



The Government's strategy session on 27 March 2017

## ACTION PLAN FOR THE UPDATE OF THE ARCTIC STRATEGY

### Introduction

The action plan for the update of the Arctic Strategy concerns the following priorities in the update: Finland's foreign and EU policy in the Arctic region, Finland's arctic expertise, sustainable tourism, and infrastructure solutions that support these. The action plan was prepared in accordance with the specification and follow-up procedure of the key projects in the Government Programme, as applicable: the key objectives and measures for the priorities were made concrete and, where possible, concrete schedules for progress were provided. The implementation of these will be reported and

monitored by the preparatory body (Arctic Officers Network) and the Government's strategy session, coordinated by the Government strategic secretariat. The ministries responsible for each priority have produced the content of the respective priority. The ministry with the main responsibility for the priority has compiled the content. The decisions on financing will be made in connection with the preparation of the General Government Fiscal Plan and the National Budget.

#### The responsible ministries

*the ministry with the main responsibility in bold*

- Arctic Foreign and EU policy: **MFA**, PMO, Mol, MoD and MoE
- Commercialisation of arctic expertise: **MEAE**, MoEC, MTC, MoAF, MoD, Mol and MoE
- Sustainable tourism: **MEAE**, MoAF and MoE
- Infrastructure: **MTC** and MoF

### Key measures

#### Arctic Foreign and EU policy

- Application of Finland's Arctic Council chairmanship
- Strengthening of the EU's Arctic policy
- Enforcement of the Paris Climate Agreement and multilateral environmental agreements
- Promotion of synergies in Arctic and Nordic matters

#### Commercialisation of Arctic expertise

- The thematic entity of Arctic business
- Launching of the broker function (ArcTraDe)
- Space incubator
- Commercial utilisation of the training and research functions of the defence and rescue services administration and Nordic Coast Guard Cooperation

#### Sustainable tourism

- The Arctic sustainable tourism destination programme
- Making the Arctic aspect an asset in Finland's international tourism marketing strategy

#### Infrastructure

- The North-East Passage telecommunications cable project
- Including the Arctic railway in bilateral discussions
- Report on how to implement a wireless network in the Arctic region
- Development of the operations of the Sodankylä Satellite Ground Station
- An operational programme for satellite navigation
- Creation of Arctic Spatial Data
- Infrastructure
- Report on the Helsinki-Tallinn railway tunnel
- Improvement of Finnish national roads 21 and 4

## Background

On 26 September 2016, the Finnish Government outlined the priorities of the Arctic Strategy. The main elements of the Arctic Strategy published in 2013 are still valid. The update of the strategy defines Finland's role and the Government's objectives in the development of the Arctic region in more detail. Finland wants to produce key solutions to various problems related to Arctic development by providing innovative products and practices. The sensitive Arctic environment and the principles of sustainable development will be taken into account in all operations in the Arctic region. Finland's arctic expertise, sustainable tourism and infrastructure are the priorities that are particularly highlighted.

The Ministry for Foreign Affairs was in charge of preparing the section on the priority related to foreign and EU policy in the strategy update. With regard to Finland's possibilities to have an influence, the key elements include full application of Finland's chairmanship in the Arctic Council, strengthening of the EU's Arctic policy, enforcement of the Paris Climate Agreement and global environmental agreements and the promotion of synergies in Arctic and Nordic matters.

The objectives related to arctic expertise as defined in the strategy remain topical issues. Arctic research has been reinforced by various means. In practice, all the measures identified in the 2013

strategy have either been put into practice or they have become an established part of activities. It is necessary to make efficient use of research in areas such as decisions on land use, the use of natural resources, working in cold conditions and energy-efficient construction. With regard to the creation and utilisation of business opportunities, it is essential to maintain, develop and market the arctic expertise.

Increasing travel business in the Arctic region requires responsibility: the vulnerability of nature, the rights of indigenous peoples and the need to ensure safety and quality must be taken into account. The programme for sustainable tourism destination pays attention to all aspects of sustainability. Successful implementation of the programme requires tailored cooperation across sector boundaries. The Arctic aspect is raised to spearhead Finland's international tourism marketing strategy. The goal is to boost the attributes related to 'Arctic'.

The central infrastructure solutions are connected to the reports prepared on the North-East telecommunications cable, the Arctic region's wireless network project and the Helsinki-Tallinn tunnel project. Once the reports have been completed, it will be possible to create a broader vision of the infrastructure and to take a stand on the projects in the Government.

