

Government Resolution on Finland's maritime policy guidelines

From the Baltic Sea to the oceans

Publications of the Prime Minister's Office | 2019:7

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Finland's maritime policy guidelines

From the Baltic Sea to the oceans





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Abstract

The policy guidelines determine the focus areas of Finland's maritime policy concerning oceans and seas, and present measures required for reaching the set objectives. The aim of this document is to enable Finland to develop its maritime policy into a clear area of strength. In these policy guidelines, the protection of the seas, maritime logistics, the maritime cluster and marine production are selected as priority areas. The horizontal themes connected to all priority areas include automation, digitalisation and data; competence, research and education; exercising influence at the EU and international level; a secure operating environment; financing.

In the vision for maritime policy, Finland exercises global influence and produces solutions ensuring that the use of marine natural resources is sustainable, the state of the marine environment is good and the effects of climate change do not exceed the carrying capacity of the oceans. Finland has high-quality marine competence, an innovative and consistently successful marine cluster, and a well-functioning, safe and environmentally responsible logistics system.

The marine environment faces constantly increasing pressures: warming caused by the climate change, oxygen depletion, acidification caused by the atmospheric concentration of carbon dioxide, marine litter, loss of biodiversity, oil spills and chemical accidents, eutrophication and overfishing. Maritime transport and the entire logistics sector are facing major changes. The aim is to make maritime logistics a growing industry in Finland with a pioneering role in digitalisation, autonomous transport and emission reduction. The maritime cluster and its economic ecosystem already form a significant industrial sector in Finland. The maritime industry, port services, logistics and services related to these fields account for over 3,000 companies with some 50,000 employees. The total turnover of the maritime cluster is EUR 13 billion. The strengths of Finland's maritime industry include cooperation and networks. Maintaining competitiveness and making use of opening markets are key growth factors for the maritime cluster. Oceans and seas provide opportunities for sustainable and low-carbon food and energy production. With Finland's competence, aquaculture can be developed at a global level by utilising high technology, and alternative cultivation methods and species. Finland's marine energy competence can be further developed, scaled and exported with the aim of creating ecological, sustainable and as carbon neutral energy production as possible.

In autumn 2016 the Prime Minister's Office set up a steering group for Baltic Sea and integrated maritime policy to perform the task to update Government's report to Parliament Challenges of the Baltic Sea and on Baltic Sea Policy (2009). The steering group decided to update the report as the Government Resolution on Finland's Strategy for the Baltic Sea Region. Decisions on any appropriations associated with this document will be made as part of the General Government Fiscal Plan.

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Tiivistelmä

Linjauksissa määritellään Suomen valtamerille ulottuvan meripolitiikan painopisteet ja toimet asetettujen tavoitteiden saavuttamiseksi. Tarkoituksena on, että Suomi kehittää meripolitiikasta selkeän vahvuusalueen.

Meripolitiikan kärjiksi on valittu merten suojelu, merilogistiikka, meriklusteri ja merellinen tuotanto. Kaikkiin näihin kärkiin liittyvät horisontaalisina teemoina automatisaatio, digitalisaatio ja data; osaaminen, tutkimus ja koulutus; EU- ja kansainvälinen vaikuttaminen; turvallinen toimintaympäristö; sekä rahoitus. YK:n kestävän kehityksen toimintaohjelman Agenda 2030 tavoitteet ja kestävän sinisen kasvun periaatteet ohjaavat kaikkia esitettyjä toimia.

Meripolitiikan visiossa Suomi vaikuttaa globaalisti ja tuottaa ratkaisuja siihen, että meriluonnonvarojen käyttö on kestävää, meriympäristön tila on hyvä ja ilmastonmuutos ei ylitä valtamerten kestokykyä. Suomella on korkeatasoinen meriosaaminen ja innovatiivinen, jatkuvasti menestyvä meriklusteri sekä toimiva että turvallinen ja ympäristövastuullinen logistiikka.

Meriympäristöön kohdistuu jatkuvasti yhä enemmän paineita: ilmastonmuutoksesta johtuva lämpeneminen ja happamoituminen, roskaantuminen, luonnon monimuotoisuuden väheneminen, öljy- ja kemikaalionnettomuudet, rehevöityminen sekä ylikalastus. Suomi lisää vaikuttamista kansainväliseen merten hallinnointiin, suojeluun ja kestävään käyttöön liittyvään päätöksentekoon. Meriliikenne ja koko logistiikka ovat suurten muutosten edessä. Tavoitteena on, että merilogistiikka on Suomessa kasvava toimiala, joka toimii edelläkävijänä digitalisoinnissa, autonomisessa liikenteessä ja päästöjen vähentämisessä. Meriklusteri ja sen taloudellinen ekosysteemi on jo nyt merkittävä teollisuussektori Suomessa. Klusterissa on yli 3000 yritystä jotka työllistävät 50 000 henkilöä ja jonka kokonaisliikevaihto on 13 miljardia euroa. Klusterin vahvuuksia ovat yhteistyö ja verkostot. Kilpailukyvyn ylläpitäminen ja avautuvien markkinoiden hyödyntäminen ovat avaintekijöitä meriklusterin kasvulle. Valtameret ja meret tarjoavat mahdollisuuksia kestävälle ja vähähiiliselle ruoan- ja energiantuotannolle. Suomalaisella osaamisella voidaan kehittää vesiviljelyä globaalisti hyödyntäen korkeaa teknologiaa, vaihtoehtoisia viljelytekniikoita ja -lajeja. Suomalaista merellistä energia-osaamista voidaan kehittää, skaalata ja viedä tavoitteena kestävä ja mahdollisimman hiilineutraali energiantuotanto.

