

EXPERT COMMISSION

on

NORWEGIAN SECURITY
AND DEFENCE POLICY

Unified Effort

2015

Published by:
Norwegian Ministry of Defence

Public institutions may order additional copies from:
Norwegian Government Security and Service Organisation
E-mail: publikasjonsbestilling@dss.dep.no
Internet: www.publikasjoner.dep.no
Telephone: + 47 222 40 000

Publication number: S-1023 E
ISBN 978-82-7924-100-3 (Print)
ISBN 978-82-7924-101-0 (Electronic)

Basic maps: the Norwegian Military Geographic Service
Design and illustration: Norwegian Armed Forces Media Centre
Layout: 07 Media AS
Print: Norwegian Government Security and Service Organisation
06/2015 - Impression 500

Contents

Summary	5
Chapter 1 Introduction	7
The Assignment to the Expert Commission	7
The Norwegian Armed Forces' Most Demanding Tasks	7
About this Report.....	9
Part I Basis	11
Chapter 2 Security Challenges	13
Geopolitics and Military Power	13
Russia – Great Power and Neighbour	16
The Arctic in the Long Term.....	23
Non-Conventional Threats	24
Challenges in Africa and Asia	29
Consequences for Norway.....	31
Chapter 3 Technology, Concepts and Doctrines	32
Technological Trends.....	32
Concepts and Doctrines	33
Network-Centric Warfare	34
Hybrid Warfare	34
Denial Strategies	35
Consequences for Norway.....	35
Chapter 4 Western Military Co-operation	36
Challenges and Opportunities	37
Revitalisation of Collective Defence	40
America's Involvement in Northern Europe and the High North	42
Defence Co-operation in Northern Europe	44
Consequences for Norway.....	46
Chapter 5 Financial Outlooks	48
Developments in the Norwegian Economy	48
Defence Finances in the Short Term	49
Finances in the Longer Term.....	51
Consequences for the Armed Forces	54
Chapter 6 Three Scenarios	55
Scenario I – Escalation of a Bilateral Crisis	55
Scenario II – Collective Defence in the Baltic Countries	56
Scenario III – Terrorist Attack	57

Part II Recommendations	59
Chapter 7 Norwegian Security Policy and the Use of Military Power – the Way Ahead.....	61
The Basis for the Defence of Norway.....	62
Operational Concept	64
NATO, the United States and Northern Europe	68
Russia – The Dual Policy	71
International Military Efforts	72
Recommendations	73
Chapter 8 Critical Functions for the Defence of Norway	75
Intelligence and Surveillance – First Line of Defence	75
Rapid and Relevant Decisions	78
Deterrence	81
Responding to Shorter Warning Times.....	83
Support to the Military Forces.....	86
Recommendations	88
Chapter 9 A Unified Effort to Strengthen Operational Capability	90
Ordinary Appropriations	91
Additional Funding	92
Efficiency and Quality Improvements	93
Multinational Co-operation	96
Recommendations	97
Chapter 10 Conclusions and Recommendations.....	99
Strategic and Military Challenges.....	99
A Unified Effort.....	100
Simultaneous and Seamless.....	101
Strengthening Operational Capability.....	101
Appendix About the Expert Commission.....	103
Appointment and Composition	103
Mandate.....	103
Work Process.....	105

SUMMARY

A Unified Effort to Strengthen the Defence of Norway

A new threat and risk environment demands significant measures to strengthen Norway's defence. The Armed Forces, the society at large and Norway's allies need to join forces in a unified effort to create a 'new normal'.

- Russia will remain the defining factor of Norwegian defence planning in the foreseeable future. The crisis in Ukraine marks the end of the 'deep peace' in Europe. The build-up of the Russian military underscores the asymmetry of Norwegian-Russian power relations. At the same time, the Asia-Pacific is of increased geo-economic and geopolitical significance. Terrorism, cyber-attacks and long-range missiles are evidence of geographical distance losing some of its importance. These threats and risks have a strong impact on Norwegian security.
- Changes in the threat and risk environment demand a 'new normal'. The task of handling such complex challenges is too large for the Norwegian Armed Forces and Norway to address alone. The Expert Commission on Norwegian Security and Defence Policy therefore suggests a unified effort by the Armed Forces, the society at large and Norway's allies. The Armed Forces must invest more in operational capability. Norwegian society should contribute through conscription and the total defence concept, as well as by ensuring a sound financial framework for the Armed Forces. Norway needs to take an active role in building a strong NATO through heightened co-operation with close allies. At the same time, Norway's relationship with Russia must be managed wisely, based on common interests.
- Five priority areas are particularly important for creating a strong war-preventing defence: Better intelligence and surveillance; a more robust strategic decision-making mechanism to manage crises; credible deterrence; Norwegian and allied forces ready and able on short notice, and Norwegian forces present in exposed areas at all times; sufficient logistical support.
- As important as a unified effort is the principle of simultaneity in planning and operations. The Armed Forces' logistical requirements should be met where and when needed. Furthermore, Norway must avoid a defensive war

separated into phases. Such an approach would run the risk of Norway having to act independently in the initial, crucial phase. Credible deterrence must build upon allied engagement from the very outset of a severe crisis. Escalation must be as seamless as possible, ensuring that the build-up of Norwegian forces and allied reinforcement take place simultaneously and in an integrated manner.

- In order to strengthen intelligence, presence, preparedness, endurance and support to military forces in Norway, the Expert Commission suggests increasing the appropriation level by 2 billion NOK by 2017. Investment in new submarines should be provided for by additional funding. Also, the Armed Forces should increase efficiency and reallocate a minimum of 3.5 billion NOK per year by 2020 from supporting areas to operational capabilities. 10 years from now these measures will provide an additional 7.5 billion NOK per year to the Armed Forces' operational activities.

An extensive Norwegian effort, combined with support from allies, will establish a new normal and enable a strong and credible defence of Norway.

CHAPTER 1

Introduction

The Assignment to the Expert Commission

The Expert Commission on Norwegian Security and Defence Policy was appointed by the Norwegian Minister of Defence, Ine Eriksen Søreide, on 15 December 2014, and submitted its report on 28 April 2015. The Commission was asked to analyse the Norwegian Armed Forces' ability to solve the most demanding tasks in crisis and war. The Commission has studied developments in the short term (the next four years) and the long term (the next 20–30 years). Complementary information concerning composition, mandate and process is available in the appendix.

The Expert Commission on Norwegian Security and Defence Policy

Members

- Professor Rolf Tamnes (chair)
- Secretary General Kate Hansen Bundt
- Rear Admiral Trond Grytting
- Research Director Alf Håkon Hoel
- Professor Janne Haaland Matlary
- Research Director Asle Toje
- Senior Research Fellow Julie Wilhelmsen

Secretariat

- Director Espen Skjelland (leader)
- Senior Adviser Kristin Hemmer Mørkestøl (deputy leader)
- Adviser Per Kristian Overn Krohn
- Office Manager Helene Leirud
- Colonel Per Erik Solli

The Norwegian Armed Forces' Most Demanding Tasks

The point of departure for the Commission's analysis is the Norwegian Armed Forces' most demanding tasks, i.e. challenges on the high end of the crisis scale. In this context, the following definitions are used:

- *National security* means preserving the existence, sovereignty, sovereign rights and integrity of the country. National security may be challenged through armed attack, political and military pressure, and serious strikes against Norwegian interests by state or non-state actors. Threats to national security may legitimise the use of all military and other resources.

- *War* has a relatively narrow significance in Norwegian jurisdiction, and is no longer a central term in international law. *Armed conflict* has a broader scope and encompasses more types of conflict than those covered by ‘war’ as a legal concept. However, in everyday speech ‘war’ is used interchangeably with ‘armed conflict’. Thus, the Expert Commission uses this term when deemed natural.
- *Security crisis* refers to a crisis that threatens the country’s territorial integrity and political sovereignty, while falling short of being a full-scale armed attack in the traditional sense. A crisis of this kind is characterised by being in an unclear grey zone between war and peace. The Norwegian authorities know or assume that foreign actors are responsible or involved. The character of the crisis could easily change. Above all, it could escalate. Such crisis could pose a threat to life and health, and may cause a deep sense of fear in the society. Crisis of this sort could, for example, be caused by political-military pressure from a foreign country, extensive terrorist actions, and severe cyberattacks.
- *Societal security* refers to the preservation of the lives, health and safety of the population as well as protecting important infrastructure and critical functions in the society.

The Armed Forces’ primary task is to enforce Norwegian sovereignty and sovereign rights and to defend the country when national security is threatened.

In complex situations it may be difficult to know in advance who should coordinate and manage a crisis. In order to handle threats against national security and severe security crises, Norway will most likely request allied assistance with reference to Article 5 of the North Atlantic Treaty (collective defence).¹ NATO’s senior political decision-making body, the North Atlantic Council, will formally decide on assistance. NATO will then take command of allied operations in Norway. However, the obligation to provide assistance applies to each member of the Alliance, irrespective of the deliberations in NATO’s Council. In any event, the operation will take the form of a coalition of countries willing and able to participate. At the national level, the civilian

1 The North Atlantic Treaty of 4 April 1949 contains two articles of importance to security crises and war. Article 5 constitutes the basis for collective defence. It dictates that an armed attack against one or more of the member countries shall be considered an attack against them all. Each country will provide assistance by immediately taking such action as deemed necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area. Under the provisions of Article 4, the member states will consult together whenever, in the opinion of any of them, the territorial integrity, political independence or security of any of the member states is threatened.

actors within the Norwegian total defence concept will support the needs of the Armed Forces.²

The Norwegian Ministry of Justice and Public Security will coordinate civilian crisis management in the event of threats to societal security unless otherwise decided. The Armed Forces may provide support to the crisis management. As illustrated in Figure 1, societal security may also be challenged in a situation where national security is threatened.

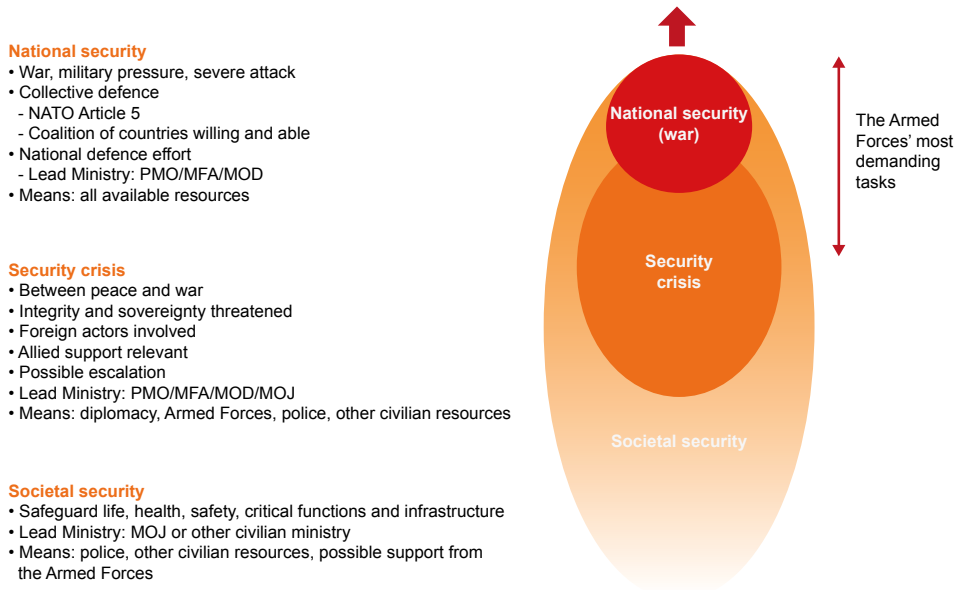


FIGURE 1 The crisis scale and the Norwegian Armed Forces' most demanding tasks. (PMO: Prime Minister's Office, MFA: Ministry of Foreign Affairs, MOJ: Ministry of Justice and Public Security, MOD: Ministry of Defence.)

About this Report

This report consists of two parts. In Part I, the basis for Norwegian security and defence policy is discussed. This includes security challenges (Chapter 2), technology, concepts and doctrines (Chapter 3), and the Western military co-operation (Chapter 4). Part I concludes with a description of the more particular challenges the Armed Forces are facing, partly with regard to

2 The total defence concept was established after the Second World War in order to ensure the best possible utilisation of society's limited resources in times of serious crises and war. This concept originally focused on civil support to the Armed Forces, and was closely linked to contingency legislation. Today, the total defence concept encompasses both civil support to the Armed Forces in war, and support from the Armed Forces to the civil society when managing crises in peacetime.

finances (Chapter 5) and partly through the use of scenarios to illustrate situations that the Armed Forces must be able to handle (Chapter 6).

In Part II, the Expert Commission gives its recommendations and input regarding the Norwegian Armed Forces' ability to solve the most demanding tasks in crisis and war. First, the main features of Norwegian security and defence policy, including the main principles for the defence of Norway (Chapter 7) are discussed. The report then takes an in-depth look at five areas that are of particular importance for our defence capabilities; intelligence and surveillance, strategic decision-making mechanisms, deterrence, availability of Norwegian and allied forces, and logistical support (Chapter 8). In Chapter 9, the Expert Commission points out the central principles within the realm of finance which, ten years from now (2025), will strengthen the Armed Forces' operational capability by an additional NOK 7.5 billion annually. The Expert Commission's overall conclusion is presented in Chapter 10.



**Part I
Basis**

CHAPTER 2

Security Challenges

The conditions for Norwegian security policy have fundamentally changed in recent years. Norway is once again facing traditional security challenges, combined with a variety of less conventional threats. The international system from the years of the Cold War, built up around two superpowers, was characterised by an elevated level of tension, but also by stability. The break-up of the Soviet Empire and the end of the Cold War left the U.S. as the sole superpower in a unipolar system. Doubts arose quite quickly regarding the strength of the United States, especially as the wars in Iraq and Afghanistan demonstrated that the country failed to achieve its objectives. Future threats and risks are likely to become extremely complex, and geopolitical developments unpredictable.

All of these factors influence Norwegian security policy. At the same time, this policy has several fundamental features that reflect geopolitics, history and political tradition.

This chapter describes significant developments of central importance for Norwegian security, especially those that may result in a serious security crisis or armed conflict.

Geopolitics and Military Power

Four aspects of geopolitical development are of particular relevance from a global perspective. First, the Asia-Pacific region is increasing in geo-economic and geopolitical importance. The current international system is multipolar. It may turn bipolar, built around China and the United States. This shift affects the willingness and ability of the U.S. to maintain a visible and credible engagement in Europe. The second factor applies to Russia under President Vladimir Putin, who has set as a goal to re-establish Russia as a strong and firm great power. Through the annexation of Crimea and a subsequent 'hybrid war' in Ukraine, Russia has challenged the 'deep peace' in Europe. Third, Southwest Asia and North Africa will continue to be characterised by deep divides and militant Islamism. This constitutes a threat not only within, but also far beyond the affected regions. The fourth and final factor involves non-conventional threats; weapons of mass destruction, terrorism and cyberattacks. These geopolitical developments illustrate how geographical distance is losing some of its significance. All of these factors have an impact on Norwegian security.

At the same time, large technological developments are shaking up accepted ideas. Highly accurate long-range missiles, drones and capacities for cyber-operations make it difficult for countries to protect themselves and challenge established defence philosophies. It is also becoming increasingly difficult to know who is the aggressor: Countries can conceal their intentions and tracks through disinformation, cyberattacks, the use of special forces and wars by proxy.

All of these changes in geopolitics, technology and the use of power contribute to the formulation of Norwegian security policy and the conditions for the organisation of the Armed Forces. At the same time, certain factors do not change:

- Norway is a small country. It is certainly a major actor within the field of natural resources, and its engagement policy is characterised by a high level of activity and the use of significant resources around the world. Norway has also made significant contributions in international military operations. Nonetheless, in terms of *Realpolitik*, Norway is a small country.
- A robust international framework is important for Norway. Especially for small countries, it is essential that the great powers recognise the importance of common rules of the game and do not threaten the system's existence. In the same way, it is important to maintain international rule of law, institutions, regulations and norms that regulate behaviour and contribute to conflict resolution. The UN should continue to play a central role in this system. As a major maritime state, Norway draws heavily on the global regulations at sea including the UN Convention on the Law of the Sea (UNCLOS) of 1982, as 'the constitution' of the seas.
- Norway is an Atlantic coastal state with strong historical ties to the West. Norway has sought protection from Western great powers, in previous times particularly from the United Kingdom and, later, from the United States. Norway's decision to join NATO in 1949 confirmed and reinforced the strong Atlantic theme in Norwegian security policy. Norwegian defence policy came to be based on the need for external support and reinforcement in the event of war. Assistance would have to come from the West, and it would have to be prepared in peacetime in order to be effective in times of war.
- The High North constitutes Norway's most important strategic area of responsibility. More than 80 % of the country's sea territory is located north of the Arctic Circle. Norway has both the right and the duty to preserve its sovereignty and its sovereign rights. In the North, Norway and Russia meet along a long common border both on land and at sea. Moreover, Norway must deal with both conflict and co-operation patterns in the Baltic Region.

Throughout history, this region has been an arena for geopolitical struggle and the region is highly affected by the tense security situation in Europe today. The mutual guarantee of the NATO co-operation implies that Norway will be obliged to support allied countries in the region when necessary.



FIGURE 2 Map of Norway's core area of interest.

- Norway is part of the Western security community. Important features of such a community are that the countries are not considering or planning to go to war against one another, that they have developed a defence community, and that institutions have been set up to ensure that conflicts are resolved through peaceful means.
- Russia is outside the Western security community. This limits opportunities for a close relationship in the North. There is also significant regional imbalance between Russia as a great power and nuclear state, and the small state of Norway. An asymmetrical neighbourly relationship requires that

Norway, in its own interest, develops and cultivates co-operation with Russia in a number of fields. At the same time, the aim of Norwegian policy is to involve allies and make the High North an arena for multilateral co-operation. This contributes to counteracting the risk of an imbalance that could otherwise make Norway vulnerable to pressure.

The Norwegian Armed Forces must always adapt to changing surroundings. Particularly since the beginning of the new millennium, the Armed Forces have undergone substantial modernisation. They have gone from being a mobilisation defence to becoming reaction forces. Certain circumstances are, however, of such a nature that armed forces should have a permanent feature:

- Armed forces have the fundamental and timeless responsibility of protecting the country and its people.
- Fundamental changes and deep crises – globally, regionally or locally – which we were unable to predict may occur, and may demand other solutions than those we envisaged.
- It takes decades to build a robust defence. Decisions made today have consequences for the size and shape of the Armed Forces far into the future. The purchase of costly weapons systems, such as combat aircraft and frigates, illustrates this. Such acquisitions strengthen our defence posture but at the same time limit our future freedom of action because we have chosen to purchase these, not something else.

In order to deal with both the unpredictable and the longer-term aspects, our Armed Forces must adhere to some central tasks. The forces must have a certain breadth, robustness and flexibility, to ensure that Norway is prepared if confronted with challenges different from those planned for.

Russia – Great Power and Neighbour

Russia under President Vladimir Putin is an authoritarian and anti-Western state with significant great power ambitions. The stated aim of Putin's regime is to re-establish Russia as a Eurasian great power. This will have strong impact far beyond that region. It is important for Russia to prevent neighbouring countries that were formerly part of the Soviet Union from developing close economic and strategic ties to the West. Putin currently enjoys the support of the country's elite and he is popular amongst the citizens. At the same time, the country is facing a number of structural problems, not least financial, which may lead to serious consequences for the society in the long term.

Russia has demonstrated *willingness* to use all the means deemed necessary, including military power, to promote and secure its national interests. Russia's military *capability* has been substantially strengthened in recent years, a trend which is expected to continue. The Russian military is operating in greater unison, with increased military readiness, mobility and range. Economic turmoil and difficulties will however also affect the Russian Armed Forces.

The conflicts in Ukraine have led to a great deal of uncertainty in the West concerning Russian intentions and a need to set clear limits. Russia itself views the West as continuing to advance its positions. A deep distrust, which could last for a long time, has developed between Russia and the West.

Threat is generally viewed as the sum of intentions and capabilities. Russia's intentions and actions leave, from a Western stance, little room for optimism. This may change for the better, but also for the worse. The development in military capabilities is more predictable, especially in the North. The Northern Fleet and the strategic nuclear submarines are essential elements in the Russian strategy. The country's military strength in the area, in combination with assets which can be transferred rapidly, contribute to the strong and lasting asymmetry in our bilateral relationship.

Geopolitics and Strategic Objectives

The great power ambitions of the Putin regime are not accompanied by a sustainable plan. The United States and NATO have been increasingly labelled geopolitical rivals since 2004, in line with the enlargement of the Alliance and the West's military engagement in Southwest Asia and North Africa. This influences Russia's strategic thinking and military prioritisation, especially the role of nuclear weapons. At the same time, it is worth noting that in Russian doctrine, NATO is still described as a 'danger', not as a 'threat'.

The Baltic Sea region is important to Russia as a gateway to Central and Western Europe by sea and air. The Baltic states are randomly being subject to pressure from Russia and perceive the situation to be challenging. Sweden and Finland, which Russia considers Western and NATO-friendly, are also concerned about Russia's behaviour in the region.

The High North has a different geopolitical character than the Baltic region. To Russia, this region is important for both economic and military reasons. A modernisation of Russian nuclear and conventional forces is underway, making Russia more able to project power to the north and west.

Russia also has to deal with challenges in the south, with terrorism and instability in its own republics and neighbouring states. Furthermore, Russia

has long been signalling its intention to turn to the east. The crisis in Ukraine has contributed to strengthening the country's co-operation with China, with a special emphasis on increased exports of oil, natural gas and weapons. At the same time, however, Russia fears China, and this will limit Russian-Chinese relations in the longer term. Russia cannot be more than a junior partner in relation to an expanding China, which, like the United States, has a global perspective on international relations and primarily views Russia as a regional actor.

Economic Development

The Russian economy is dependent upon the country's petroleum production. Three factors are crucial in ensuring growth; the price of oil, developments in the European gas market, and the need for investment in order to maintain production levels. A dramatic fall in the price of oil, Western sanctions and an oil production that is levelling out all create considerable challenges for the country. As in 1998 and 2008, we have seen an investor and capital flight from the Russian market. This has had a hard impact on the Russian economy. Growth was at approximately 0.2 % in 2014, the lowest level since 2009. Growth estimates are still being adjusted downwards and a new recession would see the country even worse off than it was during the financial crisis in 2008–2009, due to weaker currency reserves, amongst other reasons. Nevertheless, Russia's ability to avoid a lengthy crisis should not be underestimated.

