# **Government Report** on Security of Supply

#### **Contents**

1.	Intro	duction	3
2.	2.1 2.2 2.3	, , , , ,	7 10 11
3. Ch	3.1 3.2	Long-term monitoring of the security of supply operating environment and current threats	13 13
	3.3 3.4	Digitalisation and cyber security	16 18
4.	Citize	ns' preparedness	18
5.	5.1 in the	Regulation and planning of security of supply and organisations esector  5.1.1 Act on the Measures Necessary to Secure Security of Supply and the Government Decision on the Objectives of Security of Supply	20 20 22 25 28 30 38 40
6.	Milita	ary security of supply	44
7.	Developing Finland's security of supply 46 Safeguarding adequate overall level of security of supply		
		Updating security of supply regulation	47 48 50
Δnne	<b>v</b> 1	·	54

#### 1. Introduction

The Government report on security of supply is now submitted to Parliament for the first time. The report lays out the key objectives for developing Finland's security of supply by the year 2030, describes the operating environment of security of supply in Finland and in the international context and contains an assessment of the priorities for developing security of supply in a rapidly changing operating environment. The report and its implementation will ensure adequate security of supply and its operating capacity as part of comprehensive security. The report deals with preparedness and the work to ensure security of supply in normal conditions, and their operational details are not discussed in the document.

Security of supply means preparedness for crises and disruptions as well as continuity management to ensure production, services and infrastructure critical to the livelihood of the population, the national economy and national defence during major disruptions and emergencies. Even though safeguarding basic needs remains an important task, preparing for new types of threats is also a key part of today's security of supply work.

Resilience of critical production and services depends on the ability of market actors to adapt to disruptions and to ensure the continuity of their operations. Security of supply is largely based on the ability of companies operating in critical sectors to respond to emergencies, tolerate crises and disruptions and to rapidly recover from them. Security of supply work in Finland is based on the cooperation between the public, private, and third sectors.

The international operating environment for security of supply has changed significantly as a result of the COVID-19 pandemic. Nordic cooperation in the field of security of supply has expanded, the security environment of the Baltic Sea has become increasingly important for the countries in the region, and several projects under way in the European Union also affect the organisation of security of supply at national level and the legislation on it. Finland applied for membership in the North Atlantic Treaty Organization NATO on 18 May 2022. Even though the international operating environment is changing and security of supply is becoming more international in nature, the Finnish security of supply system will also in the future be based on national preparedness and national measures.

The Russian invasion of Ukraine has fundamentally changed the Finnish and European security environment. The security situation in Europe and Finland is now more serious and more unpredictable than at any time after the Cold War. The change is expected to be long-term. The increase in tensions is also weakening security in the Baltic Sea region and makes the future more difficult to predict. The Russian attack has wideranging impacts on the relations between Finland and Russia.

On 13 April 2022, the Government submitted to Parliament a report on changes in the security environment (VNS 1/2022 vp). Changes in the situation and the decisions made also have an impact on security of supply and on developing Finland's emergency preparedness.

Finland has long traditions in security of supply work. They can be traced back to more than a century ago to the supply crisis caused by the First World War. During the Second World War, the focus in security of supply was on safeguarding defence and civilian needs. The National Board of Economic Defence was established in the 1950s, and in the 1960s, the legislative framework for preparedness was created and the activities were placed on a more organised basis.

In the 1970s, the energy crisis highlighted the impacts of international crises and dependencies. The general objectives of security of supply were set out for the first time in 1988, and the National Emergency Supply Agency started operations at the beginning of 1993. The operation environment was significantly changed by the end of the Cold War and Finland's accession to the European Union. In the 2000s, the operating environment has been shaped by increasing global interdependence, advances in technology and new threats across national borders.

Numerous reports on security of supply issues have been published in recent years. They include the Government's Defence Report (Publications of the Finnish Government 2021:80); Government Report on Finnish Foreign and Security Policy (Publications of the Finnish Government 2020:32); Government Report on Internal Security (Publications of the Finnish Government 2022:12); Government report on Intelligence Legislation (Publications of the Finnish Government 2021:94); and the Government Resolution on the Security Strategy for Society (Government Resolution of 2 November 2017). Finland also prepares a national risk assessment based on the Civil Protection Mechanism of the EU<sup>2</sup> on a regular basis and the document coordinates the risk assessments of individual actors (Publications of the Ministry of the Interior 2019:9).

The Security Strategy for Society provides a harmonised basis for the principles governing national preparedness and guides preparedness work in individual administrative branches. The Security Strategy for Society describes the cooperation model for comprehensive security, in which actors share and analyse security information, prepare joint plans and train together. Foresight is an important part of the preparedness work. The Government has commissioned the Security Committee to update the Security Strategy for Society, and the work is expected to be completed in early 2023.

<sup>2</sup> The purpose of the national risk assessment is to foresee sudden events affecting Finland that force the authorities to take exceptional measures or even request assistance from other countries. The national risk assessment identifies threats that can affect vital functions of society. The national risk assessment is closely linked to national preparedness and the Security Strategy for Society.

Security of supply is part of the comprehensive security described in the Security Strategy for Society, and it serves as the Finnish model for cooperation in the field of preparedness. Interaction between different actors (the authorities, private sector, non-governmental organisations and individuals) in preparedness matters at national, international, regional and local level is essential from the security of supply perspective.

The Government Decision on the Objectives of Security of Supply (1048/2018) contains provisions on the level of security of supply. The decision lays out the starting points, principles, national objectives and priorities for security of supply. The decision is updated on a regular basis.

Security of supply regulation concerns preparedness and security of supply work taking place in normal conditions. The Emergency Powers Act (1552/2011) contains provisions on the powers of the authorities in emergencies. The Ministry of Justice launched a comprehensive reform of the Emergency Powers Act in April 2022. The State of Defence Act (1083/1991), which is applied during national emergencies caused by armed conflicts, is the second special act containing provisions on emergency conditions

Several assessments and reports on security of supply and the National Emergency Supply Agency were prepared between— 2020 and 2021.<sup>3</sup> Development needs arising from the capacity of the National Emergency Supply Fund, regulation of security of supply, Government Decision on the Objectives of Security of Supply, the role of Parliament in security of supply issues, material preparedness, the network model for security of supply, and situational picture have emerged on the basis of these documents and the assessments produced by the National Emergency Supply Organisation.

The reports on security of supply and the lessons learned from the COVID-19 pandemic show that even though Finland has a well-functioning security of supply system, the

Evaluation of the National Emergency Supply Agency by a consortium led by the University of Vaasa 28 May 2021 (From Security Stocks to Data Security: The Evaluation of the National Emergency Supply Agency (NESA), Publications of the Ministry of Economic Affairs and Employment 2021:32 <a href="https://julkaisut.valtioneuvosto.fi/handle/10024/163181">https://julkaisut.valtioneuvosto.fi/handle/10024/163181</a> (in Finnish)).

Huoltovarmuusneuvoston tarkastelu koronakriisin vaikutuksista huoltovarmuuteen 19.11.2020 (Huoltovarmuusorganisaation julkaisu <a href="https://www.huoltovarmuuskeskus.fi/files/64e37c6d808d5e981328218248cd2ae1a42384fb/tarkastelu-koronakriisin-vaikutuksista.pdf">https://www.huoltovarmuuskeskus.fi/files/64e37c6d808d5e981328218248cd2ae1a42384fb/tarkastelu-koronakriisin-vaikutuksista.pdf</a>).

Audit report on security of supply prepared by the National Audit Office Finland 23 June 2021 (Audit report 10/2021: Security of supply and safeguarding it during the Covid-19 pandemic) <a href="https://www.vtv.fi/app/uploads/2021/06/VTV-Tarkastus-10-2021-Huoltovarmuus-ja-sen-turvaaminen-covid-19-pandemian-aikana.pdf">https://www.vtv.fi/app/uploads/2021/06/VTV-Tarkastus-10-2021-Huoltovarmuus-ja-sen-turvaaminen-covid-19-pandemian-aikana.pdf</a> (in Finnish)).

changing operating environment requires sufficient resources and an updated operating model.

The strategic objective of security of supply is to safeguard the minimum basic needs of the population, national economy and national defence. Finland's special features, such as cold climate, remote location, dependence on maritime transport, energy-intensive economic structure, long distances and dependence on foreign imports, are taken into account in the objectives of security of supply work and in the selection of the instruments used.

As a rule, the level of national preparedness for Finland's security of supply is good. Abundant natural resources, good food production capacity, highly developed welfare and education system, well-functioning infrastructure and close cooperation between the public, private and third sectors are some of Finland's strengths helping us to maintain security of supply at a high level.

In the new operating environment, Finland must assess the overall adequacy of its preparedness, especially as the focus of security of supply is shifting towards ensuring resilience.

National security of supply is based on well-functioning international markets, broad industrial and production base, stable central government finances and a competitive national economy. In Finland, critical infrastructure, services and production are mostly supplied and maintained by private companies. Many of the critical companies are internationally owned or multinational corporations. Organisations under public control also need production inputs from the international markets so that they can operate.

Safeguarding security of supply is one of the strategic objectives of state-owned business operations.<sup>4</sup>

As a rule, market-based approach should also apply when societies are facing crises. If the markets are unable to maintain the basic economic and technical functions of society during disruptions and emergencies, the public sector must take the necessary measures to supplement the functioning of the markets. The purpose of the security of supply work is to make the preparations required to maintain the critical functions of society as close to normal as possible in all situations.

As a result of the COVID-19 pandemic and the war in Ukraine, issues concerning comprehensive security and security of supply have attracted more attention than in

Revenue through responsible ownership. Government Resolution on the State Ownership Policy 8 April 2020.

the past. It also seems that the expectations concerning security of supply have changed. This has also been prompted by the growing debate within the European Union on resilience and on safeguarding critical functions and production (strategic autonomy).

It is difficult to prepare for all risks in advance, and there are also major disruptions that cannot be managed with security of supply measures. The operating field of security of supply must be kept clear.

The preparation of the report has been monitored by a parliamentary monitoring group chaired by Minister of Employment Tuula Haatainen. Workshops have also provided Parliament and stakeholders (including business operators and various organisations) with an opportunity to participate in the preparation of the report. The preparation of the report in central government has been steered by a cross-administrative management group. The draft report was circulated for statements on the Lausuntopalvelu.fi platform between June and August 2022. A total of 93 statements were submitted.

A concise description of Finland's security of supply system is presented in the Annex to the report.

#### 2. International cooperation

#### 2.1 International preparedness activities

The COVID-19 pandemic and especially the war in Ukraine have changed the international operating environment for security of supply. In addition to national preparedness, international cooperation has assumed a more important role. International cooperation supplements national preparedness but it cannot act as a substitute for the need for national preparedness and national action.

In international comparisons, the Finnish security of supply model is considered effective and comprehensive. Switzerland, Australia, Canada, New Zealand and the United States are some of Finland's reference countries in preparedness matters. Many countries have maintained emergency stockpiles, especially in energy products and critical health care materials. Geopolitics, history, political systems and culture influence the way in which preparedness and security of supply activities are organised.

Finland actively participates in international preparedness and security of supply cooperation at Nordic, European Union and global level.

Nordic countries have shown growing interest in closer cooperation, especially against the background of the COVID-19 pandemic and the strained security situation in areas close to the region. Developing the cooperation was one of Finland's priorities during its Presidency of the Nordic Council of Ministers in 2021. At Finland's initiative, the Nordic Prime Ministers issued a joint statement on the matter in November 2021, emphasising the importance of preparedness and cooperation in an unstable and unpredictable operating environment.

The cooperation includes such areas as pandemic vaccines. A preliminary study on Nordic cooperation in vaccine development and production was prepared in 2022.<sup>5</sup>

Market-based security of supply requires an extensive network of political and commercial international relations. The stability and development of an open, rules-based international trade system is important to Finland. Expanding the trade agreement network of the EU and more effective implementation of the existing trade agreements can provide more alternatives to production inputs and supply chains alongside the promotion of market access.

Finland applied for membership in the North Atlantic Treaty Organization NATO on 18 May 2022. The ratification process is now under way, and it is the final stage before Finland's full membership in the alliance. Finland is still an observer member of the organisation and in this capacity, it may attend NATO meetings where it has the right to speak but no voting rights (veto power).

Participation in the NATO Partnership for Peace programme since 1994 has laid the foundation for Finland's full membership. Finland has strong armed forces and its defence budget is at the target level set by NATO (2% of GDP). The Finnish model of comprehensive security has attracted interest in the alliance.

With the membership in the alliance, the nature and practices of the cooperation between Finland and NATO will change from a non-binding Partnership for Peace to close cooperation based on common NATO standards. This change will also affect functions in the field of resilience, civil preparedness and security of supply.