Valtioneuvoston kanslia asetti 24.10.2016 eri ministeriöitä edustavan Itämeri- ja meripolitiikan ohjausryhmän valmistelemaan valtioneuvoston Itämeri-selonteon päivittämistä sekä kehittämään ja koordinoimaan kansallista meripolitiikkaa. Työn ensimmäisessä vaiheessa ohjausryhmä laati Suomen Itämeren alueen strategian. Tähän asiakirjaan liittyvistä mahdollisista määrärahatarpeista linjataan osana Julkisen talouden suunnitelmaa ja talousarviokäsittelyä.

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Referat

I riktlinjerna definieras fokusområden för Finlands havspolitik som omfattar också världshaven och åtgärder för att nå målen. Avsikten är att Finland ska utveckla havspolitiken till ett tydligt kompetensområde.

Som havspolitiska fokusområden har man valt skyddet av haven, den maritima logistiken, det maritima klustret och den maritima produktionen. Varje fokusområde inbegriper fem horisontella teman: automatisering, digitalisering och data; kompetens, forskning och utbildning; påverkan inom EU och internationellt; en säker omvärld och finansiering. Samtliga åtgärder styrs av målen i FN:s globala handlingsprogram för hållbar utveckling, Agenda 2030, och av principerna för hållbar blå tillväxt.

I sin havspolitiska vision är Finland en global påverkare som tar fram lösningar för att de marina naturresurserna ska användas på ett hållbart sätt, den marina miljön ska ha god status och klimatförändringen inte ska överskrida världshavens bärkraft. Finland förfogar över högklassig marin kompetens och ett innovativt, framgångsrikt marint kluster samt en fungerande, säker och miljöanpassad logistik.

Den marina miljön utsätts ständigt för ett allt större tryck: uppvärmning till följd av klimatförändringen, syrebrist och försurning orsakade av höjda koldioxidhalter i luften, minskad biologisk mångfald, olje- och kemikalieolyckor, eutrofiering och överfiske. Finland bedriver ett allt starkare påverkansarbete med avseende på det internationella beslutsfattandet i frågor som gäller förvaltning, skydd och hållbar användning av haven. Sjöfarten och den maritima logistiken står inför stora omställningar. Målet är att den maritima logistiken i Finland ska vara en tillväxtbransch och en föregångare inom digitalisering, autonoma transporter och minskade utsläpp. Det maritima klustret och dess ekonomiska ekosystem är redan i dag en betydande industriell sektor i Finland. Klustret omfattar över 3 000 företag med 50 000 anställda och en omsättning på 13 miljarder euro. Klustrets styrka bygger på samarbete och nätverk. Att upprätthålla klustrets konkurrenskraft och expandera till nya marknader är nyckelfaktorer med tanke på klustrets tillväxt. Världshaven och haven erbjuder en stor potential för hållbar och koldioxidsnål produktion av livsmedel och energi. Vattenbruket kan utvecklas globalt med finländsk kompetens, högteknologisk kunskap och alternativa odlingstekniker och arter. Finländsk kompetens i den marina energiproduktionen kan utvecklas, skalas upp och exporteras med sikte på hållbar och koldioxidsnål energiproduktion.

Statsrådets kansli tillsatte den 24.10.2016 en styrgrupp med företrädare för de olika ministerierna för att bereda en uppdatering av statsrådets Östersjöredogörelse och för att utveckla och samordna den nationella havspolitiken. I den första fasen utarbetade styrgruppen Finlands strategi för Östersjöregionen. Eventuella behov av anslag som hänför sig till detta dokument linjeras upp som en del av planen för de offentliga finanserna och budgetbehandlingen.

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Introduction

The world's seas and oceans are a shared resource and a source of livelihood for the humankind. They cover 71% of the earth's surface. Two thirds of the oceans' surface areas are considered common areas beyond national jurisdiction. Responsibility for all marine areas and the protection of the marine environment belongs to us all. Oceans and seas also provide major opportunities for sustainable blue growth.

More than one half of the world's population live within 100 kilometres of the coast. The oceans and seas are also an important transport channel: shipping accounts for more than 80% of the global transport volumes, and the volume of goods carried by sea is predicted to grow further.

The aim of this document is to enable Finland to develop its maritime policy into a clear area of strength. The policy guidelines determine the focus areas of Finland's maritime policy concerning the oceans and seas, and present measures required for reaching the set objectives. A further aim is to implement the EU's maritime policy where applicable.

On 24 October 2016, the Prime Minister's Office appointed a steering group with representatives from different ministries with a task of preparing an update to the Government Report on the Baltic Sea, and developing and coordinating a national maritime policy.

