

# **FFI RAPPORT**

## **NORWEGIAN DEFENCE REFORMS OF THE 1990s**

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Director of Research

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THE 1990s**

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## PREFACE

A short overview of the Norwegian Defence reforms of the 1990s requires a substantial simplification of a number of issues relevant to our defence planning. As a compromise, most attention has been devoted to the defence concept evolution, the planning process, the implementation and lessons identified. Areas like security policy development and the role of technology have been briefly touched on, and could well deserve a more thorough discussion.

This report is based on an earlier paper submitted to a publication on *Defence Reforms of the 1990s: lessons learned* by the EastWest Institute and the Geneva Centre for the Democratic Control of Armed Forces (Switzerland). The defence reform publication contains a collection of papers from 15-20 nations on how defence reforms during the 1990s have been handled with a focus on approaches, procedures, problems encountered and lessons to be learned. At the request of Yugoslav authorities, the publication is meant to assist the Yugoslav government in preparing a comprehensive defence reform. Brassey's Inc is going to publish the Defence Reforms volume. In this FFI report, tables and figures are included to further expand on the points made in the earlier version.

The original work was initiated and funded by the Ministry of Foreign Affairs. The Norwegian Defence Research Establishment (FFI) was asked to take on this task due to our close involvement in Norwegian long-term defence planning over many years. Also, White Papers to the Storting during the 1990s have constituted an important source of information. To further broaden the picture of Norwegian Defence reforms, the Norwegian reader should see a recent study by Flikke on the adaptation of the Norwegian Defence to the European security policy development of the 1990s.<sup>1</sup>

I would like to acknowledge the comments from my colleagues Dr. Ragnvald H Solstrand, Lieutenant General Ola Aabakken (retired) and Iver Johansen. They have generously shared their longstanding experience in defence planning.

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<sup>1</sup> Flikke Geir (2001), *Norge og europeisk sikkerhet – tilpasning til besvær?*, Atlanterhavskomiteen, 15-2001 (in Norwegian)

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## NORWEGIAN DEFENCE REFORMS OF THE 1990s

### 1 INTRODUCTION

The Norwegian Defence has during the 1990s been transformed from primarily homeland defence against an invasion to a wider spectrum of defence tasks of which homeland defence remains the most important task. At the same time, substantial downsizing has been carried out to adapt to the economic reality of the 1990s, and to free up funding for high priority areas. During the 1990s, the defence budgets have been insufficient to implement existing plans, and operating costs have shown an undesired increase, especially since 1995. This has happened in spite of several attempts to reduce and rationalize the peacetime organisation. In Norwegian defence planning, these two factors have been referred to as the double imbalance. The new long-term defence plan addresses the double imbalance and prescribes the number of employees to be cut by 20-25% within the next few years.<sup>2</sup> Also, focus has been placed on increasing force readiness in order to meet the challenges from international involvement and new threats.

As of today, the Norwegian Defence summarizes to about 39000 personnel in peacetime, of these about 27000 personnel (including 15000 conscripts) are considered to be in active duty. In addition, about 1300-1400 troops are deployed abroad in peacekeeping missions of which 1200 in the Kosovo Forces. In times of crises and war, a total of 222000 personnel could be mobilised; the Army could expand to 89000 troops, the Navy to 25000, the Air Force to 25000 and the Home Guard to 83000 personnel. An overview of the main Norwegian Defence components for the period 1990-2005 is given in table 1.1.

The Army consists of cadre and training units for a division with three tactical brigades (one armoured brigade and two infantry brigades), two independent mechanised infantry brigades, and one armoured brigade. During the 90s, both the overall structure and readiness have been reduced. In 1990, the Army had a total of 13 independent brigades organised within three divisional commands. The equipment of these brigades was, however, of a variable standard. Towards 2005, the Army is planning to further reduce and reshape its forces to four brigades and a division level marginally intact<sup>3</sup>. The reduction in readiness can be observed from the reduction of active personnel from 19000 in 1990 to 14700 in 2000. As a part of this, the number of conscripts has been reduced significantly. However, the new long-term defence plan stresses the need for increasing force readiness the next years and as a consequence, units have been earmarked for fulfilling this requirement.

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<sup>2</sup> Bill no 45 to the Storting (2000-2001). The Storting is the Norwegian Parliament.

<sup>3</sup> The number of brigades in the Army is under debate by the Storting. In the Spring 2001 debate, a four brigade structure was decided, but funding uncertainty could lead to further reduction in the Spring 2002 debate.

