning processes, it is important to leverage academic and external perspectives on Norway's strategic challenges. To this end, in early 2019 the MOD commissioned the not-for-profit research institute RAND – comprising both RAND Europe and the US-based RAND Corporation – to conduct an independent study in support of Norwegian strategy development, planning and defence policy. With a history of over 70 years of defence-related studies, RAND's mission is to help improve policy and decision making through objective research and analysis.<sup>2</sup> This latest research is intended to help challenge

1 While there is no formal or universal definition of the High North as a region, in the context of this study it is understood in broad terms to include Norway and surrounding territories in Northern Russia and Scandinavia, as well as the surrounding waters of the Arctic Ocean, Barents Sea, North Sea and North Atlantic Ocean. This encompasses also the Greenland-Iceland-United Kingdom (GIUK) gap and lines of communication to North America.

2 For more information on RAND's mission, values or research areas, see RAND (2020a).

**Figure 1.1. Outline of Allied nations and other institutions within the scope of RAND's research**

conventional thinking and stimulate debate about future security challenges in the North Atlantic and High North, examining some of the core assumptions that might underpin Norway's long-term strategy for the future and collaboration with NATO Allies.

### **1.1.2. This study focuses on understanding selected Allies' perspectives on priorities for Norwegian and NATO security on the Alliance's northern flank**

The central focus of this study is on harnessing RAND's independence to provide the MOD with a fuller understanding of how other Allies perceive the key strategic challenges and priorities that will shape the future of Norwegian and NATO defence along the Alliance's northern flank. Specifically, RAND was tasked to examine the perspectives of officials from the nations and institutions summarised in Figure 1.1.

This sub-set of nations was selected by the MOD in order to capture a range of different Allied perspectives, while also recognising that practical barriers prohibit a broader mapping of

the viewpoints of all 29 NATO Allies. The list of actors for consideration in this RAND study also does not include a number of important non-NATO partners, such as Finland and Sweden. The perspectives of these nations, however, are already well-understood through the MOD's own bilateral engagements as well as within wider cooperative arrangements at the Nordic level.

### **1.1.3. The study captures Allied perspectives on a number of research questions of interest to future national and collective defence strategy**

The Norwegian MOD tasked the RAND research team with the following questions:

1. What are the current and future strategic challenges and threats to Norwegian security?
2. What are the strength and coherence of current NATO approaches to the North Atlantic area and the High North, including stated intent, capabilities and activities?
3. What are the perspectives of both Norwegian stakeholders and key NATO Allies on the above?



**Figure 1.2. Overview of RAND research approach and methodology**



4. What might be potential strategic options to enhance long-term national and regional security, mitigating any divergences or gaps between Norwegian and Allied perspectives and priorities?

This report represents the final output of this independent study, presenting analysis of the evidence base gathered through RAND's mixed-method research approach. This methodology is outlined below.

## 1.2. Research approach and methodology

### 1.2.1. RAND employed a combination of desk-based research, expert workshops and field visits to gather and analyse the evidence base

In order to address the objectives and topics provided by the Norwegian MOD, the RAND study team conducted a mixed-method research approach structured around a number of interlinked work packages (WPs). Figure 2.1

summarises the scope and relationship between each WP, along with the principal means of data collection employed throughout the study.

As outlined above, the principal data collection methods used by the research team included:

- **Document review:** The RAND team conducted a targeted review of open-source literature relating to Norwegian and Allied perspectives on the research topics in question. This included a mix of national strategies and other government documents (e.g. white papers), as well as relevant academic, think-tank and specialist news-media sources of relevance to WP1–3.
- **Field visits and interviews with Allied officials:** At the direction of the MOD, the primary resource for this study is data gathered through field visits to defence establishments or foreign ministries in Berlin, Copenhagen, London, Paris and Washington, D.C., as well as to NATO

headquarters in Brussels and in Norfolk, VA. These visits provided the RAND study team with opportunities to conduct semi-structured interviews with Allied and NATO officials, combining a protocol of set research questions with the flexibility to investigate further topics seen as priority issues by national and Alliance stakeholders.

- **External workshops with Norwegian MOD stakeholders in Oslo:** In addition to document review and interviews, the RAND team also engaged with officials from the Norwegian MOD and Armed Forces and independent defence researchers through two workshops in Oslo. The first workshop in April 2019 focused on gathering data on Norwegian perspectives and priorities for national and NATO strategy in the High North. This provided the baseline for a subsequent gap analysis and comparison with Allied viewpoints on this topic in WP4. The second workshop in October 2019 focused on gathering Norwegian officials' feedback on the emerging findings of WP1–4, as well as stress-testing the draft Strategic Options (SOs) prepared in WP5 as the final output of the study.

In addition, RAND leveraged the multidisciplinary expertise of its transatlantic, multinational team; as well as insights gained through past studies on related aspects of national and collective defence strategy for NATO, European Union institutions and defence planners in the US, UK and Europe. This included a number of internal workshops with RAND experts to synthesise and analyse data gathered in WP1–3, allowing the research team to identify areas of convergence or divergence between Norwegian and Allied perspectives through the gap analysis in WP4.

Taken in combination, these research activities allowed the RAND team to generate a set of prospective SOs for the Norwegian MOD to consider as part of its ongoing strategy and policy development. As discussed above, these draft SOs were subject to challenge and validation through the final workshop in Oslo, involving a mix of stakeholders across the Norwegian MOD and Armed Forces. Finally, RAND summarised the evidence base and analysis gathered throughout the course of the study in this report, subject to RAND's robust Quality Assurance (QA) process of peer review, as described below.

### 1.2.2. Research findings are subject to RAND's process of Quality Assurance (QA) peer review and transparency

As an independent not-for-profit research institute, a core tenet of RAND's mission is to ensure the rigour of any evidence and analysis presented in its research for government sponsors such as the Norwegian MOD. All research activities and outputs have been subject to RAND Europe's ISO-certified process of QA review, involving peer review by a number of relevant senior experts outside of the core research team. This includes review and validation of the underlying research approach as described above, as well as assessment of the analysis and findings against a set of quality standards.<sup>3</sup>

In line with RAND's reputation for transparency on any caveats and limitations to its research, readers of this report are invited to note the following:

- This report and all information contained therein are unclassified, necessarily limiting the scope to present certain topics in detail. The RAND team hold NATO and national security clearances, and where appropriate

classified aspects were discussed with Allied and Norwegian officials to provide additional background on certain issues of strategic interest on NATO's northern flank.

- The analysis presented is focused at the strategic-level only, and does not consider operational, tactical or technical aspects of the challenges to deterrence and defence in the High North. It similarly does not explore in any detail any issues associated with specific types of defence equipment, or consider numbers of troops, platforms, bases, etc.
- The information presented is derived primarily from consultations with selected Allied and NATO officials, and does not represent any independent characterisation by RAND of the viewpoints of different nations or institutions. These perspectives do not necessarily represent the official stance of Allied governments, with officials encouraged to provide insights based not only on their organisational roles but also their applied military judgement and wider individual experience and expertise.
- In order to enable Norwegian and Allied officials to engage candidly with the RAND study team, this report does not attribute any viewpoint or statement to any individual or organisation. Instead, the analysis provided in subsequent chapters provides a synthesis of different perspectives, highlighting areas of agreement or divergence as appropriate.
- The SOs generated as a result of the gap analysis between these Norwegian and Allied perspectives have been tested through an external workshop with key stakeholders in Oslo. Further analysis – including modelling and gaming – would be required to refine these prospective options further and explore the potential of their individual or collective application.

- All research has been conducted in full compliance with the US's International Traffic in Arms Regulations (ITAR).

### 1.3. Structure of this report

Building on this research approach, this RAND report presents a summary of findings from all WPs. This is intended to inform both ongoing debates and strategy and policy development efforts within the Norwegian defence community, as well as a wider NATO and public audience.

In addition to this introductory chapter, this report comprises the following elements:

- **Chapter 2:** Allied perspectives on NATO in the High North, including an overview of Allied threat assessments and priority issues for the Alliance on its northern and eastern flanks.
- **Chapter 3:** Allied perspectives on Norway's strategic challenges, building on Chapter 2 to explore the implications of geopolitical trends for Norwegian defence at the national level.
- **Chapter 4:** Outline of a series of Strategic Options (SOs) for Norway to consider when drawing up future strategy, policy and plans, so as to enhance both national and collective deterrence and defence.
- **Chapter 5:** Conclusions and final reflections on themes arising from Chapters 1–4, as well as the trade-offs, interdependencies and enablers for different SOs, and areas for further research.
- **Bibliography:** A full list of references is presented at the end of the report, along with an Annex that lists the affiliations of Allied officials consulted for this study.

In order to aid the readability of this report, summary boxes are provided at the end



of each of the core substantive chapters. Footnotes provide additional information on documentary sources for any of the points raised in the text; however, given the central role played by consultations with Allied

officials as the basis for the majority of the findings, the reader should assume that unless otherwise indicated, any information presented throughout has been derived from RAND's analysis of interview data.

## 2 Allied Perspectives on NATO in the High North

This chapter provides an overview of Allied perspectives on the significance of the High North region to the NATO Alliance. Specifically, the following sections outline:

- Allied assessments of the principal threats in the High North.
- Allied perspectives on the strategic challenges to NATO deterrence and defence, including the interdependencies between security issues on the northern, eastern and southern flanks.
- Allied perspectives on the strategic role and key missions for NATO.

The findings presented below represent a summary of information gathered through field visits and RAND interviews with defence officials from Denmark, France, Germany, the UK, the US and NATO institutions. In presenting the areas of convergence and divergence between different Allied perspectives on the major strategic issues facing NATO in Norway's immediate neighbourhood, this chapter provides the basis for a more detailed look at the implications for Norway's own national defence in Chapter 3 and the discussion of strategic options for Norway to consider in Chapters 4 and 5.

### 2.1. Allied threat assessments

#### 2.1.1. Allied assessments of the High North consider the most significant threat

#### to be horizontal escalation of a crisis or conflict emanating from another region

Allied officials consulted in the course of this RAND study were asked to provide an unclassified threat assessment, considering potential drivers of future conflict or instability on NATO's northern flank. While there were some differences in emphasis from one nation to the next, the findings of this engagement show Norway and its key Allies share a common assessment of the main threat vectors and the overall level of threat in the High North region. No major areas of divergence were identified regarding the principal threats, though there were differing perspectives on the time horizons within which certain emerging trends might be expected to mature.

The overall assessment of key Allies is that the northern flank represents a strategically important region where there is growing competition between NATO and Russia, but also one where there are relatively few internal drivers of potential conflict. Allied officials believe that the risk of 'vertical escalation' is low in the short and medium term – that is, the likelihood of an internal crisis emerging within the region and escalating to the point of armed conflict within the next ten years. Rather, both Norwegian and Allied threat assessments suggest that the greatest risk is that of 'horizontal escalation'. This is the potential for an external crisis or conflict

emanating in another region (e.g. on NATO's eastern or southern flank) to move rapidly into Norway's immediate neighbourhood. Looking out to the long-term, e.g. 20 years or more from now, the future is inherently more uncertain. Nonetheless, the common assumption of Allied officials remains that the greatest threats stem from the inescapable links between the stability of the High North and the wider state of global geopolitics and Euro-Atlantic security at large.

### **2.1.2. Allied officials highlight the strategic importance of the High North to Russia's Bastion Defence as the potential trigger for horizontal escalation**

The potential for horizontal escalation – whereby a crisis in some other part of NATO affects Norway and the High North – is driven in part by the basic principles of the North Atlantic Treaty; namely, that an attack on one Allied nation is an attack on all (Article 5).

There is also a direct strategic logic. Both Norwegian and Allied officials consulted for this RAND study repeatedly highlighted the centrality and vital importance of the High North in Russia's own defence strategy, policy and planning. For Russia, the High North represents its own defensive 'bastion' – where its nuclear-armed ballistic missile submarines deploy on patrols from bases on the Kola Peninsula out into the Barents Sea and Arctic Ocean as guarantors of Russia's second-strike nuclear capability.<sup>4</sup> From Moscow's perspective, it also provides a potential route for aerial or missile attacks from North America into the Russian homeland. In turn, the

region provides Russia with potential access for naval and aerial forces seeking to disrupt NATO movements of troops and materiel across the North Atlantic Ocean, assuming they can penetrate Allied defences along the Bear and Greenland-Iceland-UK (GIUK) gaps.

This concept of Russia's Bastion Defence is shown in Figure 2.1 overleaf.

As shown in Figure 2.1, the Bastion area indicates the patrolling area of Russian SSBNs. This also represents a vital zone for Russian economic and energy interests, with UK officials estimating Arctic territories and waters to be responsible for around 12–15 per cent of Russian gross domestic product (GDP) and 80 per cent of Russian natural gas.<sup>5</sup> Moscow seeks capabilities that would allow it in wartime to control the inner defence region (shaded in dark blue); deny NATO safe passage and operations in the outer defence region (shaded in lighter blue); and threaten sea lines of communication in the North Atlantic west of the GIUK gap (in grey).<sup>6</sup> The proximity of NATO forces to Russia's bases in the Kola Peninsula and strategic forces operating in the Bastion provides the underlying logic for horizontal escalation in the High North. This suggests that a crisis or conflict between NATO and Russia on the eastern or southern flank could rapidly lead to confrontation in the High North, as Russia sought to extend a protective cordon around its bastion – directly threatening Norwegian territory, airspace and waters in the process.<sup>7</sup>

4 These neighbouring waters close to Russia's northern coast similarly play an important role as test ranges for new Russian naval, air and missile systems in peacetime, as well as hosting military exercises and training. This brings additional NATO interest in intelligence-gathering in the region even in peacetime.

5 HCDC (2018).

6 Ibid.

7 One example of this Russian ambition is a major exercise in October 2019 in which the North Sea Fleet sent eight submarines into the Barents and Norwegian Seas at the same time – its largest such exercise since the Cold War.

**Figure 2.1. Map of Russian Bastion Defence in relation to Norway and the Bear and GIUK Gaps**



Source: adapted from Mikkola (2019).

### 2.1.3. Environmental and geopolitical developments provide drivers for potential conflict, though Allies' primary focus remains on external threats

The differentiation between internal drivers of conflict (seen as relatively benign and stable) and external drivers (seen as more potentially destabilising) reflects a range of factors. Norwegian and Allied officials note that the geographic realities of the High North and some of the historical policy choices of regional actors have contributed to strategic stability in recent decades. These characteristics include:

- The sparse, depopulated nature of much of the High North and especially the Arctic.
- The hostility of the local climate and environment, limiting the potential for large-scale military deployments.
- A relatively stable management of land and maritime borders between Norway and Russia, especially following the 2010 maritime boundary agreement.
- A comparative lack of major minority populations.
- The dual-track policy of deterrence and reassurance by Norway and NATO in the region.
- Ongoing efforts to promote international norms that aim to treat the Arctic, in particular, as a zone for multilateral cooperation and governance, rather than for great power competition.



**Figure 2.2. Changes in Arctic sea ice coverage and possible shipping routes**

Source: World Economic Forum (2018). Note: the red line indicates the Northwest Passage, along the Canadian coastline; blue is the Northern Sea Route that runs predominantly past Russia; and grey other routes.

Environmental and geopolitical changes<sup>8</sup> are threatening to erode some of the assumptions that underpin this perception of localised strategic stability in the High North, and therefore raise new questions for NATO and Norway's deterrence posture in the region. Most fundamentally, climate change is accelerating the melting of the Arctic ice cap, opening up new northern sea routes for maritime traffic, as well as resource exploitation (e.g. fishing, oil, gas, minerals etc.). This is illustrated in Figure 2.2 above. Legal, scientific and political deliberations are still ongoing through the

United Nations Convention on the Law of the Sea (UNCLOS) to decide between competing maritime claims in the region. As a result, Norwegian and Allied officials caution against over-stating the rate at which certain trends, such as an increase in commercial shipping through the region, are likely to mature. At the same time, Russian investments in infrastructure and forces in the Kola Peninsula and along its northern coastline are already raising concerns about ongoing militarisation,<sup>9</sup> while the US, UK, France and others have increased the periodic deployment of their

8 For a useful primer on Arctic issues in particular, see US Congressional Research Service (2019).

9 Aliyev (2019).

own national patrols both above and below the ice.<sup>10</sup> With its own territories in Greenland and the Faroe Islands to secure, Denmark – a close Scandinavian ally of Norway – has similarly been strengthening its presence and capabilities in the region. The latest Danish Defence Agreement 2018–2023 involves a raft of initiatives to enhance command and control, surveillance, protection of the marine environment, civil preparedness, and search and rescue capabilities in the Arctic.<sup>11</sup>

Alongside these regional developments, however, Allied officials suggest that perhaps the most important changes have nonetheless arisen outside of the High North itself. Most notable is the wider deterioration in NATO–Russia relations. This follows the annexation of Crimea in 2014 and forcible intervention in Eastern Ukraine,<sup>12</sup> the downing of airliner MH17 in Ukraine,<sup>13</sup> the Novichok nerve agent attack in Salisbury in 2018,<sup>14</sup> an ongoing pattern of provocations in the Baltic region, and allegations of Russian interference in the US, French and other national elections.<sup>15</sup> Allied officials also recognise a number of other major geopolitical shifts of relevance, such as the ongoing rise of China and its official aspirations to be a ‘polar great power’, as well as the enduring and evolving security challenges posed by terrorists, organised crime and other non-state actors. These different state and non-state actors are explored in more detail in the following sections of this chapter.

#### **2.1.4. Leading Allies and Norway share a common threat assessment regarding Russian capabilities and intent in the High North**

Consultations with Allied officials found that Norway and key NATO Allies share much common ground in their respective assessments of the threat posed by Russia. Officials highlighted a number of Russian capabilities as particular causes for concern to Norway and to NATO on its northern flank, as portrayed in Figure 2.3.

#### **2.1.5. Improved Russian capabilities mean that Norwegian and NATO strategy must plan for possible future operations in a highly contested environment**

One example of the troubling confluence of multiple political, strategic, technological and other trends is the proliferation of anti-access, area denial (A2/AD) capabilities. These threaten both Norway’s and Allies’ ability to operate military forces, bases and supply lines within Norwegian territory, airspace or waters.