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## Priority 1: ARCTIC FOREIGN AND EU POLICY

Finland's Arctic foreign and EU policy is based on cooperation in the EU, the Arctic Council, the Barents Euro-Arctic Council and the Northern Dimension. Participation in Nordic cooperation strengthens Finland's arctic role. Finland's foreign and EU policy in the Arctic region also includes taking into account the interests of indigenous peoples and supporting international environmental cooperation concerning the Arctic region.

Full application of Finland's two-year chairmanship of the Arctic Council, starting on 11 May 2017, is important with regard to the effectiveness of Finland's Arctic foreign policy. During this period, Finland will be steering the work of the Arctic Council, aiming to retain stability and strengthen Arctic cooperation. At the same time, Finland will consolidate its bilateral relations with the member and observer countries. Finland will strengthen its country brand and promote its arctic expertise. Furthermore, Finland holds the chairmanship of the Arctic Coast Guard Forum, and the Arctic Economic Council has a Finnish chair from 2017 to 2019, which will increase Finland's influence.

Finland sees the EU as a key actor in the Arctic region and supports efforts to consolidate the EU's Arctic policy. According to the EU's global strategy for foreign and security policy, it is in the EU's strategic interest to keep tensions in the Arctic regions at a low

level. From Finland's perspective, Arctic policy should be made one of the priorities of the EU's external relations. As the strategic importance of the Arctic region is increasing, the EU's common foreign and security policy should pay more attention to it. With respect to this, Finland will keep the situational picture up-to-date.

Finland supports the reinforcement of the EU's position as an observer in the Arctic Council and will bring this matter forward also during its chairmanship. Finland will influence the implementation and monitoring of the EU's third Arctic Communication at the national and EU levels in accordance with Finland's Arctic Strategy and the policy lines of the Ministerial Committee on EU Affairs (27.5.2016/UM2016-00451). At the call of Finland, the European Commission and the European External Action Service will arrange a high-level meeting and an Arctic stakeholder forum on 15 and 16 June 2017 in Oulu in order to enforce the Communication. Finland considers the balanced approach included in the EU's Arctic Communication (2016) very important. In addition to global objectives, it takes into account the special questions related to the Northern regions of Europe, such as Northern Finland.

Finland emphasises the EU's focus on employment, growth, investment, infrastructure projects, environmental issues, the battle

against climate change and adaptation to it, renewable energy and Arctic research and innovation. Particular attention is paid to sustainable commercial projects that can be promoted by means such as the EU's Arctic policy.

Finland will ensure that Finland's Northern and Arctic policy lines will be reflected in the EU's decision-making also in the future. Finland will promote the full application of the financing opportunities provided by the EU in Arctic and Northern regions and will make every effort to ensure financing in the EU's next multiannual financial framework period 2021–2027. The efficiency of the synergy benefits of the EU's Arctic policy with the implementation of the cohesion policy will be improved.

The Nordic Council of Ministers (NCM) finances cooperation projects that promote sustainable development in the Arctic region (about EUR 1 million per year). Finland supports the use of Nordic funds to finance projects that are in line with its priorities and will ensure that the NCM's updated Arctic cooperation programme to be confirmed in June 2017 will include the priorities that are important for Finland. In addition, Finland will work to ensure

that the EU's Arctic policy can be applied in the context of Nordic cooperation frameworks. The NCM is an observer in the Arctic Council.

In the Barents Euro-Arctic Council, Finland will continue to promote the objectives of the Arctic Strategy in cooperation with Finland's Barents counties. Finland will promote regional dialogue between the EU, Russia, Norway and Iceland to secure the Northern dimension cooperation. Furthermore, Finland will contribute to the improvement of the operating conditions of the Northern Dimension transport and environmental partnerships. A further objective is to find methods for the concretisation of bilateral Arctic partnerships between Finland and Norway and between Finland and Russia.

Enforcement of the Paris Climate Agreement and multilateral environmental agreements is important for the environment and people of the Arctic region. Finland enforces these agreements, promotes initiatives in Arctic cooperation that support their enforcement and highlights the perspective of the Arctic region in conferences of the parties to the agreements.