	Status 1990	Status 2000	Status 2005
<b>ARMY</b>			
Division (1)		1	1
Brigades (2)	13	6	4
Ranger battalion		4	1
Field battalion	28	20	
Field company			< 20
Active personnel	19000	14700	
Reserve personnel	146000	89000	
<b>NAVY</b>			
Escort vessels (3)	7	4	1+3
Missile craft/fast patrol boats (4)	36	15	6+14
Submarines	12	10	6
Mine clearance vessels	6	9	8
Minelayers	2	2	1
Coastal defence fortress (5)	32	9	(9)
Light missile batteries (6)		9	
Coastal Ranger Commando			1
Torpedo batteries (5)	5	3	(3)
Cable mine fortress (5)	7	3	(3)
Amphibious craft	5	5	3
Coast guard			
Offshore patrol vessels	13	11	11
Inshore patrol vessels	6	14	14
Active personnel (7)	6000	6100	
Reserve personnel	26000	25000	
<b>AIR FORCE</b>			
Fighters	87	58	48 (+10)
Medium range SAM batteries (8)	6	6	3
Short range Anti-Air batteries	22	10	3
Transport	6	6	5
Tactical helicopters	13	18	18
Maritime air patrol	7	6	4 (+2)
Active personnel	9100	5000	
Reserve personnel	28000	25000	
<b>HOME GUARD</b>			
Reserve personnel	85000	83000	83000
<b>Forces abroad</b>	<b>943</b>	<b>1353</b>	

Notes

- 1) After the 1990 Defence Commission, a complete division structure with centralised artillery and support units was implemented. Before 1990, the independent brigade organisation could be integrated into a three division command after mobilisation.
- 2) A fourth brigade was included by the Storting in the Spring 2001 debate. However, funding uncertainty could lead to a reduction of brigades in the Spring 2002 debate.
- 3) In 2004-09, five new frigates is to become operational and the four Oslo-class frigates is to be phased out. One new frigate is planned to be operational in 2005
- 4) Six new missile crafts of the Skjold class are integrated into the structure to the existing 14 Hauk class fast patrol boats.
- 5) All coastal defence fortress, torpedo batteries and cable mine fortress would be placed on mouth bag status
- 6) In 2005, light missile batteries are integrated in the new coastal ranger commando
- 7) Coast guard personnel included
- 8) After 2000, the ground based air defence is to be organised into three air defence groups

*Table 1.1 Overview of the main Norwegian Defence components for the period 1990 – 2005. The figures are based on White Papers to the Storting, Defence budgets, and Defence studies. Some deviation among the sources could be found. In their spring 2002 session, the Storting would address the 2005-status.*

The Navy consists of four frigates, ten submarines, 15 missile craft/fast patrol boats, nine mine countermeasures vessels and some coastal fortresses. In 1990, a substantially larger structure was present in terms of anti-invasion components, especially fast patrol boats and coastal fortress. The substantial downsizing of the stationary anti-invasion structure will continue

towards 2005 when a large number of fortified positions will be closed. Also, the number of missile craft and submarines will be substantially reduced. Personnel in active duty as well as in the reserve has not shown a similar cut. The reason is twofold. First, a large part of the stationary anti-invasion structure including the personnel has been preserved at a low operational status without training and exercises (moth bag status). Second, the Navy has maintained its readiness to fulfil its peacetime tasks during the 90s – though with some variations in activity level. This has resulted in a steady level of active personnel.

The Air Force has of today 58 F-16s, six medium and ten short range ground based air defence batteries, six transport aircraft, 18 tactical helicopters and six maritime patrol aircraft. During the 90s, the downsizing has been targeted toward fighters and ground based air defence. The support aircraft and helicopters have been maintained at the same level. Reduced readiness and base closures have cut active personnel from about 9000 to 5000 over the ten years. Towards 2005, the air bases structure and the ground based air defence batteries are to be further reorganised and reduced. The number of reserve personnel is to a large extent constant to enable mobilisation of civilian airfields for allied reinforcements in times of crises and war.

The Home Guard has been maintained at the same level during the 1990s in order to protect military and civilian key targets and functions in crises and war. The task of protecting the mobilisation of the defence forces has become less comprehensive. Instead, protection of critical objects (personnel, infrastructure, etc) towards terrorism and Special Forces attack has been given increased weight. The Home Guard personnel can be mobilised from their civilian jobs within 24-72 hours.

## **2 DEFENCE CONCEPT EVOLUTION**

Norwegian security has since 1949 been founded on four pillars: a nationally balanced defence, allied military and international cooperation, the concept of general conscription and the total defence concept. The content and strength of all these pillars have been subject to substantial changes over the last 10 years. Before addressing these changes, a brief overview of the defence task development during the 90s is given.

