LONG-TERM CHALLENGES OF DEFENCE

final report of the parliamentary assessment group (summary)



Long-term Challenges of Defence

Final Report of the Parliamentary Assessment Group

(summary)

Cover: Parliament of Finland/Vesa Lindqvist

Parliament of Finland

Helsinki 2014

ISBN 978-951-53-3566-1 (paper back) ISBN 978-951-53-3567-8 (PDF)

Contents

SUMMARY	3
CHALLENGES TO MAINTAINING THE DEFENCE CAPABILITY	7
Targets for additional financing proposed in the Government Report 2012	8
Analysis of options for different materiel investment levels	8
Conclusions	12

SUMMARY

Finland faces no military threat at this moment; however, the status quo may change. Change in the operating environment as well as Finland's geostrategic position, its being on the border of a military alliance and neighbouring a great power, must be taken into account as conclusions regarding the Defence Forces overall capacity and development are being made.

Globalisation brings about increased interdependence in the operating environment. It also increases the rate of change as well as unpredictability and uncertainty, which can then facilitate strategic surprises. In the transforming picture of war the range of instruments being used in the use of force is expanding, making the possibilities for using force all the more versatile. Warfare impacts society as a whole, rather than the armed forces alone. It will become increasingly difficult to identify the onset of war and, especially, to anticipate it. The situation in Ukraine serves as an example of a crisis in which political, economic and military pressure have systematically been used. Information warfare and cyber-attacks are an elemental part of the range of instruments available to the actors.

Strategically speaking, the Baltic Sea is the predominant logistic transport corridor for Finland. Relations between Russia and NATO have become strained, and their geographical boundaries now intersect in our immediate vicinity. The geostrategic importance of the Baltic States has risen and controlling the approaches to the Gulf of Finland has, yet again, become a key strategic factor. The significance of the Arctic region keeps growing due to the opening of new sea lanes.

Finland's defence cooperation stems from the needs of our national defence. Defence cooperation strengthens Finland's international and security policy-standing. When it comes to maintaining and developing interoperability, multinational training and exercises are of the essence. While defence cooperation is essential for the development of Finland's capabilities, it does not imply any military security guarantees. A defence alliance is the ultimate form of defence cooperation.

Western countries and Russia alike focus on improving their own joint capabilities. The armed forces in our neighbouring areas will retain their armies, navies and air forces; the aim is to rapidly and suddenly concentrate force by employing joint capabilities. Great powers take advantage of the airspace, outer space and information dimensions – aiming for information supremacy. Whereas the significance of peacetime troop stationing is on the wane, high readiness and force projection as well as digitisation and information management are the key elements on the rise. Overthe-horizon capabilities from land, sea and air as well as information networks from outside a country's borders are gaining increased prominence.

The primary purpose of the defence capability is to establish deterrence against the use of military force, and the threat thereof, and to create the capability to repel any attacks against our country. The maintenance of deterrence will remain the top

priority of our defence. This entails genuine capability on the part of the Defence Forces, in accordance with its tasks. While the need for defence remains, its demands are becoming more varied. The Defence Forces must be able to meet both conventional military and more wide-ranging threats alike. We must continue to prepare for the possible use of military force in the future as well.

Our defence capability continues to stand on the cornerstone of a defence solution that corresponds to its tasks as well as the required numbers of troops and defence materiel. The entire annual intake fit to serve will be trained and assigned to wartime units. Only through general conscription can Finland generate sufficiently skilled reserves in great enough numbers for wartime duties. Simultaneously, this creates a knowledgeable and competent resource that can be employed to improve society's crisis resilience.

Both deterrence and the capability to repel attacks must be founded on the troops' sufficient capabilities. Some systems must be kept in constant high readiness so as to deny the adversary the element of surprise and prevent the paralysis of defence. The units must be furnished and trained with sufficient and modern defence materiel. Support from the rest of society in a crisis is critical for the implementation of military defence. The military security of supply necessitates that the Defence Forces be internationally networked.

Following the implementation of the Defence Forces reform the size, basic structure and capacity of the Defence Forces meet the set financial requirements. The reform, however, had to be financed at the expense of materiel procurements. The Defence Forces are now operating at the minimum sustainable level, provided that additional resources, based on the calculated requirements, can be allocated to materiel investments. The present defence budget is too small in view of the necessary investments. A particular challenge involves the quantity of defence materiel. Shortcomings related to the troops' combat resilience and readiness must systematically be reduced. Without additional resources the troops' equipment cannot be modernised and the Defence Forces will only be able to carry out their tasks for a few more years.

The Defence Forces need higher operational readiness and improved combat resilience to carry out their tasks. In light of recent events, the significance of high readiness is especially gaining new import in Europe. The present level of defence spending does not make it possible to improve troop readiness in any noteworthy manner.

