



Puolustusministeriö
Försvarsministeriet
Ministry of Defence

Material Policy Strategy for the Defence Administration



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Summary

The key objective of materiel policy is to build the capabilities required by national defence and to ensure military security of supply. Finland must be able to operate critical defence systems in all security situations, and to ensure this, both technological know-how and materiel readiness are required. The Defence Forces' national partners and international cooperation arrangements are an essential part of military security of supply as a whole.

The development programmes create the basis for capability acquisition. It is essential to identify critical capability areas where the requirements of military security of supply are particularly high. The objective of procurement is to acquire capabilities that best suit Finland's defence system, in an appropriate and cost-effective way, and with due consideration for the essential security interests of the state.

A viable and internationally competitive domestic defence industry, its international networking and exports maintain military security of supply and promote the operational capability of national defence. In materiel policy, the Finnish defence industry plays an important role both in maintaining key weapons systems and other systems and in developing new capabilities.

Research and development (R&D) create and maintain competences that support the planning, building and use of capabilities. R&D must be goal-oriented, resourced adequately and with national and international networks.

The capabilities of Finland's defence system, as well as the security of supply of materiel and expertise, are developed through international materiel cooperation. Materiel cooperation is part of wider defence cooperation and its goals. Participation in materiel cooperation is guided by the development needs of the Defence Forces' military capabilities and the need to maintain sufficient defence industrial and technological expertise required by national defence. The promotion of industrial networking and exports is part of international materiel cooperation.

The Ministry of Defence, the Defence Forces and other actors, such as the domestic industrial, scientific and research community, are jointly responsible for implementing this Strategy. A separate document will be drawn up to specify the measures to be taken to achieve the objectives set out in the Strategy.

1

Introduction

The Materiel Policy Strategy of the Defence Administration provides guidelines for its materiel policy and repeals the old materiel policy sub-strategy (as well as the defence and security industry strategy). The document concretises and specifies the entries in the Government's Defence Policy Report of 2021, takes into account the Government's Report on Security of Supply (2022), the Objectives of Security of Supply (2018) and the Government Resolution on Safeguarding the Industrial and Technological Base of Finland's Defence (2016).

The key objective of materiel policy is to safeguard capabilities and military security of supply during emergency conditions. In order to achieve this objective, it is essential that the control and integration capacity of the defence system as a whole and its critical parts are in Finland both under normal conditions and during emergencies. The Defence Forces must have suitable materiel in operational condition and the necessary expertise to use, maintain and develop the systems.

The ongoing change in Finland's security policy has a significant impact on all activities of the defence administration, including materiel policy. Membership in NATO will also deepen Finland's materiel cooperation within the NATO framework. New opportunities for cooperation will be created for procurement and R&D, for example. Within its resources, Finland will participate in the development of NATO's joint capabilities. It will also appoint the necessary defence materiel experts to NATO's structures. However, certain key materiel policy objectives and principles will remain also as a member country of NATO: Finland bears the main responsibility for its own materiel readiness and for ensuring military security of supply.

New disruptive technologies create both opportunities and new threats to the Defence Forces' capabilities. Technological development, particularly in the areas of digitalisation, artificial intelligence, machine autonomy, sensor technologies and new operating environments (space, cyber), will have a decisive impact on the development of military capabilities. Wireless information technology, which is spreading almost everywhere, will enable new approaches and structures that place new demands on materiel policy. As the importance of competences increases, different means and cooperation models are needed to ensure that competences outside the defence administration will remain accessible.

The utilisation of rapidly developing new technologies requires active technological measures, which include anticipation and monitoring to maintain situational awareness and, to enable application, an analysis based on a good understanding of one's organisation. Competence management, adequate resourcing, agile organisation, partnerships and correctly timed research, development and innovation (RDI) measures will be emphasised. A uniform data policy that penetrates all levels of the organisation is a key part of the utilisation of ICT-based technologies and the compatibility of systems.

The defence administration must constantly maintain and develop its competences in relation to the operating environment and requirements and, for its part, ensure that the cooperation to build national competences is interactive and smooth. Together these maintain the Finnish capacity for innovation and foresight. In addition, active approach to international cooperation is essential to fully benefit from the capabilities offered by new technologies.

2

Safeguarding Military Security of Supply

One of the key objectives of materiel policy is to safeguard military security of supply. Finland must be able to operate critical defence systems in all security situations, and to ensure this, both technological know-how and materiel readiness are required. The Defence Forces' domestic partners and international cooperation arrangements are an essential part of military security of supply as a whole.