Allied officials expressed particular concern that developments such as the collapse of the INF Treaty could open Norway and NATO up to potential coercion in future, as well as posing a threat to military forces, critical national infrastructure and civilian populations. Until 2019, the Intermediate-Range Nuclear Forces (INF) Treaty constrained the development and deployment of ground-launched ballistic and cruise missiles with ranges of between 500

10 Cf. Jane’s (2018); Reeve (2018); Royal Navy (2018).

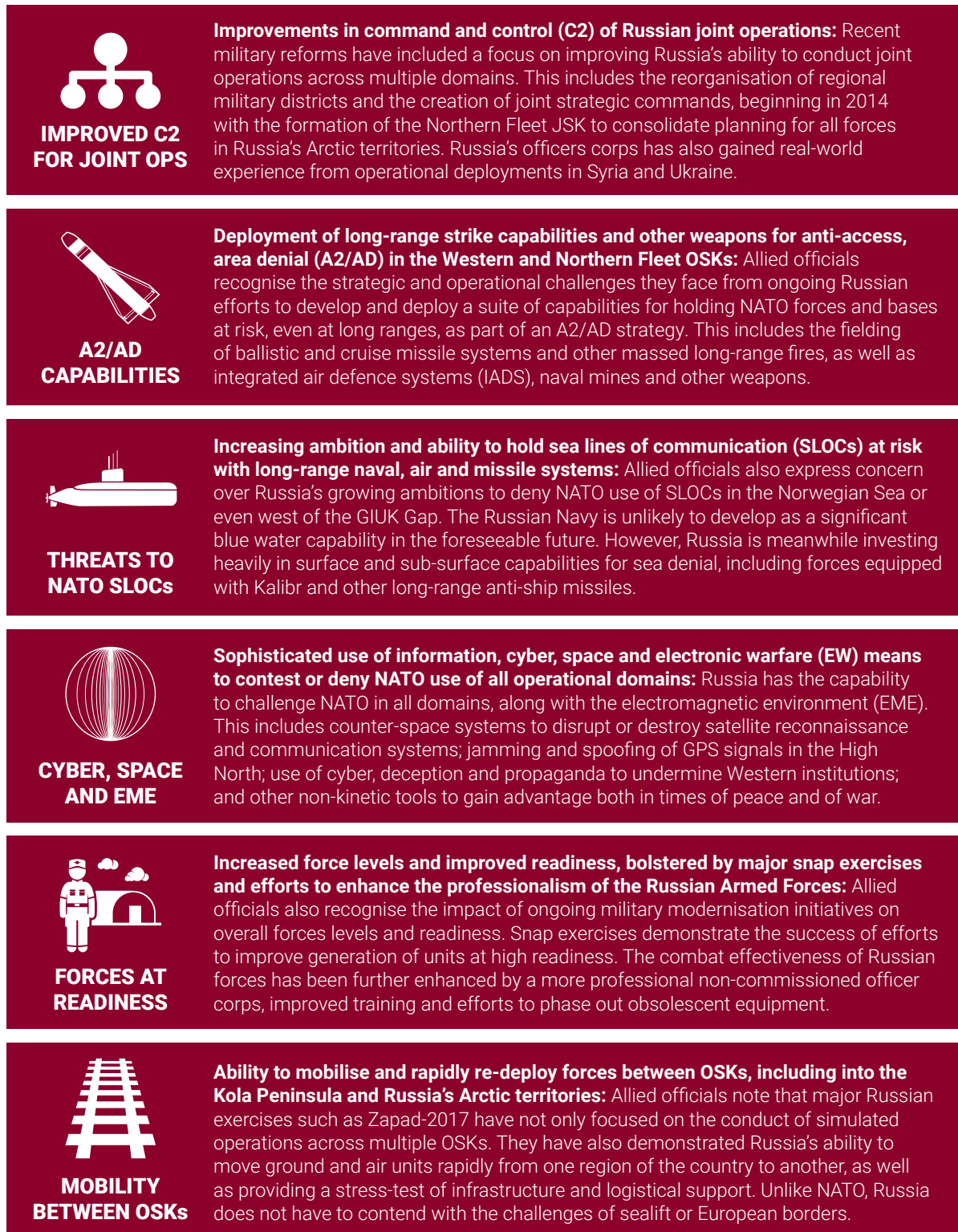
11 Danish MOD (2018).

12 Pifer (2019).

13 Government of the Netherlands (2019).

14 UK Government (2018a).

15 Conley & Vilmer (2018).

**Figure 2.3. Allied perspectives on Russian capabilities of particular concern to NATO**

Source: RAND interviews with selected Allied nations and NATO institutions (2019).

**Figure 2.4. Map of approximate ranges for ballistic missiles launched from Russian soil**



Source: RAND analysis.

and 5,500 kilometres.<sup>16</sup> This meant that most of Norway, including key bases for conducting air and maritime surveillance and defence, and for receiving allied reinforcements, was beyond the range of Russian land-based missiles. However, if and when Moscow begins to field significant numbers of medium-range ballistic missiles, defence planners in Norway and throughout NATO will need to establish credible options to adjust to this new class of threat.

To illustrate this point, Figure 2.4 shows the approximate coverage of short- and medium-range ballistic missile systems (SRBMs and MRBMs) if launched from within Russian territory.

Besides ballistic missiles, Norwegian and Allied officials share concerns over related developments in a number of other Russian capability areas, including:

- Advances in cruise missile technology, for land-attack and anti-ship missions.
- Capacity for possible saturation attacks, aiming to overwhelm fixed defences using large salvos (potentially to include a mix of high-end and more low-cost weapons systems, for example in the future through deployment of swarms of small unmanned drones).



- Development of hypersonic glide vehicles and related technologies, threatening to up-end the traditional strategic calculus around air and missile defence by greatly reducing decision times.
- Continuing investment by the Russian ground forces in other long-range fires, such as tube artillery, advanced munitions and multiple-launch rocket systems.
- Continuing investment in submarines, unmanned underwater or surface vehicles (UUVs/USVs) and naval mines, as means of threatening coastal security and sea lines of communication (including also undersea cables<sup>17</sup> providing transatlantic phone and Internet connections).
- Ongoing development of offensive cyber capabilities and the integration of cyber, information and influence operations into an overall strategic concept alongside conventional military means.
- Continuing heavy investment by the Russian Armed Forces in advanced electronic warfare (EW) capabilities – by comparison, an area of recognised shortfall for even the largest NATO Allies.
- Increasing counter-space capabilities that could pose kinetic and non-kinetic threats to Allies' access to space-enabled services for communications, surveillance, weather monitoring, and precision, navigation and timing (PNT) (e.g. GPS, Galileo).

It is important to note that some Allied officials and independent analysts also cautioned against overstating the maturity or reach of some of the types of weapons system often associated with A2/AD (especially when used against mobile targets, given the difficulty of targeting weapons at long ranges), and questioned the utility and coherence of the A2/AD concept as a distinct 'strategy' for Russia.<sup>18</sup> Nonetheless, there was a general agreement among interviewees that new developments in the threat environment represent a significant and growing challenge for Norway and NATO. Given the country's geography, particular Allied concerns were raised about the potential for a future Russia to impose an A2/AD 'bubble' on Norway.<sup>19</sup> With its extensive coastline, reliance of sea lines of communication and lack of strategic depth, Norway is inherently vulnerable to such tactics. Other practical considerations also matter, such as the distribution of forces and infrastructure within Norway. Allied officials especially highlighted the concentration of Norwegian forces into a small number of centralised bases following a series of base closures since the Cold War, as well as the overall lack of depth to Norway's small Armed Forces.

Overall, the picture that emerges from consultations with Allied officials is the perception of a Russia that faces some serious internal challenges and constraints on its resources, but that is nonetheless modernising its military forces in selected areas, and

17 A number of undersea cables connect Southern Norway to the UK and continental Europe below the North Sea, running from Øygarden, Kårstø, Farsund, Kristiansand and Arendal. In the Norwegian Sea, others connect Central and Northern Norway as well as islands along the coast, running from Trondheim up to Narvik. In the Arctic, the Svalbard Undersea Cable System connects Longyearbyen to Breivika on the Norwegian mainland.

18 Dalsjö, Berglund & Jonsson (2019).

19 Beyond the direct missile threat to Norwegian soil, Allied officials also emphasised the wider A2/AD challenges to NATO's freedom of action in the Baltic Sea. Danish and German officials in particular highlighted the strategic challenge posed by Russian deployment of long-range precision strike capabilities to its exclave in Kaliningrad; while US officials noted the important role that the Royal Norwegian Navy's mine countermeasures (MCM) vessels might have to play in helping clear maritime chokepoints such as the Danish Straits in any future conflict, especially since the US Navy's own MCM capabilities are comparatively limited.

pursuing foreign and defence policy objectives to the detriment of NATO security.<sup>20</sup> Continuing vigilance and adaptation to this evolving threat is required, combining dialogue with a robust deterrence response to demonstrate NATO's credibility.

#### **2.1.6. While recognising the need to consider the strategic implications of a rising China, Allied perceptions of the urgency and scale of this challenge differ**

Allied officials expressed greater divergence among national perspectives on the strategic implications of China as an actor of increasing salience to NATO, including in the High North. There was common agreement that the ongoing rise of China – seen primarily as an economic superpower in the near-term, but one with growing military and political ambitions to reshape the wider global order in the medium- and long-term – represents a significant new strategic challenge for the NATO Alliance.<sup>21</sup> Allied officials disagreed, however, over the extent to which the impacts of a rising China on NATO strategy can be felt directly today as opposed to being issues for the future; as well as over the timelines within which China might be expected to begin posing a more direct threat to NATO in the High North or beyond.

Unsurprisingly, given their differing geostrategic positions and national priorities, the differences of perspective were most pronounced between US and European officials. Where US officials emphasised the scale and imminence of the strategic challenges posed by China, and called for more robust Allied action, their counterparts in other Allied nations typically adopted a more cautious stance. This framed the rise of

China as one of the defining conditions of the contemporary and future strategic environment, but not as one that posed an immediate security threat for the Alliance on the level of other state actors (e.g. Russia, Iran and even North Korea) or of cyber and terrorism.

European officials also recognised the economic and trade potential of deepening Europe's relations with China, while noting their concerns over trends in Chinese foreign, commercial and internal policy, and therefore the need for a nuanced engagement with Beijing. This includes promoting human rights and Chinese adherence to the norms of a rules-based international order, while also not alienating China from the institutions of global governance or undermining the opportunities for mutual benefit that can come from close cooperation – with the EU and China working closely to tackle climate change, for example, and notably doing so without the US given changes in its environmental policy under Donald Trump. Where European officials did emphasise the need for a more robust response to the economic and security challenges posed by China, this did not necessarily mean alignment with US policy and priorities; indeed, recent debates in Paris and Berlin have often framed China's rise in terms of furthering the case for 'European strategic autonomy' and enhancing the EU's ability to promote its interests in the face of growing great-power competition with both Washington D.C. and Beijing alike.<sup>22</sup> At the same time, while most European officials recognised the need for Europe to hedge its own strategic interests against a reorientation of US defence policy and posture to the Asia-Pacific, many also cautioned against any European action on China that

20 Crane et al. (2019); Radin et al. (2019); Thomas (2019).

21 Deutsche Welle (2019).

22 Financial Times (2019); Smith & Taussig (2019).

might undermine NATO and the transatlantic security alliance.<sup>23</sup>

Despite these differences in perspective and emphasis, overall most officials recognised that China could represent a growing challenge to NATO in terms of:

- **Increasing the pressure on Europe to do more to enhance its own deterrence and defence** alongside a US rebalance to the Asia-Pacific.<sup>24</sup>
- **Undermining NATO's cohesion on certain regional and global issues** in ways that could diminish its influence in a fast-changing world.
- **Provoking uncertainty over how best to balance between economic and security interests;** with officials citing dilemmas over whether to engage Chinese firm Huawei in the roll-out of 5G telecommunications or in other aspects of critical national infrastructure,<sup>25</sup> as well as the recent trade disputes between the US and China,<sup>26</sup> as possible signs of a more confrontational dynamic between the world's largest economies in the future.
- **Raising questions about the future role and remit of NATO in a multi-polar world,** as the overall balance of military, political and economic power shifts away from the transatlantic community and moves eastward towards the emerging

economies of the Asia-Pacific region.

Furthermore, wider developments such as the emergence of cyber and space as operational domains mean that future threats to NATO may come from actors far beyond the Alliance's borders.

While China is not seen as posing an imminent military threat to NATO in the High North specifically, Allied officials did observe that Beijing continues to promote itself as an important stakeholder in the Arctic region more generally. This includes investment in icebreakers – including interest in possible nuclear-powered designs – and plans for future exploitation of shipping routes to Europe opened up by the receding ice-sheets. China has also been investing in Russian infrastructure and commercial interests in the region, meaning that it is expected to have an increased interest in security issues in the High North in future decades.<sup>27</sup> Growing Chinese interest and investments in Greenland were also reported to have raised particular concerns for defence officials in Denmark and the US.<sup>28</sup>

Indeed, stepping away from the High North specifically, Allied officials also noted that China is already beginning to pose a number of direct challenges to NATO security below the threshold of armed conflict. This includes through cyber operations, espionage, technology theft, and the increasing influence of Beijing over global supply chains for

23 For further discussion of differing European perspectives on whether and how to operationalise the mantra of 'European strategic autonomy', see Järvenpää et al. (2019).

24 US DOD (2018).

25 NATO CCDCOE (2019).

26 Dou (2019).

27 Nilsen (2019); Goodman & Maddox (2018).

28 In addition to acquiring stakes in the mining of rare earth minerals in Greenland, Chinese state-owned companies have in recent years attempted to buy up a former US military base on the autonomous Danish territory. They have also lobbied the local Greenlandic authorities to allow Beijing to finance and build several new airports on the island, raising concerns both about the potential security threat to the US Air Force base at Thule in Greenland, as well as the more indirect and long-term challenge of growing Chinese influence over the local economy and politics. Cf. Mehta (2018); Gronholt-Pedersen (2019).

key materials, components and enabling technologies used in defence production and elements of critical infrastructure in Europe.

Importantly, Norwegian and Allied officials also highlighted the need for NATO strategy to consider the implications of a changing dynamic between China and Russia.

While the two nations have demonstrated increasingly close relations in recent years, including through the conduct of joint military exercises,<sup>29</sup> it remains to be seen how the relationship between Moscow and Beijing will evolve in the medium- and long-term – as well as what the knock-on effects could be for NATO's position relative to both powers.

In recognition of all of the above, in December 2019 the NATO Allies agreed to acknowledge China as an issue of collective concern for the first time. The London Declaration signed at the NATO Leaders Meeting on 3–4 December explicitly identified China as a future area of focus for the Alliance, while carefully adopting neutral language that reflects the enduring differences in threat assessments and policy towards Beijing of the kind identified through this study.<sup>30</sup>

#### **2.1.7. Leading Allies also recognise the evolving challenges posed by terrorism and non-state actors, with NATO acting in support of national responses**

In addition to the threat of potential hostile state action by Russia or China, both Norwegian and Allied officials consulted for this study also emphasised the enduring and evolving challenges posed by non-state actors.<sup>31</sup> This includes the security threats

posed by violent extremist organisations, both within NATO nations themselves as well as in contributing to conflict and instability in other regions of the world. Allied officials also highlighted the importance of tackling the security implications of the nexus between terrorism and organised crime networks, as well as the growing problems posed by cyber-criminals and hacktivists. Looking to the future, novel technologies and tactics offer new opportunities for non-state actors to deliver kinetic or non-kinetic effect, both to harm or intimidate civilian populations, as well as potentially to target and disrupt NATO forces in the High North themselves. There is also the potential for state actors to fund, equip and exploit non-state actors as local proxies, including as part of deniable operations to subvert or exert influence on NATO Allies below the threshold of armed conflict.

While recognising the significance of non-state threats for these reasons, Allies also broadly agree that this challenge should be addressed primarily at the national level, given it falls within the remit of individual NATO Allies to maintain their own internal security and societal resilience. Allied officials did however recognise an important role for enhanced cooperation among Allies as well as between NATO, the EU and other multinational organisations to tackle terrorism, cybersecurity and other issues. In turn, more agile and robust national responses to the various security threats posed by non-state actors would contribute to the overall deterrence and defence posture of NATO, allowing the Alliance to focus on more existential threats posed by state militaries and on the core tasks of collective territorial defence.

29 The Economist (2018a).

30 In the London Declaration, the Heads of State and Government assembled for the North Atlantic Council agree: 'We recognise that China's growing influence and international policies present both opportunities and challenges that we need to address together as an Alliance.' Cf. NATO (2019c).

31 NATO (2019a).



## 2.2. Allied perspectives on NATO's challenges in the North and East

### 2.2.1. Norway and key Allies share a similar assessment of the pressing challenges to deterrence and defence on NATO's northern and eastern flanks

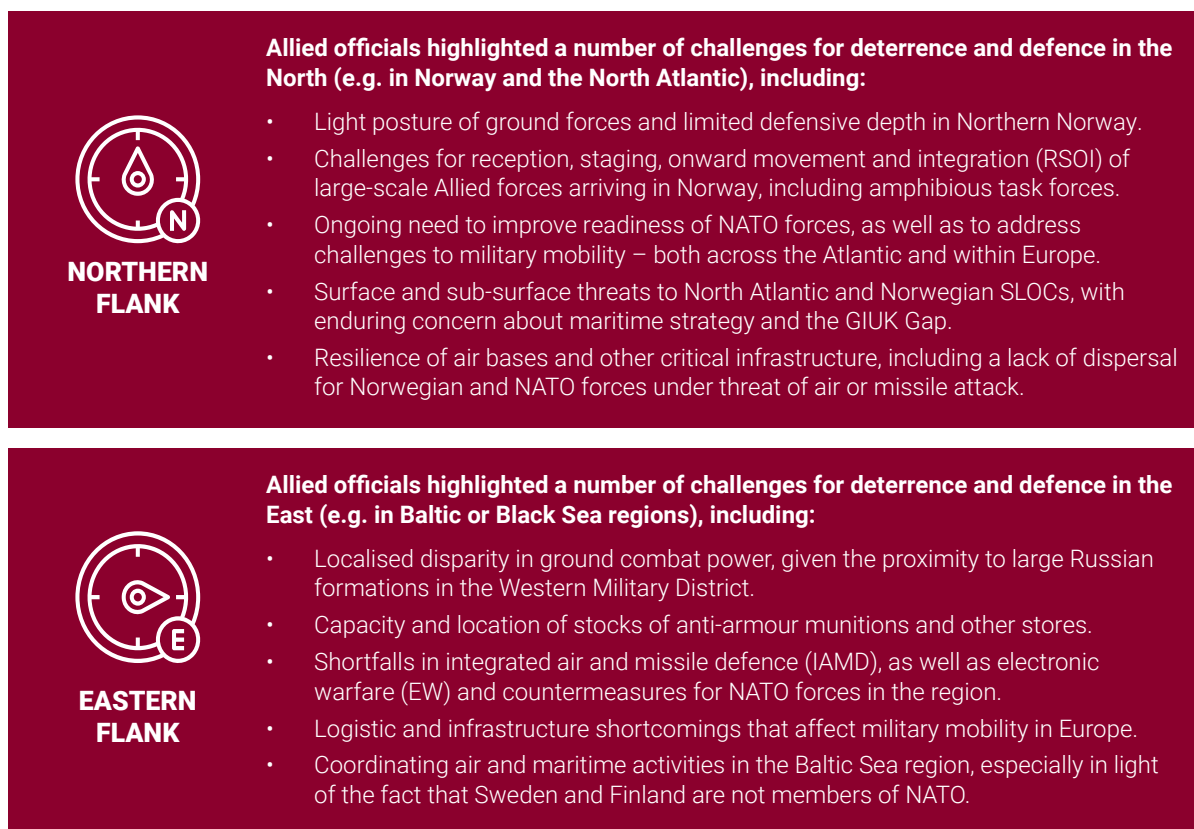
Reflecting on the potential internal and external drivers of conflict discussed above in Section 2.1, the Allied officials consulted for this study were asked to offer their perspectives on the most pressing strategic challenges for deterrence and defence on NATO's northern and eastern flanks. Findings indicate a broad convergence among the selected key Allies and Norway's own assessment of the challenges facing NATO in this regard. Figure 2.5 outlines a summary of Allied perspectives on the differing

challenges on the Alliance's two closely linked flanks in north-eastern Europe.

### 2.2.2. Allies also stress the importance of a 360° perspective on NATO security beyond the High North, with a role for Norway on the southern flank

At the same time as noting the unique and pressing challenges facing NATO in Norway's immediate neighbourhood, Allied officials also highlighted the need for adopting a 360° perspective on NATO's security challenges. This includes recognising the interlinkages not only between threats to the north and east, but also the strategic challenges posed both by drivers of conflict and instability around Europe's southern periphery (e.g. in the Balkans, or the Middle East, North Africa and Sahel).

**Figure 2.5. Selected Allied perspectives on challenges to NATO in North and East**



Source: RAND interviews with selected Allied nations and NATO institutions (2019).