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## Priority 2: COMMERCIALISATION OF ARCTIC EXPERTISE

The opportunities for the commercialisation of Finnish arctic expertise are mainly based on the large theme areas and drivers of the Arctic region: climate change mitigation and energy solutions, maritime safety, construction and functional infrastructure, and digital services and functional data transfer. Finnish expertise can be exploited in fields such as energy-efficient Arctic construction (including timber construction), sustainable energy solutions and functional community development. Finland can be profiled as a model country for bio-based and circular economy.

The sensitive Arctic environment and challenging natural conditions emphasise the importance of know-how and knowledge of the conditions, and the requirements related to the functionality and reliability of products and services are particularly emphasised. This requires the ability to understand the conditions in which Finnish products will be used.

Finnish experts and authorities involved in defence and rescue services administration and border guard cooperation possess a high level of Arctic knowledge and skills. There is potential for the commercialisation of the extraordinary circumstances know-how possessed by the Finnish public administration.

The visibility of and demand for Finnish energy-efficient and sustainable construction know-how should be improved. Energy-efficient construction and, on the other hand, techno-functional special issues related to Arctic construction, as well as construction products produced by the woodworking and quarrying industries,

are examples of top-notch Finnish expertise. Arctic energy technology and municipal engineering constitute a material part of construction activities, and the use of renewable energy in arctic conditions is a special question that needs focusing on.

The strengthening of Arctic bioeconomy partnerships combines cooperation in the various fields, including forests and fields, land use, aquatic natural resources (fish and water, blue bioeconomy), food and adaptation to climate change. The topics are also strongly linked to Arctic biodiversity and genetic resources, as well as the development of climate resilience, but also in a broader sense to sustainable use of natural resources and responsible conduct. The know-how of Finnish Arctic bioeconomy and the development of new business activities in the Arctic bioeconomy R&D sector must be supported. The establishment of new types of partnerships between actors such as the public and private sectors, the improvement of the operating conditions of companies and the increased networking between bioeconomy actors promote the achievement of these objectives.

Because of our geographical location, nearly all fields of research possess knowledge and skills related to Arctic conditions and cold climate. In Finland, Arctic research is carried out by universities of applied sciences, scientific universities, research institutes and companies. Finland's areas of special expertise include versatile scientific and technological research related to cold conditions, snow, ice and the composition of air, as well as interdisciplinary and social research expertise, which is particularly important as a basis

for decisions concerning new financial activities. Research related to cold conditions know-how is important for the Finnish economy, and an adequate quantity of resources should be invested in it.

The opportunities provided by the EU's Horizon 2020 programme and LIFE financing for the financing of research must be used more efficiently nationally. In addition, we must influence the content

of the next Horizon 2020 work programme (2018–20) and the upcoming 9th research framework programme of the EU, so that they will include research priorities related to the key questions of the Arctic region. Particular priorities include climate change and sustainable development, as well as various logistic and digital solutions.

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## Measure 1: The thematic entity of Arctic business

### The objectives

The objective is closer programme cooperation between Tekes (the Finnish Funding Agency for Technology and Innovation) and Finpro in order to create Arctic business (particularly the marine industry and the digital solutions serving it). The goal of the programme cooperation is an extensive reform of the entire marine industry network to better meet the new needs of demand. The future of sea transport is strongly based on autonomy, which requires adding completely new knowledge, skills and solutions to the traditional vessel development process. The new needs for knowledge and skills are strongly related to the development of cybersecurity, telecommunication solutions, remote operation of vessels and

autonomy, as well as the safety and environmental friendliness of ice-going vessels. This requires strengthening the entire network and the new knowledge and skills.

### Measures

Supporting more extensive development of Arctic business by renewing the services and programme functions of Tekes and Finpro as part of a more extensive growth agenda in 2017  
Supporting the creation of an unmanned sea transport ecosystem and a related joint development roadmap in order to implement autonomous and unmanned sea transport.  
DIMECC Oy will coordinate the operations of the ecosystem, partially financed by Tekes.

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## Measure 2: Launching of the broker function

### The objectives

The cold climate know-how of Finnish companies, research institutes and the academic world is not clearly visible to international companies and organisations. The broker function facilitates matching the needs of international organisations and Finnish know-how. In addition, it will organise seemingly scattered knowledge and skills so that they are more easily identifiable and available to the buyer.

### Measures

Preparing and carrying out competitive bidding to find the provider of the broker function  
Carrying out the ArcTraDe project (Prizztech) 2017–2018.

