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DEFENCE INDUSTRIAL POLICY IN FINLAND

Drivers and Influence

BY

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Policy Paper

The key drivers for Finland's defence industrial policy are a desire to maintain a robust national defence capability, openness to increased cooperation with EU and NATO and continuing non-membership in a military alliance (NATO). This has consequences for industrial participation and security of supply.

Firstly, Finland's domestic defence industry is an integrated part of national defence, through a broad range of strategic partnerships. Secondly, Finland focuses on security of supply (*huoltovarmuus*), from the ability to store and import food and energy to being able to independently upgrade and service critical military equipment.

Because Finland does not belong to a military alliance, it retains a broad range of military capabilities for independent use. However, continually developing those capabilities demands cooperation, including with the international defence industry. Finland's domestic industry therefore focuses on developing niche products which it sells itself or through resellers. Alternatively, it cooperates with a large international 'prime contractor' with the aim of either 'rebadging' or having the product or service integrated into a larger whole. Independence of use, *huoltovarmuus*, and continuity are the key tenets of Finland's defence industrial cooperation.

MAPPING DEFENCE INDUSTRIAL POLICY IN FINLAND

Defence industry as a central part of Finland's security and defence system

Finland's approach to security is based on the concept of Comprehensive Societal Security and the Seven Vital Functions of Society. One of these is a functioning defence system, of which the Finnish Defence Forces are the core, and while it continuously contributes hundreds of individuals to international missions, the Finnish Defence Forces focus on national defence. The objective of the Finnish Defence Forces is to create a high enough threshold to dissuade any potential attacker from using military force, and failing that to repel any (non-nuclear) attack.

Finland's defence industry and industrial policies contribute to national emergency preparedness and defence, with two particularly unique features. First, domestic defence industry is an integrated part of national defence, through a broad range of (strategic) partnerships. Second, Finland focuses on Security of Supply (SoS), from the ability to store and import food and energy to being able to independently upgrade and service all critical military equipment.

Finland is not a member of NATO, and hence retains a broad range of military capabilities needed for independent territorial defence. The foundation is a reservist based wartime field army with an initial 285 000 soldiers divided into operative,

regional and local forces (in total there are approximately 900 000 reservists). The Air Force consists of mostly cadre officers but much of the field and base maintenance is done by a mixture of conscripts, reservists and defence industry employees (the latter are in times of crisis directly integrated into the military). Together they provide the main operational effect through over sixty thoroughly modernised F/A-18 Hornets (C/D) with access to a high-end arsenal in the form of AIM-9Xs, JDAMs, JSOWs and JASSMs. The Navy focuses on coastal and littoral warfare, with a range of anti-shipping (RBS-15) and anti-air missiles and a strong domestically produced minelaying capability. The company Millog, which employs approximately 1000 individuals, does most depot maintenance and servicing for the Army and Navy. Like the Air Force, the Finnish Navy can use conscripts and reservists in roles reserved for cadre personnel in most western states.

Because of a strong focus on Security of Supply, over 100 000 individuals are, in cooperation between authorities and private firms, released from other national defence duties because their regular jobs are of critical importance to society.

Continually developing the above capabilities demands international cooperation, including with the international defence industry. Finland's domestic industry focuses on developing world-leading niche products and then sell the products or services themselves or through resellers. Alternatively, they cooperate with a large international 'prime contractor' with the aim of either 'rebadging' or having the product or service be integrated into a larger whole.

Independence of use, security of supply (*huoltovarmuus*) and continuity are key words for Finland's defence industrial cooperation.

Key statutes, laws and resolutions guiding Finnish Defence Industrial policies

Finnish Defence Industrial policy is anchored in statutory law¹ and developed through strategy level guidelines, as well as government reports and specific documents, such as defence white papers. The most recent and important are:

- Government resolutions on: *Securing the Finnish Defence and Technological and Industrial Base* (2016) and separately one on *Security of Supply* (2013)².
- The multi-authority and industry *Defence and Security Industrial Strategy* (2007)³

¹ Act on Public Contracts in the Fields of Defence and Security; Laki ulomaalaisten yritysostojen seurannasta; "Q&A about Act on the Monitoring of Foreign Corporate Acquisitions."

² "Securing the Finnish Defence Technological and Industrial Base"; Laki huoltovarmuuden turvaamisesta; "Government Decision on the Security of Supply Goals (Unofficial Translation) 05.12.2013."

- The Ministry of Defence *Materiel Policy Strategy*, and guideline for *Industrial participation in defence procurement (2017)*⁴
- The newest Government *Defence Policy Report (2017)*⁵ and *Foreign and Security Policy* document (2106)⁶.

Procurement is conducted in accordance with the *Act on Public Defence and Security Contracts (1531/2011)*, which is the national implementation of the European Union's 'Defence and Security Procurement Directive' (2009/81/EC). Hence, offsets are no longer automatically required. Industrial participation is now requested on a case-by-case basis, with the legal foundation being the *Rules on Industrial Participation in Defence Equipment Procurement in Finland*.⁷ In general, all procurement is open, public and shows little preferential treatment towards domestic producers (though some international companies have difficulties in meeting requirements regarding extreme temperatures and local servicing).