While the need and the tasks for Finland's defence will remain the same, the means of implementing the national defence as well as the scope and quality of defence cooperation may require further scrutiny. Barring sufficient investments in materiel, the core principles of our defence–defending the entire territory of the country, general conscription and military non-alignment–will require reassessment during the next Government's term in office.

The key conclusion of the group is that the additional financing, at minimum, which the defence establishment proposed in the Government's security and defence policy

report 2012 is needed to rectify the shortcomings in material capabilities. However, none of the solutions studied by the group meets the substantial capability-related projects' financing requirements which we will face in the 2020s (successors to the F/A-18 Hornet and the Navy's ageing warships). The solutions for the 2020s must be considered during the Government's term in office in 2019-2023.

Helsinki 1 October 2014

Ilkka Kanerva, Chair (National Coalition Party Parliamentary Group)

Johannes Koskinen, Vice Chair (Social Democratic Parliamentary Group)

Members

Esko Kurvinen (National Coalition Party Parliamentary Group),

Tuula Väätäinen (Social Democratic Parliamentary Group)

Sari Palm (Christian Democratic Parliamentary Group)

Thomas Blomqvist (Swedish Parliamentary Group)

Seppo Kääriäinen (Centre Party Parliamentary Group)

Eero Reijonen (Centre Party Parliamentary Group)

Jussi Niinistö (Finns Party Parliamentary Group)

Tom Packalén (Finns Party Parliamentary Group)

Annika Lapintie* (Left Alliance Parliamentary Group)

Anni Sinnemäki* (Green Parliamentary Group)

Deputy members

Sofia Vikman (National Coalition Party Parliamentary Group)

Mika Kari (Social Democratic Parliamentary Group)

Risto Kalliorinne* (Left Alliance Parliamentary Group)

Tuija Brax (Green Parliamentary Group)

Ismo Soukola (Finns Party Parliamentary Group)

Mari Kiviniemi (Centre Party Parliamentary Group)

Stefan Wallin (Swedish Parliamentary Group)

Peter Östman (Christian Democratic Parliamentary Group)

Permanent experts:

Ministry of Defence:

Arto Räty, Esa Pulkkinen, Hannu Ojala, Manu Tuominen, Rami Peltonen

Ministry for Foreign Affairs: Jaakko Laajava

Defence Command Finland: Juha Rannikko, Pasi Välimäki

Clerks to the group:

Heikki Savola, Juha Martelius

^{*} The supplementary opinion of the Greens and the dissenting opinion of the Left Alliance are included in the original Finnish and Swedish language versions of the report.

CHALLENGES TO MAINTAINING THE DEFENCE CAPABILITY

The primary purpose of the defence capability is to establish deterrence against the use of military force, and the threat thereof, and to create the capability to repel any attacks against our country. The maintenance of deterrence will remain the top priority of our defence. This entails genuine capability on the part of the Defence Forces, in accordance with its tasks. While the need for defence remains, its demands are becoming more varied. The Defence Forces must be able to meet both conventional military and more wide-ranging threats alike. We must continue to prepare for the possible use of military force in the future as well.

As a result of international developments Finland may, indirectly or directly, become involved in conflicts in its immediate vicinity, or in international operations. The situation in Crimea and Eastern Ukraine has shown that a military conflict can also be regionally limited, or focus on a single state alone.

Warfare impacts society as a whole, rather than the armed forces alone. Through well-functioning cooperation between the authorities and by employing the comprehensive security strategy model it is possible to secure society's crisis resilience, which also depends on the trust that citizens place in the central government and the Defence Forces. With regard to Finnish society, additional key factors that impact defence include the uncertain economic situation, problems in general government finances as well as changes in values and attitudes.

The change in the operating environment as well as Finland's geostrategic position set the basic requirements for the arrangements of Finland's defence. While Finland faces no military threat at this moment, the situation may change. Finland's location, on the border of a military alliance and a neighbour to a great power, must be taken into account as conclusions regarding the Defence Forces overall capacity and development are being made.

Our defence capability continues to stand on a defence solution that corresponds to its tasks as well as the number of troops and equipment required. The entire annual intake fit to serve will be trained and assigned to wartime units. Only through general conscription can Finland generate sufficiently skilled reserves in large enough numbers that are suitable for wartime duties. Simultaneously, this creates a knowledgeable and competent resource that can be employed to improve society's crisis resilience.

Following the implementation of the Defence Forces reform the basic structure and capacity of the Defence Forces meet the set financial requirements. The reform, however, had to be financed at the expense of materiel procurements. The Defence Forces are now operating at the minimum sustainable level, provided that additional resources based on calculated requirements can be allocated to materiel investments. The present defence budget is too small in view of the necessary investments (amount of defence materiel). A particular challenge involves the quantity of defence materiel.