The Russian defence budgets have shown continual growth in real terms since 2000. In addition, Russia has prioritised defence over other sectors. In 2008, Russia used 2.7 % of the Gross Domestic Product (GDP) on defence, while the proportion for 2015 is estimated at 4.3 % of GDP, see Figure 3. Estimates from the Norwegian Defence Research Establishment (NDRE) indicate that the weapons programme GPV-2020 alone will account for an average of 2.2 % of GDP in the period 2011–2020. The gloomy economic situation is expected to have an impact on defence. However, to date there are no grounds to suggest that the Armed Forces will be hit hard. Russian authorities have previously maintained a high level of military ambition also during economic downturns – most recently during the 2009 recession.

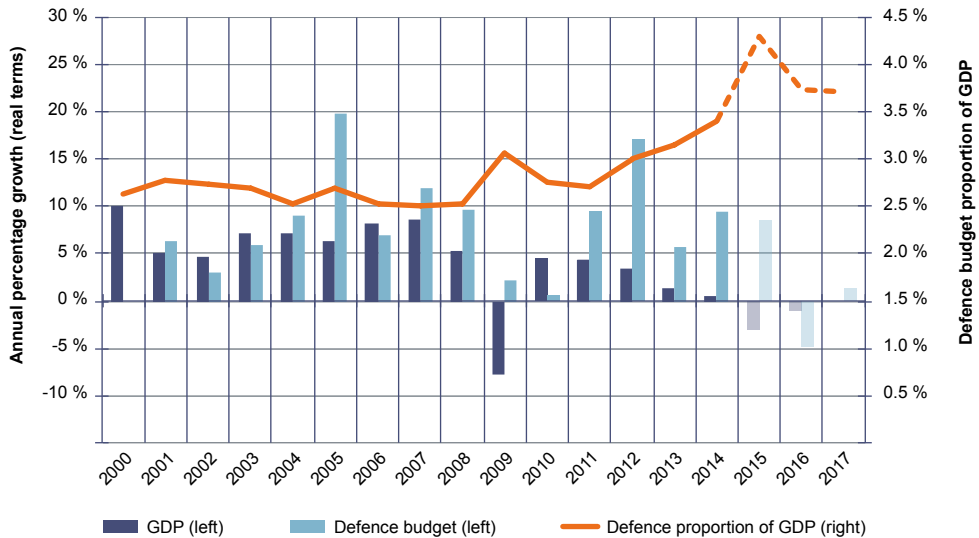


FIGURE 3 Annual percentage growth in GDP and the defence budget (bars measured against the left-hand column) and the defence budget proportion of GDP (line graph measured against the right-hand column) (Source: The Norwegian Defence Research Establishment).

The Development and Modernisation of the Armed Forces

The Russian Armed Forces are undergoing a modernisation that is likely to continue for many years. Through its armaments programme for 2011–2020 a ten-fold increase in procurement for arms, in comparison to the preceding ten-year period, is planned (approximately NOK 3,500 billion). The aim is to increase the proportion of modern military armament in the forces from 20 % in 2011 to 70 % by 2020. Russian forces are now more professional, better trained and better armed. A new command structure has also been established. Central to the development of military strategy is the fact that Russia places high value on the development of cruise and ballistic missiles which can reach all parts of Europe from Russian territory and Russian vessels.

Nuclear weapons are still a high priority. Like the United States, but unlike France and the United Kingdom, Russia maintains a nuclear triad (bombers, land-based missiles and submarines). Nuclear weapons are an expression of Russia’s great power ambitions, and they can also be used to compensate for its inferiority in conventional forces in relation to the West. The Putin regime has lowered the threshold for the use of nuclear weapons, most recently expressed in its updated military doctrine from December 2014. Russia spends significantly on maintaining its triad. One may ask whether in the longer term the country will have the financial muscles to uphold this ambition.

In a short time, Russia has improved its ability to carry out integrated operations with traditional military forces, intelligence, special forces, information operations and a range of diplomatic and financial means which can support its political objectives. The Ukraine crisis is a recent, but not unique, example of the effective use of a broad range of such means. The crisis shows that Russia has learned and achieved a great deal since the conflict in Georgia in 2008.

The High North and the Arctic

The High North and the Arctic are of great economic and military strategic importance to Russia, and contribute to maintaining the country's position as a great power. Russian authorities aim to develop the region into the country's foremost strategic base for natural resources by 2020. However, such growth is dependent upon sufficiently high prices for raw materials.

Conflicts elsewhere could spread to the High North. The Ukraine crisis illustrates this connection. Norway has backed the West's sanctions policy against Russia, which has responded with countermeasures. This crisis has also affected co-operation in the North. Thus far, the consequences have been modest.

The connection between international politics and regional conditions has always been most visible in the field of military strategy. While the political climate may vary, the strategic importance for Russia of the High North remains constant. In this context, the United States is the main adversary – today as in the past – and Russia is therefore critical towards American and allied military activity in the North.

The most important new weapons systems are the Dolgoruky-class strategic nuclear submarines, equipped with Bulava missiles. These are currently being brought into use. In addition, there are new types of both sea- and land-based cruise missiles, highly accurate and with long ranges. The new Severodvinsk-class submarines are capable of using missiles with both conventional and nuclear warheads. Another aspect of the strategic scenario in the North is that Russia has forward bases for the deployment, dispersal and support of bombers normally stationed at air bases further inland. Since 2007–2008, Russia has resumed and increased the number of flights involving long-range bombers as well as patrols with strategic submarines.

The primary reasons for the geostrategic value of the High North are the Russian nuclear submarines and the need to protect them. The submarine patrols are concentrated in areas of the Barents Sea, which is designated as a *bastion*. One of the prioritised tasks is to protect these bases and patrol areas against hostile forces. In a conflict, Russia will seek to establish control in its

immediate vicinity, and to deny others access in the more forward-situated areas. Broadly speaking, the bastion defence reaches northern parts of the Norwegian territory, the Barents Sea and the Norwegian Sea (see Figure 4). As part of the protection of the strategic nuclear submarine capacity and of Russia in general, a robust aerial defence is also being built in the form of additional air bases, anti-air assets and radar stations for air defence and early warning throughout the whole of the Arctic area, including the Kola Peninsula. We must expect that this strategic pattern will continue.



FIGURE 4 Schematic diagram: The Russian bastion and the reach of the bastion defence.

The key mission of the conventional forces in the North is to protect the strategic submarines and their base structure. The ground forces in Northwest Russia are relatively modest at present, but are increasing in number. A few new mobile rapid reaction forces are being established. They can be deployed quickly where needed. In addition, the Northern Fleet and air assets are important capabilities in the area. To further underline the importance of the High North to Russia, an Arctic Command is currently being established in Murmansk. The Command will primarily rely on the forces in the Northern Fleet. Its responsibility will comprise the entire Arctic area of interest, including the Northern Sea Route. Russia is currently setting up a number of

bases along the Arctic coast that can be used for military, paramilitary and civilian purposes.

This is the strategic backdrop that can lead to tension and military conflict in the High North. Regionally there are few potential sources of conflict, at least compared to many other places in the world. Russia – like Norway – wants the region to remain stable and peaceful. The countries in the North share several interests. Russia and Norway work closely together on, for example, the management of resources, environmental issues, and search and rescue. For both countries, the Law of the Sea is important in securing their own interests as well as common interests. The agreement concerning maritime boundaries in the Barents Sea and the Arctic Ocean, which came into effect in 2011, emphasises Russia's desire to settle claims within the recognized rule of law. The agreement also solved a latent source of conflict in the bilateral relationship and facilitated future petroleum activity in the region.

Developments in supply and demand in the markets for raw materials, particularly the discovery of shale oil and shale gas and a lower demand from Asia, have contributed to undermining visions of an imminent oil boom in the North. Also, Russia is dependent upon Western capital and expertise in order to expand its undertakings on the continental shelf. Western sanctions have contributed to slowing down the pace of Russian petroleum expansions. In general, there are no grounds for the often-repeated claim that we will experience a race for the petroleum resources in the North.

Military conflicts are unlikely to arise in the foreseeable future on the basis of local or regional differences in the North. Differences do exist. The outer limits of the continental shelf beyond 200 nautical miles into the Arctic Ocean are yet to be settled. Russia and other coastal states claim substantial sea territories. All involved states have stated that they will abide by the Law of the Sea. Overlapping claims, which under international law are settled by negotiations between the states involved, are unlikely to lead to severe crises.

Svalbard is potentially a more testing issue. Under the terms of the Svalbard Treaty of 1920, Norway gained sovereignty over the group of islands, which have been part of the Kingdom of Norway since 1925. Several countries are critical of the Norwegian exercise of authority. Russia keeps a visible presence on Svalbard and aspires for special arrangements to maintain its historical position on the islands. A foothold on Svalbard may also be of strategic importance to secure influence in the western Arctic and to make sure Western countries do not use the islands for military purposes. Disagreements with Norway over the exercise of authority in the Fishery Protection Zone may also in the future be a source of conflict. However, extensive use of military force in

the Svalbard area is not very likely unless a crisis spirals out of control or becomes part of a larger conflict that originated elsewhere.

The Arctic in the Long Term

The Arctic is undergoing major changes. Reduced ice coverage and ice volumes in the Arctic Ocean will make large areas more accessible during the summer months. This may result in an increase in economic activities such as shipping, tourism and fishing. Ice conditions will, however, continue to vary between different areas, from year to year, and they will remain particularly challenging during the wintertime. Although the Northern Sea Route is important for transport into and out of Russia's Arctic region a major increase in traffic through the Arctic is not expected in the foreseeable future.

Nor is it likely that offshore extraction of oil and natural gas will reach any significant levels over the coming decades. It will take a long time and be very costly to develop such fields, to build infrastructure and to initiate any large-scale production regardless of the price level. In a few decades, production of alternative and renewable energy may make the extraction of fossil energy in such high-cost outer regions less attractive.

All of the eight Arctic countries have increased their activity in the North. Russia is likely to remain the dominant actor in the Arctic, due to the country's vast Arctic coastline, large amounts of natural resources in the North, and the region's military importance. In particular, strategic submarines make this region valuable to Russia in the long term. New submarines are now being delivered, making the fleet able to continue operating for many years. Russia will again have to consider renewing its fleet of submarines in a few decades. By then, much could change. It is not self-evident that a new generation of submarines will concentrate its patrols in the immediate vicinity of the Barents Sea. It is not even certain that Russia will have the financial strength to build a new generation of strategic submarines. In such a case, a comprehensive bastion defence will lose its justification, and this may have a positive effect on Norwegian security.

The United States will also remain an important actor in the Arctic, and the country's level of ambition for the region is being stepped up. However, the region is not granted the same priority in plans and resource allocation in the United States as in Russia. The fact that the United States has so far not prioritised building a new icebreaker clearly illustrates this. We also see an increasing Asian engagement. In the long term, we must expect China to significantly increase its activities in the North. Generally speaking, countries both within

and outside of the Arctic will be interested in the region for scientific purposes, commercial activities and transport.

No one can today envisage a possible conflict scenario in the Arctic in the long term. The most likely source of a potential military conflict is probably geopolitical disparities developing between great powers or blocs, which will then have consequences in the North. Since a number of challenges in the Arctic, such as remotely sourced pollution and climate change, have their source outside the region, an increased co-operation between actors both within and outside of the region is important. Svalbard is becoming more conveniently placed for research and travel both within and through the Arctic. An increase in activity deep within the Arctic region, including military operations, underlines the need for good surveillance and intelligence.

Non-Conventional Threats

States and non-state actors who use non-conventional power tools may threaten Norway's security and Norwegian interests. The most prominent non-conventional threats stem from terrorist attacks, use of weapons of mass destruction, and attacks in or through cyberspace.

There are three main reasons why these threats constitute a serious challenge in both the short and the long term. First, religious, ethnic and ideological disparities and large-scale social inequality contribute to the development of extremism and radicalisation in a number of countries and regions. Terrorist organisations have been able to develop and consolidate several places in North Africa and Southwest Asia. Second, technological development and international trade enables terrorists to acquire the knowledge and resources that can be utilised in the production and use of non-conventional means. Third, Norway is becoming more vulnerable to non-conventional threats. Such threats cross borders more easily and are increasingly difficult to detect, society is constantly becoming more dependent upon digital information and communication systems, and higher population density in cities increases the potential for damage.

Developments in cyberspace are unique as they involve new and unfamiliar challenges. Activity in this domain partially erases the dividing lines between public and private spheres, between home and the outside world, and between peace and war. The emergence of 'an internet of things', where physical objects such as refrigerators and air-conditioners are being connected to the Internet, is contributing to greater dependency between physical and digital spaces. In addition, information of great value is stolen through digital espionage each year. Estimates from the Center for Strategic and International Studies and

McAfee indicate that the global cost of undesirable cyber activity amounts to approximately NOK 3,240 billion per year – i.e. about three times the size of the Norwegian national budget.

The Internet is being used for communication between terrorists and for espionage and sabotage in or through cyberspace. Several terrorist organisations have expressed an ambition to use cyberattacks as weapons in the pursuit of their objectives. So far, they have displayed little ability to do this.

In sum, non-conventional threats have become extremely complex and unpredictable. They are becoming more difficult to detect, and how to deal with them is becoming increasingly incalculable.

Terrorism

Acts of terrorism will not necessarily cause war-like conditions. The most effective terrorist weapon is the generation of fear through spectacular strikes. The authorities and the general public may experience such strikes as a crisis on the high end of the crisis scale, and act accordingly.

The terrorists can be organisations or individuals who are acting on their own or as proxies on behalf of states. Terrorist organisations make use of ungoverned spaces in states where the central power is weak or non-existent. They can build strength with the support of local followers and attract foreign sympathisers who can contribute both knowledge and expertise. Terrorist organisations can cause death and destruction in their host country, and also target international organisations and other foreign actors in the region. Terrorist organisations often operate across several national borders. The attack on the gas facility at In Amenas, Algeria, in the winter of 2013 illustrates how terrorist organisations can emerge in one country and attack across the border in another. Foreign fighters generate anxiety, both because they contribute to death and destruction in conflict areas, and because there is an increased risk that they may strike in their home countries.

The terrorists can use both non-conventional and conventional weapons. In terrorist attacks in Europe the use of simple weapons such as knives, firearms and improvised explosive devices (IED) is most common. In recent years there has been an increase in the number of 'lone wolf' terrorists. Some terrorist groups have become more conscious of their targets, e.g. military personnel and police officers. The terrorist attacks in Paris and Copenhagen in early 2015 also demonstrated that such attacks can target specific groups, such as Jewish people and proponents of free speech.

So far, terrorist organisations have made little use of chemical, biological or radiological weapons. There is a risk that this may change. New technology and international trade make knowledge and resources to develop weapons of mass destruction increasingly accessible. It is difficult to either control or stop the trade of chemical substances used in the development of such weapons because these substances can also be used for legal, civilian purposes. It is not difficult to produce small-scale biological weapons. So-called ‘dirty bombs’, i.e. conventional bombs furnished with radioactive substances, are easy to develop. These can be produced by using radioactive waste from nuclear power plants or from research reactors. Such weapons will cause less damage than a full-scale nuclear bomb, but their effect could be considerably higher than that of a conventional weapon. The use of chemical, biological or radioactive substances can generate fear and a sense of crisis. When such weapons become easier to produce or to acquire we must be prepared for the use of them by terrorist organisations.

State-Sanctioned Use of Non-Conventional Means

Organisations and individuals can cause great damage. However, states possess greater resources and abilities to develop not only conventional, but also non-conventional weapons, including weapons of mass destruction.

Nuclear weapons stand out due to their enormous destructive potential. Full protection against nuclear weapons does not exist. Not even a territorial missile defence in Europe would protect Norway against all forms of the strategic and tactical use of such weapons.

Nuclear weapons are first and foremost an instrument used by states in the strategic game between states. For most of the nuclear powers, the principal purpose of these weapons is both to act as a deterrent and to express the country’s status as a great power. Credible deterrence involving nuclear weapons presupposes that nuclear weapons can be used if necessary. Some countries may be more inclined to do so than others. Several categories of nuclear weapons and weapon carriers, particularly missiles, are currently being modernised and refined. Many new military capabilities, such as combat aircraft and submarines, can carry both conventional and nuclear weapons. Nuclear weapons continue to be an essential part of great power politics.

In this context, the prospect of nuclear weapons to be used as a non-conventional means is of particular importance. A nuclear power such as Pakistan may be subjected to internal unrest and disintegration, which could result in authorities losing the physical and actual control of their weapons and production facilities. Moreover, some nuclear powers may have strategic motives for contributing to

the proliferation of nuclear weapons and to other states and actors' competency about nuclear weapons.

Other types of weapons of mass destruction, such as chemical, biological and radiological weapons, exist to varying degrees in several countries, in spite of the ban in the Chemical Weapons Convention and the Biological Weapons Convention. Most countries consider the weapons to be so controversial that there is a high threshold against using them. On the other hand, chemical weapons have been used in internal conflicts, for example in Syria in 2014. Therefore, we cannot discount the possibility that states may use such weapons also in the future.

States have greater ability than non-state actors to cause destruction also in cyberspace. Several countries have, or are in the process of developing, the capability to conduct offensive cyberoperations. These include Russia, China, Iran and North Korea, as well as allies such as the United States, France, the United Kingdom, Germany and the Netherlands. Norway is also developing such a capability. Countries may use cyberspace for offensive actions in all phases of a conflict. In peacetime and early on in a conflict, the purpose would most likely be espionage. An aggressor would typically want to obtain information about plans, command and control systems and vulnerabilities. Furthermore, an aggressor could plant malware to be used in a later cyberattack.

A number of attempts of digital espionage against Norway have been uncovered in recent years. Russia and China are the most active, with ongoing espionage operations targeting Norwegian interests. In the summer of 2014, the Norwegian oil and energy sector was targeted in one of the most extensive cyber espionage campaigns against Norwegian interests to date. More than 50 businesses were confirmed affected, while several hundred had to thoroughly check their data systems. Concurrently, there is reason to believe that advanced digital espionage is not being discovered.

Cyberattacks can involve far more than espionage. It is also possible to destroy physical infrastructure. To date, two such instances are publically known. The first, Stuxnet in Iran in 2010 was, according to open sources, carried out by the United States and Israel. The second case was reported in Germany in December 2014; an attack on a steel mill. The cyberattack affected data systems controlling core functions such as the furnaces, which were blocked from turning themselves off normally. This cyber-induced functional error resulted in overheating, and the facility was severely damaged.

Thus, cyberattacks can be used for espionage and the destruction of physical infrastructure. However, it is not likely that cyberattacks alone can create a

severe security crisis or pose a threat to national security. Few envision a ‘cyber war’, which only takes place in cyberspace. Cyberattacks are more likely to occur in combination with other means, such as conventional military attacks and propaganda. In a conflict, threats of cyberattacks may be used as forms of pressure and in order to deter an opponent. Just prior to an outbreak of war, cyberattacks may be directed against an opponent’s vital command and control systems. The attack will most likely be prepared in advance, and can be executed without revealing the identity of the aggressor. Cyberattacks early on in a conflict may be an initial indication that an armed conflict is imminent. This can generate chaos, which can be exploited to carry out more traditional military operations. This was demonstrated in practical terms when Russian troops went into Georgia in 2008. The Georgian authorities’ public information pages on the Internet were blocked during a critical phase. This caused insecurity and prevented communications between the authorities and the citizens.

Offensive use of cyber weapons is extremely complex and risky. It requires detailed knowledge of the opponent’s computer systems. It is also difficult to predict the consequences of cyberattacks, how an adversary might react and to what extent actions may lead to an undesired escalation. The use of digital weapons can make the weapon known to the opponent – who will thus be able to develop countermeasures and make it virtually impossible to repeat the attack. These challenges may explain why many states are reluctant to use such means. Nonetheless, in a precarious situation a state could make use of cyberattacks to gain the upper hand or to avoid defeat. Preparations for the offensive use of digital means are fully under way, both amongst Norway’s allies and countries outside NATO. In military doctrines, cyberattacks are included as part of the state’s arsenal, especially as a force multiplier of conventional power. Cyberattacks may become an increasingly important tool in conflict and war, but developments in the long term are difficult to predict.

Grey Zones, Doubts and Decisiveness

With new complex threats and risks, more grey zones will arise. A government dealing with a crisis may find it difficult to determine whether the situation represents a challenge to societal security or to national security. Terrorist attacks may be carried out in several places simultaneously; terrorist organisations may threaten to use or use weapons of mass destruction, and both the state and the society may be affected by cyberattacks which may or may not be carried out by another state. Complex attacks will be extremely difficult to handle. Doubts and disputes on who owns the crisis may arise, and decision-making power in critical situations can be weakened. Crises in the grey zone between war and peace highlight the need for good intelligence and the necessity for the authorities to clarify responsibilities in advance to avoid paralysis.

Challenges in Africa and Asia

North Africa and Southwest Asia face such profound problems that crises will remain a persistent challenge. Conflicts may potentially affect Norwegian interests, and Norway will be expected to contribute with economic and military means, also in the future. At the same time, the Asia-Pacific region is gaining geo-economic and geopolitical importance. This will influence the priorities of the United States, our primary ally, and may lead to direct and indirect consequences for Norwegian security.

North Africa and Southwest Asia contain four interconnected conflicts:

- 1) A political and socio-economic conflict between privileged elites and large population groups which receive a small proportion of the society's benefits.
- 2) Disparities between ethnic and religious groups, in many cases across national borders.
- 3) The great power disparities between primarily Saudi Arabia and Iran.
- 4) The conflict between Israel and the Palestinians.

Due to these conditions, political and socio-economic misery, deep disparities and militant Islamism permeate these regions, threatening countries and people, including those far outside the area. The situation in Afghanistan will remain difficult for the foreseeable future. Developments in Iraq, Syria, Libya and Yemen are of great concern as well. In the Sahel region, Islamic militants have gained control and are undermining the system of governance and the fragile stability in large parts of North Africa.

Since the turn of the millennium, the international community has used huge resources to try to either solve or limit the problems. The results are not proportionate to the effort. One major problem is the lack of a robust system of governance. Attempts at regime changes, primarily undertaken by the United States, have failed. What is left is weak leadership, state disintegration and a fertile ground for extremism.