The policy guidelines in this document complement those contained in existing strategies. In November 2017 the Government adopted a resolution on Finland's Strategy for the Baltic Sea Region¹ (15a/2017), after which the steering group began to prepare the Government's joint coordination document aiming at a government resolution on Finland's maritime policy guidelines. For the Arctic region, decisions on updating Finland's Strategy for the Arctic Region and a related action plan² were adopted in 2016 and 2017. The steering group has also taken into account the reports, strategies and action plans

¹ Finland's Strategy for the Baltic Sea Region: https://vnk.fi/en/finland-s-strategy-for-the-baltic-sea-region

² Finland's Strategy for the Arctic Region: https://vnk.fi/julkaisu?pubid=2411 and an update to the strategy and action plan: https://vnk.fi/en/arctic-issues/finlands-arctic-policy



Photo: Vuokko Ranki

with relevance to maritime policy. Decisions on any appropriations associated with this document will be made as part of the General Government Fiscal Plan.

Safety and security have an impact on every operator and function. Providing and guaranteeing a secure operating environment in all circumstances is a basic precondition for all activities. Finland depends on its maritime connections for protecting its safety and security, security of supply and society's vital functions. Security in the Baltic Sea region and safeguarding society's vital functions are discussed in the Government Report on Finnish Foreign and Security Policy³ (2016), the Government's Defence Policy Report⁴ (2017) and the Government resolution on the Security Strategy for Society⁵ (2017).

In the vision for maritime policy, Finland exercises global influence and produces solutions ensuring that the use of marine natural resources is sustainable, the state of the marine environment is good and the effects of climate change do not exceed the carrying capacity of the oceans. Finland has high-quality marine competence, an innovative and consistently successful marine cluster, and a well-functioning, safe and environmentally responsible logistics system.

In these policy guidelines, the protection of the seas, maritime logistics, the maritime cluster and marine production are selected as priority areas. In this context maritime

 $^{3\}quad Government\ Report\ on\ Finnish\ Foreign\ and\ Security\ Policy:\ https://vnk.fi/julkaisu?pubid=12503$

⁴ Government Defence Policy Report: https://www.defmin.fi/en/publications/the_governments_defence_report_2017

⁵ Government Security Strategy for Society: https://turvallisuuskomitea.fi/en/security-strategy-for-society/

logistics are examined separately rather than as part of the maritime cluster. The horizontal themes connected to all priority areas include automation, digitalisation and data; competence, research and education; exercising influence at the EU and international level; a secure operating environment; financing.

The marine environment faces constantly increasing pressures: warming caused by the climate change, oxygen depletion, acidification caused by the atmospheric concentration of carbon dioxide, marine litter, loss of biodiversity, oil spills and chemical accidents, eutrophication, and overfishing. The oceans remain insufficiently explored and there is a lack of scientific information to support decision-making in some areas. It is important for the protection of oceans and seas to proceed as rapidly as possible. The best way to improve the state of oceans and seas is by exercising a strong influence on decision-making related to the international governance, protection and sustainable use of oceans and seas.

The state of the marine environment can effectively be improved also by influencing the international maritime environmental legislation. Finland participates actively in developing international legislation on environmental protection for shipping in the International Maritime Organisation (IMO), which is a specialised UN agency.

Finland is dependent on maritime transport. As a result of increasing digitalisation and autonomous transport, maritime transport and the entire logistics sector are facing major changes. The EU's maritime transport policy priorities until 2020 are decarbonisation, digitalisation, competitiveness, an effective internal market and a world-class maritime cluster⁶. Blue growth creates new business opportunities for the operators in the field. The aim is to make maritime logistics a growing industry in Finland with a pioneering role in digitalisation, autonomous transport and reducing emissions.

Significant emissions reductions could be achieved in shipping by improving the logistics system. Supported by improved ship-shore information exchanges, ships could time their arrival in port better, allowing them to slow down already at sea and achieve significant reductions in GHG emissions. Similarly, port operations could be planned better if the ship's time of arrival were known more accurately. The preconditions for improving the logistic system's energy performance include advanced communication technology, digital services and opening up of information systems.

The maritime transport stakeholder network is intended for all companies and organisations interested in shipping policy that wish to participate in the authorities' cooperation with maritime sector companies and organisations. The purpose of the network is to encourage companies and institutions in the industry to cooperate and

⁶ Valletta declaration: http://data.consilium.europa.eu/doc/document/ST-6185-2017-INIT/en/pdf

to work together with central government authorities. The network's tasks also include following international shipping issues, such as decision-making in the IMO and the EU.

The maritime cluster and its economic ecosystem already form a significant industrial sector in Finland. The maritime industry, port services, logistics and services related to these fields account for over 3,000 companies with some 50,000 employees. The total turnover of the maritime cluster is EUR 13 billion. The industry is oriented towards the international market; around 90% of total deliveries are exported.

The international competitiveness of Finland's maritime industry is based on innovation, constant renewal and specialisation. The strengths of Finland's maritime industry include cooperation and networks, which enable flexibility and the efficient utilisation of competence. This cluster depends on the global market for its development, as Finland's domestic market is fairly small. The changing operating environment of logistics opens up new opportunities for the growth of the maritime cluster. Maintaining competitiveness and making use of opening markets are key growth factors for the maritime cluster.