In considering the future of Alliance strategy, officials suggested different perspectives on how exactly NATO should prioritise between challenges on each flank. These nuances reflected differences in individual Allies' geo-strategic positions and national priorities.<sup>32</sup>

A recurrent theme, however, was to caution against framing the commitments of NATO or individual nations in different regions as being mutually exclusive, or as detracting from attention on strategic challenges in other areas. Rather, Allied officials emphasised the many complex interlinkages between threats in multiple regions – noting, for example, the interconnected strategic and security impacts of recent Russian interventions in Syria, Libya and sub-Saharan Africa. A number of Allied officials noted that Norway has demonstrated a commitment to addressing this full suite of threats;<sup>33</sup> as well as of considering NATO's posture and operations on different flanks as contributing holistically to the overall cohesion and credibility of the 29-strong Alliance.

## 2.3. Allied perspectives on NATO strategy and key missions

### 2.3.1. There is a broad convergence between key Allies and Norway on priorities for NATO strategy in the High North

Conscious of the complex threats and challenges outlined in Sections 2.1 and 2.2, Allied officials recognised the value of

continuing to develop theatre-wide strategies and plans for NATO's defence of north-eastern Europe. Given the interlinkages between challenges in different regions, as noted above, this includes the Baltic up to the North Cape and considering also the impact on non-NATO partners such as Sweden and Finland.<sup>34</sup> When considering what the priorities should be for any future such NATO strategy in the High North, Allied officials emphasised the importance of:

- **Developing more integrated planning for the defence of the entire Nordic and Baltic region**, particularly improving coordination of plans and C2 in the air and maritime domains, as well as the capacity to operate alongside non-NATO partners such as Sweden and Finland if required.
- **'Minding the Gaps' to secure North Atlantic and Norwegian Sea SLOCs** from surface and subsurface threats that could limit the ability of NATO's naval and amphibious forces to provide support to Norway in the event of a crisis (considering both the GIUK and Bear gaps).
- **Enhancing collective Allied and partner operational capacity**, including through a reinvigorated exercise programme to prepare for large-scale warfighting in territorial defence scenarios, as well as the ongoing maturation of new NATO, joint and national formations, such as Joint Force Command Norfolk, the US 2<sup>nd</sup> Fleet, and the UK-led Joint Expeditionary Force (JEF).

32 For example, French officials were the most vocal advocates for Allies enhancing their contributions to security initiatives in the Mediterranean and Sahel. Other nations typically prioritised the eastern flanks, in particular the Baltic Sea, though even officials from countries in that region (i.e. Denmark, Germany) emphasised the importance of addressing out-of-area threats – both because such threats warrant attention on their own merit, and also because tackling such issues makes a wider contribution to overall NATO security and cohesion. Similarly, France is also recognised as having boosted its own engagement with the northern and eastern flanks since 2014.

33 Officials agreed that Norway had made significant and valued contributions to NATO operations in Libya in the 2011 campaign, and to counter-insurgency, stabilisation, and training efforts in Afghanistan since 2002, and that these in turn reinforced Norway's credibility and standing within the NATO Alliance.

34 See also Tamnes (2018).

- **Maintaining and exercising key naval, air and amphibious capabilities** for the initial defence and rapid reinforcement of Norway in the event of a crisis, including the US Marine Corps, UK Royal Marines and other JEF (Maritime) forces.
- **Strengthening national and collective resilience against emerging threats in cyber and space**, and continuing to build NATO's capacity and capabilities for conducting operations in the fourth and fifth operational domains to be recognised by the Alliance.

In this regard, consultations with Allied officials identified no major areas of divergence in key Allies' thinking about NATO strategy. One potential exception to note, based more on political sensitivities than differences in strategic culture, is ongoing disagreement among some NATO Allies about the extent to which the Alliance should be taking a proactive stance in the Arctic, as opposed to nations working through other bodies such as the Arctic Security Forces Roundtable (ASFR) or the Arctic Council.<sup>35</sup> These disagreements over the best diplomatic and institutional approach reflect the unsettled status of Arctic

waters, given competing national claims to an extended continental shelf and economic rights in the region; as well as nuances in how different Allies seek to balance cooperation and competition in the Arctic to de-risk escalation. Nonetheless, despite these enduring political sensitivities within NATO, Allied officials noted that the remit of Supreme Allied Commander Europe (SACEUR) is clear: their area of responsibility stretches north–south all the way from the North Pole to the Tropic of Cancer.

### 2.3.2. Key Allies and Norway also share similar perspectives on the key missions for NATO in the region

Given the convergence in Allied and Norwegian perspectives on the high-level priorities for Alliance strategy in the High North, it is perhaps not surprising that Allied officials also provided similar assessments as to the key missions that NATO should be capable of conducting to enhance deterrence and defence on its northern flank. While officials from individual Allied nations placed subtly different weighting on the importance of each mission, a common set is presented in Table 2.1.

35

A number of Allied officials suggest Canada has been especially reluctant to have the Arctic region addressed in a formal NATO context, given concerns both over Canada's own sovereignty in the North and how a greater NATO role could be perceived by Moscow. However, this stance may be shifting as Canadian concerns about Russian military activities in the Arctic have grown. Several other nations continue to push for certain topics to be considered primarily through smaller groupings of likeminded nations – such as the ASFR – or meetings of chiefs of defence from Arctic nations only; however, as these have excluded Russia since 2014, some other stakeholders argue that the best route to strategic stability and consensus might be an increased future role for the Arctic Council – which does include Moscow but does not address security topics in its remit – or for other cooperation bodies such as the Barents Euro-Arctic Council. Cf. Charron (2017); HCDC (2018); Pincus (2019); Blanchfield (2019).

**Table 2.1. Selected Allied perspectives on missions for NATO in North and East**

Category	Key NATO Missions	Geographic Focus
<b>DETER OR DEFEAT AGGRESSION</b>	Deter or defeat military aggression against NATO's eastern flank	Estonia, Latvia, Lithuania, Poland
	Deter or defeat military aggression against Norwegian territory, airspace and waters	Norway and High North
<b>CONTROL LINES OF COMMUNICATION</b>	Defeat threats to Allied maritime operations and reinforcements (sea control)	North Atlantic Ocean, Norwegian Sea, Barents Sea, North Sea, Baltic Sea
	Hold at risk or disrupt adversary's maritime and air operations (sea denial)	Barents Sea, Kola Peninsula
<b>ENSURE SITUATIONAL AWARENESS</b>	Maintain awareness of adversary's military activities and other relevant developments	Alliance-wide, but particularly in relation to Russia's Western and Northern Fleet OSKs
<b>PROMOTE COHESION AND RESILIENCE</b>	Detect, assess and counter adversary efforts to disrupt, divide or coerce populace and governments	Alliance-wide

Source: RAND interviews with selected Allied nations and NATO institutions (2019).



## 2.4. Summary

The following box presents a summary of findings presented throughout the course of Chapter 2.

### Box 2.1. Summary of selected Allied perspectives on NATO in the High North

- Allied threat assessments of the High North consider the most significant threat to be horizontal escalation of a crisis or conflict triggered in another region. Allied officials highlight the strategic importance of the High North to Russia's Bastion Defence as the potential trigger for horizontal escalation. Environmental and geopolitical developments provide other internal and regional drivers for potential conflict, though Allies' primary focus remains on external threats.
- The Norwegian and Allied officials consulted share a common threat assessment regarding Russian capabilities and intent in the High North. Improved Russian capabilities mean that Norwegian and NATO strategy must plan for possible future operations in a highly contested environment, while also recognising the enduring internal and structural challenges that Russia itself faces.
- While recognising the need to consider the strategic implications of a rising China, Allied perceptions of the urgency and scale of this challenge differ. Norway and the Allies consulted also recognise the evolving challenges posed by terrorism and non-state actors, with NATO seen as having a support role to primarily national responses.
- Norway and key Allies also share a similar assessment of the pressing challenges to deterrence and defence on NATO's northern and eastern flanks. To varying levels, Allies also stress the importance of a 360° perspective on NATO security, with a role for Norway on the southern flank and beyond.
- There is a broad convergence between consulted Allies and Norway on priorities for NATO strategy in the High North. Key Allies and Norway also share similar perspectives on the key missions for NATO in the region.

Building on this analysis of Allied perspectives on the threats and challenges facing NATO in the High North, as well as the wider context of NATO strategy and missions on the Alliance's northern and eastern flanks, Chapter 3 considers Allied perceptions of priorities for Norwegian national defence.

## 3 Allied Perspectives on Strategic Considerations for Norway

This chapter outlines selected Allied perspectives on Norway's important strategic roles within NATO, including how Norwegian contributions enhance not only national security but also the collective deterrence and defence posture of the wider transatlantic Alliance. This includes considerations of external, international perceptions of Norway's areas of particular strength as a defence player – be it when operating close to home, or when deploying further afield in solidarity with NATO Allies in the Baltic States or on out-of-area operations. The chapter then concludes by presenting Allied perspectives on the most pressing strategic challenges and opportunities facing Norwegian defence strategy, both in the near term and looking ahead two or more decades into Norway's future.

### 3.1. Allied perspectives on Norway's strengths and role within NATO

#### 3.1.1. Perceptions of any nation's contributions and role within NATO matter, affecting the credibility both of national strategy and deterrence

Potential adversaries must perceive a nation's or alliance's defence capabilities to be credible, if they are to be deterred from aggressive courses of action. Partners and allies must similarly perceive each other as competent, reliable and committed, in order to maintain

bonds of trust and avoid tensions over burden-sharing. Those who seek to undermine NATO recognise that achieving cohesion and coherence among 29 Allied nations – in the face of practical barriers to interoperability and differences in national priorities and strategic culture – is both the Alliance's greatest challenge and its source of strength. Individual nations must also have their own internal dialogue within domestic institutions and the general public, so as to determine their own national orientation and how they see themselves in an Alliance context. Importantly, these perceptions are subjective, fluid and contested: how a nation such as Norway sees its own role on the world stage may differ significantly from how its friends or rivals perceive it. If Norway fails to appreciate these important differences between how it perceives its own actions and how they are taken by its partners and allies, as well as its potential adversaries, it becomes increasingly difficult to design effective defence engagement, strategic communications or a national deterrence posture.

To provide such a mirror to the Norwegian MOD's own self-perceptions about national defence strategy and policy, the following sections outline selected Allied perspectives on Norway's defence capabilities, contributions and unique role within NATO. These are derived from field visits and engagements with officials

in Denmark, France, Germany, the UK, the US, and NATO institutions.

### **3.1.2. NATO forms an indispensable pillar of Norwegian defence and security, and in turn benefits from Norway's active contributions to the Alliance**

In a world marked by interconnectivity, complexity and change, it is not possible to insulate Norwegian society from wider regional and global trends. In the event of any armed conflict, the deployment of Allied reinforcements by air and sea to defend Norway would be essential, given the relatively small size of the Norwegian Armed Forces and the vast areas of land, coastline and territorial waters to protect. Norway must therefore invest in and leverage its alliances, partnerships and participation in multinational organisations if it is to maximise its impact and influence as a small nation.

In the defence context, Norway's most important connections are through its membership and active participation in NATO. Other multinational frameworks such as the Nordic Defence Cooperation (NORDEFCO), the Northern Group or the Joint Expeditionary Force, or bilateral initiatives with individual Allies such as the UK or US are also significant.<sup>36</sup> Norway also engages with European defence programmes as a third country outside the EU, and remains involved in shaping initiatives through the European Defence Agency and other mechanisms. Each of these frameworks has its own purpose, as well as its unique benefits and drawbacks, but

none are intended as – or capable of being – substitutes for NATO. As well as forming the all-important political basis for deterrence and collective defence, NATO provides the command structures, plans and other mechanisms for putting that into practice. The Alliance cannot deliver these outputs without sustained contributions from individual nations. For Norway this means continuing to demonstrate political solidarity as well as investing in the necessary capabilities, posture and plans.

### **3.1.3. Leading Allies perceive Norway as having an impressive mix of high-end capabilities for a nation of its size, and a mature Total Defence Concept**

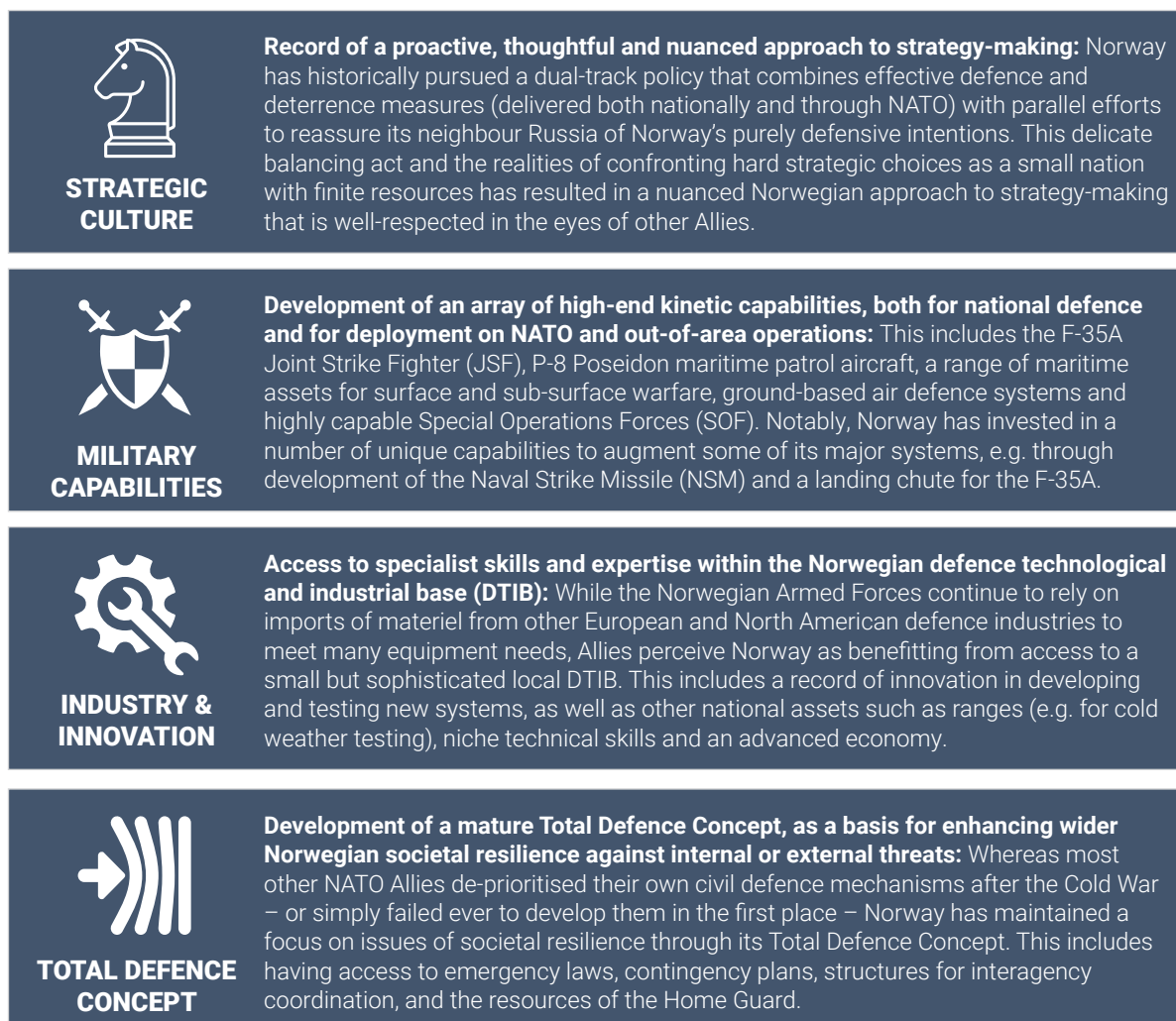
Allied officials consulted for this study share a common perception of Norway as having well-trained, equipped and respected Armed Forces with access to an array of high-end capabilities. This includes cutting-edge new systems recently acquired and brought into service (or expected soon) under the latest iteration of the Norwegian Long-Term Plan.<sup>37</sup> While many of these systems are only available in limited numbers compared to Norway's larger NATO Allies – such as the US, UK or France – in qualitative terms the country is seen as being able to 'punch above its weight' by possessing an impressive array of capabilities that position Norway as a medium power within the Alliance.

The following figure outlines specific areas of perceived strength as reported by Allied officials:

<sup>36</sup> For a discussion of NORDEFCO's evolution see Efstad (2018).

<sup>37</sup> Norwegian MOD (2016).

**Figure 3.1. Selected Allied perceptions on areas of strength for Norwegian national defence**



Source: RAND interviews with selected Allied nations and NATO institutions (2019).

While impressive, Norwegian capabilities and readiness in all of these areas may not be necessarily sufficient to address all short-term pressures, or to safeguard Norway against all potential future scenarios. As discussed further below, there are many areas where Norway is perceived by a number of key Allies as being 'ahead of the curve' (e.g. in recognising the importance of effective air and missile defence, or in investing in a Total Defence Concept, including to counter sub-threshold threats), but still requiring more

effort to bolster this position further. In part, this reflects how far some other NATO Allies have allowed their own capabilities in these areas to erode over the last two decades – and therefore represents a perception that Norway, in relative terms at least, has proven more successful in retaining its focus on capabilities that are of greatest relevance to territorial defence. At the same time, this also reflects a recognition by the consulted Allies that the wider security environment has deteriorated in recent years and is projected to pose new



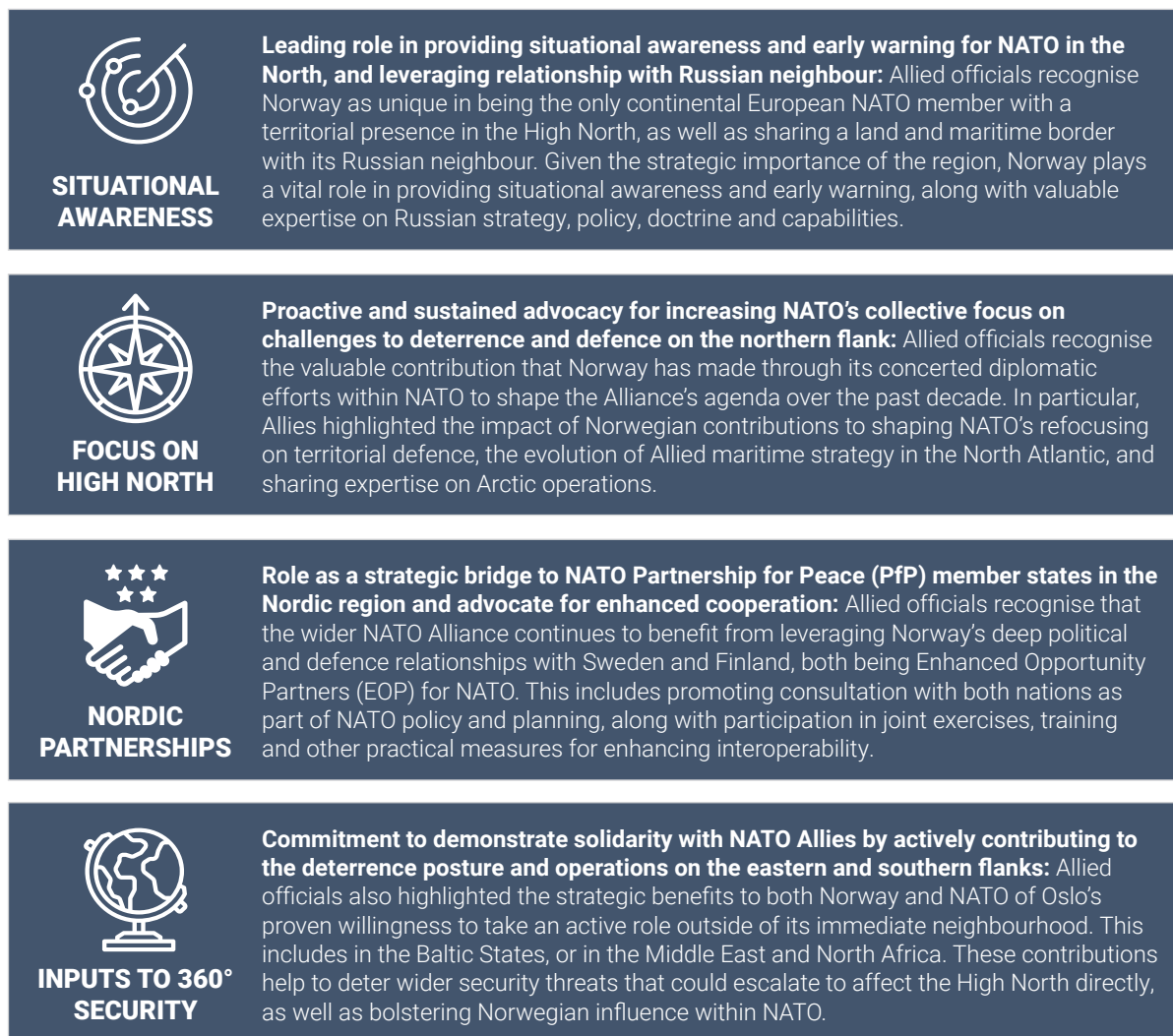
strategic challenges in future (see Chapter 2), necessitating further investment to go beyond the existing capabilities at Norway's disposal.

