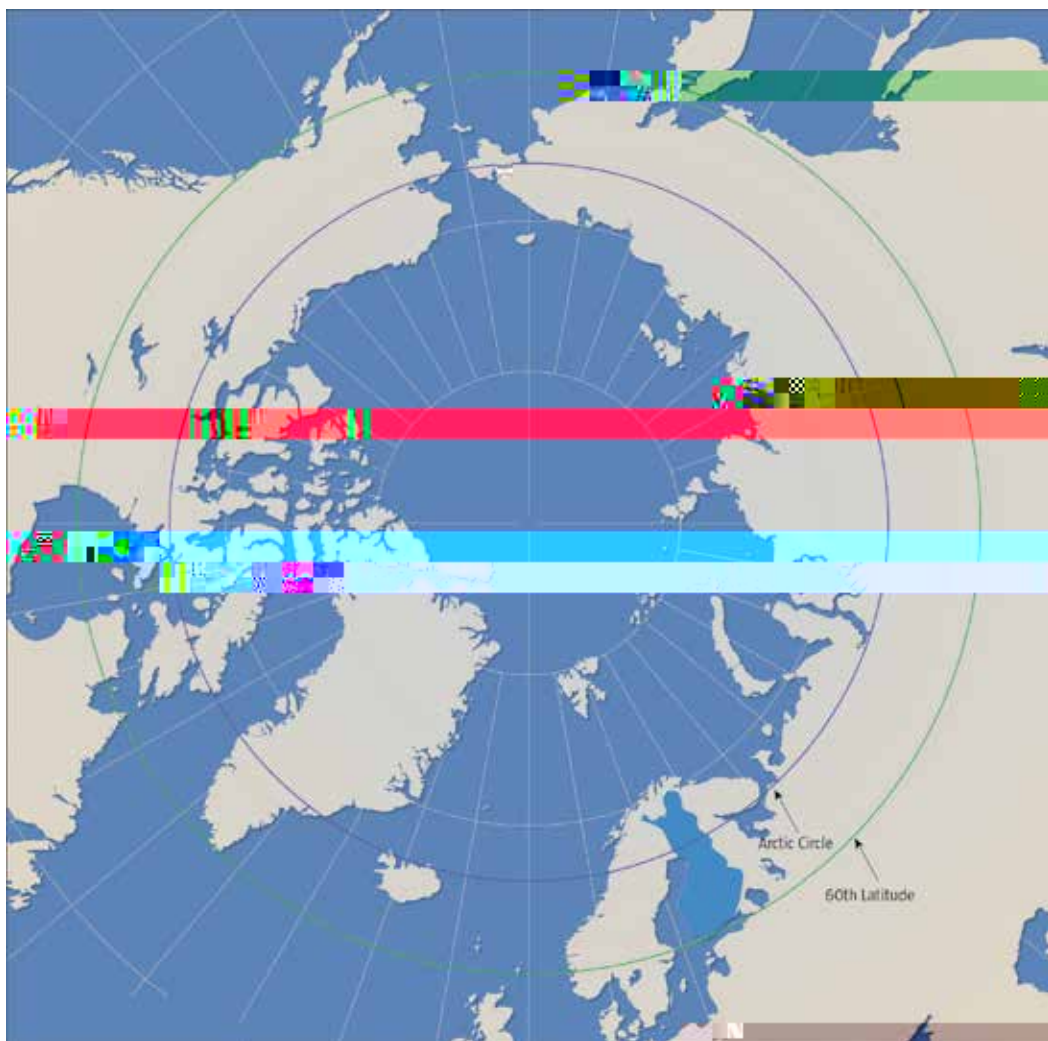




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Finland's Strategy for the Arctic Region 2013
Government resolution on 23 August 2013

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Abstract <p>Finland's new Strategy for the Arctic Region defines a number of objectives for Finland's Arctic policy and explores ways of promoting them. The strategy addresses local residents, education, research, the economy, infrastructure, the environment, stability and international cooperation in the Arctic.</p> <p>Underlying the review of Finland's Strategy for the Arctic Region is the increased significance of the region and a growing perception of the whole of Finland as an Arctic country. Finland possesses diversified Arctic expertise and it is very much in its interests to be involved in the development of the region. The new strategy is a reflection of the drive to pursue these ambitions.</p> <p>The Government Programme of Prime Minister Jyrki Katainen's government, announced on 22 June 2011, makes reference to the Arctic strategy by foreseeing intensified efforts to implement it. The previous strategy announced in 2010 focused on external relations. The new strategy addresses a wide range of issues. It examines the possibilities for bolstering Finland's position regarding the Arctic region; the creation of new business opportunities; the Arctic environment and the region's security and stability; the position of the northern parts of Finland; international cooperation; and Arctic expertise in the widest sense of the term.</p> <p>Finland's Arctic policies were adopted by the government in its evening session held on 10 October 2012. Inherent in the perspectives created by the new strategy are the four pillars of policy outlined by the Government: <i>an Arctic country, Arctic expertise, Sustainable development and environmental considerations</i></p>			

In terms of the natural environment, the Arctic region is one of the purest and best preserved

Finland is in a position to assume a key role, open up new opportunities and innovate in areas VXFV DV \$UFWLF DQG FROG FOLPDWH H[SHUWLVH FRQVWUXFWLR operations, research as well as in value-added products drawing upon the northern environment.

Finland is a leading expert in the Arctic maritime industry and shipping

Finland has a strong national interest to retain its position as one of the global leaders in the training, research, product development, operations and business activities related to Arctic PDULWLPH WHFKQRORJ\ DQG VKLSSLQJ 0XOWL GLVFLSOLQDU\ F technology are directly linked to the business opportunities offered by the region.

)LQODQG KDV ORQJ WUDGLWLRQV DQG OHDGLQJ H[SHUWLVH L vessels have been operating for years in the Arctic, including the North-East Passage. Finland's DPWLWRQ LV WR EH D OHDGLQJ H[SHUW LQ \$UFWLF PDULWLPH companies are already actively involved in projects to develop Arctic sea areas. Finland also PDQXIDFWXUHV DGYDQFHG VWDWH RI WKH DUW \$UFWLF LFH EUH maritime technology include Canada, Norway, Russia, the United States and China.

7R UHLQIRUFH \$UFWLF QDYLDWLRQ VNLOOV DQG H[SHUWLVH training, research, administrative cooperation and, in particular, cooperation with the other Arctic countries. Owing to the nature of the competition and markets in the sector, contacts with the government agencies of other countries are essential. Often, the best practices developed in the %DOWLF 6HD UHJLRQ RIIHU KLJKO\ VXLWDEOH H[SRUW SURGXFW in a position to offer new types of services to facilitate safe transportation and contribute to the SUHVHUYDWLRQ RI WKH PDULQH HQYLURQPHQW)LQODQG SRVV\ UHFRYHU\ LQ LFH FRQGLWLRQV ± D WHFKQRORJ\ WKDW LV YLWDO

Finland is a pioneer in sustainable mining in the Arctic

0LQLQJ LQ WKH \$UFWLF UHJLRQ LV H[SDQGLQJ LQ)LQODQG DV development is offering Finnish operators new international business opportunities both in terms of PLQLQJ WHFKQRORJ\ DQG WKH LQFUHDVLQJ WUDQVSRUW YROXP this is the growing demand for ice-breakers. Environmental and social sustainability considerations DUH DOVR KLJKOLJKWHG LQ WKH SODQQLQJ DQG LPSOHPHQWDW management and geotechnological engineering will be further underlined in the face of climate change.

)LQQLVK FRPSDQLHV DUH DEOH WR RIIHU QHZ VHUYLFHV DQG natural resources with due regard to the principles of sustainable development.

Finland's objective is to attract further foreign investments in its growing mining industry. There are several mines currently operating in northern Finland with plans to open new ones. However, prospects for the mining industry have been weakened by the uncertainty of the global economy and the movements in the price of minerals.

)RU)LQODQG LW LV YLWDO WR PDLQWDLQ D VXI¿FLHQW OHYH ODERXU DQG WKH DGHTXDF\ RI WKH UHVRXUFHV DQG FRPSHWQ¿HOG RI DFWLYLW\ \$W WKH VDPH WLPH WKH 1RUWK &DORWWH U of a single Nordic labour market.

Arctic developments impact future transports

The foreseen growth of the mining industry, tourism, the growing energy industry in the Barents region and the opening of the North-East Passage have highlighted issues such as the need to develop transports and logistics, and establish new transport routes in the Arctic. Many potential investment and transport projects involve a cross-border dimension.

\$V WKH FRVWV RI DQ\ LQYHVWPHQWV ZLOO EH H[WUHPHO\ KLJK in a comprehensive way. Finland's near-term measures are based on the Finnish Transport Agency report on the transport needs in northern Finland. An understanding with the neighbouring countries needs to be reached on any decisions on potential new connections from Finland to the Arctic Ocean, and to Sweden, Norway and Russia. The Northern Dimension Partnership on Transport and Logistics provides a useful platform for the development of northern transport services.

Finland offers advanced energy expertise

7KH RLO DQG JDV UHVHUYHV LQ WKH \$UFWLF UHJLRQ DUH RI JOR FHQW RI WKH ZRUOG¶V XQGLVFRYHUHG RLO UHVHUYHV DQG SHU there. As a result, they attract keen international attention and involve major economic interests. A large part of these reserves lie relatively close to Finland in the area between Norway and the Yamal Peninsula in western Siberia. Finland has a strong interest in participating in the energy business operations in the Arctic region, which will also have an impact on demand for various products and services.

In the energy business, risk assessment and risk prevention are of primary importance. Oil drilling in the Arctic, in particular, involves a number of risks. The Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic creates opportunities for utilising Finnish oil recovery know-how. Additionally, multilateral Arctic projects allow Finland to promote the H[SRUW RI)LQQLVK HQYLURQPHQWDO H[SHUWL VH \$W WKH VDPH V contingency planning and the prevention of oil spills.

7R SURPRWH WKH H[SRUW RI)LQQLVK \$UFWLF HQUHJ\ H[SHUW company cooperation is called for, particularly with companies in Norway and Russia.

)LQODQG SRVVHVHV VSHFLDO H[SHUWL VH LQ HQUHJ\ HI¿FLH sources, especially wood energy. The Arctic region needs new electricity transmission lines and decentralised energy production. As a result of the increased economic and industrial activity in the region, the natural environment will be subjected to greater stresses which, in turn, will create a need to develop public utilities. At the same time, it will offer opportunities for Finnish cleantech

H[SHUWL VH DQG FRPSDQLHV HQJDJHG LQ WKLV OLQH RI EXVLQHV

)LQODQG ZLOO LQWHQLI\ WKH HIIRUWV WR SURPRWH LWV VS H[SRUWV 7KLV FDOOV IRU DQ DFWLYH FRQWULEXWLRQ ERWK IUR as cooperation between the various actors involved.