### **2.1 Defence Tasks**

Homeland defence, based on the lessons learned from the German invasion of Norway during the 2<sup>nd</sup> World War (WW2) and followed by the Cold War, has been dimensioning for the Norwegian Defence until 1990. The major defence task was to deter and defend against an attack or invasion of Norway from the Soviet Union. The basic instruments were a nationally balanced defence and membership in the North Atlantic Treaty Organisation as well as strong bilateral ties with the United States and the United Kingdom.

In this context, Norway was regarded as being *a net importer of security*. The unique location with respect to the transatlantic sea lines of communication and the Soviet Kola bases, made

Norway exposed to a Soviet attack in case of a major attack on Western Europe. The Soviet armed forces represented such an overwhelming capability compared to the Norwegian armed forces that an attack could only be dealt with in an acceptable way provided substantial early allied reinforcements. However, as a confidence building measure Norwegian policy was that no allied forces were to be permanently stationed on Norwegian territory in peacetime. Instead, extensive preparations for rapid allied reinforcements were made such as construction of airfields, quays, stockpiles and depots. To make this concept work, the Norwegian armed forces would have to deter and defend against pre-emptive strikes and to establish a military threshold, enabling rapid and substantial transfer of allied reinforcements to Norway.

After 1990 the security environment became multi-faceted. Following the collapse of the Warsaw Pact and later the disintegration of the Soviet Union the direct, visible and overwhelming threat from the Soviet Union vaporised and was replaced by an uncertainty about the development in Russia – in the medium-term a development that could be dominated by political instabilities and in a longer term, a potential resurrection of a military offensive and capable Russia. The Norwegian closeness to Kola and the Barents Sea implies a particular attention to our national security interests in the Northern Region. However, a perceived potential military challenge to South Norway was substantially downgraded. Another important implication was that other NATO-nations altered their view of the Norwegian security situation in such a way that Norway is now *required to be a net exporter of security*. Closer ties between NATO and Russia combined with emerging threats from rogue states and extremist groups, as well as an active military involvement on the Balkans, have been important drivers for this shift in Norwegian security priorities.

The defences against an invasion and more limited attacks have been gradually reduced from including the whole of Norway to include only Northern Norway, and now to be more generic in nature where major challenges towards Norwegian territory are seen integrated within a joint allied operational context (see table 2.1).

Longer warning times have led to reduced readiness and ability to reinforce own forces. However, the new long-term defence plan put more weight on reaction capability, but now from a perspective of the new security challenges towards Norway and the requirements from primarily international operations. The territorial defence has its prime emphasis shifted from protecting and supporting the mobilisation of the armed forces to the protection of facilities and activities vital to the society in case of limited attacks from Special Forces and/or terrorists.

The Defence Commission of 1990 emphasized the aspects of crisis management.<sup>4</sup> Changes in the security environment made military crises with a very low risk of escalating to war more likely compared to the situation before 1990. Disputes about the utilisation of natural resources and other conflicts of interest were considered possible within a bi-lateral context between Norway and another nation.

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<sup>4</sup> The Defence Commission of 1990 was established by the Storting to advise on the future of the armed forces

DEFENCE TASKS DEVELOPMENT			
1989-1993	1994-1998	1999-2002	2002-2005
Defence against any attack	Defence against invasion	Defence against invasion	Defending Norwegian territory and preparing, together with allies, to meet any challenge to Norwegian security
Ability to reinforce high readiness national forces	Maintain readiness and ability to national reinforcements		
Prepare for allied reinforcements and joint operations in crises	Prepare for allied reinforcements and joint operations in crises		
	Territorial defence	Territorial defence	Securing facilities and activities vital to Norwegian society
	Crises management in areas under Norwegian control	Crises management in areas under Norwegian control	Crises management in areas under Norwegian control
	Participate in NATO's reaction forces	Involvement in international operations	Involvement in international operations
Support to UN operations	Support to UN operations		
	Military presence in areas under Norwegian control		Military presence in priority areas
Upholding national sovereignty	Upholding national sovereignty	Upholding national sovereignty	Upholding national sovereignty
Exercise national authority	Exercise national authority	Exercise national authority	Exercise national authority
Intelligence gathering and surveillance	Intelligence gathering and surveillance	Intelligence gathering and surveillance	Intelligence gathering and surveillance
Assisting civil society (incl rescue)	Assisting civil society (incl rescue)	Assisting civil society (incl rescue)	Assisting civil society (incl rescue)

*Table 2.1 Development of defence tasks during the 1990s and into 2000.  
Sources: White Papers to the Storting.*

Military presence is an important element in upholding national sovereignty and exercising national authority. However, the presence has been gradually reduced from “in all areas” to “priority areas” to adjust to a significantly smaller defence force.