#### 3.1.4. Leading Allies also recognise that Norway plays an important strategic role within NATO, both in its own neighbourhood and further afield

Allied officials emphasise that Norway not only possesses a number of national capabilities of relevance to NATO, but also continues to play

a valued wider role in shaping the evolution of the Alliance itself. This is reflected in Allied perceptions of an important – and in some respects unique – part for Norway to play in contributing to NATO's political agenda and shaping the priorities for the Alliance's strategy, policy and planning. Figure 3.2 outlines some of the most important aspects of Norway's perceived role within NATO, as reported by Allied officials.

**Figure 3.2. Selected Allied perceptions on Norway's strategic role within NATO**



Source: RAND interviews with selected Allied nations and NATO institutions (2019).

Allied perceptions of Norway's role within NATO reflect a combination of historical, geo-strategic and political factors. Norwegian involvement in the past evolution of Alliance structures, policies and plans is well-documented, with Norway having been a founding member of NATO in 1949 and a significant contributor to deterrence and collective defence of the High North throughout the Cold War.<sup>38</sup> Crucially, when the Alliance was formed, Norway was both the only NATO nation to share a border with the Soviet Union, and still fresh from the experience of invasion and occupation in the Second World War. These factors necessitated a dual-track approach to deterrence and reassurance. Though the Cold War has since ended and relations with neighbouring Russia have evolved, this balanced approach is reflected in Norway's continuing policy of not permanently basing any NATO forces on its territory during peacetime,<sup>39</sup> or allowing any nuclear weapons to be stationed on Norwegian soil. While NATO's eastward enlargement since 1990 has increased the number of Allies who share land and maritime borders with Russia, Norway remains the only European nation with a territorial presence directly on NATO's northern flank. This entails a unique strategic role, with a number of Allied officials consulted referring to Norway as in many ways representing 'NATO in the North'.

This includes recognition of Norwegian expertise on High North issues – including Arctic operations – as well as a strong understanding of its Russian neighbour and an

awareness of the benefits of coordinating more broadly with nations and institutions beyond NATO (e.g. the Northern Group, or bilaterally with Finland and Sweden) to promote security in the region. Geographic realities, a lack of strategic depth, and the asymmetry in the military forces of Norway and its Russian neighbour also dictate a strong Norwegian focus on ensuring that NATO is able to secure vital sea lines of communication in the North Atlantic as the basis for deploying Allied reinforcements into Norway in a crisis.<sup>40, 41</sup>

### **3.1.5. Allies recognise Norwegian contributions on the eastern and southern flanks as delivering important benefits to Norway and NATO alike**

Many of the Allied officials consulted expressed a nuanced understanding of whether Norway should ultimately be seen as a 'net security importer' or 'exporter' within NATO. It is certainly true that Norwegian national interests are served directly by Oslo's continuing efforts within NATO over the past decade to re-focus Alliance thinking on territorial defence and maritime strategy. However, such a re-focus has also been valued by other key Allied nations, including by some of those who themselves de-prioritised these topics during the 2000s when NATO's primary focus was on expeditionary and counter-insurgency operations.

A number of Allied officials also noted that Norway is seen as an active contributor to wider NATO security and operations beyond its own immediate neighbourhood. This

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38 NATO (2019d).

39 This policy does not preclude a rotational presence; indeed, with over 700 US Marines providing an enduring presence, the policy has continued to evolve, even within the last year.

40 Lund (1989).

41 In turn, geographic realities also help influence different Allied perceptions on the significance of Norway to their own national interests. For example, Norwegian waters are a key source of oil and gas imported to the UK via pipelines, while the airspace around Norway would provide Russia with the most direct approach if striking the UK.

includes significant Norwegian contributions to NATO operations in Afghanistan and Libya in 2011, as well as ongoing participation in the Enhanced Forward Presence in the Baltic States. Outside of NATO structures, Norway is also seen to be actively contributing to United Nations and other missions, for example by deploying ground and air forces in support of peacekeeping operation MINUSMA in Mali.<sup>42</sup>

A strong and recurrent theme across the Allied officials consulted was that Norway's continued commitment to securing NATO against potential threats on all flanks – not just in Norway's own backyard – is essential. Such contributions not only help to prevent wider international threats or crises from escalating to a point where they have a direct impact on Norway's own sovereignty and security, but also reinforce the principle of solidarity among all NATO Allies, and build corresponding influence for Oslo to promote its own strategic objectives and priorities within the Alliance.

## **3.2. Allied perspectives on challenges for Norwegian strategy**

### **3.2.1. Norway faces a range of challenges at different levels: political, strategic-military, and in the context of sub-threshold threats to Norway's resilience**

While Allied officials recognise the mutual benefits of an active and engaged Norwegian contribution within NATO, they also highlight a number of challenges for Norway to confront. These challenges – and the extent to which they are overcome – will shape the future evolution of Norway's national defence strategy and Alliance role.

The following sections outline a summary of Allied perspectives on the perceived challenges facing Norwegian deterrence and defence at the political level; the strategic-military level; and in the context of wider security threats to societal resilience below the threshold of armed conflict. These reflections are intended to complement Chapter 2's broader discussion of challenges to NATO's deterrence and collective defence posture on its northern flank. Consideration of strategic challenges through both a national and a collective lens informs the subsequent analysis of strategic options for future Norwegian defence in Chapter 4.

### **3.2.2. Perceived challenges at the political level include: maximising the benefits of Norway's key defence relationships while hedging against uncertain change**

At the political level, Allied officials reported a number of important challenges for future Norwegian defence strategy and policy to consider. Some of these stem from recent political developments within NATO and the resulting pressure on Norway to address certain priority issues in the short-term – for example, heightened pressure from the US on European allies to increase their defence spending, or the emergence of a range of new EU defence initiatives following the UK's decision to leave the bloc.<sup>43</sup> Others reflect fundamental structural changes in the global geopolitical system that affect the long-term courses of action open to Norway and other Allies. These include the rise of China and other emerging economies; the impact of new social and technological trends (such as the advent of artificial intelligence, or the ongoing digitalisation of modern life); and the direct and

<sup>42</sup> Norwegian Government (2019a).

<sup>43</sup> Black et al. (2017).

indirect effects of climate change on defence and security issues.<sup>44</sup>

Against this evolving backdrop, Norway must seek to balance risk and opportunity, and position itself to pursue its strategic objectives through its national and NATO defence contributions, while recognising that future outcomes will also be shaped by external factors outside of its control. Pressing questions for the Euro-Atlantic community at large include, for example, considerations over how best to re-balance transatlantic burden-sharing; and how – and to what extent – to enhance European strategic autonomy at a time when the US appears to prioritise the Pacific in its long-term strategy. For Norway specifically, questions also arise over how to strike the appropriate balance between the country's economic interests in pursuing close ties with certain nations, alongside needs of national security and Norwegian influence in NATO.

Underpinning all of these short- and long-term challenges is a common theme of increasing uncertainty, complexity and speed of change. The result is a confluence of different issues that individually pose difficulties for Norwegian defence strategy and planning, but which in combination pose serious questions about how to position Norway to hedge against multiple potential future scenarios in a fast-changing security environment.

### **3.2.3. The political and institutional landscape through which Norway must implement its defence strategy is complex, as partnerships continue to evolve**

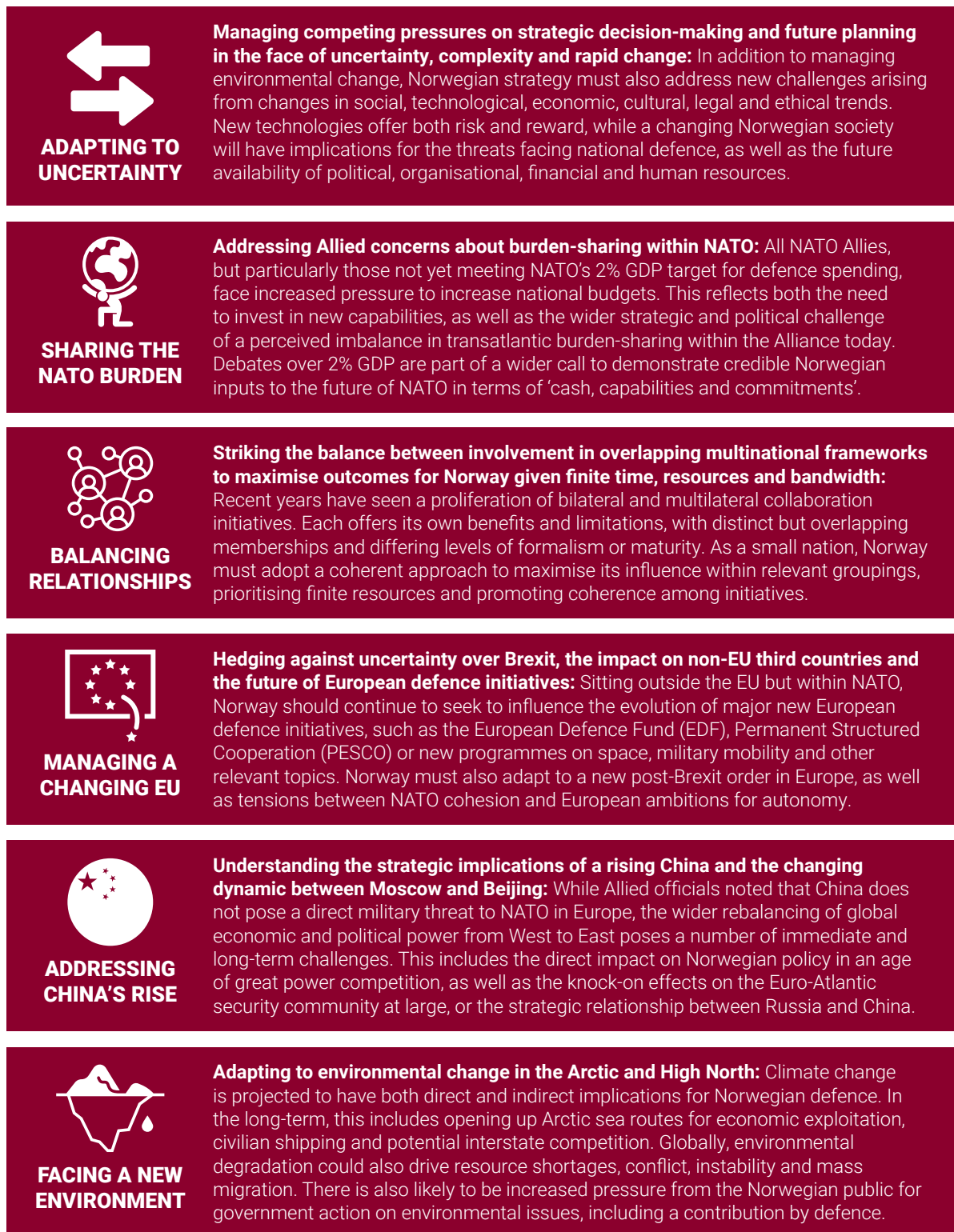
It is not only the strategic challenges facing Norway that appear complex, multi-faceted and interconnected. As outlined in Figure 3.3, multiple new collaborative defence frameworks outside of NATO structures – though often

involving a number of key NATO Allies alongside Norway – have emerged in recent years. These 'mini-lateral' groupings seek to provide a basis for smaller, more agile clusters of like-minded nations to act quickly on issues of common interest. Ideally they achieve this through shared strategic culture, flexible structures and a more targeted scope or mandate.

While groupings such as the Northern Group or JEF do not purport to offer a substitute for NATO's extensive planning, command structures or treaty obligations, they do offer a number of potential advantages to Norway. This includes the opportunity to shape the strategic thinking, policies and investments of major allies such as the US, UK or France, as well as to enhance interoperability through joint planning, training or exercises. In the case of the UK-led JEF, or possibly in future the French-led European Intervention Initiative (E2I), this may also include a framework for a group of likeminded allies to deploy forces or take other joint action to deter or otherwise address an emerging security crisis, short of triggering a full NATO Article 5 response. In addition to agility of response, mechanisms such as the JEF also provide an opportunity for Norway to engage some of its key non-NATO partners – including Sweden and Finland – in practical preparations for joint operations through a Framework Nation Concept in the Baltic Sea or elsewhere.

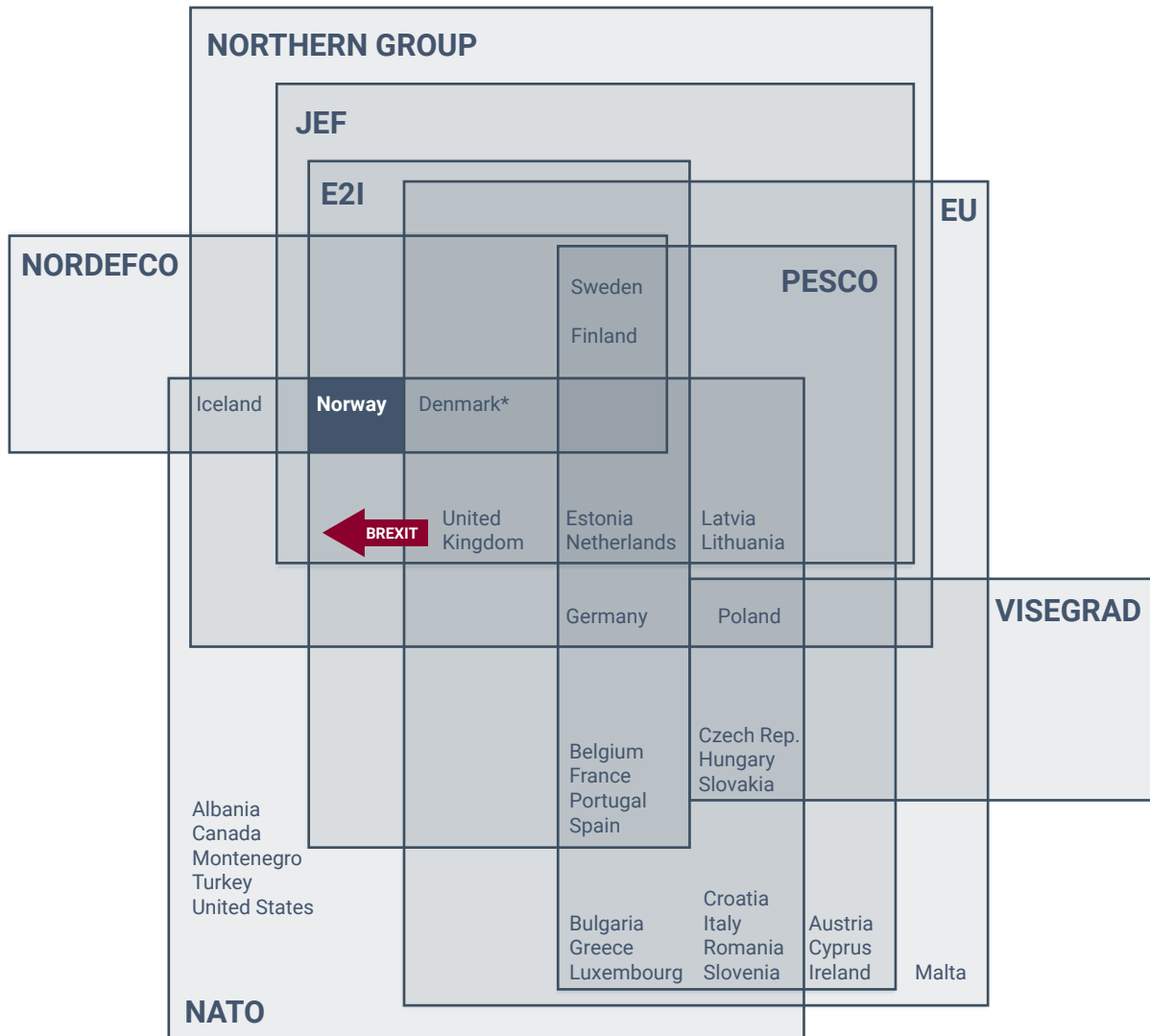
At the same time, while Norway stands to benefit from taking a leading role in shaping the evolution of these and other multinational frameworks, such initiatives also impose their own strains on the design and implementation of Norwegian defence strategy. Managing relationships with key Allies in an increasingly complex web of interdependent bi- and



**Figure 3.3. Allied perspectives on key challenges for Norway at the political level**

Source: RAND interviews with selected Allied nations and NATO institutions (2019).

**Figure 3.4. Euler diagram of Norway's membership in overlapping European defence frameworks**



Source: RAND analysis, adapted from Le Gleut & Conway-Mouret (2019). Note: While it is a member of the EU, Denmark (marked \*) has an opt-out from participation in its Common Security and Defence Policy (CSDP).

multilateral defence partnerships (see Figure 3.4) poses challenges for Norwegian planning and defence diplomacy. Getting the most out of each initiative also imposes its own demands in terms of staffing, resourcing and other impacts on Norwegian forces, for example in terms of platform availability, or training and exercise commitments. Crucially too, there is a risk that poor coordination could

serve to undermine the overall coherence of NATO, if not carefully managed.

These and related questions do not imminently require definitive answers, but Norwegian strategy must be cognisant of the effect of short-term political decisions – or indecisions – on opening up or closing off certain options for Norway to exert influence within collaborative defence frameworks in future.

### 3.2.4. Perceived challenges at the strategic-military level include: enhancing the readiness and resilience of Norwegian forces to deter aggression, alongside the capacity to receive Allied reinforcements in the event of a future crisis

At the strategic-military level, Allied officials reported a range of other challenges for consideration in Norwegian defence strategy and policy. While there are also important issues for Norway to address at the operational- and tactical-level, these are outside the scope of this study and are not listed here.

The primary challenges identified by Allied officials fall into two broad categories:

- Challenges relating to enhancing Norway's own sovereign capabilities for deterrence and defence;
- Challenges relating to enhancing Norway's ability to receive, host, support and operate alongside large-scale NATO reinforcements in the event of a major crisis.

The two categories should not be seen as mutually exclusive. Norway does not face a straightforward choice between investing in policies or capabilities of relevance to national defence, versus those of relevance to collective defence. Instead, they are interconnected: actions that enhance Norway's ability to deter aggression and defend itself against attack

or intimidation without the support of Allies in turn contribute to NATO's collective deterrence posture. Similarly, measures to increase NATO Allies' ability to deploy, train and operate in Norwegian territory also bolster the country's national defence.

Figure 3.5 provides a summary of some of the most pertinent themes at the strategic-military level, derived from RAND's engagements with selected Allied and NATO officials.