Arctic cooperation calls for regional operators and interregional contacts

From Finland's perspective, Arctic operations fall into three categories: international, national and regional. Geographically, Lapland, Finland's northernmost province, is an Arctic region and like all Arctic areas it is characterised by sparse population and long distances. Hence, it is often in Lapland that the strategic objectives related to tourism, renewable energy sources, land use, mining operations, transport, culture and indigenous peoples are felt most tangibly.

As well as Lapland, the Barents Regional Council covers the regions of Oulu and Kainuu, with Northern Karelia holding an observer status in the Council. The regions and regional operators play

For Finland, the structural funds of the European Union and the aid for sparsely populated areas are central instruments in facilitating the regional development of northern and eastern Finland.

Welfare and local population

economic stability and enhances competitiveness. Aside from the more conventional business models, information and communication technology offers new possibilities to improve welfare of

The Saami are the only indigenous people in the European Union. In Finland, the status of the Saami is guaranteed by the Constitution. Finland is committed to further reinforcing the position of the Saami language and culture, and securing the availability of services in the Saami language. At the international level, Finland seeks to ensure the participation of indigenous peoples when issues of the indigenous people represented in the Arctic Council are able to participate in the work of the Council at the various levels.

Technological applications, innovations and efficient services called for

services are instrumental in boosting economic activity in northern Finland as well as improving competitiveness in the country as a whole. The adoption and utilisation of smart solutions drawing upon advanced communications technology need to be promoted in all sectors.

The sources of livelihood in the north depend on smooth air, road and railway transport services, which are also necessary to respond to the need for international connections. Other elements essential to housing, services and government actions are to improve risk management, and to

considerably, Finland is striving to establish itself as a hub in the cloud service industry. The Nordic

tourist destination. To succeed in developing and increasing tourism, it is necessary to cherish the level of service, research and training related to tourism should be of the highest standard, all

conditions are called for. One such solution is Arctic design, which refers to design that draws upon an understanding of the Arctic environment and circumstances, while giving due consideration to greater added value in production.

At the same time, the mere fact that the Arctic environment in itself is highly challenging may
RIIHU EXVLQHVV RSSRUWXQLWLHV)RU H[DP SOH /DSODQG KDV V
ground for the automobile industry. As far as satellite reception is concerned, Lapland's geographic
location is ideal. Satellite services could be upgraded on the public-private partnership basis into a
new type of service catering for international and domestic customers. The investments made in

The need for research, education and training as well as access to and the transparency of information is highlighted

) LQODQG¶V H[WHQVLYH DQG LQ GHSWK \$UFWLF H[SHUWLVH LV D I where its position as an Arctic country is taken into account at all levels. Arctic and cold climate research is carried out and training provided at several higher education institutions and research LQVWLWXWHV LQ PDQ\ DFDGHPLF GLVFLSOLQHV)LQQLVK \$UFWLF ambition of achieving the highest international level. It calls for investments in education, training DQG UHVHDUFK WKH RQJRLQJ GHYHORSPHQW RI DQG VXSSRUW institutions; and closer collaboration between the various Arctic operators from both within and outside the academic framework. In this respect, international networks, contacts and mobility are of great and ever increasing importance. Finnish actors play a visible and proactive role in this area.

Research also is important in providing information in support of decision making and the Arctic policy. Research may also help companies drive their business operations in the region.

From the standpoint of Finland's Arctic objectives, broad-based access to and transparency of Arctic knowledge are of key importance. This need is further emphasised by the rapid transition that the Arctic region is currently undergoing, accompanied by a growing international interest. It is vital for society as a whole, including the policy makers, to understand what this transition in the Arctic is all about.

Finland's position as an Arctic Member State of the European Union offers it an opportunity to generate and disseminate comprehensive information on the Arctic sorely needed by the Union. Finland is working for the establishment of an EU Arctic Information Centre under the auspices of the Arctic Centre at the University of Lapland. At the same time, Finland is making use of the FRPPXQLFDWLRQV DQG H[KLELWLRQ DFWLYLWLHV RI WKH \$UFWL

for. Further development of the network of nature conservation areas in the region is a more pragmatic and faster way than legislation in improving the protection of the Arctic environment and clarifying the framework for economic activity.

7KH ULVNV DVVRFLDWHG ZLWK WKH RSHUDWLRQV LQ WKH UHJLR must also be evaluated in terms of corporate social responsibility. Further efforts are called for to GHYHORS WKH PHWKRG RORJ\ RI HQYLURQPHQWDO LPSDFW DVVHV for Arctic conditions.

Climate change poses a serious immediate risk to biodiversity. Special attention must be paid

The Arctic Council is engaged in valuable efforts that deserve public recognition; what is more, full use should be made of the information produced by the Council in support of decision making. However, there is still a need to increase the visibility of the Council.

\$ V R I D X W X P Q) L Q O D Q G Z L O O K R O G W K H S U H V L G H Q F \ R I W
for a two-year term. Barents cooperation will introduce a regional perspective to the Arctic policy and has played a part in establishing permanent networks for cross-border cooperation.

The geographic areas covered by the BEAC, the Northern Dimension and related partnerships partly overlap since the Northern Dimension focuses on the Baltic and the Barents region. Barents cooperation and Northern Dimension partnerships represent major potential in view of the entire Arctic region. As well as the Nordic countries, both the EU and Russia are involved in this cooperation. Increasing mutual consistency and links between Barents cooperation and Northern Dimension S R O L F L H V Z L O O F U H D W H D W W U D F W L Y H R S S R U W X Q L W L H V I R U H [
Finland pursues a proactive role in fostering Northern Dimension Partnerships. Arctic cooperation L Q W K H F R Q W H [W R I W K H 1 R U G L F & R X Q F L O R I 0 L Q L V W H U V O D U J H
councils, all in line with Finland's national interests.

In 2010, Finland launched an Arctic partnership with Russia, which represents a strong economic and practical approach responsive to the needs of enterprises operating on a commercial basis. Finland is also considering other bilateral Arctic partnerships as well as multilateral partnerships with Norway and Sweden.

The European Union plays a key role in Finland's Arctic policy. Finland cooperates with Sweden and Denmark to clarify and reinforce the European Union's Arctic policy. The European Union's observer status in the Arctic Council serves this purpose.

II ELEMENTS OF THE ARCTIC STRATEGY

1 Vision for Arctic Finland

Vision: Finland is an active Arctic actor with the ability to reconcile the limitations imposed and business opportunities provided by the Arctic environment in a sustainable manner while drawing upon international cooperation.

The new policies under underlying Finland's current Arctic strategy were adopted by the Government on 10 October 2012:

Finland as an Arctic expert

- Finland is an Arctic country The Arctic identity of Finland has been shaped by climate, one third of all the people living north of the 60th parallel are Finns. The Saami's status as the only indigenous people within the European Union is duly recognised and their participation in issues affecting their status as indigenous people is ensured. The northern parts of Finland must remain a stable and secure operating environment.
- Finland is an Arctic expert The Arctic region is undergoing a major transition. Finland
- Finland complies with the principles of sustainable development and respects the basic conditions dictated by the Arctic environment Understanding the global effect of climate change, the sustainable use of natural resources as well as recognising the basic conditions imposed by the Arctic environment lie at the very core of Finland's Arctic policy.
- International cooperation in the Arctic Reinforcing its Arctic position, promoting international cooperation and maintaining stability in the Arctic region remain Finland's key objectives.

1.1 Background for updating the strategy

In accordance with its Programme, the Government decided on 16 May 2012 to review its Arctic Arctic policies were adopted by the Government on 10 October 2012.

October 2012, in which all the ministries were represented.

Finland has major interests to look after in the Arctic. It involves aspects related to business, H[SHUWLVH LQWHUQDWLRQDO FRRSHUDWLRQ)LQODQG¶V QRUW country's Arctic position, and efforts to promote sustainable development in the region.

1.2 International operating environment

1 R VLQJOH XQDPELJXR XV GH¿QLWLRQ H[LVWV IRU WKH \$UFWLF academic disciplines or political agreements. Similarly, for the purposes of the strategy, the Arctic UHJLRQ LV WR EH XQGHUVWRRG ÀH[LEO\ LQ WKH JLYHQ FRQWH[W in Lapland north of the Polar Circle. The starting points of the strategy are that Finland possesses a ZLGH UDGJH RI H[SHUWL VH UHODWHG WR WKH \$UFWLF DQG WKDV of Finland.

Interest in the Arctic has also grown in countries outside the region. Its economic potential and the foreseen new transport routes underline the strategic importance of the region in a way that will also have implications for security policy. An increasing number of nations will display a keen interest in the area in the future.

Underlying all these developments is the accelerating climate change. At the same time, the position of the Arctic region is affected by the shift to Asia in the focus of the global economy. The transition in the Arctic will take place concurrently with the changes in the re-division of powers in international politics.

Canada holds large land and sea areas in the Arctic where it underlines its sovereignty. Canada has played an important role in the Arctic Council and is a leading country in Arctic research. Canada

Iceland adopted a resolution on its Arctic policy in March 2011, which underlines the importance of the location once the necessary preconditions for Arctic sea transports improve.

Sweden announced its Arctic strategy in May 2011. Sweden's priorities include climate and the environment, economic development and the human dimension. A major theme running through the strategy is environmental protection, which is addressed from a wide range of perspectives.

Denmark is an Arctic country because of Greenland, whose autonomy Denmark has been reinforcing. The Arctic strategy of the Kingdom of Denmark was published in August 2011. Along with

The United States has a concise political document designed to highlight the USA's priorities in the Arctic region and intensify the focus on Arctic issues particularly at the national level. The strategy addresses security, a peaceful, balanced and responsible development of the region, and the promotion of international cooperation.

Russia has ICT infrastructure; the assurance of environmental safety; international cooperation in the Arctic region; the assurance of military security; and defence of the state borders in the Arctic region.

2 Finland's Arctic population

2.1 Social sustainability, a well-functioning society and working conditions

The Arctic region has a total population of about four million, of whom indigenous peoples account for about 10 per cent. There are over 180,000 inhabitants in Finnish Lapland.

As a result of global warming and increased economic activity, the conditions in the Arctic have changed in a way that will have implications for health, well-being and the living environment as well as the call for action to adapt.

From the standpoint of Finland's northern parts, it is imperative to secure the necessary

introduction of smart solutions across administrative boundaries based on advanced information and communications technology will be promoted in all sectors of society. To manage this process, all ministries are currently preparing smart strategies for their respective administrative branches.

As the livelihoods important to the Arctic develop and the northern cities grow, new jobs will
EH FUHDWHG DQG WKH GHPDQG IRU ODERXU ZLOO LQFUHDVH +
labour in a sparsely populated area, the opportunities and problems associated with the mobility
of the workforce will be felt more tangibly than further south. Familiarity with the Arctic conditions
and knowledge of the Scandinavian languages, Russian and English would offer employment
RSSRUWXQLWLHV IRU MRE VHHNHUV DFURVV WKH HQWLUH \$UFWL
GHPDQG LQ 5RYDQLHPL ,QXYLN 0XUPDQVN DV WKH\ DUH LQ +DP
it important to promote the mobility of labour in the Arctic region.