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## Measure 3: Space incubator

### The objectives

Finland will establish a space incubator, partially financed by the European Space Agency (ESA), to promote the translation of space technology into practical applications. The incubator will serve start-up companies that work with the utilisation of space technology (spin-off and spin-in companies). The incubator is part of a larger Arctic business development network within the scope of ESA financing. In order to diversify the operations, the incubator will include a programme function aiming for piloting and demonstrations (IAP) and a technology transfer programme function, which is in preparation. The objective is to give a boost to the business of 50 start-up companies in five years.

### Measures

Completing the negotiations for an agreement between ESA and Aalto Start-Up Center, assisted by Tekes  
Launching the operations in spring 2017.

## Measure 4: Commercial utilisation of the training and research functions of the defence and rescue services administration and Nordic Coast Guard Cooperation

### The objectives

The knowledge and skills of the Finnish experts and authorities are at a high level. Forms of using and highlighting their know-how include, for example, various Arctic region research, development, exercise and training activities. The special know-how of the defence and rescue services administration and the Coast Guard Cooperation in our Northern conditions should be more efficiently utilised in the export of know-how.

### Measures

Implementing the Arctic Maritime Safety SARC project, which will lay the foundation for the grounds of cooperation between the authorities

Utilising the Pilot Course in Winter Navigation more extensively, such as in connection with the global Polar Code training

Studying possibilities to establish a virtual Arctic training centre within the EU and/or NORDEFECO framework, serving the land, naval and air forces.

Utilising the opportunities provided by the European Defence Agency's (EDA) Arctic project led by Finland, 'European Maritime Capabilities in the Arctic', and by the polar region research cooperation (ICE PPR), in large projects in which there is demand for Finnish know-how.

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## Priority 3: SUSTAINABLE TOURISM

Tourism in the Arctic region is strongly based on the area's special natural conditions and business built around them. There is also a global interest in the Arctic region, for reasons such as the consequences of climate change. Integrity of nature, flora and fauna, clean air and water, polar nights, midnight sun and silence,

as well as the unique culture of the region, are attraction factors around which Arctic tourism is built. The balanced development of the means of livelihood in the region requires sustainable coexistence of different industries and strong management of the environmental and socio-cultural effects.

### The objectives

Travel destinations will be developed to make them more sustainable, so that they are financially sound, customer-driven local communities and cultures, as well as international-level centres that respect the Arctic natural environment.

Responsibility know-how and responsible conduct at tourism companies and destinations will be increased (this will be monitored).

Awareness of Finland as a responsible country of tourism will be promoted.

Positive economy and employment effects will be increased.

The sustainability of the Arctic bioeconomy will be increased, so that its added value for the tourist trade becomes concrete (e.g. Arctic food, natural water resources, renewable energy and timber construction as part of the travel experience).

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## Measure 1: The Arctic sustainable tourism destination programme 2017–2019

### The objectives

Actors in the tourist industry will be committed to the Arctic travel theme.

The criteria and concept of Arctic tourism will be agreed on together.

Seasonal variation will be balanced by developing new products. Awareness of Finland as an Arctic country of tourism will be improved.

Growth and employment will be increased.

## Measures

Analysing the current status of the sustainable tourism programmes of travel destinations, as well as the ways of cooperation with the region's other companies existing at the interface (June 2017).

Implementing an information campaign for tourism actors and for trades at the interface on the significance of responsible tourism, highlighting best practices, the benefits for companies and the effect on Finland's image. Committing the actors to work to achieve the joint goal. (The information campaign will start in August 2017.)

Preparing and launching a responsible tourism and communication training package for companies and destinations, utilising existing research data and programmes (to be completed in December 2017).

Creating the Responsible Visit Finland concept and an umbrella label, and implementing the label to provide support for those companies and destinations that systematically apply sustainable development programmes to the development of their own operations. Utilising existing assessment methods (to be completed in December 2017).

Supporting regional productisation and packaging by companies and destinations (e.g., with national parks and indigenous peoples), relying on the principles of responsible tourism (implemented throughout the project).

Carrying out the Responsible Arctic Finland marketing/sales campaign for tourists through social media channels and specialised tour operators (to be completed in April 2019).

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## Measure 2: Making the Arctic aspect an asset in Finland's international tourism marketing strategy

Identifying Team Finland actors and tourism actors that utilise the Arctic aspect and committing them to the Arctic theme (September 2017).

Carrying out background studies to support decision-making (November 2017).

Carrying out a target group/country study and distribution channel analysis (traditional and digital) on the attractiveness of Arctic products (tourism + other) (February 2018).