The Western economic and military engagement in the region will, despite all struggles, have to continue. This is due to humanitarian reasons and is needed to prevent movements like Al-Qaeda and the Islamic State in Iraq and the Levant (ISIL) from acquiring territory that would enable consolidation and growth. Every future Western strategy must acknowledge the importance of stable regimes and regional stability in order to reach tangible results.

The challenges in the Asia-Pacific region differ fundamentally from those in North Africa and Southwest Asia. First, the region consists of stable states, and future conflicts will be primarily centred on inter-governmental matters. Second, the region is characterised by economic growth and military build-up.

The Asia-Pacific region is a locomotive in the international economy. This is beneficial to many, also Norway. Third, China is emerging as a great power with the world's second largest economy and defence budget. A new bipolar power system with the United States and China as the key actors may emerge. However, predicting China's future is difficult. There are strong social and economic tensions in the country, which may reduce its economic growth and strengthen its nationalist tendencies. This may lead to a more self-assertive foreign policy. We have seen such tendencies already. Nevertheless, continued growth is the most likely trend.

It is difficult to know whether China's growth will make the world less peaceful or not. On the one hand, China's position as a global economic power entails that the country will consider it to be in its interest to maintain a rule-based multilateral system with freedom of movement, access to markets and protection of investments. The country's growth and increased self-awareness may, on the other hand, lead to more geopolitical rivalry, by creating insecurity in the region and by challenging the position and self-image of the United States as the leading power. Historical experience suggests that large and rapid changes in absolute and relative power have in many cases developed into sources of conflict. For the time being, these conflicts are of a regional nature. China is not willing to compromise when its regional interests are at stake, as in the cases of unresolved sovereignty issues in the East China Sea and the South China Sea. Furthermore, China is developing a military strategy aiming to deny the U.S. military access to areas in the immediate vicinity of Chinese territory.

The U.S. rebalancing towards the Asia-Pacific region began already in the mid-1990s, and this trend has been reinforced in recent years. The U.S. withdrawal from Iraq and Afghanistan enables a larger U.S. military footprint in Asia. China's increased military muscle and more self-assertive policy have brought the United States closer to several other countries in the region. In all major conflict scenarios in the region, the United States will most likely be involved.

These shifts in geo-economic and geopolitical power will affect the framework for Norwegian security policy. Central actors outside the Western world will have much greater influence on the design of the international system, in a way that will not necessarily benefit Norwegian interests. These shifts will, however, be most clearly expressed in American re-assessments and expectations. In some situations, the United States might insist on European, including Norwegian, military contributions in a future conflict in Asia. The United States might also urge Europeans to contribute more to capacity building in order to strengthen the ability of selected countries to assert their own sovereignty.

Consequences for Norway

Norway's primary strategic interests are in the North. Norway's interests must be secured and protected. Russia is not part of the Western security community, most recently demonstrated by the Ukraine crisis, and the asymmetric power relationship between Norway and Russia is becoming more apparent. The Russian build-up of military forces creates a number of challenges: The acquisition of several types of long-range precision weapons and the capability of cyberoperations make Norway more vulnerable. Better Russian responsiveness and higher readiness reduces the warning time to next to nothing. Covert use of military power increases the need for early detection.

The potential use of weapons of mass destruction, terrorism and cyberattacks illustrate that 'far away' no longer exists. This has consequences, also for Norway. Organisations and individuals can cause great damage, for example by terrorist strikes. Nevertheless, it is still primarily states, possibly in combination with non-state actors, that may trigger a severe security crisis and pose a threat to national security.

The increased geopolitical and geo-economic importance of the Asia-Pacific region will impact the framework on which Norwegian security policy is based, through changes in the rules of the international system and through American expectations of increased European military engagement.

Threats and risks are becoming both complex and unintelligible. Several challenges could unfold in the grey zone between war and peace. It may be difficult to detect and provide a proper warning in time, to know who is the aggressor and to coordinate the Norwegian and allied effort.

CHAPTER 3

Technology, Concepts and Doctrines

The Gulf War in 1991 represented a shift in military technological development. New and refined technologies such as stealth, precision-guided weapons, night vision goggles, long-range cruise missiles, unmanned aircraft and various satellite systems, combined with new tactics and concepts, led to a qualitative Western superiority. Analysts in Russia, China and a number of other countries and organisations took note of this and implemented measures which have gradually compensated for Western conventional dominance.

Information and network technologies, precision-guided long-range missiles and unmanned systems will characterise the future development of military power. Along with this, we see changes in concepts and doctrines, including new forms of hybrid warfare and denial strategies. These are the central themes in this chapter.

Technological Trends

Modern information and network technologies are mainly being developed in the civilian sector. The defence sector's introduction of such technologies for its own purposes has created both new opportunities and challenges. Military adaptation to and the utilisation of these technologies will be central in the foreseeable future, including in the network-based defences that are gradually being implemented by modern military forces.

Long-range missiles are no new capacity, but their technology has evolved greatly in recent times. This provides significant opportunities and challenges for Norway. On the one hand, even small states like Norway can develop and introduce advanced missile systems, such as the Naval Strike Missile (NSM), a highly advanced missile for naval targets. On the other hand, modern missile technology will make Norway and allied countries vulnerable because existing air defence systems are not necessarily able to protect against the new systems. A number of actors around the world already possess modern missile systems that will pose a potential threat to Norway in a conflict.

Aircraft, naval vessels and ground vehicles are mobile platforms able to fire missiles at various types of targets. Mobile platforms, especially land-based systems, are difficult to keep track of and are thus very resistant to attack.

New guidance systems have resulted in far better accuracy, which increases the effectiveness of all categories of missiles. The following missiles exist, or are in the process of being developed; ballistic missiles for ground and sea targets, long-range cruise missiles with high precision, supersonic missiles, anti-satellite missiles and anti-aircraft missiles with very long ranges.

	RGM/UGM-109 'Tomahawk' USA	Kh-55 'AS-15 Kent' Russia	DH-10 and CJ-10 China
Variants	10	6	4
Range (km)	500–2500	2500–3500	1500–2000
Warhead	130–450 kg Conventional/nuclear	400 kg Conventional/ nuclear	500 kg Conventional/ nuclear
Launch system	Surface vessels / submarines	Aircraft	Ground vehicles / aircraft / surface vessels
Inventory (approximately)	1000 (about 2000 used in battle)	800	200–500

TABLE 1 Examples of long-range cruise missiles. Data has been collected from open sources.

Unmanned systems will be of great significance in military operations. Civilian actors are spearheading the development. At present, remote-controlled satellites, aircraft, helicopters and ground vehicles are already mature and widespread technology, including in the military sector. These systems are expected to grow in numbers, and will become more autonomous. Unmanned systems will not by default be reducing costs; the benefit of such systems may just as well be to reduce risk. Some systems, such as armed drones, also raise ethical and legal issues. In any case: Unmanned systems in the air, at sea and on land will in the future be used by Norway and against Norway.

Concepts and Doctrines

The West, and particularly the United States, has at times had an exaggerated confidence in the importance of technological advantage. In Afghanistan, the NATO countries have experienced that a motivated opponent can create significant resistance without advanced technology, but rather with the help of effective asymmetric strategies. Despite the development of new concepts and refined doctrines, past solutions do not necessarily lose their relevance. For some actors, guerrilla warfare will still be the preferred approach.

Nuclear weapons continue to play a central role in the strategy of a number of countries. The United States and Russia have reduced their arsenals, but they still have more than 4,000 nuclear weapons each. France, Britain and China each have 200 to 300 nuclear weapons in their arsenals, and India and Pakistan introduced such weapons in the 1990s. Non-proliferation is a priority area, but the international regime has a number of weaknesses.

In a number of countries the military structures are still characterised by traditional manoeuvre warfare. Battle tanks and heavy mechanised armies occupy a central place in many Western and non-Western armed forces, yet they have been challenged in two areas. First, advances in sensor and weapon technology have made large platforms more vulnerable, and second, increased operational tempo and shorter warning times have made it more difficult to utilise heavy land-based platforms in the right place at the right time.

Network-Centric Warfare

From the end of the 1990s, the Norwegian Armed Forces devoted increased attention to developments in information technology. The ambitious concept of ‘network-centric warfare’ was thought to lead to fundamental changes in modern warfare. In retrospect, it is more accurate to view this as an evolution rather than a revolution. Network-centric warfare has led to enhanced information flow and communication within units and between actors. The ability to work together and to conduct joint operations has gradually improved.

Hybrid Warfare

The combination of regular and irregular warfare has a long tradition in many parts of the world. In recent years, this has received increased interest. In the final phase of the war in Bosnia in 1995, the coalition used not only conventional military power, but also various forms of political and economic pressure. China uses diplomacy, propaganda, economic pressure, its coast guard, militia and other paramilitary units to achieve its goals in both the South China Sea and East China Sea. The conflict in Ukraine differs from the war in Georgia in 2008 as the use of force has been more extensive and more professional, and because Russia has used political, civil, paramilitary and military means in a comprehensive manner.

Open and trust-based Western societies are vulnerable and ill prepared to meet such combined wars or hybrid wars. Countermeasures require good intelligence, high responsiveness and coordinated efforts across a number of state sectors.

Denial Strategies

During the Cold War, the Soviet Union aimed to deny Western powers access to the Barents Sea and the Norwegian Sea. As part of the modernisation of the Russian Armed Forces, this form of denial strategy is reintroduced in plans and operations. China is taking on the same approach. Chinese submarines, vessels, bombers and mobile missile batteries on land with long-range precision weapons will make it increasingly difficult for the United States and countries in the region to operate in China's neighbouring areas during a conflict. The spread of modern military technology will make more countries capable of formulating denial strategies.

There is a long-standing debate in the United States concerning counter-measures against this effective defence strategy. The so-called Air-Sea Battle concept from 2011 was a response to this kind of challenge: Its intention was to attack and defend in all five domains (outer space, airspace, sea, land and the cyber domain). Many were critical of this concept because of high financial costs and high risks associated with attacking targets in a country possessing nuclear weapons. In 2015, Air-Sea Battle will be replaced by a new concept that will form the basis for dealing with challenges in the short term. At the same time, the United States has indicated that it will invest heavily in research and development in order to regain military advantage in the long term. The consequences of this commitment can be significant, both for the military-strategic relationship between the United States and China and for forms of warfare more generally.

Consequences for Norway

Technological development favours the offensive party. Geographical distance is losing some of its relevance. Tools such as cyberattacks, ballistic missiles, cruise missiles, long-range drones and satellites challenge a defender's ability to create strategic depth in time and space.

We see a growing number of conflicts where different tools are used in a coordinated and comprehensive manner. An offensive or defensive party in a conflict may take and maintain the initiative using diplomacy, economic measures, conventional forces, guerrilla forces, terrorism and information operations.

Western military powers, including the Norwegian Armed Forces, must be prepared to confront manoeuvre warfare, guerrilla warfare and other forms of irregular warfare, hybrid warfare, deterrence with nuclear weapons, cyber-attacks and new denial strategies.

CHAPTER 4

Western Military Co-operation

Since 1949, NATO has been the core framework of Western military co-operation and the central component of Norwegian national security. Military co-operation within NATO is based on the right to individual and collective self-defence, which is customary international law and explicitly stated in Article 51 of the UN Charter. NATO's three core tasks are collective defence (Article 5), crisis management within and outside NATO's territory, and security through co-operation with partners. NATO membership commits the member states. While the member states may expect allied assistance when needed, they are also duty-bound to assist others.

Today's NATO, consisting of 28 sovereign countries, is facing great challenges. The Alliance has become heterogeneous and it may be difficult to reach consensus. A number of countries have reduced their defence budgets and military capabilities, and the traditionally strong U.S. leadership is weakened.

Nevertheless, NATO is the world's most robust defence alliance. Three factors make the Alliance unique. These are collective defence, the planning and command mechanisms, and the North Atlantic Council. The Council convenes permanently for consultations and decision-making. Each member state has one vote regardless of size.

In addition, NATO is a collective framework for bilateral and multinational co-operation. Norway's relationship with the United States has, for example, been referred to as an 'alliance within the Alliance' and NATO has been considered as a collective framework for a bilateral American security guarantee. Now as in the past, military operations will normally consist of forces from a group of countries as a coalition of those able and willing to participate. This applies to operations outside NATO's territory, but also, in an Article 5 situation, within NATO's core area.

NATO is critically dependent upon American military strength and leadership. Without the United States, there is no NATO: Without the United States, collective defence would lose much of its credibility. Several countries, including Norway, have made strenuous efforts to commit the United States to the defence of Europe. However, such close association with a superpower has also been demanding. There is a dualism in many countries' relations to the United States, once enunciated by a Norwegian politician as follows: 'We desperately

want American leadership, we do not want to be told what to do, but we want the United States to follow policies we can support'. For a small country, a multilateral alliance such as NATO will serve to mitigate the consequences of co-operating directly with a great power. Bilateral measures can be a lot easier to justify at home if they are linked to a common cause in NATO.

The United States expects Europe to spend more money on its own defence, and is more inclined to use military force than most European allies. Furthermore, the U.S. Government expects Europeans to look beyond their own region and to contribute militarily in crises and wars elsewhere. With varying intensity, this has been the case for decades. The transatlantic differences are not likely to diminish in the years to come.

Bilateral and minilateral defence co-operation can complement and strengthen co-operation within the Alliance. Such co-operation may become even more relevant in the near future. This is also the case for the management of security challenges in the High North and in the Baltic Sea region. The United States has significant interests in these regions and is working purposefully to further develop partnerships with relevant countries, including Norway. Concurrently, a closer co-operation is developing between northern European countries, both between NATO allies around the North Sea basin and amongst the Nordic countries. In the long term, a considerably more integrated and comprehensive northern European military co-operation may develop.

Challenges and Opportunities

Europe has problems. The southern region is particularly hit by a deep financial and social crisis. Internal and external pressure, both popular and political, is challenging the stability and legitimacy of the EU and a number of governments. The Europe that once was the centre of the world may end up as a periphery in terms of political power. Several actors strive to prevent the established structures from falling apart. The EU is an important actor in this regard. The Union has played a significant role during the Ukraine crisis, especially as a result of Germany using the EU as a multinational framework to anchor its policies. The EU has a number of political instruments at its disposal, and has demonstrated its engagement in the areas of civil and military crisis management and conflict prevention. The EU has also formulated a solidarity clause on mutual assistance in crises. However, in dealing with the most demanding security challenges the Union can only contribute to a limited degree. NATO is therefore the only major defence organisation that with a certain amount of credibility can deal with serious security crises and armed conflict.

NATO's enlargement during recent years has contributed to stability and democratic development in the former Eastern Europe. At the same time, the expansion has made the Alliance more complex and made relations with Russia, which views NATO enlargement as a threat to its own interests, more complicated. This friction has increased gradually. Russia's conduct in the Crimea and in Eastern Ukraine has created concern in many NATO countries. Russia's behaviour has led to an amplified need to reassure NATO countries in the vicinity of Russia and underscored the Alliance's commitment to achieve deterrence through practical measures.

Consisting of 28 individual member states, it is difficult for NATO to speak as one. The allies' views on threats and risks vary. The members in the east are concerned about Russia. The members in the south are most worried about the threats on NATO's southern and south-eastern borders, which have ramifications for the troubled Southwest Asian region and North Africa. There is no reason to believe that these differences in views and interests will diminish in the years ahead.

The NATO countries' overall defence capabilities constitute a significant combat force, but their ability to effectively develop and use their resources in unison is limited. Their will and ability to meet set objectives is unimpressive, such as the establishment of a potent rapid reaction force (NATO Response Force, NRF). The defence structure in many countries is old fashioned, and only a small portion of the countries' military forces are available on short notice. In recent years, defence budgets in several NATO countries have been greatly reduced. NATO's summit in September 2014 urged members to boost their spending and the investment share. However, very few of the European allies will be able to fulfil these goals. The low defence budgets have weakened the countries' preparedness and sustainability as well as their ability to equip and deploy forces for high-intensity war. An increasingly smaller force structure has also weakened their ability to operate in multiple theatres simultaneously. These problems may challenge allied cohesion and undermine co-operation during a crisis in Europe.

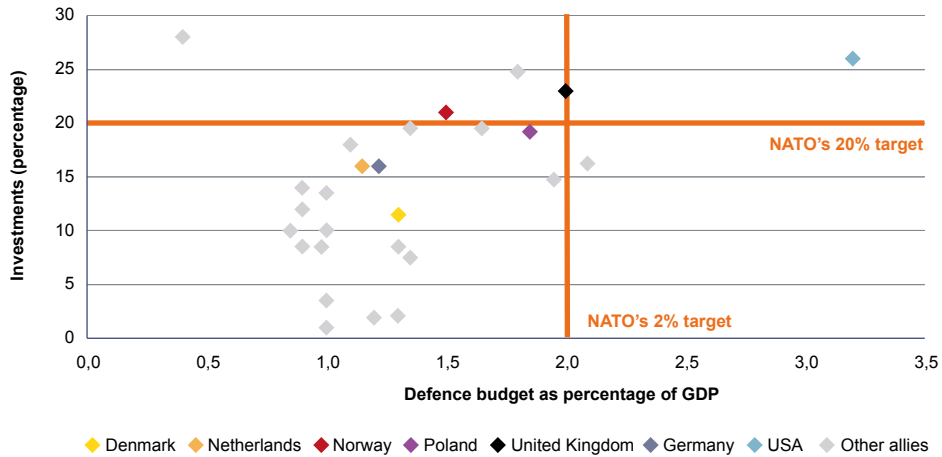


Figure 5 The NATO countries' defence spending in 2014 in relation to the targets from the Wales Summit, of spending 2 % of GDP on defence, and a minimum of 20 % of the defence budget on investments.

NATO's challenges are amplified by the lack of strong and clear U.S. leadership. America's attention and resources are needed for crisis management elsewhere, especially in the Middle East and North Africa, and American forces are being moved to Asia to deal with a growing conflict potential in the region. At the same time, the American Armed Forces are facing persistent pressure to reduce their budget. A new generation of U.S. politicians who do not have historically close ties to Europe is emerging. Furthermore, the decision-making system has lost some of its traditional strength. The long post-war period of broad political consensus on U.S. foreign policy is over.

Under these circumstances, the United States expects Europeans to make a far greater contribution to European security. The debate on transatlantic burden-sharing often starts with the fact that the United States accounts for around 70 % of the NATO countries' overall defence spending. This imbalance must be seen in the light of America's global role, as only a portion of the U.S. defence efforts are linked to Europe, as well as reduced defence budgets among the European allies. More specifically, the debate concerns how these budgets are spent. European allies have made themselves dependent upon several U.S. capabilities. This was clearly demonstrated during the operation over Libya in 2011, in which the United States alone had to carry out several critical functions, including air-to-air refuelling and ammunition supply.

Despite all these challenges, the transatlantic military relationship is characterised by clear, durable features and a willingness to continue the co-operation.

The political relationship is still solid, built on common interests and values. NATO forms an important framework for the formulation of common standards and procedures as well as for planning, force generation, exercises and training. This is where decisions are made on military operations using the Alliance's expertise and structure. Allies work closely on joint capabilities such as NATO's Command Structure, NATO's Air Command and Control System (ACCS) and the development of a missile defence capability in Europe. There is ongoing co-operation on surveillance, not least through the NATO Airborne Early Warning and Control Force (AWACS) and Alliance Ground Surveillance (AGS). Norway and other allies have built military airports, naval bases and early warning installations through the use of NATO's infrastructure or investment programmes. Today, the investment programme amounts to approximately EUR 700 million per year. Common funding of information and communication technology enables NATO to lead and support larger operations. In spite of the fact that several allies fail to take responsibility also in these areas, NATO manages to maintain some common core capabilities.

Revitalisation of Collective Defence

For a long period after the Cold War, concrete plans for the defence of Norway and allied territory were not given any attention and many plans became obsolete. This was due to more pressing tasks, after the start of the new millennium in particular managing asymmetrical threats and the extensive military operation in Afghanistan. Several allies, especially Poland and the Baltic countries, became increasingly concerned that NATO was neglecting the planning that is critical for dealing with more traditional state-to-state conflicts. In 2008, Norway launched the Core Area Initiative to contribute to a change of course within the Alliance. The Initiative underlined the importance of collective defence. The idea has gradually gained support within NATO. In 2010, it was included in NATO's revised Strategic Concept. NATO's Summit in September 2014 took new steps to strengthen the Alliance's collective defence capabilities.

NATO is now updating its geographic contingency plans, including plans for Norway and the maritime flanks. NATO is also establishing reaction forces on higher readiness than today's NATO Response Force. The spearhead will be a 'fire brigade' referred to as the Very High Readiness Joint Task Force (VJTF). It will be of limited size, only about 5,000 soldiers supported by air and sea combat forces and special forces. Its importance is highlighted by its ability to be quickly deployed to the frontline, signalling that an attack can trigger NATO's defence guarantee and a more powerful Western response.

The Norwegian Core Area Initiative has contributed to establishing closer linkage between national military headquarters and NATO's Command Structure

as an objective for the Alliance. The Norwegian Joint Headquarters (NJHQ) in Bodø is a pilot project in this effort. Such a connection will make it easier for individual allies to contribute to NATO's combined situational awareness on and near NATO's territory. NATO is in the process of clarifying command and control relations between NATO and national command structures in the event of crisis and war. In the case of Norway, this involves questions about who will lead military operations in Norway and its immediate vicinity.