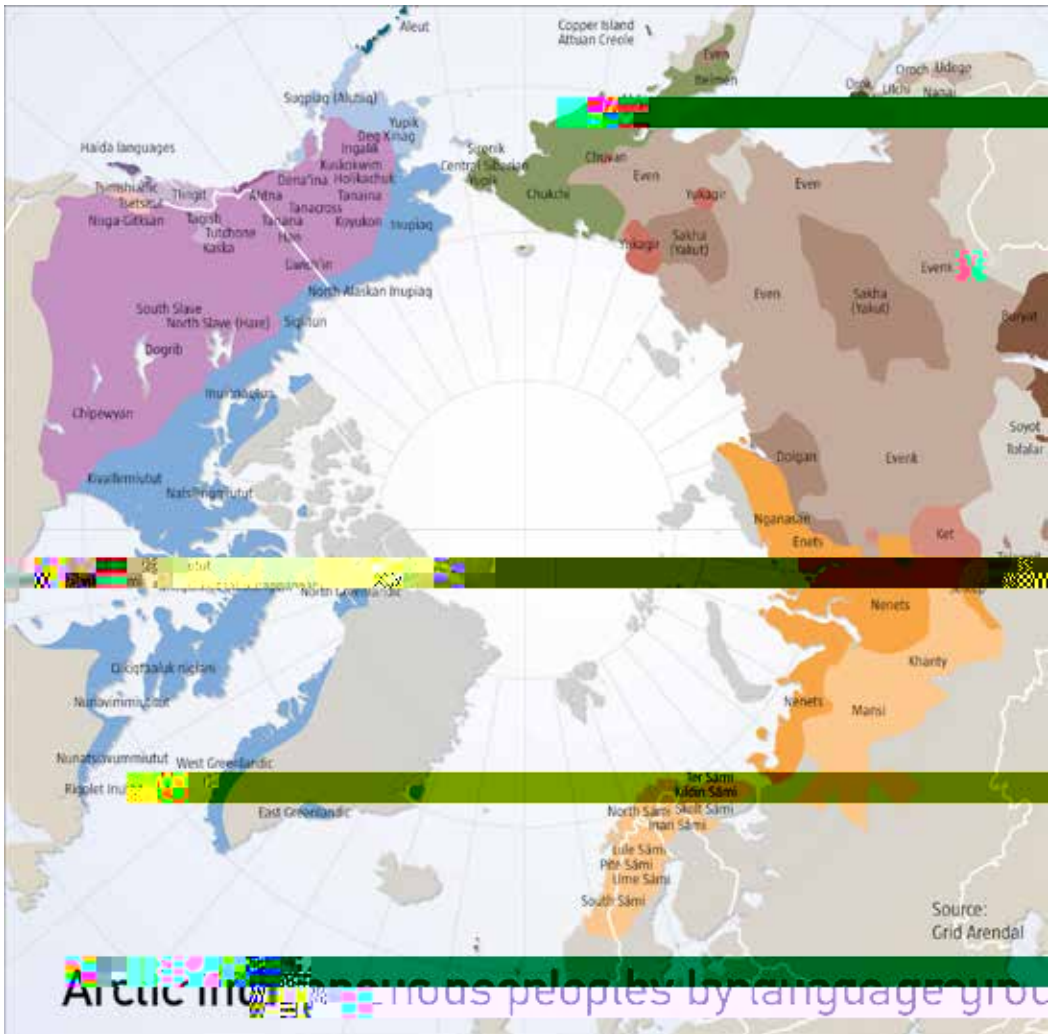
In particular, the availability and free mobility of labour and businesses are of vital importance
to economic growth and investments in the Nordic countries. As the Nordic countries are the main
WUDGLQJ SDUWQHUV IRU RQH DQRWKHU WKH\ EHQH¿W IURP PXW)
As neighbouring countries, Finland, Sweden and Norway can advance in many areas important to
WKH \$UFWLF E\ IDFLOLWDWLQJ WKH PRYHPHQW RI H[SHUWV DQG
QDWLRQDO ERUGHUV 7KH 1RUGLF &RPPRQ /DERXU 0DUNHW \$JUH
to the mobility of labour in the Arctic border areas.

Another factor promoting mobility between Nordic countries is commuting. To make more
HI¿FLHQW XVH RI FRPPXWLQJ VPRRWK WUDQVSRUW VHUYLFHV D
are called for.

The Nordic Mining School, jointly launched by the Universities of Oulu and Luleå, serves as a
SULPH H[DPSON RI KRZ WKH HIIRUWV WR UHVSRRG WR WKH FKDO
begin already in education.

In tourism, seasonal work and career development can be facilitated in the north by working
WRJHWKHU ZLWK WKH \$UFWLF QHLJKERXUV)RU H[DPSON E\ F
VHDVRRQ LQ 1RUZD\ ZLWK WKH TXLHWHU VHDVRRQ LQ)LQODQG DQ

2.2 Finnish Saami population and other indigenous peoples in the Arctic



Sources: Grid Arendal

, QGLJHQRXV SHRSOHV DUH UHSUHVHQWHG LQ WKH \$UFWLF & RXQ organisations. The Saami people residing in Finland, Sweden, Norway and Russia are represented on the /6ep

SURWHFWLRQ RI LQGLJHQRXV SHRSOHV)LQODQG ¿QGV LW LPSI
indigenous peoples in this cooperation.

3ULPH 0LQLVWHU -\UNL .DWDLQHQTUV *RYHUQPHQW 3URJUDPP
&RQYHQWLRQ 1R RQ ,QGLJHQRXV DQG 7ULEDO 3HRSOH DV RQ
± :RUN LV LQ SURJUHVV WR H[SORUH WKH SUHFRQGLWLRQ
)RU VHYHUDO \HUV QRZ WKH 6DDPL ODQJXDJH DQG FXOWXU
Government has supported these developments by allocating additional resources for teaching
Saami and for projects aimed at reviving the knowledge of the language among children. Of the
WKUHH 6DDPL ODQJXDJHV VSRNHQ LQ)LQODQG ,QDUL DQG 6NR
March 2012, a working group appointed by the Ministry of Education and Culture submitted its
proposals for a programme to revive the Saami language. Efforts to reinforce the Saami language
and culture need to be continued.

The Saami people

- An indigenous people living in the territories of Finland, Sweden, Norway and Russia.
- 7KH 6DDPL SRSXODWLRQ LV ±
- 7KH 6DDPL LQ)LQODQG QXPEHU DERXW RI ZKRP FORV
the Saami Homeland.
- Saami Homeland: the municipalities of Enontekiö, Inari and Utsjoki and the northern
parts of the municipality of Sodankylä.
- The Saami languages spoken in Finland are North Saami, Inari Saami and Skolt Saami.
- \$V RI WKH 6DDPL OLYLQJ LQ WKH KRPHODQG KDYH XG
cultural autonomy with regard to their language and culture.
- The duties related to autonomy are managed by the Saami Parliament elected by public
ballot.

3 Education and research

3.1 Finland's Arctic expertise

)LQODQGTUV H[WHQVLYH DQG LQ GHSWK \$UFWLF H[SHUWLHV LV D
ZKHUH LWV SRVLWLRQ DV DQ \$UFWLF FRXQWU\ LV WDNHQ LQWR D
DQG UHVHDFK UHODWHG WR QRUWKHUQ DUHDV 'LYHUVL¿HG \$
HGXFDFWLRQ LQVWLWXWLRQV DQG UHVHDFK LQVWLWXWHV ([SHU
Because of Finland's northern location, nearly all areas of research are in some way linked to
FROG FOLPDWH H[SHUWLHV DQG DFFRUGLQJO\ \$UFWLF FRQGLWLF
LQVWLWXWHV HQJDJHG LQ \$UFWLF UHVHDFK DQG WKHLU UHVSH

H[DP SOHV RI WKL V DUH)LQODQG¶V VSHFLDO H[SHUWL VH LQ DUH snow, ice and air where it is of the highest international calibre. Similarly, research plays a key role in the area of planning, licensing procedures and evaluation of risks and threats in connection with the various activities. These data are needed for adapting to Arctic climate change and for utilising the opportunities offered by the region.

In the Arctic region, research involves an important social dimension, while at the same time its importance to the Finnish economy is growing.

\$V D UHVXOW WKH VLJQL¿FDQFH RI WKH HI¿FLHQW XVH RI EU KLJKOLJKWHG LQ WKH \$UFWLF UHJLRQ \$Q LPSRUWDQW VRXUFH F the local conditions. An active dialogue between the various parties is of great importance when research and surveys are carried out. Moreover, the new knowledge generated by research needs WR EH DFWLYHO\ GLVVHPLQDWHG WR VXSSRUW GHFLVLRQ PDNLQJ general awareness of the Arctic among the public at large.

- University of Helsinki: accounts for a considerable percentage of Finnish Arctic research, for H[DP SOH LQ WKH ¿ HOGV RI JHRORJ\ JHRJUDSK\ DQG SK\VL FV
Turku operate research units in northern Finland.
- University of Lapland: is the northernmost university in the European Union. It conducts research on Arctic populations, communities, the environment, and art and design and their interaction. Additionally, it is assigned nationwide responsibility for social and legal research related to the Saami nation. The Arctic Centre of the University of Lapland focuses on global change, sustainable development and environmental and minority law in the region. Its QDWLRQZLGH UROH LQFOXGHV WKH GLVVHPLQDWLRQ RI VFLH H[SHUW GXWLHV UHODWHG WR WKH \$UFWLF DQG %DUHQWV (XU to establish a European Union Arctic Information Centre in Rovaniemi. The University of Lapland also houses the University of the Arctic International Secretariat , which is responsible for the administration of the cooperation network between the universities, polytechnics and other educational organisations of the Arctic countries. The higher education institutions belonging WR WKH QHWZRUN SURPRWH WKH H[FKDQJH RI UHVHDUFKHUV regions.
- The University of Oulu is an international science university engaged in research into northern DQG \$UFWLF LVVXHV LQ VHYHUDO ¿ Biology Institute L H Q Sine 7 KH X Q L nation-wide responsibility for the provision of education in the Saami language and culture. Research is carried out on Saami history and society. The Thule Institute Research Centre LV HQJDJHG LQ UHVHDUFK LQWR WKH HQYLURQPHQW QDWXUD For this purpose, it operates a Centre for Arctic Medicine and the NorNet network coordinating environmental and natural resources research. The Oulu Mining School and the Nordic Mining School, established in collaboration with the University of Luleå, respond to the growing needs of the mining industry. The Sodankylä Geophysical Observatory is a national special institute subordinated to the University of Oulu.
- Finnish Meteorological Institute: Arctic research is one of the institute's strategic priorities.

- Technical Research Centre of Finland (VTT): low-temperature research, low-temperature technology.