Oceans and seas provide opportunities for sustainable and low-carbon food and energy production. With Finland's competence, aquaculture can be developed at a global level by utilising high technology, and alternative cultivation methods and species. Marine energy production can reduce greenhouse gas emissions. Finland's marine energy competence can be further developed, scaled and exported with the aim of creating ecological, sustainable and as carbon neutral energy production as possible.

The United Nations Convention on the Law of the Sea (UNCLOS) forms a framework for setting international standards for all operations targeting seas and oceans as well as the use of seas and their natural resources.

All the proposed measures are guided by the goals of the UN's 2030 Agenda for Sustainable Development and the principles of sustainable blue growth identified in this document. The policy guidelines of this document contribute to implementing the Government Report on the implementation of the 2030 Agenda for Sustainable Development⁷ (2017), the working programme of the National Commission on Sustainable Development (2016–2019) and the Society's Commitment to Sustainable Development⁸.

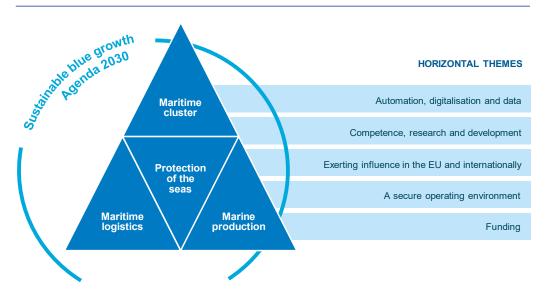
The UN has declared 2021–2030 the Ocean Decade, and on this basis, UNESCO has named it the Decade of Ocean Science for Sustainable Development. Finland promotes the realisation of the UN's Ocean Decade.

⁷ Government Report on the implementation of the 2030 Agenda for Sustainable Development: http://urn.fi/URN:ISBN:978-952-287-360-6

⁸ Society's Commitment to Sustainable Development: https://kestavakehitys.fi/en/commitment2050

The priority areas and vision of Finland's maritime policy

Finland has a global responsibility to promote sustainable growth. The impacts of our activities extend outside Finland's national borders, and we must participate in solving global challenges. Finland has good prerequisites for promoting sustainable development and blue growth.



Finland has global influence and produces solutions ensuring that the use of marine natural resources is sustainable, the state of the marine environment is good, and climate change does not exceed the carrying capacity of the oceans.

Finland has high-quality marine competence, an innovative and constantly successful marine cluster, and well-functioning and safe logistics that are environmentally responsible.

The principles of sustainable blue growth

A key principle of Finland's maritime policy is to ensure responsible use of the oceans and seas in line with the principles of sustainable blue growth. Sustainable blue growth aims at economic growth that uses marine natural resources in line with the principles of sustainable development. Sectors directly or indirectly connected to seas, including the maritime industry, are included within the scope of blue growth. Resource use can be considered sustainable when it does not degrade the state of the marine environment or threaten the vitality of marine nature or the diversity of species and natural habitats, and when the state of the marine environment is good.

The principles of sustainable blue growth used in these guidelines include:

- Knowledge-based decision-making
- Reducing the environmental pressure
- Improving the status of the environment
- Circular economy, recyclability of materials, and life cycle efficiency
- Low carbon
- Energy efficiency
- Increasing use of environmental criteria and certification
- Corporate social responsibility and positive net impact on society

Finland is committed to implementing the UN's 2030 Agenda for Sustainable Development adopted at the UN Sustainable Development Summit 2015⁹. According to Agenda 2030, today's generations must act in a way that also allows preserving the conditions for a good life to future generations. This document is particularly focused on Goal 14 of Agenda 2030, Life Below Water.

Finland has a global responsibility to promote sustainable growth. The impacts of our activities extend outside Finland's national borders, and we must participate in solving global challenges. Finland's prerequisites for promoting sustainable development and

⁹ Agenda 2030 – Sustainable Development Goals: https://www.yk.fi/sdg

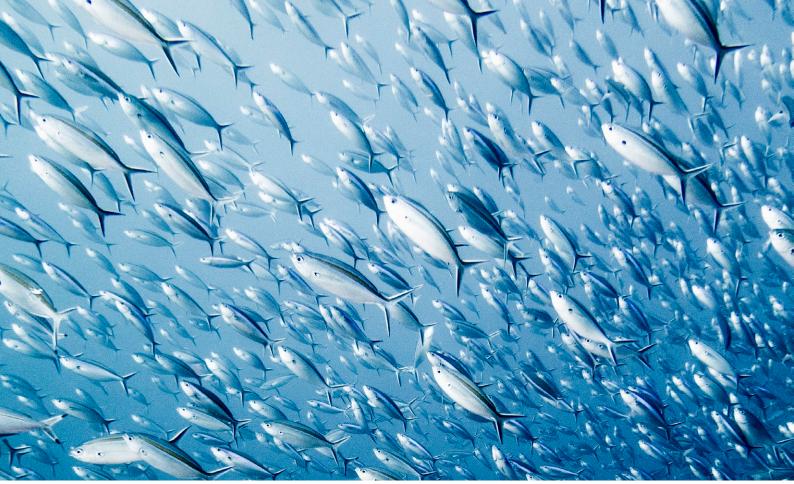


Photo: Essi Havula

sustainable blue growth are good: we have plenty of renewable resources and a high level of education and technological competence, and we utilise digital solutions and robotisation. Furthermore we have an ability to recognise problems and seek solutions for them.