The purpose of NATO's resilience activities is to strengthen the alliance's resilience and the ability of civilian actors to support military defence. NATO has no control over the security of supply activities of its member states but it has developed an assessment

A Nordic joint feasibility study. Potential for collaboration on innovation, development and production of vaccines. Vinnova Report VR 2022:03.

model for its member states that comprises seven baseline requirements for civil preparedness. This allows the member states to evaluate their own level of civil preparedness and thus also the joint resilience of NATO. Finland has participated in NATO's civil preparedness and resilience activities since the beginning of our partnership cooperation. Finland's national security of supply model currently meets the needs set out in the seven baseline requirements of NATO. The Finnish model is more comprehensive than the basic requirements as it also covers a number of other sectors. However, NATO's Resilience Committee is broadening the content of the requirements, making them more similar to the Finnish concept of security of supply. The membership also requires more focus on national coordination.

The NATO Summit held in Madrid in June 2022 updated the alliance's strategic concept, in which resilience is a natural component, and in which resilience means the alliance's ability to prepare for, resist, respond to and quickly recover from strategic shocks and disruptions. Resilience is not a secondary task in NATO but an essential part of its defence and deterrence. However, NATO is primarily a defence alliance that exists to meet the member states' security needs and in which resilience issues are develop alongside security matters.

Under Article 3 of the NATO Treaty, member states must maintain, at their own initiative, continuous national capacity to resist armed attacks. This obligation also covers hybrid threats and influencing of vital national functions. National civil preparedness and security of supply arrangements and capabilities are at the core of this obligation. The practical implementation of the above preparedness is at the discretion of individual member states.

Article 8 of the NATO Treaty is also important from the perspective of security of supply as it prevents NATO member states from concluding agreements with third parties that are in conflict with the obligations arising from the membership. For example, if a non-NATO country concludes an agreement on security of supply cooperation during a crisis with a NATO member state, the application of the agreement is always secondary to the needs of NATO member states arising at the same time. For example, the bilateral security of supply agreement between Finland and Norway contains a reservation stating this. In its opinion on the Government report on changes in the security environment, the Parliamentary Defence Committee stated that NATO membership would improve Finland's security of supply.<sup>6</sup>

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<sup>&</sup>lt;sup>6</sup> PuVL 3/2022 vp.

#### 2.2 Bilateral cooperation in security of supply

Finland has traditionally engaged in bilateral cooperation with Sweden and Norway. Finland has agreements on economic cooperation during international crises (security of supply agreements) with both Sweden and Norway.

An agreement on economic cooperation during international crises has been concluded with Sweden (107/1992). The agreement was signed in 1992, before the two countries joined the EU. The agreement, which covers cooperation at ministerial level, has been concluded for serious international tensions considered a war or a threat of war. The objectives of the agreement mainly concern economic cooperation, exchange of information in security of supply issues and contacts during international crises.

Overall, cooperation in security of supply matters between Finland and Sweden has been in modest scale. In practice, there has been no bilateral committee work based on the security of supply agreement since the 1990s. In the current operating environment, it is important to strengthen bilateral cooperation in the field of security of supply, especially between Finland and Sweden.

There is active practical-level cooperation between the National Emergency Supply Agency and the Swedish Civil Contingencies Agency (MSB). At the beginning of 2020, the agencies prepared a common strategic roadmap for security of supply cooperation, which sets out the types of cooperation until 2025. The roadmap describes the process by which closer bilateral cooperation creates an administrative framework, and a common understanding of the operating environment as well as the themes in which bilateral cooperation strengthens security of supply and general preparedness of the two countries. The themes include the networking and interdependencies of the critical functions of society, regional dependencies on global value and supply chains, and the needs they produce for up-to-date situational awareness and cross-sectoral and public-private cooperation. Themes are transferred to practical cooperation through such instruments as joint studies, analyses and exercises.

The agreement concluded with Norway in 2006 (55/2006) concerns the maintaining of the exchange of goods and services during military conflicts, crises and internal disruptions. Under the agreement, sectoral agreements and decisions on joint preparedness measures can also be introduced. A monitoring committee meets regularly to review the implementation of the agreement.

In addition to bilateral cooperation, Finland, Sweden and Norway have also promoted security of supply on a tripartite basis. The Critical Nordic Flows report published in

spring 2020<sup>7</sup> describes how Finland, Sweden and Norway can deepen their cooperation in order to secure the product and service flows crucial to the basic functions of society. Communication and digital networks, energy, food, the financial sector, medicines and logistics are the key sectors listed in the report.

#### 2.3 Key EU projects impacting security of supply

Harmonised European Union legislation and the single market play an important role in safeguarding Finland's security of supply. For example, functioning of the electricity and gas markets is essential for securing Finland's energy supply. The agricultural policy of the EU makes agriculture possible in the northern conditions of Finland. The single market and the functioning of logistic chains (including maritime transport) are a prerequisite for the availability of many items important to security of supply and for safeguarding foreign trade. Security of supply work is increasingly based on cooperation between EU countries and partly carried out within the framework of EU regulation.

A number of initiatives that will affect security of supply work in Finland have been adopted by the EU or are pending in the Union. The most important of these is the CER Directive (Resilience of Critical Entities). The purpose of the directive is to improve the resilience of the services essential for the European Union, to maintain vital and economically important functions of society and to ensure that critical players operating in the single market are required to maintain a uniform level of preparedness, regardless of the Member State in which they operate.

The directive specifies ten critical sectors that provide such services. The sectors are energy, transport, banking, financial markets, health, food supply, drinking water and waste water management, digital infrastructure, space and, to a limited extent, the public sector. The directive is expected to enter into force in December 2022.

The directive will impact the activities of both the authorities and companies identified as critical entities. The Member States must prepare a national strategy to strengthen resilience. The strategy is based on a national CER risk assessment and a set of criteria for identifying critical entities. Based on these, a governance framework to achieve the strategic objectives must be established, and the Member States must also designate a competent authority or authorities monitoring and supporting the resilience of critical entities and a national CER point of contact. Under the directive, the authority would

Critical Nordic Flows: Collaboration between Finland, Norway and Sweden on Security of Supply and Critical Infrastructure Protection.

Proposal for a Directive of the European Parliament and of the Council on the resilience of critical entities (COM/2020/829 final).

also have the right to impose fines if companies fail to take the measures to improve resilience set out in the directive.

Effective implementation of the CER Directive in Finland would strengthen the resilience of critical national entities. As part of the implementation project, the need to develop and change the way in which the national authorities act in matters concerning the directive should also be assessed. In its opinion on the Government report on changes in the security environment, the Parliamentary Administration Committee concludes that the identification of critical infrastructure should be carried out as quickly as possible, as this is a prerequisite for the systematic protection of critical infrastructure. Finland's national security of supply legislation and the activities in the sector serve as a good basis for this work.<sup>9</sup>

There are also a number of other initiatives on preparedness and security of supply under way in the EU. For example, the proposed NIS2 Directive would update the Network and Information Systems Directive (NIS) of the EU to reflect the changed operating environment.<sup>10</sup> The purpose of the new directive is to strengthen cyber security for sectors and actors considered critical at EU level and in individual Member States. The directive is expected to be adopted in autumn 2022.

On 24 September 2020, the European Commission presented a proposal for a regulation on digital resilience in the financial sector (DORA Digital Operational Resilience Act). The purpose of the proposal is to streamline the ICT risk management of financial market actors, the testing of systems, the supervisors' awareness of the cyber risks encountered by supervised entities and incidents related to ICT issues. The aim is to address risks that have been overlooked in the absence of uniform regulation.

The European Health Union will also be developed by establishing the European Health Emergency Preparedness and Response Authority (HERA), which operates under the auspices of the European Commission. Its core tasks include safeguarding the development, manufacture, purchases and fair distribution of key medical countermeasures.

The Civil Protection Mechanism (UCPM) of the EU covers natural and man-made disasters. The COVID-19 pandemic and the war in Ukraine have highlighted the role of

Proposal for a Directive of the European Parliament and of the Council on measures for a high common level of cybersecurity across the Union, repealing Directive (EU) 2016/1148 (COM(2020) 823 final).

<sup>9</sup> HaVL 14/2022 vp.

Proposal for a Regulation of the European Parliament and of the Council on digital operational resilience for the financial sector and amending Regulations (EC) No 1060/2009, (EU) No 648/2012, (EU) No 600/2014 and (EU) No 909/2014 (COM(2020) 595 final).

the UCPM. Finland is developing the capabilities of international rescue operations within the framework of the mechanism and is preparing to participate in the EU-level strategic emergency stockpiling system (CBRN threats). International assistance provided by Finland through UCPM is also a way to demonstrate solidarity during crises.

The objective of the Single Market Emergency Instrument now under preparation is to reduce the negative impacts of exceptional situations on the internal market. The European Commission is expected to present its proposal during the second half of 2022. The aim of the proposal is to ensure the functioning of the single market (movement of goods, capital, services and people) during crises. It might be useful in crisis preparedness, such as in securing the supply of raw materials or intermediate products.

In November 2021, the European Commission issued a Communication on a contingency plan to ensure food supply and food security during crises.12 The contingency plan lists nine measures, one of which is the establishment of a permanent European food security crisis preparedness and crisis management mechanism. One aim is to map the risks and vulnerabilities of the food supply chain of the EU and its critical infrastructure and the structural problems facing them.

# 3. Changes in the security of supply operating environment and their impacts

In addition to climate change and digitalisation, the national risk assessment<sup>13</sup> identifies cyber threats and hybrid influencing as phenomena that have a wide-ranging impact on Finnish society. The national risk assessment also draws attention to the ageing of the population and the resulting decline in working-age population as well as urbanisation as phenomena that must be taken into account in comprehensive security. They also highlight the need for changes in the security of supply system. Ensuring critical competence at national level in different sectors and regions is also indirectly linked to the overall situation.

## 3.1 Long-term monitoring of the security of supply operating environment and current threats

The Government's Defence Report and the Government Report on Internal Security published in 2021, the Government Report on Finnish Foreign and Security Policy

Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Contingency plan for ensuring food supply and food security in times of crisis (COM(2021) 689 final).

<sup>&</sup>lt;sup>13</sup> Publications of the Ministry of the Interior 2019:9.

published in 2020, and the update of the Security Strategy for Society published in 2017 as well as the more comprehensive national risk assessment added to it in the following year recognise the challenges of the operating environment as well as the unpredictability and speed of the changes. There are also risks that are difficult to identify in advance.

In connection with the preparation of the current Government Decision on the Objectives of Security of Supply (1048/2018) and the previous decision (adopted in 2013), future changes in the operating environment of Finland's security of supply were anticipated with the help of scenario work. Scenario work is used to identify the key drivers of change in the operating environment, trends affecting security of supply work, uncertainties that challenge it, and possible weak signals. When security of supply is based on a competitive market economy, considering the views of the companies and organisations operating in the National Emergency Supply Organisation is essential for anticipating the need to develop security of supply.

Against the background of the Russian invasion of Ukraine and its wide-ranging and long-term impacts, matters must also be examined from the perspective of security of supply. In addition to the impacts of the conflict, alternative trajectories of the war must also be anticipated. The National Emergency Supply Agency carries out scenario work on alternative trajectories of the war in Ukraine and their impacts on Finland and Finland's security of supply. The purpose of the scenario work is to find out what Finland should be prepared for during the next three years.

The Russian invasion of Ukraine has fundamentally changed the security and operating environment and it has shown that traditional threats must still be taken seriously. The changes arising from the war are discussed in the Government report on changes in the security environment (VNS 1/2022 vp) presented in April 2022. Traditional threats are combined with new threats, such as cyber and hybrid influencing. Preparing for multiple threats in an interdependent world requires a hard-to-define balance between safeguarding national security of supply and preparedness based on international cooperation.

Geopolitics and geoeconomics can together create a need to change priorities in measures concerning material preparedness and diversification of global value and supply chains and in ensuring their continuity.

The vital online services and service processes enabling the continuity of society's operations are fragmented in terms of location and ownership. For many people, broadband and mobile networks are the only way to receive official information and news as a growing proportion of the population no longer uses conventional radio or television receivers. Growing interdependence gives rise to new vulnerabilities, which

are often located outside the country's borders. This poses challenges to both national preparedness and security of supply activities. Rapidly changing situations call for anticipation, an up-to-date situational picture and quick response.

#### 3.2 Climate change

Climate change impacts society and its vital functions in many different ways, and the progress of climate change constitutes a risk to Finland's security of supply. Firstly, the regional risks typically arising from extreme weather phenomena within Finland's borders are changing, and climate change will also give rise to new risks for Finland's ecosystems, livelihoods and critical infrastructure. Secondly, climate change will also increase the likelihood of risks that affect Finland through cross-border impacts. Thirdly, the risks arising from climate change mitigation (transition risks) have been highlighted in recent years.

In security of supply work, it is particularly important to examine the impacts of climate change from the perspective of critical infrastructure and the continuity of production and services. As Finland's vital functions and critical infrastructure, services and production maintaining them are globally networked and linked to long value and supply chains, the impacts of climate change can disrupt security of supply, irrespective where they occur.

Energy transition, the impacts of extreme weather phenomena on the reliability of the physical infrastructure and climate risks to food production and forestry are the key climate change issues from the perspective of national security of supply. Degradation of biodiversity may also cause problems for security of supply.