Finnish institutes engaged in Arctic research:

KWWS ZZZ DUFWLFHFWUHQWUH RUJ 6XRPHNVL 787.,086 \$UNWLQHQBW

4 Finland's business operations in the Arctic

4.1 Arctic business opportunities

%HFDXVH RI WKH FKDOOHQJHV IDFLQJ WKH JOREDO HFRQRP\ DQG HFRQRPLF UHODWLRQV WR)LQODQG LW LV H[WUHPHO\ LPSRUWD growth in all areas where the prospects are favourable, and where Finnish companies have a chance of success. Such prospects are offered by the Arctic region.

)LQQLVK \$UFWLF H[SHUWL VH KDV ORQJ WUDGLWLRQV DQG HQM IDPLOLDULW\ ZLWK \$UFWLF FRQGLWLRQV DQG WKH HI¿FLHQW D EHVW H[DP SOH LV SURYLGHG E\ \$UFWLF PDULQH WHFKQRORJ\ DQ and services. According to companies engaged in this line of business, competition is becoming increasingly globalised and, as a result, the relative competitive edge achieved in the past is about to crumble unless strong action is taken. At the same time, the Arctic region is offering a wide range of new business opportunities attractive to numerous companies, even in areas other than marine technology. For these reasons, business and industry takes a keen interest in Finland's Strategy for the Arctic Region, which foresees a range of measures for combining the common interests of the State and the business community.

Global competition is of great interest and concern to business and industry. In the Arctic region, LW ZLOO PHDQ ERWK PDMRU JURZWK RSSRUWXQLWLHV DQG H[WUH Arctic projects being planned and implemented in Canada, Norway, Sweden, Denmark, the United States and Russia are attractive to investors, large corporations and networks of companies across the world. Additionally, the growing presence of China and other Asian countries and companies in the Arctic is a fact of life that needs to be taken into account.

7KH H[WHQVLYH \$UFWLF H[SHUWL VH SRVVHV VHG E\)LQODQG DQ EDVLV IRU JHQHUDWLQJ QHZ EXVLQHVV 6SHFLDO HIIRUWV DUH QI RI H[SHULHQFH LQWR VRXQG EXVLQHVV RSSRUWXQLWLHV 7KH H UHJLRQ ± LFH FRYHU WKH \$UFWLF FROG DQG VWURQJ ZLQGV ± LF RSHUDWLRQV)LQODQG KDV H[WHQVLYH H[SHULHQFH LQ RSHUDW ZKLFK RIIHUV FRPSDQLHV H[FHOHQW SRVLELOLWLHV IRU VHL]L up in the Arctic.

)LQODQG SURPRWHV WKH H[SRUW RI HQYLURQPHQWDO H[SHUWL RSSRUWXQLW\ WR LQFUHDVH WKHVH NLQGV RI H[SRUWV LQ DUHDV

to offer their services to international Arctic projects as part of a wider network. A further challenge
WR)LQQLVK FRPSDQLHV LV SRVHG E\ WKH ¿QDQFLQJ RI WKH QHF
7KH PHUH VL]H RI WKH SURMHFWV ± DV ZHOO DV WKH VSHFLDO
UHTXLUH SXEOLF VXSSRUW DQG LQYROYHPPHQW 7KH SXEOLF VHF
launching and supporting reference projects or organising visits by corporate delegations. While
this is of special importance with Russia, it is also useful in dealings with other Arctic countries.
Access to emerging projects calls for long-term efforts and a broad-based commitment to regional
development and local presence.

Major energy and other investments in Finland's neighbouring areas and their multiplier
HIIHFWV JHQHUDWH H[WHQVLYH EXVLQHV RSSRUWXQLWLHV IRU
WHFKQRORJ\ WKLV KROGV WUXH IRU VHU\LFHV IRU H[DPSOH Z
VXSSRUW DQ RIIVKRUH ¿HOG

7KH FRQVXPSWLRQ RI ELRHQHUJ\ LV VWHDGLO\ LQFUHDVLQJ
this respect, also in the Arctic region, will be made in motor fuels. In the future, biochemicals,
ELRPDWHULDOV PHGLFLQH DQG FRVPHWLFV ZLOO EH GHULYHG
marketing of timber grown in Arctic areas will offer new opportunities for small and medium sized
companies.

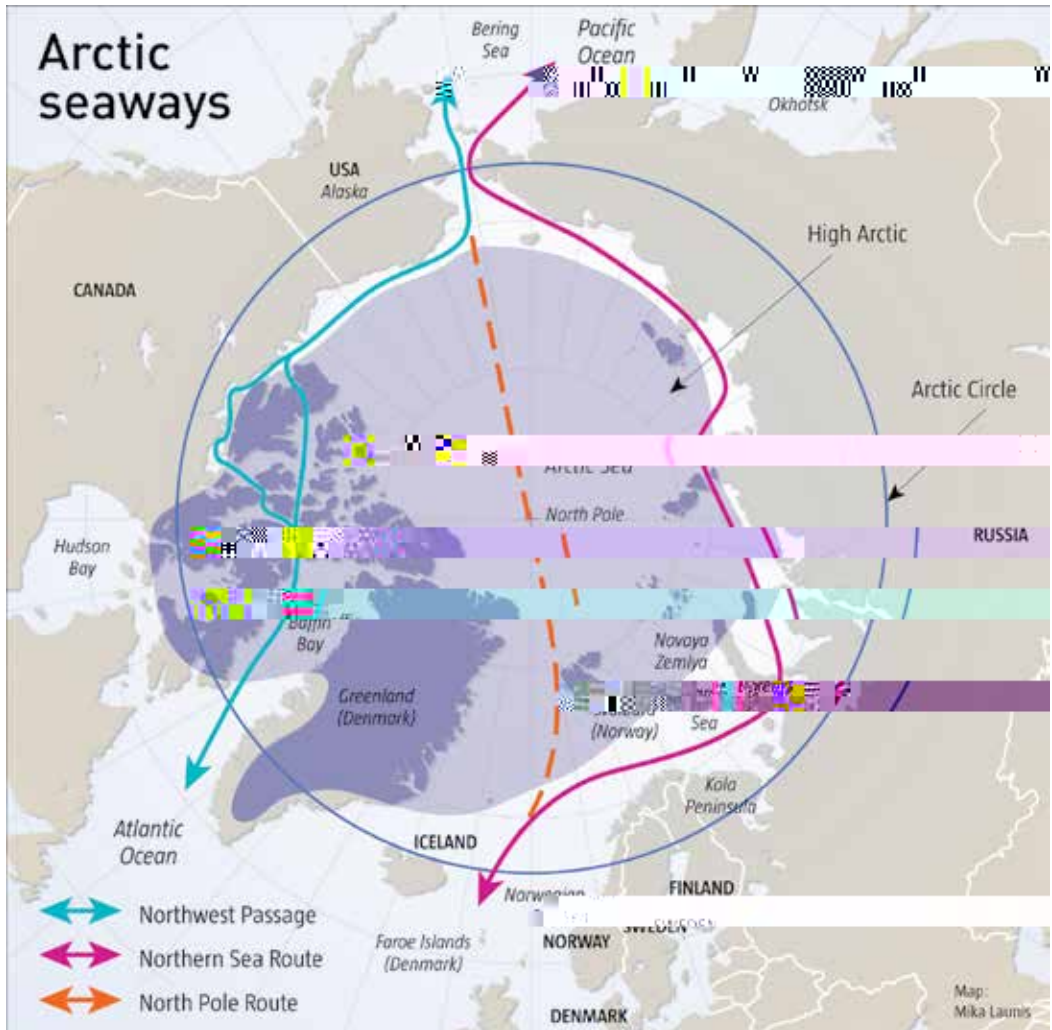
)LQQLVK FRPSDQLHV KDYH VROLG H[SHUWLHV LQ FRQVWUXFV
harmonise the relevant standards.

([SHUWLHV LQ \$UFWLF FRQGLWLRQV DQG \$UFWLF WHVWLQJ DU
the past few decades, Lapland has become an increasingly important development and testing

4.2 Energy industry

\$FFRUGLQJ WR WKH 8 6 *HRORJLFDO 6XUYH\ SHU FHQW RI W

4.3 Arctic maritime industry and shipping



Sources: Arctic Centre, University of Lapland

\$V DQ H[SHUW LQ VKLSEXLOGLQJ IRU \$UFWLF FRQGLWLRQV VKI

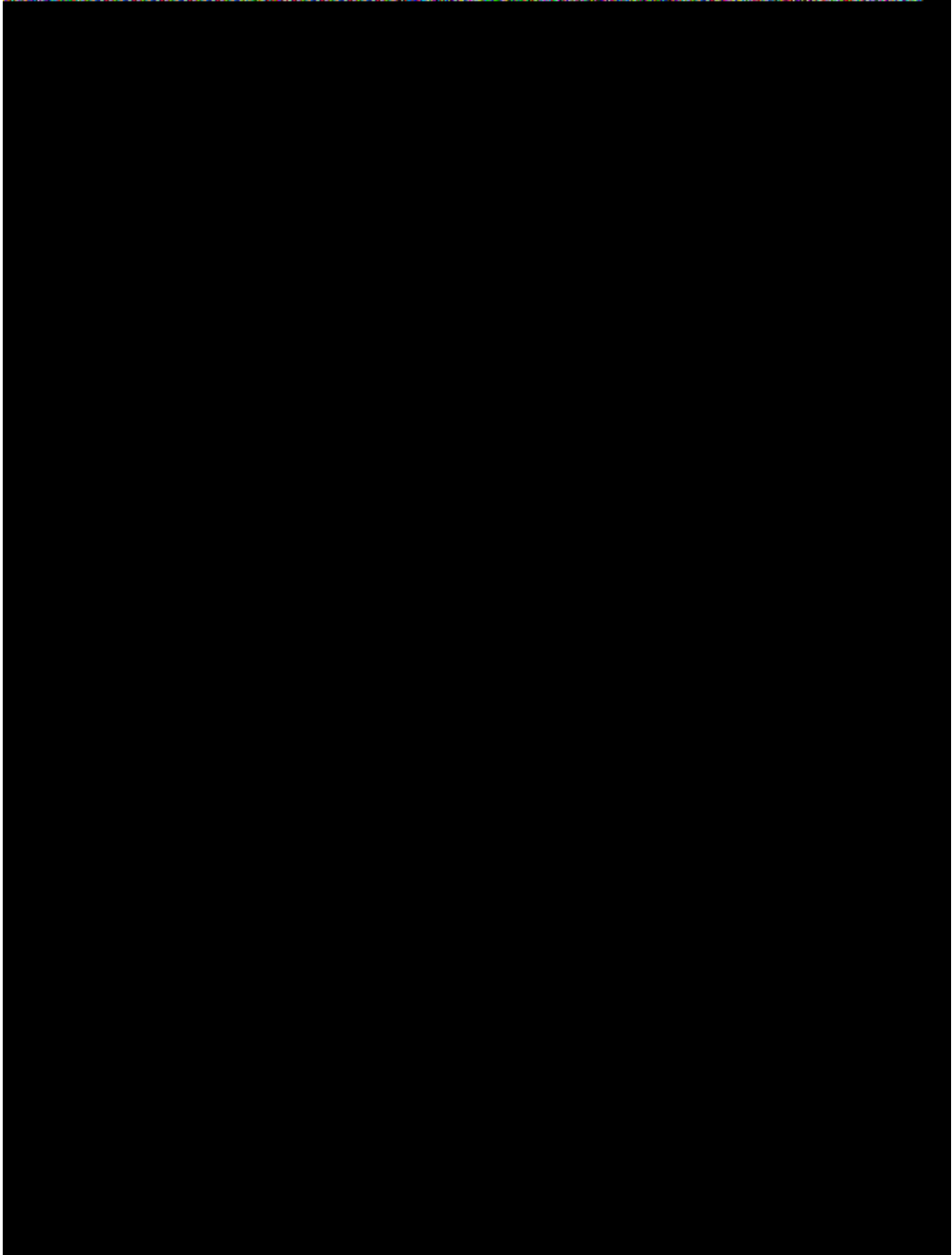
Arctic maritime industries in Finland and the implementation of the programmes prepared with a YLHZ WR QDWLRQDO LQWHUHVWV &RQVHTXHQWO\ HIIRUWV VKRX environment to global corporations while underlining Finland's logistically ideal geographic location.