As outlined in Figure 3.5, areas of potential challenge according to Allied officials<sup>45</sup> range across all operational domains and cut across any traditional 'stovepipes' within or between different branches of the Norwegian Armed Forces or MOD.<sup>46</sup> Each issue should be of individual concern, but as with the political challenges outlined in Section 3.2.2 it is the interplay between multiple challenges at the strategic-military level that pose the most difficult dilemmas for Norwegian strategy and planning.

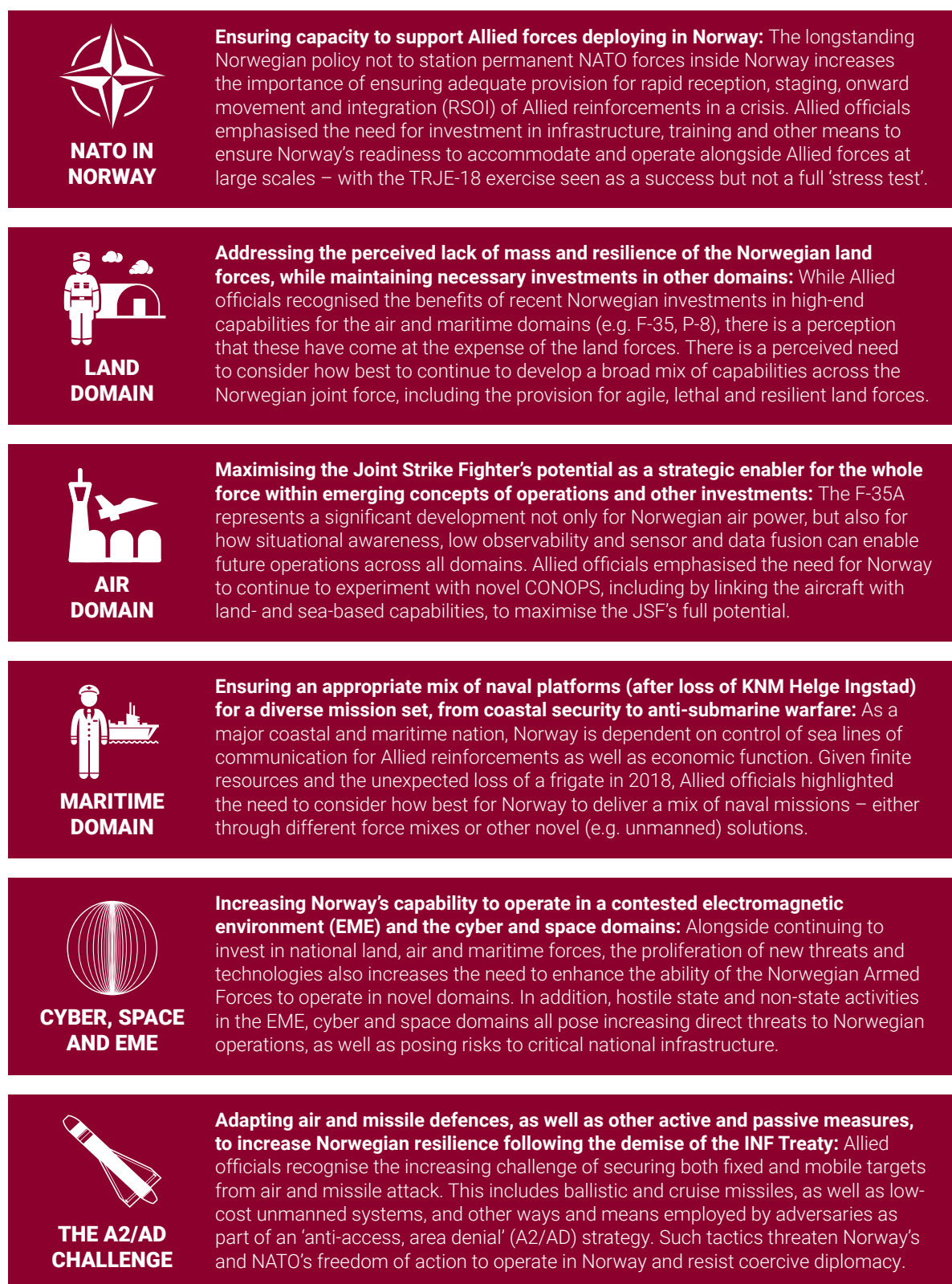
### 3.2.5. Perceived challenges below the threshold of armed conflict include: the need to bolster the Total Defence Concept to address threats both new and old

In addition to the challenges posed by new kinetic and non-kinetic threats to Norway in a time of war, Allied officials recognise the increasing need for national defence strategy

45 Consultations with Allied officials emphasised different nuances depending on each nation's own envisaged role in a NATO response to an Article 5 scenario in the High North, as well as the prominence of Norway in its own defence planning and bilateral engagements. Interlocutors from the US in particular noted the need for Norway to recognise and plan for the sheer scale of any potential US or joint operations in and around Norway; this could exceed the local infrastructure and organisational capacity for Host Nation Support without proper long-term planning and robust exercising and stress-testing of those plans. Both US officials and their UK counterparts expressed specific concerns about aspects of infrastructure, including limited space for allied aircraft, the location of Norwegian F-35s primarily at a single base in Ørland, and the reliability of dispersal options. For officials in France and Germany, by contrast, large-scale deployments of their own national forces to Norway in a crisis were deemed less likely than for the English-speaking countries (given other commitments, e.g. in the Baltic), meaning their focus was primarily on higher level barriers to military mobility rather than specific potential logistic bottlenecks in Norway.

46 Notably, different Allied perspectives on Norway's strategic-military challenges also in part reflect these stovepipes. The focus of US and UK engagement with the Norwegian Armed Forces is through their amphibious, naval and air forces; by contrast, Germany's closest operational ties are with the Norwegian Army, including EFP in Lithuania. However, Germany and Norway have signed a strategic cooperation agreement on joint submarine development, and are also both parties to a Letter of Intent on cooperation on future Multi Role Tanker and Transport Capability (MRTT-C) along with Belgium, France, Luxembourg and the Netherlands.

**Figure 3.5. Allied perspectives on key challenges for Norway at the strategic-military level**



Source: RAND interviews with selected Allied nations and NATO institutions (2019). Note: the Royal Norwegian Navy's frigate KNM Helge Ingstad sank in November 2018 following an accidental collision with tanker Sola TS.



to address a continuum of threats both above and below the threshold of armed conflict. In a NATO context, this also means the task of managing and de-escalating crises both before and after the triggering of an Article 5 response. This reflects a perceived erosion of the distinctions between 'war' and 'peace', or 'home' and 'abroad'.<sup>47</sup> In this strategic context, hostile state and non-state actors seek to gain competitive advantage through intimidation, subversion, covert action, cyber, information operations and other unconventional ways and means.<sup>48</sup> Previous RAND studies have explored Russia's recent record, in particular, in employing a mix of nonviolent subversion, covert violent action and conventional warfare tactics backed by subversion to pursue its strategic objectives short of triggering open conflict.<sup>49</sup>

Allied officials express concern that in future, by exploiting ambiguity and deniability in this way, adversaries may seek to undermine Norway's institutions and societal resilience.<sup>50</sup>

This was a point emphasised especially by the European Allies (i.e. Denmark, France, Germany and the UK), if less prominent in discussions with the US.<sup>51</sup> At the same time, officials were also quick to emphasise that Norway faces a less acute and imminent threat from sub-threshold operations than a number of other NATO Allies, including frontline states on the Alliance's eastern flank. This reflects both perceptions of Norway's resilience in the face of subversion tactics, as well as Allies' recognition of the maturity of mechanisms for implementing an effective Norwegian response. Norwegian society is perceived as largely cohesive; its borders and territorial sovereignty are not in question, having resolved maritime boundary issues with Russia in 2010; and its governance, public institutions and rule of law are seen as robust. Norway's Total Defence Concept is also recognised as a strategic asset, as noted in Section 3.1.3.

Nonetheless, Allied officials noted a number of enduring and novel challenges, as outlined in Figure 3.6.

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47 The Economist (2018b).

48 Carter (2019).

49 For examples of recent RAND studies on this topic, see: Flanagan et al. (2019); Cohen & Radin (2019); Bodine-Baron et al. (2018); Helmus et al. (2018); Robinson et al. (2018); Radin (2017); Connable et al. (2016).

50 A variety of terms have been employed to describe these distinct but overlapping phenomena, such as 'hybrid warfare', 'measures short of war', or operations in the 'grey zone'. While there is no single universal definition, what unites these challenges is the potential for adversaries to act below the threshold of open conflict, frustrating the coherence and speed of any response at either the national or NATO level.

51 The EU Global Strategy (EUGS) includes its own section, for example, on the importance of building state and societal resilience through both national and collaborative efforts. See EEAS (2018). This includes coordination with NATO, with both institutions contributing to the European COE for Countering Hybrid Threats in Helsinki.

**Figure 3.6. Allied perspectives on key challenges for Norway below threshold of armed conflict**



Source: RAND interviews with selected Allied nations and NATO institutions (2019).

### 3.3. Allied perspectives on opportunities for Norwegian strategy

#### 3.3.1. Leading Allies recognise that Norway has a number of opportunities to leverage its defence capabilities to promote its strategic goals

Allied officials emphasised the importance of Norwegian defence strategy continuing to identify and exploit the opportunities open to the country – that is, to remain proactive in shaping strategic outcomes, rather than merely being reactive to events or the policies and actions of larger NATO Allies or potential adversaries. Indeed, as noted in Section 3.1, Allied officials noted that Norway's record in this regard is a positive one; with the country being seen as having positioned itself to 'punch

above its weight' in terms of its influence, prosperity and security through the astute application of strategy.

#### 3.3.2. Perceived opportunities to leverage Norway's strengths include shaping NATO thinking on topics such as Russia, societal resilience and innovation

Officials specifically noted a number of potential opportunities for Norwegian defence strategy and policy to leverage existing areas of perceived strength. This included:

- **Realising the strategic and operational benefits of Norway's recently acquired new capabilities** (e.g. F-35A, P-8);<sup>52</sup> demonstrating and maintaining their readiness, and ensuring their interoperability with and connectivity to other types of platforms and command

elements in order to maximise their contributions to NATO, in order both to reinforce collective deterrence as well as enhance Norwegian influence and standing within the Alliance.

- **Continuing to share lessons and experiences from what is a unique relationship with Russia;** including a deep level of mutual understanding derived from practical day-to-day cooperation and coexistence; improved situational awareness; and Norwegian subject-matter expertise in Russian operations, capabilities and thinking.
- **Building on the existing strong foundation offered by Norway's Total Defence Concept,** and positioning Norway as a recognised leader on societal resilience issues within NATO.
- **Leveraging Norway's high-tech industry, skilled workforce and unique geography to lead within NATO on innovation in specialist areas** (with Allied officials citing possible examples such as cold-weather operations, manned-unmanned teaming, or advances in mine countermeasures concepts and technologies) both to deliver new capabilities and intellectual property for Norway, as well as to enhance the nation's influence within NATO and other frameworks.

### 3.3.3. Perceived opportunities to leverage Norway's varied partnerships include promoting cooperation among different multilateral groupings and NATO

Allied officials also noted a number of potential opportunities to leverage Norway's extensive

network of bi- and multi-lateral defence partnerships, including both NATO and non-NATO actors:

- **Promoting improved cooperation and coherence between initiatives in NATO, the EU, the Arctic Council, and the various other frameworks of which Norway is an active member** (e.g. the Northern Group, JEF, E2I, NORDEFCO, ASFR etc.). Allied officials cite the possibility of Oslo taking on more of a leadership role within the JEF as one near-term opportunity, as well as noting the potential to continue expanding cooperation with Sweden and Finland with the goal of enhancing interoperability and building capacity for combined, theatre-wide defence.
- **Engaging with the US, UK, Netherlands and Allied Maritime Command (MARCOM) on emerging concepts for amphibious and littoral operations in a contested A2/AD environment.** This includes the possible use of amphibious forces in a sea-denial role operating along the Norwegian coastline with a mix of low signature forces, land-based fires, ISR and agile logistics. Allied officials note that shaping the conceptual and force development of those Allies most likely to be involved in any reinforcement of Norway in any future crisis is important to ensure new concepts are tailored to specific Norwegian requirements (as opposed to operations in Asia-Pacific or other theatres), as well as to enhance levels of interoperability between Norwegian and NATO forces, and to consolidate Norway's role as a partner of choice.

### 3.4. Summary

The following box presents a summary of findings presented throughout the course of Chapter 3.

#### **Box 3.1. Summary of key Allied perspectives on Norway's strategic challenges and opportunities**

- Norway faces a number of pressing challenges across different levels: political, strategic, military and in the context of sub-threshold threats to national and societal resilience.
- Perceived challenges at the political level include maximising the benefits of Norway's key defence relationships while hedging against uncertain change. The political and institutional landscape through which Norway must implement its defence strategy is complex, as partnerships and multinational defence frameworks continue to evolve within Europe. At the strategic-military level, perceived challenges include: enhancing the readiness and resilience of Norwegian forces to deter aggression, alongside the capacity to receive Allied reinforcements in the event of a future crisis.
- Below the threshold of armed conflict, Allied officials recognise the importance of continuing to bolster the Total Defence Concept to address threats both new and old, while recognising that Norway is seen as being ahead of many other Allies in implementing measures for societal resilience.
- Allied officials also report a number of potential opportunities that Norway could seek to exploit through its national defence strategy. Perceived opportunities to leverage Norway's strengths include shaping NATO thinking on topics such as Russia, societal resilience or innovation. Allied officials also highlight the potential benefits that could be accrued for the long-term by leveraging Norway's varied partnerships and promoting cooperation among different multilateral groupings and NATO.

Building on this analysis of Allied perspectives on the key strategic challenges and opportunities facing Norwegian defence strategy and policy in the short-, medium- and long-term, subsequent chapters explore a number of potential strategic options for shaping Norway's and NATO's response.







# 4 Strategic Implications and Options for Norway

This chapter presents a series of potential Strategic Options (SOs) for the Norwegian MOD to consider in its ongoing development of defence strategy, policy and plans. These build directly on the insights gained through RAND's consultation with defence officials to understand Norwegian and Allied perspectives on the strategic challenges facing Norway and NATO, both now and in the coming decades.

## 4.1. Strategic Options (SOs) for Norway

### 4.1.1. Norway and NATO are already taking a range of proactive measures to address current and emerging challenges on the Alliance's northern flank

As already highlighted Chapters 2 and 3, security threats on the Alliance's northern flank have intensified in recent years and are projected to become more challenging in future. The strategic and threat environments are marked by uncertainty, complexity and rapid change; Norway and the High North are not immune from the destabilising effects of wider global trends that continue to pose risks to regional peace, prosperity and security. The Norwegian MOD is already taking action to address known and emerging challenges. It is also seeking to exploit opportunities to deepen bi- and multi-lateral cooperation with Allies and partners; as well as to maximise Norway's contributions to shaping the future of NATO

strategy. This includes ongoing efforts to adapt and enhance Norway's defence plans, forces and posture, as well as investment in new high-end capabilities designed to operate effectively in highly contested environments. Joint training and planning with key Allies have also been expanded and re-focused on deterrence of recognised threats to NATO, without losing sight of the need to assure other parties of the Alliance's non-aggressive intentions.

### 4.1.2. The Norwegian MOD asked RAND to provide an independent assessment of potential options to inform future defence strategy, policy and planning

While existing ongoing initiatives are welcome, the Norwegian MOD also recognises the need to continuously reappraise and refine Norway's defence strategy, policy and plans. This chapter therefore sets out five SOs for consideration as the Norwegian MOD continues to evolve its national defence strategy and configure its wider contributions to collective security within NATO. The SOs are explicitly derived on the one hand from a gap analysis of areas of convergence or perceived difference between Allied and Norwegian perspectives on threats in the High North; and, on the other, from perceived strengths and limitations of national and NATO efforts to promote deterrence and defence in the region. The SOs have been shared and refined through consultation with the Norwegian MOD, though neither RAND nor the Norwegian

**Figure 4.1. Outline of Strategic Options (SOs) for consideration by the Norwegian MOD**

Source: RAND analysis, derived from Allied perspectives in Chapters 2 and 3.

government have yet conducted further analysis, modelling or gaming to refine plans for practical implementation of each of these SOs.

Figure 4.1 provides a high-level outline of the five SOs. Each of these options emphasises a distinct component of Norway's overall approach to defence and security, identifying initiatives that it could undertake nationally – or in collaboration with Allies and partners – to strengthen regional deterrence.

None of these options is exclusive of the others. That is, initiatives could be selected from multiple SOs and implemented without contradictory effects. In this way, the different options can be viewed as mutually reinforcing. That being said, the resources available for defence are finite, meaning choices and

trade-offs are inevitable. There is also a need to strike a delicate balance between deterrence and reassurance – in line with longstanding Norwegian defence policy – and the SOs are designed to be scaled up or down with both political and resource considerations in mind. This also includes continuing to balance national priorities and areas where Norway could add the most value to NATO. It is hoped that these SOs and the discussions in this chapter might help Norwegian policymakers to articulate the strategic effects of these choices, both now and in the long-term.

With these considerations in mind, the following sections provide a more detailed examination of each of the SOs, along with illustrations of potential supporting actions that could help guide future planning.

## 4.2. SO1: Strengthen deterrence in Norway

This section provides more information on supporting actions for SO1, as outlined in Figure 4.2.

**Figure 4.2. Summary of possible supporting actions for SO1**



### SO1: STRENGTHEN DETERRENCE IN NORWAY

Enhance the capability and readiness of Norwegian Armed Forces to deter or defeat aggression in Norwegian territory, airspace and waters.

**SUPPORTING ACTIONS:**

- Develop more robust ISR coverage to ensure situational awareness
- Consider steps to increase the deterrence posture in Northern Norway
- Enhance the protection of bases and forces against air and missile threats
- Maximise the F-35's potential as an enabler for joint operations
- Prepare for operations in contested cyber, space and EM environments

The core mission of the Norwegian Armed Forces is to deter or defeat aggression against the nation's territory, airspace and waters. This fundamental security contribution to the welfare of the Norwegian people underpins all other aspects of national strategy, enabling the pursuit of prosperity, influence and other government policy goals in line with Norway's national interests and values. In turn, a robust national defence posture in Norway provides important benefits to the collective security and credibility of NATO by enhancing deterrence; reducing vulnerabilities on the Alliance's northern flank; and positioning Norway to defeat or at least contain any potential armed

incursion without relying on the arrival of Allied reinforcements that could be employed elsewhere in the European theatre. Allied threat assessments make clear the direct and pressing challenges that Norway faces to this core defence mission, especially given concerning developments in both Russian intent and capabilities. While the primary risk in the High North is seen as horizontal escalation of a crisis emanating from other flanks, the threat is dynamic. The strategic logic of Bastion Defence entails a need for Norway and NATO to be equipped, configured and ready to respond to a range of potential crisis scenarios in the north.

Faced with these challenges, a future strategy that chose to emphasise the strengthening of deterrence in Norway could consider the following possible supporting actions:

### 4.2.1. Develop more robust ISR coverage to ensure situational awareness

Situational awareness is the basis for effective decision-making, both before and during any crisis. While Norway and NATO have considerable assets for intelligence, surveillance and reconnaissance (ISR), there are enduring challenges to providing coverage of an area as large and as inhospitable as some areas within Norway's vast territory, airspace and waters. Potential adversaries are also actively seeking to improve their capabilities to deploy forces and operate without detection, or else to use deception, misinformation and other means to undermine NATO Allies' understanding of the strategic and operational picture. Advanced precision-strike missiles, sophisticated air defence, counter-space capabilities, electromagnetic jamming systems and other threats can make it difficult to gather timely and accurate data about the military situation in contested areas – an issue of particular concern to a country such as Norway, given its physical proximity

to Russian bases and forces, including in the Kola Peninsula. Failure to ensure robust ISR coverage in any future conflict could not only have significant operational and tactical implications, but could also have knock-on effects at the strategic level, such as: frustrating Norwegian and NATO decision-making, and enabling an adversary to seize the initiative and control the tempo of operations.