Business must be sustainable and based on the principles of corporate responsibility. Companies and their innovations play a significant role here. Companies and communities also reap competitive advantages from sustainable blue growth and wise resource utilisation. Finnish companies are globally recognised in socially responsible business.

The Finnish Maritime Cluster can contribute to solving sustainability problems by providing the world with solutions that facilitate operating within the limits set by the earth's carrying capacity, including energy and material efficiency, and renewable and new fuels. The efficiency of the logistics network's business process may also be improved by means of new technologies, including blockchain-based solutions.

Education and research lay a foundation for sustainable blue growth and solving societal challenges. We need to advance the transparency and constant development of both empiric and scientific knowledge.

The purpose of Finland's national Society's Commitment to Sustainable Development is to implement the global UN 2030 Agenda for Sustainable Development. The operators of the Finnish Maritime Cluster are encouraged to participate in promoting sustainable development through the Society's Commitment to Sustainable Development. The

operators can draw up their own commitments to sustainable development measures or, where applicable, join the ResponSea¹⁰ initiative, which provides a concrete tool for the responsibility efforts of the maritime industry.

The goal of the EU's maritime policy is to support the sustainable use of the seas and oceans. The Blue Growth long term strategy¹¹(2017) prepared by the European Commission is used to promote structured and sustainable growth in the marine and maritime sector as well as the implementation of the EU's maritime policy in general. The main focus areas of the strategy are marine energy production, aquaculture, coastal tourism, biotechnology and seabed mineral resources. The strategy also mentions key factors promoting growth, such as marine knowledge, maritime spatial planning, protection of the marine environment, maritime expertise, maritime safety, marine research, and strategies specific to individual marine areas.

To promote the accomplishment of the goals of the EU's maritime policy in the financing period 2015–2020, special funding has been available for promoting maritime policy implementation from the European Maritime and Fisheries Fund. This funding is currently used to support 17 maritime policy projects in Finland. Preparation of this document particularly to cooperation with stakeholders have also been supported by this funding.

¹⁰ The ResponSea initiative: https://meriteollisuus.teknologiateollisuus.fi/responsea-0

¹¹ The Blue Growth strategy of the European Commission: https://ec.europa.eu/maritimeaffairs/policy/blue_growth_en

I Protection of the seas

Finland plays an active and constructive role in the conservation of the oceans and seas, and in the promotion of the sustainability of blue growth based on high-quality knowledge and competence.

Finnish marine research leads the way in producing solutions to environmental problems.

Priorities:

- Stop the loss of marine biodiversity
- Reducing marine litter and micro-plastics
- Reducing eutrophication
- Preventing oil spills and chemical accidents and developing capacity for damage prevention
- Mitigating climate change: stopping ocean warming and acidification

International conventions play a special role in managing and solving environmental problems in maritime areas. The United Nations Convention on the Law of the Sea (UNCLOS) includes general provisions on the protection of the marine environment. However, the efficient implementation of the protection also requires detailed provisions which must be agreed on at regional or sectoral level; states are responsible for the implementation of these agreements. Negotiations on a new agreement under the UNCLOS on the protection of biodiversity and sustainable exploitation of maritime areas beyond national jurisdiction are currently ongoing.



Photo: Alf Norkko

Measures:

- 1. Exercising influence to strengthen the international legal framework on the protection of the marine environment
- 2. Strengthening the implementation of international conventions related to the oceans
- 3. Increasing active and goal-oriented influence
 - Integrating the protection and sustainable use of the oceans and seas into all policy sectors
 - Including the protection of the oceans in the development policy and as part of bilateral and multilateral diplomacy
 - Appointing "good will" ambassadors for protecting the oceans
- 4. Developing a marine research infrastructure and global research capacity
 - Building up Finnish capabilities in remote sensing of the seas, satellite services and the provision and utilisation of Copernicus¹² marine environment services
 - Supporting Finnish research institutes' and universities' affiliation to key international and European marine research infrastructures

¹² Copernicus – Marine Environment Monitoring System: http://marine.copernicus.eu/

- Supporting the development of autonomous marine observation activities
- Maintaining and developing capabilities for assessing the impacts of emissions to air and water on the marine environment
- 5. Productising Finnish solution competence and services supporting export activities
 - Exporting good practices from the Baltic Sea
 - Distributing ready-made service concepts for monitoring the state of the sea, including the Inventory Programme for the Underwater Marine Environment (VELMU)
 - Integrating an ecosystem-based approach in activities aiming to promote blue growth
 - Introducing the ideas of the Plastics Roadmap for Finland to a global maritime context
 - Establishing a global oil spill response centre in Finland
 - Developing the capacity for damage prevention of oil spills and chemical accidents

Time span: launched over a short time span (1–2 years) and continued in the long term

Responsibility: Ministry of the Environment, Ministry for Foreign Affairs, Ministry of Agriculture and Forestry, Ministry of Transport and Communications, Ministry of the Interior

II Maritime logistics

Finland plays an active and constructive role in the conservation of the oceans and seas, and in the promotion of the sustainability of blue growth based on high-quality knowledge and competence.