In individual cases, Finland invokes Article 346 section 1 of TFEU, due to concerns about security of supply or regarding technologies that are critical or central to functioning of the entire defence system. The strategies and documents lay out these critical capability areas of Finland's defence as follows:

- 1) Command, Control, Communications, Computers (C4)
- 2) Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR)
- 3) Engagement
- 4) Protection

In addition to this, four clusters of technology or engineering capabilities are identified as critical⁸:

- 1) Technologies and engineering related to C4 and ISTAR
- 2) Material technology and structural engineering
- 3) Technologies and engineering for multi-technology systems (integration)
- 4) Bio and chemical technologies and engineering.

For these technologies and systems, Finnish industry, universities and the defence forces aim to together retain the ability for life-cycle management, production, research

³ "Defence and Security Industrial Strategy."

⁴ "Puolustushallinnon Materiaalipolitiika"; "Industrial Participation in Defence Procurement."

⁵ "Government's Defence Report."

⁶ "Government Report on Finnish Foreign and Security Policy."

⁷ <https://tem.fi/en/industrial-participation>

⁸ Pages 10-12 in *Securing the Finnish Defence Technological and Industrial Base* government resolution give a more detailed description of the sub-fields within each of these four clusters.

and development, planning and design, and the ability to integrate, maintain and repair systems, even in times of war.⁹

DEFENCE INDUSTRIAL STAKEHOLDERS

The primary political driver in Finnish defence industrial policy is national security. Procurement is based on capability needs of the defence system, and does not as such take into consideration impacts on domestic jobs. However, the focus on security of supply as a whole, and the ability to service and modify systems, means that maintaining the technical ability inherent in the jobs is an important consideration.

The key drivers for Finland's defence industrial policy are a desire to maintain a robust national defence capability, openness to increased cooperation with EU and NATO and continuing non-membership in a military alliance (NATO). This has consequences for industrial participation and security of supply.

The primary domestic stakeholders: The Finnish Defence Forces and Ministry of Defence

The primary stakeholder in Finnish defence industrial policy is the Finnish Defence Forces (FDF) and the Ministry of Defence, where the latter is responsible for political guidance and the former for developing, integrating into the defence system and using the required capabilities. Both the Ministry and FDF recognize that a competitive domestic industry is in their interest, while knowing that major weapons systems will all be procured in the international market. Hence, they support international cooperation and networking between domestic and international defence companies. The FDF do not favour any given company, and there is no expectation that they choose domestic producers, as long as security of supply and maintenance concerns are taken care of through contracts that are binding even in times of crisis.

To ensure that defence procurement delivers good quality services or systems, the Finnish Defence Forces ensure that there is adequate local expertise about developments in defence systems and materials. Primarily this is driven through the Finnish Defence Research Agency (FDRA) but frequently in cooperation with domestic and foreign universities or technical research institutes. In terms of defence industrial policy, the impact of more social or political science focused research organisations/think tanks is minimal.

⁹ "Securing the Finnish Defence Technological and Industrial Base."

Finnish defence industry: mainly privately owned SMEs and a few large internationally partnered actors

Finland's defence industry consists predominantly of small and medium sized privately owned companies, with the total turnover within defence, aerospace and security sectors being €1.4Bn in 2016.¹⁰ The ability to provide cutting-edge products within niche spaces, and ensure whole of lifespan servicing for procured materiel makes the domestic industry an important stakeholder *vis a vis* national defence. However, with a few exceptions such as Patria, producer of the AMV armoured wheeled vehicles and NEMO mortar systems (2016 turnover €490m, personnel 2800) they are not large industrial players.

Because Finland does not belong to a military alliance and it is not an important global security or defence policy actor, Finnish defence companies recognize that the services or products they offer must be globally unique or market leading in their segment. This insight has guided companies to focus on developing niche expertise. Examples include the tactical communications company Bittium, the encryption and data wiping software creator Jetico, producer of UAV launchers Robonic, or naval combat survivability software designer Surma.

Both the defence establishment as well as the Finnish Parliament seek the industry's views on matters such as new defence or security policy white papers, as well as government programs. Due to the Comprehensive Societal Security approach where the private sector plays a critical role, as well as Security of Supply concerns, the industry as a whole is involved in formulating and contributes to planning. Perhaps uniquely, due to the importance placed on strategic partnering by the Finnish Defence Forces, individual companies are also included in operational planning, and their employees can in crisis/wartime be easily transferred to serve in logistics units; Millog Oy being one example of such a company.

It is important to note that the close relationship between some Finnish defence companies and national defence planning does not mean Finnish authorities are required to or show any marked preference for procurement from Finnish firms. Rather, the Finnish Defence Forces set exacting standards, so success by Finnish companies in domestic procurement contests usually suggests that the product is well placed to compete in the international market.