The national ambitions with respect to participating in international military operations have been substantially raised. Until 1993, the primary focus was supporting United Nations peace support operations. After 1993, more explicit weight was given to potential participation in NATO’s reaction forces including high intensity operations. In 1999, the Norwegian parliament (the Storting) emphasized Norway’s commitment to contribute to international military operations and designated about 3500 personnel for such operations comprising elements from all services.<sup>5</sup>

## 2.2 A Nationally Balanced Defence

The Norwegian Defence has since the WW2 been developed as a balanced defence, including the most critical defence components of a modern defence and maintaining a balance between the defence components in developing the armed forces. Behind this principle stands a Cold War national ambition of having a defence capability to fight a major invasion long enough for NATO reinforcements to arrive. A balance in defence components would prevent “holes” in the defence to be exploited for quick breakthrough by an attacker.

As primarily stated, the principle of balanced defence has been under considerable strain during the 1990s due to funding constraints and cost escalation. The major defence

<sup>5</sup> White Paper no 38 to the Storting (1998-1999)

components have continued to show a cost escalation that is substantially higher than the increase in budgets. Studies of US and English materiel procurements after the WW2 describe an annual cost escalation of 5% for main battle tanks, 10.5% for frigates, 9% for submarines and 11% for fighters.<sup>6</sup>

Substantial initiatives have been made to reduce the impact of cost escalation on defence materiel. On the weapons manufacturers side alternative design solutions with extensive use of commercial technology as well as more effective production methods have been pursued. On the armed forces side, procurement solutions involving lower capabilities and cheaper materiel have been explored.

However, the cost escalation is likely to remain a challenge to long-term defence planning and with the largest impact for small nations. For Norway, the technological level is more or less determined through the principle of balanced defence and also the requirement for interoperability with other NATO forces. The size of the Norwegian armed forces is so small in all sectors that there is little room for further downsizing. The NATO defence capability initiative (DCI) stresses the need for nations to strengthen priority capabilities and interoperability with other forces. Especially, in the area of command and control substantial investments would have to be made in nations in the years to come.

Still, the principle of a balanced defence remains a pillar in the Norwegian defence planning as confirmed by the Storting in their spring 2001 debate of the long-term defence plan. One key argument for this decision is Norway's geopolitical situation. However, a more offensive approach towards force pooling and allied cooperation is required to improve weakened defence components.

### **2.3 Allied Military And International Cooperation**

During the Cold War the military cooperation was exercised mainly within the NATO framework. The key elements were joint planning for allied reinforcements to Norway, extensive NATO funded infrastructure development in Norway, and also large scale and frequent allied exercises in Norway. As a separate force production trade, Norway was also a significant troop-contributor to the United Nations' traditional peacekeeping missions.

In the 90s, a wider perspective on allied and international cooperation has been adopted. Emphasis has been placed on stronger integration and ability to participate in joint allied operations both in Norway and in other countries, and at the same time keeping attention to the national dependency on allied reinforcements to meet any major challenge to national security. The political support for contributions to UN peacekeeping operations is still very strong, along with a willingness to contribute to a wider range of international operations, including peace enforcement

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<sup>6</sup> Pugh (1992), The Procurement Nexus: Underlying Causes In Cost Escalation, UK-MOD

NATO and bi-lateral agreements are important security policy instruments for Norway. NATO's revised strategic concept highlights the transformation of allied forces towards a wider spectrum of tasks, including collective defence. This implies increased weight on higher readiness forces, and stronger focus on the areas identified in the Defence Capabilities Initiative (DCI). The DCI establishes requirements to the national defence planning with respect to ability to effective engagement, deployment and mobility, survivability for forces and infrastructure, and sustainability of forces and logistics. The current defence plan clearly states that the Norwegian Defence on a number of important areas do not fulfil the requirements put forward in the DCI. On the bi-lateral side, the cooperation with allies and specially the US on reinforcements and pre-deployment stockpiles is considered important.

Norway participates also in the development of a stronger defence identity within the European Union. But the fact that Norway is not a member of the EU makes an active role difficult. The future involvement would depend on the degree of openness in EU for non-member nations to participate, and also on the cooperation established between the EU and NATO. Norway has reported about 3500 soldiers to the EU headline goal.