The essential transition to zero-emission energy sources poses security of supply challenges. At the moment, the security of fuel supply is primarily based on the stockpiling of imported fuels. Crude oil, other oil feeds, petroleum products, natural gas and coal are products falling under the scope of companies' stockpiling obligations. The National Emergency Supply Agency also maintains emergency and security stockpiles of fuels.

Stockpiling of imported fuels does no longer have the same impact on security of supply as in the past because the combustion-based energy generation capacity is shrinking. More importance is now attached to issues concerning the reliability of the electricity transmission and distribution grids, adequacy of the power supply and the flexibility of the electricity system. The problem is highlighted in district heating supply, which is local in nature, and the number of non-combustion heat-generation options may be limited.

The green transition of the energy system is essential to mitigate climate change so that Finland can meet the greenhouse gas reduction obligations set for it by the EU for 2030 and the nationally set carbon neutrality target for 2035. The EU is seeking to end all imports of Russian energy in the next few years. Finland is decoupling from Russian energy very quickly. The green transition will help to end dependence on Russian energy imports and thus it will also improve security of supply in the energy sector.

#### 3.3 Digitalisation and cyber security

The cyber environment has changed permanently. The change has been prompted by the changed geopolitical situation and the COVID-19 pandemic, as a result of which the entire digital operating environment was fundamentally changed by the use of new technologies and technological advances. Digital security includes matters related to risk management, business continuity management and preparedness as well as cyber security, information security and data protection issues.

Digitalisation is present in all human activities, including working life. Inadequate working life skills increase information security risks and expose companies and individuals to disruptions. The digital operating environment is part of the basic structure of society. Cyber security is an integral part of all functions, processes and systems in society. Teaching of cyber security skills must be an integral part of educational and training offerings at all levels. In their opinions on the Government report on changes in the security environment, several parliamentary committees drew attention to cyber skills and the importance of enhancing them.

Well-functioning communications services and networks are a prerequisite for the use of many services provided by private and public sector operators. Many everyday services and routines used by ordinary citizens also depend on the reliable functioning of communications services and networks.

Many services vital to society, such as payment transactions and power grids, depend on the uninterrupted functioning of communications services and networks. For example, the information technology services used by companies and many government agencies require telecommunications connections with foreign data centres to function properly. Disruptions affecting them pose a significant threat to the functioning of society as the resulting problems cannot necessarily be solved in Finland. A significant proportion of the devices, equipment and means of transport are today connected to the internet and they are controlled by processing digital information, which means that more attention must also be paid to their security.

Due to the interdependencies between electronic systems and services, the concatenation and recurrence of faults and disruptions pose a significant threat.

Disruptions affecting electronic services may also lead to disruptions in physical services, such as water supply.

A cyber threat means a potential situation, event or activity that can damage or disrupt network and information systems, users of such systems and other persons, or otherwise adversely affect them. A cyber threat may endanger the availability, integrity or confidentiality of a function vital to society or that of other functions or information that are dependent on the cyber operating environment.

Changes in the foreign and security policy operating environment are also reflected in the cyber environment. Cyber attacks have become more common around the world, and they have also been directed against central and local government actors as well as business operators in Finland. The war in Ukraine has also highlighted the importance of managing the supply chains of software and digital services. The global component shortage has also affected systems maintenance. It is now increasingly important to understand the potential risks to the entire value chain and to identify places where systems are connected to each other.<sup>14</sup>

A high level of cyber security is achieved when each actor operating in the digital society accepts responsibility for ensuring it. The Government resolution on Finland's cyber security strategy adopted in 2019<sup>15</sup> recognised the need to improve the overall state of national cyber security.

Finland's Cyber Security Strategy and its implementation are part of the implementation of the Security Strategy for Society (2017) and the Cybersecurity Strategy of the European Union. The development of cyber security is also guided by the Cyber Security Development Programme (2021), <sup>16</sup> which strengthens Finland's cyber capabilities and skills and helps to build an ecosystem of public and private actors. Cyber security will also be taken into account in the climate and energy strategy currently under preparation.

The Finnish cyber security and defences as well as the countermeasures incorporated in them must be dimensioned to prevent an extensive cyber attack by a state actor against national decision-making, security authorities and critical infrastructure. Strong national cyber security requires competence and broad participation at all levels of

In connection with the threat assessment of public administration and the identification of cyber threats, the Information Management Board has prepared a recommendation describing the assessment criteria for information security in public administration (Julkri) and providing instructions on its use (The publication is in Finnish). Publications of the Ministry of Finance 2022:43.

<sup>&</sup>lt;sup>15</sup> Finland's Cyber Security Strategy 2019. Government Resolution of 3 October 2019.

Cyber Security Development Programme. Publications of the Ministry of Transport and Communications 2021:7 (in Finnish).

society, close cooperation, especially between public administration and the business sector, and a strong domestic cyber security industry.

#### 3.4 Hybrid threats

In hybrid influencing, a state or other actor seeks to exploit the vulnerabilities of the target by different means to achieve its own goals. A broad range of instruments is used, including political, diplomatic, economic and military means as well as information and cyber influencing.

In hybrid threats, there is extensive overlapping of external and internal security. Influencing may target Finland directly or Finland as part of more extensive operations. Hybrid influencing can target all vital functions of society. Key services or critical infrastructure may be targeted, directly or indirectly.

Prompted by the changes in its security environment, Finland is preparing for a situation in which it is targeted for exceptional, extensive and complex hybrid influencing in the short and in the long term. The influencing may include military pressure or the use of military force. Hybrid influencing by state actors is linked to Finland's security policy choices. The comprehensive security model must be adapted to the current security situation.

The changed security environment requires continuous threat assessment and better overall coordination as well as better identification and prevention of hybrid threats. The ministries and their administrative branches as well as international cooperation structures, (including the EU and NATO partnership), will be closely involved in the threat assessment activities.

#### 4. Citizens' preparedness

From a citizen's perspective, security of supply means the ability to live everyday life that is as close to normal as possible despite an emergency, a crisis or other major disruptions. In everyday life, effective security of supply means that citizens are able to purchase essential basic goods and services during disruptions. The duration and impacts of the disruptions can be limited by means of security of supply measures. Preparedness aims to ensure that even though services can be temporarily disrupted, society can recover from the disruptions as quickly and efficiently as possible.

Better consideration should be given to different age and population groups in preparedness measures. According to the opinion of the Ombudsman for Children, children in particular are inadequately taken into account in preparedness arrangements, even though they are more vulnerable than adults due to their age and level of development.<sup>17</sup>

Security of supply also includes independent action by ordinary citizens to ensure self-sufficiency and functional capacity during disruptions. Under the 72-hour recommendation, prepared by the National Emergency Supply Agency, the authorities and various organisations, households should stockpile such items as food, water, medicines and cash for at least three days. Citizens should also be familiar with the basis of preparedness. Adequate citizens' preparedness supports psychological resilience and makes it easier for security of supply actors to restore services to normal during disruptions. The need for preparedness and interest in the topic among citizens in now significantly higher than before the war in Ukraine.

Most of Finland's civil defence shelters are in good condition and meet protection requirements. In 2020, there were approximately 54,000 civil defence shelters in Finland, with space for approximately 4.4 million people. The national review of civil defence shelters will be launched in 2022 under the auspices of the Ministry of the Interior, and the necessary development measures will be planned on the basis of its results.

Knowledge of security of supply work and citizens' preparedness skills are an important component of comprehensive security. Security of supply and citizens' preparedness must be adequately considered in curricula at all levels of education. To ensure this, education institutions must be provided with up-to-date and extensive teaching material on security of supply as a basis for the curricula. In their opinions on the Government report on changes in the security environment, several parliamentary committees also drew attention to the teaching of preparedness and security skills and the strengthening of citizens' resilience. Non-governmental organisations, including volunteering, also play an important role in this work.

Safeguarding the information security of consumers' own equipment and information systems is an essential part of citizens' preparedness. In addition to safeguarding citizens' own information and communication channels, protection of the devices prevents their use against critical targets.

The parliamentary committee examining the development of conscription and the fulfilling of the national defence obligation concluded that the non-military service should play a more central role in the strengthening of comprehensive security and that

<sup>&</sup>lt;sup>17</sup> Yhdenvertaisuus pandemian ajassa. Lapsiasiavaltuutetun vuosikertomus 2021.

voluntary activities should be encouraged as part of the work supporting comprehensive security. 18

The COVID-19 pandemic, which has been going on for two years, has tested citizens' resilience, which also plays a key role in citizens' preparedness. Meeting citizens' information needs is essential for enhancing resilience. Communication adds certainty to the activities and preparedness of the authorities and enhances trust in them. The media play an important role in this work. When the authorities disseminate information, it must be ensured that it reaches all age and population groups and that the information is sufficiently up-to-date and reliable and provided in several languages.

#### 5. Operating model of security of supply

## 5.1 Regulation and planning of security of supply and organisations in the sector

# 5.1.1 Act on the Measures Necessary to Secure Security of Supply and the Government Decision on the Objectives of Security of Supply

Even internationally, the Finnish concept of security of supply is unique. Under the Act on the Measures Necessary to Secure Security of Supply (1390/1992), the aim is to secure the economic functions and related technical systems that are vital to safeguarding the livelihood of the population, the national economy and defence operations during emergencies or comparable major disruptions (security of supply). To ensure security of supply at all times, sufficient preparedness must be implemented and maintained to ensure the production of essential items, and steer production, distribution, consumption and foreign trade accordingly.

Under the Act, the Government sets the general objectives for security of supply, which define the level of preparedness, considering the minimum needs of the population, essential economic activities and national defence. The Act only applies to the economic activities carried out at the level of society.

Individual ministries are responsible for security of supply in their own administrative branches and for developing it. The Ministry of Economic Affairs and Employment is responsible for developing security of supply and for coordinating preparedness measures.

Development of conscription and fulfilling national defence obligation:

Report of the Parliamentary Committee. Publications of the Finnish Government 2021:91 (in Finnish)

The regulatory framework for security of supply has proved effective and it has also enabled the rapid implementation of the measures required during the COVID-19 pandemic. The Act on the Measures Necessary to Secure Security of Supply was adopted in 1992 and a small number of amendments has been made to the Act after that. To ensure that the Act can better meet the requirements of the changing operating environment, such as those arising from international cooperation, the need for the amendments should be assessed as a whole. At the same time, it can also be assessed whether the objectives and the concept of security of supply are up to date at the regulatory level and in what situations the National Emergency Supply Agency exercises public authority.

National implementation of the CER Directive on the resilience of critical entities impacts national security of supply regulation, including the regulation applying to companies identified as critical to the functioning of the sectors falling under the scope of the Directive and regulation applying to the competent authority.

The Government Decision on the Objectives of Security of Supply (1048/2018) sets out the general objectives for security of supply work at national level. The decision lays down the starting points, principles, national objectives and priorities for security of supply. The decision also steers the priorities for international cooperation in the field of security of supply (international, European and global dimension).

The decision is constructed on a sector-specific basis, covering such matters as the protection of critical infrastructure, digitalisation, financial services and systems, logistic networks and services, media, energy preparedness, critical production and services (water supply, industry, infrastructure construction and maintenance, food supply, social welfare and health care, and pharmaceutical and waste management) and the national competence base, technologies, production and services supporting military defence as well as the financing and development of security of supply operations.

The current Government decision was adopted in 2018 and like the Security Strategy for Society and the national risk assessment, it takes into account the complex nature and interdependencies of the operating environment and its sensitivity to disruptions. According to the decision, the national competence base for security of supply must be enhanced. In particular, this applies to analysis and research activities supporting the focusing and dimensioning of security of supply measures, and safeguarding the functioning of networks. The functioning of preparedness and plans is tested and assessed in exercises and by utilising the lessons learned from disruptions.

Although Finland has encountered both the COVID-19 pandemic and the war in Ukraine, the objectives and content of the Government decision remain highly relevant.

However, more effective instruments to monitor the implementation of the decision and to assess its effectiveness are needed.

# **5.1.2** Role of the National Emergency Supply Agency and the National Emergency Supply Organisation

The National Emergency Supply Agency is responsible for developing and maintaining security of supply. Under the Act on the Measures Necessary to Secure Security of Supply (1390/1992) the task of the National Emergency Supply Agency is to develop cooperation between the public administration and the business sector in security of supply matters; ensure the functioning of technical systems that are critical to security of supply; secure the production of essential goods and services as well as production that supports military defence; manage compulsory stockpiling and security stockpiling; maintain any such materials in the state emergency stockpiles that are essential to achieve the goals specified in section 1 of the Act and to meet the international contractual obligations binding on Finland.

Provisions on the other tasks of the National Emergency Supply Agency are contained in the Government Decree on the National Emergency Supply Agency (455/2008). The Board of Directors of the National Emergency Supply Agency has general competence to decide on matters that are far-reaching and important in principle from the perspective of the National Emergency Supply Agency and matters that are not specified as the responsibilities of the Chief Executive Officer. The National Emergency Supply Organisation includes the National Emergency Supply Council, the tasks of which is to maintain and develop contacts with key partners, monitor the state and development of security of supply and to make proposals for measures.