Industry associations and labour unions are both worth consideration as stakeholders, but their roles are limited. Owing to the relatively small size of the defence industry, there is one primary defence industry association, the Association of Finnish Defence

¹⁰ AFDA Facts & Figures 2017.

and Aerospace Industries (AFDA)¹¹, itself positioned within the broader Technology Industries of Finland group. In addition to this, the American Chamber of Commerce in Finland hosts the Defence Industrial Dialogue to facilitate contact networks between Finnish defence industry actors and their North American counterparts¹².

Labour unions are a relevant actor as they frequently negotiate binding agreements, which limit an individual company's ability to make flexible work-force adjustments based on market demand. However, in Finland, many companies are small enough to avoid the most burdensome limitations of such agreements. Moreover, due to the structure of the strategic partnership agreements, normal worktime/overtime regulations agreed to between unions and employers do not adversely affect the operations of the Finnish Defence Forces.

External influencers (incl. states and international organisations)

Increasing international cooperation, both operationally as well as in procurement and R&D has an influence on Finnish defence industrial policy. Bilateral cooperation has increased most significantly with Sweden; though there are mutual expectations that this may impact individual (joint) procurement projects, large scale impacts are not foreseen. Finland has also signed numerous bilateral memoranda of understanding/intent with among others the United Kingdom, Germany and the United States. Because the listed countries were already among those with whom Finland (and Finnish industry) cooperated most closely, the documents are unlikely to significantly impact the structure of Finnish defence industrial cooperation.

There is broad political support in Finland for increased defence cooperation within the European Union (PESCO), as well for the European Defence Agency. The impact of the EU-dimension, beyond the national implementation of the 'Defence and Security Procurement Directive' is at the moment somewhat unclear but Finnish industry have positive expectations.

In terms of international cooperation regarding Security of Supply, which is led by the National Emergency Supply Agency, the NATO Maintenance and Supply Agency (NAMSA) and some bi-lateral agreements play a key role.

International cooperation and links with other defence industry firms is central to Finland's defence industry strategy, and as such other states' industries (from individual firms to cooperation on projects and broad strategy) will continue to be important stakeholders.

¹¹ Association of Finnish Defence and Aerospace Industries: <http://pia.teknologiateollisuus.fi/node/60>

¹²American Chamber of Commerce Defence Industry Dialogue: <https://amcham.fi/defence-industry-dialogue/>

CONSEQUENCES OF FINLAND'S DEFENCE INDUSTRIAL POLICY

Finland's current defence industrial policy has sought to achieve, and to a large degree succeeded in its three top objectives: (1) That the Defence Forces have access to and are able to procure what its planning specifies are necessary capabilities; (2) that the domestic industry is a part of security of supply planning and integrated into the daily operations of the Defence Forces; and, (3) that industry is increasingly networked with international defence industry actors.

Because of geographic, environmental and technological imperatives, the continuous focus on security of supply in both defence and industrial policy is understandable. Efforts to strengthen security of supply, from the ability to store and import foodstuffs to maintenance of all critical defence equipment and services, have made Finland less vulnerable and more resilient to a broad range of societal crises or interruptions. Consequently, security of supply will continue to form a key consideration in defence industrial policy.

In terms of jobs, the current defence industrial policy means that jobs are fairly widely spread across Finland. An individual employer may be locally important but from a national employment perspective, the direct employment impact is negligible.

THE FUTURE OF FINNISH DEFENCE INDUSTRIAL POLICY

Finland is unlikely to diverge from the present course regarding defence industrial policy. The increasing complexity generated by changes in global trade dynamics and processes, such as extended delivery networks and just-in-time storage, combined with an increasing number of 'black boxes' in defence equipment and services, will however continue to challenge the means through which the goals of defence industrial policy are achieved.

Finland's defence and the tax-payers alike have benefitted from not automatically having to support extensive national defence firms, and have instead been able to outfit the military using a mixture of procurement approaches (buying proven high-tech, used but effective, develop own niche etc.)

The two large strategic procurement projects, *Squadron 2020* (for 4 multi-role corvettes) and the *Hx-project* (replacement for F/A-18 Hornets), exemplify the focus and expected dynamics between the defence industry and defence forces. Expected to cost a combined €8.2-11.2 billion, both platforms will need to be (nearly) completely serviceable in Finland.

Finland's comparative advantage in certain software based defence relevant technologies may mean an increased focus on supporting the continual development of such capabilities. ■

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ARES GROUP

The Armament Industry European Research Group (Ares Group) was created in 2016 by The French Institute for International and Strategic Affairs (Iris), who coordinates the Group. The aim of the Ares Group, a high-level network of security and defence specialists across Europe, is to provide a forum to the European armament security community, bringing together top defence industrial policy specialists, to encourage fresh strategic thinking in the field, develop innovative policy proposals and conduct studies for public and private actors.

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