The importance of multinational cooperation within the alliance and in Europe is growing. Factors like new security challenges, reduced defence budgets, cost escalation of defence components, requirements for interoperability would influence nations towards increased cooperation. Specially, small nations like Norway would not be able alone to procure and sustain a desired capability spectrum to fulfil the DCI and national defence needs.

#### **2.4 The Concept of General Conscription**

In its spring 2001 debate on the new long term defence plan, the Storting confirmed to hold on to the concept of compulsory military service as a pillar for the Norwegian Defence. Such a system is considered critical to preserve close relations and a "hands-on" feeling between the Norwegian Defence and the citizens. It is also a key instrument for recruitment to the armed forces. However, adjustments to the current implementation are required. Both the number of males drafted and the total service time have to be reduced. The total number of conscripts to be called up is still a difficult political issue since the drafting about 50% of the male population does not comply well with a concept of general conscription. As for the duration, the initial service would be 12 months for most conscripts with the exception for those drafted for the Home Guard who would serve 4-6 months. In addition, the Home Guard conscripts have annual one-week exercises until the age of 44.

The degree of drafting among the male population has been limited in most of the period after 1814 when the concept of general conscription was included in the constitution. A successful implementation of a conscription system rests on two fundamental assumptions. First, the level of advanced military technology in the armed forces has to be relatively low to avoid overly complex system operations requirements for the conscripts to be maintained over time. Second, sufficient funding for equipping and training the units has to be available. These

assumptions have never been fully met. Today, about 55% of the group of 19 years males complete their initial service<sup>7</sup>.

The compulsory system has been under political and military debate during the 1990s. There has been tension and lack of convergence between those arguing from a rational military cost-effectiveness perspective and those taking a more principal overall national view. The debate has gained additional momentum by the shift to a professional system in European nations like France, Belgium and the Netherlands. Still the compulsory service holds a strong position among the politicians and the population, not only for the Norwegian Defence, but also as a foundation for building and developing a national identity.

From a military rational point of view, the development over the last 25-30 years has made topical the question of whether a more professional force would be more adequate for the future. The level of military technology and operational complexity makes it hard to exploit the force capabilities within the limited initial service. Also, a substantial downsizing of the Army has substantially lowered the need for conscripts. Force production to handle a rigid general conscript system where 70-80% of the age group are drafted for initial service is a significant cost driver.

## **2.5 The Total Defence Concept**

The intended purpose of the total defence concept is to enable Norway to mobilise all national resources and unite military and civilian assets in times of crises and war. It was developed primarily to support full national mobilisation in an all out war during the Cold War era. This integrated perspective was required to maintain the will and capability to national defence, to protect life and health, and to prevent damage and to uphold society and civil functions. The military component is the Norwegian Armed Forces and the civilian component is the many components of the civil emergency system. The civil emergency system is responsible for society functioning, for protection of citizens and for support to the Norwegian Armed Forces.

During the 90s, the concept has been subject to debate concerning both relevance and content. The development of society towards extremely cost-effective operations, internationalisation of ownership, and privatisation makes military requisition from the civil society more questionable. The military development towards more mobile and reaction oriented forces put increased requirements to the civil support, requirements often seen to be too extensive to fulfil without substantial government funding. Increased military international involvement would also represent new challenges to the civil preparedness. The new threats have increased the attention to society vulnerability in such areas as transportation, telecommunications, power supply, and also the top-level management of the civil emergency system.

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<sup>7</sup> The size of the age group is about 27000 (1999).

In the new long-term defence plan, the total defence concept is considered a pillar to our national defence, but a major revision is required to achieve a more flexible concept. This process has barely been started in the last few years.

### **3 THE NORWEGIAN DEFENCE PLANNING PROCESS**

Norwegian defence planning is a continuous periodic process with a normal cycle of four years. Each period has three phases. The first phase is the establishment of alternative plans for long-term defence development, an assessment of each alternative defence capability to meet defence needs and an estimation of total costs of carrying out the plans. The second phase comprises high-level military and political choices of the preferred planning alternative to be pursued as a main long-term plan. In the third phase, more detailed shorter-term execution plans for the preferred alternative are developed.

The first phase, development of planning alternative, is particularly important. Due to the fundamental uncertainties related to the basic assumptions that over time will influence the development of defence forces, the ability of each planning alternative to meet the desired defence mission must be addressed with respect to these uncertainties. The overall objective is to identify alternative defence development plans that are as robust as possible to changes in the most critical and uncertain assumptions.