The National Emergency Supply Agency is part of central government but it is not organised in the same manner as other government agencies. The National Emergency Supply Fund, which operates under the auspices of the National Emergency Supply Agency, is managed on a commercial basis, unless otherwise provided by reasons of security of supply. The Chief Executive Officer is in charge of the operational aspects of the National Emergency Supply Agency. All staff members of the National Emergency Supply Agency are under contractual employment relationships. The National Emergency Supply Agency is steered and supervised by the Ministry of Economic Affairs and Employment.

#### National Emergency Supply Organisation – sectors and pools

Provisions on the objectives and tasks of the sectors and pools belonging to the National Emergency Supply Organisation as well as matters pertaining to establishing them and appointment of their members are also contained in the Act on the Measures

Necessary to Secure Security of Supply (1390/1992). Under the Act, the sectors and pools operate as permanent cooperation bodies.

Effective contract-based cooperation between the public and private sectors is one of the strengths of the Finnish security of supply system. The sectors and pools of the National Emergency Supply Organisation form a cooperation structure that extensively covers the value and supply chains that are essential for security of supply and the key actors operating in them. Most of the infrastructures, services and production critical to security of supply are owned by private sector actors. Thus, companies play a key role in the National Emergency Supply Organisation.

As a rule, preparedness in the private sector is on a voluntary basis, unless otherwise specified in special regulation applying to the sector. For companies, preparedness is based on the fundamentals of business operations, agreements concluded with customers, and risk management in these areas. By participating in the cooperation, companies can promote their own preparedness work and business continuity management.

Sectors and pools maintain and develop security of supply and continuity management in the network of companies and organisations of their sectors. The task of the sectors is to promote cooperation between business operators and the authorities and to monitor the activities of the pools in their sector. The sectors coordinate the statutory preparedness obligations with independent and contract-based preparedness for security of supply work.

The pools support and promote sector-based and site-specific operational preparedness and their activities are planned and carried out in cooperation with business operators. The activities of the pools are based on agreements between sectoral organisations and the National Emergency Supply Agency.

Up-to-date situation awareness, its interpretation and, in particular, understanding the trends arising from it, play a key role in the security of supply work. Reliable and proactive situation awareness work can only be carried out if sufficient real data is obtained from the authorities, international partners, Finland's network of diplomatic missions, and companies (especially those with international operations). The pools act as sensors of the situational picture produced by the National Emergency Supply Agency. They also produce valuable understanding of the risks facing Finland's security of supply. The COVID-19 pandemic and the war in Ukraine have demonstrated the effectiveness of the situation awareness work carried out by the National Emergency Supply Organisation.

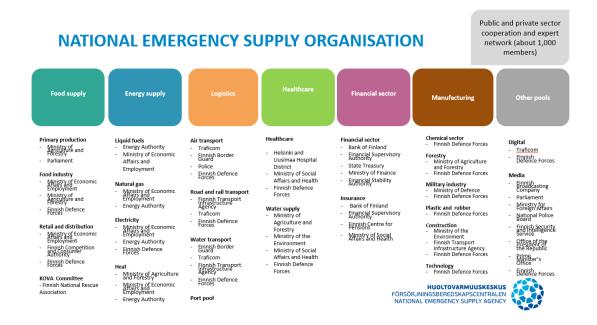


Figure 1 shows the six different sectors of the National Emergency Supply Organisation and the pools operating within their overall framework

Ensuring critical competence at all levels of the National Emergency Supply Organisation and managing situation awareness and foresight work are some of the major challenges facing the organisation in the coming years.

#### **Programme work in the National Emergency Supply Agency**

Extensive and long-term programme work is emphasised in the activities of the National Emergency Supply Agency. The programmes Energy 2030, Digital Security 2030, Logistics 2030 and Region 2030 are currently under way.

The purpose of the *Digital Security 2030* programme is to improve the capacity of the key actors of a digitalising society to identify and combat cyber threats. It enhances the capacity of these actors to detect the disruptions caused by cyber attacks and to recover from them.

Uninterrupted supply of energy is a basic prerequisite for all vital functions of society. The purpose of the *Energy 2030* programme is to safeguard uninterrupted supply of energy for the needs of society, now and in the future. For example, the programme seeks to find new ways to ensure security of energy supply in carbon neutral Finland.

The *Region 2030* programme was set up to meet the needs of regional actors and it seeks to achieve this by surveying the current situation and by carrying out high-quality basic surveys. Decisions on follow-up measures will be made on the basis of the situational picture produced by the programme. The programme supports the development of regional security of supply and related preparedness, recognising the challenges facing different regions.

The purpose of the *Logistics 2030* programme is to strengthen logistics and transport during major disruptions and to support preparedness among professionals in the sector. A broad range of different stakeholders, companies (including state-owned companies) and research organisations are involved in the projects carried out as part of the programme.

#### 5.1.3 National Emergency Supply Fund

Since 1993, the National Emergency Supply Agency has managed the off-budget National Emergency Supply Fund, in which the emergency supply contribution collected under the Act on the Excise Duty on Liquid Fuels (1472/1994) is entered.

The emergency supply contribution consists of the strategic stockpile fees for imported energy commodities, and it is collected as part of energy taxes on electricity, coal (heat), natural gas (heat), petrol and fuel oil (diesel oil and light and heavy fuel oil).

The revenue from the emergency supply contribution has been decreasing for many years and there are two reasons for this trend. The emergency supply contribution was introduced in 1992 and no inflation adjustments have been made since then. A shift from fossil energy sources to other energy sources is the other reason for the downward trend. The National Emergency Supply Agency can only meet the financing needs for security of supply required under the law and a rapidly changing operating environment if the long-term capacity of the National Emergency Supply Fund is secured.

The National Emergency Supply Fund covers the expenditure arising from security of supply measures that can be used to safeguard the continuation of economic activities necessary for the livelihood of the population, national economy and national defence as well as the related technical arrangements during emergencies and similar major disruptions.

The capital of the National Emergency Supply Fund consists of the items kept in emergency stockpiles, uninvested assets and the other assets and receivables of the National Emergency Supply Agency. The National Emergency Supply Fund covers the expenses incurred from the activities of the National Emergency Supply Agency and the

National Emergency Supply Council as well as the expenses that under other acts must be covered by the National Emergency Supply Fund.

The Government approves the final accounts of the National Emergency Supply Agency, which contain the profit and loss account, balance sheet and the board of directors' report. The balance sheet of the National Emergency Supply Fund currently includes holdings in such companies as Fingrid Oyj, Suomen Huoltovarmuusdata Oy and Navidom Oy. The holdings are used to carry out tasks and meet objectives that are important with regard to security of supply.

The perspective of security of supply is emphasised in the management of the National Emergency Supply Agency's assets. Efficient use of the National Emergency Supply Fund's balance sheet in the medium and long term enables the utilisation of balance sheet items. The Fund can act as an anchor owner in sectors critical to security of supply or in areas of economic activity that are in line with the objectives of security of supply and in which natural markets do not arise. The balance sheet may include corporate ownership, real estate and shares. As a rule, a return target must be set for balance sheet items and the achievement of this target is monitored.

The National Emergency Supply Fund is not the only financing instrument for security of supply. Individual ministries also provide funding for security of supply activities within their own administrative branches in the Budget. Comprehensive information on budget funding allocated to security of supply functions is difficult to obtain, as the funding for security of supply and preparedness is often budgeted within appropriations for other activities.

According to the principle of unity, the Budget must include estimates of all known revenue and appropriations for all known expenditure. The status, operations and transparency of the National Emergency Supply Fund as an off-budget fund have been assessed on several occasions. It is estimated that the Fund has been used to finance expenditure that could also have been financed from the Budget.<sup>19</sup>

In connection with the review of the Government's annual report for 2020, the Parliamentary Audit Committee noted the following on the use of the National Emergency Supply Fund: Over the years, the National Emergency Supply Fund has assumed an increasingly important role as a general source of funding for security of supply projects in public administration, while at the same time, the security of supply preparedness of individual administrative branches and its coordination have weakened and it seems that administrative branches no longer receive the same amount of resources for the work as before. Salaries of the security of supply employees working in the Regional State Administrative Agencies and the holders of permanent posts at the National Cyber Security Centre are paid from the National Emergency Supply Fund. The Audit Committee found the multi-year commitment of appropriations problematic from the perspective of the principle of unity and noted

In its report 'Security of supply and safeguarding it during the Covid-19 pandemic', the National Audit Office of Finland concluded that the use of a Fund is justified if it is appropriate to achieve more flexible and rapid funding in exceptional circumstances. By operating as a funding source on this basis, the National Emergency Supply Fund allows the National Emergency Supply Agency to provide quick response.<sup>20</sup>

The Fund must be able to meet the objectives set for security of supply in the Act on the Measures Necessary to Secure Security of Supply, the Government Decision on the Objectives of Security of Supply and other laws.

The role of the National Emergency Supply Fund as an enabler of projects playing a key role in terms of the operations and security of supply must be ensured so that security of supply can be planned on a long-term and goal-oriented basis. In the long term, the activities financed from the Fund should be planned so that they do not endanger the capacity of the Fund. The Fund must remain a source of funding for projects that require an exceptionally quick response.

In its opinion on the Government report on changes in the security environment, the Parliamentary Commerce Committee noted that in the development of legislation, the objective of safeguarding should be to ensure the functioning of critical infrastructure and the adequacy of the National Emergency Supply Fund in a situation characterised by a broad range of different threats. The Parliamentary Defence Committee also drew attention to the Fund's capacity. According to the Committee, the role of the National Emergency Supply Fund as an enabler of activities and projects must be guaranteed so that the activities can be planned on a long-term basis and on the basis of secure and goal-oriented funding. This is particularly important in the new security situation and when Finland is preparing for a variety of different threats and risks concerning security of supply. 22

The Fund's management and steering systems should be examined to ensure effective and economical management of its operations. The management of the National Emergency Supply Fund must be based on the preservation of the Fund's value. Careful management of the Fund can also generate returns if this is possible without endangering the security of supply objectives. Issues arising from the return on capital

that the financing of operations through an off-budget fund limited the budgetary powers of Parliament. However, in its report, the Audit Committee also noted that the use of the National Emergency Supply Fund for its intended purposes adds to flexibility and allows quick response in exceptional situations (TrVM 8/2021 vp).

Audit report 10/2021 of the National Audit Office of Finland, Security of supply and safeguarding it during the Covid-19 pandemic.

<sup>&</sup>lt;sup>21</sup> TaVL 23/2022 vp.

<sup>&</sup>lt;sup>22</sup> PuVL 3/2022 vp.

and investments of the Fund must be addressed on a comprehensive basis. It should also be considered how other sources of income could compensate for the declining intake of the emergency supply contributions.

The general criteria for financing the Fund's activities must be transparent and in accordance with the state aid rules of the EU.

#### 5.1.4 Current state of material preparedness

Finland's preparedness must be at an adequate level, and the country must be self-sufficient to the degree possible with regard to the most essential commodities.<sup>23</sup> It is not only a question of stockpiling but of creating a production and technological base in Finland that is sufficient for security of supply. This also involves production reservations and the need to develop new operating methods and stockpiling models.

Finland's security of supply stockpiles include compulsory stockpiles maintained by importers, compulsory stockpiles for power plants and heating plants, pharmaceutical plants, importers' facilities and health care facilities, stockpiles of the National Emergency Supply Agency and the Finnish Defence Forces as well as state emergency stockpiles. All state emergency stockpiles are last-resort stockpiles, which are, as a rule, only used in major disruptions or emergencies affecting the whole country. Under the Emergency Powers Act, public actors must take preparedness measures as part of their own activities, and this obligation also includes sufficient material preparedness.

Products that are poorly suited for long-term storage, perishable products or products that become rapidly obsolete technically are not kept in the state stockpiles. For this reason, such items as ready-made foods or technical components that must be frequently replaced, are not kept in the emergency stockpiles. Many of the stockpiled products are raw materials.

After the COVID-19 pandemic, the European Union has also boosted its efforts to improve material preparedness in Europe by, for example, launching joint preparedness projects. Preliminary discussions on joint stockpiling have also taken place at Nordic level. Preparedness as part of joint stocks must be coordinated with national stockpiles. They can play an important role as an instrument supporting national preparedness but they cannot act as a substitute for preparedness at national level.

In addition to legislation, provisions on the level of material stockpiling are also contained in the Government Decision on the Objectives of Security of Supply

<sup>&</sup>lt;sup>23</sup> Section 4.2 of the Government report on changes in the security environment VNS 1/2022 vp.

(1048/2018). Under the Decision, to prepare for a disruption in the supply of imported energy and to meet international contractual obligations, The National Emergency Supply Agency must maintain stockpiles of imported fuels so that the country has, on average, reserves of imported fuels for a normal consumption of five months. These reserves are dimensioned to only take into account the use of oil products as a back-up fuel for natural gas in the energy supply of communities.

A grain reserve must also be maintained in the state emergency stockpiles in order to secure domestic supply during major disruptions and emergencies so that the amount available for use in the country corresponds to at least an average six-month human consumption. Primary production must also be secured by stockpiling seeds, fodder protein and other fundamental production inputs. Sufficient financial resources must be reserved for plant breeding and the maintenance of plant species.