Military security of supply safeguards the functioning of systems in the Defence Forces in all circumstances. Production, technology and know-how critical to military national defence must be available and at their command in all security situations. Military security of supply aims to be able to operate the critical systems of Finland's defence independently, including the necessary access to technology ('operational independence').

Ensuring the availability of technology, raw material, materials, components and technical solutions is critical for Finland. Military security of supply is increasingly about technological know-how and access to technology, including the right to modify technologies acquired from others. The capability to operate independently the critical systems of the Defence Forces both under normal conditions and during emergencies means that the requirements of military security of supply are taken into account from the outset of capability development.

International cooperation is one way of safeguarding security of supply, and where possible, the commitment of international partners is also sought through treaties. With the increased significance of competences, the impact of knowledge ownership and knowledge capital management will grow. Ensuring military security of supply requires securing these nationally (through contractual arrangements) and, if necessary, through treaties or other international arrangements.

The Defence Forces' domestic partners are part of the provision of military security of supply. Strategic partners are an integral part of maintaining and developing the Defence Forces' critical systems and producing consumption material both under normal conditions and during emergencies. To ensure and develop critical expertise and military security of supply, long-term cooperation with universities, research institutes, technology companies and the defence industry is required. Defining national defence's own interests at both the national and international level is a precondition for exerting influence and engaging in cooperation.

3

Development Programmes, Projects and Procurements

Development programmes create the basis for capability acquisition. It is essential to identify critical capability areas where the requirements of military security of supply are particularly high. The objective of procurement is to acquire capabilities that best suit Finland's defence system, in an appropriate and cost-effective way, and with due consideration for the essential security interests of the state.

Capabilities are developed nationally and in international cooperation. As part of this work, different instruments and mechanisms will be used in bilateral and multilateral international cooperation. If the essential security interests of the state so require, industrial participation arrangements are among the available means. In developing capabilities, shared situational awareness with industry and the scientific community is the basis for cooperation and interaction.

Development programmes are a key tool in developing the Defence Forces' capabilities. They must strive to determine the domestic proportion required for national defence and military security of supply in view of technology, expertise and intellectual property rights. This provides the basis for selecting an appropriate procurement strategy and determining the proportion of R&D activities. Already at the level of development programmes, it must be possible to identify the capability areas and the technologies behind them, where interdependencies with third parties should be minimised.

Efficient and innovative application of new technologies requires structures and funding models that make it possible to develop agile methods and iterative development alongside traditional development programmes. The utilisation of new technologies challenges the traditional operating culture because new technologies force us to consider the lifecycle issues, updating and security of supply of solutions, partly on a new basis.

The aim of procurement is to acquire capabilities that best suit Finland's defence system, in an appropriate and cost-effective way, and with due consideration for the essential security interests of the state. Development programmes create the basis for this, more detailed specifications will be made during the project phase and implementation takes place in the procurement phase. New openings with higher risk levels are developed in research programmes and as separate studies. Procurement is one of the Defence Forces' core activities; it is estimated that one third of the defence budget will be used for procuring materiel in the future, too. In addition to the annual funding, attention should be paid to monitoring capability building.

Procurement may be made by open or restricted procedures. The chosen method will depend on the item to be procured and the related requirements. Particular attention should be paid to requirements on military security of supply and secrecy, which must be safeguarded throughout the entire life cycle of the system to be procured.

Domestic technological know-how required for building defence capabilities is developed selectively, as not all high-technology defence materiel suitable for Finland's needs is commercially available. Especially in some areas of critical capabilities, commercial offerings may lag a decade behind the highest possible capability level. The manufacturing countries may keep their most recent solutions to themselves to protect their own military interests.

The Defence Forces' procedures and processes should be developed to facilitate research and technology procurement and the maintenance of the above-mentioned competences, for example by means of new innovative procurement and financing models, and innovation or technology partnerships.

4

Defence Industry

A viable and competitive domestic defence industry, its international networking and exports enable Finland to maintain national defence capabilities and military security of supply. As systems become more complex, competences and maintenance ability are more important than before and, therefore, domestic industries must look after their competence base.

When looking at the entire materiel policy, the Finnish defence industry plays an important role both in maintaining the key weapons systems and developing new capabilities, especially in areas of competences that are critical to the defence system or that cannot be procured from elsewhere. The defence industry's activities range from peacetime conditions to war.