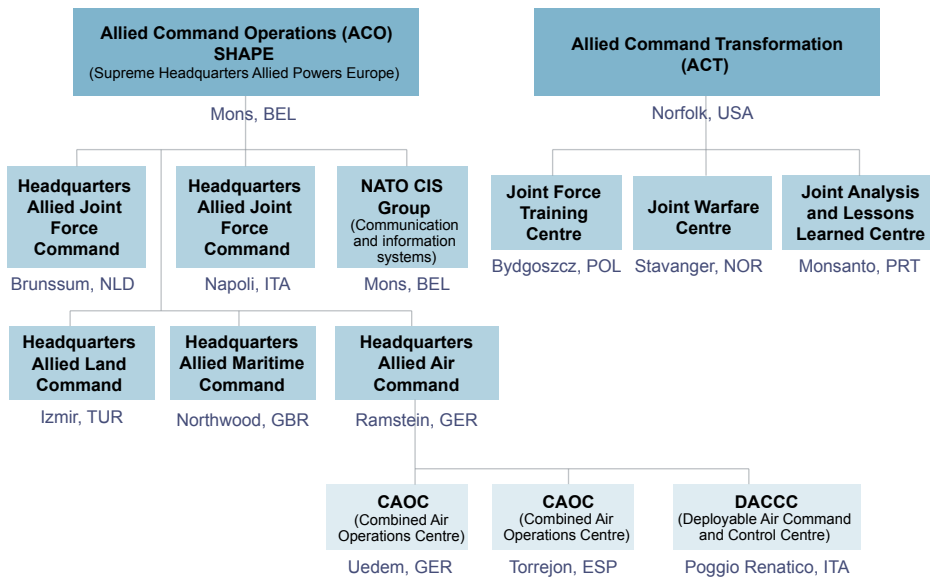


Figure 6 NATO's Command Structure.

For several years, NATO member states and partners have been conducting complex military operations in an integrated manner. The withdrawal from Afghanistan increases the necessity to use NATO as a framework for training and exercises to ensure continued expertise and ability to work in an integrated manner during operations. At the same time, we know from experience that it is more difficult to finance exercises than operations.

Although NATO is now clearly making an effort to revitalise collective defence, the efforts are not particularly vigorous. This raises the question of the direction of the United States and NATO in the long term.

In spite of different threat perceptions and conflicting interests, the Alliance will probably manage to reach consensus on some important common goals also in the future. The United States still sees the value of NATO. The Alliance

is a tool for influencing developments in Europe. NATO makes it easier to convince Europeans to contribute to crisis management and military operations in other parts of the world. The United States also benefits from maintaining military bases and prepositioned materiel in Europe to substantiate the NATO guarantee and support American operations outside NATO's territory. U.S. contributions to European missile defence represent a new presence, which is also in the interest of the United States. However, Europe must be prepared to take on greater responsibility for European security.

Nevertheless, it is conceivable that developments in NATO will go in other directions and be governed by different logics. The United States will probably not spend a lot of time and resources on the Alliance if it were to be viewed as weak. The United States has always had a wide range of bilateral relations with most countries in NATO, and these relations might increase in importance if the Alliance were to become nothing but a paper tiger, and the United States was to completely lose confidence in it.

America's Involvement in Northern Europe and the High North

American interest in northern Europe and the High North follows two main tracks. Both individually and combined, these signal a continuous and significant American engagement.

The first track is related to the Arctic, as the reduced ice cover provides the basis for increased activity. The United States will continue to be engaged in economic activities, climate research and dealing with challenges such as search and rescue, smuggling and other criminal activity. Within this path, the United States is keen to develop co-operation between all countries, including Russia and Norway, emphasising the importance of stability and peace. At the same time, the United States has fundamental national security interests in the area, that it is prepared to protect alone if necessary. These include early warning and defence against long-range missiles and, because the Arctic is primarily a maritime domain, protection of the freedom of the seas. In the long term, the Arctic ambitions and interests of both the United States and Russia can have significant impact on Norwegian security policy.

The second track is the traditional one rooted in European security-related challenges. In this regard, the Baltic Sea region has high priority. The United States has been promoting the incorporation of the Baltic States into NATO and supporting them economically and militarily. For years after the Cold War, American authorities have strived to convince the Nordic countries to assume greater responsibility for the security of the Baltic peoples. The Nordic countries have been reluctant to take on this task on their own.

An additional aspect of this track is the strategic importance of the European High North for the Americans, the main rationale being the need to keep up with the development and use of Russian military forces, especially the strategic nuclear weapons and other naval forces which could threaten the United States. The Norwegian Intelligence Service is monitoring this activity closely. Information from Norwegian stations forms the basis of a comprehensive bilateral intelligence co-operation that currently includes far more than the High North, and which is at the core of the broader Norwegian-American co-operation. The fact that Norway takes responsibility in the High North, and actively participates in international operations, contributes to consolidating the American perception of Norway as a reliable partner able to contribute, as illustrated over several years in Afghanistan, in the air operation over Libya in 2011 and through a long-standing bilateral co-operation between our special forces.

The United States is Norway's primary ally in the event of a crisis or war. A great number of bilateral arrangements were set up during the Cold War, concerning prepositioned materiel in Norway and the military reinforcement of Norway's defence. Some of these arrangements still exist and are in the process of being renewed. The most important component is the prepositioned materiel for the U.S. Marine Corps in Trøndelag (Marine Corps Prepositioning Program – Norway). These depots will support a Marine Air Ground Task Force of about 4,500 soldiers. The unit constitutes a potent military force in its own, and may facilitate the subsequent arrival of an expeditionary brigade of 15,000 to 18,000 soldiers if need be.

This agreement is beneficial to the United States. Norway pays a large portion of the depot costs and has committed itself to providing Host Nation Support to the military forces. The Americans can use these depots for several purposes, especially in Europe and Africa – such as peacekeeping operations, humanitarian assistance, disaster relief, military support to handle terrorist attacks and evacuation operations. For Norway, this arrangement is of great importance as it lays the foundations for U.S. reinforcement in crisis or war.

In addition to this arrangement with the Marine Corps, a renewal of other agreements with the United States is being considered – particularly regarding air support.

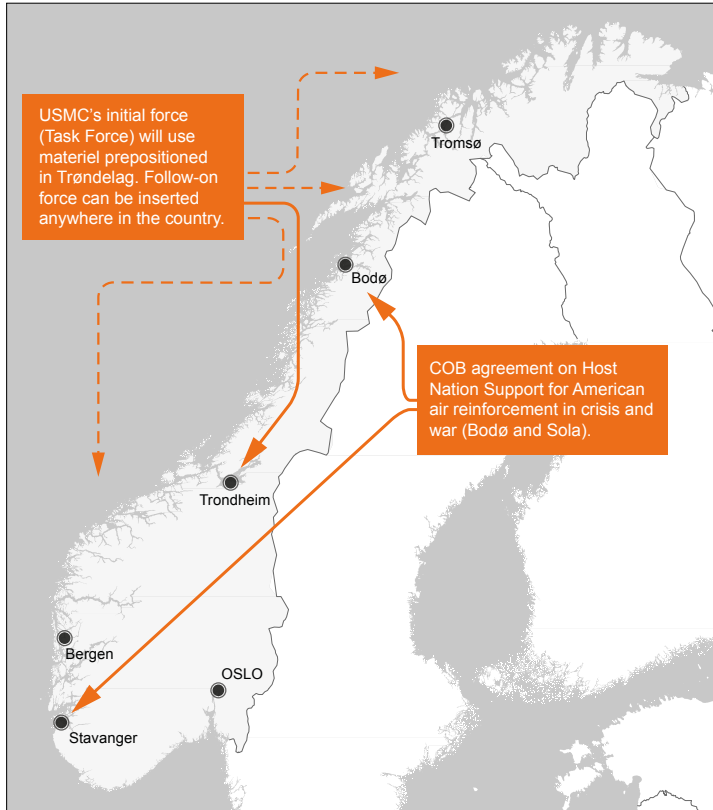


Figure 7 American agreements with Norway on prepositioned materiel for use in crisis and war.

The American presence in Norway may be challenged. In NATO, several allies compete for U.S. attention: Other countries would also like to see an American presence on their territory. Future engagement with Norway will require that the arrangements are beneficial for the United States. Are they providing value added for operations and security concerns? Is the solution cost effective? Today, the arrangements in Norway are undoubtedly advantageous for the United States.

Defence Co-operation in Northern Europe

International defence co-operation is important as it enables cost-effective development, acquisition and utilisation of capabilities. In a number of cases, investing in modern materiel is so expensive that without co-operation it would prove impossible. Over the next few years, Norway will face numerous large defence investments, including combat aircraft and submarines. As for the

European F-16 co-operation, a broad multinational co-operation must be established for the development and operation of the F-35. This will also apply to Norway's acquisition of new submarines.

Nevertheless, co-operation has proved to be difficult. Considerations regarding national sovereignty, domestic defence industries and conflicting specifications are particularly challenging. The ideal defence co-operation is one that provides advantages for a country's security policy, operational activity, and economy. Some such examples exist. This is especially relevant for large materiel projects, some of which are under the auspices of NATO and others of a single country. Due to rising costs and budget pressure Norway may be forced into much closer materiel collaboration with northern European allies and the United States.

There is potential for an even deeper strategic and operational co-operation between the northern European countries. In 2002, Norway developed its North Sea Strategy. Its purpose was to strengthen defence co-operation with close allies around the North Sea basin, namely Germany, the United Kingdom, the Netherlands and Denmark, a group of like-minded countries with sound economy and reasonably well functioning defence structures. This interaction has increased gradually. It encompasses operational activities such as training, exercises and operations, and co-operation on structural development. In recent years the northern European allies, Sweden and Finland have participated in several strategic level crisis management exercises. Such co-operation can improve the countries' ability to work together during crises.

It could be beneficial for the countries in northern Europe to engage in a deeper regional defence co-operation. Germany is a particularly interesting actor, being the central power in Europe and a stable and predictable partner. While reticent against the use of military power, it has in recent years demonstrated increasing leadership on NATO issues. An illustration of this is the German initiative in NATO in 2013 for a collaborative arrangement in which groups of countries can form clusters for the acquisition and maintenance of capabilities, and where one country takes the lead (Framework Nations Concept, FNC). Norway is part of the FNC.

Norway has many and close ties to the United Kingdom, but the United Kingdom has not always assigned great strategic importance to Norway and its region. In recent years, the United Kingdom has shown a reinvigorated strategic interest in Europe, perhaps particularly in northern Europe. In 2010, the United Kingdom set up the meeting forum called Northern Group, an informal discussion arena for northern European NATO countries, Sweden and Finland. In 2012, it initiated multinational co-operation in a combined rapid response force based on British forces (the Joint Expeditionary Force, JEF). JEF is

intended to increase the operational capability of allies in a cost-effective manner. The force will easily incorporate contributions from other countries, primarily northern European participants including Norway. JEF may be deployed to various operational theatres, both within and outside NATO territory.

The Netherlands and Norway have a long-standing defence co-operation. Both countries participate in FNC and JEF. Furthermore, Germany, Norway and the Netherlands are connected through the German-Netherlands Corps, which can also be used in Norway in a potential crisis or war.

Poland is also signing up for deeper co-operation in northern Europe. This country has the fastest growing economy in the EU. Poland's geographical position and military force make it an effective contributor in crisis and war. Norway has engaged in bilateral military co-operation with Poland, at this stage particularly linked to defence materiel.

Sweden and Finland are also seeking closer ties to NATO. Both countries have adapted to NATO's standards, send personnel to NATO's staffs, participate in all types of exercises with allies and co-operate in NATO-led international operations. Russia's conduct in Ukraine has caused great concern in both countries and strengthened their affiliation to NATO. In 2014, both countries signed an agreement with NATO on Host Nation Support. These agreements will facilitate the provision of support to NATO forces within Finnish and Swedish territory, should the need arise. The Finnish and Swedish co-operation with NATO has become so comprehensive that it could be called a semi-alliance – a functional defence community without the mutual defence guarantee. NATO membership is not a viable option in the short term. Should the countries decide to apply for membership, only smaller adjustments would be needed. A NATO membership would increase antagonisms with Russia, but would also create clear boundaries and prepare the ground for a comprehensive northern European defence co-operation within the framework of NATO.

Consequences for Norway

NATO is facing great challenges that affect the Alliance's ability to support Norway and its immediate vicinity in crisis and war. The member states view threats and risks differently. Many have reduced their defence budgets and military capabilities, and they are to a limited degree able to effectively develop and use resources in an integrated manner. The American leadership has weakened. Despite this, NATO continues to be an important alliance, now and for the foreseeable future. Collective defence is given higher priority in the form of new contingency plans and response forces. NATO is a vital collective frame-

work for bilateral and multinational co-operation. The American authorities are clearly dissatisfied with the Europeans' investment in their own security, but find it beneficial to be militarily engaged in Europe. This also applies to U.S. presence in Norway. Alongside this, a closer defence co-operation between the countries in northern Europe is developing. Germany and the United Kingdom have both taken initiatives towards new forms of co-operation that may be of great significance for Norway as well.

CHAPTER 5

Financial Outlooks

Norway has a good financial basis from which it can further develop a credible defence. In contrast to earlier times, planned budgets are now being accompanied by actual appropriations to the Armed Forces within the level of ambition set by the political authorities.

Nevertheless, the Armed Forces are also facing demanding financial challenges. Competition for funds from public budgets and demands for efficiency savings in the public sector will intensify. Halfway through the 2013–2016 period, there are several challenges in keeping costs and the defence budgets as directed in the current long-term plan for the Armed Forces (Proposition no. 73 S (2011–2012)). More worrying is that the current situation provides little flexibility to increase the level of ambition – the way many are appealing for – in certain areas. Such areas are, for example, military presence in the North, intelligence, preparedness and readiness and sustainability. Furthermore, the Armed Forces are facing large potential imbalances both in the forthcoming four-year period and, not least, in the longer term.

In this chapter, the financial basis of the Armed Forces is described. This covers developments in the Norwegian economy, existing financial principles for the Armed Forces and cost development for the military forces in the longer term.

Developments in the Norwegian Economy

Growth in the Norwegian economy is currently at about 2 % annually and is classified as moderate (White Paper no. 1 (2014–2015) National Budget 2015). Uncertainty about developments in the countries we trade with and in the international prices for raw materials is, however, creating uncertainty also for Norway. In the national budget for 2015 measures such as tax and duty cuts, increased productivity and investments in knowledge and infrastructure were prioritised. As before, emphasis was placed on budgetary discipline and that the use of oil revenues is adapted to the state of Norway's economy.

In 2013, the white paper on long term developments points to great uncertainty and significant challenges in the coming decades, inter alia as a result of an increased proportion of elderly people and a gradual phasing out of oil-related activities (White Paper no. 12 (2012–2013)). Over time, this will require a

major restructuring of the Norwegian economy, and an increasing proportion of society's resources will have to be devoted to pensions, care and health. These challenges come on top of the persistent pressure within society for a continued expansion of public services. In a worst case scenario, the need for restructuring will come about abruptly and brutally rather than as the result of a planned programme.

One of several ways to respond to the increased public expenses for – amongst other things, pensions, health and care – is with more efficiency within the public sector. However, White Paper no. 12 emphasises that it is difficult to measure – and therefore also to control – efficiency in public sector activities, and that a number of services are labour-intensive, which limits the potential for efficiency measures. In its first report, the Productivity Commission highlights that the measurement problems are particularly large in services which do not have clearly-defined products, including sectors like defence (Official Norwegian Report 2015:1).

The aim of making the public sector more efficient is restated in the 2015 budget: The Government introduced '(...) a permanent de-bureaucratisation and efficiency reform with an annual saving of 0.5 % of all operating costs granted over and above the national budget'. Some of the savings from this reform shall be used to prioritise efforts that put Norway in a better position to meet the challenges of the future and to improve services to inhabitants.

Since 2000, there has been a relatively consistent though cautious growth in the defence budget. However, compared to other public sectors, the defence budget has only seen a slight progression. The defence budget's proportion of GDP continues to shrink. NATO is now measuring its proportion at 1.5 %, in other words significantly below NATO's target of 2 % – as illustrated in Figure 5, Chapter 4.

Defence Finances in the Short Term

The existing financial principles for the Armed Forces up to 2016 are stated in the current long term plan, Proposition no. 73 S (all prices in 2012 kroner):

- Continuation of the appropriation level for 2012 (in real terms)
- A temporary increase for the acquisition of new combat aircraft (totalling NOK 22–28 billion)
- Re-allocation of additional costs for operations abroad (approximately NOK 600 million)
- Internal efficiency measures (to re-allocate at least NOK 173 million annually).

In the two most recent long-term plan periods (since 2009), the actual defence appropriations have been largely as forecasted in the plans. This is in stark contrast to previous practice when the actual appropriations were significantly lower than the planned budgets, see Figure 8.

Today, the Armed Forces' investments in materiel amount to NOK 9.0 billion or 20.5 % of the defence budget. This proportion is a key figure in NATO's defence planning. In NATO's calculations, Norway's investment proportion is 25.3 %. Hence, Norway performs well compared to other allies and significantly above NATO's target of 20 %. A high investment proportion indicates that Norway has the capability to further develop modern forces and to attend to long-term requirements. Another indication of long-term focus is research and development. This post represents just under NOK 1 billion or 2 % of the defence budget.

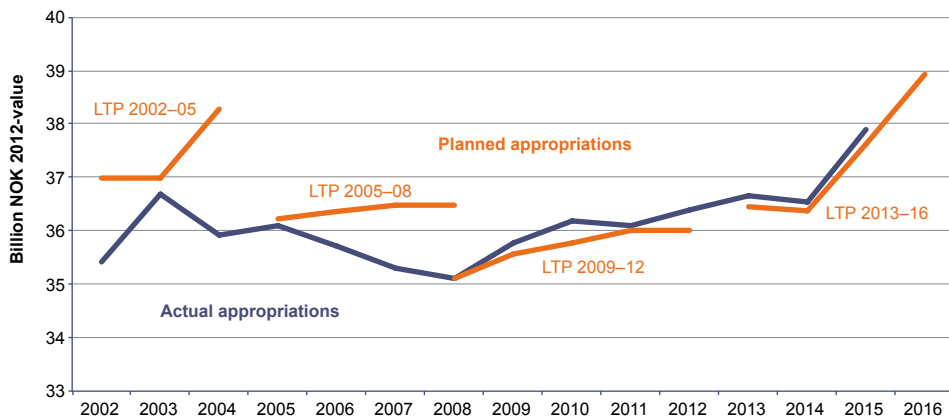


FIGURE 8 Planned and actual appropriations to cover the Armed Forces' Long Term Plans (LTP) (source: Ministry of Defence). In the first half of the period, the variations were large and systematic (under-financing), while in the second half there has been a good correspondence between the planned and actual appropriations.

The procurement of new combat aircraft with a new air base has a total cost framework of over NOK 73 billion. The project will go on for more than ten years into the future. The annual payments through to 2025 will be in the order of NOK 6 billion. Due to the extraordinary size of the project the budgets will be temporarily increased by NOK 22–28 billion in total during the procurement period. The additional funds amount to about NOK 1.1 billion in 2015. The rest will be spread over the coming budget years. This shows how extensive this procurement is, both in scope and time, and how even minor changes in progress or financing can have large repercussions for the rest of the Armed Forces.

Halfway through the current planning period, 2013–2016, there are three challenges that stand out in the implementation of the long-term plan:

1) *Internal Efficiency Measures*

The Armed Forces introduced a systematic internal efficiency programme in 2009. The programme was highly successful from 2009 to 2012, but there is some concern that the targets will not be fully met in the current period.

2) *The De-Bureaucratisation and Efficiency Reform*

The Government's requirement of 0.5 % efficiency savings amounts to approximately NOK 160 million per year in the defence sector. As this comes in addition to the sector's internal efficiency requirements, the requirement for 2015 was reduced to NOK 113 million. It is not yet clear whether the reform will have full effect on the Armed Forces in the next budget year, and which consequences this will have on the sector's own efficiency programme. As some of the savings from this reform will be used to prioritise efforts across the sectors, these may also benefit the Armed Forces.

3) *The Restructuring of the Air Force*

The Armed Forces has reported great challenges in restructuring the Air Force within the budgets. This applies especially to the repercussions of establishing a new air base at Ørland.

In total, the financial side of the current long-term plan has been relatively well attended to, but some factors are less favourable for the Armed Forces. If the de-bureaucratisation and efficiency reform comes into full effect in 2016, there will be a total cut of approximately NOK 400 million from operations and maintenance in 2015 and 2016. Missed targets in the internal efficiency programme and possible cost increases in the restructuring of the Air Force will further weaken the ability to implement the long-term plan and to increase the level of ambition in prioritised areas.

Finances in the Longer Term

In order to strengthen the necessary long-term perspective in the defence planning, the Norwegian Defence Research Establishment (NDRE) calculates how costs in the Armed Forces will develop in the forthcoming 20-year period, based on the current long-term plan (Proposition no. 73 S). The intention is to identify structural and financial challenges in the coming years so that these can be resolved in a comprehensive manner over time, without unnecessarily

dramatic interventions. Therefore, these calculations do not represent a prediction for the developments to come.

The recently updated cost scenario of the existing development plans for the Armed Forces is shown in Figure 9 and Table 2. Two factors are particularly important to note: First, the estimated costs are considerably and consistently above the estimated budgets. For the whole 20-year period, this potential under-financing amounts to around NOK 150 billion, which corresponds to almost 20 % of the estimated budgets or close to NOK 8 billion per year on average. Second, this under-financing varies considerably over the 20-year period. On average, it amounts to approximately NOK 6 billion per year in the forthcoming planning period (2017–2020) and about NOK 9 billion per year from 2021 to 2034. The under-financing also varies considerably from year to year depending on how large materiel procurements are phased in over time.

An important reason for the consistent increase in costs is the growth in unit costs, which, albeit to somewhat different degrees, applies to all modern military forces. The costs of modern military materiel and personnel increase at a higher rate than general inflation in the society as measured by the consumer price index. This phenomenon is empirically well documented.

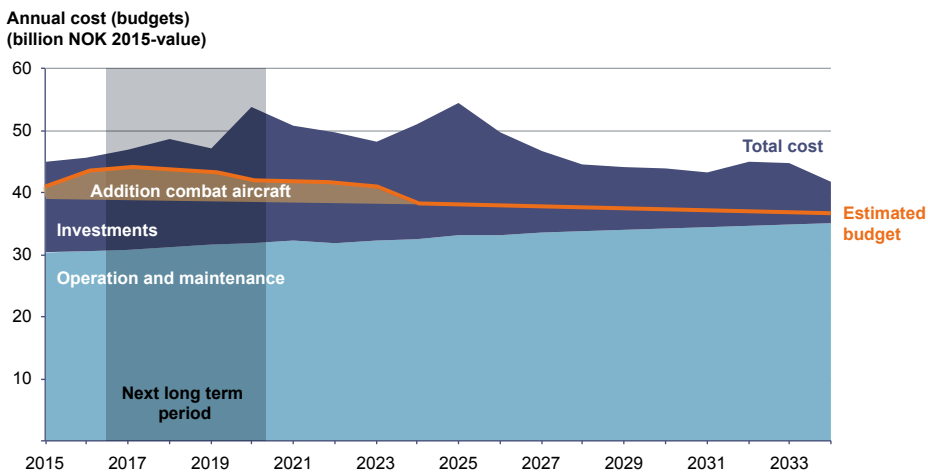


FIGURE 9 Long-term cost scenario for the Armed Forces. Estimated costs, divided into investments and operation and maintenance, and estimated budgets, 2015–2034 (Source: Norwegian Defence Research Establishment).