State emergency stockpiling is based on the Act on the Measures Necessary to Secure Security of Supply (1390/1992) and its purpose is to safeguard the livelihood of the population and the functioning of the national economy during a crisis. State emergency stockpiles contain raw materials and products that support the livelihood of the population, national economy, and production supporting national defence and that are essential for meeting Finland's international contractual obligations concerning security of supply. Emergency stockpiles contain such products as imported fuels, grain, hospital supplies, medicines, alloys, chemicals and critical raw materials imported from other countries. The Government decides on the use of the stockpiled items.

Material preparedness of business operators and public actors is always the primary means of safeguarding security of supply, and the state emergency stockpiles can only act as complementary reserves.

Compulsory stockpiling is based on the Act on the Compulsory Stockpiles of Imported Fuels (1070/1994) and the Act on the Compulsory Stockpiles of Medicinal Products (979/2008). The stockpiling is the responsibility of companies and other key actors. Its purpose is to ensure Finland's security of supply during major disruptions affecting the supply of imported fuels or medicines. Crude oil, petroleum products, coal, natural gas, medicines and active pharmaceutical ingredients are the products kept in the compulsory stockpiles.

Provisions on security stockpiling are contained in the Act on Security Stockpiling (970/1982). The arrangements concerning the stockpiling are agreed between companies in the sector and the National Emergency Supply Agency. The purpose of the stockpiling is to safeguard the livelihood of the population and the production activities of companies during disruptions affecting the supply of essential raw materials and other materials. The stockpiled items are critical products and materials.

The National Emergency Supply Agency does not have any security stockpiles of its own but the quantities to be stockpiled are specified with the companies in the sector to ensure that the products are circulated along with normal operations. The stockpiled materials are owned by the companies concerned but they may only be used with the permission of the Ministry of Economic Affairs and Employment. Under the scheme, the company acquires an additional raw material stock, for which it receives a stateguaranteed interest-subsidy loan from a financial institution. The current security stockpiling system is considered heavily regulated and bureaucratic.

#### 5.1.5 Starting points for sector-specific preparedness

Individual ministries are responsible for preparedness in their own administrative branches, developing their operational capacity and for supervising these two areas. Each ministry is also responsible for adequate preparedness management in its own administrative branch.

Under the Act on the Measures Necessary to Secure Security of Supply (1390/1992), the Ministry of Economic Affairs and Employment is responsible for developing security of supply and coordinating preparedness measures in the Government. The coordination of preparedness and security of supply in different administrative branches and sectors is developed both nationally and regionally. A cross-administrative cooperation group was appointed in autumn 2021 to coordinate security of supply work between ministries. The group operates under the auspices of the Ministry of Economic Affairs and Employment.<sup>24</sup>

The Government Decision on the Objectives of Security of Supply (1048/2018) guides and sets targets for the development of sector-specific security of supply work. The sector-specific development proposals put forward in connection with the preparation of the Government report will be evaluated as part of the updating of the Government Decision on the Objectives of Security of Supply.

#### Examples of sector-specific preparedness and the need to develop it

#### Food supply and water and waste management

The purpose of food supply is to ensure the availability, quality and safety of sufficient food supplies for the population at all times. The aim of securing food supply is to ensure continuity management in the food sector by monitoring the structural change in the sector, changes in capacity, developments in the world market for products and inputs, and by analysing the impact of these factors on security of supply. The aim also

<sup>24</sup> https://tem.fi/hanke?tunnus=TEM069:00/2021 (in Finnish).

is to safeguard adequate primary production (agriculture, horticulture, fisheries and natural products) and the supply of domestic production inputs, the processing capacity of the food industry, a well-functioning industrial and retail sector distribution system for consumers, and the functioning of the retail network and food services. Economically sustainable primary production is a basic prerequisite for securing food supply.<sup>25</sup>

The Finnish food industry is primarily based on the use of domestic raw materials. Consumers value domestic food products, which account for approximately 80% of the consumption. The figure varies by product, and in fish products, for example, domestic products account for less than one third of the consumption. Maintaining national security of supply requires an uninterrupted supply of production inputs. Smooth functioning of logistics and the essential infrastructure must also be ensured.

Emergency stockpiling is also used to prepare for disruptions and emergencies. The preparedness of the public administration is based on legislation whereas the business sector ensures the continuity of its operations on a voluntary basis. Availability of the foreign production inputs and raw materials key to safeguarding security of supply is ensured in cooperation with the National Emergency Supply Organisation.

The task of water supply is to ensure access to clean water and proper treatment of wastewater. Water supply is essential to ensure adequate living conditions, functioning of social welfare and health care and food supply, and to ensure the operating prerequisites for the industrial sector. Preparedness for exceptional situations and safeguarding uninterrupted operations are part of the normal operations of water utilities.

An ageing water supply infrastructure is vulnerable to disruptions and climate change. The Emergency Powers Act contains provisions on safeguarding water supply in emergencies.

The task of waste management is to ensure that the waste generated by households and in private-sector and public-sector production is treated in a manner that does not harm human health or the environment. Adequate waste management must be ensured in both normal conditions and during disruptions.

#### Development needs in the sector

The Russian invasion of Ukraine has further underlined the importance of preparedness and security of supply. Both the availability and prices of production inputs and

<sup>&</sup>lt;sup>25</sup> Security Strategy for Society 2017, p. 79.

agricultural products are affected. Fuels, fertilisers and their raw materials, plant protection products and feed components, such as supplementary protein, are the most important of the imported production inputs. The domestic content of these inputs should be increased to the extent possible, as the sanctions imposed on Russia have also targeted these products, which are essential for security of supply.

The sanctions affect imports of products essential for security of supply and the arrangements for transporting them, either by preventing or impeding imports. Because of the sanctions, Finland has to seek alternative suppliers and transport arrangements for these products.

The following are some of the matters that must be ensured in food supply: availability of seasonal labour, liquid fuels, natural gas, agricultural seeds, plantlets, plant protection products, feed raw materials, growing media and bedding, food chain packaging materials and spare parts for agricultural machinery and equipment, veterinary medicinal products, diagnostic supplies and protective equipment, continuity of transport, coordination of vehicle and machinery reservations and cyber security. Developing and increasing domestic production of fertilising products are important development priorities, as the raw materials for mineral fertilisers are only partially available in Finland.

In food supply, the entire value chain must function properly. For this reason, particular attention must also be paid to enhancing the operational reliability of the food industry and the groceries sector.

Measures to safeguard water supply include the restructuring of the water utilities sector, safeguarding the availability of electricity, chemicals and components, improving cyber security and improving preparedness for disruptions.

Measures to safeguard waste management include identifying the capacity of waste facilities, material flows and actors critical to waste management. It is also necessary to anticipate waste flows during exceptional situations, draw up location and treatment plans, ensure the availability of components and enhance continuity planning.

#### **Energy supply**

The energy supply sector ensures uninterrupted supply of energy, monitors developments in the energy market, draws attention to security of supply in decision-making, develops new methods to ensure security of supply and promotes contingency and preparedness planning in the sector.

The main purpose of energy supply is to ensure the availability of natural gas, heat, electricity and oil.

Companies and organisations in the energy sector play a key role in safeguarding security of supply in this area. The power transmission grid company Fingrid Oy is responsible for ensuring balance between electricity generation and consumption. The Energy Authority monitors the electricity generation capacity to ensure its adequacy and reports on its observations.

To ensure energy supply during disruptions and to meet international contractual obligations, Finland maintains imported fuel reserves corresponding to normal consumption during an average period of five months. Compulsory stockpiling of imported fuels covers coal, other petroleum products and natural gas.

Energy supply preparedness is based on the same measures that are used to ensure energy supply in normal conditions. Preparedness and contingency plans have also been drawn up for the sector to ensure the functioning of transmission and distribution networks as well as transport and stockpiling systems.

#### Development needs in the sector

As geopolitical tensions have reached new heights, security of supply and delivery as well as energy prices are now given the same attention as climate change.

Crude oil and coal are world market products. Purchases have been redirected outside Russia as a result of EU decisions and decisions by individual companies. Finding new suppliers of natural gas is more difficult. The Balticconnector gas pipeline, which was opened two years ago, allows Finland to purchase natural gas via the Baltic region, and this source is now needed after Russia stopped natural gas deliveries via pipelines. The existing import capacity of liquefied natural gas (LNG) can also be utilised. However, these sources are not enough to meet the normal demand for natural gas. Finland is purchasing a floating LNG terminal for the winter 2022–2023, and it is mainly intended to secure the supply of natural gas for industrial users.

Reduction in the use of fossil fuels and peat will increase the demand for wood fuels in particular, even though there is increasing use of non-combustion heat generation methods, such as heat pumps, in district heating. In Finland, wood fuels are largely based on side streams and residues of wood processing and logging.

In recent years, Russia has been an important source of wood chips for Finland's energy sector, as imports from that country have accounted for approximately one quarter of all wood chips used by Finnish heating and power plants. There is no statutory

obligation to stockpile wood fuels. Safeguarding the security of supply and delivery of energy generation is primarily the responsibility of the energy companies. The measures taken by the state are of complementary nature.

In response to the end of wood chip imports from Russia, harvesting of domestic wood chips is encouraged. The main aim is to increase the availability of small-size wood chips from young forest management sites. In the long term, measures will be taken to ensure the operating conditions of forestry and the forestry industry, the network of biomass terminals will be expanded and the necessary upgrades will be made to the transport infrastructure.

Hydropower with control capacity and high predictability plays an important role in Finland's electricity system. The need for reserve capacity will be further highlighted as the combating of climate change will lead to more extensive use of weather-dependent energy.

Peat is a domestic energy source and for this reason, it has traditionally been seen as a fuel contributing to security of supply. The reduction in the market-based use of peat has reduced its role in preparedness schemes. Peat producers are now less interested in producing peat for security stockpiles. The termination of the Russian wood chip imports has temporarily highlighted the role of peat in security of supply. In April 2022, the National Emergency Supply Agency decided to establish an emergency stockpile for peat totalling 2.2 TWh. Heat producers will also be encouraged to conclude fixed peat purchasing agreements with peat producers.

As a rule, the current level of preparedness for fuels is adequate.

#### Financial sector

The Finnish infrastructure for payment transactions, card payments and securities trading has changed dramatically over the past two decades. Financial institutions have transferred systems and data resources important for their service production to other countries. Blocking the use of international systems or data resources may stop payment transactions, card payments and securities trading in Finland.

The task of the financial sector is to ensure that services vital to society function at all times, to ensure the continuity of its operations and to monitor the security of supply and the overall sensitivity of the sector to disruptions.

The regulation and supervision of financial markets is based on international cooperation. However, when taking measures, individual member states usually pay less attention to economic disruptions and focus instead on other threats to financial

markets. The authorities of member states and the companies providing financial market services bear the main responsibility for operational actions in the event of disruptions.

#### Development needs in the sector

The level of preparedness in the Finnish financial markets is not fully in line with the policies set in the Security Strategy for Society and the preparedness targets set by the Government.

Companies providing key financial market services also have a statutory obligation to prepare for emergencies. However, regulation covering the preparedness obligation is quite general in nature. In the development work, it is essential to look into issues concerning legislation and management systems.<sup>26</sup>

#### **Continuity of transport**

Finland is a country characterised by long distances where transport operations must be on a competitive basis. This is particularly important to companies that are integrated into international networks and need efficient export and import transport arrangements.

The aim of preparedness is to ensure vital transport services during major disruptions occurring in normal conditions and emergencies. Preparedness is based on market-based logistics services, a well-functioning infrastructure and cooperation between the business sector and the authorities. Logistics include road and rail transport, maritime and air transport and ports as well as the related financial and information flows.

Ensuring continuity management is the responsibility of individual companies. Aviation and railway undertakings as well as the largest road freight and passenger transport companies have preparedness obligations under national legislation. The preparedness is supported by international regulations on maritime and air traffic and the safety and quality systems of logistics companies.

As part of transport sector preparedness, the companies critical to security of supply are supported in their business continuity management, preparedness exercises are held, cooperation between companies and the authorities is encouraged, and preparations safeguarding the operating prerequisites of the sector are promoted. The work also involves risk management, mapping of alternative routes and/or modes of

The Act on Certain Arrangements to Secure Security of Supply in the Financial Sector (666/2022) entered into force on 11 July 2022. The Act enhances preparedness in the financial sector but it only applies to daily payments.

transport, material preparedness and possible investments critical to security of supply that are not commercially feasible.

#### Development needs in the sector

Preparations must be made to ensure the continuity of maritime transport and domestic transport operations. Development measures will be carried out as part of the Logistics 2030 programme launched by the National Emergency Supply Agency. In its opinion on the Government report on changes in the security environment, the Parliamentary Transport and Communications Committee emphasises that alternative modes of transport and routes by land and by air must be available as part of crisis preparedness.<sup>27</sup>

#### Manufacturing

The focus in ensuring security of supply in manufacturing is on critical industrial production, and industrial production, construction and critical materials safeguarding national defence. The chemical industry, plastic and rubber industry, forest industry, construction industry and the defence industry are some of the sectors considered critical.