Finnish marine research leads the way in producing solutions to environmental problems.

Priorities:

- An efficient, smart, safe and clean logistics system
- Reducing GHG emissions from marine logistics
- Globally competitive maritime shipping business for Finland
- Enabling the freedom of mobility
- · Reducing maritime accidents
- · Security of supply
- Well-functioning fairways and port structures

In order to support Finland's competitiveness, the country's logistics must be highly efficient. Due to its location, Finland must outdo its competitors to succeed in global competition. The competitiveness and constant renewal of Finland's logistics operators must be facilitated. Ensuring safe and fluid logistics underlies all activities.



Photo: ESL Shipping / Broufoto

Measures:

- 1. Promoting the preconditions for highly effective logistics at the global level: passengers, goods and data move freely, safely, smoothly and cleanly
 - Making full use of new technologies and data to improve navigation safety and energy efficiency as well as to reduce GHG emissions
 - Maintaining and developing proactive maritime traffic management
 - Ensuring the quality and timeliness of navigation data
 - Developing the competence and educational system related to maritime transport to meet the needs of a rapidly changing operating environment

Time span: ongoing

Responsibility: Ministry of Transport and Communications, Ministry of the Interior, Ministry of Education and Culture, Ministry of Defence

- 2. Promoting low-emissions operation
 - Promoting low-carbon maritime transport
 - Cutting black carbon emissions
 - Promoting ships'
 - improved waste management and ability to sort wastes
 - commitment to leave all waste in the port waste reception facilities
 - possibilities of using the power supply network offered by ports

- Promoting ports'
 - capacity to reduce their carbon footprint
 - capacity to receive sorted waste
 - opportunities for providing a connection to the power supply network
 - capacity to receive the waste and bilge waters of vessels
- · Promoting projects that improve the state of the sea
- Continuous improvement of environmental responsibility

Time span: ongoing

Responsibility: Ministry of Transport and Communications, Ministry of Economic Affairs and Employment, Ministry of the Environment

- 3. Guaranteeing security of supply and safe and smooth logistics in all conditions
 - Securing the availability of and developing up-to-date and extensive maritime situational picture and situational awareness to support vessel traffic control
 - Ensuring and developing the up-to-dateness and usability of fairways and port structures
 - Securing the availability of the domestic tonnage required for maintaining security of supply
 - Promoting cooperation between states and authorities in developing situational awareness and closer cooperation with companies to use new technologies
 - Preparing for cyber security threats and ensuring capabilities also in abnormal situations
 - Ensuring the prerequisites for winter navigation

Time span: ongoing

Responsibility: Ministry of Defence, Ministry of the Interior, Ministry of Transport and Communications, Ministry of Economic Affairs and Employment, Prime Minister's Office, Ministry for Foreign Affairs

- 4. Supporting the development of economic ecosystems in logistics
 - Preparing a best practice benchmark for economic ecosystems in the industry sector in logistics
 - Enabling experimental projects:
 - Public-private cooperation to remove barriers
 - Engaging research organisations
 - Providing open access to public data
 - Promoting information sharing between companies
 - Supporting the creation of platforms

Time span: ongoing

Responsibility: all ministries

- 5. Making the Baltic Sea an international test bed area for autonomic maritime transport to promote the development of maritime transport
 - Encouraging closer cooperation between companies, research and the public sector to expand the test bed for autonomous shipping and to ensure its international attraction
 - Piloting autonomous devices in the Baltic Sea across the boundaries of territorial waters and exercising influence on the EU law together with the Nordic and Baltic countries

Time span: launched over a short time span (1–2 years) and continued in the long term Responsibility: Ministry of Transport and Communications, Ministry of Economic Affairs and Employment, Ministry for Foreign Affairs

6. Creating stable and predictable operating conditions; improving preconditions for digital business by exercising influence globally through international organisations and the EU; setting operating and competitive conditions at the same level with other EU Member States and influencing the European Commission

Time span: ongoing

Responsibility: all ministries



Photo: ©Viking Line

- 7. Promoting digitalisation in the logistic chain 13
 - Optimising and improving the efficiency of the integrated transport system and logistic chains
 - Ensuring the compatibility of systems and data to facilitate uniform and cost-effective solutions
 - Utilising new technology, such as blockchain-based solutions, which enable enhancing the efficiency of the business processes in the logistic chain
 - Promoting the development of smart waterways to connect Finland's waterways to the data production and data links of the logistical network
 - Developing the availability and compatibility of the services produced by ports and port operators to improve the efficiency of the entire logistical value chain and reduce transport-related environmental impacts

Time span: launched over a short time span (1–2 years) and continued in the long term Responsibility: Ministry of Transport and Communications, Ministry of Economic Affairs and Employment, Ministry for Foreign Affairs

 $^{13\ \} Government\ resolution\ on\ the\ development\ plan\ for\ strengthening\ the\ digitalisation\ of\ logistics,\ the\ transport\ sector\ and\ ports:\ https://valtioneuvosto.fi/paatokset/paatos?decisionId=0900908f8059df65$