Shortcomings related to troop combat resilience and readiness must systematically be reduced. Without additional resources the troops' equipment cannot be modernised and the Defence Forces will only be able to carry out their tasks for a few more years.

Targets for additional financing proposed in the Government Report 2012

On the basis of the Government Report 2012 the Defence Forces have completed the calculations regarding the targets for additional financing, and on the effectiveness of said funding. The conclusion of these calculations was that additional financing can augment the materiel procurements which have been identified as the most critical. Such procurements will secure the systematic equipping of troops at the level required for their tasks and training through the 2010s and up to the early 2020s.

The additional financing must be focused on capability-related and materiel-related procurements which, first and foremost, help eliminate the numerical shortage of systems and equipment to be procured from 2016-2024. These include, among other things, anti-tank weaponry for the Army's territorial and operational forces, organic ground-based air defence systems and ammunition, the Navy's warship and surface warfare capability, ground-to-air missiles as well as supplementary procurements of special equipment that serve joint capabilities.

Analysis of options for different materiel investment levels

When the required investment financing for material capability is being defined, in addition to anticipated inflation one must also take into account the development in unit costs in defence material procurements, which presently exceeds the consumer price index. This development is widely authenticated, both internationally and nationally. The single most important reason for the rising unit costs is the need to procure sufficiently capable systems vis-à-vis any potential adversaries along with the technological development. Other reasons include multi-purpose requirements and resultant challenges, small production series, lack of competition, national legislation and materiel policy, and advances in technology. According to studies, unit costs have generally risen by 2-7% on an annual basis. The annual rise in unit cost for combat vehicles has been 5-7%, that of warships 7-10% and that of aircraft 7-10%. This being the case, the purchasing power in defence materiel procurements falls below the realised annual inflation.

The unit cost in defence materiel matters because it determines the possibilities for procuring new materiel. A small country such as Finland generally procures materiel in small volumes and accommodates its requirements and standards to those set by other countries. When it comes to defence planning, the solutions always represent an amalgamation of operational methods and equipment. High technology and competence must be incorporated in critical defence systems. If materiel procurement appropriations remain at the present level (2015), then the required number of wartime troops cannot be furnished with modern equipment. Retaining the defence

capability demands that the rising unit costs are constantly taken into account in resources.

EXPERIENCES FROM CREATING A CAPABILITY-RELATED PROJECT



Experiences:

- There are risks involved in introducing new technology and systems delays and end product quality.
- . Even though we master the basics, it is still challenging to build a multi-purpose solution.
- . It takes time to train hundreds of systems, procurements and scores of competence areas.
- . Most unknowns and risks are related to the procurement, system integration and time.
- Many different reasons cause delays in capability-related projects.

Figure 2: Experiences from creating a capability-related project.

Developing, equipping and training troops requires years of long-range, systematic work. Regarding the Defence Forces' capability projects the lifespan of the troops and systems that are to be developed is approximately 25 years. Consideration of the need for a new capability and the possibilities for modernising the equipment in use or extending its lifespan precedes any investment decision. The possibilities of obtaining pre-used materiel will be actively charted prior to taking a decision on procuring new weapon systems. A materiel procurement launched in any given year will begin to concretise into real capabilities after 6-15 years from the commencement of the acquisition. The investment decisions taken today will be realised in the 2020s and remain viable all the way into the 2040s.

Because of the aforementioned factors the maintenance and development of a defence capability calls for through research, long-term and coherent planning, sufficient R&D resource allocation and commitment to projects. As a result of the cutbacks in 2011

the plan which was intended to develop the Defence Forces' material capability actually became a plan for sustaining its capability.

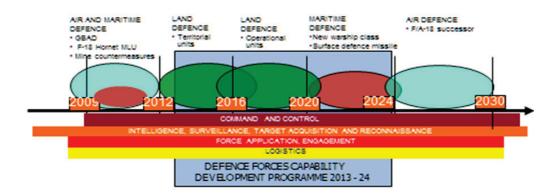


Figure 3: Finnish Defence Forces Capability Development Programme 2013-2024.

On average, defence materiel spending has amounted to 32% of the Defence Forces' expenses from 1980-2012, following which it has been impossible to sustain such a level. Within the given spending limits, approximately 20% of defence spending can be focused on materiel investments, which is insufficient for maintaining or developing the needed capabilities. The present materiel budget of less than 500 M€ translates into less than 0.25 of the GDP.

The average shares of defence materiel spending of the GDP have been 1:

- The average in the 1980s was 0.44% of the GDP,
- The average in the 1990s was 0.57% of the GDP, and
- The average in the 2000s was 0.36% of the GDP.