	2017–2020	2021–2034
Operation and maintenance	125	469
Investments	71	188
SUM costs	196	658
Budgets	173	534
DIFFERENCE	23	124

TABLE 2 Long-term cost scenario for the Armed Forces. Estimated costs, divided into investments and operation and maintenance, and estimated budgets, in the next long-term planning period 2017–2020, and in the longer term 2021–2034. All amounts in NOK billion based on 2015 values (source: Norwegian Defence Research Establishment).

The increasing costs can also be attributed to NDRE’s method of calculation. Structure and activity levels are presumed to develop according to current plans and then continue through the rest of the 20-year period. This means, for example, that some materiel reaching its expected expiry date in the latter half of the 20-year period is expected to be replaced on a one-for-one basis. As new materiel is generally far better than the old, operational capabilities will be raised. Furthermore, these calculations take into account the budgetary effects of a continued de-bureaucratisation and efficiency reform, but not the effects of internal efficiency measures. If the internal efficiency measures are successfully implemented in line with the current target figure (NOK 173 million per year) through the whole 20-year period, this will amount to a total saving of over NOK 35 billion, of which NOK 3 billion will be saved in 2017–2020.

This cost scenario includes the large investments, first and foremost the new combat aircraft, but also the submarines that will account for more than half of the combat aircraft procurement. Examples of other large investments included in these calculations are the replacement of the current maritime patrol aircraft, new helicopter-carrying coastguard vessels and the upgrading of the Army’s armoured personnel carriers. Through prudence, utilisation of new technology and good management, there will be a number of opportunities to make new investments less expensive than those featured in this costs scenario.

Since the current long-term plan was decided, developments have made it necessary to look at new initiatives. This applies, for example, to the procurement of dedicated helicopters for special operations, increased military presence in the North and investments in intelligence, preparedness and readiness and sustainability. Such initiatives are not included in the above cost calculations and will increase the potential imbalances.

These examples indicate that there are several factors contributing to changes in the long-term cost scenario, for better or worse. Nonetheless, the intention

of using a cost scenario is to visualise and revise the most important challenges in the years to come.

Consequences for the Armed Forces

Despite several challenges in the area of costs and financing, the Armed Forces are well on track to implement the current long-term plan. Nevertheless, during the coming four-year period and not least in the longer term, the Armed Forces face considerable potential imbalances. Furthermore, the defence budgets will continue to encounter both strong competition from other sectors of society and, like the public sector in general, clear efficiency demands. This will make it difficult to carry out new, necessary initiatives. How to improve consistency between the threat and risk developments, the Armed Forces and the defence budgets, is the theme of the second part of this report.

CHAPTER 6

Three Scenarios

Hypothetical cases or scenarios can illustrate some of the situations the Armed Forces must be prepared for. We have considered three situations: Escalation of a bilateral crisis, collective defence in the Baltic countries and a severe terrorist attack. These three future scenarios are not necessarily the most likely, but they illustrate the scope of the challenges that the Armed Forces must be able to contribute to solving. These scenarios may arise in the short or long term.

Two of the three scenarios involve Russia as an opponent. This does not imply that military conflict with Russia is neither probable nor unavoidable, but a credible security and defence policy seeking to avoid such conflicts is paramount for Norway.

In Norway, the civilian authorities have the primary responsibility for ensuring societal security, while the main tasks of the Armed Forces are to assert Norway's sovereignty and sovereign rights and to defend the country against external attacks (national security). The Armed Forces may provide assistance to the police when societal security is threatened. The distinction may be blurred between terrorism as a criminal act and a terrorist strike being viewed as an armed attack. The Government is responsible for deciding whether a terrorist attack should be considered an armed attack, which the Armed Forces must handle.

Scenario I – Escalation of a Bilateral Crisis

This scenario takes as its starting point heightened tension between Russia and the West, in which a challenging political situation arises between Norway and Russia. NATO is heavily involved militarily in crises in the Middle East and Central Asia, where Russia is playing a central but non-constructive role in the management of these crises. The tension between the West and Russia leads to consequences in the High North. Russian authorities consider vital interests connected to natural resources and the country's ability to exercise authority in the High North to be threatened. National prestige is at stake. To be humiliated by the small neighbouring state of Norway is unacceptable to Russia.

With little warning, Russia escalates a disagreement with Norway in the seas of the High North. Without prior notice, the Russian Navy announces that it is going to conduct a major military exercise in the waters north of Finnmark and demands that civilian ships and airplanes keep out of the area for security reasons. Russian naval vessels and aircraft carry out live firing exercises. Norwegian and foreign fishing vessels pull out of the area and all maritime and air traffic between Svalbard and the mainland is brought to a halt. Norway rejects Russian demands for changes in Norwegian marine resources policy and protests strongly against the Russian military exercise.

During this escalation's second phase, covert cyberattacks are carried out targeting Norwegian critical infrastructure across the country. Some of these attacks are suspected to be a preparation for sabotage operations. Russian special forces and intelligence agents are rapidly and covertly deployed to central Finnmark for reconnaissance and to prepare for a potential escalation. Unknown drones are observed at several locations in Finnmark and Troms. The sensors of a Norwegian surveillance aircraft over Finnmark are neutralised by electronic interference from Russian jamming transmitters. Ground-based radars and other sensors in Finnmark are also subjected to interference. The Norwegian Intelligence Service intercepts messages that Russian ground forces may be preparing to cross the border into Norway, and that military bases and other key targets in the northernmost counties may be attacked with long-range missiles. Norway and several allies prepare countermeasures in the cyber, air and sea domains, and the Norwegian Government decides to send extra military forces to the North, especially ground forces to Finnmark, but the conflict has not yet been declared as an Article 5 situation.

In this scenario, Norway is facing extensive challenges: The Norwegian Government and the Armed Forces experience great problems in gaining a full overview of what is actually happening. The Russian operations are being conducted by highly trained forces with advanced equipment, and the warning time for Norwegian forces is a few days, at best.

Scenario II – Collective Defence in the Baltic Countries

A number of European countries struggle with severe economic and social problems that have contributed to increased nationalism and enmity towards immigrants and minorities. This development is also taking place in the Baltic countries and is causing antipathy towards the local Russian minorities.

According to Moscow, Russian minorities have on several occasions been subjected to severe discrimination and harassment. The Russian authorities have thus conveyed repeated protests to the governments of Lithuania, Latvia

and Estonia. However, the situation is deadlocked. Militias acting against what they see as extreme right-wing forces emerge amongst the Russian minorities. The police are not able to manage the violence that follows. The Russian militias are getting more and more heavily armed, and clashes with police and security forces become more military in nature.

Russia intensifies its information campaign with a mixture of facts and disinformation. Russian Armed Forces are deployed close to the Baltic states and Russian military aircraft and naval vessels increase their activities in the Baltic region. Reports of active Russian intelligence agents on Baltic land flourish in the media.

Lithuania, Latvia and Estonia claim that their territorial integrity is seriously threatened and consultation in NATO with reference to Article 4 of the treaty is requested. The Alliance decides to deploy units to the Baltic countries in order to resist any military pressure and to deter a possible attack. The United States and southern European NATO member states are mainly concerned with challenges in the Mediterranean region and in the Middle East. Thus, the northern European NATO countries will be expected to provide military support.

In order to contribute to NATO's operation, the Norwegian Armed Forces must be able to rapidly provide and transfer units to the Baltic area, to demonstrate political will and an actual ability to exercise collective defence. The crisis' development is unpredictable, which means that the Norwegian forces must be prepared for both military combat and to remain in the area for a protracted period of time.

Scenario III – Terrorist Attack

This scenario takes as its starting point a situation with a high terrorist threat in Europe, with conflicts and terrorism in the Middle East as a backdrop. A number of European countries have taken part in military operations to defeat ISIL in Iraq and Syria. ISIL has many supporters in Europe, and returning foreign fighters have in recent years carried out terrorist attacks in several countries in Europe. Several members of the organisation are imprisoned.

A Norwegian-owned and Norwegian-flagged passenger ferry on its way from Oslo to Kiel is hijacked in the strait of Skagerrak. The ferry has 2 200 people on board and the passengers are from several countries. This ferry is out of range from mobile networks, and information about the situation on board is scarce and contradictory. The terrorist attack occurs in international waters, but on a Norwegian ship. Norway assumes responsibility to coordinate the management of the crisis in dialogue with other affected countries.

The terrorists demand the release of jihadi leaders imprisoned in Europe, and that Western countries withdraw their forces from Syria and Iraq. Hostages are executed in order to stress the gravity of the situation. According to the Norwegian authorities there is a risk of further terrorist actions. The Intelligence Service warns of possible attacks on ferries operating in the Baltic Sea and of probable attacks on Norwegian territory. ISIL has previously carried out several terrorist attacks simultaneously.

After 24 hours the situation deteriorates when the ferry sets off to the west at maximum speed. The terrorists announce that they will kill more hostages and ram an oil platform on the British continental shelf. At the same time, a new terrorist attack is carried out at a shopping centre in the centre of Oslo.

This situation contains a number of challenges. There are many actors involved from countries both within and outside of Europe. Good intelligence is critically important and effective information sharing both nationally and with the affected countries is required. A number of assets, both nationally and internationally, are needed to manage the crisis. An important question will be who should handle the situation; the police or the Armed Forces – or perhaps another country.



Part II

Recommendations

CHAPTER 7

Norwegian Security Policy and the Use of Military Power – the Way Ahead

The previous chapters have shown that the Norwegian Armed Forces are facing great challenges. They must be able to deal with both conventional and non-conventional threats, different forms of hybrid attacks as well as attacks in or through cyberspace. The imbalance of power between Norway and Russia in the High North has become more apparent. Alongside these challenges, the Armed Forces are subject to a difficult budgetary situation.

The Norwegian Armed Forces are not capable of solving all of these tasks on their own. In order to create a new normal, a *unified effort* is required by three partners; the Armed Forces, the society at large and our allies. The unified effort must be implemented in such a way that co-operation and common solutions are in the interests of all three parties. The Armed Forces require a lot of support from the wider Norwegian society through conscription and the total defence concept, and from the Government to secure a sound financial framework. Increased efficiency in and prioritisation of operational activities may make a budget increase to the Armed Forces more likely. Allied assistance in crisis and war is vital but has long been given too little attention in Norwegian defence planning. A prerequisite for allied reinforcement is investments and better facilitation for their reception. At the same time, Norway must also be ready to assist other NATO members if need be.

As important as a unified effort is the principle of *simultaneity* in planning and operations. Planning must be done in an integrated manner so as to meet the requirements for logistics and supplies by the Armed Forces wherever and whenever needed. The principle of simultaneity must also apply to our allies. Allied reinforcement for the defence of Norway should be an integral part of the national defence planning. Hence, bases for aerial reinforcement must be established simultaneously with the development of Norwegian air bases. As the allied dimension now is included at a late stage in the planning process, large difficulties and extra costs may follow. Furthermore, Norway must avoid a defensive war separated into phases. Such an approach would run the risk of Norway having to act independently in the initial, crucial phase of fighting. Credible deterrence must be based on the involvement of allies simultaneously with Norwegian forces, and escalation must be *seamless*.

This chapter discusses and presents the views of the Expert Commission on the main features of Norwegian security and defence policy, including the main

principles for the defence of Norway. Core elements of allied co-operation, relations with Russia and international military efforts are also addressed.

The Basis for the Defence of Norway

The Norwegian Ministry of Defence manages a catalogue outlining security policy objectives, defence policy objectives, the defence concept, the total defence concept and the tasks of the Armed Forces. This comprehensive catalogue has, over the years, become incomprehensible and inaccessible to those who are not overly interested in its content. The Expert Commission has updated and refined the objectives and tasks in the catalogue, has narrowed down the overall policy into three categories, and has established a more comprehensive logic between the categories.

Security Policy Objectives

The Expert Commission identifies four key security policy objectives:

- A strong international framework is an important safeguard for small states, because it reduces the risk for harassment and arbitrary conduct. Therefore, Norway must strive to achieve an international system characterized by stability between states and blocs and a UN-led legal order promoting peace and stability.
- Together with its allies and partners, Norway must engage in deterring and preventing armed conflict and conventional and non-conventional threats. In particular, Norway should contribute to strengthening NATO as a credible defence alliance with a strong collective framework for bilateral and multinational co-operation. Should the international community fail to keep the peace, Norway and its allies must defend Norway against aggression and attacks from other state and non-state actors. Norway should assist allied countries in the same way.
- Norway must be capable of protecting national sovereignty and national rights, interests and values, and ensure Norwegian freedom of action in the face of political, military and other pressure.
- The society and the population must be safeguarded against assaults and disasters in peacetime.

The Tasks of the Armed Forces

The security policy objectives form the basis for the tasks of the Armed Forces. The Expert Commission underlines the need for allied assistance to Norway,

not just in the event of armed attacks, but also in a serious security crisis. Consequently, the most important task for the military must be clarified: The defence of Norway must be separated from participation in military operations abroad.

Four of the military tasks must, as a general rule, be handled by national efforts and without allied involvement:

- *To secure a national basis for decision-making through able surveillance and intelligence.*
- *To assert Norwegian sovereignty and sovereign rights.*
- *To safeguard the exercise of authority in demarcated areas.*
- *To prevent and handle incidents and a small-scale security crisis in Norway and Norwegian areas of interest.*

The following tasks must be handled in co-operation with allies, and possibly others:

- *To defend Norway during a severe security crisis and during an armed conflict.* The challenges may include a major conventional conflict in the High North that originate elsewhere as well as a more limited conflict stemming from the region. Unconventional strikes and attacks from state and non-state actors may also cause damage to the point that collective defence measures would be necessary.
- *To contribute to the collective defence of allied countries in a severe security crisis and in armed conflict.*
- *To participate in international crisis management outside Norway, primarily together with allies.*

Tasks where other branches of Government would have the primary responsibility:

- *To support other bodies of the Norwegian government in the safeguarding of societal security.* This could include assistance in preventing and responding to serious attacks, searching for and apprehending individuals who threaten life or vital public interests, and measures to save lives and limit the consequences of disasters and accidents. This task will have an impact on the shaping of specific elements within the Armed Forces.

Defence Concept

The Armed Forces are not, as noted, capable of handling the many security challenges Norway faces alone. There is need for a defence concept, a fundamental idea, making the case clear for a large base of assets. The Expert Commission therefore calls for renewed attention to a defence concept in an amended form based on four mutually reinforcing components:

- *National reaction forces with a core of units on high readiness and an otherwise robust and sustainable structure.* These forces must contribute to deterring and dealing with an armed conflict and to planning for the reception and onwards movement of allied reinforcements.
- *Allied military support and international defence co-operation.* Assistance from abroad is essential to make the guarantee of the Alliance credible. As co-operation in NATO is mutual and binding, Norwegian contributions to international military operations are expected.
- *General conscription.* Conscription is a unique recruitment base for the manning of the defence structure. The system must be practised in line with the needs of the Armed Forces, which calls for a differentiated conscription service.
- *An effective total defence.* The Armed Forces must, under certain conditions, be able to make use of civilian services and resources, and thereby avoid significant investments in and duplication of equipment and capabilities.

Operational Concept

Our relationship with Russia is the single most important factor in Norwegian defence planning. The Norwegian operational concept for the handling of a military conflict with Russia, to the extent that there is one, is primarily based on Cold War thinking. During the Cold War era, the majority of Norwegian ground forces were to be used in a defensive campaign in Inner Troms, combined with forward air and sea denial operations. Issues like these have received little attention since 1990. The formulation of a modernised operational concept that constitutes a bridge between the Ministry of Defence's tasks on the one hand and the Armed Forces' doctrines and directives on the other is now necessary.

The operational concept must be directed towards the most challenging situations the Armed Forces may face. Robust and sustainable units are required. Some of the units must be available on short notice while others should be allowed somewhat lower readiness. The Expert Commission considers measures to meet the critical phase between peace and armed conflict to be especially important, as the use of military force may still be avoidable through diplomacy and credible deterrence. With this in mind, the Commission has discussed five premises and outlined the basic features of an operational concept.

Premises of a New Operational Concept

- *The concept must be based on a dispassionate assessment of the nature of the threat.*

Today, the probability of an armed attack is low but such a risk cannot be discounted in the long term. The failure to avert armed conflict in time may

lead to disastrous consequences. An armed conflict in the North could quickly evolve in all domains, including cyber and information operations. We have described two forms of conflict of direct relevance for Norwegian security. The first is the use of military force against Norway and Norwegian interests in a bilateral conflict in a tense international situation. The second form of conflict is the use of military force against Norway in the North as part of a confrontation between Russia and Western countries that originated elsewhere. Whether the origin of the conflict is local or distant, its scale and warning time may vary greatly. The most challenging situation will be an attack on Norway with little to no warning, as it will minimize the time for defensive preparations. This scenario must be given special attention.

- *The concept must communicate an unequivocal and immediate Norwegian ability and will to respond to aggression.*

This must be achieved by clear and consistent strategic signals and through the way in which military capabilities are used and positioned. The costs associated with violating Norwegian sovereignty and attacking Norwegian territory must exceed the value an aggressor sees in taking such steps. The message must be that an attack on Norway would not be limited to a fight *against* Norway, but a fight *over* Norway. For this we need a strong and effective decision-making mechanism with functioning interaction between national governmental bodies and between Norwegian and allied actors. Conflict management requires good intelligence and early warning, as well as command systems able to resist cyberattacks.

- *The concept must handle the specific challenges stemming from asymmetry and distance.*

It is neither possible nor desirable to equalize the asymmetrical power relation in the North in peacetime through large-scale initiatives that may establish a regional balance. Our closest allies, who are located far away, will need time to bring in reinforcements by sea. Instead, it must be communicated in a different way that Norwegian territory is not a military void, and that Norway and NATO are inextricably tied together. As part of such a communication strategy, military presence in strategically vulnerable or prioritised areas in peacetime and regular national and allied exercises is vital. National and allied presence and operations contribute to form the impression of what is normal, predictable and non-provocative behaviour. Such an approach emphasises ability, determination and a credible Alliance guarantee.

The Norwegian combat aircraft that is already under NATO command during peacetime and on 15 minutes' Quick Reaction Alert is one expression of the

connection between Norway and NATO. It is important to communicate that these aircraft link Norwegian and allied efforts and the transition between peace and armed conflict.

- *The concept must build on a strong and customized national effort.*

The need for bases and units must be adjusted to a comprehensive plan. Current localisation of bases and logistics is not sufficiently adapted to the needs of a potential crisis in the North. Several large investments have been made without the necessary assessment of how to fit them into national preparedness planning. Some adjustments may be done in the short term, but the structure cannot be disrupted every four years. Therefore, in the short term the Norwegian defence efforts must concentrate on capabilities already in the inventory or those about to be implemented, and operational planning must optimize available resources. Given the Army's small size, concentration of ground forces in order to hold terrain over time is no longer possible. On the other hand, Norway will eventually possess a number of capabilities suited for deterrence and long-range targets. This applies to the fifth generation combat aircraft with stealth capabilities, a new generation of submarines, surface vessels with missiles and the Special Forces.

- *The concept must stress early allied engagement to ensure the greatest possible simultaneity and seamless escalation.*

A serious security crisis or an armed attack on Norway exceeds a threshold that immediately must trigger collective defence and an escalation that is as seamless as possible. Norway must, to the extent possible, avoid a first phase of the conflict that is limited to Norwegian forces, as this may encourage an opponent to seek a *fait accompli* before any allies decide to engage, and before reinforcements arrive. On the contrary, an opponent must be made to understand that Norway will respond immediately with military means, and that the conflict will be internationalised from the first moment on. Norway must, therefore, also work with allies to prepare them to make an immediate and visible decision to assist, and to ensure that this decision is accompanied by military assistance as quickly as possible. Some allied forces will be able to operate at a distance, i.e. from bases outside Norway. Others should operate from Norwegian territory, both for operational reasons and to increase the deterrent effect. In this case, a detailed set of plans, access to bases with prepositioned materiel and Norwegian support to the units will be required.



Norwegian F-16 re-fuelling from American air tankers over the Porsanger fjord (Jan Jørgensen).

Basic Features of a New Operational Concept

In line with the above-mentioned premises, the operational basic features of the concept will be as follows: In the event of a serious security crisis or a strategic assault in forward locations, resistance in *the land domain* is crucial. Such a response demonstrates determination to act, is visible and will attract attention. In addition to local ground forces being at the scene, the Norwegian authorities must send additional forces to the area as quickly as possible. The intention will be to demonstrate the violation of Norwegian sovereignty and to trigger the Alliance guarantee through an active response. The initial aim of the military will be to disrupt the intruder and deny him the opportunity to utilise bases and infrastructure. At a distance from the epicentre of the war and in locations of great strategic importance, the Armed Forces must assume full control in order to operate their own units and to ensure the reception of allied assistance, including ground forces, which subsequently can be transported to forward positions.

The Norwegian military operations must be a joint undertaking. Efforts on land must be based on local forces from the Army and the Home Guard as well as mobile ground forces and Special Forces as reinforcements. The ground units should, first, include ISTAR capabilities, providing targeting for long range weapons. Second, they should include a light armoured battle group on high readiness, which can signal its presence by frequent rotations and availability on short notice. By establishing forward storage depots, the time needed for deployment can be reduced.



Soldiers from the Home Guard Rapid Reaction Force in Alta, Finnmark (Christina Gjertsen).

However, Norwegian resistance in the land domain is not necessarily enough to deter an attack. Thus, Norwegian and allied forces must immediately engage on a wider scale. This is achieved primarily by the potentially large assets which Norwegian and allied units have for operations in *other domains*, especially submarines, combat aircraft and surface vessels with long-range weapons, which can strike units and systems participating in the attack. The deterrence potential of these systems are formidable due to the difficulty of neutralising them or disregarding them. Operations with these systems can be launched immediately when a decision is made, and thus they serve the principle of simultaneity well. These kinds of capabilities will make a big difference in military strength. Such a joint and combined allied force of combat, in combination with a decision to transfer ground forces, will demonstrate seamless escalation, if required to a level exceeding that of the opponent. This will underscore that the costs associated with any assault or attack will be much higher than the benefits, constituting the essence of a war-preventing policy and strategy.