A viable and internationally competitive domestic defence industry, its international networking and exports maintain military security of supply and promote the operational capability of national defence. Influence should be exerted on national economic, science and education policies to secure the operating conditions of the defence industry and to develop the vitality of industry. The defence administration will support industrial exports and the use of international cooperation opportunities.

Finland's own defence industry's capacity is limited and many of the key weapons systems are purchased from abroad. Finland must possess domestic industrial and technological expertise required for maintaining and updating critical systems so that they can be used independently in all circumstances. If necessary, domestic industry must also have sufficient capabilities to act as a system integrator. As systems become more complex, competences and maintenance ability are more important than before.

It is essential for national security that companies operating in Finland have a sufficient level of technological know-how with regard to critical technologies. That domestic expertise is secured, especially in the fields of digitalisation, artificial intelligence, analytics and autonomy, is of growing importance.

The Defence Forces' partners and subcontracting chains play a significant and established role in the defence system, and strategic partners in particular play a key role in the maintenance and repair of the Defence Forces' equipment and materiel. The Defence Forces and its partners must be able to react quickly to changes in the operating and security environment. Partnerships are deepened already under normal conditions, for example by working in a shared environment. This will ensure the continuity of operations also in a rapidly escalating crisis situation.

5

Research and Development

Research and development (R&D) create and maintain competences that support the planning, building and use of capabilities. R&D must be goal-oriented, resourced adequately and with national and international networks.

Developing and maintaining the Defence Forces' capabilities require systematic planning as well as steadfast, correctly-timed and sufficient resource allocation of R&D for the entire life cycle of any given capability. The allocation of the Defence Forces' R&D resources must ensure that they are able to maintain the conditions for the organisation's innovation and foresight capacity, support for capability development, volume of competences critical to defence and international research cooperation in a balanced manner.

Research and development projects within critical technologies will be supported and the innovation and production capacity of domestic industry will be maintained in a manner that is required by the essential security interests of the state. The development of broad-based expertise required by national defence relies on the national research, development and innovation (RDI) system and its ability to produce new knowledge and technological know-how. The defence administration's R&D activities must be closely linked to the national RDI policy and the strengths and competences to be developed in Finland. At the same time, the defence administration must clearly define and highlight the critical R&D needs of military national defence, the priorities of which may not always be consistent with other national objectives, but where the defence administration relies on the national RDI system.

The defence administration's RDI activities support the development of new capabilities and domestic integration, modification and operational capability, including task planning and advice. National maintenance of technological competence and security of supply are prerequisites for the ability to design, purchase, use and maintain complex systems. It is also a prerequisite for developing countermeasures during emergencies. As a result, the importance of developing national competence capital and security of supply is growing, especially with regard to technologies in transition.

The defence administration promotes industrial R&D from the starting points of the Defence Forces' development programmes so that, as a rule, research and technology development work is acquired from Finland. This must be based on a shared situational awareness and a common understanding of key future trends.

For the further development, commercialisation and maintenance of technologies and research results, it is essential that, as a rule, intellectual property rights are owned by the industry and scientific community, and that the Defence Forces have sufficient user rights to utilise information and technology. Other procedures may be agreed on a case-by-case basis, for example in situations requiring protection of classified information. At the same time, however, it must be ensured that the necessary intellectual property rights related to critical technologies are in national control, and that company acquisitions or financial agreements cannot jeopardise or weaken this.

In addition to the EU, EDA and NATO, R&D is also conducted bilaterally and in other forms of cooperation, based on overall consideration. Verifiable national competences are a precondition for international research cooperation. To achieve common objectives in national and international RDI cooperation requires the establishment of the defence administration's desired end state and resources for developing cooperation.

6

International Materiel Cooperation

International cooperation is an integral part of the defence administration's materiel policy. Participation in materiel cooperation is guided by the need to develop the Defence Forces' military capabilities and to maintain sufficient competences in the defence industry and defence technologies that are required by national defence. International cooperation takes place both bilaterally and multilaterally.

International materiel cooperation offers a way to develop the capabilities of Finland's defence system as well as the security of supply of materiel and expertise. It is also linked to wider defence cooperation and its goals. Participation in materiel cooperation is guided by the development needs of the Defence Forces' military capabilities and the need to maintain sufficient competences in the defence industry and defence technologies that are required by national defence. The promotion of industrial networking and exports is part of international materiel cooperation.