The Arctic region continues to involve a range of risks and presents a challenging environment LQ WHUPV RI ZHDWKHU DQG LFH FRQGLWLRQV 7KHVH HOHPHQWV VXFK DV LQ WKH SRWHQWLDOO\ H[WHQVLYH IUHLJKW WUDI¿F XV navigable in summer and autumn. As goods need to reach their destination at a predetermined time, the predictability and reliability of transports are of critical importance. If this challenge can EH PHW LW ZRXOG RIIHU QHZ EXVLQHV RSSRUWXQLWLHV IRU) reinforced and the crews are skilled in navigating in ice conditions. Some shipping lines have been RSHUDWLQJ LQ WKH \$UFWLF UHJLRQ IRU \HDUV IRU H[DPSOH LQ 1RUWK (DVW 3DVVDJH ([SRUWLQJ WKLV H[SHUWLHV RIIHUV PDMR

Finnish Arctic navigation skills have also been utilised in North America, particularly in ice-breaking. The objective is to intensify cooperation with the United States and Canada in enhancing the capabilities to perform under Arctic conditions and securing fast response times in the event of impending accidents. Opening the North-East Passage will increase the importance of the Bering Straits in the future. Similarly, the North-West Passage may be increasingly used for shipping in the long term. The sea transport monitoring systems in use in the Gulf of Finland could serve as a useful H[DPSOH IRU RSHUDWLQJ LQ 1RUWK \$PHULFD DQG WKH \$UFWLF

When efforts are made to develop reindeer herding, due consideration must also be given to the capacity of natural pastures in order to adapt herding to an ecologically sustainable level. Additionally, stocks of large carnivores should be managed with due regard to the impacts on reindeer husbandry.

Mines with significant transportation volumes, potential mines areas
transportation orientation options



Sources: *The Transport Needs of the Mining Industry in the North, pre-study. Working group's background report. Research reports of the Finnish Transport Agency 11/2013.*

4.6 Clean technology (Cleantech)

7KH QHZ GHYHORSPHQWV LQ WKH \$UFWLF UHJLRQ RIIHU PDMRU RS and companies engaged in this line of business. With the increasing economic activity, growing industry and rising population, the environment is subjected to greater strains and thus utilities, VXFK DV ZDWHU SURFHVVVLQJ WHFKQRORJ\ DQ DUHD WKDW)LQ developed.

\$PRQJ RWKHUV 5XVVLD LV SD\LQJ LQFUHDVLRQ DWWHQWLRQ WF RI HQHUJ\ HI¿FLHQF\ LQ LQGXVWU\ DQG VRFLHW\ DW ODUJH)LQ DQG ZLGHO\ UHFRJQLVHG LQ 5XVVLD IRU H[DPSOH)LQQLVK WHFK Arctic environment.

Finnish environmental technology is suitable for cleaning up the environment in the Arctic and HQVXULQJ WKH HI¿FLHQF\ RI SURGXFWLRQ IDFLOLWLHV DQG D OF OLQN WR LPSURYHPPHQWV LQ FRVW HI¿FLHQF\

Oil spills represent the greatest risks associated with Arctic shipping and oil drilling. When it comes to mechanical oil recovery in ice conditions, Finnish companies are at the leading edge of WHFKQRORJ\ 7KLV H[SHUWLHV UHODWH ERWK WR UHVHDFK DQG

4.7 Tourism

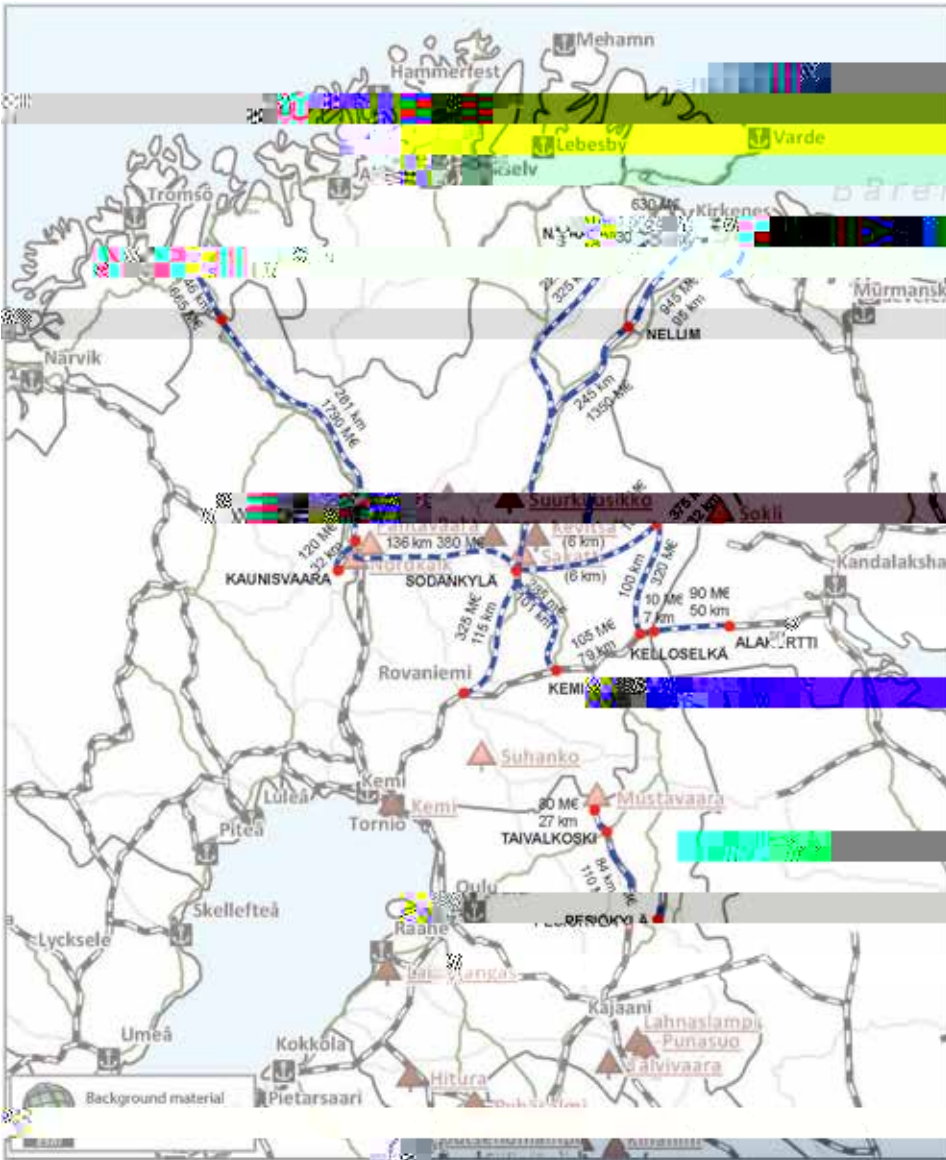
7KH FKDQJLQJ RI VHDVQRV XQWRXFKHG ZLOGHUQHVV FXOWXUDU JUHDW SRWHQWLDO IRU H[SDQGLQJ WRXULVP LQ QRUWKHUQ)LQ LQFOXGH WKH XQFHUWDLQW\ RI VQRZ LQ FHQWUDO (XURSH DQG W

Many of the holiday resorts in northern Finland have evolved into hubs of versatile activities. Additionally, tourism ensures a wider range of better services for the local population and helps maintain the basic infrastructure which, in turn, enables the development of other businesses.

7RXULVP ZLOO UHPDLQ D ODERXU LQWHQVLYH ¿HOG RI DFWLYLW\

The infrastructure, level of service, international orientation as well as tourism research and education are of the highest standard in Finnish Lapland. Competitiveness in Arctic tourism is based on the utilisation and sustainable use of the natural environment; cooperation and mutual

4.8 Traffic and transport systems



Sources: Locations and cost estimates of the new lines included in the route option. The Transport Needs of the Mining Industry, report. Finnish Transport Agency, 2013.

%RUGHU FURVVLQJ SRLQWV DUH DQ LPSRUWDQW SDUW RI D VP Arctic region. At present, the crossing points on Finland's eastern border are working at capacity DQG DUH XQDEOH WR UHVSRRG WR JURZLQJ WUDI¿F YROXPHV 3RV Russia, the intensifying economic activity in the Arctic and the growing population will inevitably LQFUHDVH WKH YROXPH RI FURVV ERUGHU WUDI¿F 7KH ERUGHU P in the planning and implementation of transport facility projects. Funding for this purpose may be UHTXHVWHG IURP (1, &% 3URJUDPPHV DPRQJ RWKHU VRXUFHV

The foreseen growth in marine transportation in the Arctic calls for enhanced safety and environmental regulation in order to prevent accidents and environmental damage, and raise the level of preparedness in the event of accidents.

In 2002, the International Maritime Organization IMO approved instructions for vessels operating in ice-covered Arctic seas. Aside from these recommendations, the IMO is currently preparing a Polar Code which is intended to be compulsory. The provisions of the Code will be related to maritime safety, the protection of the marine environment and crew training. In the review of the Polar Code, Finland has played an active role in environmental issues and the formulation of the

UXOHV IRU WKH LFH FODVVL;FDWLRQ RI YHVHVOV
%HFDXVH RI WKH LQDGHTXDWH LQIUVDWUXFWXUH DQG ORQJ G
UHVFXH HTXLSPHQW WR WKH VFHQH RI DQ DFFLGHQW RU VXSSC
challenge to the rescue services.