#### **3.1 The Political Process**

The Storting seeks a broad foundation among the representatives of the political parties and the armed forces. Normally, the overall vision and development perspectives for the Norwegian Defence are debated every four years in the Storting. This debate might not result in formal defence decisions, but a joint perspective for the next four years is sought among the representatives and set the overall context for Ministry of Defence preparations of the annual defence budget and bills to be passed before the Storting. The defence budgets and bills constitute formal decisions that the Ministry of Defence (MOD) and the Chief of Defence have to act upon.

In situations where a fundamental reorientation of the defence policy and defence forces is necessary, a parliamentary defence commission has been established. The defence commission has a representation to ensure a broad perspective and a best possible rethinking of the national defence strategy. The first commission was established in 1946 after the WW2, the second commission in 1974 and the third commission in 1990.

The last commission was established as a direct consequence of the political development in Eastern Europe and the East-West relations including the positive trends in the disarmament talks. It comprised 15 members; nine members appointed by the leading political parties, and six members appointed from the Norwegian armed forces, the civil emergency directorate, and the defence and security policy research institutes. The mandate included an appraisal of the

security policy, technological and strategic development and how these relate to the Defence policy and structure. The commission was also asked to evaluate funding needs for the period 1994-98 and also economic perspectives for the following ten years. The Defence Commission suggested a comprehensive downsizing of the defence structure. During the 1980s, the defence budget had shown an annual real growth of 2-3%, but the commission foresaw a zero growth budget. However, the commission believed investments could be increased to more than a 30% share of annual budget by significantly reducing the manning and thereby the operating costs. The final report was presented to the Storting two years later. The report and the parliamentary debate shaped the White Paper no 16 to the Storting (1992-93).

The Storting has debated and decided on restructuring of the Norwegian Defence at three different strands (1993, 1998 and 2001) over the last ten years. In 1993, the focus was on adjusting to the new security environment after the collapse of the Warsaw pact and the disintegration of the Soviet Union and also to an expected 0% growth in defence budgets. As a consequence, the defence structure was substantially downsized; e.g. the number of brigades was reduced from 13 to 6. In 1998, the debate did not fully take off and a “steady state” solution was chosen keeping the 1993 structural goals with some minor adjustments.

### **3.2 The Chief of Defence’s Process**

In his Defence Studies, the Chief of Defence (CHOD) expresses his independent longer-term view on the structural development of the armed forces. The Defence Studies are initiated by the CHOD and carried out independently of the MOD. However, the conclusions are made available in time to support the MOD in its white paper work. This model fulfils the Storting’s request for an independent military advice concerning future defence (re)-organization.

Three defence studies have been carried out during the 1990s: the Defence Study 1991, the Defence Study 1996 and the Defence Study 2000. The Defence Study 1991 provided the military input to the 1990 Defence Commission. The study focused on the minimum defence structure necessary to fulfil the missions of the armed forces.

The Defence Study 1996 recommended a continuation of the 1990 Defence Commission structure (steady state) based on the overall security situation. The size of this force structure was viewed as a minimum to fulfil the mission. Rather than scaling down, the need for increased funding was stressed as imbalances between needs and actual funding had continued to accumulate after the commission’s work. If this condition could not be met, a new defence study would have to be carried out focusing on how to reduce the imbalances.

A fundamental shift in planning strategy was chosen for the Defence Study 2000. In this study, the CHOD described a substantially smaller defence structure that could be achieved within a funding level comparable with the development after the Defence Study 1996/White Paper No. 16. The proposed structure was not a recommendation, but a description of how to best adapt to the funding level experienced the last years. The accumulated imbalances

between funding requirements and defence budgets and between operating costs and material procurements had become intolerable, and would lead to full collapse of normal planning if not promptly taken care of. A major adjustment was critical to reduce strain in the organisation as well as avoiding over-investing in units and weapons. To a large degree the Defence Study 2000 set the context and the recommendations for the current defence plan, however with some significant adjustments during the political process – as outlined above.

### **3.3 The Analytical Support**

Over the last 30 years, the Norwegian Defence Research Establishment has played a key role in providing independent analytical support to the MOD and the CHOD in shaping the future armed forces. The main contributions have been to develop alternative long-term perspectives concretised as defence structures, to assess funding needs over a 20-year period and to assess the defence capability of each structure. The ability to perform credible cost calculations over a longer period is crucial to ensure realism between the long-term plans and the expected budgets to avoid a sneaking, incremental imbalance between defence ambitions and defence means. Insight into the defence effectiveness is necessary to ensure that a given structure is cost-effective in relation to the defence mission and to evaluate whether it is sufficient to fulfil the defence mission or whether a change in budget constraint or structure content is required.