NATO, the United States and Northern Europe

Norway must contribute to building a strong NATO. This primary aim must be supplemented with close co-operation with the United States and northern European countries. Relations with Russia could remain difficult in the foreseeable future. It is in Norway's interest to address clear signals of its NATO

connection and commitment, as well as a policy aiming for a new era between Russia and the West and good neighbourly relations in the North.

Alliance Policy and Partnership

Norwegian security and defence policy must encompass co-operation with many countries, be it consultations on key issues or co-operation on capacity building and security sector reform. Nonetheless, the policy must have a clear prioritisation, and the key issue is traditional security. NATO is the primary guarantor of Norwegian security. Regardless of the major challenges within the Alliance, its importance to Norway is vital. Recent developments, such as Russia's invasion of Ukraine and its military modernisation, have contributed to stressing the importance of collective security and Article 5. Now it is important to buttress the Alliance and avoid any watering down of its security guarantee.

Military assistance from abroad presumes mobile, combat ready and available allied capabilities. Norway must work purposefully towards convincing allies of the common interest in such an effort. This support must include forces that can be deployed at short notice, as well as heavier contributions that require some time. Countries and forces becoming partners in times of crisis and war must have necessary knowledge about Norway and the North as a theatre of operations. This is best achieved through training and exercises in and around Norwegian territory linking the activity as closely as possible to a conflict situation. It must be a priority for Norwegian authorities to facilitate such an engagement.

The Significance of the U.S. for Norwegian Security

The United States is Norway's strongest and most important ally. Even with the American reorientation towards other regions, the United States will remain important for European security. The U.S. still has an interest in Norway and the High North, but new times require a stronger cultivation of bilateral contact than before.

The United States will continue to expect Norway to be engaged in international operations, including outside NATO's traditional area of responsibility. Norway should provide such contributions when it is compatible with its own needs, interests and principles.

Norway has gained particular recognition for its contributions in the field of intelligence and surveillance in the High North. A strong Norwegian intelligence capability constitutes, now and also in the future, a vital contribution to Norwegian security, as well as to American security. Maritime surveillance in the North has been of great importance to both countries. The U.S. must be encouraged to contribute financially to the acquisition of new maritime patrol aircraft when the P-3 Orion's lifetime expires in a few years.

The defence of Norway rests heavily on American assistance. There is potential to deepen this co-operation. The Norwegian procurement of U.S. F-35 combat aircraft strengthens the security policy connection and paves the way for a close operational co-operation. At this juncture, it must be an important task for Norway to link the American combat aircraft more closely to the defence of Norway, including through arrangements prepared in peacetime. The U.S. Marine Corps is closely linked to Norway, because it is in the interest of the United States. Norway must strive to ensure that arrangements for the prepositioning of arms and equipment and the transit of forces work optimally, for both countries.

The Northern European Dimension

The Norwegian policy of defence co-operation in northern Europe must be intensified. Most important is the strengthening of bilateral and multilateral co-operation with NATO allies in the region. The United Kingdom, Germany and the Netherlands are in a unique position. The United Kingdom and Germany have significant military capabilities that may be relevant as assistance to Norway in a given situation. The Netherlands has a long tradition of operational and armaments co-operation with Norway. Norway should also strengthen its operational co-operation with Poland, as this country is becoming an increasingly important actor in the region. Denmark is working actively and competently to preserve NATO as a strong and credible defence alliance, clearly also benefiting Norway. Iceland may, in the future, have an important role in defence co-operation in the North, especially within the fields of maritime and air surveillance. Such a development could also be significant from a Norwegian strategic and military perspective.

Northern European initiatives, such as the Framework Nations Concept (FNC) and the Joint Expeditionary Force (JEF), may prove highly important for Norway. The JEF can be relevant for early deployment to Norway during a crisis. Norwegian contributions in UK-led operations within the framework of JEF may further strengthen Norway's operational capabilities.

The Baltic Sea region is militarily important to Norway due to its geopolitical location and because many of the countries in the region are NATO allies. There will be high expectations from other allies that Norway will make substantial contributions in the region in times of crisis and war. Close relations with allies in the Baltic Sea region are thus a Norwegian interest. When it comes to allied operations in the southern part of Europe, it may be more relevant for Norway to contribute as 'flag waver' and with niche capabilities.

Sweden and Finland have developed a diversified bilateral and multinational defence co-operation with Norway and other allies in northern Europe.

However, the co-operation is limited by the fact that the two countries are not members of NATO. Co-operation may generate mutual dependencies, which will be problematic as long as the countries cannot count on each other's assistance in a serious security crisis or war.

The northern European defence co-operation is at a formative stage. It consists of many and important dimensions, but can hardly be described as comprehensive and robust. If Sweden and Finland were to join NATO, this would open up great opportunities for developing this co-operation on all fronts. This would enable a whole new impetus in the joint handling of security policy challenges, in combating severe terrorism and in international operations. It can also be an incentive for much closer co-operation on armaments and capabilities. In the broader perspective, it could unite northern Europe and create a more effective collaborative arena, something that should not be overlooked should the major international organisations lose a lot of their strength sometime in the future. Security policy also concerns thinking alternatively, beyond the usual and the conventional.

Russia – The Dual Policy

Russia is an important and demanding neighbour for Norway. We have to accept that the relationship between Russia and the West may remain difficult for a long time. In light of the Ukraine crisis, Norway's endorsement of and support for the common allied policy is important. As a result of the asymmetrical neighbourly relationship, Norway will, also in the long term, need to establish security by multinational co-operative arrangements with Western engagement and through a solid and predictable NATO.

At the same time, it is neither possible nor desirable for Norway to define itself outside of its neighbourhood. There is no contradiction between a distinct policy of firm line-drawing toward Russia and active collaboration. Norway has a long tradition of using this dual policy. This tradition was especially evident from the mid-1970s, when the Cold War intensified while Norway and the Soviet Union initiated closer co-operation on fisheries management. As long as Russia's orientation is considered to be interest-based, co-operation will be possible when deemed useful to both parties. Therefore, in difficult periods our policy towards Russia must be based on strategic patience.

The handling of strategic and security policy challenges in the North takes place on several levels. On some issues Norway has zero influence. This is most evident on issues related to nuclear weapons. The Russian nuclear capabilities in the North contribute strongly to the region's status in great power politics. Any discussions on arms control and disarmament in this field are primarily

limited to Russia and the United States. Norway has on the other hand an opportunity to play a constructive part in the effort to re-establish a credible dialogue between the West and Russia. The NATO-Russia Council should be revitalised at some point in the future. In the meantime, other channels for political dialogue must be kept open. It would be a substantive step in the right direction if all parties became interested in living up to the agreed provisions on early warning and notification, not just in name but also in fact.

There is extensive international co-operation on Arctic issues. International treaties, institutions and regimes are helping to shape the region's future in important areas such as environment, fisheries, traffic and societal security. The countries in the North are all interested in continuing this positive path of co-operation, and it must be an important task for Norway to be a driving force in these endeavours. The Norwegian Armed Forces can contribute substantially through co-operation with the Russian authorities on matters pertaining to the coast guard, border guard, and search and rescue.

It is critical to avoid having incidents and crises live a life of their own and escalate. Crisis stability is a keyword: There is great potential for expanding the contact and notification mechanisms during both civil and military crises, and to generate a shared perception that all parties would be best suited by living up to agreements and understandings.

Although difficult to achieve, Norwegian visions and ambitions should stay firm.

International Military Efforts

Norwegian interests are also defended beyond the country's territorial borders. Military assistance to NATO members and to strengthen ties with key allies are most important. In many respects, participation in operations abroad will contribute to building expertise and to making Norwegian units better suited to carry out their main tasks at home.

It should be pointed out that Norwegian security interests are hardly best served by sending small numbers of military personnel to a long list of countries. Such approach resembles engagement policy far more than security policy. Contributions abroad must be weighed carefully against domestic needs. The authorities must have plans for the withdrawal of forces committed to operations far away and for bringing them home on short notice.

Recommendations

Norway is dependent upon allied support in serious crisis and war. A small, but modernised military also needs support from the society at large in such situations. With these clear insights as a basis, the Expert Commission has discussed and presented the main features of Norwegian security and defence policy.

The objectives and tasks must be prioritised and clarified in order to direct the efforts more towards what is most important – the defence of Norway. Since Norway cannot do this alone, allied co-operation must be accorded higher priority in the governing guidelines for this sector. An updated defence concept is also needed. It should be based on four mutually reinforcing components providing the strongest possible resource base to the defence undertakings. These are the national military effort, allied support, conscription and total defence.

The Expert Commission underlines the need for a modernised operational concept addressing the most demanding situations the Norwegian Armed Forces may face and the limited time for response. The Expert Commission has outlined such a concept. War prevention through deterrence is the central idea. Norway must avoid being left alone, with the risk that an opponent will seek to settle the conflict before the allies get involved. Credible deterrence presupposes early allied engagement and an escalation that is as seamless as possible.

NATO remains very important. A central task for Norway must be to strengthen collective defence and the credibility of the Article 5-guarantee. Mutual co-operation implies allied assistance to Norway – and Norwegian contributions to military operations abroad. If the Alliance is to operate as intended, the reinforcement plans must be concrete and substantial, and the command structure of NATO must be developed to master collective defence. The relationship between Norway and the United States is still an ‘alliance within the Alliance’, but the American interest can no longer be taken for granted. Norwegian efforts on several levels are needed to cultivate this relationship and to encourage the Americans to engage in the High North. At the same time, the Expert Commission strongly recommends a strengthened northern European defence co-operation. In a broader perspective, closer co-operation between all the countries in northern Europe may provide a new impetus in a number of areas.

To Norway, Russia is an important and demanding country. Norwegian policy must be in line with the main allied position, steadfast and fearless. The neighbourly relationship must at the same time be managed wisely and based on

mutual co-operative interests. This dual policy proves its relevance, even in a new era.

The Norwegian Armed Forces are not capable of solving all of the demanding tasks they face alone. The Expert Commission thus stresses the need for a *unified effort* uniting the military, the Norwegian society at large and our allies. The Armed Forces must invest more in operational activities. Norway needs allied assistance in times of crisis and war. Thus, Norway must invest substantially in the facilitation of such assistance. Similarly, Norway must be prepared to assist others. Furthermore, the military needs support from the wider society through conscription and total defence. It is necessary to develop and establish new arrangements allowing for the extraction of resources from other public and private actors. Similarly, the Armed Forces depend on support from the Government to ensure a sound economic framework.

Planning and operations for the use of military force must be based on the principle of simultaneity. Plans to commit allies to the defence of Norway must be developed simultaneously with, and as an integral part of, national defence planning. Norway must seek to ensure allied military assistance from the first moment in crisis and war, and simultaneously with Norwegian defensive efforts. Simultaneity must apply equally in national planning and operations, especially by ensuring logistical support to the military when and where necessary as a part of the total defence framework.

CHAPTER 8

Critical Functions for the Defence of Norway

In order for the Norwegian Armed Forces to continue performing current tasks, to increase the level of activity if necessary and to be prepared for the unexpected, they must maintain a certain breadth, robustness and flexibility. Today, the Armed Forces are generally characterised by high quality. The command structure is modern and well functioning. The Army and the Home Guard are more professional than ever. The Navy and the Air Force have received or are in the process of acquiring weapons systems of a particularly high standard. Norwegian Special Forces are amongst the best in the world. NATO is increasingly interested in collective defence. The U.S. Marine Corps is closely linked to Norway, and Germany and the United Kingdom are actively developing co-operative arrangements which can also benefit Norway.

Nevertheless, not everything with regards to the defence of Norway is good. The Armed Forces have been reduced significantly in numbers, many units are unavailable on short notice, and it may take time for allied assistance to arrive. The depicted threat and risk environment above, as well as the operational concept, underline that much needs to be done for the Armed Forces to be able to deal adequately with severe security crises or war.

In this chapter, the Expert Commission will discuss *five functions* that require special attention since they will be of great importance in the event of a serious crisis or war, and since they are characterised by significant gaps that need to be covered. The five are; good intelligence and surveillance, robust strategic decision-making mechanisms, deterrence, increased availability of Norwegian and allied military forces, and comprehensive logistical support of military operations.

Intelligence and Surveillance – First Line of Defence

In order to organise our own defence, knowledge of a potential opponent's capabilities and intentions is vital. Knowledge makes surprises less likely. Knowledge can reduce misunderstandings that might otherwise lead to increased tension and escalation.

Norway's need for intelligence and surveillance is particularly linked to three factors: Russia as a potent political and military actor; terrorism and weapons

of mass destruction which can threaten Norwegian interests at home and abroad; and threats in cyberspace. Geopolitical changes, exposure of Norwegian interests and new technologies suggest that Norway must continue to spend large sums on intelligence and surveillance.

Norwegian intelligence and surveillance in the High North serve both national and allied interests. The activity is based on co-operation with and support from the United States. Because Norway has such good capabilities, there is little need for other Western countries to collect information by use of aircraft and surface vessels in the North, close to Russia. This division of labour contributes to low tension in the North. However, the activity is very resource-intensive. Without a unified effort, Norway cannot afford to continue all intelligence and surveillance activities in the area. Ensuring acquisition of new maritime patrol aircraft is the most pressing issue.

As a result of the gradually melting ice and the increased activity, the Norwegian area of interest in the North is growing. Russia will continue to have the most significant impact on Norwegian intelligence and surveillance priorities. The negative development in Russia has led to a greater need to closely and continuously analyse the situation in Europe's neighbouring areas. Also, we need to deal with a militarily strengthened Russia.

Over the years Norway has built up very good knowledge about Russian political and military developments. These insights are an important contribution to predictability and stability in the relationship between Norway and Russia. In order to keep pace with the military modernisation on the Russian side, the Norwegian Intelligence Service needs to invest in systems for information gathering and processing. The Service is also vulnerable to various forms of attack and must be made more robust. All of this is expensive.

Co-operation with the United States is crucial for Norway's intelligence gathering and surveillance in the North. Access to advanced American technology at an affordable price is especially important. The acquisition of the new intelligence vessel *Marjata* is a good example of this. The same is true for maritime patrolling. Surveillance of the vast waters around Norway is of utmost importance in order to detect and monitor what is going on, and to identify foreign vessels and submarines. Norway has been conducting such activities in co-operation with allies since the 1950s. The United States has been very interested in monitoring Russian strategic submarines near Norwegian waters. When Norway acquired the maritime patrol aircraft P-3B Orion at the end of the 1960s, the Americans financed about 2/3 of the purchase costs. The same principle was applied when the P-3B was replaced with the P-3C at the end of the 1980s.

P-3 Orion's lifetime will expire around 2020. Without American participation, it is unlikely that Norway can afford to pay for new maritime patrol aircraft. The most interesting replacement for P-3C would be the P-8 Poseidon. The justification for a replacement will be the same as before, namely detection, identification and anti-submarine warfare. In the interest of continued low tension in the High North, it is important for Norway to attend to this task by use of Norwegian capabilities. Anti-submarine warfare must be prioritised as Norway seeks to commit the Alliance more closely to the defence of Norway. Reinforcements must be brought towards the North safely, without risking defeat by Russian submarines and other weapons.

Convincing the United States that this capacity must be continued as part of a unified effort must be a priority for the Norwegian Government. The United Kingdom may perhaps also participate in a comprehensive North Atlantic patrol co-operation. The United Kingdom terminated their antisubmarine-capable aircraft a few years ago, but is now considering acquiring a new system. Norway should consider the possibility of bilateral or multinational co-operation on, for example, education, maintenance, exercises and training, and operations. Germany also has maritime patrol aircraft and could be considered as a possible future partner.



Maritime patrol aircraft seen through the periscope of the submarine KNM Utsira (KNM Utsira, Norwegian Armed Forces).

Today, Norway's need for intelligence extends far beyond the High North. The ongoing geopolitical shift with China as a new major actor implies that Norway needs to raise its awareness of important developments in the Asia-Pacific region. The situation in North Africa and Southwest Asia is unstable and provides leeway for terrorists who can strike both in these regions and in Western countries, including Norway. One task of the Norwegian Intelligence Service is to contribute to the protection of Norwegian military forces abroad,

such as in Afghanistan and Iraq. The Intelligence Service also addresses cross-border threats that affect various Norwegian interests at home and abroad. Concerning terrorist attacks against targets in Norway, the Service assists in clarifying whether such an attack has an international dimension, as demonstrated during the bombings in Norway on 22 July 2011. The hostage situation in In Amenas in Algeria during the winter of 2013 illustrated that the Norwegian Intelligence Service can play an important role in international crisis management through the use of its own capabilities and co-operation with others.

The most recent challenge stems from threats in cyberspace. This threat reflects the change of paradigm in communications, and the simple fact that intelligence gathering must take place where communication occurs – in this case on and through the Internet. Serious cyberattacks against Norway and Norwegian interests will cross the same digital border. Cables are the primary tool for electronic communication between Norway and the rest of the world. In order to be able to detect, warn of and deal with foreign threats such as terrorism, espionage and cyberattacks, it is necessary to have access to relevant Internet traffic passing through the cables. This will constitute a kind of digital border defence. In contrast to most countries we like to compare ourselves to, such as Sweden and the United States, the Norwegian Intelligence Service does not possess the ability to follow such communication. This activity will not be principally different from other forms of foreign intelligence, but it will be a question of large amounts of data. The Service will need significant investments in the technical capacity to process, manage and analyse data. At the same time, a digital border defence must be combined with good control mechanisms that ensure the safeguarding of privacy.

Rapid and Relevant Decisions

Strategic decision-making mechanisms will be placed under severe pressure in the event of an armed attack, terrorist strike or an indeterminate crisis in the grey zone between war and peace. Short warning time can cause strain and chaos and end in inability to act or ill-founded decisions. Today's decision-making mechanisms are not adequate for handling the most demanding challenges that Norway could face. In a certain sense, this is an insoluble problem because crises tend to come as surprises or in a shape that we do not expect. Nevertheless, several measures can be taken to limit the problem. The Expert Commission emphasises the need to strengthen co-operation with allies in times of crisis or war and to enhance the ability of the Prime Minister and the Government to manage crises through the creation of an adapted unit in the Prime Minister's office.

Crises in peacetime can be difficult to handle. More severe situations, such as serious security crises, demand even more of the strategic decision-making bodies, especially due to time deficiencies and the risk of escalation. Armed conflict is the ultimate challenge for any government, and highlights the need for robust and validated decision-making mechanisms.

In serious security crises and war it is important to involve our allies and NATO as quickly as possible. A seamless NATO engagement can be ensured by immediately sharing our understanding of the situation with NATO's Council and Command Structure, as well as with our close allies and potential partner countries. The need for support must be identified and communicated so that allies can make relevant decisions and initiate their efforts early on. These steps can, in themselves, counter further escalation. In line with the principle of simultaneity, decisions on allied assistance must be combined with national efforts to support military reinforcement.

Norway must prepare the grounds for allied reinforcement in peacetime. In this effort, developing and exercising joint command systems and decision-making procedures is important, as well as ensuring the ability to exchange sensitive information at political and military levels. These mechanisms are already mostly in place between Norway and NATO. The same is not the case bilaterally and multinationally within the Alliance, as demonstrated through high-level tabletop exercises. Achieving a great effect will not demand much effort. Bilateral procedures for crisis management and mechanisms for exchanging classified information must be established. The highest priority should be given to establishing such bilateral crisis management procedures with the United States and the United Kingdom. There is no reason to delay the establishment of such arrangements. Once in place, they must be exercised to validate their proper functioning.

Norway has a particular responsibility for maintaining situational awareness in the High North. In this respect, the Armed Forces' Joint Headquarters (NJHQ) in Bodø provides a powerful capacity, both for Norway and the Alliance. The NJHQ is now firmly established, has been given operational command nationally and is among the most modern joint operational headquarters in NATO Europe. The Headquarters is a hub for national military operations – and the preconditions are in place to also make it a hub during allied operations in the North. The NJHQ is already sharing its situational awareness of military activity in Norwegian areas of interest with the Alliance, improving NATO's capability to act in a serious security crisis or armed conflict. The NJHQ should be proposed as a national contribution to NATO in the event of allied operations in Norway and in the North. One alternative could be 'dual-hatting' the NJHQ commander in Bodø, as the National Commander and as NATO's Northern

Commander within NATO's Command System, if need be. Such an arrangement presents a number of challenges, but these have to be compared to the many advantages. This solution would ensure a robust operational arrangement, which could also contribute to simultaneity in planning and operations and to seamless deterrence. A NATO flag in Bodø will strengthen the link between Norway and NATO and improve our ability to jointly deal with a conflict on the high end of the crisis scale. The NJHQ should also establish direct links with the joint operational headquarters of close allies, especially U.S. commands and the UK's permanent joint operational headquarters. Such an arrangement can be extended to more countries once closer co-operation has been established in the whole of northern Europe. These links will contribute to more effective bilateral contingency planning and crisis management across the crisis scale.

Seamless arrangements are important also nationally, between sectors. The results can be catastrophic if the decision-making mechanisms are significantly flawed by deficiencies in areas such as responsibilities, competence, communication and training. In the event of a serious crisis where it is not obvious who is responsible for the overall co-ordination of the crisis management, it is the Government's task to decide immediately which Ministry should lead the effort (the 'lead ministry'), and whether it is the civil authorities or the Armed Forces that should handle the situation. There is an apparent need to review the documents and plans covering strategic crisis management, as well as a need to test the system through exercises to clarify responsibilities, roles and authority, especially with the aim of ensuring effective crisis management in grey zone situations.

For several years there has been a debate in Norway about whether or not to create a separate unit for crisis management within the Prime Minister's Office. Until now, this has been rejected by the changing governments, under strong influence of the bureaucracy in the Prime Minister's Office. The need for such a move is now urgent. While the handling of major accidents and crises in peacetime demands a lot from the Government, this will normally be manageable compared to the immense pressure put on the authorities in a grave security crisis or an armed attack. A serious crisis that far surpasses the terrorist attacks of 22 July 2011 will require an extremely robust decision-making apparatus in which the Prime Minister will have to emerge as a strong and clear leader. Today's organisation leaves no room for this, other than as improvisation.