4.9 Data communications and digital services

,Q DGGLWLRQ WR HI;FLHQW WUDQVSRUW VHUFLFHV UHOLDEOH
services are instrumental to boosting economic activity in the north and improving competitiveness in the country as a whole. The adoption and utilisation of smart solutions drawing upon advanced communications technology need to be promoted in all sectors.

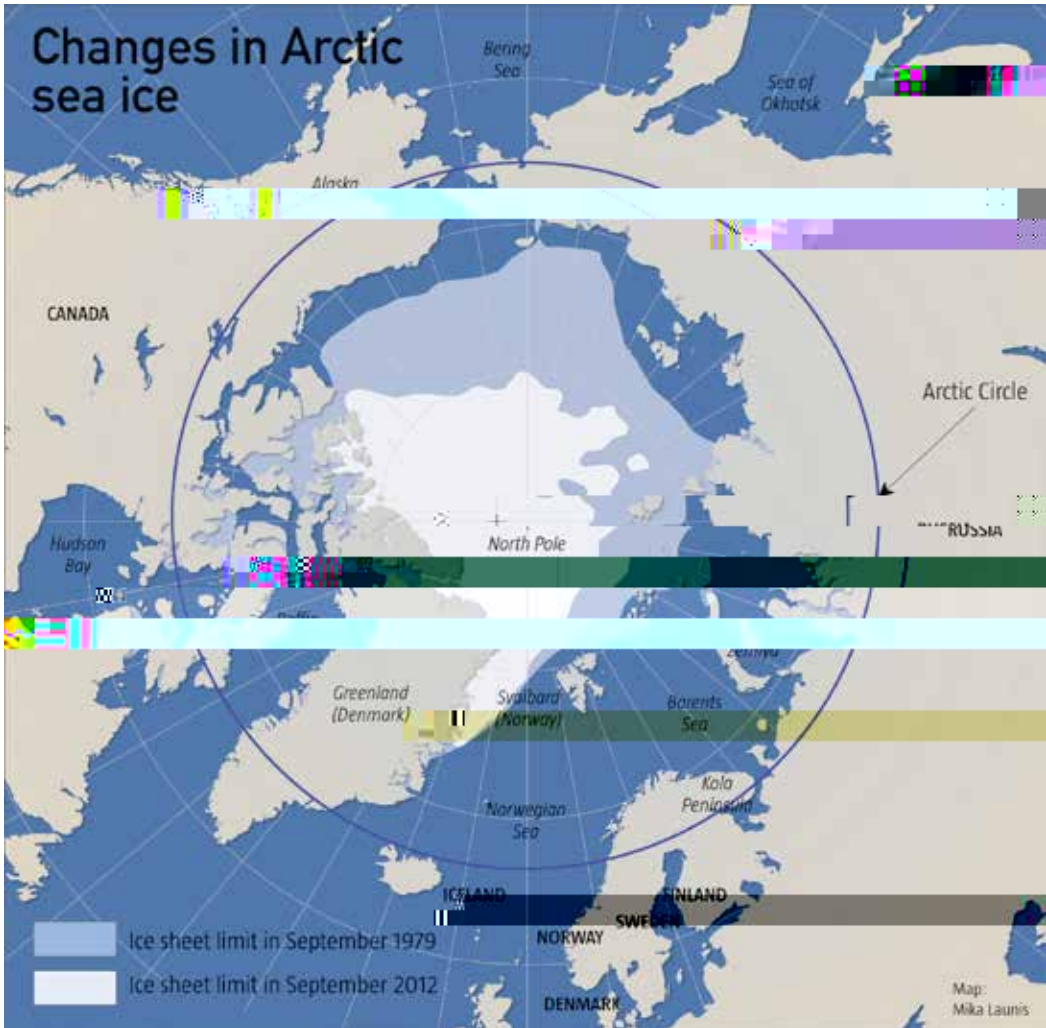
Information and communications technology as well as related services and applications have been developing at a fast pace. Near-term opportunities and challenges will be closely related to the development and broad-based adoption of 'cloud services', advances in object-to-object communication and the utilisation of big data. The market for cloud services is valued at EUR 1

ELOOLRQ DQQXDOO\ DQG LV H[SHFWHG WR JURZ VXEVDQWLDOO

Finland is seeking to establish itself as a new major centre for the cloud industry. Companies engaged in this line of business need an interesting and incentive operating environment in order WR GHYHORS WKH VHUFLFHV)RU H[DPSOH OHDGLQJ JOREDO FO
high-capacity communications connections backed-up by several optional routes when selecting sites for their computer centres. Moreover, the weather conditions in the north are perfect for FRPSXWHU FHWUHV UHTXLULQJ HI;FLHQW FRROLQJ ([SORLWL
Finland's competitive position as a site for information-intensive industry as the connections can be built in the direction of the North-East Passage linking Europe and Asia.

6DWHOOLWH EDVHG FRPPXQLFDWLRQV \VWHPV DUH QHFHVVD
transmit weather and maritime safety services to sea-going vessels.

5 Environment and stability



Sources: *Sea Ice Extent 16.9.2012*, National snow and ice data center, Boulder, CO

5.1 The Arctic environment

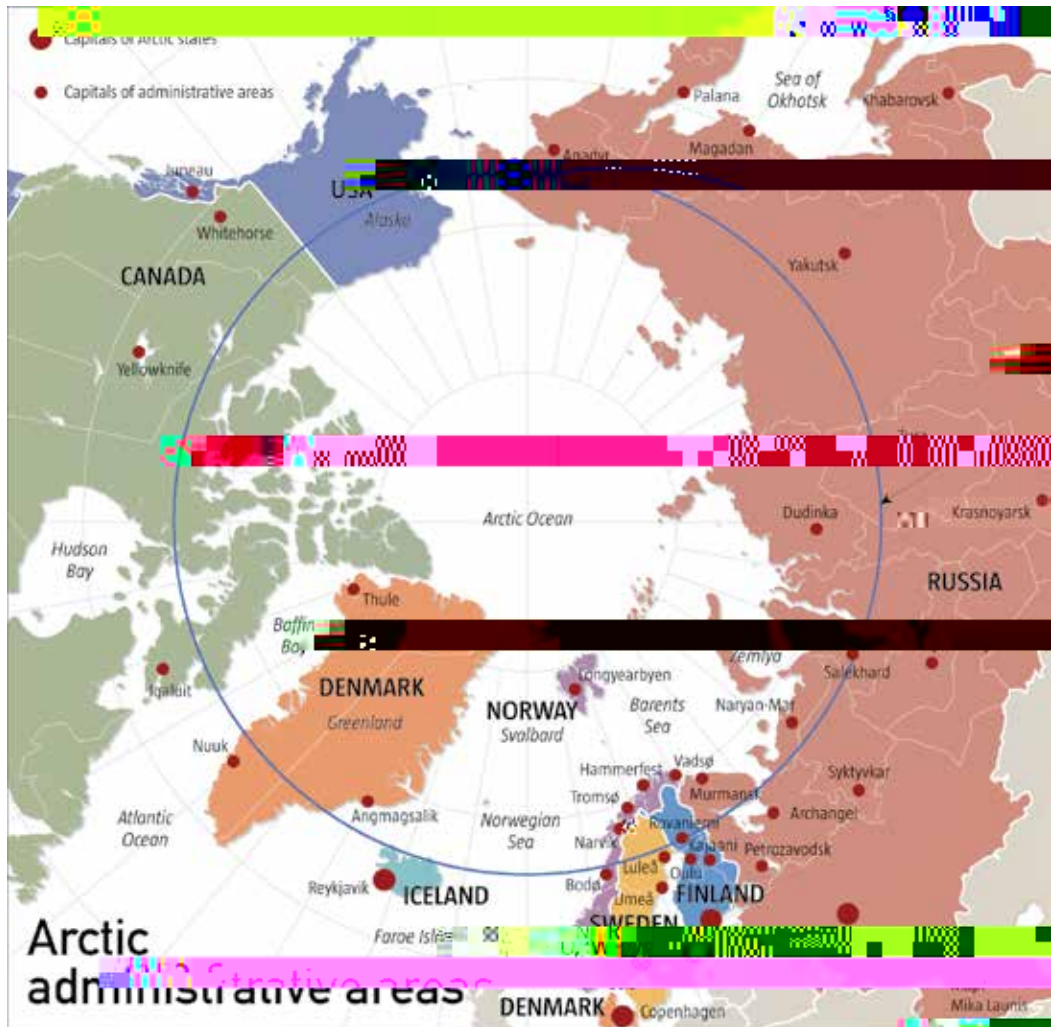
7KH \$UFWLF HQYLURQPHQW LV KLJKO\ H[FHSWLRQDO ,W LV H[WU
HFRV\ VWHPV DQG VSHFLHV KDYH DGDSWHG WR H[WUHPH ZHDWKH

,Q WKH \$UFWLF DOO HFRQRPLF DQG RWKHU DFWLYLWLHV PX
constraints imposed by the environment, the recognition of and preparedness for the risks, and the
prevention of pollution. For Finland's part, this calls for common guidelines, a solid knowledge base
and competence, close cooperation between the various administrative branches and the promotion
of best practices.

(QYLURQPHQWDO ULNVV FDQQRW EH UHGXFHG XQOHVV WKH\ D

\$UFWLF ELRGLYHUVLW\ DQG LWV SURWHFWLRQ DUH RI JOREDO adapted to cold conditions depend on the conservation of Arctic ecosystems for their survival, more than half of the world's wader population among them. Most endangered are Arctic migrant birds as PLOOLRQV RI WKHP UHSUHVHQWLQJ QHDUO\ VSHFLHV UHWXUQ :HOO IXQFWLRQLQJ HFRV\WHPV DUH LQYDOXDEOH WR WKH OR RI WKH ZRUOG¶V WRWDO ¿VK FDWFK IRU H[DPSOH LV IURP WKH environment is crucial to the communities of indigenous peoples whose traditional livelihoods depend on biodiversity.

6 International cooperation in the Arctic



Sources: Arctic Centre, University of Lapland, various maps

6.1 Finland's status as an Arctic country

One of Finland's key objectives is to bolster its position as an Arctic country and to reinforce international Arctic cooperation. Finland is actively involved in multilateral cooperation at the global and regional levels to achieve its own Arctic goals and to pre-empt global threats.

The fundamental components of Arctic debate are cooperation, mutual dependence, trust and transparency. Finland's thinking and action is built upon cooperation outlined in international FRQYHQWLRQV , W LV DGYLVDEOH WR UHYLHZ WKH DGHTXDF\ RI V Finland plays an active role in drafting supplementary regulations. While the sovereignty of the States must be respected, it should not discourage genuine recognition of mutual dependencies. All HIIRUWV VKRXOG EH PDGH WR EXLOG XS PXWXDO WUXVW DQG WK transparency.

As a result of the increasing global interest in the Arctic Region, the role of international law in the area is growing. Most importantly, pending issues and any disputes need to be settled in accordance with international law using various dispute settlement procedures where necessary. One of Finland's objectives regarding the Arctic region is consistent regulation. At present, the treaty system is fragmented and may thus lead to ambiguities regarding liability for damages.