Accordingly, force planners in other NATO nations are exploring means for conducting ISR in contested environments and providing improved monitoring of remote areas. In the Norwegian context, priorities could include: the northern regions of the country (typified by challenging weather, difficult terrain and relatively limited infrastructure or local population); security threats along Norway's extensive coastline; and the surface and subsurface picture in the Norwegian and Barents Sea, or out to the GIUK Gap. Technological and conceptual advances offer the potential to increase the number, networking and affordability of different sensor nodes to deliver a more robust ISR capability, rather than relying on small numbers of expensive (and potentially vulnerable) traditional platforms. Examples of novel systems with which other Allies are experimenting include: deployment of large numbers of inexpensive, distributed sensors (for instance, unattended ground sensors in border regions, or at sea or on the sea-bed); or use of small, recoverable unmanned air, surface and sub-surface vehicles (UAVs, USVs and UUVs). Norway and NATO could also explore future opportunities to deliver more robust ISR in an increasingly contested, complex and congested High North.

#### **4.2.2. Consider steps to increase the deterrence posture in Northern Norway**

Improved situational awareness is necessary but not sufficient to ensure a robust national

defence. The Norwegian Armed Forces must also continue to develop and deploy the means to act, once a hostile actor or incursion has been detected. Maintaining a mix of capabilities to deliver kinetic and non-kinetic effects at range – for example using air and naval power in the 'deep battle' – is one important aspect of holding an adversary at risk (see SO3 for more detail). At the same time, there is a continuing need to be able to close with and engage hostile forces and, crucially, to be seen by potential adversaries as equipped, ready and willing to do so. Otherwise, deterrence cannot be credible. The presence of ground forces has its own important strategic effects: demonstrating a commitment to protect all areas of a nation's territory; providing a tripwire to deter or if necessary meet any hostile incursion; and presenting defensive options even when effects cannot be delivered through other domains (for instance due to the adversary's use of sophisticated air defences or long-range anti-ship missiles).

While recognising the benefits of high-end air and maritime capabilities that have recently entered service in the Norwegian Armed Forces, a number of Allied officials also emphasise the need for a balanced force across all domains. Particular attention is merited on the question of how best to strengthen the deterrence posture in Northern Norway. This includes considering the optimal size and balance of land forces, as well as their weight, mobility, lethality and survivability to address a range of different potential threats.

#### **4.2.3. Enhance the protection of bases and forces against air and missile threats**

Air and missile defence is not only of tactical and operational significance through its utility in protecting military forces, bases, logistic nodes and other critical infrastructure against attack. Integrated air and missile defence (IAMD) also contributes to the overall strategic

resilience of a nation and its deterrence posture by reducing the risk that an adversary might seek to coerce Norway or undermine its will to fight; or launch a series of long-range strikes to cripple defending forces early in a campaign, before they could be dispersed. Allied officials recognise that the Norwegian MOD is well ahead of most NATO Allies, including the US in some respects, in recognising this challenge. This is reflected in efforts to harden key facilities at military airbases, the acquisition of the F-35, and Norwegian plans to field up to six NASAMS batteries.<sup>53</sup> However, the threat is dynamic and continues to develop at pace, necessitating consideration of further efforts to mitigate risks.

Capacity and cost are also important considerations. Current systems for defending against ballistic missile attacks are not effective against large salvos; nor are they a cost-efficient means of addressing other aerial threats at lower altitudes, such as the use of inexpensive UAVs to deplete, disrupt or overwhelm point defences. NATO Allies therefore face a need to explore alternative IAMD options, such as mobility, dispersal, and counter-C4ISR capabilities. These must be able to mitigate the threat posed by a broad spectrum of ballistic, cruise and aerial threats – including, looking to the future, emerging threats such as hypersonic glide vehicles, loitering munitions or swarming UAVs. Norway and NATO continue to explore how best to maximise resilience against rapidly evolving threats such as these, drawing upon a flexible mix of counter-proliferation, deterrence, counter-force and active and passive defence measures.

#### **4.2.4. Maximise the F-35's potential as an enabler for joint operations**

As NATO air forces gain more experience of operating the F-35 Joint Strike Fighter, they

are realising that it has as-yet unrealised potential as a surveillance platform. The aircraft is equipped with on-board sensors and processing capabilities that can yield valuable, time-sensitive information in highly contested environments. Investing in the development and production of new data links can allow these aircraft to share that information in a timely and secure manner with forces in the air, on land, and at sea. This enables the recognition of the F-35's role as not only a component of air power, but rather as an important strategic enabler for joint operations, both defensive and offensive. The F-35 offers not only incremental advances beyond previous generations of aircraft (i.e. doing the same things better), but entirely new strategic and tactical opportunities (i.e. doing things differently).

To realise the full potential of the Norwegian Air Force's newly acquired F-35A fleet, Norway could continue to invest in integrating the aircraft into the joint force. Examples could include a focus on data links, training, and the development of novel concepts of operations involving low-observability, sensor and data fusion, and interoperability across multiple domains. Allied officials also emphasise the need to dedicate appropriate resources for facilities, training and security; these are issues that are proving to be more extensive (and expensive) than was the case for prior generations of aircraft.

#### **4.2.5. Prepare for operations in contested cyber, space and EM environments**

Beyond the need to address threats and challenges in the traditional domains of land, sea and air, Norwegian defence strategy and planning must also account for the growing importance of operations in or through other



domains. This includes the increasing need for cyber defence and cybersecurity to secure wider Norwegian institutions and critical infrastructure against cyber-attack, as well as to protect and enable military operations by Norwegian and NATO forces in other domains.

NATO now also recognises space as an essential operational domain for the Alliance, following on from the recognition of cyber at the Warsaw Summit in 2016.<sup>54</sup> This reflects concern over the ongoing development of counter-space capabilities by Russia and others, along with the deepening reliance of many civilian and military users on a wide range of space-enabled services (e.g. the use of GPS in precision guided munitions, space-based ISR and earth monitoring, or satellite communications). Norway could therefore consider the implications of space becoming an increasingly contested, complex and congested domain for its own national resilience, critical infrastructure and military operations. It could also explore whether emerging space technologies might present Norway with new opportunities to achieve advantage, for example leveraging flagship programmes such as Galileo or considering the potential future application of

low-cost smallsats and other systems for ISR, communications and other purposes.<sup>55</sup> Norway could give special consideration to ways to address the challenges of communications and monitoring in the Arctic, including the use of Molniya orbits to provide enhanced satellite coverage at high latitudes and the important role of satellite downlink stations in the North.<sup>56</sup>

Outside of the cyber and space domains, Norwegian defence strategy and planning could also prepare for future operations in a contested electromagnetic environment. NATO Allies are belatedly recognising the significant capability gaps that have emerged between their own electronic warfare capabilities (which have been allowed to erode during the last decade of expeditionary operations) and the sophisticated systems and tactics employed by Russian forces. In addition to exploring requirements for improved electronic countermeasures and other responses to hostile jamming or spoofing, Norway could also continue to develop and train for appropriate reversionary modes to ensure the Armed Forces continue to operate effectively even when access to the EM spectrum is degraded or denied.

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54 NATO (2019b).


55 Puteaux & Najjar (2019).

56 ESA (2019).

### 4.3. SO2: Expand capacity to receive Allied reinforcements

This section provides more information on supporting actions for SO2, as outlined in Figure 4.3.

**Figure 4.3. Summary of possible supporting actions for SO2**



**SO2: EXPAND CAPACITY TO RECEIVE ALLIED REINFORCEMENTS**

Increase Norway's ability to receive, support and operate alongside large-scale Allied land, air and naval forces in a possible future crisis.

**SUPPORTING ACTIONS:**

- Enhance planning for Allied reinforcement under challenging conditions
- Increase the scale and complexity of field exercises
- Ensure sufficient prepositioned stocks of key consumables and equipment
- Upgrade and expand infrastructure along with concepts for dispersal
- Deepen cooperation to enhance military mobility and interoperability

While Norway should continue to make robust preparations for its own national defence and deterrence, in any serious conflict against a major power, Norwegian forces will require support from NATO Allies. This, of course, is the logic behind collective defence. Military planners in Norway have not lost sight of the importance of rapid reinforcement for Norwegian security, even when in recent decades other nations shifted their focus away from territorial defence and protection of SLOCs in the North Atlantic to focus instead on operations in Afghanistan and the Middle East. Since 2014, defence planning, training

and exercising in the US and across NATO have begun to rebuild expertise and capacity in this area, but much remains to be done. Supporting actions along the following lines have the potential to contribute further to Norway's defence and to wider credibility of Alliance deterrence, boosting readiness and responsiveness to address any potential future conflict in the High North:

#### 4.3.1. Enhance planning for Allied reinforcements under challenging conditions

Norway and its NATO Allies should continue to elaborate and refine plans for the potential deployment of large-scale ground, air and naval forces to Norway in the event of a crisis. This includes the capacity to secure SLOCs and, if necessary, conduct amphibious landings in the face of armed opposition. Planning assumptions should increasingly emphasise the operational and logistical challenges of deploying and absorbing larger Allied contingents (whether of land, air or naval forces), and conducting reception, staging, onward movement and integration (RSOI) of those forces in a contested environment with all its implications for force protection. Ensuring Norwegian naval capabilities for coastal defence would also be a key consideration in advancing this priority.

#### 4.3.2. Increase the scale and complexity of field exercises

Expanding the scale and – perhaps more critically – the complexity of field exercises also has an important role to play in translating the theory of reinforcement into practice. Large-scale exercises such as Trident Juncture 2018 (TRJE-18) directly contribute to deterrence by demonstrating NATO Allies' capability and intent to defend forward. While analysis and planning can be helpful, there is no substitute for actual

experience of this kind; both as a source of insights about barriers and shortfalls, and as training for those who might be involved in any future Allied response to threats. In this regard, TRJE-18 was a landmark event, bringing over 50,000 soldiers, sailors, airmen and marines to the northern flank under realistic timelines.<sup>57</sup>

However, it was nonetheless not a full 'stress test' of Allied reinforcement, or of Norway's Total Defence Concept, given the long planning horizon involved and the peacetime conditions in the area of operations. Furthermore, no one exercise is sufficient to build and retain NATO's expertise in this field; vital skills and experience will degrade if not regularly tested and refreshed. Looking to the future, Norway could therefore continue to press for events of this type as part of a progressive multi-year exercise cycle. Additionally, command-post exercises and smaller but demanding events that stress those aspects of multinational logistics found to be most problematic during TRJE-18 could be arranged in years when there is no TRJE-scale live exercise. Learning would be further enhanced by providing for unscripted events within the exercises and involvement of an increasingly sophisticated opposition force to simulate ways in which the adversary could try to counter allied force deployments, onward movement and operations. The Cold Response exercise series stands out as a promising venue to introduce new operational challenges for arriving forces and those Norwegian entities responsible for their integration.<sup>58</sup>

#### **4.3.3. Ensure sufficient pre-positioned stocks of key consumables and equipment**

It is not only important that Allied forces are able to deploy to Norway quickly. Equally important is their ability to fight and sustain themselves effectively once deployed. This is reflected in the model of the US Marine Corps' partnership with Norway for pre-positioning of equipment and supplies at secure locations within the country. One important measure of success is that the munitions that would be used by the deployed force are present in sufficient quantities to account for large-scale and high-tempo operations in the event of a potential future conflict. Unfortunately, this is too often not the case; indeed, there is a wider trend of leading NATO Allies now recognising and taking steps to increase the depth of their own stores for key munitions and supplies. To support the plans that call for Allied air force squadrons to deploy to and fight from Norwegian bases, provision could be made for munitions, including air-to-surface and air-to-air missiles, to be readily available as well. Given recent and ongoing increases in Russian long-range strike capabilities, it may not be prudent to expect ready resupply of these weapons (including from the US) during the crucial opening phase of any potential future conflict in and around Norway.

#### **4.3.4. Upgrade and expand infrastructure along with concepts for dispersal**

In addition to pre-positioned equipment and supplies, Allied reinforcements would require access to infrastructure with sufficient capacity and throughput for reception and support of large-scale operations within Norway. This includes sufficient space to accommodate NATO troops, equipment,

<sup>57</sup> Norwegian Armed Forces (2018); NATO (2018).

<sup>58</sup> Norwegian Armed Forces (2019).

munitions, fuel and supplies at airbases, ports and other bases or logistics hubs, and the need for this infrastructure to be ready and available in the relevant parts of the country. Importantly, advances in adversaries' precision-strike capabilities, including the ballistic and cruise missile threat, highlight the importance of ensuring the resilience of infrastructure against possible attack. At the same time, the reduction in the overall number of bases and facilities since the Cold War increases the risk that an adversary might be able to interdict supply lines or disrupt NATO forces by overwhelming defences at a small number of key nodes.

It is therefore important to continue to prioritise both hardening of infrastructure and more passive defence measures, such as dispersal and signature-reduction for Norwegian and NATO forces. Recent enhancements at major air bases such as Ørland stand to increase the survivability of combat aircraft and other high-value assets that might arrive in large quantities in the event of a conflict. An equal focus on less defended, less built-out locations that could be used for rearming and refuelling (or simply for temporary relocation to escape missile salvos) may be useful to complicate adversary targeting. However, these types of distributed operations require that Norway and her allies continue to refine and make the relevant resources available for C2 and logistics-support concepts.<sup>59</sup>

#### **4.3.5. Deepen cooperation to enhance military mobility and interoperability**

Importantly, Norwegian security in the event of major conflict depends not only on Norway's capacity to receive and support NATO reinforcements upon arrival in-theatre. It is also important that NATO increases its wider readiness and responsiveness, so as to be able to generate and deploy forces rapidly in the early phases of a crisis. This agility is essential not only to the conduct of defensive operations, but also as a key pillar for the credibility of the Alliance's deterrence. While it is the remit of individual NATO Allies to take necessary steps to increase levels of readiness for their own national forces, there are practical and political steps that Norway could take to support NATO's collective efforts. This includes the provision of continuing and enhanced support to the Alliance's newest commands (e.g. Joint Force Command Norfolk),<sup>60</sup> or to wider NATO and European initiatives to address barriers to military mobility within and across borders.<sup>61</sup> Assuming NATO forces can be successfully deployed in Norway, it is also essential to ensure their effective integration alongside Norwegian counterparts. Continuing to deepen interoperability and joint training and exercising between the Norwegian Armed Forces and key Allies (including most notably the US Marine Corps and the Royal Marines) is therefore also prudent to maximise multinational forces' ability to operate effectively alongside each other.

59 For more on this topic, see Priebe et al. (2019).

60 NATO SHAPE (2019).

61 For examples of recent European initiatives to address this topic, see EDA (2019).



## 4.4. SO3: Explore concepts to hold the adversary at risk

This section provides more information on supporting actions for SO3, as outlined in Figure 4.4.

**Figure 4.4. Summary of possible supporting actions for SO3**



### SO3: EXPLORE CONCEPTS TO HOLD THE ADVERSARY AT RISK

Disrupt any adversary's tempo of operations and seize the initiative for Norway through ways and means for achieving strategic and deterrent effects at range.

**SUPPORTING ACTIONS:**

- Invite Allies with deep attack systems to deploy to Norway periodically
- Consider the potential role for longer range weapons for Norwegian forces
- Explore concepts for generating mass and persistence with unmanned assets
- Collaborate with key Allies on sea denial and littoral strike concepts
- Conduct parallel strategic communications to control the escalation ladder

The most credible deterrent posture is one that confronts the adversary with the prospect of failure to achieve the operational objectives of any campaign of aggression (providing deterrence by denial, not just deterrence by punishment). NATO Allies' land, naval and air forces are postured and equipped to conduct defensive campaigns aimed at doing just that. Capabilities to damage selected 'deep' targets in the adversary's rear areas can contribute to

the success of this defence by suppressing the adversary's tempo of operations and disrupting their offensive. Within limits, creating doubts in the mind of the adversary regarding the security of key assets in their rear areas could strengthen deterrence without creating instability – if nested within an overall strategy and posture geared to defensive operations. By presenting multiple strategic dilemmas for the adversary in this way, NATO can seize the initiative and provide Allied commanders with additional options for controlling the escalation ladder in a conflict or crisis.

Norway's newly acquired F-35 Joint Strike Fighter provides some capabilities for selective strikes on rear-area targets (tactical offence for the purposes of a strategic defence). The Joint Strike Missile extends the effective range and lethality of these aircraft.<sup>62</sup> Several possible supporting actions are available if the Norwegian MOD wished to consider developing these capabilities, further enhancing a robust deterrence without prejudice to the need for parallel assurance of NATO's non-aggressive intentions.

### 4.4.1. Invite Allies with deep attack systems to deploy to Norway periodically

Norwegian policy currently precludes the permanent basing of foreign forces on Norwegian soil, but does not preclude the temporary deployment or rotation of Allied land, air and naval contingents. NATO Allies routinely deploy units for port visits, training or exercise purposes in and around Norway – a visible embodiment of the Alliance's commitment to Norwegian security. To enhance this deterrent effect, Norway could consider inviting those Allies with long-range systems for deep attack to deploy into the country periodically as a means of demonstrating the potential for NATO

to hold adversary rear areas at-risk in the event of a future conflict.

In the near-term, candidates could include US, UK or German forces equipped with the Guided Multiple Launch Rocket System (GMLRS), which has a maximum range of 90 kilometres, or the Army Tactical Missile System (ATACMS), with a maximum range of 300 kilometres. Looking to the medium-term and beyond, a number of NATO Allies are exploring the potential to develop and deploy longer range land-based systems. Allied air forces already provide a number of relevant capabilities: for example, US Air Force aircraft capable of delivering the JASSM-ER and LRASM cruise missiles or similar current and future European systems that can strike targets at ranges of over 900 kilometres in a stand-off profile.

#### **4.4.2. Consider the potential role for longer range weapons for Norwegian forces**

In addition, Norway could explore the potential for developing its national capabilities for long-range strike. While finite resources within defence mean that the Norwegian Armed Forces will not be able to acquire and deploy deep-attack systems on the same scale as some larger Allies, developing a sovereign capability would contribute directly to Norway's own operational advantage and freedom of action. At the same time, this would enhance and contribute to wider NATO deterrence, as well as freeing up Allied forces for commitments in other regions. Several candidate systems are on the market or in development with ranges exceeding several hundred kilometres. Early inclusion of key NATO Allies in discussions regarding the envisioned concepts of operation for any

such forces would be an important element of this potential action. This would promote interoperability and leverage lessons learned from those nations who already have similar systems in service, while at the same time jointly considering the implications in a post-INF context.

#### **4.4.3. Explore concepts for generating mass and persistence with unmanned assets**

Novel technological and conceptual developments are also opening up new possibilities for small nations such as Norway to increase the mass and persistence of their military forces, while also reducing the risk to life for certain missions. New and emerging technologies of note include advanced robotics, autonomy, and related developments in enabling technologies such as artificial intelligence, machine learning, data analytics, energy systems, and miniaturised sensors and electronics. A number of NATO Allies recognise the confluence of these different developments as highly disruptive, opening up new possibilities for human-machine teaming (HMT) to enhance NATO's strategic and operational advantage.<sup>63</sup> The US Air Force, for example, is experimenting with Low-Cost Attritable (L-CAAT) UAVs that can be acquired cheaply in large numbers and launched and recovered without the need for runways or other fixed infrastructure.<sup>64</sup> These have the potential to provide ISR, targeting, and strike capabilities at long ranges. The UK and France, and several other Allies, have similarly experimented with 'loyal wingman' concepts and non-traditional ISR and targeting solutions, and have also considered the wider uses of

63 UK MOD (2018). \_

64 Insinna (2019).

unmanned systems in other roles, such as logistics.<sup>65</sup>

Alongside conceptual development and experimentation, Norway should also consider the wider strategic, policy, legal and ethical implications of the advent of these technologies. This includes the enduring need to have a 'human in the loop' for decisions on the use of lethal force, as well as consideration of potential future capability gaps that could arise if Norway was faced with an adversary employing unmanned or autonomous systems in a less ethically constrained manner. At the same time, Norway and NATO would benefit from continuing to recognise the enduring relevance of manned forces as well as considering those situations where the presence of human troops, pilots or sailors provides its own important deterrent and de-escalatory effect.