Interdependencies between functions are highlighted in a networked society. It is therefore important to examine the entire production chain and the operational capacity of its parts. The security of supply work is to large extent carried out by companies themselves within the framework of continuity management development to ensure that there are no interruptions to production and the availability of products and services can also be secured during disruptions and emergencies.

The task of critical industrial production and construction is to produce goods and services to safeguard the vital functions of society. Central government authorities, unincorporated state enterprises and municipalities have a statutory obligation to ensure that they can carry out their tasks during disruptions in normal conditions and emergencies.

Industrial companies do not have any general statutory preparedness obligation. Preparedness is on a voluntary basis and set out in agreements with sectoral organisations and the National Emergency Supply Agency, other actors or the Finnish Defence Forces.

Emergency stockpiles of raw materials and products essential for business operations, critical industrial production and production supporting national defence are

<sup>&</sup>lt;sup>27</sup> LiVL 18/2022 vp.

maintained by the state. Security stockpiles of essential raw materials and products are also maintained. In such cases, companies own the stockpiled material but it can only be used with the permission of the Ministry of Economic Affairs and Employment. Companies and the National Emergency Supply Agency conclude agreements on the stockpiling and the tasks related to the process are managed by the National Emergency Supply Agency.

Security of supply arrangements and international cooperation agreements have been introduced to safeguard the operating prerequisites of the critical defence equipment industry based in Finland. The Finnish Defence Forces concludes production reservation agreements with companies for wartime production.

### Development needs in the sector

From the perspective of security of supply, ensuring the critical industrial production capacity requires, among other things, availability of energy, well-functioning logistics, investments in production facilities, a continuous and steady order book and an uninterrupted supply of critical raw materials.

Technological advances, especially in digitalisation, artificial intelligence, machine autonomy, sensor technologies and new operating environments, will have a crucial impact on the development of military capabilities and security of supply. Domestic expertise is highlighted in the utilisation of new technologies. Especially in the field of critical technologies, Finland must maintain and develop its own expertise to ensure that the Finnish Defence Forces can independently use its key systems at all times.

### Social welfare and health care

The purpose of social welfare and health care is to provide the population with social welfare and health services, a healthy living environment and livelihood central to health and functional capacity at all times. Preparedness for disruptions in social welfare and health care is led, supervised and coordinated by the Ministry of Social Affairs and Health. The development of national-level contingency and preparedness is also reviewed and discussed by the Government-appointed Advisory Board for Health and Welfare in Emergency Conditions. National-level preparedness for social welfare and health care is based on the model of five cooperation areas and in the process, consideration is also given to the five national preparedness centres. The wellbeing services counties maintaining university hospitals and the HUS Group must have a social welfare and health care preparedness centre.

The responsibility for providing social welfare and health care services will be transferred from municipalities to wellbeing services counties from the beginning of

2023. In their preparedness arrangements, the wellbeing services counties must also ensure the continuity of services purchased from private service providers.

Care supplies, medical equipment, medicines and diagnostic supplies are the key items considered when measures are taken to ensure material security of supply in social welfare and health care. Social welfare and health care also includes the last-resort safeguarding of the livelihood of the population as well as the provision of basic care and temporary accommodation. For emergencies, this requires special systems, cooperation with other authorities and actors as well as material preparedness and agreements with service providers, such as the groceries sector and accommodation companies.

Social welfare and health care depends on joint services provided by society for its functioning, such as electricity supply, waste management and digital security. Cyber security of information systems and identification of critical systems are key components of continuity management.

## Development needs in the sector

Social welfare and health care must be provided with adequate material resources, proper facilities and, in particular, adequate personnel resources. The COVID-19 pandemic showed that a shortage of skilled staff is often a factor limiting the provision of services. The needs arising from the cooperation with the Finnish Defence Forces must also be taken into account in the use and purchases of materials. In addition to national-level material preparedness, the need for international cooperation must also be taken into account, especially in the context of the EU and the Nordic countries. The security of supply and self-sufficiency of pharmaceutical services must be assessed at both national and EU level. From the perspective of security of supply, there is a need for more extensive cooperation with the private sector.

### 5.1.6 Regional security of supply

The authorities responsible for preparedness and security of supply and the National Emergency Supply Organisation maintain and develop the cross-administrative preparedness needed to ensure security of supply at regional level and ensure regional cooperation and exchange of information between business operators, public administration and the third sector. Preparedness at regional and local level will be coordinated with the structures of the wellbeing services counties reform. The development of the regional activities of the National Emergency Supply Organisation and its coordination with other activities must continue. On 22 June 2022, the Security

Committee issued a recommendation to promote coordination between regional and local preparedness.<sup>28</sup>

In addition to the tasks specifically laid down for them, the Regional State Administrative Agencies are also responsible for coordinating preparedness in their regions and organising preparedness cooperation, coordinating preparedness planning, organising regional defence courses, supporting municipalities in preparedness planning, organising preparedness exercises and promoting security planning in regional and local government. Regional State Administrative Agencies also support preparedness planning at municipal level. Regional preparedness committees have been established under the auspices of the agencies, and in them the parties responsible for regional security (such as the rescue department, the police and voluntary organisations) are able to coordinate their preparedness work.

Five cross-sectoral committees (ELVAR committees) have been set up to develop regional preparedness in the business sector. They are tasked with developing business sector preparedness in regions and wellbeing services counties and to ensure regional cooperation and exchange of information between business operators, public administration and the third sector. ELY Centres coordinate the committees' work, which in addition to the representatives of the business sector, also involves representatives of Regional State Administrative Agencies, chambers of commerce, rescue departments and the Finnish Defence Forces.

Municipalities play a key role in safeguarding security of supply and basic services at local level. The role of municipalities is highlighted in tasks pertaining to critical infrastructure as well as the functional capacity and psychological resilience of the population. Municipalities, joint municipal authorities and other associations of municipalities must use a variety of different preparedness measures to ensure the continuation of their critical tasks during major disruptions and emergencies. The aim must be a crisis-resilient municipality that is prepared to act and to provide services in all security situations. Preparedness, continuity management and competent personnel are the means used to combat threats and strengthen the municipality's ability to recover from major disruptions.

Under section 12 of the Emergency Powers Act, municipalities, joint municipal authorities and other associations of municipalities must draw up preparedness plans, make advance preparations for emergencies and take other action to ensure that they

https://turvallisuuskomitea.fi/turvallisuuskomitean-suositus-alueellisen-ja-paikallisenvarautumisen-yhteensovittamisen-edistamiseksi (in Finnish)/.

can also carry out their tasks under emergency conditions. The Local Government Act (410/2015) also contains separate provisions on risk management.

Municipalities manage the tasks that they have undertaken to carry out as self-governing entities and organise the tasks specifically laid down for them under the law. As a result, municipalities have a statutory obligation to organise these tasks in several sectors critical to security of supply (such as water supply, municipal waste management and food supply). A municipality or a joint municipal authority may provide the services it is responsible for or purchase them on a contractual basis from other service providers (such as private companies). There are substantial differences in the ways in which municipalities provide the tasks they are responsible for.

Even though service providers have a statutory obligation to also ensure the availability of their services during disruptions, the municipality remains the party responsible for organising the service. To ensure the continuity of functions critical to security of supply, municipalities must, by means of contractual procedures and by coordinating preparedness plans, also ensure the continuity of critical functions during disruptions. Municipalities must identify the threats that may disrupt services and work to minimise the adverse effects of the disruptions in advance.

Responsibility for security of supply in the Province of Åland is divided between the Provincial Government of Åland and the Government of Finland The division of the powers depends on whether under the Act on the Autonomy of Åland, the sector concerned falls within the purview of the Provincial Government or the Government of Finland. The authorities cooperate in preparedness matters as specified in the Decree on the Carrying out of Tasks concerning the Preparedness for Emergency Conditions in the Province of Åland (900/2000). The Åland Islands are demilitarised, which means that no military presence in the province is allowed and the islands may not be fortified.

#### 5.2 Critical infrastructure

Critical infrastructure can be defined as the basic structures and systems of society without which the vital functions of society would be seriously disrupted. From the perspective of security of supply, both the infrastructure and the goods and services produced using the infrastructure, that together enable the vital functions of society should be considered as critical. Under the Government Decision on the Objectives of Security of Supply (1048/2018), critical infrastructure covers not only the basic structures but also the services and related activities that are essential for maintaining the vital functions of society.

Critical infrastructure includes power transmission grids, heating plants and heat distribution networks, mobile networks, Population Information System and

positioning systems, data centres, road and rail infrastructure, water utilities, hospitals and logistics centres. Critical services and production include electricity generation and transmission, heat production and distribution, telecommunications, data resources, logistic supply chains, water supply and waste management, social welfare and health care, primary production, food production and the media.

Programmes focusing on the key areas of critical infrastructure are used to enhance preparedness in this area. According to the Government report on changes in the security environment, particular priorities in safeguarding the operating capability of critical infrastructure include securing energy and water supplies, supporting preparedness for and recovery from cyber security threats, safeguarding the information systems of digital society and communication services and networks, safeguarding the critical services of financial markets in all circumstances, secure positioning and geographic information systems, and functioning logistics services and networks.<sup>29</sup>

Business operators protect the critical infrastructure in their ownership in a business-oriented manner. With their business-oriented risk and continuity management approach, business operators meet the statutory minimum level of preparedness. Growing interdependencies of the operating environment together with heightened uncertainty and a deteriorating security environment require better preparedness arrangements for critical infrastructure. Most of the companies possessing and maintaining critical infrastructure participate in the pool activities of the National Emergency Supply Organisation.

The CER Directive<sup>30</sup> regulating the resilience of critical actors is closely connected to critical infrastructure. Effective implementation of the CER Directive in Finland would strengthen the resilience of nationally critical actors. It is stated in the Government report on changes in the security environment that a legislative project will be launched to prepare a proposal for legislation on the strengthening of critical resilience, to determine and assess the needs to develop and amend the activities of national authorities related to the CER Directive, and to prepare proposals for organising the authority activities required by the Directive in a centralised manner under the Government.<sup>31</sup>

Measures to protect critical infrastructure and legislation must be developed to meet the requirements of the changed operating environment. The reliability of the

<sup>&</sup>lt;sup>29</sup> Section 4.2 of the Government report on changes in the security environment VNS 1/2022 vp.

<sup>30</sup> Proposal for a Directive of the European Parliament and of the Council on the resilience of critical entities (COM/2020/829 final).

<sup>&</sup>lt;sup>31</sup> Government report on changes in the security environment VNS 1/2022 vp.

broadband networks serving many critical functions of society and the adequacy of the capacity in exceptional situations must also be continuously assessed. Tasks related to critical infrastructure are the responsibility of several administrative branches. Coordination at Government level is also needed to ensure comprehensive protection of critical infrastructure.

**Screening of foreign corporate acquisitions** Finland systematically screens foreign acquisitions of companies that are critical to security. The Ministry of Economic Affairs and Employment is responsible for screening foreign corporate acquisitions in cooperation with a cross-administrative network of authorities.

The screening of foreign corporate acquisitions is security-based. The procedures laid down in the Act on the Screening of Foreign Corporate Acquisitions (172/2012) are used to assess the security risk that foreign ownership in the company concerned could pose to military defence and vital functions of society. The purpose of the Act is to screen and, should a key national interest so require, restrict the transfer of influence to foreign nationals and foreign organisations. Key national interest means securing military defence and other functions vital to society but also national security and foreign and security policy objectives.

The Act is a general act and there are no detailed lists of the sectors to be screened. The Act makes a distinction between defence and security sector acquisitions on the one hand and other acquisitions on the other. All corporate acquisitions in the defence and security sector require advance approval by the authorities. In other corporate acquisitions, the notification of the acquisition may also be submitted after the acquisition has taken place.

The EU Regulation on the screening of foreign direct investment (EU) 2019/452 (the EU screening regulation) established a framework for the screening of foreign investments in the Member States and a cooperation mechanism for the exchange of information between Member States and the European Commission. However, the Member States have the power to decide on the investments to be screened and the outcome of the screening.

In the practical application of the Act on the Screening of Foreign Corporate Acquisitions, it has been found necessary to examine issues related to the ownership of critical infrastructure and advance preparedness for situations in which strategically important critical infrastructure is being transferred to foreign ownership through acquisition/investment. The principles applied by the Government to the ownership of strategically important critical infrastructure will be jointly prepared by ministries.

**Supervision of real estate ownership.** The Ministry of Defence is responsible for the supervision of real estate ownership. The Act on Transfers of Real Estate Requiring Special Permission (470/2019) and the Act on the Right of Redemption of Immovable Property and Special Rights in Order to Protect National Security(468/2019 vp) entered into force on 1 January 2020.

Under the Act on Transfers of Real Estate Requiring Special Permission, a permit to acquire real estate in all parts of Finland, with the exception of the Province of Åland, is required of persons who are not citizens of an EU country or an EEA country and of companies and organisations with a seat outside the areas in question and in situations where the company or an organisation has a seat in the EU or the EEA but a person or an entity owns at least 10% of the company or organisation or exercises other actual control over the company or organisation outside the EU or the EEA. A permission for the acquisition of real estate may be granted if the acquisition is not deemed to complicate the organisation of national defence, the surveillance and safeguarding of territorial integrity or the assurance of border control, border security or the maintenance of emergency stocks of critical supplies.