## **4 IMPORTANT ISSUES IN DEFENCE PLANNING**

### **4.1 The Consistency Between Defence Funding and Defence Spending Plans**

The annual defence budget for 2000 was USD 2.9 billion or 5.8% of central government total expenditure.<sup>8</sup> Operational costs represent USD 2.0 billion including costs involved in peacekeeping missions, and investments constitute USD 0.9 billion.<sup>9</sup>

The fundamental challenge to Norwegian defence planning during the 90s has been the gap between defence funding and requirements consistent with a defence ambition of a balanced defence. Since 1985, the defence budgets have shown a steady decline compared to the general central government spending (see figure 4.1). In 1985, a total of 8% of central government spending was used for defence. In 2000, the share has dropped to 5.8%. The defence budget share of gross domestic product (GDP) has dropped from 3.1% to 1.9% from 1990 to 2000. During the 90s, this budget development has been close to the average in NATO. For 2000, the average for NATO is 2.2% and new member nations are requested to allocate more than 2% of their GDP to defence. To fulfil the stated ambition in the new long-term defence plan a substantial increase in defence funding over time is required. However, the current political landscape in the Storting with minority Governments is likely to continue,

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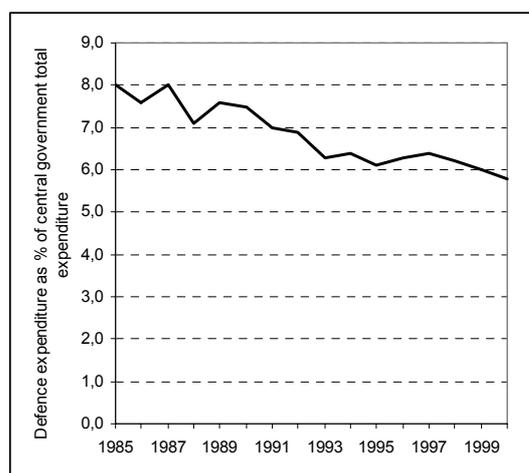
<sup>8</sup> US\$1=8.81NOK as used in the IISS Military Balance 2000

<sup>9</sup> Investments include procurement of materiel (USD 0.65 billion or 22% of total defence spending), and investments in buildings & construction (USD 0.25 billion).

and this makes it extremely difficult to give high priority to the defence sector at the expense of other government sectors.

In the 90s, the financial gap has both a funding and a cost side to it. First, the Storting has approved defence plans assuming a funding level significantly higher than the actual budgets appropriated by the same Storting. In case of the Defence Commission of 1990, a 0% growth budget was assumed while the actual defence budgets for the following planning period (1994-98) annually showed about 1% real decrease in average.

Second, the costs of implementing the plans have been significantly undervalued. Subsequent costing of the recommended defence structure plans after the Defence Commission 1990 and the White Paper No 22 (1997-98) showed that the initial estimates were at least 20-30% too low. The main reason is the strong tendency to add elements to the force structure after final cost calculations have been made. This happens both in the political decision and in the military implementation process.



*Figure 4.1 Development of defence expenditures compared with central government total expenditure. Source: Statistics for Norway 2000.*

The lacking ability to come to grips with the growing gap between defence funding and defence spending has had several adverse effects. Partly, the Defence has had to reduce investments by delaying materiel projects and reducing materiel procurements in a far from optimal way. Partly, the Defence has reduced activities like training and exercises, patrolling, flying hours and so on. These measures have not been planned, and the consequences both in a long-term and short-term perspective have been adverse.

## **4.2 Time horizon for planning**

In a period with large uncertainties, long-term plans are difficult to establish. Still, important consequences of our choices could only be fully seen in a long-term perspective. One four-year period is far too short to capture the full extent of economic and structural consequences. Also, an eight-year period would not be sufficient to include important structural issues. For example, a replacement of the Norwegian F-16 after 2010 would call for a major share of total

defence investments for a longer period. One should notice that in the implementation of plans, uncertainty about the long-term perspective could be used to justify delaying critical investments or decisions when funding requirements are not met. Such a focused short-term perspective would not be able to capture and prevent gradually accumulating structural imbalances.

Generally, a longer-term perspective should be used for defence planning even if large uncertainties make it difficult. Planning is not about once and forever establishing “the correct way”, but about working with concrete alternatives to make sure that the various consequences of alternative decisions could be made explicit, taking into account the present uncertainty.