#### **4.4.4. Collaborate with key Allies on sea denial and littoral strike concepts**

In addition to exploring emerging concepts for human-machine teaming, Norway could also seek to engage with key NATO Allies on novel thinking about future amphibious and littoral operations. As has been discussed, reinforcement by Allied amphibious task forces would form an essential component of defending Norway in the event of a major

conflict (see SO2). Norway therefore has a direct interest in ensuring its own strategy, policy and plans are coherent with ongoing debates and conceptual development within NATO and individual Allied nations about the future of amphibious forces. In turn, it could seek to engage and provide inputs to shape Allies' thinking, ensuring that emerging concepts for amphibious operations, sea denial and littoral strike are tailored to the specifics of the Norwegian context (as opposed to be the differing demands of operations in the Mediterranean, Middle East or Asia-Pacific).

For example, Norway could explore options to take advantage of the newly introduced US Marine Corps Expeditionary Advanced Base Operations (EABO) concept. This could provide an enhanced sea-denial capability by pairing mobile, low-signature Marine Corps elements with Norwegian forces in coastal environments.<sup>66</sup> Similarly, emerging UK and Dutch littoral concepts provide a possible basis for trilateral discussions on innovative options to pose new dilemmas to an adversary aiming to protect key facilities or terrain.<sup>67</sup> The MARCOM-led NATO Amphibious Leaders Expeditionary Symposium (NALES) provides a potential venue for the Norwegian Armed Forces to engage with the Alliance's leading amphibious powers on this and a range of other issues, such as reinforcement.<sup>68</sup>

65 Grzeszczyk (2018).

66 'Expeditionary advanced base operations may be employed to position naval ISR assets, future coastal defence cruise missiles (CDCM), anti-air missiles (to counter cruise and ballistic missiles as well as aircraft), and forward arming and refuelling points (FARPs) and other expedient expeditionary operating sites for aircraft such as the F-35, critical munitions reloading teams for ships and submarines, or to provide expeditionary basing for surface screening/scouting platforms, all of which serve to increase friendly sensor and shooter capacity while complicating adversary targeting. They may also control, or at least outpost, key maritime terrain to improve the security of sea lines of communications (SLOCs) and chokepoints or deny their use to the enemy, and exploit and enhance the natural barriers formed by island chains.' See USMC (2019).

67 Willett (2019).

68 Germanovich et al. (2019).

#### **4.4.5. Conduct parallel strategic communications to control escalation**

Alongside the potential development of innovative new options to hold the adversary at risk in the deep battle, Norway should continue to work with its NATO Allies on effective strategic communications to help control moves up and down the escalation ladder in any crisis. This includes continuing reassurance measures to demonstrate to non-NATO nations, most notably Russia, the Alliance's purely defensive intentions, as well as to understand the Russian mindset, signalling and strategic calculus.

Allied officials suggested that this should both involve continuing with Norway's own well-established mechanisms for reassurance and neighbourly cooperation with Russia at the national level; as well as exploring how Norway can best encourage an effective strategic dialogue with Moscow through multilateral institutions. At the NATO level, this could include use of the NATO-Russia Council as well as support to wider strategic communications initiatives to balance deterrence and reassurance. Norway should also continue to consider when it is most appropriate to address certain regional issues through

other fora such as the Arctic Council and the Arctic Security Forces Roundtable (ASFR). Combined, these efforts would continue to provide opportunities for Russia to assure itself of NATO's intentions while communicating its own priorities and legitimate security concerns to Brussels and Oslo; as well as providing practical opportunities to reinforce mutual understanding and trust on both sides through cooperation on subjects of joint interest.

In the event of the outbreak of an armed conflict, Norway and NATO would do well to continue to balance the need to deter and defeat any adversary with recognition of the need to provide them with paths for de-escalation. Such options are essential in order to achieve a political resolution and the cessation of hostilities on acceptable terms, rather than leaving a defeated and humiliated adversary feeling that they have nothing to lose by risking a further escalation of the conflict. Norway could continue to leverage its unique position and understanding as a neighbour to Russia in this regard, sharing its expertise on the Russian way of warfare as well as the assumptions and perceptions that wrongly or rightly drive Moscow's strategic decision-making towards NATO.



## 4.5. SO4: Enhance national and societal resilience

This section provides more information on supporting actions for SO4, as outlined in Figure 4.5.

**Figure 4.5. Summary of possible supporting actions for SO4**



**SO4: ENHANCE NATIONAL AND SOCIETAL RESILIENCE**

Continue to build on and adapt the Total Defence Concept in light of new trends, technologies and threats, preparing Norway for an uncertain future.

**SUPPORTING ACTIONS:**

- Refine and bolster the Total Defence Concept in light of evolving challenges
- Continue to promote and test Norway's whole-of-government approach
- Continue to deepen and refine mechanisms for civil support to the military
- Contribute to NATO's strategy for addressing sub-threshold operations
- Engage in dialogue over further measures to enhance collective will to fight

Highly capable national forces and robust plans for reinforcement are of limited utility on their own, if NATO Allies lack the resilience needed to maintain national and collective will to fight, or the means to prevent an adversary using coercion and subversion to achieve their objectives below the threshold of armed conflict. As previously discussed, countries such as Russia have proven willing and able to employ a broad mix of military and non-military

means to undermine the security, freedom and values of individual societies (see Chapters 2 and 3). Through these tactics, they also seek to undermine the cohesion of the NATO Alliance or frustrate its decision-making by exploiting ambiguity and deniability, as well as the perceived 'grey zone' in which they can compete most effectively without triggering escalation to an Article 5 response. Possible supporting actions include:

### 4.5.1. Refine and bolster the Total Defence Concept in light of evolving challenges

Allied officials recognise that Norway is already a leader in maintaining a Total Defence Concept and investing in the practical mechanisms for implementing it in a time of crisis. At the same time, the threats to Norwegian societal resilience are dynamic; they require continuing vigilance, as well as ongoing efforts to update and adapt the Total Defence Concept to reflect a fast-moving threat environment. New technologies and changes in the wider social, political and economic context present new vulnerabilities for NATO Allies to address, both in terms of increasing the potential attack surface (e.g. social media, supply chains, or critical infrastructure) as well as expanding the range of different threat vectors (e.g. cyber, information operations etc.). These are threats to be robustly addressed in Norwegian strategy.

Wider changes in Norwegian society and its way of life present their own sets of challenges. Demographic and economic trends, for example, affect the availability of people and expertise for direct service in the Home Guard or wider Armed Forces, given strong competition from civilian industries for certain niche skills.<sup>69</sup> Internal population movements away from some of

the coastal regions in the north have also reduced the potential for local communities to provide monitoring and vigilance in the surrounding waters. The ongoing digitalisation of Norwegian society and its integration into global supply chains also affects its level of exposure to certain risks; related trends such as 'just in time' manufacturing, or the privatisation and rationalisation of infrastructure, also have knock-on effects on levels of redundancy and security of supply for key resources that could be needed in a time of crisis. These and related developments all require mitigation in future planning.<sup>70</sup>

In this evolving context, Norway could continue to build on structures, legal mechanisms and policies and plans developed when its Total Defence Concept first matured in the context of the Cold War, while also refining these as necessary to address new and emerging threats. This could include horizon-scanning to better understand future risks and opportunities arising from new technological, social or other developments, as well as efforts to collaborate and share best practices with NATO, European and other international partners facing related challenges. Indeed, Allied officials highlight this as a potential strategic opportunity for Norway to leverage its recognised expertise and thought leadership around societal resilience measures – using the Total Defence Concept as a model to help enhance the resilience of Allies could benefit both the defence and influence of Norway itself within NATO.

#### **4.5.2. Continue to promote and test Norway's whole-of-government approach**

Norway could also continue to deepen and 'stress test' existing mechanisms for ensuring

a whole-of-government approach to any future crisis, both above and below the threshold of armed conflict. A number of NATO Allies are considering how best to improve the strategic integration of information and activities across all government departments – both to ensure a more coordinated response in times of crisis, as well as to more proactively enable the development and implementation of a national grand strategy that combines diplomatic, informational, military and economic levers of power. The UK, for example, has been evolving its own structures and approaches for coordinating cross-government activities on issues of national security under the label of 'fusion doctrine'.<sup>71</sup> In the Norwegian context, it is especially important to ensure effective collaboration between the MOD and Ministry for Justice; an imperative that has already been recognised by the decision to align long-term plans more closely in the latest planning cycle. Norway should continue not only to revise its whole-of-government approach as needed over time, but could also further test the effectiveness of these efforts through regular table-top exercises and larger scale simulated crises involving significant interagency coordination.

#### **4.5.3. Continue to deepen and refine mechanisms for civil support to the military**

In addition to deepening cooperation across the Norwegian public sector, Norway could also consider ways and means for further bolstering collaboration with actors beyond government, including civil society, industry and the general populace. Crucially, this should include not only consideration of how best the military can support civil authorities in a time

70 Tesh & Cole (2016).

71 UK Government (2018b).

of crisis – as was perhaps the emphasis of thinking and planning for Total Defence in the ‘peace dividend’ period after the Cold War – but also how best to prepare for civil support to the military in any future conflict. While there is a need to avoid alarmism and reassure Norwegian citizens about their security, it is necessary also to ensure ongoing dialogue and effective public engagement regarding the changing threats in the High North. This is important both to prepare the population for different eventualities as well as to help counter hostile information operations by adversaries who seek to undermine trust in Norwegian governance and institutions.

#### **4.5.4. Contribute to NATO's strategy for addressing sub-threshold operations**

Recognising the interdependencies between Norway's security and that of its wider NATO Allies, as well as Norwegian leadership in matters of Total Defence, it is also important for Norway to continue to shape and contribute to the Alliance's evolving strategy for deterring and countering sub-threshold operations. This includes ways and means for detecting, understanding and attributing adversaries' covert or deniable attempts at coercion and subversion; along with a clear deterrence posture and signalling. To this end, Norway

could continue to inject societal resilience considerations into appropriate bilateral and NATO planning, as well as to energise the Alliance's focus on information operations and the development of rapid, proportionate responses to sub-threshold threats.

#### **4.5.5. Engage in dialogue over further measures to enhance collective will to fight**

Possessing the ways and means to counter military or non-military threats is a necessary but not sufficient precondition for a successful deterrence and defence strategy. Essential too is the national and collective will to employ those ways and means in pursuit of strategic ends, even in the face of a determined adversary seeking to undermine national resilience or NATO's cohesion. The prominence of – and attention given to – will to fight in the doctrine and planning of different NATO Allies have fluctuated over time, but are increasingly recognised as fundamental to successful strategy development and implementation.<sup>72</sup> Norway could continue to engage in dialogue with NATO Allies and other partners over possible further measures that could be taken to enhance the collective will to fight in the face of ongoing changes in the wider geopolitical and threat environments.

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Connable et al (2019); McNerney et al (2018).

## 4.6. SO5: Solidify Norwegian contributions to NATO and partners

This section provides more information on supporting actions for SO5, as outlined in Figure 4.6.

**Figure 4.6. Summary of possible supporting actions for SO5**



### SO5: SOLIDIFY CONTRIBUTIONS TO NATO AND PARTNERS

Identify and pursue opportunities for Norwegian leadership within NATO and other partnerships, maximising both national interests and collective security.

**SUPPORTING ACTIONS:**

- Continue to provide valuable contributions beyond NATO's northern flank
- Contribute to ongoing efforts to rebalance transatlantic burden-sharing
- Promote deepening of NATO engagement with EOPs Sweden and Finland
- Identify and pursue opportunities for Norwegian leadership
- Leverage innovation and industry as enablers of national influence in NATO

Allies look to Norway to play a leading role in shaping the Alliance's agenda, delivering high-end capabilities, and participating in NATO's crisis-management and stability operations around the globe. Oslo's political will to participate in international missions with meaningful contributions, combined with the Norwegian military's professionalism and track record, translate to a level of credibility that only a handful of NATO Allies enjoy. Stated another way, when Norway makes the case

for measures needed to boost deterrence and defence in the High North, Allies will listen carefully – as they did during the development of the 2010 NATO Strategic Concept or 2011 Alliance Maritime Strategy – and, more often than not, will be willing to advance a collective agenda. Looking to the future, Norway has concrete opportunities to further reinforce its relations with NATO as a whole, as well as with multinational groupings, or on a bilateral basis. Possible supporting actions for consideration are outlined below.

### 4.6.1. Continue to provide valuable contributions beyond NATO's northern flank

Maintaining Norway's EFP formation in Lithuania contributes to alliance solidarity and helps convey the message that any aggression in the Baltics would be met with a swift, collective response. Furthermore, integrating within the German-led battlegroup bolsters relations with Berlin, an important centre of power and influence in Europe whose support may be essential to cementing future NATO initiatives. Contributions to overseas missions, including in harsh environments in West Africa and the Middle East, further reinforces Norway's dependability within NATO and on the international stage more broadly. Maintaining a robust operational tempo into the future – while also ensuring high readiness for contingencies closer to home – will require a delicate balancing act and, possibly, additional resources.

### 4.6.2. Contribute to ongoing efforts to rebalance transatlantic burden-sharing

If the Norwegian government's recent announcement that it aims to allocate 1.8 per cent of its GDP to its 2020 defence

budget comes to fruition,<sup>73</sup> it will be viewed as an important step in enhancing Norway's commitment to defence and could encourage other middle-tier-spending European Allies to follow. If Norway follows this intended near-term increase with realisation of its plan to reach 2 per cent no later than 2024, the effects could include not only moving past the thorniest issue in present US–Norwegian defence relations, but also gaining funds needed to address the most urgent priorities outlined in the preceding SOs.

Beyond spending, Norway has a near-term opportunity to make a meaningful, and timely, contribution to the NATO Readiness Initiative (NRI). The push to generate additional high-readiness forces – initially proposed by the US and embraced by NATO at the 2018 Brussels Summit – represents an important element of NATO's evolving deterrence posture. In the context of collective defence, NRI forces are designed to ensure a sizeable European capability in the opening weeks of a conflict and in advance of North American reinforcements. Norway's emerging high-end capabilities, such as fighter aircraft and anti-submarine warfare assets, would be an important contribution in their own right, but could also have the effect of encouraging other European allies to align their most capable forces to NRI. Furthermore, Norway could continue to shape and contribute to wider efforts to enhance Europe's integrated defence and contributions to security in its immediate neighbourhood, whilst remaining vigilant to the need to ensure any initiatives complement NATO structures instead of duplicating them.

#### **4.6.3. Promote deepening of NATO engagement with Sweden and Finland**

While NATO represents the core multilateral framework for Norwegian defence strategy, other relationships and constructs play an important role and hold the promise of complementing the Alliance's objectives. Building on recent political and practical advances in areas such as consultations, intelligence sharing, and cross-border training in the air domain, Norway could advance defence ties with its Scandinavian neighbours by identifying a series of concrete projects and initiatives that build on recent bilateral, trilateral and NATO agreements.<sup>74</sup> These would ultimately result in the development of more integrated, combined concepts and plans for defence of the North, as well as providing a basis for wider formal NATO cooperation with Sweden and Finland as Enhanced Opportunity Partners.

#### **4.6.4. Identify and pursue opportunities for Norwegian leadership**

Allies recognise the value and calibre of Norwegian thinking, expertise and inputs on defence matters. Norway maintains a range of capabilities and access to impressive financial, human and natural capital. It also has latent, as-yet unexploited opportunities to enhance its influence and contributions within multilateral defence frameworks, both to directly benefit Norwegian national interests and to increase wider collective security. To this end, Norway could seek to identify and pursue additional leadership opportunities within its bi- and multi-lateral partnerships, building on areas of Norwegian strength and topics of particular significance to national strategy.

73 Norwegian Government (2019b).

74 In a related effort, Denmark has also been considering opportunities for deepening ties between NORDEFCO and the United States (and potentially others) as a priority.



In the near-term, an increased Norwegian leadership role in the JEF appears to offer three key benefits. First, this UK-led grouping enhances NATO's ability to act in Northern Europe while taking advantage of the framework-nation concept to proceed with planning and certification at a steady pace without unnecessarily involving all 29 Allies. Second, the inclusion of Sweden and Finland contributes additional high-readiness forces while providing the Alliance with a built-in mechanism to include Stockholm and Helsinki in operations, should NATO and Sweden and/or Finland decide that joint action is merited in a crisis. Finally, with continuing uncertainty over the UK's future security relationship with the EU, the JEF provides a lever to anchor and reinforce defence ties between the UK and mainland Europe. With these benefits in mind, Norway could seek to increase its contributions to the JEF framework by allocating additional high-readiness combat forces for exercises, increasing the level of participation of enabling and specialised forces, and seeking placement of experienced, high-ranking officers in key positions. Norway's close relationship with both the UK on one hand and Sweden and Finland on the other could also enable it to serve as a 'bridge' for promoting more rigorous advanced planning for the defence of the Scandinavian region, as well as improved coordination of operational planning between NATO's northern and eastern flanks.

#### **4.6.5. Leverage innovation and industry as enablers of national influence in NATO**

Opportunities for Norway to enhance its contributions and influence on collective defence matters are not only confined to the recognised expertise and capabilities of its MOD and Armed Forces. There is also

an important potential role to be played by leveraging Norway's wider technological, industrial and skills base, along with its access to niche facilities and ranges (e.g. for cold-weather training or testing). Norway could consider the priority areas in which it currently possesses niche skills, competences and intellectual property, or else where it wishes to develop further its sovereign capabilities in future in collaboration also with NATO Allies and partners. Examples could include efforts to play a leading role in experimentation with the application of new and emerging technologies and concepts in a cold weather or Arctic setting (e.g. autonomous systems in all domains, or novel approaches to providing ISR and logistic support in remote areas and challenging climatic conditions); or building on Norway's existing strengths in areas such as mine countermeasures technologies and long-range missile systems or other munitions.

Coherence between overall Norwegian defence strategy and the goals, plans and resources of wider innovation and defence industrial policy would be an important enabler for Norway to maximise the benefits it derives from any future collaborative research or capability programmes. It would also help Oslo to better understand and navigate its options for shaping the ongoing evolution of capability development and industrial frameworks within NATO and Europe, in light of the recent emergence of the European Defence Fund and PESCO.<sup>75</sup>

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75 IFS (2019).

## 4.7. Summary

The following box presents a summary of the SOs presented throughout the course of Chapter 4.