International cooperation is carried out both bilaterally and multilaterally, based on contractual arrangements between the parties, including treaties.

The Defence Forces will participate in the development of NATO's common capabilities to the extent agreed separately, and will be prepared to benefit from NATO's materiel and spare part logistics (through NATO Support and Procurement Agency, NSPA, for example) in an optimal way. The Defence Forces will appoint a sufficient number of materiel personnel to NATO's command structures.

Through the membership in NATO, the defence administration will adjust its materiel structures, if necessary, to match NATO processes to ensure as flexible and compatible operation as possible. In the future, the Defence Forces will also take an active part in the preparation of NATO's STANAG standards and make use of the Finnish research community and industry in this work.

Nordic materiel cooperation takes place both bilaterally and within the framework of NORDEFECO. Possible areas of cooperation include joint procurement, military security of supply, R&D and joint development projects.

The European Defence Fund (EDF) is a new cooperation structure and financial instrument. Finland is a proactive actor, ready to take the initiative in research and development projects, including cooperation within the framework of the European Defence Agency (EDA) and the EU's permanent structured cooperation (PESCO). This requires close cooperation between the Ministry of Defence and the Defence Forces. The defence administration supports and promotes the participation of Finnish industrial operators and the scientific community in projects carried out within the framework of the Fund.

The roles of the Finnish industry and research community must be included in building and maintaining the Defence Forces' capabilities already when projects are prepared and planned, and they must be part of negotiations to ensure concrete maintenance capability and life cycle support. The expertise and potential role of the Finnish industrial, scientific and research community in international procurement of materiel will be taken into account as early as possible.

Procurement between states (Government-to-Government sales) is one form of international cooperation. This is an arrangement in which the state purchases defence materiel, services and/or public works contracts directly from another state. As a rule, the Finnish defence administration does not sell defence materiel in arrangements referred to above. Instead, in Finland an alternative to GtoG sales is a model where the seller is a Finnish defence industry company, while the State (Defence Forces) offers support elements in implementing the trade.

There has been a significant increase in interest in and demand for using this procurement model in recent years. In competitive tendering, the purchasing country has in some cases required that, in addition to a commercial contract, an agreement be concluded between the states. Bilateral contract-based cooperation improves predictability and provides the necessary security to the purchasing country. The participation of state aid elements may in some cases be a prerequisite for the Finnish industry to participate in the competition in general and to be able to offer its own products or services.

The defence administration must support domestic industry by providing, for example, product support, training, quality assurance or other services to the purchasing country within the framework of a cooperation agreement. This will enable cooperation that benefits both countries in the future, for example in logistics or user cooperation. The Defence Forces must commit to cooperation with sufficient resources. Compensation to the Defence Forces for costs incurred will be agreed separately on a case-by-case basis.

7

Sustainable Development

Sustainable development will be taken into account in the materiel development of the Defence Forces. Life cycle assessment and management of materiel is an essential part of the defence administration's materiel policy.

The Sustainable Development Goals set out in the United Nations 2030 Agenda for Sustainable Development by 2030 and the Government Report on the 2030 Agenda for Sustainable Development provide a framework for sustainable development in the defence administration. As part of the defence administration's materiel policy, sustainable development will be taken into account, without compromising the defence capability, in materiel development, in the management of the life cycle of materiel and in the phasing out of materiel.

The goal of the defence administration's materiel development is to ensure cost-effective procurement, updating and maintenance of troops' equipment. Sustainable development will be taken into account in the materiel development of the Defence Forces. Material efficiency is improved by considering the need for procurements, purchasing sustainable products, appropriate storage and responsible use, maintenance and disposal. Compliance with the sustainable development requirements will probably also entail additional costs, which must be taken into account when resourcing the Defence Forces.

Life cycle assessment and management of materiel is an essential part of the defence administration's materiel policy. In order to extend the life cycle, materiel policy aims to reduce the waste generation, improve sorting and further develop the management of materiel. Environmental risk management and the prevention of environmental damage are taken into account in the life cycle management. In addition, the defence administration will examine new alternatives for destroying the decommissioned materiel.

8

Implementation of the Strategy

The Ministry of Defence, the Defence Forces and other actors, such as the domestic industrial, scientific and research community, are jointly responsible for implementing this Strategy. A separate document will be drawn up to specify the measures to be taken to achieve the objectives set out in the Strategy.