### **4.3 Implementation Of Defence Reforms**

The Norwegian experiences of the 1990s demonstrate the complexity of and the many challenges involved in reshaping military organisations to best respond to a multidimensional and uncertain set of future requirements. Faced with such challenges, large organisations, including military, often demonstrate a remarkably strong tendency to resist change and preserve their old structure far beyond the limits of its realm of validity.

Successful implementation of defence reforms rests on a number of conditions. First, the leadership and also the defence organisation itself must accept the need for change, and the new course must be established and accepted. In the Norwegian case, the initiative for change has shifted from the political side in the early 90s and the Defence Commission 1990 to the military side in 2000. The over-ripped challenges caused by the double imbalance finally had the effect of ensuring acceptance for change as such. But the extent of the reforms required was unfavourable for anchoring the conclusions; especially, when it came to the need for comprehensive cut in defence jobs all over Norway. Still, the Storting has with some adjustments, supported the recommendations presented.

Second, funding for implementing changes must be provided. As mentioned above, a fundamental problem has been the “financial gap” that has been developing during the 90s. Also, the new long-term defence plan lacks a firm commitment from the Storting on future funding level.<sup>10</sup> To ensure momentum in the restructuring and funding for high priority projects, the MOD and the CHOD would have to establish additional priorities in order to achieve optimal exploitation of resources. If not, a substantial risk would exist concerning allocating funding to areas not sustainable in a longer term and also the implementation of recommended (costly) reforms. A critical side of this issue is the need for additional “fresh money” to make changes happen, especially within a shorter-term perspective. Substantial funding is required to cover for new constructions, compensation salaries and overtime payments, consulting services etc. If such funding were to be made available from the existing organisation, the transformation process would normally be delayed.

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<sup>10</sup> The Storting is to debate long-term defence funding in their spring 2002 session.

Third, the tempo in implementing the changes has to be high to avoid that the reforms come to a halt. However, high tempo in reforms can easily cause internal organisational problems and between the Defence and the society. For the 90s, the White Paper No 16 (1992-93) described a cut of about 6100 defence employees, but only 2000 jobs were cut. Consequently, the ambition of cutting operating costs with 1% annually was never met. Instead, a substantially increase in operating costs and a drop in activity level has been experienced after 1995. This problem has been acknowledged both on the military and political side, and as a consequence, a more concentrated period for change has been set.

## **5 LESSONS TO BE LEARNED**

A successful defence transformation process rests on full realisation of the fact that general overarching key choices that have to be made in reforming defence are political in nature. These choices rest on a number of uncertain assumptions, the most prominent of them being the security development, the level of defence funding and defence component cost escalation, the technological development and the development of society. The strain between the wish for a stable and optimal long-term vision for the Defence and the many uncertain and partly conflicting assumptions and goals creates several dilemmas. Since the time constant for defence changes are long, a long-term perspective is definitely necessary for good guidance.

The degree of challenge in reforming the defence is closely linked with limited future defence funding compared to the relevant defence task spectrum. The more constrained future defence funding becomes, the more pressing the priority problem will be. Especially for smaller nations, the questions soon turn into the “either-or” type. Substantial cuts in operating costs could free funds for investments. However, the Norwegian Defence has only partially managed to implement planned manning reductions and cuts in operating costs during the 1990s, and, contrary to plans, actually experienced an increase in operating costs since 1995. Basing decisions about future materiel investments on dubious assumptions of extensive and quick reductions in operating costs is not recommendable. Shrinking budgets on top of this would further aggravate this problem. The lesson is; don't spend money that is not known with a high probability to become available.

A plan for reshaping the defence forces needs to be based on three fundamental considerations. First, a direction or vision for developing the Defence must be established. This vision has to be viewed in a longer-term perspective to capture the consequences of decisions or lack thereof, and to achieve sufficient degree of freedom from shorter-term constraints given by the existing defence structure in developing alternative solutions. Typically, defence components have 20-30 years operating time and the lead times for significant structural changes are typically 5-10 years.

Second, and closely integrated with the first consideration, is the need for planning consistency between the overall defence ambitions, the structural development and the defence funding.

Lack of such consistency will unavoidably lead to capability gaps either from insufficient funding or from investing in wrong capabilities.

Third, one should recognise the need for strong political and military commitment to the implementation of the defence plans. This consideration can be especially challenging when a substantial downsizing and/or reshaping of defence forces are required. Under such circumstances, some actors influenced by the changes are likely to take every opportunity to delay the implementation, pending a new and more favourable decision. As a result, the transformation process from the current defence structure to a new defence structure could come to a halt leaving only fragments of the total force structure to be implemented at a very high cost.

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