The Act also applies to safeguarding security of supply by means of supervision of real estate ownership. Under the Act, ownership of real estate that could threaten the organisation of security of supply and the implementation of security of supply in Finland can be prevented.

The Act on the Right of Redemption of Immovable Property and Special Rights in Order to Protect National Security applies to the right of redemption of immovable property and special rights for the purpose of safeguarding national defence, territorial integrity, government administration, border security, border control, security of supply, the continued operation of the infrastructure necessary for the vital functions of society or other equivalent public interest. The Act is the most effective means of monitoring security of supply in the supervision of real estate ownership. The ministry the operations of which are directly endangered by the real estate ownership in question is responsible for the redemptions.

# 6. Military security of supply

Military security of supply means the safeguarding of the maintenance of the resources necessary to ensure the operational capacity of the Finnish Defence Forces and the related technical systems during emergencies and similar disruptions. Military security of supply also ensures the operational capacity of the Finnish Defence Forces' critical systems during events disrupting the functioning of society.

The operating environment and basic security and defence policy choices play a key role in securing Finland's military security of supply. In practice, the geographical location of Finland, a country on the periphery of the European Union, far away from European industrial centres, in northern climatic conditions and largely dependent on sea routes, means that in a crisis it is difficult for us to obtain and receive support. This make Finland's security of supply position more vulnerable than, for example, the position of central European countries.

Material, production, technologies and expertise critical to military defence must be available in all security situations. The availability of technologies and the ability to produce and integrate new technologies and technical solutions into the defence system in a cost-effective manner require national industrial and technological expertise and appropriate production capabilities. It is particularly important to ensure the maintenance of critical technical systems and the production of the critical consumption material used in national defence. In cooperation with the National Emergency Supply Agency, Finland's defence administration maintains the production capacity of the most important wartime consumption material, such as powder and ammunition, as well as the necessary emergency stockpiles supporting national defence.

Military security of supply increasingly involves expertise in materials technology and access to technology, including the right to modify technologies acquired from others. Thus, more importance is attached to data ownership and knowledge capital management. Safeguarding military security of supply requires that these aspects are safeguarded nationally through contractual arrangements and, if necessary, through international agreements.

A well-functioning and internationally competitive domestic defence industry, its active role in international networks and export activities enable Finland to maintain military security of supply and enhance its defence capacity. The importance of competence and maintenance capacity is emphasised as systems become more technologically oriented, and national maintenance of technological skills is a prerequisite for the ability to plan, purchase, use and maintain complex systems. When export licences for

defence equipment are considered, the perspective of security of supply is also taken into account, especially in critical areas of technology and skills.

The partners of the Finnish Defence Forces and their subcontracting chains play an important and well-established role in the defence system. Strategic partners play a particularly important role in the maintenance of the Finnish Defence Forces' equipment and material. The services provided by strategic partners have a critical impact on the core activities of the Finnish Defence Forces, and they always include readiness requirements necessary for operating in emergency conditions.

Ensuring and developing critical expertise and military security of supply require long-term cooperation with universities, research institutes, technology companies and the defence industry. This cooperation can only produce results if the interests of national defence are defined and a shared situational picture with industry and the scientific community is created on their basis.

Military security of supply is also ensured through international cooperation. Finland promotes international arrangements strengthening military security of supply, including agreement-level arrangements. For example, the agreement on defence materiel cooperation between the Nordic countries contains an annex on military security of supply between the countries involved. Practical-level cooperation should be further deepened within the framework of the agreement.

Cooperation on military security of supply is also promoted in the European Union. An evaluation and steering process of security and defence cooperation in the EU (strategic compass) is under way to define the direction of security and defence cooperation in the Union and to clarify its objectives. European security of supply can be strengthened by developing the European industrial and technological base in accordance with the compass, which will also enhance Finland's military security of supply. Finland will also promote cooperation in the field of military security of supply on other European Union cooperation forums, such as the European Defence Agency (EDA).

Finland also boosts its military security of supply capabilities through bilateral and multilateral arrangements. Finland is engaged in defence material cooperation with an extensive international partner network, and this cooperation may also include arrangements for military security of supply. This will also strengthen Finland's ability to receive assistance in different security situations.

Wartime defence capabilities are to a great extent based on resources supplied by the rest of society, and for this reason, safeguarding and developing military security of supply requires well-functioning non-military infrastructures and close cooperation between military and non-military security of supply actors. The National Emergency

Supply Organisation guides and supports the management and preparedness of business continuity and coordinates the needs of the authorities and business sector during major disruptions and emergencies. The changed operating environment highlights the maintenance of situation awareness and quick response capacity, material preparedness and the safeguarding of the functioning of critical technical systems and infrastructure. Protecting critical infrastructure must also be a consideration in defence planning.

In order to safeguard military security of supply, the Finnish Defence Forces have drawn up, in cooperation with business operators, military economy, production reservation and framework agreements as well as contingency plans for disruptions and emergencies. They describe how the production and services required in emergency conditions are ensured and the resources required for this. The allocation of critical business sector resources to the needs of the Finnish Defence Forces and civil society in emergencies must already be planned and determined under normal conditions. Military security of supply arrangements and use of resources are practised and tested in exercises between the Finnish Defence Forces, the National Emergency Supply Organisation and business operators.

# 7. Developing Finland's security of supply

# Safeguarding adequate overall level of security of supply

Finland must ensure adequate level of security of supply at all times. We are talking about comprehensive preparedness for crises that manifest themselves in different ways. Adequate security of supply covers close cooperation between the public, private and third sectors, clear sector-specific responsibilities, systematic scenario work, foresight and situation awareness work, up-to-date material preparedness, correctly dimensioned and flexibly available resources to enable quick response in crisis situations, and active participation in increasingly close international security of supply cooperation. Even though international cooperation supports and strengthens domestic security of supply, Finland is ultimately responsible for its own security of supply.

Recent changes in the operating environment have also challenged the Finnish security of supply system. The system has proved effective but development needs requiring action have also emerged.

Key priorities include adjusting the capacity of the National Emergency Supply Fund in accordance with objectives and needs, safeguarding the adequacy of the resources that maintain security of supply and updating the regulatory and other steering systems for

security of supply, including the national implementation of EU legislation relevant to security of supply. Cooperation between the public, private and third sectors must also be intensified, sector-specific responsibilities clarified and cross-administrative cooperation developed. Security of supply cooperation at international level is also important. Measures to protect critical infrastructure, legislation and Government-level coordination must be developed so that they can meet the requirements of the changed operating environment.

## 7.1 Financial resources available to security of supply

Funding to ensure security of supply comes from a variety of different sources. All sectors of society share responsibility for security of supply and they must provide adequate resources to ensure security of supply.

The energy sector is undergoing a major transformation, which calls for new security of supply solutions as we are moving from a fossil economy to renewable energy sources and towards a carbon neutral society. At the moment, the most significant source of income for the National Emergency Supply Fund is the emergency supply contribution, and the revenue it generates is decreasing in the longer term. The emergency supply contribution was introduced in 1992 and no adjustments have been made to it since then. There is a continuous shift from fossil fuels to other energy sources, which means that the revenue generated by the emergency supply contribution will continue to decline.

The National Emergency Supply Fund is a key source of funding for security of supply measures. The Fund is a quick, flexible and efficient source of financing for measures prompted by crises. However, the revenue from the emergency supply contribution is decreasing and dividend income is now a significant source of income for the National Emergency Supply Fund.

Security of supply can only be kept at adequate level if the capacity of the National Emergency Supply Fund is ensured. The income and cost structure of the Fund must be assessed from this perspective in the short and in the long term. When the assessment is carried out, the needs arising from the management of the Fund's capital, expected returns and the role of investment activities must also be reviewed.

- The National Emergency Supply Fund will be kept as a quick and flexible off-budget provider of financing for projects critical to maintaining and developing security of supply.
- The capacity of the National Emergency Supply Fund must be ensured. The National Emergency Supply Fund must be dimensioned correctly in relation to the changes in the operating environment and the security of supply tasks. The revenue generated

by the emergency supply contribution is decreasing as Finland is moving from fossil fuels to other energy sources, which means that new sources of financing must be found to secure the capacity of the National Emergency Supply Fund. The assessment and preparatory work concerning these changes will be carried out as part of the overall review of security of supply regulation.

- The operating principles related to the management and steering of the Fund and the return on capital and investments must be examined comprehensively so that the Fund's capacity can be safeguarded.
- The general criteria for financing the Fund must be transparent. As a rule, the National Emergency Supply Fund does not provide financing for long-term security of supply activities in normal conditions that are the responsibility of sectoral ministries and that can be financed from the Budget under the main title of the ministry concerned.

### 7.2 Updating security of supply regulation

The current regulatory framework for security of supply has proved effective during recent crises. Clear and up-to-date regulation is a basic prerequisite for the smooth functioning of the security of supply operating model.

The Act on the Measures Necessary to Secure Security of Supply (1390/1992) was adopted in 1992. There are provisions in the legislation that should be reviewed and, if necessary, updated. They include the objectives of the Act on the Measures Necessary to Secure Security of Supply and the concept of security of supply, the responsibilities of the National Emergency Supply Agency in international stockpiling activities, and defining when the National Emergency Supply Agency exercises public authority and when it is performing other activities. It must also be determined whether the tasks and obligations of the National Emergency Supply Agency are sufficiently clear in relation to the responsibilities of the sectoral authorities. The need for changes in the regulation of material preparedness, some of which may be cross-administrative in nature, will also be assessed in the comprehensive review.

The regulatory project on the resilience of critical entities (CER Directive) under way in the EU is relevant to the preparedness of critical infrastructure and national security of supply regulation. The national implementation of the CER Directive is a key issue from the perspective of both the authorities and companies that are identified as critical.

Public contracts play an important role in the overall security of supply. It is often asked how domestic or local content can be promoted in public contracts. The Act on Public Procurement and Concession Contracts is based on EU procurement directives, in which the key aim is to promote the smooth functioning of the Single Market, and ensure the free movement of goods and services and non-discrimination of tenderers.

Under the Act, contracting entities cannot set domestic or local content as a minimum requirement for tenderers. Under public contract regulations, proactive preparedness for security of supply crises cannon be used as a criterion for awarding a contract directly to a domestic supplier.

When issuing an invitation to tender, the contracting entity may set minimum requirements and comparison criteria for the object of procurement that can boost the chances of success of a domestic or local company in the competitive tendering. The comparison criteria must be non-discriminatory and ensure fair competition. The national procurement strategy prepared as part of the Procurement Finland action plan plays an important role in achieving the objectives set for society in public procurement. Systematic strategic promotion of public procurement supports the integration of procurement into national preparedness measures and security of supply. The strategy work is divided into themes, and the work involves the drawing up of models to support contracting entities and to enhance their competence so that they are better placed to promote the achievement of the broader requirements set for society through procurement. The implementation of security of supply in public procurement must be promoted systematically as part of the Procurement Finland action plan.

Essential items purchased in public contracts in accordance with the relevant rules are needed to manage disruptions and crises. The need for rapid implementation of material preparedness has highlighted the need to assess the application of selection and comparison criteria for security of supply contracts in national public procurement. Adequate preparations for security of supply needs should be made in all public contracts.

- An overall review of the security of supply legislation will be carried out in the next
  parliamentary term to ensure that regulation is up to date. The examination will also
  include sector-specific security of supply regulation. As part of the work, regulation
  will be coordinated with the ongoing reform of the Emergency Powers Act.
- The CER Directive on the resilience of critical entities will be implemented in an effective manner in accordance with the Government report on changes in the security environment. In the implementation, the identified strengths of the Finnish security of supply operating model will be considered and utilised, especially with regard to cooperation between the public, private and third sectors. The objectives of preparedness measures for critical infrastructure, the minimum levels of preparedness of entities maintaining critical functions, sector-specific responsibilities and the coordination of measures at Government level must be defined to meet the requirements of the changed operating environment.

Comprehensive preparedness and strengthening security of supply should also be
systematically supported through public contracts. The need and opportunities for
updating general public procurement regulation within the framework of EU
regulation will be examined so that adequate consideration is given to security of
supply needs. In connection with the overall review of the security of supply
legislation, it will be assessed, for example, whether the Act on Public Procurement
in the Field of Defence and Security (1531/2011) can be amended to take into
account the special features of procurement based on security of supply.

# 7.3 Developing sector-specific preparedness and cooperation and safeguarding competence

The steering model, management and cooperation structures of the Finnish security of supply system must support quick response of the operating model. The powers of the ministries responsible for security of supply must be clearly defined and the cross-administrative cooperation must function properly. The National Emergency Supply Agency is primarily a preparedness organisation with operational responsibilities during disruptions and emergencies.