It is therefore necessary to establish a separate unit to support the Prime Minister and the Government in contingency planning and crisis management. This can be a small unit that, in peacetime, unifies and structures the preparedness planning of the ministries and directorates. In times of crisis and war the unit could expand to provide operational support to the Prime Minister's and

the Government's crisis management. During a crisis, personnel familiar with managing crises from relevant ministries can strengthen the unit. This proposition does not alter the constitutional responsibilities: In a serious crisis, the Ministry of Justice and Public Security coordinates crisis management and response measures within the civilian sector. The Ministry of Foreign Affairs will manage the diplomatic communication with other countries and international organisations, while the Ministry of Defence will be in charge of the military effort, supported by allies and the civilian part of the Norwegian total defence.

The crisis management apparatus must withstand attacks and infiltration. Threats may stem from long-range precision weapons, or traditional attacks carried out by conventional forces or special forces. In addition, we must be increasingly prepared to prevent attempts to outmanoeuvre political and military authorities by damaging critical information and communication systems. Well functioning and secure communication is also vital for the exercise of command and control in the Armed Forces and in interaction with our allies.

Deterrence

In the outlined operational concept, deterrence is a main component. Norway cannot deter Russia on its own as the military relations are asymmetrical. Hence, the total cost of a potential armed attack against Norway is represented by NATO's military volume and modern operational capabilities. Furthermore, in the event of an attack with little or no advance warning, credible deterrence depends on quick response and seamless escalation. Such escalation takes place in three parallel processes; the build-up of national military forces, allied military reinforcement and the Norwegian total defence framework.

In order to contribute to deterrence and, at the next stage, to be able to trigger a counter-reaction, military forces need to be continuously present in the High North in peacetime. A stable presence consists of national forces permanently stationed in the North, and forces present on an ad-hoc basis during training, exercises and peacetime operations. Units such as the Border Guard, Home Guard, Coast Guard, maritime patrol aircraft and NATO quick reaction combat aircraft have a regular presence as part of ongoing peacetime missions. In addition, both Norwegian and allied forces train and exercise in the High North.

Allied forces train and exercise several thousand days annually in the North. The numbers vary from year to year, depending on which exercises are being conducted as well as the allies' training cycles. The main activities take place in Northern Norway during the winter months. In 2014, allied soldiers, mostly from the United States, the United Kingdom, Germany and the Netherlands,

trained and exercised more than 160,000 days in Norway. This number is comparable to 2012. Such presence also has a strategic dimension, as a demonstration of co-operation between allies. Norwegian authorities should strive to establish an understanding on the part of key allies to enable the use of individual units present in Norway in the event of a military conflict. Allied exercises and training in Norway should also be included in the national programme of exercises dealing with Norwegian presence in the North. Also, such activity could be extended. In time, Norway will have the largest concentration of the F-35 combat aircraft in Europe. A hub for F-35 exercises and training can therefore be established at Ørland.

Military forces on high readiness must be able to move quickly to the North to be able to respond to a serious crisis or an armed attack on short notice. National air and naval forces and light ground forces must be quickly set up, deployed and supported. Allied air forces can be transferred relatively quickly to bases in Northern Norway, or they can carry out missions in the North from bases abroad supported by air-to-air refuelling.

If a conflict protracts, the immediate reaction must be followed by larger-scale military countermeasures. The Home Guard is available on short notice and can protect the staging and onwards movement of national and allied forces. The Brigade North, the Coastal Squadron, air squadrons and other operational forces must be readied and transferred to the mission area. Norway must deploy follow-on forces in all domains, with manoeuvrability and firepower. In parallel with national preparations, allied forces should be transferred to Norway and be part of creating a powerful multinational force in the region. Robust air defence must protect Norwegian preparations and allied movement of forces against long-range offensive systems. Norway must have plans, infrastructure³ and support units that facilitate the transfer and operations by allied forces in the region, both in the early and later stages of an escalating conflict. Norwegian and allied forces must be supported by the necessary logistical supply. Support from the civil part of the total defence framework will provide Norwegian and allied forces increased sustainability.

Combat aircraft, submarines and long-range weapons will increase the risk for an aggressor due to their mobility, unpredictability and great firepower. Submerged submarines are difficult to detect and monitor and therefore create great uncertainty. Submarines can severely interfere with maritime operations and deny an adversary control of the maritime domain. Modern submarines are key tools in deterring an attack on Norway. The F-35 combat aircraft with stealth capabilities are also difficult to detect and create uncertainties similar to submarines. Combat aircraft also have high speed and significant range. This

3 Physical infrastructure such as airports, transshipment ports and communication infrastructure.

entails high risk for an adversary planning offensive actions against Norway. Combat aircraft, frigates and corvettes with long-range anti-ship and land-attack missiles create a series of difficult dilemmas for an aggressor.

An armed attack on Norway must also be expected to include attacks in or through cyberspace. Norway must protect its own critical infrastructure against such attacks. The Armed Forces have a capability for offensive cyberoperations, which contributes to protecting Norway against attacks from abroad. The ability to withstand cyberattacks in both the civilian and the military sector reduces the potential effect of an aggressor's offensive operations, and the Armed Forces' offensive capability contributes to deterrence. In a serious crisis where there is a need for further deterrent measures, it may be relevant to request bilateral assistance for cyberoperations from close allies. Norway can also solicit assistance from NATO in order to include the Alliance in resolving the conflict.

Responding to Shorter Warning Times

An operational concept for managing a military conflict must be based on the fact that an attack can take place without much advance warning. This will have implications for the interaction with our allies that is necessary to ensure their support, and for measures that need to be implemented nationally in preparation for further action.

Securing Allied Support on Short Notice

In the event of serious crises and surprise attacks, some allied forces may deploy to Norway within a relatively short timeframe. Prepositioned materiel and other measures will reduce the time necessary for the deployment of forces.

Ørland Main Air Station is a forward base for NATO's AWACS aircraft, with an organisation adapted to the reception and accommodation of these. The AWACS are periodically in Norway and participate in joint exercises with the Norwegian Air Force and in national and multinational exercises in the North. If there is an operational need in Norway, these aircraft can be very quickly deployed.

The U.S. Marine Corps has equipment prepositioned in Trøndelag to support an initial force of about 4,500 soldiers. If necessary, this force may be strengthened by an expeditionary brigade of 15,000–18,000 soldiers. The brigade has great combat strength and constitutes an important deterrent. Support to the U.S. Marine Corps must therefore be one of the most important tasks in Norwegian defence planning. The Norwegian Host Nation Support Battalion must be available at sufficiently short notice so as to readily receive the

American reinforcement. Requirements for host base support will change as the Marine Corps introduces F-35 combat aircraft into their air squadrons.

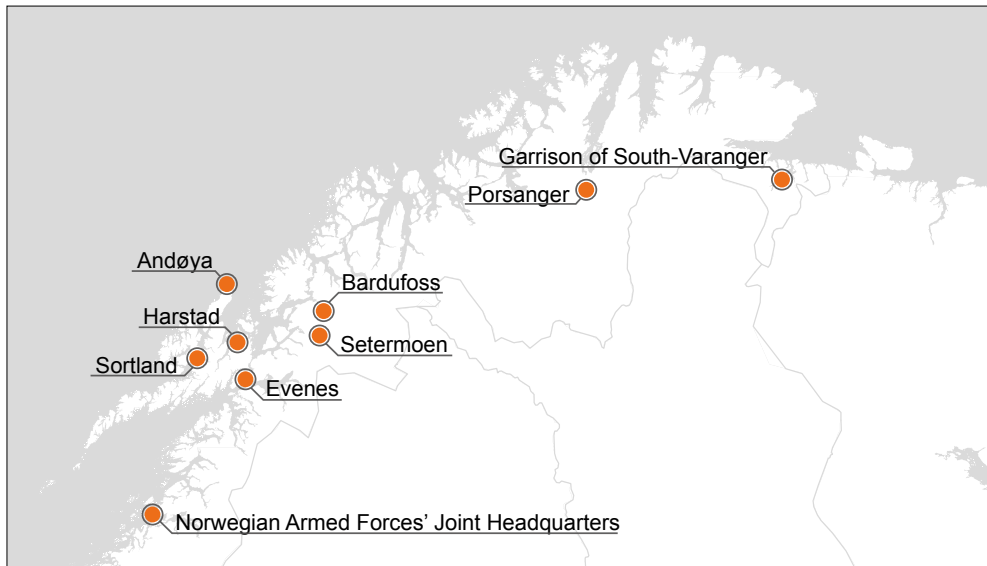


FIGURE 10 Main areas for Norwegian military presence in the North. Åsegarden close to Harstad and Halkvarre by Porsanger are central to allied exercises and training.

The agreement on Collocated Operating Bases (COB) between the United States and Norway is a framework agreement to enable selected Norwegian airports to accommodate American air reinforcement in crisis or war. The agreement includes prepositioned equipment and support from the Norwegian Armed Forces. At present, only Bodø and Sola airports are included in the agreement. The content of the agreement is maintained at a minimal level. Rapid air reinforcement is critically important. Therefore, updating and adapting COB must be a priority. The aircraft must be linked to bases suitable for the purpose, and the arrangement must be adapted to the needs of the U.S. F-35 combat aircraft.

In addition to pre-planned solutions, flexible solutions can be established when necessary. Shortly after the start of the crisis in Ukraine in 2014, American combat aircraft were deployed to Poland and the Baltic states for visible presence and to participate in exercises. Other European countries followed suit. This experience is of interest also to Norway. In the event of a serious situation in the North, Norwegian airports must be prepared to accommodate allied air reinforcement. Alternatively, allied aircraft could operate from bases outside of Norway supported by air-to-air refuelling, but this will only address the Norwegian need for a visible allied presence on Norwegian territory to a limited degree.

Protection against airstrikes is also critical. Active defence of airbases consists of early warning systems, tactical leadership, combat aircraft and anti-aircraft defences. Passive defence includes measures such as dispersion, physical protection of materiel and personnel and the ability to repair damage. From the 1990s until present, active and passive defences have not been given high priority in international operations, as the threat against airbases has been low or non-existent. In the so-called 'bare base' concept for international operations, there were no requirements to protect the aircraft on the ground. Russia has long-range offensive systems that can threaten Norwegian airbases, especially in the North. If Norwegian and allied combat aircraft are to be deployed in Northern Norway in crisis and war, the traditional concept for the protection of airbases must be re-established.

Ensuring Available Norwegian Forces on Short Notice

Short warning time requires selected Norwegian forces to be available on short notice, not least to resist pressure until allied reinforcements are in place. Increased availability implies reducing the time span required for the forces to be ready for action and ensuring that the forces are in the right place at the right time.

It is necessary to establish a new normal for the presence of all branches of the Norwegian Armed Forces in the North, through operations, exercises and training. Some units are available for limited action on short notice, including the Norwegian Joint Headquarters, the Border Guard, the Home Guard, quick reaction combat aircraft and the Special Forces. Parts of the Armed Forces have also demonstrated great flexibility and availability in ad-hoc situations, e.g. the contribution of the Norwegian Air Force to operations over Libya in 2011. Today, only a small part of the Armed Forces is tasked to be available on short notice. The prevailing view has been that higher readiness is not necessary given the threat situation. This is no longer the case. The availability of several selected units in all branches of the Armed Forces needs to be increased. This will have major consequences for logistical support. The measures will be very expensive.

There is a strong need for military presence on land in forward areas, such as in Finnmark as illustrated in the operational concept. In addition to being available on short notice, the Home Guard is familiar with the area and the local civilian counterparts, and has an important task in protecting critical infrastructure. The Border Guard is, like the Home Guard, a limited but important capacity. Strengthening the Border Guard with heavier weapons and vehicles must be considered in order to increase its operational ability and to support Norwegian ability to draw firm lines. Nevertheless, the Home Guard and the Border Guard are not sufficient to resist military pressure. This brings back the aforementioned need for elements of the Army to be frequently or

continuously present in forward areas through rotational exercises and training. Ordinary ground forces and special forces need to develop a close working relationship with other Norwegian units and allied forces which exercise and train in the same area. The Armed Forces also need to move relevant equipment to forward storage sites. Storage and training can, for example, be located in connection with the well-established, if somewhat outdated, exercise and training area Hálkavárri in Porsanger.

Support to the Military Forces

Adequate military and civilian logistical support is necessary for the effective use of Norwegian and allied forces. The arrangements for such support are flawed and deficient, and the existing plans for support in severe security crises and war, from tactical to strategic level, have not been exercised in recent years. The challenges seem even greater if we include the additional support needs that will result from increased allied involvement in Norway, more forces available on short notice and an increased presence in the North.

Logistical support to the Armed Forces in war is divided into three main parts; the first and second comprise the Armed Forces' own logistical resources and contracts with civilian suppliers. The third part is the statutory requisitioning of goods and services and the military command over civilian service providers such as the rescue service and meteorological services, in line with the Norwegian total defence concept.

The Armed Forces' own support capacity is inadequate. There is a maintenance backlog. The Armed Forces' supply stocks are close to non-existent. The Navy is even 'cannibalising' on its newly acquired frigates in order to obtain the necessary spare parts. Amongst these challenges some positive developments can be noticed. The establishment of the National Logistics Command in 2014 and the entry into service of a new logistics vessel from 2016 are some examples.

The Armed Forces' need for civil support is normally covered through commercial contracts. This also applies to the transportation of military personnel, equipment and supplies, which are mainly carried out by civilian companies. One example is the March 2015 contingency contract between the Armed Forces and WilNor Governmental Services, a company in the Wilhelmsen Group. These contracts are intended to also apply in war, although not all civilian contractors may be able to meet the needs of the Armed Forces as commercial production is geared towards the demand in the private market and cannot necessarily be scaled up easily. There are also important legal restrictions in war. These include the prohibition of civilian actors to conduct logistics support operations within a conflict area.



The Armed Forces' contingency contract with WilNor Governmental Services includes NorSea Group logistics bases such as here in Tananger near Stavanger (Jostein Viestad, NorSea Group).

The prerequisite for lawful military requisitioning during war is that there is something to requisition. Most civilian commercial actors within the Norwegian total defence have gradually wound down the supply stocks that would support the Armed Forces. This was partly because of the lack of clarity on the needs of the Armed Forces after they were reorganised, and also partly because the civilian contractors considered such stocks to be too expensive to keep in peacetime. The framework for the Armed Forces' military command over civilian service providers in war is now under review after years of inactivity.

To enhance the ability to provide logistical support, the Armed Forces' support capability must be fitted to the revised allied and national contingency and defence plans. Shorter warning times must involve increased readiness for selected Norwegian forces, which in turn will have major consequences for their logistical support needs. In an early phase, allied and Norwegian forces must bring what they need of equipment and immediate supplies. In addition, measures must be implemented to ensure continuous support in a prolonged crisis. Re-establishing contingency supply stocks within the Armed Forces, adapted for forces at higher readiness, will require significant investments. An adapted building stock is necessary to store these extra supplies. This factor needs to be carefully assessed since a significant proportion of the sector's building stock has been sold off over the past fifteen years.

The re-assessed needs for civilian logistical support resulting from the revised plans and forces on higher readiness must be clearly communicated to the civilian part of the total defence. This is a pre-requisite for military needs to be included in the civilian planning. For example, civilian airport owners request answers from the Armed Forces as to which airports will be used in a crisis or war, so that the military needs can be included in an overall plan. At the same time, the civilian sector needs to think differently. Many civilian actors within the total defence framework have for a long time considered serious crisis and war to be unrealistic scenarios, and have removed these dimensions either completely or partially from their planning.

Nonetheless, civil contingency planning is not only to safeguard the needs of the Armed Forces. Such civil planning will also contribute to safeguarding the continued performance of other functions critical to society in war. The civilian sectors therefore need to plan for the sustainment of these functions. This applies to war planning at all levels in the civilian society, an area that has not attracted attention since the 1990s. The Municipality of Bodø represents an exception by profiling itself as ‘Norway’s civil contingency capital’. More actors should follow this example, with a reflective attitude towards the effects on society of serious crises or war.

Military requirements must also be clarified in the legislation. The Trade and Industry Preparedness Act of 2011 still has only one applicable regulation. There is a considerable backlog on important legal basis that must be in place to ensure relevant and timely support for the military forces in war.

In general, the Armed Forces and the civilian actors who have key roles in supporting military operations in Norway, need to do more – jointly – to better defend the country. The support requirements need to follow logically from changes in the allied reinforcement regimes, forces at higher readiness and increased presence in the North. Support to military forces in war should be raised higher on the agenda in exercises and in the dialogue between relevant actors. There must also be a willingness to pay the cost for being as prepared as possible.

Recommendations

The Norwegian Armed Forces consists of units of high quality. This quality will improve even more when new combat aircraft and submarines are in place. However, the forces are not sufficiently strong to face and persevere a severe crisis or war in our area. In this chapter, the Expert Commission has put forward and discussed five functions that will improve the defence of Norway.

These measures will constitute a unified effort between Norway and the allies, and between the military and the civilian sector.

Intelligence and surveillance need heavy investment in the time to come. In addition to an increase in the general ability to collect and analyse information, priority should also be given to maintaining the ability to conduct extensive maritime surveillance and to develop a digital border defence.

The strategic decision-making mechanism for severe security crises and war must be strengthened. First, the Norwegian Joint Headquarters must be linked more closely to NATO's Command Structure and the headquarters of close allies. Second, an adapted unit should be established in the Prime Minister's Office to enhance the ability of the Prime Minister and the Government to manage crises. Third, contact mechanisms with selected allies for bilateral crisis management should be developed.

Credible deterrence is fundamental to Norwegian security. Deterrence should be ensured through the continuous presence of Norwegian and allied forces in the North in peacetime, as well as through the ability to move forces to exposed areas on short notice. Deterrence is also based on a national capability in terms of combat aircraft, submarines and long-range weapons, which will increase the risk for an aggressor because of their mobility, unpredictability and a high level of firepower. Last, but not least, the deterrent potential of a small country rests on close and credible collaboration with allies, demonstrated through allied presence in exercises and training in Norway.

We need to be prepared for military conflict without any advance warning. Thus, selected Norwegian and allied forces must be ready for action on short notice. The reception of allied air reinforcement must be planned for and prepared in advance. Norwegian ground forces must be continuously present in exposed areas, along with forward supply depots.

Military operations depend heavily on logistical support. The Armed Forces' own logistical support must be further developed and adapted to the Norwegian and allied forces it will support. Civilian logistical support to the Armed Forces needs to be given increased priority, both in the military and in the civilian sectors, and exercised regularly.

CHAPTER 9

A Unified Effort to Strengthen Operational Capability

In order to meet security challenges, it is necessary to strengthen intelligence, military presence in the North, preparedness and readiness, the sustainability as well as the support of allied training, exercises and the reinforcement of Norway. Defence spending must be a priority.

The financial realities discussed in Chapter 5 show large potential imbalances between the Armed Forces' budgets and costs in the coming four year period, and not least in the longer term. There will also still be strong competition over public budget funds and clear demands to increase efficiency in all public activities. Hence, it will be challenging to increase the level of ambition of selected areas within the Armed Forces.

The Expert Commission has not had the mandate or the opportunity to go into depth on structural recommendations and cost calculations. However, it is essential to strike a good balance between ends and means. Otherwise, the Armed Forces will not be able to meet the challenges on the high end of the crisis scale and the risk of erroneous investment in personnel, equipment and infrastructure grows rapidly.

In this chapter, the Expert Commission therefore wishes to highlight some central principles for the Armed Forces' economic foundation in the years ahead. The aim is to strengthen operational capability and all measures must have this as their goal. The discussion is based on the ordinary appropriations and will then assess additional funding, efficiency and quality improvements and multinational co-operation. The principles described by the Expert Commission are based on an ambition of a unified effort by the Armed Forces, the society at large and our allies. The most important instruments in the short-term are raising the level of allocation by NOK 2 billion in order to strengthen preparedness and readiness and to initiate an ambitious efficiency improvement programme with an aim to reallocate a minimum of NOK 3.5 billion a year for operational activities before the end of 2020. Later, additional funding will be necessary to procure new submarines. Ten years from now (2025) this will strengthen operational capability by NOK 7.5 billion annually.

Ordinary Appropriations

The central budget premise for the Armed Forces in the current planning period (2013–2016) is the continuation of the 2012 level of appropriations, in real terms. As we have seen in Chapter 5, this means that the defence budget's proportion of the GDP has a decreasing tendency. According to NATO's measures the proportion is currently 1.5 %.

The Expert Commission does not believe it is possible to create consistency between the mentioned developments in threat and risk, the structure of the Armed Forces and the defence budgets – without raising the level of allocation. This can be done on the basis of different arguments, including by linking the defence budget to the growth of GDP in the Norwegian economy.

At the NATO Summit in Wales in autumn 2014, the Heads of State and Governments agreed that the allies should reverse declining defence budgets, use resources efficiently and aim towards a more balanced sharing of costs and responsibilities. The Summit established that each ally should spend at least 2 % of its GDP on defence purposes and at least 20 % of its defence budget on investment in major equipment, including research and development. Member countries that do not satisfy these targets should aim to achieve them within a decade.

Based on the existing financial principles for the Armed Forces and the OECD's growth estimate for the Norwegian economy, the defence expenditure's proportion of GDP is estimated to fall to around 1.2 % ten years into the future (2024), when the additional funding of new aircraft has ended. If Norway were to spend 2 % of its GDP on defence purposes in 2025, this would mean an average increase of the defence budget by about NOK 3 billion a year (5.5 %). As shown in Figure 11, pursuing this goal for the following ten years would bring the defence budget up towards NOK 88 billion in 2034. Such budgetary development would make room for strengthening preparedness and readiness and the operational capability in the short-term, cover the potential gap between plans and budgets and provide the opportunity for new investments in the longer term.

As a member of NATO, Norway has agreed to the goal of raising the defence budget to at least 2 % of GDP within a decade. The Expert Commission views this obligation as a clear expression of political willingness to invest in the Armed Forces over time.

At the same time, the Expert Commission underscores that security challenges make it important to rapidly strengthen military presence in the North, intelligence, preparedness and readiness and sustainability as well as the ability

to support allied activities. Therefore, the Expert Commission recommends increasing the level of appropriation by NOK 2 billion annually by 2017.