### Box 4.1. Summary of Strategic Options (SOs) and implications for Norwegian defence strategy

- Cognisant of the challenges identified in Chapters 2 and 3, both Norway and NATO are already taking a range of proactive measures to address current and emerging challenges on the Alliance's northern flank. In addition, the Norwegian MOD asked RAND to provide an independent assessment of potential options to inform future defence strategy, policy and planning, resulting in the following Strategic Options (SOs):
- SO1: Strengthen deterrence in Norway. This includes possible supporting actions such as developing more robust ISR coverage to ensure situational awareness; considering steps to increase the deterrence posture in Northern Norway; enhancing the protection of bases and forces against air and missile threats; maximising the F-35's potential as an enabler for joint operations; and preparing for operations in contested cyber, space and electromagnetic environments.
- SO2: Expand capacity to receive Allied reinforcements. This includes possible supporting actions such as enhancing planning for Allied reinforcements under challenging conditions; increasing the scale and complexity of field exercises; ensuring sufficient pre-positioned stocks of key consumables and equipment; upgrading and expanding infrastructure along with concepts for dispersal; and deepening cooperation to enhance military mobility and interoperability.
- SO3: Explore concepts to hold the adversary at risk. This includes possible supporting actions such as inviting Allies with deep-attack systems to deploy to Norway periodically; considering the potential role for longer range weapons for Norwegian forces; exploring concepts for generating mass and persistence with unmanned assets; collaborating with key Allies on sea-denial and littoral strike concepts; and conducting parallel strategic communications to control the escalation ladder.
- SO4: Enhance national and societal resilience. This includes possible supporting actions such as refining and bolstering the Total Defence Concept in light of evolving challenges; continuing to promote and test Norway's whole-of-government approach; continuing to deepen and refine mechanisms for civil support to the military; contributing to NATO's strategy for addressing sub-threshold operations; and engaging in dialogue over further measures to enhance collective will to fight.
- SO5: Solidify Norwegian contributions to NATO and partners. This includes possible supporting actions such as continuing to provide valuable contributions beyond NATO's northern flank; contributing to ongoing efforts to rebalance transatlantic burden-sharing; promoting deepening of NATO engagement with Sweden and Finland; identifying and pursuing opportunities for Norwegian leadership; and leveraging innovation and industry as enablers for influence in NATO.

# 5 Conclusions

This chapter presents the final conclusions of this independent study for the Norwegian MOD into Allied perspectives on deterrence and defence on NATO's northern flank. Specifically, this chapter provides a number of additional reflections on the interdependencies, risks and trade-offs between each of the SOs presented in Chapter 4, and identifies areas for further research as Norway and NATO continue to debate and consider how best to ensure effective deterrence and defence on the Alliance's northern flank.

## 5.1. Understanding and navigating the trade-offs among SOs

### 5.1.1. The strategic options presented in this report are intended to be mutually reinforcing and scalable, depending on levels of ambition and resource

This report has focused on understanding areas of convergence and perceived divergence between Norwegian and Allied perspectives on the strategic challenges facing Norway and NATO in the High North. Chapters 2 and 3 presented a summary of viewpoints provided by officials in Denmark, France, Germany, the UK, the US and NATO. This included both their assessment of wider trends shaping the current and future threat environment in the High North, as well as perceived areas of specific opportunity or challenge for Norwegian strategy.

Based on these Allied perspectives, Chapter 4 outlined a number of possible SOs for Norway to consider as part of its ongoing defence strategy, policy and planning initiatives. These SOs are not intended as mutually exclusive; indeed, given effective coordination of activities in different lines of effort, they would be mutually reinforcing. Importantly, each of the SOs is also intended to be scalable – that is, to be scaled up or down to deliver a range of different benefits depending on the level of ambition and resources devoted to Norwegian defence. For example, a range of different options could become available for enhancing the breadth and depth of national defence capabilities in SO1, depending on future levels of spending. In the same fashion, efforts within SO2 could range from relatively low-cost or time-bound initiatives – such as smaller command-post exercises – up to the formalisation of an ambitious multi-year cycle of large-scale exercises on the model of TRJE-18. The same flexibility is true of SOs 3–5.

While this study has provided insight into select Allied perspectives on the priority issues for consideration in Norwegian defence strategy, it is for the Norwegian MOD and government to decide how to navigate the inevitable trade-offs that must be made between potential lines of effort across and within each SO, given the finite resources available to defence. Additionally, close coordination with other actors beyond the Norwegian MOD, including

through a whole-of-government approach and collaboration with partners and allies, will continue to be important in regard of each of the SOs proposed.

### **5.1.2. A range of factors can frame and guide the trade-offs to be made between different options for enhancing Norwegian defence and deterrence**

In considering these choices, external factors beyond the direct control of the Norwegian MOD will impose some constraints. Such factors include the myriad trends in the wider geopolitical environment highlighted in Chapters 2 and 3. Of course, any deterrence strategy can also only be effective if calibrated to the mindset, intent and capabilities of those whom Norway and NATO are seeking to deter – while also recognising the enduring need for parallel efforts to provide assurance of non-aggressive intentions. In turn, vital reassurance measures can only be truly effective if they are backed with a robust defence and deterrence posture that is appropriately scaled to the level of threat posed by others' hostile behaviour.

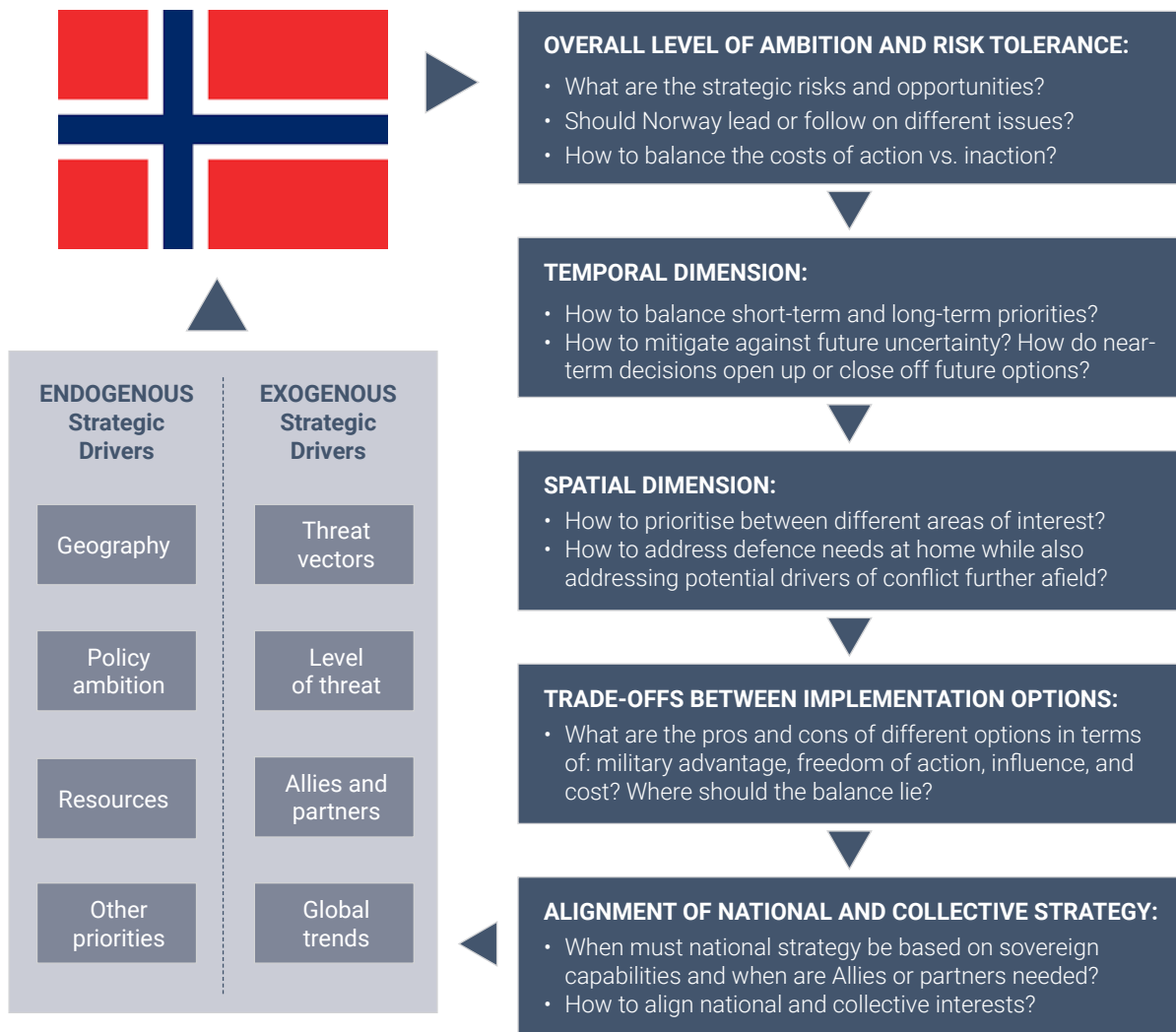
That being said, Norwegian strategy is not dictated by external trends or by adversary actions. Norway has considerable agency to shape future strategic outcomes by continuing to hedge against risk and uncertainty while also proactively positioning Norway to exploit opportunities for advantage. Figure 5.1 outlines just a few examples of the different factors that could be considered when thinking about the options open to Norwegian and NATO strategy. This illustrative diagram is intended to inform deliberations and trade-offs that will need to be made when considering and resourcing any of the SOs or specific possible supporting actions within each SO.

### **5.1.3. Similarly, any collective strategy for NATO's northern flank must be resilient and flexible enough to deal with a range of potential future scenarios**

Importantly, NATO strategy and plans for the Alliance's northern flank should not only continue to bolster resilience against a range of plausible external threats or possible 'strategic shocks'. They should also continue to reflect on the central importance of cohesion and coherence across the Alliance, as recognised by ongoing initiatives to enhance NATO's collective responsiveness, readiness and capabilities for reinforcement. Posture and plans for the High North must also be seen as proportionate and credible by a range of different audiences: national, allied and adversary. This requires a clear strategic narrative and concerted efforts to secure buy-in from the relevant stakeholders, including – most notably – the public. It also entails continuing to strike a balance between costs and benefits when calibrating national and NATO strategy; proactively seeking to impose costs on the adversary (including, where appropriate, through deterrence by punishment, but most importantly through deterrence by denial); while maximising returns on resources invested into defence amid other competing priorities for government. It also means continuing efforts to address burden-sharing and ensure that national contributions – whether in terms of cash, capabilities and commitments – are sufficient to address the collective threats to the Alliance.

Successful implementation of NATO strategy therefore also entails ongoing efforts to align activities all across defence: for example, by overcoming traditional barriers that frustrate effective decision-making or collective action, both within individual governments and across the Alliance; ensuring that capability development and procurement processes are

**Figure 5.1. Illustrative implications of different factors on strategic decision-making**



Source: RAND analysis.

agile enough to deliver new capabilities in the timeframes required; promoting a culture of innovation and adaptability at all levels; and ensuring access to the necessary mix of skills and expertise to deliver the human element of defence. Effective coordination of activities across government and with industry and civil-society partners is similarly important, bringing together all levers of power and influence to achieve the nation's overarching strategic objectives.

#### **5.1.4. The Norwegian MOD and its NATO Allies should continue to stress-test the assumptions that underpin their strategy and plans for the High North**

This study has provided a snapshot of the perceived challenges and opportunities facing strategy-making in the High North and wider North Atlantic region, and presented insights gained through consultations with officials from selected NATO Allies. These perspectives are necessarily subjective and time-bound.

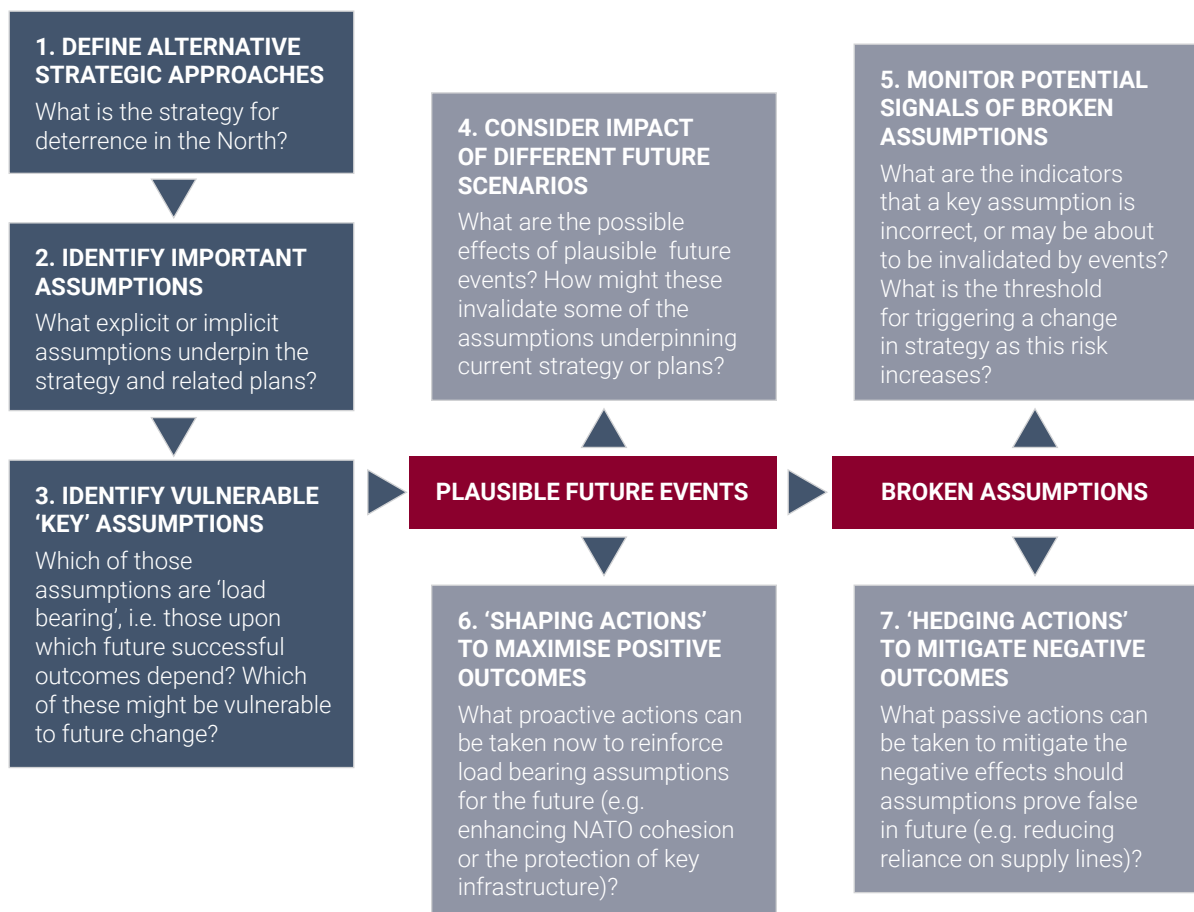


Any strategy is similarly based on a number of assumptions, some of which may be subject to challenge or change as geopolitical circumstances evolve over time. There are different methods and approaches for testing the robustness of strategies and plans against a range of future scenarios. These include: strategic-level gaming, table-top exercises and modelling; scenario development; futures and foresight studies; horizon-scanning; and application of assumptions-based planning (ABP) techniques and related methods for assessing robust decision making (RDM).

Figure 5.2 outlines one potential example of such an approach to further analysis.

This report provides insight for specialist and general audiences in Norway and across the wider Euro-Atlantic community. It is intended to inform the ongoing debates and discussions, both within Norway and across NATO, about the measures needed to enhance deterrence and defence on the Alliance's northern flank. Crucially, strategy is a process, not an endpoint, and so continuing efforts to understand areas of convergence or disagreement between different Allies' perspectives on the High North will remain important if NATO is to ensure coherent and effective responses to its collective challenges.

**Figure 5.2. Schematic of assumptions-based planning to stress-test strategy in the High North**



Source: adapted from Dewar (2002) and Black et al. (2017).

## 5.2. Summary

The following box presents a summary of the final reflections presented in Chapter 5.

### Box 5.1. Summary of conclusions and potential areas for further analysis

- This independent RAND study for the Norwegian MOD focused on understanding selected Allies' perspectives on strategic-level factors affecting deterrence and defence on NATO's northern flank. This included consideration both of near-term priorities, as well as emerging trends for the future.
- Chapters 2 and 3 presented a summary of viewpoints provided by officials in Denmark, France, Germany, the UK, the US and NATO. This included both their assessment of wider trends shaping the current and future threat environment, as well as perceived opportunities and challenges to be addressed in Norwegian defence strategy. Based on Allied perspectives, Chapter 4 outlined a number of possible Strategic Options (SOs) for Norway to consider as part of its future planning.
- The SOs are intended to be mutually reinforcing and scalable, depending on levels of strategic ambition and the availability of resources. There is a range of considerations that can frame and guide the trade-offs made between different options for enhancing Norwegian defence and deterrence. Similarly, any collective strategy for NATO's northern flank must be resilient and flexible enough to deal with a range of potential future scenarios.
- Norway and its NATO Allies should therefore continue to stress-test the assumptions that underpin their strategy for the region, ensuring that NATO's posture and plans are sufficiently robust to address a wide range of different plausible futures. Such a resilient, adaptable approach is essential in a strategic environment characterised by uncertainty, complexity and rapid change.

A full bibliography of sources referenced in this report is provided below.







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## Annex A. List of Key Consultations

This study was informed by consultations with individuals from the organisations outlined in Table A.1.

Individual names have been anonymised so as to enable candid and open discussions about different Norwegian, NATO or Allied perspectives on the issues raised in this report.

In a number of instances, RAND consulted with multiple individuals from each of the teams or organisations outlined below. In addition, the study team also benefitted from the insights and support of the defence attachés from the Norwegian embassies to Berlin, Copenhagen, London, Paris and Washington, D.C.

**Table A.1. List of stakeholder organisations consulted**

Actor	Organisation(s)
	<ul style="list-style-type: none"> <li>Norwegian Armed Forces</li> <li>Norwegian Defence College (FHS)</li> <li>Norwegian Defence Research Establishment (FFI)</li> <li>Norwegian Institute of International Affairs (NUPI)</li> <li>Norwegian Ministry of Defence</li> </ul>
	<ul style="list-style-type: none"> <li>Allied Command Transformation (ACT), Strategic Foresight Analysis</li> <li>Defence Policy and Planning Division, International Staff, NATO HQ</li> <li>Emerging Security Challenges Division, International Staff, NATO HQ</li> <li>Joint Force Command Norfolk</li> <li>Net Assessment Unit, International Staff, NATO HQ</li> <li>Policy Planning Unit, Office of the Secretary General, NATO HQ</li> </ul>
	<ul style="list-style-type: none"> <li>Danish Defence Command</li> <li>Danish Ministry of Defence</li> <li>Danish Ministry of Foreign Affairs</li> </ul>



	<ul style="list-style-type: none"> <li>• Department for Europe, North America and Multilateral Affairs, French Ministry of Defence</li> <li>• Defence Policy and Strategic Foresight, Policy Division (DGRIS), French Ministry of Defence</li> <li>• Fondation pour la recherche stratégique (FRS)</li> </ul>
	<ul style="list-style-type: none"> <li>• Norway Desk, German Federal Foreign Office</li> <li>• NATO Section, German Federal Foreign Office</li> </ul>
	<ul style="list-style-type: none"> <li>• Defence Strategy &amp; Priorities, UK Ministry of Defence</li> <li>• Development, Concepts and Doctrine Centre (DCDC)*</li> <li>• Euro-Atlantic Security, UK Ministry of Defence</li> <li>• Europe and EU Exit, UK Ministry of Defence</li> <li>• Joint Expeditionary Force (JEF) Desk, UK Ministry of Defence</li> <li>• Navy Command</li> <li>• Royal Marines</li> </ul>
	<ul style="list-style-type: none"> <li>• Office of the Secretary of Defense, Under Secretary of Defense for Policy, European and NATO Policy</li> <li>• Office of the Secretary of Defense, Under Secretary of Defense for Policy, Plans and Posture</li> <li>• US European Command, J5/8, North and East Division, Northern Europe Branch</li> <li>• US Marine Corps Headquarters, Plans, Policies, and Operations (PP&amp;O) Department</li> <li>• US Navy Second Fleet Headquarters</li> </ul>

(\*) Note: while Sweden was not one of the focus countries for this study, DCDC is a joint Anglo-Swedish initiative and also acts as the Swedish Concepts and Doctrine Centre in addition to serving the UK MOD.