Each ministry is responsible for security of supply and its development in its own administrative branch in accordance with the division of labour in the Government. As a rule, this division of labour is working well but there is still room for better cooperation between administrative branches and adequate coordination between security of supply groups and processes.<sup>32</sup>

All exceptional situations requiring security of supply measures have cross-administrative impacts, which means that cross-administrative cooperation is needed to manage them. Depending on the nature of the crisis, this may require a narrow and effective cross-administrative approach or more broad-based cooperation.

The following are some of the cross-administrative cooperation structures existing on a permanent basis: Security Committee. The Security Committee is a cross-administrative body coordinating comprehensive security. Provisions on its tasks are contained in the Decree 77/2013. Heads of Preparedness and Preparedness Secretaries of individual ministries. A Head of Preparedness has been appointed for each ministry. The ministry's Head of Preparedness assists the Permanent Secretary in matters pertaining to preparedness and security. The Head of Preparedness is responsible for the administrative branch's security operations and preparedness arrangements to ensure that they constitute a uniform system and for coordinating preparedness arrangements with other administrative branches. A Preparedness Secretary has been appointed for each ministry. Security of supply management committee. On 30 September 2021, the Ministry of Economic Affairs and Employment appointed a new cross-administrative management committee to support the ministry in the coordination of security of supply development and preparedness measures at Government level.

Coordination of preparedness measures should be improved so that the system would work as effectively as possible. Moreover, if sectoral ministries would provide transparent funding for long-term security of supply activities within their administrative branches in the Budget, all measures would serve the objectives set for security of supply in the best possible manner. Sectoral ministries must also ensure effective monitoring of sector-specific preparedness.

Sector-specific security of supply issues and the need to develop them are discussed in section 5.1.5. The most effective way to coordinate preparedness measures between individual actors is to do it on the basis of Government decisions on the objectives of security of supply. These decisions will also be an effective way to define national and sector-specific security of supply objectives and operational priorities in the future.

Under the Government Decision on the Objectives of Security of Supply (1048/2018), the implementation of the decision must be actively monitored. Interim and final reports on the achievement of the objectives are prepared. The achievement of the objectives set out in the decision will be assessed before the next decision on the objectives of security of supply is adopted. The first Government decision on the objectives of security of supply was adopted in 1988 and since then a decision has been issued every five to seven years. The current decision entered into force in 2018.

Safeguarding the competence of the personnel is a common challenge facing all sectors. The availability of skilled labour is an issue that is also reflected in security of supply work. The management of critical competence in military security of supply has already been examined in the assessment commissioned by the National Emergency Supply Organisation's MIL pool.<sup>33</sup> A similar examination should also be carried out in other sectors that are essential for security of supply. It is also important that small and medium-sized enterprises as well as citizens are aware of the importance of competence in the safeguarding of security of supply.

Each ministry is responsible for preparedness in its own administrative branch.
 Sector-specific preparedness measures will be intensified and measures will be taken
 to achieve closer coordination of preparedness measures between different sectors.
 The Government decision on the objectives of security of supply will be developed
 and special attention will be paid to the target level specified in the decision,
 responsibilities for implementing the decision, monitoring of implementation and
 impact assessment.

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<sup>33</sup> Kriittisen osaamisen hallinta selvitystyön loppuraportti https://www.huoltovarmuuskeskus.fi/files/6dfe2c58429c27fd66f27d7ba428520e0e1b0342/kriittis en-osaamisen-hallinta-raportti.pdf).

- The annual resources allocated to the promotion of security of supply by each administrative branch will be assessed in more detail than at present. Functioning of sector-specific preparedness also requires adequate management and supervision of preparedness in each administrative branch.
- The work to update the Government decision on the objectives of security of supply will begin after the report has been discussed in Parliament.
- Crisis preparedness and crisis-related training must also include cooperation structures and the organisation of activities and decision-making within the structures.
- Finland's security of supply and crisis preparedness require investments in education
  and training. In addition to securing financial resources, it is also necessary to define
  the competence needs critical to security of supply and how the needs can be met by
  anticipating the availability of skilled labour as well as by means of training and
  labour market policy measures. Education modules critical to security of supply must
  be preserved in higher education and upper secondary level programmes.
- More attention must be paid to the improvement of awareness and skills among citizens and small and medium-sized enterprises. Information needs and measures to strengthen competence are prepared and implemented in cooperation with the business sector and the third sector, and existing cooperation structures are used in the work (pools).

# 7.4 Developing the network model and the need for continuous dialogue with other actors in society

Close cooperation between the public, private and third sectors on a long-term basis makes the Finnish security of supply system particularly effective and it is important that this cooperation will remain an effective instrument in the changing operating environment.

After the first Government report on security of supply has been discussed in Parliament, it is important to ensure that the parliamentary debate will continue as a regular process. In this way, the situational picture of security of supply can be shared and the state of security of supply in a rapidly changing operating environment can be debated in a systematic manner.

- The network model for cooperation between the public, private and third sectors will be developed and strengthened to meet the requirements of the rapidly changing operating environment. The requirements concerning international cooperation will be taken into account in the development work.
- The Government report on security of supply will be updated on a regular basis.
   Consideration in the updating work will be given to the follow-up and updating timetable for the Government decision on the objectives of security of supply (1048/2018) and the timetable for updating other reports discussing security of supply.

### Annex 1

### FINLAND'S SECURITY OF SUPPLY SYSTEM

Security of supply means preparedness for crises and disruptions and it is also a continuity management process. Security of supply helps to ensure the continuation of the vital functions of society and business operations so that disruptions to everyday life can be minimised. Security of supply work creates buffers to buy time for activating the preparedness plans drawn up by the public sector and business operators.

Security of supply is founded on well-functioning markets and a competitive economy. However, markets alone do not always sustain society's economic and technological basic functions during disruptions and emergencies. For this reason, security of supply work is needed to minimise disruptions to critical functions of society in exceptional situations. Security of supply work in Finland is based on the cooperation between the public, private, and third sectors.

Individual ministries are responsible for preparedness in their own administrative branches, developing their operational capacity and for supervising these two areas. Each ministry is also responsible for adequate preparedness management in its own administrative branch. Other central government authorities as well as municipalities and joint municipal authorities also have an obligation under the Emergency Powers Act to ensure that they can perform their tasks with minimum disruption in emergencies. The National Emergency Supply Agency exists to ensure security of supply in Finland.

The National Emergency Supply Agency cooperates extensively with other authorities, business operators and sectoral organisations. The National Emergency Supply Agency also safeguards the essential production of goods and services and production supporting military defence. It also manages compulsory and security stockpiles and maintains in state emergency stockpiles materials that are necessary to achieve the objectives of security of supply and to meet the international contractual obligations binding on Finland.

In cooperation with the National Emergency Supply Organisation, the National Emergency Supply Agency coordinates the objectives and benefits of society and the business sector in preparedness measures. The National Emergency Supply Organisation consists of sectors and pools through which the companies and actors critical to security of supply participate in national security of supply work. Experts from different areas are invited to join the sectors, the task of which is to assess the state of security of supply and to promote cooperation between the authorities and business

operators in matters concerning security of supply. Pools are established on the basis of agreements between the National Emergency Supply Agency and private actors to manage sector-specific and site-specific preparedness.<sup>34</sup>

## Threat scenarios facing security of supply

The Finnish economy is increasingly dependent on foreign networks and the smooth functioning of logistic systems. From the perspective of security of supply, the most serious threats often arise from international dependencies.

A crisis situation in which Finland is experiencing temporary difficulty producing or importing foodstuffs, goods and services critical to security of supply is considered a serious threat to security of supply. Other key threats to society's economic capacity include disruptions to electronic information and communication systems, payment traffic and networks, cyber attacks, interruptions to energy supply, events seriously endangering the health and functional capacity of the population, and natural and environmental disasters with extensive impact. Dangerous infectious diseases may also weaken the functional capacity of entire societies, as demonstrated by the COVID-19 pandemic. The Russian invasion of Ukraine has also reminded the rest of the world that the threat to use military force remains a concrete reason to maintain preparedness.

### Methods

There are many ways to ensure security of supply. Key instruments include economic and industrial policy, legislation, stockpiling, preparedness, continuity management, preparedness planning and agreements. Security of supply is also promoted internationally.

Traditionally, security of supply has meant material preparedness, such as safeguarding the supply of grain. Products and materials essential for the functioning of society are stockpiled to secure the livelihood of the population and the functioning of the economy during a serious crisis or shortage of supply.

Security of supply is built on a long-term basis. The planning and analysis work carried out by experts is an important part of the activities promoting security of supply. With the help of the National Emergency Supply Organisation, the National Emergency Supply Agency is able to produce a continuous situational picture of security of supply, which has been widely utilised in the COVID-19 crisis, the assessment of the effects of the war in Ukraine and in the planning and implementation of measures supporting security of supply.

<sup>&</sup>lt;sup>34</sup> See page 24 for a chart describing the National Emergency Supply Organisation.

There are legislative provisions on stockpiling, which is carried out in three different ways. The National Emergency Supply Agency is responsible for state emergency stockpiling. Compulsory stockpiling is the responsibility of companies and other key actors. The third method, security stockpiling, is based on agreements between companies and the National Emergency Supply Agency.

In many sectors important to the functioning of society, operators have a statutory obligation to ensure that processes necessary for the continuity of their operations also work during disruptions and emergencies. The voluntary and independent preparedness of companies also helps all sectors of society to function during disruptions. The National Emergency Supply Agency supports companies critical to security of supply by providing them with tools to develop continuity management.

There are companies that have a statutory obligation to draw up preparedness plans for the most serious crises. It takes into account such matters as any production, facility and personnel reservations made by the Finnish Defence Forces so that operations can continue during a crisis. The authorities must have a statutory capacity to steer society on a temporary basis in situations where the markets do not provide sufficient security of supply.

### Sectors and pools

The purpose of the sectors and pools operating under the auspices of the National Emergency Supply Agency is to maintain and develop security of supply and continuity management in the network of companies and organisations in their own fields.

The authorities, ministries, government agencies, business organisations and key companies are represented in the sectors. There are security of supply sectors for food supply, energy supply, financial institutions, logistics, industry and health care.

The task of the sectors is to promote cooperation between business operators and the authorities and to steer, coordinate and monitor preparedness in their own fields. They can also present proposals for developing security of supply and assess and analyse threats and trends affecting security of supply in their own fields.

The pools support and promote sector-based and site-specific operational preparedness and their activities are planned and carried out in cooperation with business operators. The activities of the pools are based on agreements between sectoral organisations and the National Emergency Supply Agency.

The task of the pools is, in cooperation with companies in the area in question, to monitor, examine, plan and prepare security of supply in their own fields and to specify and prepare general plans for functions during emergencies. They also maintain a

database of critical sites and actors in their own fields and organise information and training events needed to maintain preparedness in the field.

In addition to companies, households are also a key part of society and its functional capacity. The committee to support independent preparedness in households (KOVA) acts as part of the pool structure coordinated by the National Emergency Supply Agency and it serves as an expert and development network for preparedness in households. The committee comprises organisations that are important for food sector security of supply and for independent preparedness in households. The 72-hour preparedness recommendation of the KOVA committee has been drawn up by the authorities and organisations, and citizens have become well aware of it during the COVID-19 pandemic and the war in Ukraine.

#### **Finances**

The costs of maintaining security of supply are covered by the National Emergency Supply Fund, which is an off-budget entity. The Fund, managed by the National Emergency Supply Agency, covers the expenditure arising from emergency stockpiling, technical backup arrangements and other preparedness measures.

The expenditure of the National Emergency Supply Fund is partially covered with emergency supply contribution. The contribution is collected as part of energy taxes on electricity, coal (heat), natural gas (heat), petrol and fuel oil (diesel oil and light and heavy fuel oil). In 2021, approximately EUR 40 million was collected in emergency supply contributions.

The National Emergency Supply Agency observes commercial principles in emergency stockpiling unless the safeguarding of security of supply requires otherwise. However, the National Emergency Supply Agency is not an unincorporated state enterprise, as the purpose of material operations is to keep stockpiles for crisis periods. The stockpiles are integrated into natural logistic chains, and all goods are commercially available and meet all environmental standards. Due to the nature of the activity, all details of the stockpiles and such matters as their location are confidential.

The National Emergency Supply Agency has numerous cooperation agreements with companies on the management and recycling of the stockpiles The quality and quantity of the materials are controlled on a systematic basis. Products are recycled and replaced by means of commercial transactions in such a way that quality and quantity losses are avoided.

### International cooperation

Security of supply is increasingly promoted through international cooperation. Value and supply chains are global and increasingly interdependent. Globalisation and its multiplier effects have served as an incentive for international cooperation.

Monitoring of the international operating environment enhances the situation awareness of national security of supply and the ability to adapt to changes taking place internationally and domestically. Situation awareness is built through foresight work and by conducting research and analyses for the use of security of supply actors. Long-term scenario work and continuous monitoring of the operating environment in cooperation with the National Emergency Supply Organisation have been part of the security of supply work for a decade.

Finland is an active member of multinational cooperation organisations, and the work is promoted through multi-level international agreements. Sweden, Norway, EU Member States, OECD countries, and (in resilience issues) NATO are the most important cooperation partners of the National Emergency Supply Agency.