 Reducing maritime transport operators' administrative burden related to notification duties by creating procedures relying on advanced interface solutions

Time span: ongoing

Responsibility: Ministry of Transport and Communications

- 8. Developing the competence of Finland's logistics operators
 - Ensuring diverse competence to meet the needs of a constantly changing operating environment
 - Investing in the education as well as research and development (R&D) in logistics
 - Improving the efficiency of training related to maritime transport
 - Improving the efficiency and easy access to additional professional training

Time span: ongoing

Responsibility: Ministry of Transport and Communications, Ministry of Economic Affairs and Employment, Ministry of Education and Culture

III Maritime cluster

Finland safeguards the growth opportunities and competitive operating environment of the maritime cluster to enable the cluster to produce innovative solutions, services and products for the global market.

Priorities:

- · Promoting a global operating environment with a level playing field
- Developing the operating environment of the maritime cluster
- Innovations and new operating methods
- Autonomous ships
- Availability of a competent workforce

A global operating environment with a level playing field is a key factor for the future of the maritime cluster. Emerging markets provide significant growth potential for innovative products and services. To retain international competitiveness, companies need to reinvent themselves, develop and utilise new technologies and operating models, and have access to effective financial instruments.



Photo: ©Meyer Turku

Measures:

1. Exercising influence in developing the conditions and ground rules for fair competition in internationally significant fora (IMO, WTO, OECD) and in the EU

Time span: ongoing

Responsibility: Ministry of Economic Affairs and Employment, Ministry of Transport and Communications, Ministry for Foreign Affairs

- 2. Developing the operating environment of the maritime cluster and supporting the cluster in utilising global opportunities
 - Ensuring the availability of services supporting the growth of companies
 - in the long term
 - Developing proactive legislation that enables changes in operating models
 - Supporting the development of partnership networks
 - Launching special measures to safeguard the pre-conditions for the renewal and growth of companies, for instance in generational changes and for expanding the clientele of small and medium sized enterprises
 - Finding solutions for businesses relying on a single client
 - Improving the pre-conditions for companies entering the international market



Photo: ©Rauma Marine Constructions

- Ensuring a competitive export financing framework
- Safeguarding expertise in Arctic shipbuilding in Finland and promoting export opportunities

Time span: launched over a short time span (1–2 years), ongoing Responsibility: Ministry of Economic Affairs and Employment, Ministry of the Environment, Ministry of Transport and Communications, Ministry for Foreign Affairs

- 3. Supporting companies in the maritime cluster to cooperate, reinvent themselves and develop innovations
 - Supporting the development of global maritime cleantech solutions
 - Supporting the development of innovations improving the state of the marine environment
 - Promoting the utilisation of digitalisation and automation in production, products and services
 - Development of autonomous ships
 - Developing platforms and other instruments to facilitate cooperation

Time span: ongoing

Responsibility: Ministry of Economic Affairs and Employment

 Promoting the use of automation by sharing best practices related to automation trials and testing area operation

Time span: ongoing

Responsibility: Ministry of Transport and Communications

- 4. Developing measures to ensure the availability of competent workforce
 - Constantly developing the anticipation of competence needs in the cluster
 - · Increasing the positive visibility of the maritime cluster
 - Developing the availability of training to promote continuous learning
 - · Fostering diverse competence by developing the training offer
 - Continuing targeted measures aimed at industries with a shortage of skilled workforce

Time span: ongoing

Responsibility: Ministry of Education and Culture, Ministry of Economic Affairs and Employment

- 5. Safeguarding the availability of critical defence technology in all conditions¹⁴
 - Developing maritime cluster companies' competence and capacities related to critical technologies by various means, including industrial cooperation
 - Developing industrial and technological expertise to maintain and modify critical systems, and to ensure their independent use in Finland

Time span: ongoing

Responsibility: Ministry of Defence, Ministry for Foreign Affairs, Prime Minister's Office

¹⁴ Government resolution on Securing the Finnish Defence Technological and Industrial Base https://www.defmin.fi/en/publications/strategy_documents/securing_the_finnish_defence_technological_and_industrial_base

IV Marine production

Finland uses its competence to promote the development of versatile, sustainable and responsible global marine production.

Priorities:

- Increasing globally sustainable aquaculture and its value as a part of the solution for the global food shortage
- Identifying and developing sustainable recreational uses of marine areas and their effects on wellbeing
- Developing and exporting new, low-carbon and ecologically sustainable marine energy technologies and services that improve energy efficiency

Aquaculture will be practised sustainably and efficiently across the globe. Aquaculture has been the strongest growing sector of food production in the last 20 years. Finland's competence is used to develop aquaculture at a global level by utilising high technology, alternative cultivation methods and species. Finnish know-how in energy production is developed into an export product, and energy production is practised ecologically, sustainably and as carbon neutrally as possible. The operating conditions, sustainability and responsibility of marine production will be promoted through marine spatial planning, cooperation and development of service provision.