¹ Defence materiel expenses included the VAT up until 1994. Therefore, the average GDP-percentage

shares in the 1980s and the corresponding ones after 1993 cannot be considered as fully comparable. Source: Official Statistics of Finland, National Accounts [web publication]. ISSN 1795-8881, 2013, appendix table 1.

Despite the Defence Forces reform and cutbacks in wartime troop numbers it can be stated that the capabilities that are to be phased out in the 2020s cannot be replaced with a GDP level of 0.25% without damaging the national defence capability. According to calculations, the estimate on the required additional financing, put forward in the Government's security and defence policy report 2012, would only be sustainable until 2024 in a situation where unit costs continually grow. Even tying the investment funds to the GDP would not meet the challenges of this decade.

For the financing solutions presented below the point of departure was that the operational and financial cost structures as per the Defence Forces reform were in order at the minimum level. The analysis focused on resources available for materiel investments. Maintaining the post-2014 wartime capability requires considering the rising unit costs as well as inflation in the spending limits. The analysis used 4% as the value for rising unit costs and 1.5% for the rate of inflation (decreasing purchasing power within a year). The effectiveness of additional financing was calculated from 2016 onwards. The analysis applied three different financing solutions for the years 2015-2024.

In the solution involving decreasing financing the focus was on an approximately 150 M€ cut within an approximately 500 M€ spending limit. In this financing solution defence materiel investments represent an approximately 16% share of the defence budget, which is completely insufficient by any standard. This would result in the breakdown of the balanced cost structure, created by the Defence Forces reform and in the collapse of the material readiness within a few years. Lowering the materiel investment level would break down the foundation of the present defence solution.

In the solution involving the preservation of the present financing level the focus was on the approximately 500 M€ spending limit. In this financing solution defence materiel investments represent an approximately 21% share of the defence budget, which is an insufficient level. Decreasing financing for material capabilities would only prolong the degradation of the defence capability. All services would be left with significant shortcomings in the equipment and crisis resilience of their troops. If materiel investments were continued at the present level, this would result in a defence reform during the Government's term in office in 2019-2023. The decision to implement a defence reform should already be taken during the next Government's term in office, in 2015-2019.

In the solution involving additional financing, recorded in the Government's security and defence policy report 2012, the focus was on a gradually increasing financing solution which, in 2016, would be approximately 50 M€. It would gradually increase up to 150 M€ by 2020, in addition to inflation adjustments. In this financing solution defence materiel investments represent an approximately 26% share of the defence budget which, too, is clearly below the average level of 32% from 1980-2012. The final level of the proposed financing represents less than a half of the cuts implemented in 2012 on defence materiel investments. Most troops could be equipped and trained adequately, at most, in view of their tasks. The basic structure and the defence of the entire territory of the country could be secured into the early 2020s. The solutions for the 2020s must be considered in the Government Programme 2019-2023.

None of the aforementioned financing solutions meets the substantial capability-related projects' financing requirements which we will face in the 2020s. The most important of these involve the replacement of the Hornet fleet as part of maintaining an air defence capability as well as replacing the Navy's ageing warships. The preparations and planning for these procurement decisions must be launched during the Government's term in office in 2015-2019.

DEFENCE FORCES REFORM =balancing the operations and structures of the Defence Forces (2012-2015).

DEFENCE REFORM=having to change the basic strategic principles of the defence solution (defending the entire territory of the country, general conscription and military non-alignment).

Conclusions

After 2014 the Defence Forces will be operating at the minimum level. Whereas the Defence Forces reform rectified the cost structure, defence materiel financing remains at a level which is too low. One half of the permanent cost savings which were included in the reform (ca 250 M€ at the annual level) was implemented by cutting defence materiel financing. Wartime troop capabilities, especially with regard to the quantity and quality of materiel, are at the minimum level. The Defence Forces need, especially, higher operational readiness and better combat resilience in order to successfully carry out their tasks. In light of recent events, operational readiness is gaining new significance in Europe. With the existing level of defence appropriations it will be impossible to improve the troops' readiness from its present state.

While the need for and the tasks for Finland's defence will remain the same, the means of implementing national defence as well as the scope and quality of defence cooperation may require further scrutiny. Barring sufficient investments in materiel, the core principles of our defence–defending the entire territory of the country, general conscription and military non-alignment–will require reassessment during the next Government's term in office.

At the very least, the additional financing proposed in the Government's security and defence policy report 2012 will be needed to correct the materiel-related shortcomings in capabilities. It is important that the preparations and planning for the significant capability-related projects of the 2020s be launched during the next Government's term in office so that the relevant political decisions can be taken by the turn of the decade.