7KH 81 &RQYHQWLRQ RQ WKH /DZ RI WKH 6HDV 81&/26 UHJXOD WKH VHDV DQG VHHNV WR FRQFLOLDWH WKH VRPHWLPHV FRQÀLF detailed regulations, it sets out the general principles and provides a framework for supplementary regulation at the global, regional or national level based on the division of legal competencies. If necessary, the enforcement of UNCLOS can be supplemented by sector-based regulation with due UHJDUG WR VSHFL¿F FKDUDFWHULVWLFV RI WKH \$UFWLF UHJLRQ environmental protection or maritime safety, for instance. As foreseen in the resolutions adopted by the UN Rio+20 Conference, the UNCLOS is to be provided with additional tools for protecting biodiversity. The level of necessary regulation needs to be assessed on a case-by-case basis.

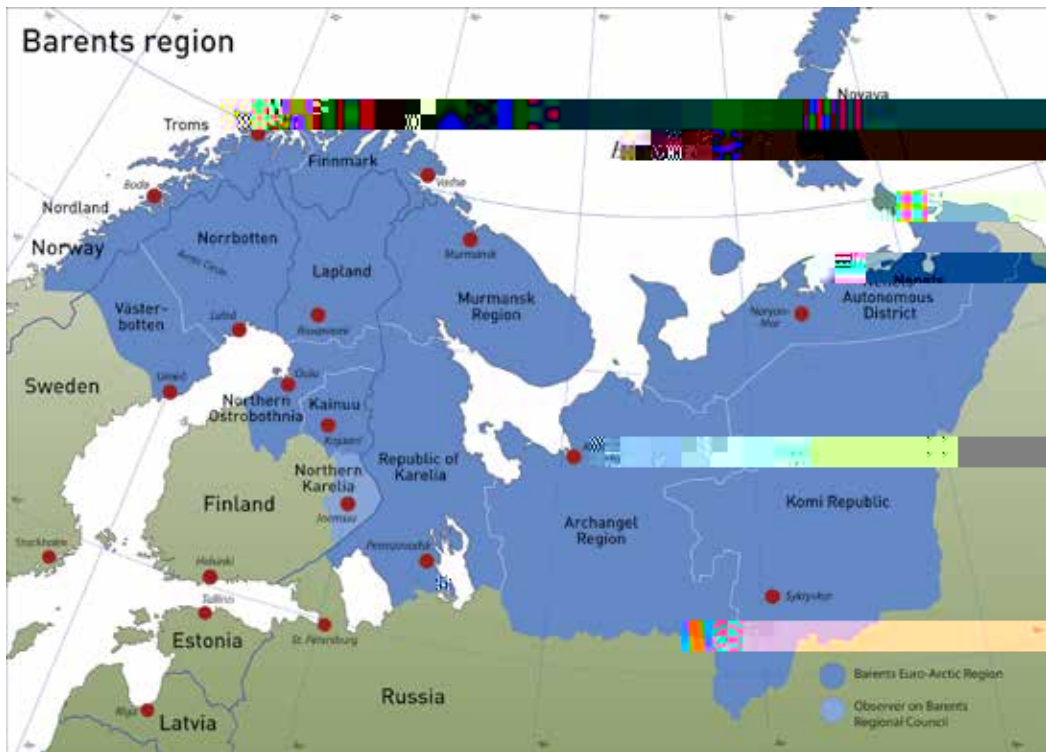
Of special relevance to the Arctic region in this respect are the Commission on the Limits of the &RQLQHWD 6KHOI &/&6 DQG WKH ,QWHUQDWLRQDO 6HDEHG under UNCLOS.

When Arctic issues are evaluated from a local perspective, due consideration should always be given to global implications. The reference framework for sustainable development is universal. \$UFWLF FRRSHUDWLRQ PD\ VHUYH DV DQ H[DP SOH RI KRZ WR FU VXVWDLQDEOH GHYHORSHPHQW ZLWKLQ WKH 81 DQG RWKHU JORED

6.2 International cooperation in the Arctic

The most important forum for addressing Arctic issues is the Arctic Council formed by eight Arctic FRXQWULHV ZKHUH WKH \$UFWLF LQGLJHQRXV SHRSOHV DUH DOV issues have global implications, such as environmental change and the opening of new sea routes, the Council should duly recognise its global role and responsibility. It makes sense for the Council to approach and establish contacts with operators outside the Arctic region. In principle, Finland is in favour of admitting new observers into the Council provided they are committed to the attainment of its goals. Such new observers could offer the Council sorely needed additional resources and new proven practices useful in multilateral cooperation.

Finland has been actively involved in the efforts to bolster the Arctic Council. Institutionally, ic CouniM gouncil.fs postoeen esngiM nd oe2.2(y)pprontong al ereltariat; daftng bindng piterational c1.7(tag)4.9(ceent)- piterational ctena°ÔŠà 'WQ3=þFì ŽĐjĐh5àŽ"êlì „œY•í ñ iĐĚ o"ÁL ĵiĀ ð WQ3= € @ þ Ā z 0 B•L A W H@W ofservers could tt



Sources: www.barentsinfo.org / Arctic Centre, University of Lapland

The Barents Euro-Arctic Council and the Barents Regional Council introduce a regional perspective to the more general Arctic policies. The added value provided by these councils consists of the ability to bring together the local operators and encourage them to make a true commitment to the attainment of the common objectives. The ultimate objective of Barents cooperation is to intensify cooperation between Russia and the Nordic countries in order to secure the stability and prosperity of the northernmost regions of Europe. On the practical level, Barents cooperation is carried out

-XQH 7KLV ZDV DFFRPSOLVKHG LQ WKH IRUP RI DQ HYHQ PR
when the Commission and the High Representative of the Union for Foreign Affairs and Security
Policy issued a joint Communication on Arctic policy. Also, the European Parliament issued its own
report on the direction of the EU's Arctic policy in 2011.

7KH &RPPXQLFDWLRQ XQGHUOLQHV WKH JOREDO LPSRUWDQFH

III OBJECTIVES AND ACTIONS ATTAINING THEM

Objectives and actions will be implemented within the framework of the central government spending limits and the central government budgets insofar as they are implemented with central government funding. It will not be possible to implement all objectives and actions during the period 2023-2027 prioritised in connection with future spending limits decisions and central government budgets, and revised to match other developments.

Although only ministries are named as the responsible parties in the following list, other parties may also be responsible for the implementation of the objectives and actions. Measures as applicable.

Responsibility for the follow-up on the objectives and performance in attaining the objectives is implemented of the strategy is overseen by the Arctic Advisory Board.

Objectives and actions

7KH UHVSQRVLEOH SDUWLHV DUH LQ LWDOLFV WKH ¿UVW PHQW

1 Vision for Arctic Finland

2 Finland's Arctic population

2.1 Objectives related to social sustainability and working conditions

- 6HFXUH VXI¿FLHQW UHVRFUHVV IRU WKH KHDOWK DQG ZHOE
- Improve the working conditions and promote the wellness at work of all workers in the challenging Arctic environment.
- Ensure the availability of labour, particularly by promoting worker mobility.

Action:

- Take social sustainability into account in impact assessments. *OLQLVWU\ RI 6RFLDO \$IIHUVLWY, Ministry of Health, Ministry of Employment and the Economy, Ministry of the Environment, Ministry of Education & Culture*
- Secure the necessary preconditions for the health and well-being of the population in northern Finland. *OLQLVWU\ RI 6RFLDO \$IIHUVLWY, Ministry of Employment and the Economy, Ministry of the Environment, Ministry of Education & Culture*
- Contribute to the studies and impact assessments of changes in living conditions in the Arctic region, including urbanisation. *OLQLVWU\ RI 6RFLDO \$IIHUVLWY DQG +HLOWK & XOWXUH OLQLVWU\ RI WKH (QYLURQPHQW*
- Intensify Nordic cooperation to promote wellness at work and ensure the continued functioning of the Northern Dimension Partnership in Public Health and Social Well-being and the Baltic Sea Network on Occupational Safety and Health. *OLQLVWU\ RI 6RFLDO \$IIHUVLWY DQG +HLOWK & XOWXUH*
- Promote worker mobility. *OLQLVWU\ RI (PSORIPHQW DQG WKH (FRQRPL*

- (QVXUH WKH DYDLODELOLW\ RI TXDOL\HG ODERXU WKURXJK WKH as part of the Team Finland concept. 0LQLVWU\ RI (PSORIPHQW DQG WKH (FRQRPI) 21\ FH

2.2 Objectives related to the indigenous peoples of the Arctic and the Saami population in Finland:

- Ensure that indigenous peoples can participate in the debate and decision making in matters affecting their status as indigenous peoples.
- ([SDQG VXSSRUW IRU 6DDPL ODQJXDJH DQG FXOWXUH DQG LPSRUWDU\ Saami language.
- 5DWLI\ ,/2 & RQYHQWLRQ 1R 2R RQ ,QGLJHQRXV DQG 7ULEDO 3H

Action:

- Promote the implementation of the Saami language revival programme to train Saami-speaking professionals and to support the Saami language and culture. 0LQLVWU\ RI (GXFDWLRQ DQG
- Ensure that indigenous peoples can participate in the debate and decision making in matters affecting their status as indigenous peoples. 0LQLVWU\ RI -XVWLFH 0LQLVWU\ IRU Ministry of Employment and the Economy, Ministry of Agriculture and Forestry, Ministry of the (QYLURQP HQW

3 Education and research

Objectives related to Finnish Arctic expertise:

- 5HLQIRUFH EURDG EDVHG LQWHU GLVFLSOLQDU\ \$UFWLF UHVHDUQ networks.
- 0DLQWDLQ DQG GHYHORS \$UFWLF H[SHUWL VH
- Invest in education, training and research to strengthen Finland's position and appeal as a FRXQWU\ ZLWK ZRUOG UHQRZQHG LQWHUQDWLRQDO \$UFWLF H[SHUWL VH
- Take an active part in the comprehensive evaluation of changes in the Arctic region.