Photo: Suomen Hyötytuuli Oy

Measures:

- 1. Developing sustainable aquaculture production in the global context
 - Bold initiatives in sustainable aquaculture production, including new species, new technologies or global markets
 - Exporting high-quality competence, good governance, services and technology to promote sustainable aquaculture
 - Commercialising marine production models as export products, taking into account the boundary conditions for growth
 - Exploring licensing models promoting sustainability of aquaculture, and the possibilities of scaling to a wider global operating environment with the aim of achieving a favourable status of the marine environment
 - Increasing the value and the degree of processing of fish, both farmed and fished, sustainably and profitably at global level
 - Developing solutions to safeguard and improve the continuity of coastal fishing including technological solutions, financing schemes and operating models, as well as building up fish stocks eg. by combating illegal fishing

Time span: launched over a short time span and developed in the long term Responsibility: Ministry of Agriculture and Forestry, Ministry of Economic Affairs and Employment

- 2. Investing in research and development measures
 - Promoting goal-oriented research and development partnerships between private and public sector, including innovation ecosystems
 - Strengthening international cooperation

Time span: launched over a short time span and developed in the long term
Responsibility: Ministry of Agriculture and Forestry, Ministry of Economic Affairs and
Employment, Ministry of Education and Culture, Ministry of the Environment

 Launching foresight research in marine biotechnology to identify opportunities and to develop and utilise competence related to it

Time span: launched over a short time span, but longer term for research and related results

Responsibility: Ministry of Education and Culture, Ministry of Economic Affairs and Employment, Ministry of Agriculture and Forestry, Ministry of the Environment

- 3. Energy production
 - Promoting the development of competence in marine energy production in Finland and the export of low-carbon energy technology solutions
 - Ensuring ecological, low-carbon and energy-efficient energy production
 - Exploring the possibilities of co-locating maritime functions, including energy production and aquaculture

Time span: launched over a short time span and developed in the long term Responsibility: Ministry of Economic Affairs and Employment

- 4. Sustainable recreational use of oceans and seas and tourism
 - Developing globally scalable digital services for travel chains
 - Promoting the networking of companies to develop more extensive service packages
 - Developing marine tourism and recreational use of the seas

Time span: launched over a short time span and developed in the long term Responsibility: Ministry of Economic Affairs and Employment

Horizontal themes

The horizontal themes in these maritime policy guidelines include automation, digitalisation and data; competence, research and education; exercising influence at the EU and international level; a secure operating environment; and financing. These themes have been highlighted in the process of preparing all priority areas in the guidelines, and questions associated with them are relevant across the field of maritime policy.

Automation, digitalisation and data

- Developing legislation that facilitates digitalisation and anticipates changes
- Promoting the availability of open data
- Supporting the development of a platform economy and open innovation platforms
- Promoting shipping automation together with other leading countries of automation in the IMO and the EU

Competence, research and development

- Preparing a proposal on the development needs for competence and training in logistics and the maritime cluster
- Integrating marine protection into the relevant education and training
- Utilising the education market at the EU and global level
- Contract negotiations held with autonomous higher education institutions concerning the following four-year term (2020)
- Supporting the development of training to promote continuous learning



Photo: ©Wärtsilä

- Encouraging the mobility of experts at the EU and international level
 - Promoting networking among experts
 - Supporting improved skills and competences and promoting continuous training
 - Retaining core competence in Finland
 - Attracting experts to Finland: increasing attractiveness and improving the smoothness of processes
- Promoting dialogue and cooperation between international maritime operators
- Increasing and utilising research knowledge
 - Creating a high-quality marine research infrastructure laying a foundation for sustainable development and the protection of the marine environment
 - Developing global research capacities, and promoting and utilising Finnish marine research capacity in the oceans and seas
 - Creating a network of universities and research institutions engaged in marine research
 - Developing research and special competence of cold regions
 - Investing in special competence related to shallow coastal areas
 - Promoting knowledge-based decision-making.

Exercising influence in the EU and internationally

- Promoting a level playing field for the maritime cluster both globally and in the EU, exercising influence on the European Commission
- Developing like-minded cooperation and other joint initiatives with countries, regions and cities with a strong maritime cluster
- Exercising influence on internationally significant forums (IMO, WTO, OECD) and in the EU
- A shift from sectoral influence focused on individual topics towards horizontal influence in exercising influence in the IMO
- Influencing third countries.

A secure operating environment

- Promoting security in the Baltic Sea Region and with initiative through national actions, in regional cooperation and as part of EU efforts and other international cooperation
- Preparing to safeguard vital functions of society in all conditions in line with the operating model of comprehensive security
- Ensuring Finland's maritime connections in normal conditions, during incidents and in emergency conditions.

Funding

- Seeking solutions to the financing problems of the small and medium sized enterprises in the maritime cluster
- Promoting the pooling of projects for better access to funding
- Ensuring a competitive export funding system to create a level playing field (Export Credits)
- Better utilisation of national financial instruments for the protection of the oceans
- Exercising influence for the better use of international, EU and Nordic financial instruments for maritime policy funding
- Promoting financial instruments that fulfil the criteria for sustainability
- Developing instruments for channelling private funding to sustainability problems.

VALTIONEUVOSTON PERIAATEPÄÄTÖS SUOMEN MERIPOLITIIKAN LINJAUKSISTA – ITÄMERELTÄ VALTAMERILLE