The defence budget's proportion of GDP is an important indicator for burden-sharing within the Alliance. At the same time, the Expert Commission emphasises that an important part of burden-sharing concerns how Norway contributes to a balanced sharing of costs and responsibilities in the Alliance, and not least what Norway gets out of the defence allocations. The targets from the NATO Summit in 2014 also reflect efficient use of resources. Later in this chapter the Expert Commission will return to how Norway should ensure this.

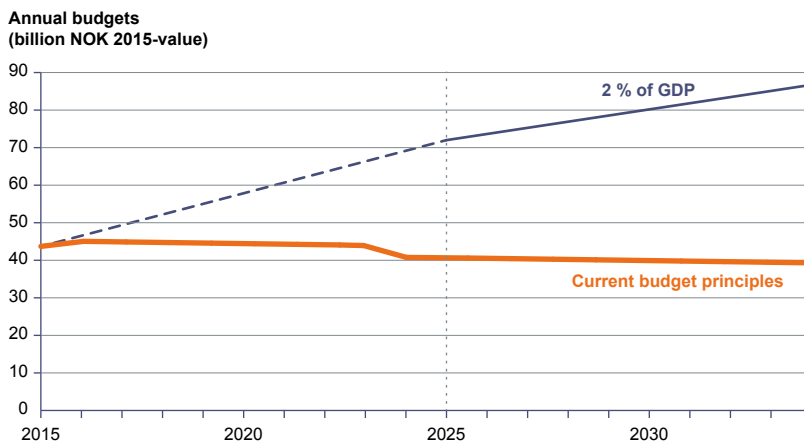


FIGURE 11 Future budget paths based on current budget principles, and an increase in the defence budget to 2 % of GDP in 2025, respectively.

Additional Funding

Some parts of the activities in the Armed Forces are financed and/or budgeted separately, e.g. military operations abroad and the procurements of frigates and combat aircraft. In order to qualify for such financing, the matter should be *important* and one that would clearly be *difficult or unreasonable* for the sector to manage within the ordinary framework and where the effects are *limited in time*.

For the ongoing purchase of new combat aircraft and accompanying air base the Government will provide an additional funding of a total of NOK 22–28 billion. The cost framework for the project is approximately NOK 73 billion. The additional funding constitutes about one third of the entire procurement.

In the longer term, the procurement of new submarines clearly stands out as the largest planned investment project by the Armed Forces. In economic terms the project will probably constitute more than half of the aircraft project. The procurement is partly overlapping timewise with the combat aircraft and coincides with a number of other critical investments; see also Figure 9, Chapter 5.

New submarines occupy a central position in the operational concept that should form the basis for resolving challenges on the high end of the crisis scale. In the opinion of the Expert Commission this investment is unrealistic within the Armed Forces' ordinary budget framework. The Commission therefore recommends that the purchase of submarines be provided additional funding in the same order of magnitude as the purchase of the combat aircraft (one third of the procurement).

The Expert Commission also believes that the establishment of separate financing and/or budgeting of extraordinary preparedness and readiness should be considered, similar to the financing of military operations abroad. This will highlight the measures and contributes to a broader and more systematic strategic risk assessment in the Government and Parliament.

Efficiency and Quality Improvements

After the Cold War, increased efficiency has been an integral part of improvement programmes in the Armed Forces. There are two reasons why such measures are of great importance. First, the savings effect is highly significant over time. As described in Chapter 5, a successful continuation of the ongoing internal efficiency improvement programme throughout the next 20 years would represent a total saving in excess of NOK 35 billion. Second, the Armed Forces, like the rest of public sector, meet clear expectations and requirements regarding efficiency. In order to compete successfully with other sectors of society the Armed Forces need to prove that available funds are being utilised efficiently and are directed towards operational capability.

The efficiency improvement programme was very successful in the preceding four-year period (2009–2012), but there is some concern that the targets will not be fully met in the current period (2013–2016).

In October 2014, the Ministry of Defence initiated a project on modernising and improving the efficiency of the defence sector. This project charts the potential for further efficiency improvements within staffs, administration and support activities in the defence sector and was supported by McKinsey & Company. In its work, McKinsey estimated an annual savings potential of NOK 3.5–4.6 billion when the full effect of the measures is achieved.

The Expert Commission has also assessed the experiences from similar efficiency improvements in the Danish Armed Forces, which were initiated in 2012. Here a net saving potential of DKK 2.0–2.7 billion in support activities within five years was identified. This represents between 10 and 15 % of the Danish defence budget. Denmark is aiming at the most ambitious savings target (DKK 2.7 billion). Halfway through the implementation phase (2013–2017) they assess themselves to be on schedule.

The Expert Commission believes that there is a large potential for reallocating funds through enhanced efficiency and other improvement measures in the Norwegian Armed Forces. Some examples are:

- The highest managerial levels within the defence sector, which consist of the Ministry of Defence, the Defence Staff and subordinated staffs, have grown significantly faster than the rest of the organisation. Previous savings targets have not been met and Norway has an organisation that is significantly more top-heavy than other Nordic countries. The Ministry of Defence and the Defence Staff in Oslo have seen the greatest growth measured in number of work years. A sizeable reduction in the top management as part of a first stage in an efficiency improvement programme will provide a clear message to the rest of the organisation of the importance of efficiency improvements and the ability to implement change.

Major reductions at the top will first require a thorough review of the organisation. This applies both to the relationship between the Ministry and the Defence Staff, and the national staff and management apparatus more generally. Such a review needs to have some fixed points. One of them is the Norwegian Joint Headquarters, which has now found its place as a qualified and robust hub in the national line of command and which should also be given a key role in NATO operations in the North.

- For several decades, the challenge of an increasing number of senior officers in the Norwegian Armed Forces has been well-known. Compared to the situation 20 years ago, the number of senior officers has risen by about 900, even though the operational structure has been significantly reduced. Also, compared to other countries, Norway has a large proportion of senior officers. Naturally this implies extra cost to the Armed Forces. This ‘inflation in ranks’ also contributes to vacancies and a high level of job rotation within the operational structure. By reducing management and staff, by increasing the proportion of civilian employees in non-operational positions and by utilising exit mechanisms, both the economy and the operational capability of the Armed Forces can be enhanced.

- Officers within the Armed Forces change positions far too often – on average after less than 2.5 years. This causes discontinuity in the organisation, which implies that disproportionately more time is spent on in-service training, impairing the opportunity to develop expertise both on the operational side and within the support activities. The frequent rotation can also blur responsibilities. Therefore, measures that reduce such rotation will lead to both efficiency and quality improvements.
- It is estimated that the Armed Forces spend in excess of NOK 2.7 billion a year on civilian and military education. One of the main explanations for this large spending is the high number of educational institutions in the Armed Forces. The high number makes the professional communities small and vulnerable. In addition, the duration of military education is long compared to other countries. The costs are particularly high in the institutions that award bachelor and master degrees. The war colleges and the other accredited academies are spread over six locations, have few students and many employees. It is entirely possible for the Armed Forces to obtain better expertise at a much lower total cost by streamlining military education, by using civilian education to a far greater extent and by integrating or co-localising military educational institutions.
- The Armed Forces spend an average of more than eight years on delivering new projects within the information and communication sector. This applies to both operational and administrative systems. This weakens the Armed Forces' ability to utilise rapid technological development in this area for operational purposes and to achieve rational operation and maintenance of their own systems. Procurement projects that extend over time will also involve additional costs in the implementation of the projects.

The Expert Commission sees enhanced efficiency and other improvement measures within the Armed Forces as decisive in both the short and long term. The Commission has not assessed which specific efficiency improvement measures are most appropriate and how such measures should be combined. By implementing a unified effort in order to enhance operational capability the Expert Commission believes that the target should be a minimum of NOK 3.5 billion in annual savings before the end of the next planning period (2020). Such a level includes the ongoing efficiency improvement programme and reflects the lower limit of McKinsey's estimated savings potential. This level is slightly higher than in Denmark, which has a budget that is around one half of the Norwegian budget. McKinsey has estimated the total restructuring costs to be about NOK 5 billion.

Multinational Co-operation

Multinational co-operation can lead to gains of relevance to a country's security policy, operational capability or economy. This kind of co-operation has been high on the agenda in recent years, not least through initiatives such as NATO's Smart Defence and the EU's Pooling and Sharing.

Norway participates in a large number of multinational mechanisms, from joint defence of the airspace and early warning within NATO, to bilateral and unilateral collaboration in more defined areas such as training and exercises. What is common to many of these mechanisms, and to a number of similar multinational co-operation projects, is that they first and foremost provide the participating countries with gains related to security or operational capabilities, for example in terms of better training and exercises or access to operational capabilities that otherwise would not be within reach.

For costly weapons systems such as combat aircraft, international co-operation has been a reality for decades. As a cost-saving instrument there are surprisingly few new examples of successful multinational co-operation. There are several explanations for this. The most important is that multinational solutions can trigger changes that clash with the individual interests of the participants, and thereby cause opposing forces. There is also a clear tendency to underestimate the additional costs stemming from such co-operation.

If multinational co-operation is to have a sizeable economic effect, financial savings must be a clear aim. Usually, the biggest gain will be in areas with few and costly units. We should not limit ourselves to support activities, but also include operational capacities. The successful co-operation on the F-16 aircraft illustrates this. The procurement of, for example, new combat aircraft and new submarines can provide similar and perhaps even better opportunities. Also, for Norway to finance the new maritime patrol aircraft it may be necessary to co-operate with other allies.

Norway should – similar to other countries – select a few strategic partners and avoid projects characterised by unclear leadership and a large number of participants. In addition, individual projects under the auspices of NATO have previously demonstrated their use through capacities that we would not have been able to acquire alone.

The Expert Commission believes that there is a large unexploited potential to create cost-effective solutions through the increased use of multinational co-operation, even if such solutions can be challenging to establish. This potential will increase in step with the gradual trend towards fewer and more

expensive units in Western armed forces. Therefore, economic savings through this type of measure are particularly relevant in the longer term.

Recommendations

In this chapter, the Expert Commission has highlighted some central principles for the economic foundation of the Armed Forces in the years ahead. These are based on the established budgetary principles where the 2012 level of appropriations is to be continued (in real terms) and a substantial part of the combat aircraft programme is financed through a temporary increase of the budget. In addition, the Expert Commission recommends:

- a) Increase the appropriations level by NOK 2 billion in the short term to strengthen military presence in the North, intelligence, preparedness and readiness, sustainability and support for allied activities.
- b) Provide additional funding for parts of the procurement of new submarines in the medium term (2024–2030), amounting to NOK 2 billion a year.
- c) Implement efficiency improvement measures in order to reallocate at least NOK 3.5 billion a year before the end of 2020 from support activities to measures that enhance operational capability.
- d) Establish separate financing and budgeting of extraordinary preparedness and readiness.

Such a unified effort will enhance the Norwegian Armed Forces' operational capability, maintain an adequate pace of modernisation and ensure efficiency in the defence sector. This will also make Norway a credible ally and an attractive partner in multinational co-operation. The recommendations are illustrated in Figure 12.

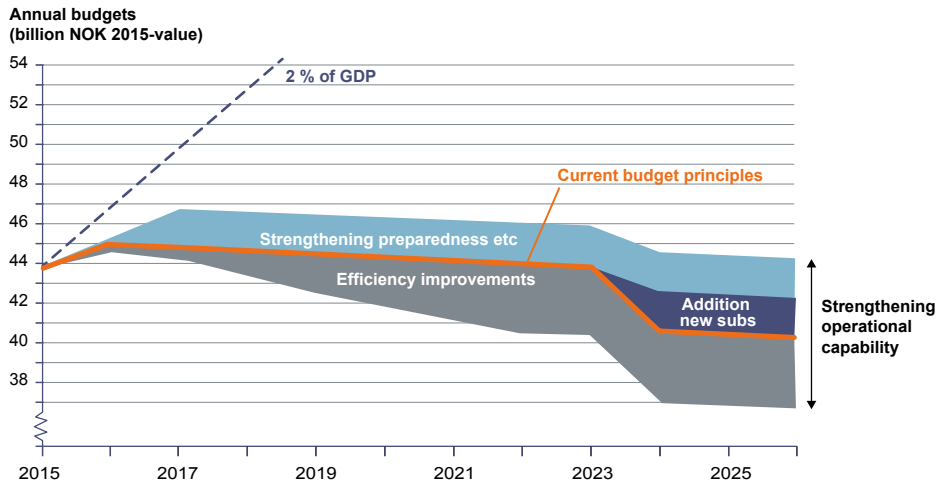


FIGURE 12 Recommendations on the Armed Forces' economic foundation. The baseline is the existing budget principles. The baseline declines after 2016 as a result of the de-bureaucratisation and efficiency improvements reform. The recommendations on strengthening preparedness and readiness, efficiency improvements and additional funding are shown as deviations. The gains from efficiency improvement will increase gradually until 2020 while taking into account the restructuring costs equivalent to a total of NOK 5 billion (to 2021). Ten years from now (2025) this will strengthen operational capability by NOK 7.5 billion a year.

Conclusions and Recommendations

A new threat and risk environment demands significant measures to strengthen Norway's defence. The task is challenging, but manageable: The Armed Forces, the society at large and our allies need to join forces in *a unified effort* to create a new normal.

Strategic and Military Challenges

Norwegian security policy and the Norwegian Armed Forces face major challenges. The Asia-Pacific is of increased geo-economic and geopolitical significance and the U.S. is becoming less concerned with Europe. Terrorism, cyberattacks and long-range missiles are evidence of geographic distance losing some of its importance. It may also become more difficult to know who is the aggressor. States can hide their intentions and tracks through disinformation, the use of special forces and war by proxy. These challenges make it more demanding to deal with challenges on the high end of the crisis scale.

In this complex environment, Russia is still the central factor in Norwegian defence planning. This will also be the case in the foreseeable future. The High North is Norway's most important strategic area of responsibility, an area in which Norway and Russia meet in a demanding neighbourly relation. Russia's conduct in Ukraine marks the end of the 'deep peace' in Europe. Russia's Armed Forces are being rebuilt and modernised. In the North, the key Russian priority is strategic nuclear weapons and their protection through the bastion defence, extending far to the west and to the south. The asymmetry in the Norwegian-Russian power relationship has become more apparent. The warning time for crises can be very short, due to better Russian responsiveness and modern military technology. Norway has become increasingly vulnerable as Russia acquires a large number of long-range precision-guided weapons and a capability for offensive cyberoperations.

Through the use of three scenarios, the Expert Commission has illustrated how these central challenges may unfold in the short and long term.

A Unified Effort

A new threat and risk environment requires the establishment of a new normal, in which collective defence, preparedness and presence in the North are prioritised. This task is too large for the Armed Forces and for Norway. A unified effort with contributions from the Armed Forces, the Norwegian society at large and our allies is required.

The Armed Forces must invest more in operational capability. The society at large should contribute through conscription as well as with increased efforts by the civilian part of the total defence framework to support the Armed Forces. Furthermore, the political authorities should provide the Forces with a sound financial framework. Norway is dependent on allied military reinforcement. For a long time this acknowledgement has received too little attention in Norwegian defence planning. Norway must contribute to building a strong NATO with credible defence plans and a robust command structure. While NATO will continue to be the overall framework, Norway also needs to intensify its efforts to commit our major ally, the United States, to the defence of Norway. Co-operation with allies in the North Sea area, and with the countries in northern Europe more generally, must be strengthened.

Norway's relationship with Russia must be managed wisely, based on common interests. Norway has a long tradition of maintaining a dual policy towards Russia, based on firm line-drawing and active co-operation. This policy works well also in the future.

The Expert Commission has highlighted five prioritised areas or functions to create a strong, war-preventing defence:

- 1) Intelligence and surveillance – the first line of defence – require additional resources.
- 2) A more robust strategic decision-making mechanism is necessary to manage severe crises and war. The Norwegian Joint Headquarters should be linked more closely to allied headquarters, and a separate unit for crisis management should be set up within the office of the Prime Minister.
- 3) Deterrence is of fundamental importance in every war-preventing strategy. Deterrence must be based on a national capability for joint operations and collaboration with allies. To enable credible deterrence, special attention must be given to the presence of ground forces in exposed areas, strategic capabilities such as the F-35 and new submarines, robust air defences and allied support.

- 4) Norwegian and allied forces need to be available on short notice. Norway must prepare for receiving allied air reinforcement and other forces. The readiness of the Norwegian forces should be significantly increased and selected units or detachments should be continually present in exposed areas.
- 5) Military and civilian logistical support to military operations has been neglected. A concerted effort is required to ensure that Norwegian and allied forces receive the necessary support in crisis or war.

Simultaneous and Seamless

Of equal importance as a unified effort is the principle of *simultaneity* in planning and operations. Comprehensive planning ensures that the logistical and supply needs of the Armed Forces are met where and when required. The plans to commit the allies to the defence of Norway must be developed and be an integral part of the national defence and contingency planning. If bases for allied air reinforcement are established at the same time as the bases for Norwegian combat aircraft, major additional costs can be avoided. Similarly, to avoid standing alone in the initial phase of a crisis or war, arrangements need to be made to enable allied forces to synchronize their efforts with Norwegian forces. Allied involvement needs to escalate *seamlessly* with the Norwegian effort. This constitutes the core of the operational concept as described by the Expert Commission.

Strengthening Operational Capability

When strict prioritisation is needed, cutting operational activities is often the result. The Expert Commission offers a different solution. The Commission proposes to strengthen the operational capability of the Armed Forces by providing fresh funds and by efficiency and quality improvements.

More money must be allocated to the Armed Forces. At the Summit in 2014, the NATO countries agreed to increase their defence budgets within a decade. The Expert Commission views this pledge as an expression of the willingness of the Government to invest in the Armed Forces over time. Nevertheless, there is no time to lose. In order to provide vital intelligence, presence, preparedness and readiness, and sustainability and support to military forces, the Expert Commission recommends increasing the appropriations level by NOK 2 billion by 2017. Similar to the combat aircraft, the strategically important new submarines should receive additional funding. In line with the idea of a unified effort, the Commission recommends that the Armed Forces implement an

efficiency improvement programme in order to re-allocate at least NOK 3.5 billion a year from supporting areas to operational activities before the end of 2020. Ten years from now these measures will strengthen the Armed Forces' operational capability by NOK 7.5 billion annually.

A solid effort by Norway combined with allied assistance can establish a new normal and make the defence of Norway strong and credible. The task is demanding, but can be implemented; it requires a strong and forward-looking political and military leadership that sets a clear direction and consistently follows the course.

APPENDIX

About the Expert Commission

Appointment and Composition

The Expert Commission was appointed by the Minister of Defence Ine Eriksen Søreide on 15 December 2014, and was comprised of:

- Rolf Tamnes (chair), Professor, Norwegian Institute for Defence Studies
- Kate Hansen Bundt, Secretary General, Norwegian Atlantic Committee
- Trond Grytting, Rear Admiral, Norwegian Armed Forces
- Alf Håkon Hoel, Research Director, Norwegian Institute of Marine Research
- Janne Haaland Matlary, Professor, University of Oslo, Professor II, National Defence University College
- Asle Toje, Research Director, Norwegian Nobel Institute
- Julie Wilhelmsen, Senior Research Fellow, Norwegian Institute of International Affairs

All of the members were appointed on the basis of their expertise in defence and security policy.

The Ministry of Defence established an independent secretariat for the Commission consisting of Director Espen Skjelland (leader), Senior Adviser Kristin Hemmer Mørkestøl (deputy leader), Adviser Per Kristian Overn Krohn, Office Manager Helene Leirud and Colonel Per Erik Solli.

Mandate

The Minister of Defence gave the following mandate to the Expert Commission on Norwegian Security and Defence Policy:

‘Norway is gradually facing a more demanding security environment. Several factors contribute to Norwegian security and defence policy entering a new phase. For the first time since the end of the Second World War, a European nation has invaded a neighbouring country and annexed parts of its sovereign territory. The relationship between Russia and the West has worsened considerably and Russia is strengthening its military force. A belt of weak states stretches from North-Africa to Central-Asia, accompanied by instability and

armed conflict. To prevent weak states from destabilizing other countries in the region and harbouring terrorists who plan attacks on western countries, international assistance will be needed for many years to come. Following the financial crisis in 2007/2008 several allies have experienced substantial cuts in their defence budgets. In sum, this implies that Norway must take more responsibility for its own and European security. Furthermore, there is an increasing expectation in the Norwegian society that the resources of Armed Forces are also available to handle challenges in the lower end of the crisis spectrum.

The Minister of Defence will establish an independent Expert Commission to give advice on the Norwegian Armed Forces' ability to solve the most demanding tasks in crisis and war. This advice will be an important contribution to the debate on the Armed Forces' ability to deter and handle threats against Norway and the Alliance. The Expert Commission should focus its analysis on the composition of the Armed Forces, not the resource level.

Against this backdrop, the Expert Commission should answer the following questions:

- How do the changes in the threat and risk environment affect Norwegian security?
- Is there consistency between the security challenges and the military capabilities of the Norwegian Armed Forces?

The Expert Commission should analyse aspects that it finds relevant for the threat and risk environment and implications for the Armed Forces. It is not part of the Commissions' mandate to advice on specific solutions.

The Expert Commission will be supported by a secretariat to facilitate its work and research. The secretariat will particularly assist in arranging travels and organizing meetings.

The Expert Commission may collect information from various sources, including the ministries, the Armed Forces, embassies and others. The members of the Commission will go through security clearance and may receive classified information relevant for the analysis. The Commission will get access to status and assessments of the Armed Forces' preparedness, manning, and resources and existing plans.

The Expert Commission should begin its work no later than December 1st 2014, and conclude its work by April 30th, 2015. The report should be submitted to the Minister of Defence. The Commission's members will deal with classified

information, but the content of the final report should be unclassified in order to be available to the public. Upon completion there should be a seminar where the Commission is given the opportunity to present its report.’

Work Process

The Expert Commission had its constitutive meeting on 15 December 2014 and has held a total of ten meetings. Two of the meetings have been combined with visits to the Norwegian Intelligence Service and the Norwegian Joint Headquarters.

A number of Norwegian defence actors have contributed to the work of the Commission. With its broad civilian expertise the Commission has emphasized the involvement of external military expertise. The Commission has had a positive dialogue with the Chief of Defence and the leadership in parts of the Armed Forces of particular relevance to the Commission’s mandate.

The report is based on unclassified and classified information.

'A new threat and risk environment demands significant measures to strengthen Norway's defence. The Armed Forces, the society at large and Norway's allies need to join forces in a unified effort to create a 'new normal'.'



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