Action:

- Encourage higher education institutions and research institutions to publicise their Arctic research H[SHUWL VH DQG WRLQYHVW LQ WKH GHYHORS PHQW DQG OHYHO according to their respective strategies. Various Finnish and international funding sources VKRXOG EH GUDZQ XSRQ LQFOXGLQJ WKH \$FDGHP\ RI)LQD & RXQFLO RI 0LQLVWU\ RI (GXFDWLRQ DQG & XOWXUH 0LQLVWU\ IRU and the Economy, Ministry of Social Affairs and Health, Ministry of the Environment, Ministry of 'HIHQFH 0LQLVWU\ RI 7UDQVSRUW DQG & RPPXQLFDWLRQV
- Have the Academy of Finland launch an Arctic research programme. 0LQLVWU\ RI (GXFDWLRQ DQG & XOWXUH \$FDGHP\ RI)LQD
- 6WUHQJWKHQ LQJ \$UFWLF H[SHUWL VH LV LQFOXGHG LQ WKH QDWLRQDO period of the EU Structural Funds and in some cross-border cooperation programmes. The tools and themes incorporated under the three pillars of the Eighth Research Framework Programme RI WKH (8 +RUL]RQ H[FHOHQFH LQ VFLHQFH LQGXVWULD DOVR EH OHYHUDJHG LQ WKH GHYHORS PHQW RI \$UFWLF H[SHUWL VH IXWXUH WHFKQRORJ\ 0LQLVWU\ RI (PSORIPHQW DQG WKH (FRQRPI 0LQLVWU\ & XOWXUH

- Develop broad-based Arctic research transcending administrative boundaries by establishing shared research priorities and by launching joint research projects. *\$OO PLQLVWULHV D*

•

Action:

VXVWDLQDEOH XVH RI WKH UHVRXUFHV DQG H[SORUH WKH SRW managing and developing ways to utilise natural resources. *OLQLVWUI RI \$JULFXOWXUH D*

- Enhance the health and growth of forests through the sustainable management and use of forest resources while facilitating adaptation to climate change. *OLQLVWUI RI \$JULFXOWXUH)RUHVWUI*
- Encourage an increased use of wood as a local renewable energy source. *OLQLVWUI RI \$JULFXOWXUH DQG)RUHVWUI OLQLVWUI RI (PSORIPHQW DQG WKH (FRQRPI*
- 3URPRWH WKH GLYHUVL¿FDWLRQ RI EXVLQHVV DQG HQWUHSUH a view to increasing the volumes of wood raw material and other ecosystem services provided by the forests. *OLQLVWUI RI \$JULFXOWXUH DQG)RUHVWUI OLQLVWUI*
- Enhance participatory regional decision making responsive to the various forms of using natural resources. *OLQLVWUI RI \$JULFXOWXUH DQG)RUHVWUI*
- Identify the business opportunities offered by bioeconomy. Ensure the availability, sustainability and public acceptance of renewable natural resources in order to secure a favourable operating environment for bioeconomy. *OLQLVWUI RI \$JULFXOWXUH DQG)RUHVWUI OLQLVWUI WKH (FRQRPI*
- Develop ways to manage the stocks of game birds nesting in the Arctic region and ensure sustainable hunting by preparing management plans consistent with the principles of adaptive *KXQWLQJ QDWLRQDOO\ DQG LQWHUQDWLRQDOO\ DQG)RUHVWUI*

4.5 Mining industry

Objectives related to the mining industry:

- Develop and offer new technological solutions using the resources of Finnish companies to meet the needs of the mining industry in the challenging Arctic conditions.
- Develop infrastructure and services using the resources of Finnish companies to support mining operations consistent with sustainable development.
- *ODNH)LQODQG DQ HFR HI¿FLHQW PLQHDOV LQGXVWUI SLRQH*

Action:

- 3URPRWH WKH H[SRUWV RI)LQQLVK PLQLQJ DQG *OLQLVWUI RI (PSORIPHQW DQG WKH (FRQRPI*
- \$WWUDFW IRUHLQJ 5 ' LQYHVWPHQWV WR WKH HPHUJLQJ PLQLQJ *IXQGLQJ DQG SLORWLQJ UHIHQFH SURMHFWV DQG SURYLGLQJ OLQLVWUI RI (PSORIPHQW DQG WKH (FRQRPI*
- Promote new technological solutions by making use of pre-commercial purchasing in collaboration with mining companies. *OLQLVWUI RI (PSORIPHQW DQG WKH (FRQRPI*
- Promote a sustainable mining industry in accordance with the action plan for a sustainable minerals industry. *OLQLVWUI RI (PSORIPHQW DQG WKH (FRQRPI*
- 5DLVH)LQODQG¶V LQWHUQDWLRQDO SUR¿OH DV DQ RSHUDWLQJ *information, in English, on the operating potential and regulation of the minerals industry in Finland in order to attract more foreign investments. OLQLVWUI RI (PSORIPHQW DQG W*

4.6 Cleantech

Cleantech objective:

- 3URPRWH)LQQLVK FOHDQWHFK H[SHUWLHV DQG XVH LW WR GHY
- 3URPRWH WKH H[SRUWV RI)LQQLVK FOHDQWHFK

Action:

- Support the launching and funding of cleantech reference projects. 0LQLVWU\ RI (PSOR\ F
DQG WKH (FRQRP\
- Promote Arctic cleantech development by establishing Arctic cleantech as a central principle in
the corporate development programme. 0LQLVWU\ RI (PSOR\ PHQW DQG WKH (F
-

•

the environment as part of the efforts to complement the network of conservation areas in the Arctic. 0LQLVWUI RI WKH (QYLURQPHQW 0LQLVWUI IRU)RUHLJQ &RPPXQLFDWLRQV

- Intensify cooperation between the Arctic Council, the UN Convention on Biological Diversity, the ,02 DQG WKH ,QWHUQDWLRQDO 8QLRQ IRU &RQVHUYDWLRQ RI 1 VLWHV RI WKH JUHDWHVW VLJQL¿FDQFH LQ WHUPV RI ELRGLYHU WKH /DZ RI WKH 6HDV 81&/26 ZLWOLQJWUG RIRNEAR QYHURQWH IRU)RUHLJQ \$IIDLUV 0LQLVWUI RI 7UDQVSRUW DQG &RPPXQLFD
- Take active part in the cooperation to promote the protection of the Arctic environment and the prevention of pollution both locally and globally. Support actions to monitor the state of the bo5tAgrCctivntio3(Marinentio7.Oil(ctic en)804BDvir)5(oP)49>(thol)-24ventio P and3(epa and))dnessc1(R)18

5.3 Internal security

Objectives:

- 'HYHORS LQWHUQDWLRQDO UHVFXH FRRSHUDWLRQ LQ WKH \$U cross-border assistance.
- (VWDEOLVK HI¿FLHQW FURVV ERUGHU FRRSHUDWLRQ EHWZHHQ actors.
- Develop cross-border cooperation in crime prevision in order to evaluate and ward off threats to Arctic shipping and security risks.

Action:

- Introduce the best practices of the Baltic Sea and Nordic cooperation to Arctic regions by making IXOO XVH RI WKH H[LVWLQJ PHWKRGV DQG PHFKDQLVPV

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6.3 Bilateral Arctic partnerships

Objectives of bilateral Arctic partnerships:

- Establish bilateral Arctic partnerships with countries sharing Finland's aims.
-

APPENDICES

Appendix 1 Decision on updating Finland's Arctic strategy and allocation of resources

Organisation

The work will be overseen by a steering group consisting of the following Permanent Secretaries: Pertti Torstila of the Ministry for Foreign Affairs; Arto Rätty of the Ministry of Defence; Raimo Sailas of the Ministry of Finance; Harri Pursiainen of the Ministry of Transport and Communications; Erkki Virtanen of the Ministry of Employment and the Economy; and Hannele Pokka of the Ministry of the Environment. Meetings of the steering group will be convened by State Secretary Olli-Pekka Heinonen.

Additional support for the efforts will be provided by the Arctic Advisory Board appointed by the 3 U L P H 0 L Q L V W H U ¶ V 2 I ¿ F H D Q G F K D L U H G E \ 6 W D W H 6 H F U H W D U \ + H Advisory Board is attached.

The work will be carried out by a group of designated civil servants from the various ministries under the supervision of Arctic Ambassador Hannu Halinen. The civil servants are responsible for ensuring that the views of their respective administrative branches are duly taken into account in accordance with a work plan to be drawn up at a later date. The views must include duly prepared S U R S R V D O V F R P S O H W H Z L W K D W L P H W D E O H D O O R F D W L R Q R I U H resources.

Members of the civil servant working group:

Hannu Halinen, Chair, Ministry for Foreign Affairs
Johanna Suurpää, Ministry of Justice
Kukka Krüger, Ministry of the Interior
Heidi Fransila, Ministry of Defence
Kirsti Vallinheimo, Ministry of Finance
Annu Jylhä-Pyykönen, Ministry of Education and Culture
Tapio Hakaste, Ministry of Agriculture and Forestry
Petri Jalasto, Ministry of Tr

The working group cannot place orders or conclude any agreements binding on the Prime Minister's
21¿FH ZLWKRXW WKH SULRU DSSURYDO RI WKH 3ULPH 0LQLVWHU
3ULPH 0LQLVWHU¶V 21¿FH DUH UHTXLUHG RQ H[SHUW IHHV DQG D

Issues such as the number of copies, distribution, layout and translation of any reports and other
SXEOLFDWLRQV ZLOO KDYH WR EH DJUHHG XSRQ LQ DGYDQFH ZI

Prime Minister Jyrki Katainen

Director General Auni-Marja Vilavaara

\$SSHQGL['HFLVLRQ WR DSSRLQW WKH \$UFWLF :RUNLQJ *URXS

Distribution Members of the Working Group

C.C. Ministries

Appendix 2 Acronyms

AC Arctic Council

ASFR Arctic Security Forces Roundtable

BEAC Barents Euro-Arctic Council

BRC Barents Regional Council

BSRBCC Baltic Sea Region Border Control Cooperation

BSTF Baltic Sea Region Task Force on Organized Crime

Coastnet, a government communications network primarily intended for border authorities

EBRD European Bank for Reconstruction and Development

EIB European Investment Bank

(/ < (/ < & HQWUH & HQWUH IRU (FRQRPLF 'HYHORSPHQW 7UDQVSRU

(1, & % & (XURSHDQ 1HLJKERXUKRRG ,QVWUXPHQW &URVV %RUGHU

EPPR Emergency Prevention, Preparedness and Response

EU European Union

GLONASS Globalnaja navigatsionnaja sputnikovaja sistema, Global Navigation Satellite System of the Russian Ministry of Defence

GTK Geological Survey of Finland

+) & + \ G U R À X R U R F D U E R Q V

IFC International Finance Corporation

ILO International Labour Organization

IMO International Maritime Organisation

INTERREG Interregional cooperation programmes of the European Union

IPCC Intergovernmental Panel on Climate Change

IUNC International Union for Conservation of Nature

MARSUR Maritime Surveillance, sea surveillance project of the European Defence Agency

Metla Finnish Forest Research Institute

METO Cooperation, cooperation between the authorities in the maritime sector

MTT Agrifood Research Finland

NATO North Atlantic Treaty Organisation

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NDEP Northern Dimension Environmental Partnership

NDPHS Northern Dimension Partnership in Public Health and Social Well-being

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in the Nordic Region

NORDEFECO Nordic Defence Cooperation

NORDRED Nordic Search and Rescue Agreement

OSH Occupational Safety and Health

PAME Protection of the Arctic Marine Environment

NCM Nordic Council of Ministers

PNT Polis och Tull i Norden, Nordic cooperation in crime prevention

ND Northern Dimension