Modifying the stereotyped view of the Arctic aspect of Finnish tourism to develop an attribute that is good for all seasons and

portrays the country from a broad perspective. Preparing a concept for the development and promotion of Arctic tourism in cooperation with the major regions (April 2018).

Launching the Arctic tourism programme on the basis of the results (May 2018).

Developing a communication and marketing concept and a product offering model for the whole of Finland (November 2018).

Implementing the communication and marketing strategy related to the meaning of 'Arctic' (December 2019).

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## Priority 4: INFRASTRUCTURE

Finland wants to grow and improve its competitiveness through Arctic activities with due respect for the Arctic environment. A high-quality digital and physical infrastructure will provide the opportunities for the growth of business in the Arctic region. In

### The objectives

Finland will be developed into a node of telecommunications between Europe and Asia, attracting telecommunications and software investment to Finland.

The utilisation of the Galileo, GPS, Glonass and Beidou satellite systems in Finland will be ensured, particularly in the Northern areas. It is possible to ensure digital services and, for example, automatic driving through satellite navigation everywhere in Finland.

addition, it will improve the region's vitality, link the Arctic region to Europe, Asia and the global centres of economic growth, and increase investment in Finland.

Good communications required by industry and commerce will be ensured in Northern Finland.

Transport corridors that connect the Arctic regions with Europe and constitute a natural part of the international transport network will be created, strengthening Finland's competitiveness in the global economy.

## Measure 1: Promoting communication connections and spatial data infrastructure in the Arctic region

The North-East Passage telecommunications cable project for connecting Asia and Europe will be implemented in such a manner that a company can be established by December 2017 and the construction started at the beginning of 2019.

The surveying of the possibilities to implement a wireless network in the Arctic region will continue.

The Sodankylä Satellite Ground Station will be developed into

a more extensive station that focuses on Arctic operations and produces satellite-based data related to the safety and reliability performance of society as well as climate change (environmental data such as snow, ice and soil frost and weather condition data).

An action programme for the efficient utilisation of satellite navigation in Finland will be prepared by summer 2017.

Arctic Spatial Data Infrastructure (Arctic SDI) will be created, aiming to collect data from the Arctic region and to produce a common base map for the presentation of Arctic data.

## Measure 2: Analysing the need for transport corridors connecting the Arctic regions with Europe and improving communications in Northern Finland

An analysis of the technical, financial and social aspect of the Helsinki–Tallinn railway tunnel will be carried out by the FinEst Link project in July 2018.

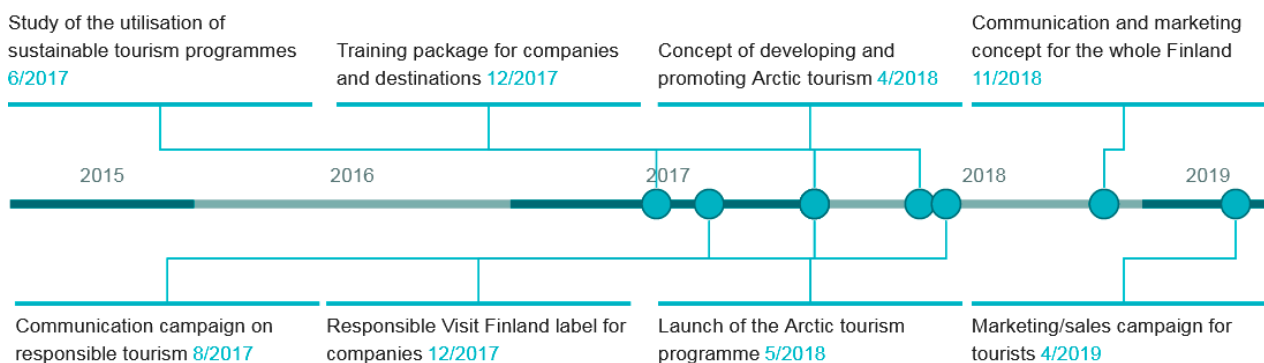
The question of the Arctic railway will be included in bilateral discussions.

Finnish national road 21 will be improved to meet the needs of industry and commerce (in 2017).

The section of Finnish national road 21 located in Muonio will be built into a smart road by the end of 2018.

Finnish national road 4 will be improved between Kemi and Oulu as part of the Bothnian Arc and the TEN-T core network (in 2017).

### Sustainable tourism, example image



### Infrastructure projects, example image

